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National legislative activities -- Medicare

Medicare physician payment reform



We are happy to report that the Senate passed H.R. 6331, the "Medicare Improvements for Patients and Providers Act of 2008," by a veto-proof majority of 69-30 on July 9, 2008. Eighteen Republican Senators joined Senate Democrats to make this a truly bipartisan process. See how your senators voted [here](#). Please [thank those senators](#) that voted to stop the Medicare physician payment cuts.

This legislation replaces the 10.6% payment cut that went into effect on July 1 with a 0.5% update extension through December 31, 2008. For calendar year 2009, the update will be 1.1%. Other important provisions such as extending the GPCI floor on physician work were also included.

This 18-month reprieve will also provide time for Congress to work with physicians on developing a long-term solution to a payment system that all agree is fatally flawed.

The bill must now be signed into law by President Bush, who has signaled on more than one occasion that he intends to veto it. However, given the fact that the payment cuts have already occurred and that the bill passed both chambers with the two-third majority needed to override a veto, there is some reason to question next steps by the White House. We will keep you apprised as we learn more.

See the [AMA Physician Payment Action Kit](#) for more information, including highlights of H.R. 6331

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Job descriptions

To accompany the 2008 Chicago wage and salary survey

EXECUTIVES

Advertising/sales promotion manager: Responsible for overall management, direction and coordination of the organization's advertising, promotion, and publicity programs. May be responsible for planning and directing exhibits, conventions or trade shows.

Chief engineering/research executive: Coordinates all engineering activities of the organization. Develops and recommends policies and programs for engineering of existing products or new products. May direct engineering research for organization. Establishes budgetary and performance controls, maintains records on engineering, coordinates with other activities of the organization, such as marketing and manufacturing. Provides technical assistance to other functions within the organization as requested. Typical position titles include: Vice President of Engineering, Vice President of Engineering/Research, Director of Engineering, Chief Engineer, etc.

Chief executive officer: Determines the basic objectives of the organizational unit, formulates plans and policies and allocates resources for the achievement of these objectives. Interprets and applies policies established by the owners of the enterprise or their representatives (Bd. of Directors, Trustees, etc.). Organizes the unit and determines allocation of duties and authorities to subordinates. Exercises controls to see that objectives are achieved in accordance with basic organization policy. Fully accountable for the results of the activity of the organizational unit. Typical position titles include: Chairman of the Board, President, Vice President, General Manager, Executive Director, etc. This is usually a single incumbent position.

Chief financial/accounting executive: Responsible for the entire range of financial activity in the organizational unit, including both the treasury and accounting functions. Formulates and recommends policies on banking, receipt and disbursement of funds, extension of credit, fiscal and accounting matters. Responsible for development of standard accounting, analysis and reporting procedures, and for exercise of overall financial control. Typical position titles include: Financial Vice President, Treasurer, Controller, Secretary-Treasurer, Director of Finance, etc.

Chief human resources executive: Responsible for the entire range of personnel administration and employee relations activity in the organizational unit. Develops, recommends, and implements policies and programs in such areas as recruitment and employment, organizational planning, training, wage, salary, and benefits administration, labor relations, communications, and safety. Provides guidance and technical assistance in these areas to other staff and operating functions of the organization. Typical position titles include: Vice President-Human Resources, Vice President-Personnel, Director of Employee Relations, Industrial Relations Manager, Personnel Director, etc.

Chief information officer: Responsible for directing the information systems activities within the organizational unit. Establishes policies for maintaining current program effectiveness. Develops recommendations regarding new hardware and software. Establishes budgetary and performance controls. Maintains documentation on current systems. Provides technical assistance to other functions in the organization as requested. Typical Position Titles include: Vice President of Data Processing, Vice President, Management Information Services, Director, Management Information Services.

Chief international executive: Responsibilities include: the successful operation and growth of foreign units (such as sales and operating), development of the international market, advise Chief Executive Officer of growth opportunities and trends of foreign markets with current or new products.

Chief manufacturing executive: Responsible for planning, controlling, and coordinating the entire range of manufacturing activities of the organization. Responsible for all related manufacturing activities such as production functions, manufacturing or process engineering, plant and facility engineers, industrial engineering, production scheduling, inventory control, quality control. Typical position titles include: Vice President of Manufacturing, Vice President of Production, Vice President of Operations, Production Manager, Plant Superintendent, etc.

Chief operating officer: Directs and coordinates the activities of the line and staff components of the organizational unit toward the achievement of established objectives. Is accountable for the full range of operations of the organizational unit, providing operational guidance and analyzing and appraising the effectiveness of all operations. Acts as Chief Executive in the absence of the Chief Executive Officer. Typical position titles include: President, Executive Vice President, General Manager, Senior Vice President, etc. This position reports to Chief Executive Officer, if your Chief Operating Officer is also your CEO, please report position under CEO only.

Chief sales/marketing executive: Responsible for the entire range of marketing planning and development, sales promotion and sales activities of the organizational unit. Formulates, recommends, and implements policies and programs in the areas of sales, pricing, market and product or service acceptance research, and related activities. May also have responsibility for customer relations or advertising. Typical position titles might include: Marketing Vice President, Vice President of Sales, Director of Marketing, Sales Director, etc.

Chief staff legal counsel: Responsible for maintaining the official records, legal affairs and documents of the Corporation and to supervise all legal matters such as interpretation of governmental regulations, review and interpret corporate contracts, etc.

Compensation/benefits head: Responsible for developing, implementing, maintaining programs and procedures for compensation of employees. May also be responsible for organization planning. At lower organizational levels, responsibilities may be limited primarily to the administration and maintenance of established systems. Usually reports to Chief Employee Relations Executive.

Controller: Responsible for all accounting activities, including budget, financial forecasting, statistical reports, audits, tax activities, etc., and usually reports to the Chief Financial/Accounting Executive.

Director of materials: Responsible for overall material procurement (purchasing), scheduling of material flow in the production process and the control of the inventory of raw, in-process, and finished goods and/or materials. May direct receiving, stores, traffic, and shipping operations.

General sales manager: Responsible for field sales and the staff to achieve profitable sales volume. Generally provides direction, counsel, and guidance for plans in marketing, advertising, sales promotion, sales training, etc., and reports to the Chief Sales-Marketing Executive.

Industrial engineering head: Responsible for methods, layout, process flow and equipment or tooling requirements for the production and/or processing operations. Conducts methods and improvement studies, evaluates work and equipment performance and prepares facilities and capital investment plans, forecasts and budgets. Supervises work measurement studies and the establishment of time standards.

Manufacturing manager/plant manager: At the Plant level, responsible for machining, fabricating, welding, assembling or for the processing operations required in the production of the finished product, goods or services of the organizational unit. Reports to the Chief Manufacturing Executive and may also be responsible for plant personnel, quality, production and inventory control, etc.

Quality control head: Responsible for planning, developing, and implementing techniques, processes, and procedures for controlling and maintaining the desired level of quality for all goods and services supplied by the organizational unit. Responsible for reviewing product design, coordinating with manufacturing, manufacturing engineering, suppliers and customers to resolve quality problems. May direct inspection services.

SALARIED WORKERS

Accountant: Compute and prepare reports and analyses as requested by organization personnel.

Accounting clerk (general): Perform bookkeeping duties and routine work in following varied standardized accounting procedures and practices.

Accounting manager: General responsibility for supervising the accounting functions of the organization.

Administrative assistant (secretary): Perform secretarial duties for president and/or other key company executives, where duties require extensive knowledge of company organization policies and procedures. Prepare a wide variety of correspondence.

Application engineer: Provide field engineering support, involving advising on and discussing complex customer requirements and application of standard company products and designs.

Benefits assistant: Coordinate administrative details of employee benefit programs following standard or accepted practices.

Bookkeeper: Perform diversified duties in maintaining accounting records.

Buyer: Place purchase orders for a variety of commodities, materials, and supplies.

Chemist: Perform laboratory chemical analyses on a wide range of materials and finished company products.

Cost accountant: Prepare cost ledger and special monthly reports on costs.

Cost accounting manager: Plan, direct, and provide supervision to cost accounting activities.

Credit and collection representative: Review accounts received from the accounting department or credit manager and determine appropriate credit limits. Assist with and check credit ratings.

Credit manager: Manage credit and collection activities of the organization.

Customs service representative: Respond to customer inquiries regarding product selection, placement of orders for standard products and services, requests for prices and quotations, and complaints.

Customer service supervisor: Supervise the activities of Customer Service Representatives engaged in processing customer orders and providing related service support.

Data entry operator: Operate a computer keyboard terminal to input alphabetic and numeric data from user department source documents.

Desktop publishing designer: Design unique, original materials based on aesthetic trends.

District sales manager: Supervise sales personnel in designated territories.

Drafter: Prepare a wide variety of drawings according to assignment.

Employment interviewer: Assist in interviewing applicants for employment, checking references, determining qualifications, previous experience, and training in relation to specifications of existing or potential job openings.

Environmental engineer: Respond to various state environmental agency inquiries about hazardous waste materials and environmental conditions at site locations.

Executive assistant: Administer special programs and project development functions for key executive management.

Facility engineering manager (maintenance): Responsible for grounds, buildings, and building equipment.

Field service manager: Supervise the activities of Field Service Representatives engaged in performing maintenance and repair of a full range of company products.

Financial analyst: Analyze financial data, prepare reports, and make recommendations for top management.

General clerk: Perform prescribed routine duties requiring the use of various forms and procedures, such as data entry or generate standard reports.

Human resources assistant: Organize and maintain records, and file government reports as scheduled; interview, verify qualifications and references for hiring.

Human resources generalist: Supervise personnel activities, including safety and first aid, wage administration, personnel records, and employee counseling.

Human resources manager: General responsibility for all plant and office personnel activities, such as employment, training, wage and salary administration, safety and working conditions, employee counseling, and personnel records.

Information services manager: Direct and supervise a department engaged in developing, maintaining and modifying system software, application programs, and operating computer hardware to automate processes and generate business reports in a large organization.

Inside sales representative: Interpret customer requirements from written or verbal inquiries and advise customers of advantageous changes to their order.

Internal auditor: Responsible for internal audits which provide verification of company operational and internal control procedures.

Laboratory technician: Perform a wide variety of difficult and critical laboratory tests on complex and involved prototypes, competitor products, and spot testing of manufactured products or components.

Mail clerk: Perform a variety of routine activities in the mail room.

Manufacturing engineer: Develop manufacturing methods and processes for complex projects and product lines.

Market research analyst: Develop methods, conduct market surveys, compile data, and prepare various market and product sales evaluation reports to assist area sales management in determining new market potential, sales penetration, and new product potential.

Marketing analyst: Assist in preparation and execution of marketing plans, including developing new business opportunities, competitive analyses, and business forecasts.

Marketing manager: Direct the organization's marketing programs.

Materials manager: Manage the processing and issuing of orders for the manufacture of parts and products.

Network systems administrator: Install, upgrade and monitor microcomputer network hardware, operating systems, communications protocols and software applications.

Network technician: Monitor microcomputer network to ensure proper operation.

Office helper: Follow simple procedures or instructions.

Order and billing supervisor: Plan, assign, and direct work of clerks engaged in the preparation of invoices for goods and services provided.

Outside sales representative: Promote, sell, and secure new business, including important and major accounts.

Payroll administrator: Make a variety of computations on employee overtime, shift premium, and various payroll deductions, following standard procedures, to prepare payroll.

Payroll clerk: Make a variety of computations on employee overtime, shift premium, and various payroll deductions, following standard procedures.

Payroll supervisor: Supervise the payroll department with responsibility for all levels of payroll and time keeping.

Product engineering manager (project or development): General responsibility for research and development work, problem resolution, designs, and the establishment of specifications and standards for company products.

Product manager (brand): Manage the sales promotional activities and profit margins of company product lines, including marketing research studies and new product development activities.

Production control manager: Supervise the planning, scheduling, and expediting of all orders through manufacturing.

Production expeditor: Follow progress of orders through plant, in accordance with production schedules.

Production planner: Analyze forecasts to determine required inventory levels.

Programmer-analyst: Analyze activities to determine applicability to internal software and hardware systems.

Programmer: Develop and modify internal computer programs, involving organization activities and complex business problems.

Purchasing agent: Obtain quotations, and prepare and place purchase orders on group or groups of commodities, materials, supplies, and equipment, including special and unusual items.

Purchasing manager: General responsibility for supervising seldom over 10 people and for all purchasing of material, equipment, and supplies for the organization, including major contracts and capital equipment.

Quality assurance engineer: Assume responsibility for complex projects in the development and implementation of methods and programs to ensure that various company product lines meet specifications and standards.

Quality assurance engineer: Investigate, establish, and implement requirements for inspection and testing methods, techniques, equipment, and facilities.

Quality assurance technician: Perform a wide variety of difficult and critical quality control evaluation tests.

Quality process manager: Manage plan, develop, coordinate and evaluate a quality process.

Receptionist: Operate multiple line telephone console or PBX switchboard and act as Receptionist.

Regional sales manager: Supervise district sales management and sales personnel in designated territories.

Research and development engineer: Original research or development work, problem resolution, and design of new models and mechanisms for a wide variety of special and unusual equipment.

Senior accountant: Oversee clerical activities in connection with orders, customer billings, debits, or credits.

Service technician: Perform repair and service assignments involving highly technical and complex products.

Shift supervisor: Direct and coordinate activities of several departments, through subordinate supervisors, with full accountability for results in terms of costs, methods, quality and quantity of production, operations, and personnel.

Shipping clerk: Prepare bills of lading or receipts for products, parts, and materials for shipments and route, following standard procedures or customer instructions.

Software engineer (programmer): Develop and test software system products in conjunction with hardware to determine operation and performance of overall system.

Software engineer supervisor: Direct research and software development projects of a complex nature.

Supervisor (class C): Supervises up to 25 persons in a department that operates or works on a limited variety of equipment, produces standardized products, subassemblies or tools, typically includes assembly, chemical processing, machining (operation only), finishing, sheet metal.

Supervisor (class D): Supervises over 25 persons in a department that performs simple, standardized work, performs manual work or work involving very simple equipment, typically includes material handling, assembly, service.

Training coordinator: Organize, coordinate and conduct assigned training programs.

Webmaster: Direct activities for maintaining, modifying and monitoring Internet publications of the organization.

HOURLY WAGE EARNERS

Arc welder: Perform ordinary hand welding operations in all positions for mechanical strength and high pressure on a wide variety of assemblies and products.

Assembler: Plan and perform a wide variety of difficult fitting, assembly, floor erection and alignment of large and complicated units with a large number of parts to exacting customer tolerances, alignment and operating requirements.

Centerless grinder: Make exacting setups and perform through form step and taper grinding on a variety of parts requiring accurate dimensions and concentricity.

Chemical processor: Operate a wide variety of chemical processing equipment involved in preparing solid chemical compounds for experimental or research purposes.

Coil winder (electrical or electronic): Wind coils of various sizes making ordinary setups of ordinary complexity on universal and solenoid winding machines or lathes with attachment.

Combination welder: Operate arc or gas welding equipment together with atmospheric control equipment for ordinary hand welding operations in all positions to meet specifications for mechanical strength and high pressures on diversified assemblies and products composed of alloys.

Degreaser operator: Operate degreasing basket conveyor or tank type of equipment to remove oil, grease and other surface foreign matter from a wide variety of sheet metal or machined parts, castings and assemblies.

Die casting machine operator: Operate die casting equipment to produce a variety of castings, following established methods and procedures.

Drill press operator: Change over and adjust drill press, involving leveling and blocking.

Electrical or electronic wirer: Install, connect and solder a variety of wiring conduit and fittings on electrical or electronic units or products.

Extruder operator: Set up and operate extruder line, using materials in pellets or sheets to produce thermoplastic sheets meeting specifications, dimensions and specified weight. Install or change dies, screens, line up takeoffs, slitter, trim scrap collector or grinder, sheet winder and pellet grinder and adjust dies, speed and temperature for sheet uniformity and quality.

Fabricating machine operator (sheet metal): Change over, adjust and operate a variety of sheet metal working machines, following prescribed operation sequence and using furnished tools.

General machinist: Set up and perform a normal range of operations on various types of machine tools to close tolerances, requiring care in tools setting and machining methods.

Grinder (universal): Make exacting and sometimes difficult setups, and operate equipment to external, internal and surface grind a wide variety of parts having shoulders, steps, tapers, contours or recesses, with close relationship of dimensions and surfaces.

Janitorial cleaner: Clean assigned areas, including some with delicate equipment or apparatus.

Lathe operator (engine): Perform a range of operations such as turning, boring, counterboring, facing, recessing and multiple and tape thread cutting on a variety of custom and standard parts, to close tolerances.

Lead assembly group: Lead a group of assemblers performing simple assembly of subassemblies or products of a less complex nature.

Lead inspection group: Act as group leader or setter responsible in a group of seldom over 10 persons.

Lead machining center (CNC): As a setter and group lead, plan job setups, review process sheet and call up program to determine tools required to perform a wide variety of very close tolerance drilling, tapping and milling operations.

Lead material handler: Lead a group of up to 25 persons unloading, loading moving and storing a variety of products.

Lead punch press: As a setter and group leader, responsible for group performing a broad range of complicated work on presses of any capacity, involving the use of progressive, subpress, combination, lamination, complex forming and deep drawing dies.

Machine filler: Fill cans, drums and pails of various sizes by operating filling machine.

Machine tool operator: Set up and operate a broad range of machine tools.

Machining center operator (CNC): Plan highly complicated job setups override program settings as related to tool feeds and speeds.

Maintenance electrician: In accordance with standard practice, install, repair, wire and maintain a variety of electrical and electronic equipment and controls related to production and building equipment, including motors, relays, circuit breakers, machine and process controls and circuits, alarm and communication systems.

Maintenance helper: Perform routine duties to assist trades people and technicians in the performance of their duties.

Maintenance machinist: Install, maintain, repair or rebuild a wide variety of large and complicated machine tools and special purpose machine and plant equipment.

Maintenance worker: Plan procedures, install and repair all production and building equipment and related operations involved in repairing buildings and maintaining grounds, power and light circuits and electrical and electronic controls.

Material handler: Unload and load trucks with incoming and outgoing materials and move materials to storage areas and between departments, using hand truck.

Model maker: Design and construct a wide variety of product models, complicated equipment, apparatus or mechanisms.

Multi-machine operator (machining): Perform a broad range of machining operations such as milling, profiling, drilling, bench or turret lathe operations, boring and surface grinding on a wide variety of large, expensive castings and parts, where setups, tooling, speeds and feeds are usually provided by others.

Packer: Plan, prepare and pack large and heavy products or fragile apparatus for shipment.

Plater: Plate a variety of parts or products, following prescribed procedures.

Press brake operator: Perform a wide variety of press brake operations, usually on heavy steel plate, stainless steel or aluminum.

Production electrician: Plan, lay out and install a variety of complicated electrical equipment controls and wiring on a wide variety of standard and non-standard products.

Production painter: Mix a variety of standard coating materials to proper consistency. Powder coat parts.

Punch press operator: Perform blanking, piercing, forming and drawing operations on a variety of parts.

Screw machine operator (automatic): Set up and perform a normal range of operations on single or multiple spindle automatics, following standard methods and procedures.

Security guard: Check buildings, equipment and materials for leaks, fires, unauthorized individuals and other conditions.

Sheet metal worker: Construct large sheet metal units and products to customer specifications.

Shipper-receiver: Count, weigh and check a wide variety of incoming and outgoing materials and supplies, select shipping method, routing and carrier.

Slitter operator: Changeover and operate slitting machine to cut sheet metal into strips of specified length.

SPC technician: Select random sample parts from production operations on a scheduled basis to perform statistical process control (SPC) procedures.

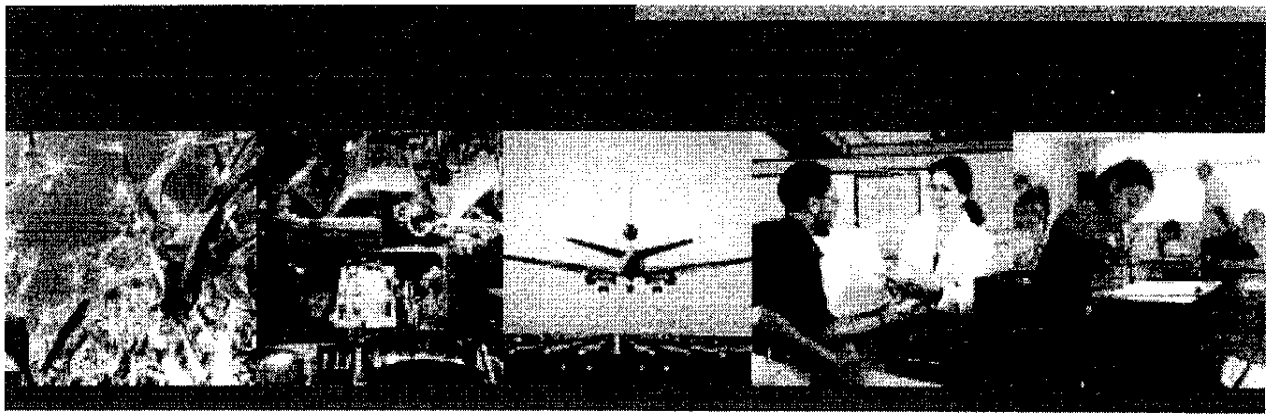
Storekeeper: Check incoming material and supplies and report shortages or damaged materials for small stock room.

Tester/analyst: Perform mechanical, electrical, electronic or hydraulic and performance tests on a variety of complicated products or apparatus and special products, following general procedures and methods.

Tool crib attendant: Responsible in general for small tool crib.

Tool, die and gauge maker: Plan, construct, alter and repair a wide variety of tools, dies, jigs, fixtures and gauges to very close tolerances.

Truck/delivery driver: Make pickups and deliveries within city and suburban areas, and assist in shipping and receiving area.



opportunity returns

Northern Stateline Region

Rod R. Blagojevich, *Governor*

STATE OF ILLINOIS



OFFICE OF THE GOVERNOR
SPRINGFIELD 62706

ROD R. BLAGOJEVICH
GOVERNOR

October 15, 2003

Dear Rock River Valley friends:

One of the most challenging things I'll do during my time as Governor is create jobs in Illinois. It is also one of my biggest priorities.

It is my plan to take the most aggressive, ambitious, direct approach we possibly can to create jobs and spur growth; to help people get a job and keep a job. We also believe there is no one-size-fits-all approach to economic development. That's why we've divided the state up into 10 economic development regions – finding areas with common economic strengths and needs, and developed a plan for each of them.

Following is our new approach for growth in the Rock River Valley. This comprehensive plan is the product of outreach over the past several months to the region with local legislators, civic and business leaders – all of whom want to see the region prosper. It includes a plan to Achieve Manufacturing Excellence, Grow Entrepreneurship, Strengthen Education and Workforce Preparedness, Maximize Access to Capital, Expand Infrastructure and Connectivity and Foster Energy Independence.

This region, known as the Northern Stateline region - which includes Boone, Ogle, Stephenson and Winnebago counties – has many strengths, like manufacturing and technology which we will help to promote and develop in order to stimulate and create new growth and new jobs.

Over the past nine months, we've made some progress towards creating new jobs. We paved the way for the expansion of O'Hare Airport. We created a new \$300 million fund to fuel the creation of clean coal power plants. We extended the ethanol tax credit and created incentives to encourage the production and use of biodiesel fuels. We developed incentives to lure the film industry back to Illinois. And we opened six entrepreneurship centers across the state to provide much needed grants and know-how to local businesses.

Now we will take that energy to your community - and be proactive about economic development. That plan starts today.

Sincerely,

A handwritten signature in black ink that reads "Rod R. Blagojevich".

Rod R. Blagojevich
Governor

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EXECUTIVE SUMMARY

Opportunity Returns is Governor Blagojevich's comprehensive plan for restoring economic opportunity to Illinois – an approach that can bring jobs and growth back to our communities. This is a new approach to economic development in Illinois. It shifts the state's focus from a centralized approach to a regional one – recognizing that local communities understand their needs best.

Ten regional plans will be developed that tailor to the unique strengths and needs of each of the regions. This plan outlines economic and workforce goals for the Northern Stateline region, which consists of Boone, Ogle, Stephenson and Winnebago counties.

The Governor's Office and the Department of Commerce and Economic Opportunity (DCEO) reviewed local strategic plans and met with regional leaders to discuss local needs and priorities. *Opportunity Returns* is the result of extensive community input, through a series of economic summits, business roundtables, regional focus group sessions and individual conversations.

This plan represents the beginning of ongoing communication between the state and regional communities. The state is targeting specific projects that people in the region have identified as priorities.

Opportunity Returns has the following objectives:

- Attract new investments
- Upgrade the skills of Illinois workers
- Create desirable, well-paying jobs
- Help existing Illinois businesses thrive
- Foster an innovative, attractive business climate
- Maximize international trade and investment opportunities
- Build infrastructure to improve transportation of goods and people
- Promote the growth of *multiple* industries to develop a more stable economy

The Foundation

Extensive studies of economic and labor force data were conducted in order to shape the region's economic and workforce development strategy.

Northern Stateline is home to 420,000 residents and has seen its population increase 11.2% between 1990 and 2000, exceeding the statewide average of 8.6%.

Unemployment in the region has historically been relatively high, and employment did not rebound during the boom years of the 1990s as quickly as in other Illinois regions.

Small businesses, defined as employers with fewer than 100 employees, account for 96.9% of local businesses.

Manufacturing is key to the region. It is the region's largest sector with more than 48,000 employees, and three of the region's top ten employers are manufacturers: Hamilton-Sundstrand, Daimler Chrysler and Honeywell.

The Focus

Six goals have been specifically tailored to the economic and workforce development needs of the Northern Stateline region:

1. Support Manufacturing Excellence

- Enhance New Technology Investment
- Open New Markets
- Reduce the Cost of Doing Business
- Provide Business Intelligence
- Promote Innovation

2. Assist Entrepreneurs and Small Business

- Promote Innovation and Technology
- Develop the Entrepreneurship Center
- Create the Illinois Opportunity Fund
- Expand "Buy Illinois"

3. Strengthen Education and Workforce Preparedness

- Expand Access to College Degree Programs
- Build Science and Technology Programs in Illinois Schools
- Develop the "21st Century Jobs" Training Initiative
- Provide Critical Skills Training

4. Maximize Access to Capital: *Capital for Tomorrow*

- Expand Community Revolving Loan Funds
- Create Lines of Credit
- Enhance Partnerships with Community Development Financial Institutions

5. Expand Infrastructure and Connectivity

- Improve the Transportation Infrastructure
- Support the Rockford Regional Airport
- Expand Telecommunications Access
- Renew Community Infrastructure

6. Increase Energy Independence

- Promote Ethanol Production
- Create the Small Business Smart Energy Program
- Support Cow Power

INTRODUCTION

"I was raised to believe that in life, nothing was ever given to you. All you can expect is an opportunity and a chance."

Rod R. Blagojevich
August 12, 2001

Opportunity Returns is Governor Blagojevich's plan for restoring economic opportunity to the State of Illinois. Recognizing that the Illinois economy is actually a collection of regional economies – with distinct identities, opportunities and challenges – *Opportunity Returns* will define and deliver state services on a regional basis. This is an effort among more than twenty state agencies with input from business, labor and public sector leaders from the region. The plan represents the first time multiple state agencies have come together to grow the economy. *Opportunity Returns* is a significant change in the state's approach to economic development. The plan designates ten economic development regions based on concentrations of employment, commuting patterns and other economic relationships.

By focusing on each of the state's ten economic regions, the state will be able to closely track economic conditions and trends, rapidly respond to opportunities and challenges, and customize regional development initiatives with greater precision.

In an effort to continually be informed of regional needs and priorities, the Governor has created a regional strikeforce team, which will include a Regional Director and regional account managers. This team will work directly with communities to retain existing companies and to attract new jobs and capital. The local presence will help the state stay abreast of local economic trends and use that information to retain existing businesses.

The key to *Opportunity Returns*' success in the Northern Stateline region is a partnership between state and regional leaders. The Department of Commerce and Economic Opportunity (DCEO) will be the lead agency for the state, and more than twenty other state agencies are committed to a coordinated approach to promote and support economic development in the state's regions. *Opportunity Returns* charges all state agencies to make economic development a top priority.

State agencies will work with the Northern Stateline team to pursue specific projects in the region. Each agency will designate one senior staff member to serve as its Economic Development Liaison to participate in interagency project meetings and rapidly respond to opportunities and challenges as they arise. The plan will be implemented in partnership with local elected officials, chambers of commerce, planning commissions, tourism and convention bureaus, transportation agencies and business and labor leaders.

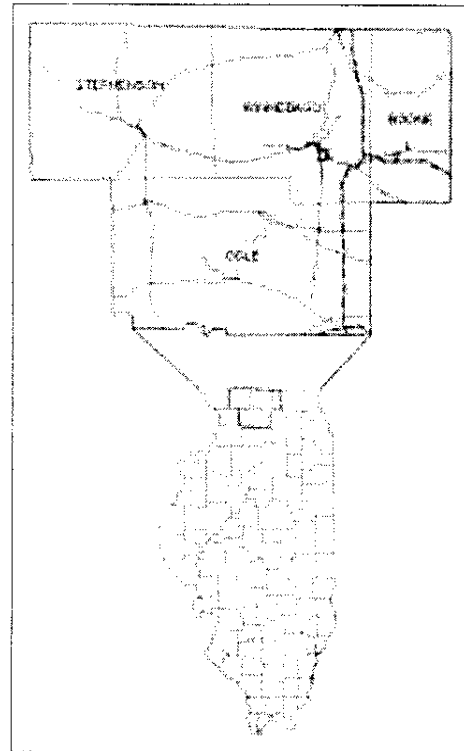
Opportunity Returns is only the first step toward coordinating the vast resources of the state and effectively using them to increase the region's economic health. The community leaders in the region will also help ensure that the plan remains aligned with the changing needs of Northern Stateline's economy. The regional team will issue an annual plan, discussing accomplishments to date and their focus for the future.

THE NORTHERN STATELINE REGION¹

The Northern Stateline region consists of Boone, Ogle, Stephenson and Winnebago Counties. Three of the region's four counties border Wisconsin on the north, and the region borders the fast-growing Chicago metropolitan area to the east, making this region one of the most dependent on its neighbors, vying for migrating businesses, working hard to retain existing businesses, focusing on transportation interconnectivity, and leveraging interstate trade. In addition, the Northern Stateline region has formed a regional, economic development partnership with Rock County, Wisconsin.

Winnebago County is home to the third largest city in Illinois, Rockford, and is a historic manufacturing center. Manufacturing remains the region's primary industry, just as it was in the 1800s. Local products include precision cutting tools, fasteners, aerospace components, machine parts and automobiles. The region was hit hard during the 1980s recession, recovering somewhat since that time, but yet it has not grown as quickly as the state overall in recent years.

In the past two years, Winnebago and Stephenson Counties have lost several major employers and have also experienced layoffs. However, the region is positioning itself as a prime transportation corridor that will benefit from a new multi-modal rail facility in Ogle County, as well as the existing Rockford Regional Airport. The region boasts an excellent telecommunications infrastructure, especially in Rockford, which is home to Rock Valley College, Rockford College and Saint Anthony College of Nursing.



Freeport, the Stephenson County seat with a population of approximately 26,500, is located approximately 25 miles west of Rockford on Highway 20. Belvidere, a community of nearly 21,000 people in Boone County, is now home to a major Daimler Chrysler auto assembly facility.

Demographics

According to the 2000 Census, the four-county Northern Stateline region has 420,200 residents, which is 3.4% of Illinois' population and 10.4% of the population of the state excluding the Northeastern Illinois region.² Winnebago County is the largest and most urbanized county in the region with nearly 280,000 residents.

¹ Some information regarding individual counties is taken from Online Highways at <http://www.iohwy.com>

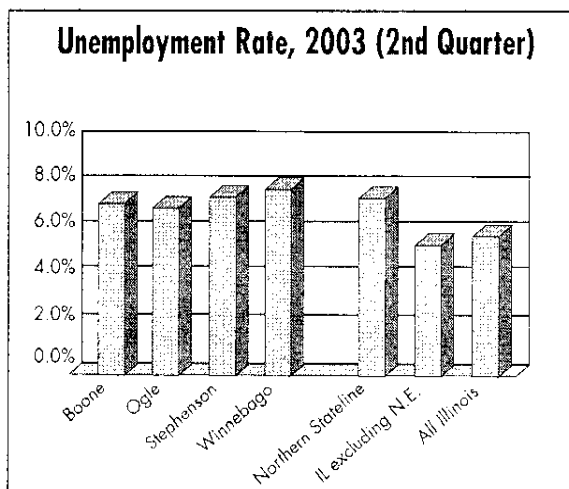
² The Northeast Region consists of Cook, DeKalb, DuPage, Grundy, Lake, Kane, Kankakee, Kendall, McHenry and Will Counties

The population of the region increased by 11.2% between 1990 and 2000, exceeding both the Illinois (8.6%) and the area excluding the Northeastern region: (3.0%) averages. This growth is largely attributable to outward migration from the Chicago area. Age distribution in Northern Stateline is similar to the state as a whole.

Educational attainment is similar to the overall profile of the rest of the state, excluding the Northeastern region. Approximately 81.9% of all residents over 25 years old have at least a high school diploma, up from 72.4% in 1990. Winnebago County has a high proportion of highly educated residents: 19.4% of Winnebago County residents have at least a bachelor's degree and 6.6% have a graduate degree.

Labor Force and Employment³

The unemployment rate in the Northern Stateline region during the second quarter of 2003 was 7.9%, higher than the Illinois average of 6.2% and the remaining area of the state excluding the Northeastern region average of 5.8%. Unemployment in the region has historically been relatively high, and employment did not rebound during the boom years of the 1990s as quickly as in other Illinois regions. Winnebago County, which is home to two-thirds of the region's labor force, has the highest unemployment rate in the region at 8.3%.⁴ Unemployment rates in the other three counties are also higher than the state average, ranging from 6.9% to 7.4%.



³ Source for unemployment statistics: Illinois Department of Employment Security

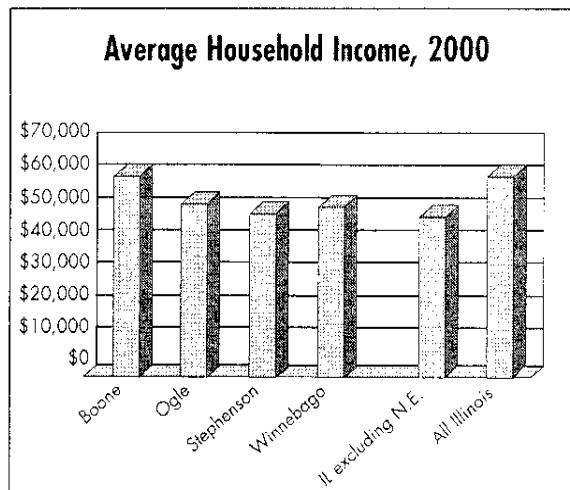
⁴ The labor force includes people who are employed and people who are actively looking for employment. It excludes people such as full time students, retirees, those who choose not to work for family reasons, and "discouraged" workers who would like to work but have given up on finding a job.

Income and Wages⁵

The Northern Stateline average household income is higher than the average of the remainder of the state, excluding the Northeastern region. All counties are above the average, with Boone County having the highest average income at \$61,600.

Per capita income in the region is higher than the per capita income for the remainder of the state, excluding the Northeastern region.

The median annual wage in the Northern Stateline region is higher than the median wage in the remainder of the state, excluding the Northeastern region. Within the region, all counties are also above the state average, and two counties, Boone and Stephenson, are above the statewide median wage.



Number of Businesses

According to the U.S. Census Bureau, the Northern Stateline region was home to approximately 9,900 business establishments in 2001 (the most recent year for which this data is available). Winnebago County's 7,030 establishments accounted for 71.1% of the region total, followed by Stephenson County (11.4%), Ogle County (10.2%), and Boone County (7.3%). The number of business establishments in the region grew by approximately 0.9% in 2002.⁶

Small businesses, defined as establishments with fewer than 100 employees, account for 96.9% of all regional business establishments, close to the statewide average of 97.2% and the average of 97.7% for the remainder of the state excluding the Northeastern region.

⁵ Sources for Income and Wage statistics: U.S. Census Bureau and Illinois Department of Employment Security

⁶ The absolute number of business establishments is based on an analysis of County Business Patterns (U.S. Census Bureau), while the change during 2002 is based on an analysis of IDES' ES202 Database.

Major Industries

Manufacturing is key to the Northern StateLine economy; it is the region's largest sector with more than 48,000 employees.⁷ Manufacturing is the leading employer in all counties in the region and accounts for approximately a quarter of all employment. Transportation equipment (including aircraft and automotive parts manufacturing), machinery, and fabricated metal products are particularly prominent sub-sectors that combine high employment levels and "location quotients," meaning that these sectors' share of the regional economy substantially exceeds their share of the statewide economy.

Other industry sectors with at least 10,000 employees regionally include: Health Care and Social Assistance (26,400); Retail Trade (20,300); Educational Services (14,600); Accommodation and Food Services (13,200); Administrative Support, Waste Management, and Remediation Services (13,200); and Construction (10,100). Other sectors in the top ten include Finance and Insurance, Wholesale Trade, and Transportation and Warehousing.

Winnebago County accounts for more than 90% of the regional employment in the Administrative Support, Waste Management, and Remediation Services sector, which comprises business support services such as document preparation, security, collection and waste disposal. Health Care and Social Assistance is another industry with a disproportionate presence in Winnebago County, with nearly 85% of regional employment occurring in the county.

Boone County has a significant Construction sector. This sector has nearly 2,000 workers in the county, ranking second to manufacturing. The Construction sector is larger than Retail Trade (1,500 employees) and Education Services (1,100), the only remaining sectors with at least 1,000 employees.

As elsewhere in the region, manufacturing is prominent in Ogle County, with 65 establishments employing approximately 5,900 people. Educational Services, ranked fourth regionally, is a distant second in the county (1,700 employees). Retail Trade is third (1,600 employees), followed by Wholesale Trade, and Health Care and Social Assistance (1,200 each).

The top four sectors in Stephenson County mirror those of the region. Manufacturing is the leading employer with 5,600 employees. Health Care and Social Assistance is a distant second with 2,500 employees, followed by Retail Trade and Educational Services (1,900 each). Finance and Insurance ranks fifth with 1,500 workers, compared to ranking eighth regionally. Other sectors with at least 1,000 employees countywide include Accommodation and Food Services, and Construction (1,300 each).

Largest Employers

Most of the region's largest employers are located in Winnebago County, and the six largest employers are located in the city of Rockford. The Rockford School District is the largest single employer in the region (this is not unusual, as schools are among the top employers in nearly every community). Three of the next four largest employers are health care facilities: Rockford Memorial Hospital, Swedish American Hospital, and Saint Anthony Medical Center. An additional health care company, the Freeport Health Network, is 10th.

⁷The source of sector and company-specific employment data is the Illinois Department of Employment Security's ES202 database, based on companies' unemployment insurance filings for the fourth quarter of 2002. Employers are allocated to 21, 2-digit NAICS (North American Industrial Classification System) codes for this analysis. See www.census.gov/epcd/naics02/naics02.html for a description of the NAICS system.

Manufacturing employers ranking in the top ten largest employers in the region are Hamilton-Sundstrand, Daimler Chrysler and Honeywell. Hamilton-Sundstrand is an aerospace and industrial products company with operations in Rockford. Daimler Chrysler operates an auto assembly plant in Belvidere, and Honeywell produces switches, sensors and components in Freeport.

OPPORTUNITY RETURNS IN NORTHERN STATELINE

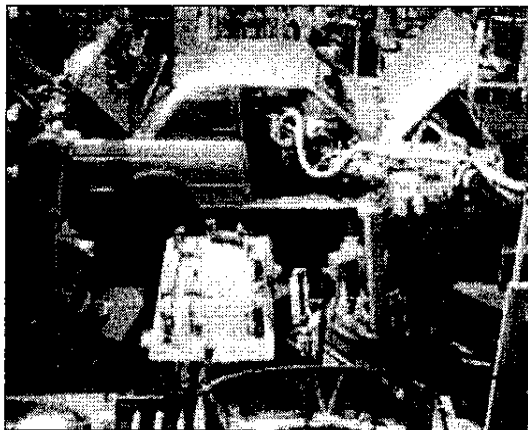
Governor Blagojevich's *Opportunity Returns* plan for the Northern Stateline region consists of six primary goals, each with specific projects, programs or strategies. The goals are to:

1. Support Manufacturing Excellence
2. Assist Entrepreneurs and Small Business
3. Strengthen Education and Workforce Preparedness
4. Maximize Access to Capital: *Capital for Tomorrow*
5. Expand Infrastructure and Connectivity
6. Increase Energy Independence

Support Manufacturing Excellence

Manufacturing is the backbone of the Northern Stateline region's economy and a continual source of pride throughout the region, with 1,395 manufacturing companies in the four-county area. This sector is starting to show positive signs of economic recovery from the recent downturn, due in part to the region's inherent advantages coupled with aggressive economic development efforts led by local development organizations. Under *Opportunity Returns*, efforts will be made to rejuvenate the Northern Stateline economy, particularly the manufacturing sector.

Opportunity Returns will include targeted strategies to attract new investments and develop new domestic and international trade opportunities. The overarching goal will be to promote Northern Stateline's competitive advantages.



- *Enhance New Technology Investment*
- *Open New Markets*
- *Reduce the Cost of Doing Business*
- *Provide Business Intelligence*
- *Promote Innovation*

Action Items:

Enhance New Technology Investment

Manufacturing Modernization. Too often, manufacturers have been forced to put off making expensive improvements because the cost of capital is too high. Governor Blagojevich has created a revolving loan fund to assist manufacturing companies in retooling and upgrading their equipment. The fund will enable manufacturers in the Northern Stateline region, and throughout the state, to modernize their production capabilities and remain competitive. This new program will enable manufacturers to access the funds at their local bank to make necessary improvements, substantially reducing the cost of capital. In addition, manufacturers will be able to access funds for energy efficiency upgrades through the Governor's Manufacturing Energy Efficiency program.

Open New Markets

Regional leaders have made it clear that more Illinois trade exports and greater foreign direct investment is needed in the Northern Stateline region. The Illinois Trade Office (ITO) in DCEO will develop new approaches aimed at taking advantage of the many opportunities of the international marketplace.

Foreign Direct Investment. In an effort to capitalize on the presence of foreign offices and Illinois' status as a world-class, strategic location, the ITO will develop a Reverse Trade Mission Representative Introduction Program. This program will bring the 25 Chicago-based, foreign trade representatives to the Northern Stateline region. DCEO regional staff and ITO staff will work to develop relationships between local manufacturers and foreign trade representatives to promote the region as a great place for foreign direct investment and provide the strategic link needed to increase exports from the region.

New Sector-Specific, Foreign Trade Missions. The state will lead new, sector-specific trade missions for industries throughout Illinois. The regional strikeforce will work with manufacturers to understand what facet of foreign trade is most important to them, where they want to market their products, and where they hope to expand the export of their product internationally. Regional account managers will work with these companies to provide the technical assistance necessary to open global markets to the Northern Stateline region.

Expanded Role of Foreign Trade Zone at the Rockford Regional Airport. Expanding the Rockford Regional Airport and increasing international import and export opportunities are both key priorities in the region. The Airport is currently ranked as the twenty-third largest cargo airport in the nation when measured by landed weight. The Foreign Trade Zone (FTZ) associated with the Airport generally has been under-utilized. The ITO will work directly with Northern Stateline's FTZ, linking it to trade experts in Illinois' foreign offices, as well as the international business community of Illinois. By locating in the FTZ, a manufacturer can reduce its costs through the delayed payment of taxes and duties on goods being shipped into the region from foreign destinations. The local FTZ will also be marketed to foreign countries through the new Reverse Trade Mission Representative Introduction Program to serve as an incentive for foreign direct investment in the region.

Reduce the Cost of Doing Business

Governor's Manufacturing Energy Efficiency Program. The Governor's Manufacturing Energy Efficiency Program will assist manufacturers in the face of rising energy and operating costs. This program will help businesses conduct industrial energy performance reviews, identifying areas for improvement and cost savings. This effort, connected with the Manufacturing Modernization Program, will help businesses lower their energy costs and will add dollars to the bottom line as companies are dealing with ever-increasing energy costs.

Provide Business Intelligence

Competing successfully means understanding how Illinois compares in areas such as cost, relative to our immediate neighbors and other major industrial states. It also means promoting Illinois' competitive advantage. Regional leaders stressed the importance of assessing the competitive position of conducting business in Illinois, including costs of labor, transportation, energy, and taxes.

Winning the "Consolidation Game." Providing training and information for the region's plant managers and local officials was identified by regional leaders as an important need to assist in their efforts to win the "Consolidation Game." The purpose of this effort, to be led by the Regional Director for the Northern Stateline region, will be to target improvements and resources before consolidation decisions have been made. This will help strengthen the position of the Illinois facility in situations where it is pitted against out-of-state facilities in a consolidation battle.

In response to this regional need, the Regional Director and account managers will work with local economic development agencies to identify, on an ongoing basis, firms that are vulnerable to downsizing or consolidation. Regional directors will also identify the appropriate contacts (such as plant managers) within these firms to receive information about state programs and initiatives.

Working directly with plant managers, the state will help them build a case for Illinois as the most appropriate location for consolidated operations.

Promote Innovation

Rockford Applied Manufacturing Research and Technology Center. The Northern Stateline regional leaders discussed the importance of the \$3.6 million dollars of federal funding for an Applied Manufacturing Research and Technology Center in Rockford. In response, Governor Blagojevich will actively support efforts to secure federal funding for the project, and provide state matching funds of up to \$1.6 million to expand the research and technology center to include a technology commercialization entrepreneurial development center.

This project would mean high-quality jobs and access to new domestic and international markets. The focus of the research at the facility will be future combat systems for the Department of Defense, a project for which The Boeing Company is the prime contractor. Additional research will explore micro-manufacturing technologies for tabletop machines and precision parts, which are used in many high-tech and defense applications.

Assist Entrepreneurs and Small Business

During his State of the State Address, Governor Blagojevich announced the creation of an Entrepreneurship Center at Rock Valley College in Rockford. The Governor recognizes the Northern Stateline region's desire to capture homegrown opportunities and convert them into market successes. Addressing this need, the state will assist the region in building the facilities, in financing, and expertise demanded by today's entrepreneurs.



- *Promote Innovation and Technology*
- *Develop the Entrepreneurship Center*
- *Create the Illinois Opportunity Fund*
- *Expand "Buy Illinois"*

Action Items:

Promote Innovation and Technology

Innovation Challenge Grant Program. The leaders of the Northern Stateline region identified the need to leverage or "match" available federal technology development funds to provide much needed capital for the growth of technology firms in the region. In response to this need, Governor Blagojevich is launching the new Innovation Challenge Grant Program to help commercialize new technologies that can be used by the manufacturing sector, biotech companies and agri-business.

The SBIR (Small Business Innovation Research) and STTR (Small Business Technology Transfer) programs are competitively awarded federal grants. They are designed to stimulate technological innovation and provide growth opportunities for small businesses. Through the Innovation Challenge Grant Program, the state will match, and as a result, help businesses secure additional federal dollars.

Develop the Entrepreneurship Center

Rock River Valley Entrepreneurship Center. Technology research and commercialization activities are key to economic expansion in Illinois. The Northern Stateline region has a unique opportunity to take advantage of technology-driven economic development due to the presence of several tech-intensive industry clusters: advanced manufacturing; transportation technology; electronics; and nanotechnology. The state of Illinois is already responding to this priority. In August 2003, Governor Blagojevich launched a new Entrepreneurship Center in partnership with Rock Valley College and Northern Illinois University. The Rock River Valley Entrepreneurship Center

(RRVEC) will serve as the umbrella organization to coordinate all available small business services and programs, as well as to provide targeted, accelerated services to companies with high growth potential. It will act as a regional hub for coordinating entrepreneurship development activity, building on the infrastructure of the Small Business Development Center Network (SBDC), the New Uses Information and Entrepreneur Development Center (NUEDC), and the proposed manufacturing research center in Rockford.

Create the Illinois Opportunity Fund

Illinois Opportunity Fund. As with many other regions of the state, Northern Stateline leaders identified lack of venture capital as an important issue for the state to address. The Illinois Opportunity Fund (IOF), a \$200 million fund of funds, has been designed as a tool to help bridge gaps in access to equity and venture capital throughout Illinois. Although the IOF was not authorized during the spring legislative session, the Governor's Office and DCEO will pursue passage of this critical legislation. The IOF will provide access to venture capital for rural regions and other areas typically under-served by conventional venture capital sources. Other key conceptual elements and goals of the IOF include:

- Investing in sectors considered to be strategic industries for the state of Illinois
- Maintaining a consistent private sector culture of focusing on rate of return in the investing process
- Creating state credit enhancements that limit risk of the private investors in the Fund
- Improving the infrastructure through which capital is delivered throughout the state
- Facilitating and enhancing the flow of venture capital into the state of Illinois

The IOF is based on a successful model piloted in Oklahoma and subsequently implemented in several states, including Iowa. The Rock River Valley Entrepreneurship Center (RRVEC) will serve as the initial point of contact for entrepreneurs seeking investments from the IOF. In addition, the RRVEC will sponsor events where entrepreneurs can present their business plans to IOF representatives, or other groups of investors, including angel investor networks and venture capital organizations.

Expand "Buy Illinois"

"Buy Illinois." Each year, Illinois businesses and government agencies spend billions of dollars on goods and services. Even a small shift in buying habits to target more in-state buying would boost the Illinois economy by hundreds of millions of dollars, resulting in the direct and indirect creation of jobs and the generation of additional tax revenues for schools, roads, police and fire protection, health care and other public services.

In response to stakeholder concerns in the Northern Stateline region, the Governor will expand the state's "Buy Illinois" efforts to increase opportunities for Illinois small and medium-sized businesses, including minority and female-owned and disabled-owned businesses, to sell their products and services to government agencies.

One major component of the new "Buy Illinois" initiative will be a series of trade fairs and workshops to be offered in the Northern Stateline region. The Governor has directed key state

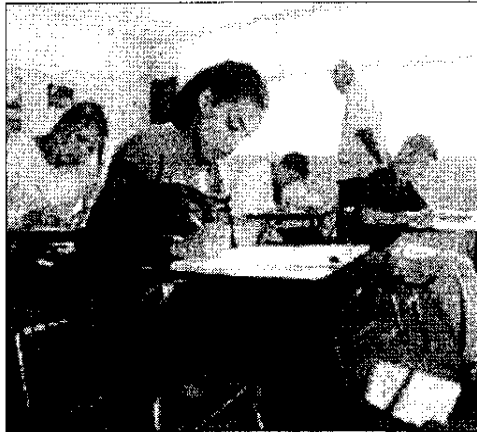
agencies to educate Illinois businesses on the steps needed to access government contracts. Examples include:

- Illinois Department of Central Management Services (CMS) procurement training seminars. CMS, the state agency responsible for the majority of the state's annual \$14.1 billion in procurement, will hold special state procurement workshops. These workshops will provide assistance to entrepreneurs who hope to access the state's procurement process, allowing more companies to gain access to the tremendous buying power of the state.
- Illinois Department of Transportation (IDOT) vendor fairs. The IDOT will host "IDOT Marketplace" in Rockford, which will allow companies and small businesses in the Northern Stateline region to understand the opportunities available to become suppliers, contractors and subcontractors. IDOT will lead a team of state agencies, including DCEO, the Illinois Toll Highway Authority and CMS, to network with local businesses.
- Illinois Capital Development Board (CDB) architect training sessions. CDB will initiate a new training program for architects in the Northern Stateline region. The purpose of this program will be to educate CDB project architects on the preferred use and availability of Illinois products. Architects will be asked to specify Illinois products in their bids, particularly for specialty items and equipment, whenever possible. In this way, the state can proactively increase the use of Illinois goods on state-funded construction projects and keep the associated economic benefits of these purchases within the state and its regions.
- Illinois Department of Commerce and Economic Opportunity (DCEO) and other partner agencies will work with the local Procurement Technical Assistance Center (PTAC) at Rock Valley College to improve understanding of the federal and state procurement processes among businesses in the Northern Stateline region. The PTACs provide one-on-one counseling, technical information, marketing assistance and training to existing Illinois businesses that are interested in selling their products and/or services to local, state, or federal government agencies.

Strengthen Education and Workforce Preparedness

As Northern Stateline's economic base becomes more advanced and technologically driven, so too must its workforce. The foundation of any successful economic development plan is hard-working people. The region seeks to better prepare its citizens for the types of quality jobs necessary for an advancing economy.

Governor Blagojevich's regional economic development plan addresses this priority with major initiatives that address both the short-term and long-term needs for skilled workers in the region, especially in the manufacturing sector.



- *Expand Access to College Degree Programs*
- *Build Science and Technology Programs in Illinois Schools*
- *Develop the "21st Century Jobs" Training Initiative*
- *Provide Critical Skills Training*

Action Items:

Expand Access to College Degree Programs

NIU Baccalaureate Programs in Rochford. The final report of the Regional Vision for Community Excellence stated that it is a priority for the area to, "Improve access to and develop new market-driven programs for (public and private) baccalaureate degrees, engineering degrees, and graduate degrees..."Expanding baccalaureate degrees in the Northern Stateline region remains a top priority as mentioned during recent group discussions.

Governor Blagojevich will work cooperatively with the Illinois Board of Higher Education (ISBE) and business and industry, educational leaders and public officials in the region to expand access to higher education, in particular four-year college degree programs critical to the economic development of the region

Governor Blagojevich's first priority in improving access to higher education in the region will be to support the expansion of Northern Illinois University (NIU) four-year degree programs in business, engineering, engineering technology, and computer science. The expansion will happen in two phases: first, the expansion of business programs, and second, the expansion of engineering and computer science programs.

Build Science and Technology Programs in Illinois Schools

Building Science and Technology Skills in Middle and High Schools. DCFO and ISBE are working cooperatively with business and industry to establish a new program for career and technical education in Illinois high schools to expand career development opportunities. This new program focuses on helping students advance in the areas of science and technology. It will strengthen academic requirements for participating students and expand partnerships with business and industry to improve students' preparation for science and technology careers.

The first steps toward achieving this objective in the Northern Stateline region is to establish a program at the high school level that prepares students to enter post-secondary degree programs in engineering and engineering technology. ISBE will work with two Northern Stateline high schools to implement a nationally-recognized, pre-engineering program called "Project Lead The Way."

Develop the “21st Century Jobs” Training Initiative

Employer Training Investment Program. Through the “21st Century Jobs” Training Initiative, the state is creating a new generation of employer-focused, customized training programs that are designed to address the needs of large, medium and small-sized manufacturers. The most important part of this initiative will be the Employer Training Investment Program (ETIP).

ETIP will help keep Illinois’ workers up to speed with new technologies and business practices. This training, in turn, will also help businesses increase productivity, reduce costs, improve quality and boost competitiveness. ETIP grants can reimburse Illinois companies for up to 50 percent of the cost of training their employees. The program may involve large companies (250 or more full-time employees) or small to mid-sized companies (less than 250 employees). ETIP projects may also involve individual employers or multi-company projects that allow companies with common employee training needs to join together in meeting these common needs and applying for training funds.

This initiative – particularly the newly-created small to mid-sized company component of ETIP – will offer assistance to address the training needs necessary to retain and expand manufacturing companies in the Northern Stateline region, especially businesses that supply larger companies. This program will be utilized, in particular, with regard to the regionally identified need for employee-training among automotive and aircraft assemblers and parts manufacturers.

Provide Critical Skills Training

Responding to Industry Skill Shortages. The Governor’s Critical Skills Shortage Initiative increases training dollars to the region to help existing firms fill skills shortage gaps. DCEO will work with the Local Workforce Investment Boards (LWIBs), in partnership with business and labor leaders, to respond to critical skill shortages in key industry sectors within the region. Funding will then be made available to tailor training programs for identified critical skill occupation shortages within the regional plan.

Maximize Access to Capital: Capital for Tomorrow

Access to capital is a significant impediment to growth potential. In response to this concern, Governor Blagojevich has embarked upon several additional, new initiatives that will increase the amount of capital available to stimulate growth and development of small businesses.

There are three components to the “Capital for Tomorrow” program. They are: (1) *Expand Community Revolving Loan Funds*; (2) *Create Lines of Credit*; and (3) *Enhance Partnerships with Community Development Financial Institutions*.



- *Expand Community Revolving Loan Funds*
- *Create Lines of Credit*
- *Enhance Partnerships with Community Development Financial Institutions*

Action Items:

Expand Community Revolving Loan Funds

Revolving Loan Funds. Several years ago, the state provided funds to local governments to establish community revolving loan funds. Historically, the funds have been highly restricted. Governor Blagojevich is changing the guidelines to allow communities to use the funds to meet the needs of business. For example, communities will be able to use the revolving loan funds to make quasi-equity investments in local businesses.

Without significant changes in state guidelines, \$3.8 million in the Northern Stateline Revolving Loan Fund will continue to be under-utilized. The new “*Capital for Tomorrow*” program will allow local funds to maximize their business financing capabilities.

Create Lines of Credit

Lines of Credit. Businesses often need to draw on lines of credit to service new customers and expand their operations. Many small businesses have expressed a need for a low interest line of credit to make them competitive when bidding on large contracts and pursuing new markets.

To address this need, DCEO will expand its Participation Loan Program and also permit the use of community revolving loan funds as lines of credit to small businesses in the region. Because they often experience significant variance in earnings, growth, seasonality and operating cash flows, a line of credit arrangement is more efficient and less costly for the small business. Businesses have more flexibility to grow and expand at a lower cost using lines of credit.

Enhance Partnerships with Community Development Financial Institutions

Community Development Financial Institutions (CDFIs). CDFIs are an increasing source of capital to small businesses. Over 18% of all CDFI loans are made to small businesses on a nationwide basis. DCEO will open its small business lending programs to the 36 federally-certified Illinois CDFIs. This will provide businesses increased access to loans with lower interest rates.

Expand Infrastructure and Connectivity

In the Information Age, the Northern Stateline region's ability to transport data, goods, power and people is paramount. To capture new investment and support existing business growth, the region needs efficient, cost-effective and accessible telecommunications, transportation and public utility infrastructure. Under *Opportunity Returns*, Governor Blagojevich will help the Northern Stateline region improve this critical infrastructure to better position the region for present and future needs.



- *Improve the Transportation Infrastructure*
- *Support the Rockford Regional Airport*
- *Expand Telecommunications Access*
- *Renew Community Infrastructure*

Action Items:

Improve the Transportation Infrastructure

US 20. Regional focus group participants placed a high priority on the widening of US Route 20, as did the Regional Vision for Community Excellence final report. On June 25, 2003, Governor Blagojevich announced that IDOT would undertake a \$20 million effort to widen U.S. Route 20 (Glacier Shadow Pass) in northwestern Illinois to four lanes from Freeport to Galena. Funding for design and final land acquisition for the US Route 20-Freeport Bypass will be provided in 2004, and funding for construction of the bypass will be provided in 2005, depending on the progress of Phase 1 initiatives. This will complete the northern bypass around the town of Freeport, an extremely high infrastructure priority for this area of the Northern Stateline region. Currently, traffic backs up regularly on US 20 in this area. The completion of the bypass will open up additional opportunities for development.

IL 173 Interchange Project. The widening of IL 173 (IL 173 – I-90 to IL 251) will create a new interchange that allows access to Loves Park, Machesney Park and Rock Cut State Park. In addition, IDOT will widen the road to four-lanes and will connect two major state routes. Funding for design and land acquisition will be provided in 2004. With the interchange and widening of IL 173, it will also be necessary to reconstruct the existing intersection at IL 251 to accommodate traffic generated as a result of new commercial development.

Illinois Route 2 (North and South Main Streets). A widened section for the main route in downtown Rockford on North and South Main Streets of Illinois Route 2 is a key economic development priority for the region in order to open up access to freight and manufacturing development. Design and land acquisition funding will be made available by IDOT in late 2004.

Global III Intermodal Facility. Union Pacific's new Global III Intermodal Facility in Rochelle is a state-of-the-art terminal, designed to serve as a critical interchange hub and loading/unloading terminal for rail intermodal shipments moving through the Northern Stateline region. This new facility, with the ability to expedite the operations of over 25 trains and 3,000 containers daily, provides the capacity for expansion to keep pace with the projected growth of the robust intermodal market for years to come.

Because of the Global III Intermodal Facility, the Northern Stateline region, as well as all of Northern Illinois, stands to experience enormous growth as industries locate warehouse and distribution facilities nearby. The facility offers multiple advantages, including direct interstate highway routes (Interstates 39 & 88) with easy access to major east-west and north-south markets. To take full advantage of the untapped potential of the Global III Intermodal Facility, the state will fund an economic impact analysis to better understand the potential of a transportation and logistics hub connecting the Rockford Regional Airport and Interstates 39 and 88. DCEO will also work with regional economic development organizations to devise a marketing strategy centered on the intermodal facility. Finally, IDOT will examine highway improvement needs leading directly to the intermodal facility to maximize its growth potential.

Cherry Valley Tolls. Stakeholders in the Northern Stateline region expressed concern over the slowing of traffic due to the Cherry Valley Tolls. Governor Blagojevich has directed the Illinois Toll Highway Authority to work to remove the Cherry Valley Tolls and identify a source of the revenue elsewhere.

Support the Rockford Regional Airport

Regional Airport Marketing. Regional leaders identified the need to develop the Rockford Regional Airport as a freight and passenger transit hub, as well as a center of regional economic activity.

Marketing is a vital component to building and maintaining an airport's client base. The state will provide marketing assistance grants to communities to market their airport's services to potential new customers and to existing customers who may not fully utilize regional airports for their transportation needs. DCEO's regional partners will provide matching funds for these grants, allowing the Department to target resources to as many regional airports as possible.

Expand Telecommunications Access

The Northern Stateline region identified a need to expand access to broadband services, as well as a need to continue to improve telecommunication infrastructure overall in the region. Broadband technologies, which encompass all evolving high-speed digital technologies that provide consumers with integrated access to voice, high-speed data, video-on-demand, and interactive delivery services, are a fundamental component of the communications revolution. According to the Federal Communications Commission (FCC), fully evolved broadband will virtually eliminate geographic distance as an obstacle to acquiring information and dramatically reduce the time it takes to access information. Locally, recognizing that broadband availability is important to attracting, expanding and retaining business firms, a 20-member task force has been established to gather information and inventory high-speed technologies in the area.

Broadband Task Force. In keeping with his promise to improve high-speed internet infrastructure, Governor Blagojevich has directed DCEO to initiate two significant projects in partnership with the Illinois Commerce Commission (ICC) and the Illinois Century Network (ICN) to expand the state's understanding of the market forces in this industry and eventually expand the diffusion

of broadband services and infrastructure in the Northern Stateline region. First, the Governor will convene a statewide task force to examine the issues surrounding broadband capabilities, identifying gaps in service and pinpointing the barriers to its expansion in the region. This group will be charged with making recommendations and to take actions that would eliminate those barriers. The task force will also review the findings and recommendations of the local broadband task force in the Northern Stateline region. Second, the task force will investigate the possibility of utilizing the ICN as an option to expand the diffusion of broadband services and infrastructure to the region.

In conjunction with the work of the broadband task force, DCEO will work with IDOT and the Illinois Toll Highway Authority to identify impediments and explore ways to install broadband fiber optic lines.

Renew Community Infrastructure

Community Infrastructure Assistance. DCEO, through the Community Development Assistance Program (CDAP), in partnership with the Illinois Environmental Protection Agency (IEPA) and the US Department of Agriculture's Rural Development office, will work with local governments in the Northern Stateline region to identify needs and provide assistance in applying for funding for housing rehabilitation, sewer and water, and other economic development projects that will lead to creating and retaining jobs in the community and address community infrastructure needs.

Community Development Assistance Program. Governor Blagojevich has authorized a \$750,000 grant from CDAP to the city of South Beloit to extend a sanitary sewer to Pacific Bearing Corporation. As a result of the project, the city of South Beloit will benefit, as Pacific Bearing Corporation will retain 116 employees. If the project had not been funded, the company would have relocated to Wisconsin.

Increase Energy Independence

The Northern Stateline region has significant natural resources that can lead to greater energy independence. The region's strong agricultural base offers many opportunities for economic growth, particularly in the areas of alternative fuels. Governor Blagojevich will continue to pursue renewable energy production throughout the state.



- Promote Ethanol Production
- Create the Small Business Smart Energy Program
- Support Cow Power

Action Items:

Promote Ethanol Production

New Ethanol Production Facilities. Governor Blagojevich signed HB46 on June 11, 2003, establishing the new and innovative Renewable Fuels Development Program. This program will support new biofuels production facilities of 30 million gallons or more of capacity. The Renewable Fuels Development Program received an authorization of \$15 million for FY04. DCEO will work directly with project developers, investors, IEPA, and IDOT to develop new ethanol production facilities in the Northern Stateline region. DCEO will coordinate activities with IEPA to expedite the permitting process for construction and operations.

Create the Small Business Smart Energy Program

Small Business Smart Energy Program. In order to help small businesses with escalating energy costs, the state has created the Illinois Small Business Smart Energy Program. The program will help businesses be more efficient, which will lower their energy costs. The program will fund energy audits for small business, identifying ways for them to save on their energy costs. The program will also provide training for building architects, designers and construction contractors on how to use more energy efficient technologies in new construction.

Support Cow Power

Cow Power Initiative. The state is launching an initiative to fund Anaerobic Digesters (ADs), which generate electricity from livestock wastes (using a microbial process to accelerate the decomposition of the waste and capture and utilize the methane gas produced by the process). Digesters also eliminate odor problems associated with livestock. As such, digesters can help the livestock industry be a good neighbor. The livestock industry, a major grain consumer, is very beneficial to Illinois' agricultural economy. Illinois corn farmers will also benefit from this initiative.

Conclusion

The Northern Stateline region has world-class assets, such as transportation infrastructure, a skilled workforce, access to global markets, and a high quality of life. *Opportunity Returns* is a proactive effort to build on these strengths. It is the beginning of an ongoing process to build a new partnership between the state and local leaders that will result in a better, stronger economy for all of Illinois. We cannot afford to wait for the national economy to rebound. It is up to the state and its regions to build a better future for Illinois.

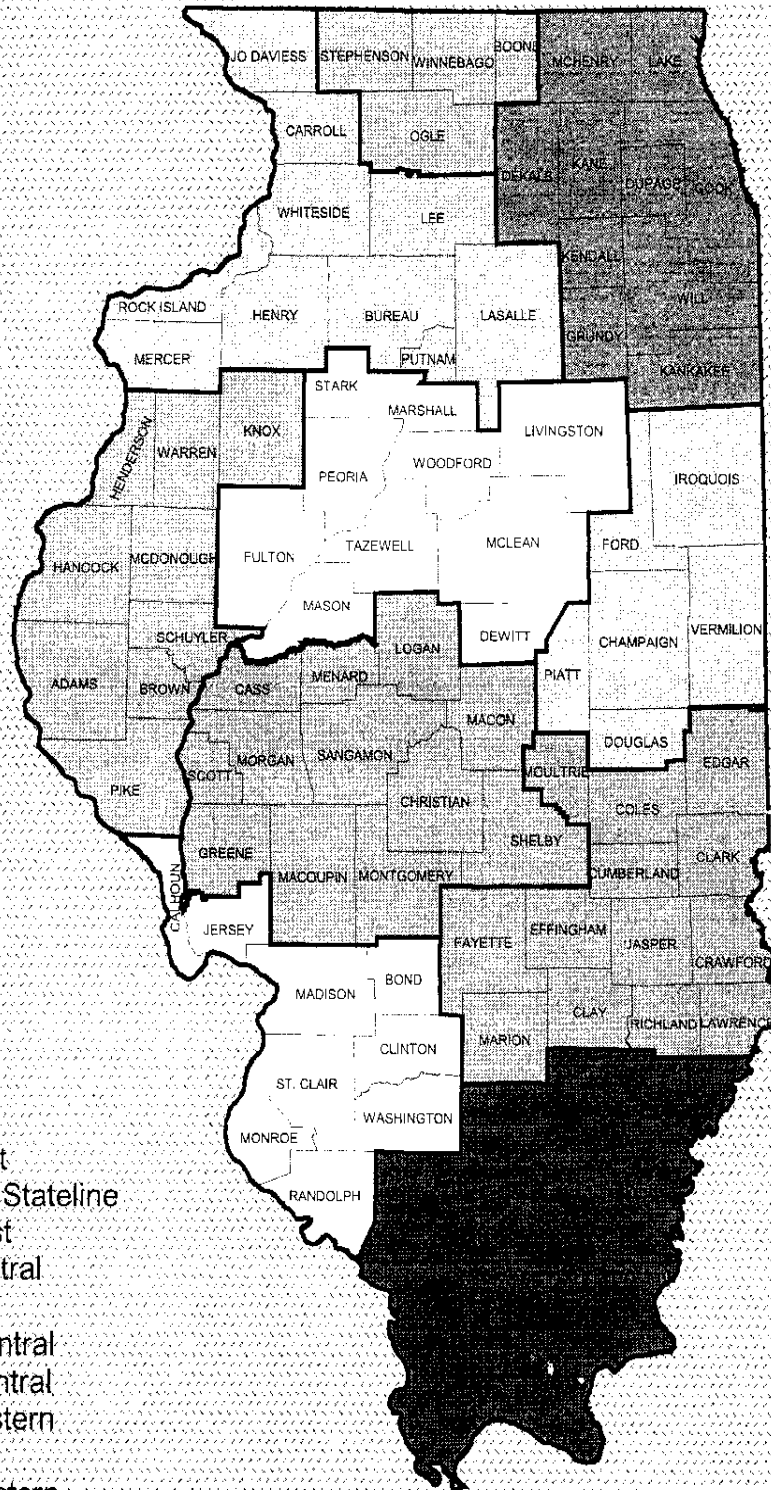
Themes, Initiatives and Partners

| 1. Support Manufacturing Excellence | | |
|---|--|---|
| <i>Enhance New Technology Investment</i> | Manufacturing Modernization | DCEO |
| <i>Open New Markets</i> | Foreign Direct Investment; Sector-Specific Trade Missions; Expanded Role of Foreign Trade Zone at Northwest Chicagoland Regional Airport at Rockford | DCEO, IDOA |
| <i>Reduce the Cost of Doing Business</i> | Manufacturers Energy Efficiency Program | DCEO |
| <i>Provide Business Intelligence</i> | Winning the Consolidation Game | DCEO; other state agencies; local partners |
| <i>Promote Innovation</i> | Rockford Applied Manufacturing Research and Technology Center | DCEO; US Department of Defense; Small Business Administration; U of I; NIU; Rock Valley College |
| 2. Assist Entrepreneurs and Small Business | | |
| <i>Promote Innovation and Technology</i> | Innovation Challenge Grant Program | DCEO; Small Business Administration; NIU |
| <i>Develop the Entrepreneurship Center</i> | Rock River Valley Entrepreneurship Center | DCEO; Rock Valley College; NIU |
| <i>Create the Illinois Opportunity Fund</i> | Illinois Opportunity Fund is a venture capital fund of funds | DCEO; Rock Valley College; NIU |
| <i>Expand "Buy Illinois"</i> | "Buy Illinois" Program; enhanced procurement assistance, vendor and architect training seminars | DCEO; CMS; IDOT; CDB |

| <i>Name/Initiative</i> | <i>Area/Description</i> | <i>Agency Partners</i> |
|---|--|---|
| 3. Strengthen Education and Workforce Preparedness | | |
| <i>Expand Access to College Degree Programs</i> | NIU Baccalaureate Programs in Rockford | IBHE; Northern Illinois University; Rock Valley College |
| <i>Build Science and Technology Programs in Illinois Schools</i> | Building Science and Technology Skills in middle and high schools; expanding technical education and career development programs | Governor's Office; ISBE; Local School Districts; DCEO |
| <i>Develop the "21st Century Jobs" Training Initiative</i> | Employer Training Investment Program; training cost reimbursements to employers | DCEO |
| <i>Provide Critical Skills Training</i> | Promoting Critical Skills Shortages initiative | DCEO; IBHE; ICCB; ISBE; IDES; IDHS; IWIBs |
| 4. Maximize Access to Capital: Capital for Tomorrow | | |
| <i>Expand Community Revolving Loan Funds</i> | Allow currently underutilized local funds to maximize business finance capabilities | Community Revolving Loan Funds; DCEO |
| <i>Create Lines of Credit</i> | Expanded uses of Participation Loan Program | DCEO |
| <i>Enhance Partnerships with Community Development Financial Institutions</i> | DCEO opens small business lending programs to CDFIs | DCEO |
| 5. Expand Infrastructure and Connectivity | | |
| <i>Improve the Transportation Infrastructure</i> | I73 Bypass Project; US Highway 20; Global III Intermodal Facility; Cherry Valley Tolls | IDOT; DCEO; Illinois Toll Highway Authority |
| <i>Support the Rockford Regional Airport</i> | Regional Airport Marketing | DCEO; IDOT |
| <i>Expand Telecommunications Access</i> | Telecommunications Infrastructure improvements to expand access to broadband | DCEO; Illinois Commerce Commission; Illinois Century Network; IDOT; Illinois Toll Highway Authority |

| | | |
|---|--|------------------------|
| <i>Renew Community Infrastructure</i> | Community Development Assistance Program | DCEO |
| 6. Increase Energy Independence | | |
| <i>Promote Ethanol Production</i> | Support new ethanol plants through Renewable Fuels Development Program | DCLO; IEPA; IDOT; IDOA |
| <i>Create the Small Business Smart Energy Program</i> | Integrated energy efficiency program to assist small businesses | DCEO |
| <i>Support Cow Power</i> | Pilot program using anaerobic digesters to generate electricity | DCEO; USDA; IDOA |

Governor's Economic Development Regions



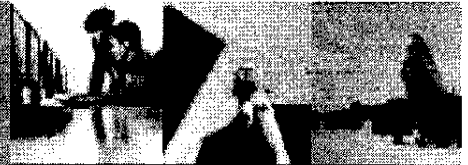
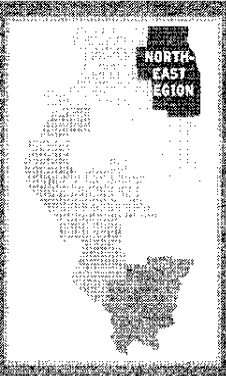
- Regions
- Northeast
 - Northern Stateline
 - Northwest
 - East Central
 - Central
 - North Central
 - West Central
 - Southeastern
 - Southern
 - Southwestern





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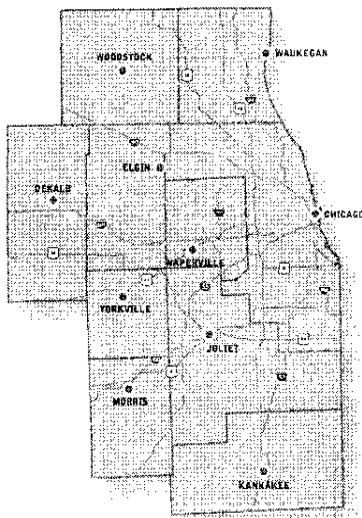
A look at Illinois' Northeast Region



ILLINOIS
OPPORTUNITY IS OUR BUSINESS

Illinois is a state rich in opportunity. Whether you are looking to build a business, find a job or conduct innovative research, Illinois' regional diversity offers something for everyone. The Illinois business climate—which features world-class universities, skyscrapers, family farms and ethanol plants, cutting-edge biotech research, small businesses and powerhouse manufacturers—is advanced and diverse. Whatever your business or your plans for the future, Illinois can provide the tools necessary to help you achieve your goals.

> NORTHEAST REGIONAL MAP



Northeast Illinois is a global leader in business achievement, with 30 Fortune 500 companies, 13 Fortune Global companies and 10 Financial Times Global 500 companies locating their headquarters here.

Site Selection Magazine ranked the Chicagoland area the top metro region for new and expanded corporate facilities in 2005. Recent Northeast headquarter moves and business expansions include: United Airlines, Mittal Steel, Pabst Brewing Company, Takeda, Astellas Pharma, Target, OfficeMax, and Levy Home Entertainment.

The Northeast regions' powerful economy and unequalled access to North American, and global markets via road, rail, air and navigable waterways, has helped make it the third largest container hub in the world.

The ten-county **Northeast Region** of Illinois is one of the state's ten Economic Development Regions established as part of Governor Blagojevich's *Opportunity Returns* economic development strategy. The program identifies common economic strengths and needs in each region, and then targets the specific state programs and services that will best promote the region's growth.

The Northeast Region's largest area of employment comes from the professional and business services sector with 680,000 workers. Government is the second-largest employer, followed by education and health care services, which are forecast for continued growth, and the manufacturing industry rounding out the top four with more than 450,000 employees.

The Northeast Region has much to offer new and expanding businesses, including an unmatched transportation infrastructure and a highly-skilled workforce. Chicago's airports handle more than 3,300 daily flights and are within a four-hour flight to the majority of major North American destinations. Fifty percent of North American industry is within one day's truck delivery, and 50 percent of U.S. container rail freight passes through rail yards in the Chicago metropolitan area.

The Northeast region possesses a highly-skilled, diversified labor pool, which leads the nation in productivity. The region also boasts first rate educational institutions, which are providing future workers the skills and knowledge necessary for the 21st century workplace.

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REGIONAL STRENGTHS



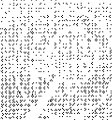
KEY INDUSTRIES

- > The Northeast regional economy is healthy, diverse, and vibrant, with a wide range of successful industries.
- > About two-thirds of the state's manufacturers are located in the Northeastern Region, with about 12,000 manufacturing facilities. Top manufacturing sectors by employment are fabricated metal products, food manufacturing and machinery.
- > Northeastern Illinois is a hub for transportation and logistics companies, with 3,000 public warehousing facilities, readily available sites or buildings, and a wide array of terminals, freight forwarders and transportation companies.
- > The Northeast Region is also a leader in the financial services industry, with the strength and diversity to provide the capital resources necessary for industrial and commercial development. Chicago is also home to many of the world's leading stock exchanges, including the Chicago Board of Trade, the Mercantile Exchange, and the Board of Options.



WORLD BUSINESS HUB

- > Northeast Illinois has an exceptional business climate, with growing domestic and international companies flocking here because of the region's central location and because their growth depends on access to a highly skilled workforce, minimal transportation and distribution costs, cutting-edge technology, flexible research and development support, and abundant and reliable energy sources.
- > Led by the Northeast Region, Illinois currently ranks fifth in the nation in attracting foreign direct investment, according to the Organization for International Investment, which has created nearly 236,000 Illinois jobs.
- > Chicago hosts 26 different ethnic groups with a population greater than 25,000 and speaks more than 100 languages. There are more than 60 foreign consulates, 100 trade associations and foreign chambers of commerce and a large concentration of foreign banks.



TOURISM/CONVENTIONS

- > The Northeast Region is at the forefront of scientific discovery, with hundreds of academic, government, corporate R&D and non-profit research institutions developing innovations in fields such as biotechnology, nanoscience and telecommunications.
- > World-class universities and research institutions include: the University of Chicago, Northwestern University, Argonne National Laboratory, Fermi National Accelerator Laboratory, University Technology Park at the Illinois Institute of Technology and the Illinois Medical District.
- > Business Facilities Magazine named Illinois the top state for biotechnology growth in 2005, and regional, multi-billion dollar medical companies, such as Abbott, Baxter and Inade-Behring, are setting industry standards for excellence in the biotech field.
- > Chicago recently hosted BIO 2006--the world's most prestigious life science conference. Chicago drew a record 20,000 attendees from more than 60 countries. The conference will return to Chicago in 2010.



TOURISM/CONVENTIONS

- > Tourism is a fundamental component in the economic engine of the Northeast regional economy.
- > With a skyline of architectural treasures complemented by 29 miles of lakefront, world-class museums and culture that includes the nation's top symphony orchestra, Chicago and its surrounding areas have tremendous natural and cultural resources attracting visitors from all around the globe.
- > In addition, conventions, trade shows and meetings generate billions in direct spending, create and support tens of thousands of jobs and further promote the Northeast Region and the state.
- > Northeastern tourist attractions include Navy Pier, the annual Taste of Chicago festival, an array of professional sports teams and exciting restaurants and nightlife.



"The Great Lakes states account for a disproportionately large share of recent U.S. manufacturing job losses."



METROPOLITAN POLICY PROGRAM

Bearing the Brunt: Manufacturing Job Loss in the Great Lakes Region, 1995–2005

Howard Wial and Alec Friedhoff

Findings

Analysis of manufacturing employment and production in seven Great Lakes states and their metropolitan areas from 1995 through 2005 finds that:¹

- **More than one-third of the nation's loss of manufacturing jobs between 2000 and 2005 occurred in seven Great Lakes states: Illinois, Indiana, Michigan, New York, Ohio, Pennsylvania, and Wisconsin.** Between 1995 and 2005, the United States lost more than 3 million manufacturing jobs. Nearly all of this job loss occurred during the last five years, and 37.5 percent of the loss occurred in the seven Great Lakes states. Michigan lost the most manufacturing jobs between 2000 and 2005 (nearly 218,000), followed by Ohio, Illinois, and Pennsylvania.
- **Despite these job losses, manufacturing remains a major driver of the nation's economy and the economy of the Great Lakes region.** Because productivity was higher in manufacturing than in other sectors of the economy, in 2004, manufacturing accounted for a higher share of gross state product than its share of employment, both nationwide and in six of the seven states in the Great Lakes manufacturing belt. In addition, productivity in the manufacturing sector increased by 38 percent between 1997 and 2004, a much higher increase than the 24.4 percent growth in productivity for all non-farm businesses during that same time period.
- **Manufacturing job losses were pervasive in Great Lakes metropolitan areas.** All but one of the 25 largest manufacturing-dependent metropolitan areas in the Great Lakes region lost manufacturing jobs during the last decade (1995–2005), often at a faster rate than the United States as a whole. Chicago and Detroit lost the most manufacturing jobs in the last five years (over 100,000 jobs each), while Canton, OH, and Flint, MI, lost the greatest shares of manufacturing employment.
- **The metropolitan areas in which manufacturing employment peaked between 1995 and 1997 tended to experience more severe manufacturing job losses between 1995 and 2005 than those in which manufacturing peaked later.** The 13 metropolitan areas where manufacturing employment peaked between 1995 and 1997 saw an average 26.8 percent decline in manufacturing employment between 1995 and 2005. In the other 11 metropolitan areas where manufacturing employment peaked later, between 1998 and 2000, the average metropolitan area lost 18.9 percent of its manufacturing jobs during the decade.
- **Manufacturing job losses were a major reason for slow overall job growth, and sometimes overall job losses, in Great Lakes metropolitan areas.** Furthermore, employment gains in high-wage advanced service industries, which occurred in all but one of the 25 metropolitan areas studied, were not large enough to offset the loss of manufacturing jobs in most areas.

Although not all manufacturing jobs can or should be saved, a combination of trade, health care, and economic and workforce development policies can help to retain and expand employment in high-productivity manufacturing in the United States.

B

Introduction

More than 47,000 workers at General Motors and auto parts supplier Delphi Corp. recently accepted early retirement offers or buyouts to leave their jobs. When those workers depart by the end of 2006, the two companies will have reduced their combined hourly workforces in the United States by about one-third. Job cuts in U.S. manufacturing, however, extend well beyond the auto industry and the state of Michigan and are having a profound effect on local economies throughout the Great Lakes region.

This report examines recent trends in manufacturing employment in seven states of the Great Lakes manufacturing belt and in the 25 largest manufacturing-dependent metropolitan areas in those states. Trends are compared with information on manufacturing output and on employment in the advanced service sector, consisting of the information, financial activities, and professional and business services industries. As with manufacturing, these industries both pay higher-than-average wages and generate export income for their home regions.² Because of their relatively high wages and exportability, and because, unlike manufacturing, they have added jobs during the past decade, the advanced services sector has the potential to be a foundation for high-wage regional economic development.

Methodology

Geographic Coverage

This report covers seven states of the Great Lakes manufacturing belt: Illinois, Indiana, Michigan, New York, Ohio, Pennsylvania, and Wisconsin. These states composed the heart of U.S. manufacturing for most of the last century, still account for nearly

Table 1. Top 25 Manufacturing-Dependent Metropolitan Areas in the Great Lakes, 2005

| Metropolitan Area | Percentage of Total Jobs in Manufacturing | Metropolitan Area | Percentage of Total Jobs in Manufacturing |
|-------------------|---|-------------------|---|
| York, PA | 21.7% | Dayton, OH | 14.3% |
| Evansville, IN | 19.3% | Cleveland, OH | 14.0% |
| Lancaster, PA | 18.9% | Flint, MI | 14.0% |
| Grand Rapids, MI | 18.8% | Detroit, MI | 13.9% |
| Reading, PA | 18.6% | Davenport, IA | 13.6% |
| Canton, OH | 17.7% | Allentown, PA | 13.5% |
| Fort Wayne, IN | 17.2% | Scranton, PA | 13.4% |
| Peoria, IL | 16.7% | Cincinnati, OH | 11.9% |
| Youngstown, OH | 16.7% | Buffalo, NY | 11.7% |
| Milwaukee, WI | 16.0% | Indianapolis, IN | 11.4% |
| Toledo, OH | 15.5% | Chicago, IL | 11.1% |
| Rochester, NY | 14.9% | Ann Arbor, MI | 10.7% |
| Akron, OH | 14.6% | United States | 10.7% |

Notes: The manufacturing percentage for the United States includes the entire nation, both metropolitan and nonmetropolitan.

Ann Arbor's manufacturing job percentage is above the national average but rounds to the national average at one decimal point.

Source: Authors' analysis of Current Employment Statistics data from the Bureau of Labor Statistics.

one-third of all U.S. manufacturing jobs, and make up the only region of the United States in which nearly all large metropolitan areas (those with populations of at least one million) are manufacturing-dependent.

The report focuses on the 25 largest metropolitan statistical areas (measured by the 2000 population) in the seven selected states. A metropolitan area is counted as being within the seven-state region if the majority of its employment is within one or more of the seven states.³ Manufacturing-dependent metropolitan areas are defined as those in which manufacturing's share of total metropolitan employment exceeded manufacturing's share of total U.S. employment in 2005 (10.7 percent), as measured by the Bureau of Labor Statistics (BLS) Current Employment Statistics program. Table 1 shows the selected metropolitan areas and the percentage of

jobs in each area that were manufacturing jobs in 2005.⁴

Time Period

The report covers the decade 1995–2005. The year 2005 is the most recent year for which a full year of employment data is available. The year 1995 is a suitable starting point for this analysis because it represents a roughly similar point in the business cycle to the year 2005. Changes in employment during the entire 1995–2005 period, therefore, are likely to result from long-term economic shifts rather than from the ups and downs of the business cycle.

The report frequently provides detailed employment information for two subperiods: 1995–2000 and 2000–2005. In each of the seven Great Lakes states covered in this report, total employment, measured as an annual average, reached its pre-

recession peak in 2000. (In contrast, total employment in the United States peaked most recently in 2001, the year in which the latest recession occurred.) In the seven Great Lakes states, the 1995–2000 subperiod roughly corresponds to the end of the pre-recession employment upswing. The 2000–2005 includes the employment downturn and subsequent recovery.

Consistent data on economic output are unavailable for the entire period of 1995–2005. The most recent data are for 2004. Output data for years prior to 1997 use a different industry classification system from the one currently in use and are not comparable to more recent data. Therefore, the output data presented in this report cover only the years 1997 through 2004.

Data Sources

Employment data are from the BLS Current Employment Statistics program, the standard source for the most up-to-date employment data. Other available data sources do not provide employment data for all of 2005. The data are derived from a monthly survey of 400,000 business establishments nationwide. They include only payroll employment in nonagricultural industries. Agricultural workers, the self-employed, unpaid family or volunteer workers, private household workers, and members of the armed forces are excluded.

All employment data in this report are annual averages of seasonally unadjusted data. Although monthly employment data are available from the Current Employment Statistics program, these data are not seasonally adjusted for metropolitan areas. Seasonally unadjusted data sometimes exhibit large monthly swings, obscuring longer-term trends. Annual averages of seasonally unadjusted data avoid this problem.

The report measures manufacturing output and total economic output at the state level using the Bureau of

Economic Analysis's (BEA) data on gross state product. Gross state product is the state-level analogue of gross domestic product. However, because there are minor differences between gross domestic product and gross state product for the entire United States, the report uses gross state product as its national-level measure of output when comparing output between individual states and the United States as a whole. BEA does not report measures of economic output for metropolitan areas.

Findings

A. More than one-third of the nation's loss of manufacturing jobs between 2000 and 2005 occurred in seven Great Lakes states: Illinois, Indiana, Michigan, New York, Ohio, Pennsylvania, and Wisconsin.

The Great Lakes states accounted for a disproportionately large share of all U.S. manufacturing job losses. Between 2000 and 2005, the United States lost more than 3 million manufacturing jobs. Michigan alone lost nearly 218,000 (Table 2). Together, the seven Great Lakes states included in this report lost more than 1.1 million manufacturing jobs, or 37.5 per-

cent of all U.S. manufacturing jobs lost. The seven states' combined share of U.S. manufacturing jobs lost between 2000 and 2005 (37.5 percent) exceeded their combined share of U.S. manufacturing jobs in 2000 (32.8 percent).

All seven Great Lakes states included in this report, as well as the United States as a whole, experienced severe manufacturing job loss during both the 1995–2005 and 2000–2005 periods (Figure 1). Nearly all the 1995–2005 losses occurred between 2000 and 2005. Between 2000 and 2005, the nation as a whole lost 17.6 percent of its manufacturing job base. During that period, all the Great Lakes states except Indiana (13.9 percent manufacturing job loss) and Wisconsin (14.7 percent loss) lost larger percentages of their manufacturing jobs than the entire nation. Michigan lost the greatest percentage of manufacturing jobs (24.3 percent), followed by New York (22.7 percent). Illinois, Ohio, and Pennsylvania lost 20 to 21 percent of their manufacturing jobs.

Manufacturing job losses were much more severe between 2000 and 2005 than between 1995 and 2000. From 1995 through 2000, Indiana, Michigan, Wisconsin, and the entire United States gained manufacturing

Table 2. Manufacturing Employment Change in the United States and Great Lakes States, 2000–2005

| State | Change in Number of Manufacturing Jobs | Percentage Change in Manufacturing Jobs |
|---------------|--|---|
| Michigan | -217,900 | -24.3% |
| Ohio | -207,600 | -20.3% |
| Illinois | -181,400 | -20.8% |
| Pennsylvania | -180,500 | -20.9% |
| New York | -170,700 | -22.7% |
| Indiana | -92,300 | -13.9% |
| Wisconsin | -87,600 | -14.7% |
| United States | -3,031,000 | -17.6% |

Source: Authors' analysis of BLS Current Employment Statistics data.

B

jobs, while the other Great Lakes states lost between 1.6 percent (Ohio) and 7.3 percent (New York) of their manufacturing jobs (Figure 1).⁵ Each of the states that lost manufacturing jobs from 1995 through 2000 lost a smaller share of its manufacturing jobs during that five-year period than in the subsequent five-year period.

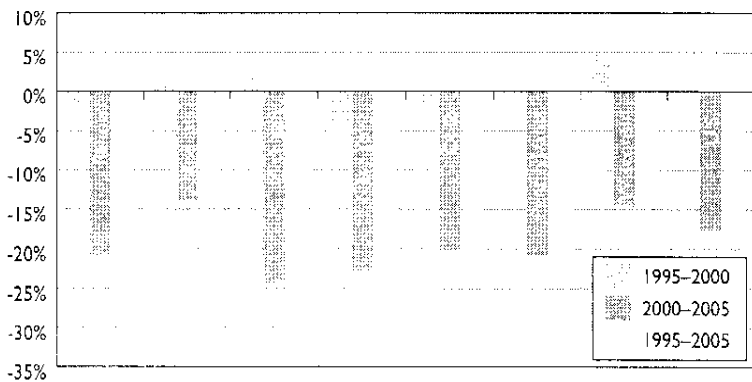
B. Despite these job losses, manufacturing remains a major driver of the nation's economy and the economy of the Great Lakes region.

Despite the loss of jobs, manufacturing remains a major driver of the economy. For instance, in 2004, manufacturing jobs accounted for a larger share of total gross state product than of total employment nationwide. This was also true in six of the seven states that make up the Great Lakes manufacturing belt, the exception being New York (Figure 2). Moreover, many jobs in other sectors of the economy depend directly or indirectly on manufacturing. Without manufacturing, the economies and populations of the Great Lakes states would be much smaller.

In addition, although manufacturing employment has fallen, inflation-adjusted gross state product in manufacturing has risen (Figure 3).

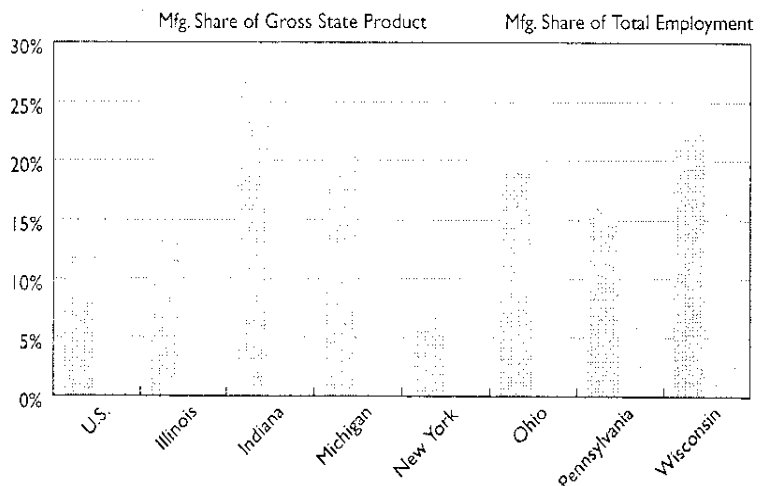
These divergences between manufacturing employment and manufacturing output indicate that manufacturing makes a crucial contribution to productivity. Manufacturing's higher share of output than of employment means that manufacturing is more productive than the rest of the economy. The combination of manufacturing output growth and manufacturing job losses occurred because productivity improved more rapidly in manufacturing than in the rest of the economy. Data from the BLS show that manufacturing productivity grew by 38.1 percent between 1997 and 2004, while the productivity of all non-farm business

Figure 1. Percentage Change in Manufacturing Employment in the United States and Great Lakes States, 1995–2005



Source: Authors' analysis of BLS Current Employment Statistics data.

Figure 2. Manufacturing's Share of Employment and Gross State Product (GSP) in the United States and Great Lakes States, 2004



Sources: Authors' analysis of BLS Current Employment Statistics (employment) and Bureau of Economic Analysis (gross state product) data.

grew by 24.4 percent. Thus, manufacturing is a major driver of overall productivity growth.

C. Manufacturing job losses were pervasive in Great Lakes metropolitan areas.

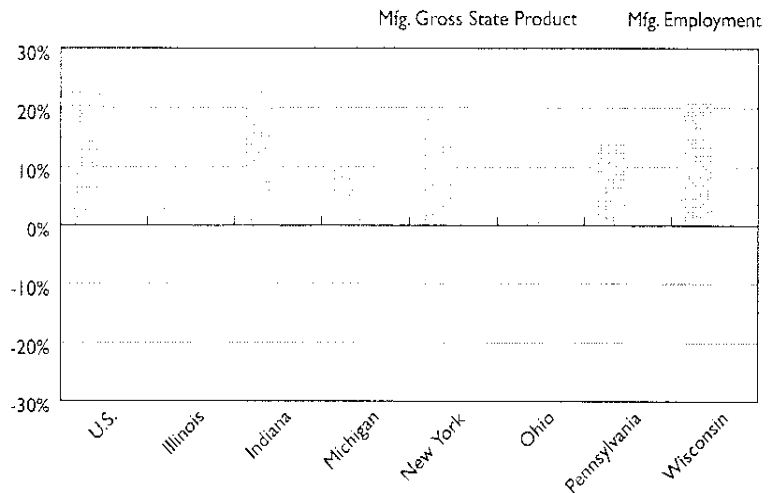
The importance of manufacturing to the U.S. economy, and to the economies of the Great Lakes states in particular, makes manufacturing job losses a major cause for concern. In manufacturing-dependent Great Lakes metropolitan areas, these losses have had an even greater impact on local economies, both because those economies are highly dependent on manufacturing and because, in most cases, manufacturing job losses have been more severe than in the United States as a whole.

Of the 25 metropolitan areas examined in this report, only Peoria, IL, gained manufacturing jobs from 1995 to 2005, and even Peoria suffered manufacturing job losses after 2000. Eighteen of the metropolitan areas (Akron, OH; Allentown, PA; Ann Arbor, MI; Buffalo, NY; Canton, OH; Chicago, IL; Cleveland, OH; Dayton, OH; Detroit, MI; Flint, MI; Fort Wayne, IN; Lancaster, PA; Milwaukee, WI; Reading, PA; Rochester, NY; Scranton, PA; York, PA; and Youngstown, OH) lost a higher percentage of their manufacturing jobs from 1995 to 2005 than did the entire United States.⁶

Five metropolitan areas (Ann Arbor, MI; Canton, OH; Flint, MI; Rochester, NY; and Youngstown, OH) had declines in manufacturing employment that exceeded 30 percent from 1995 through 2005. The Flint, MI, region was the hardest hit, losing more than one-half (55 percent) of its manufacturing jobs over the course of the decade.

Nearly all the metropolitan areas included in this report followed the national and regional pattern of accelerated manufacturing job loss after 2000. Davenport, IA; Dayton, OH;

Figure 3. Percent Change in Manufacturing Employment and Inflation-Adjusted Gross State Product in the United States and Great Lakes States, 1997–2004



Note: Gross state product changes are based on gross state product in chained 2000 dollars.

Sources: Authors' analysis of BLS Current Employment Statistics (employment) and Bureau of Economic Analysis (gross state product) data.

Table 3. Top Ten Manufacturing-Dependent Great Lakes Metropolitan Areas with the Largest Absolute Declines in Manufacturing Employment, 2000–2005

| Metropolitan Area | Change in Employment, 2000-2005 |
|-------------------|---------------------------------|
| Chicago, IL | -141,300 |
| Detroit, MI | -103,300 |
| Cleveland, OH | -47,300 |
| Milwaukee, WI | -30,600 |
| Rochester, NY | -26,300 |
| Cincinnati, OH | -24,400 |
| Dayton, OH | -21,600 |
| Buffalo, NY | -19,600 |
| Grand Rapids, MI | -16,300 |
| Canton, OH | -14,100 |

Source: Authors' analysis of BLS Current Employment Statistics data.

Detroit, MI; Evansville, IN; Grand Rapids, MI; Milwaukee, WI; Peoria, IL; and Toledo, OH, gained manufacturing jobs from 1995 to 2000 and

then lost them from 2000 to 2005. Cincinnati, OH had no change in the number of manufacturing jobs between 1995 and 2000 but lost man-

Table 4. Top Ten Manufacturing-Dependent Great Lakes Metropolitan Areas with the Largest Percentage Declines in Manufacturing Employment, 2000–2005

| Metropolitan Area | Percent Change in Employment, 2000-2005 |
|-------------------|---|
| Canton, OH | -31.1% |
| Flint, MI | -29.5% |
| Ann Arbor, MI | -28.1% |
| Dayton, OH | -27.0% |
| Detroit, MI | -26.6% |
| Rochester, NY | -25.6% |
| Reading, PA | -24.6% |
| Cleveland, OH | -24.0% |
| Buffalo, NY | -23.4% |
| Scranton, PA | -23.2% |

Source: Authors' analysis of BLS Current Employment Statistics data.

ufacturing jobs from 2000 to 2005. Akron, OH; Allentown, PA; Ann Arbor, MI; Buffalo, NY; Canton, OH; Chicago, IL; Cleveland, OH; Fort Wayne, IN; Indianapolis, IN; Lancaster, PA; Reading, PA; Rochester, NY; Scranton, PA; York, PA; and Youngstown, OH lost manufacturing jobs during both five-year periods but their absolute and percentage losses were greater from 2000 to 2005 than from 1995 to 2000. Only Flint, MI, lost more manufacturing jobs, and a greater percentage of its manufacturing jobs, from 1995 to 2000 than from 2000 to 2005.

Tables 3 and 4, respectively, show the 10 Great Lakes metropolitan areas with the largest absolute and percentage losses of manufacturing jobs between 2000 and 2005. Six metropolitan areas (Buffalo, NY; Canton, OH; Cleveland, OH; Dayton, OH; Detroit, MI; and Rochester, NY) were among the ten regions with the largest manufacturing job losses in both absolute and percentage terms.

Appendix A summarizes the absolute and percentage changes in manufacturing employment for all 25 metropolitan areas during the entire decade 1995–2005 and each of the two five-year subperiods.

D. The metropolitan areas in which manufacturing employment peaked between 1995 and 1997 tended to experience more severe manufacturing job losses between 1995 and 2005 than those in which manufacturing peaked later.

There were two distinct patterns of manufacturing job loss from 1995 to 2005 among the 24 metropolitan areas that lost manufacturing jobs during the decade. In 13 metropolitan areas, divided almost evenly between the Midwest and the eastern Great Lakes states (New York and Pennsylvania), manufacturing employment peaked most recently between 1995 and 1997 and fell almost continuously thereafter.⁷ These areas are suffering long-term, structural declines in manufacturing employment.

In 11 metropolitan areas, however—all in the Midwest—manufacturing employment peaked most recently in 1998, 1999, or 2000.⁸ These places experienced manufacturing job patterns in the late 1990s that more closely resembled (and in some cases were more favorable than) the national average. In these places, although manufacturing never recovered from the 2001 recession, it was healthier in most of these regions prior

to the recession than it was in places where manufacturing employment peaked earlier. This may reflect a combination of cyclical and structural influences.

Metropolitan areas that reached their manufacturing employment peak earlier tended to lose larger percentages of their manufacturing jobs over the decade than those in which manufacturing peaked later. The average region whose manufacturing employment peak occurred between 1995 and 1997 lost 26.8 percent of its manufacturing jobs from 1995 through 2005. In contrast, the average region whose manufacturing peak occurred between 1998 and 2000 lost 18.9 percent of its manufacturing jobs over the same period.

It is likely that the differences in manufacturing industry composition among metropolitan areas are responsible for the different patterns of job loss. Although the BLS does not provide the industry detail needed, understanding the problems of particular manufacturing industries at the local level will be necessary to craft local strategies to regain manufacturing jobs.

E. Manufacturing job losses were a major reason for slow overall job growth, and sometimes overall job losses, in Great Lakes metropolitan areas.

The 25 metropolitan areas generally had total job growth that was at best sluggish during the last decade. (See Appendix B for detailed results for each metropolitan area.) Dayton, OH; Flint, MI; and Youngstown, OH had fewer jobs in 2005 than in 1995. Fifteen of the areas studied lost jobs since 2000, even though they had higher total employment in 2005 than in 1995.⁹ Only Indianapolis, IN; Lancaster, PA; and Allentown, PA had 1995–2005 total job growth rates that exceeded the national average. Only those three metropolitan areas plus

Akron, OH; York, PA; and Cincinnati, OH added jobs faster than the nation in the last five years.

Manufacturing job losses were a major reason for the poor overall job performance in most of the 25 metropolitan areas. Manufacturing accounted for 190.2 percent of all jobs lost in Dayton, OH from 1995 to 2005, 131.2 percent of all jobs lost in Flint, MI and 397.9 percent of all jobs lost in Youngstown, OH. Manufacturing job losses exceeded total job losses in those regions because some industries other than manufacturing gained jobs. For example, Youngstown, OH, lost 18,700 manufacturing jobs but only 4,700 total jobs between 1995 and 2005. The region gained 14,000 jobs in nonmanufacturing industries (including 600 in advanced services) during that time period; these gains are the reason why manufacturing job losses were larger than total job losses.

Manufacturing accounted for between 62.3 and 875.0 percent of all jobs lost from 2000 through 2005 in the 18 metropolitan areas that lost jobs during that period. In general, metropolitan areas with larger percentage declines in manufacturing employment from 1995 through 2005 had larger percentage declines in total employment over the same period.¹⁰

Although metropolitan areas that had larger percentage increases in advanced service employment during the decade generally had larger percentage increases in total employment, advanced services did not compensate for the loss of manufacturing jobs in most of the areas studied.¹¹ All the metropolitan areas except Fort Wayne, IN, gained advanced service jobs from 1995 through 2005, and seven of them (Akron, OH; Allentown, PA; Cincinnati, OH; Davenport, IA; Grand Rapids, MI; Indianapolis, IN; and Lancaster, PA) gained those jobs at a rate that exceeded the national average. In only five metropolitan areas, however (Cincinnati, OH; Davenport, IA; Evansville, IN;

Table 5. Changes in Manufacturing and Advanced Services Employment in 25 Manufacturing-Dependent Great Lakes Metropolitan Areas, 1995–2005

| Metropolitan Area | Manufacturing Employment Change (number of jobs) | Advanced Service Employment Change (number of jobs) | Sum of Manufacturing and Advanced Service Employment Changes |
|-------------------|--|---|--|
| Indianapolis, IN | -11,500 | 46,000 | 34,500 |
| Cincinnati, OH | -24,400 | 55,000 | 30,600 |
| Peoria, IL | 3,200 | 5,000 | 8,200 |
| Grand Rapids, MI | -11,600 | 19,200 | 7,600 |
| Davenport, IA | -2,600 | 8,700 | 6,100 |
| Evansville, IN | -200 | 3,500 | 3,300 |
| Buffalo, NY | -21,600 | 20,900 | -700 |
| Akron, OH | -14,400 | 13,500 | -900 |
| Allentown, PA | -17,000 | 15,800 | -1,200 |
| Lancaster, PA | -12,200 | 10,600 | -1,600 |
| Ann Arbor, MI | -9,500 | 5,900 | -3,600 |
| Scranton, PA | -11,300 | 7,100 | -4,200 |
| Toledo, OH | -9,900 | 3,500 | -6,400 |
| Reading, PA | -11,500 | 5,000 | -6,500 |
| York, PA | -9,000 | 2,300 | -6,700 |
| Canton, OH | -15,000 | 4,400 | -10,600 |
| Fort Wayne, IN | -9,700 | -900 | -10,600 |
| Dayton, OH | -21,300 | 9,400 | -11,900 |
| Milwaukee, WI | -29,700 | 16,000 | -13,700 |
| Youngstown, OH | -18,700 | 600 | -18,100 |
| Flint, MI | -26,500 | 3,700 | -22,800 |
| Rochester, NY | -37,400 | 11,900 | -25,500 |
| Cleveland, OH | -52,700 | 20,500 | -32,200 |
| Chicago, IL | -177,000 | 138,400 | -38,600 |
| Detroit, MI | -87,700 | 31,500 | -56,200 |

Source: Authors' analysis of BLS Current Employment Statistics data.

Grand Rapids, MI; and Indianapolis, IN), did the gains in advanced service employment exceed the losses in manufacturing employment.

Table 5 shows the changes in manufacturing and advanced service employment in each metropolitan area between 1995 and 2005, along with the sum of these two changes. For metropolitan areas that both lost manufacturing jobs and gained advanced service jobs (all 25 metropolitan areas shown except for Peoria, IL, which gained manufacturing jobs, and Fort Wayne, IN, which lost advanced service jobs), the sum of the two changes

is the amount by which the gain in the number of advanced service jobs exceeded the number of manufacturing jobs lost. The table lists metropolitan areas in order of this sum. In most of the regions shown, this sum is a negative number, indicating that gains in advanced service jobs did not make up for losses of manufacturing jobs.

B

Public Policy Can Help Retain and Expand Manufacturing Jobs

Manufacturing is critical to American productivity and its growth and hence to the American standard of living. The manufacturing-dependent metropolitan areas of the Great Lakes region, in particular, must retain and modernize their manufacturing bases if they are to remain economically viable. Advanced service industries, which in principle could have substituted for manufacturing as drivers of regional prosperity, have not generated enough jobs to offset recent manufacturing job losses in most of the Great Lakes region's manufacturing-dependent metropolitan areas.

It is often argued, however, that there is nothing that public policy can or should do to reverse the loss of manufacturing jobs. Without giving up the benefits of free trade, how can the federal or state governments enable Canton, OH, to compete with Canton, China, in manufacturing? Is not the cost advantage of low-wage countries simply too great for American producers to overcome?

There are some U.S. manufacturers whose productivity does not and is not likely to overcome the labor cost advantage of low-wage countries. Others, however, can be cost-competitive with producers in the lowest-wage countries, and many others could become competitive with productivity increases of 7 to 10 percent per year over a three- to five-year period.¹² The manufacturing jobs in these firms are the ones that should be retained and expanded. With a combination of trade, health care, and economic and workforce development policies, they can be.

Trade policy is the responsibility of the federal government. Meaningful, enforceable labor and environmental standards in international trade agreements would correct market failures

that currently give many low-wage countries an artificial cost advantage over the United States. U.S. government pressure on countries such as China, which keeps its currency artificially low, would also reduce the artificial cost advantages those countries enjoy. Thus far, the federal government has failed to act meaningfully on either of these issues.

Some form of universal health care coverage would help to reduce the compensation costs of U.S. manufacturers who provide health insurance for their workers and retirees. In the absence of federal action, states can and should act to spread the cost of health care financing widely among their residents and businesses, rather than rely on employers to foot the bill for their workers.

Economic and workforce development policies at both the federal and state levels can play a major role in helping U.S. manufacturers upgrade their production processes and in helping workers gain the skills they need to work more productively within those processes. Federal funding of the Manufacturing Extension Partnership program, which helps small and medium-sized manufacturers become more productive, should be increased (not reduced, as the current administration has repeatedly proposed). So should federal funding of workforce development programs that help incumbent workers acquire new skills.

States, which partially fund the Manufacturing Extension Partnership program, should expand their efforts to help manufacturers adopt cutting-edge technologies, reorganize work to increase productivity, and move into less price-competitive product markets. The following are examples of desirable state policies:

- Some states, such as Pennsylvania, fund "early warning" systems that identify manufacturing plants at risk of closing and intervene to help them remain competitive; other states should do so as well.

These initiatives could be funded by redirecting economic development spending away from expensive efforts to recruit new firms from out of state.

- States should condition all economic development assistance they provide to firms on firms' agreement to participate in performance benchmarking and upgrading-assistance programs.
- To the extent that Great Lakes states continue to provide financial incentives to lure manufacturers to relocate, they should provide those incentives only to firms that buy a substantial portion of their components and raw materials from within the region. Such within-region sourcing will benefit local economies in those states more than will sourcing without regard to location.
- States should help manufacturers form consortia dedicated to product and process upgrading, modernization, and associated worker training. Such consortia already exist in the Milwaukee area and northeast Ohio and in a growing number of advanced manufacturing industry clusters in Pennsylvania.¹³

Finally, federal and state policies must help manufacturing-dependent regions replace those manufacturing jobs that cannot be retained. Such policies could help those regions diversify their industrial bases (e.g., by building on existing technologies, skills, or other regional assets), expand employment in existing high-wage service-sector firms, and foster the growth of small, locally based firms.

**Appendix A. Absolute and Percent Changes in Manufacturing Employment
in the 25 Metropolitan Areas, 1995–2005, 1995–2000, and 2000–2005**

| Metropolitan Area | Percentage Change: 1995–2005 | Percentage Change: 1995–2000 | Percentage Change: 2000–2005 | Absolute Change: 1995–2005 | Absolute Change: 1995–2000 | Absolute Change: 2000–2005 |
|-------------------------------------|------------------------------------|------------------------------------|------------------------------------|----------------------------------|----------------------------------|----------------------------------|
| ILLINOIS | | | | | | |
| Chicago-Naperville-Joliet, IL-IN-WI | -26.3% | -5.3% | -22.2% | -177,000 | -35,700 | -141,300 |
| Davenport-Moline-Rock Island, IA-IL | -9.3% | 5.3% | -13.9% | -2,600 | 1,500 | -4,100 |
| Peoria, IL | 11.9% | 28.4% | -12.8% | 3,200 | 7,600 | -4,400 |
| INDIANA | | | | | | |
| Evansville, IN-KY | -0.6% | 6.3% | -6.5% | -200 | 2,200 | -2,400 |
| Fort Wayne, IN | -20.9% | -4.3% | -17.3% | -9,700 | -2,000 | -7,700 |
| Indianapolis-Carmel, IN | -10.2% | -0.2% | -10.1% | -11,500 | -200 | -11,300 |
| MICHIGAN | | | | | | |
| Ann Arbor, MI | -30.4% | -3.2% | -28.1% | -9,500 | -1,000 | -8,500 |
| Detroit-Warren-Livonia, MI | -23.5% | 4.2% | -26.6% | -87,700 | 15,600 | -103,300 |
| Flint, MI | -55.0% | -36.1% | -29.5% | -26,500 | -17,400 | -9,100 |
| Grand Rapids-Wyoming, MI | -13.6% | 5.5% | -18.1% | -11,600 | 4,700 | -16,300 |
| NEW YORK | | | | | | |
| Buffalo-Niagara Falls, NY | -25.2% | -2.3% | -23.4% | -21,600 | -2,000 | -19,600 |
| Rochester, NY | -32.9% | -9.8% | -25.6% | -37,400 | -11,100 | -26,300 |
| OHIO | | | | | | |
| Akron, OH | -22.6% | -2.5% | -20.6% | -14,400 | -1,600 | -12,800 |
| Canton-Massillon, OH | -32.4% | -1.9% | -31.1% | -15,000 | -900 | -14,100 |
| Cincinnati-Middletown, OH-KY-IN | -16.5% | 0.0% | -16.5% | -24,400 | 0 | -24,400 |
| Cleveland-Elyria-Mentor, OH | -26.1% | -2.7% | -24.0% | -52,700 | -5,400 | -47,300 |
| Dayton, OH | -26.7% | 0.4% | -27.0% | -21,300 | 300 | -21,600 |
| Toledo, OH | -16.2% | 2.3% | -18.1% | -9,900 | 1,400 | -11,300 |
| Youngstown-Warren-Boardman, OH-PA | -31.4% | -10.9% | -23.0% | -18,700 | -6,500 | -12,200 |
| PENNSYLVANIA | | | | | | |
| Allentown-Bethlehem-Easton, PA-NJ | -27.3% | -5.8% | -22.8% | -17,000 | -3,600 | -13,400 |
| Lancaster, PA | -21.5% | -0.9% | -20.8% | -12,200 | -500 | -11,700 |
| Reading, PA | -26.9% | -3.0% | -24.6% | -11,500 | -1,300 | -10,200 |
| Scranton-Wilkes-Barre, PA | -24.5% | -1.7% | -23.2% | -11,300 | -800 | -10,500 |
| York-Hanover, PA | -19.0% | -3.4% | -16.2% | -9,000 | -1,600 | -7,400 |
| WISCONSIN | | | | | | |
| Milwaukee-Waukesha-West Allis, WI | -18.2% | 0.6% | -18.6% | -29,700 | 900 | -30,600 |

Source: Authors' analysis of Bureau of Labor Statistics (BLS) Current Employment Statistics data.

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Appendix B. Employment Trends in the 25 Metropolitan Areas, 1995–2005

(For additional informational graphics on these metros go to <http://www.brookings.edu/metro/mci.htm>)

Akron, OH

Metropolitan Akron posted modest job gains prior to the recession, losses in 2001 and 2002, and gains in each subsequent year. The region added 19,700 jobs (a 6.3 percent increase) from 1995 through 2000, and gained 6,900 jobs (a 2.1 percent increase) from 2000 through 2005. During the entire decade, total employment increased by 8.6 percent (an addition of 26,600 jobs), well short of the national growth rate.

Manufacturing employment declined slightly prior to the 2001 recession, dropped dramatically in 2001 and 2002, and then remained relatively flat. The region lost 1,600 manufacturing jobs (a 2.5 percent decline) from 1995 through 2000, and an additional 12,800 (a 20.6 percent decline) from 2000 through 2005. During the entire decade, manufacturing employment declined by 22.6 percent (a loss of 14,400 jobs), significantly worse than the national rate decline.

Advanced service employment increased from 1995 through 2005, but job gains in this sector were not enough to offset job losses in manufacturing. Employment in advanced services increased by 13,500 jobs (25.7 percent) over the decade. From 1995 through 2000, employment in advanced services increased by 4,700 jobs (9.0 percent); and from 2000 through 2005, the region added 8,800 advanced service jobs (an increase of 15.4 percent).

Allentown, PA

Metropolitan Allentown gained jobs at a healthy rate prior to the 2001 recession, lost a modest number from 2001

through 2002, but has rebounded in recent years. From 1995 through 2000, the region added 32,200 jobs (an increase of 11.1 percent). From 2000 through 2005, total employment increased by 12,900 jobs (4.0 percent). Its relatively strong performance in the second half of the decade contributed to a 15.5 percent growth rate (45,100 jobs added) over the entire 1995–2005 period, surpassing the national growth rate as well as the growth rates of most of the other 25 metropolitan areas.

Manufacturing employment has declined almost continuously since 1995, although most of the decline occurred between 2000 and 2003. The region lost 3,600 manufacturing jobs from 1995 through 2000 (a decline of 5.8 percent) and 13,400 manufacturing jobs (a 22.8 percent decline) from 2000 through 2005. In total, manufacturing employment declined by 27.3 percent (17,000 jobs) over the entire decade, nearly 10 percentage points greater than the national rate of decline.

Employment in advanced services increased almost continuously from 1995 through 2004, although these gains did not make up for the loss of manufacturing jobs through 2004.¹⁴ Advanced service employment rose by 12,800 jobs (27.4 percent) from 1995 through 2004. From 1995 through 2000, the region gained 9,900 advanced service jobs (an increase of 21.2 percent); and from 2000 through 2004, it added an additional 2,900 advanced service jobs (a 5.1 percent increase).

Ann Arbor, MI

Metropolitan Ann Arbor gained jobs continuously until its employment peak in 2001. The region gained 19,900 jobs (an increase of 11.0 percent) from 1995 through 2000 and gained a modest 1,900 jobs (0.9 percent) from 2000 through 2005. During the entire period 1995–2005, total employment in the metropolitan

area increased by 12.0 percent (21,800 jobs), just short of the national growth rate.

Manufacturing employment declined from 1995 through 1997, increased until its peak in 1999 and fell substantially thereafter. The region lost 1,000 manufacturing jobs (a decline of 3.2 percent) from 1995 through 2000 and 8,500 more (a 28.1 percent decline) from 2000 through 2005. The result over both periods was a decline in manufacturing employment of 30.4 percent, much greater than the national rate of manufacturing job loss and among the highest manufacturing job loss rates of the 25 metropolitan areas studied in this report.

Advanced services gained a modest number of jobs from 1995 through 2005, although this gain was not enough to make up for the loss of manufacturing jobs. Employment in this sector increased by 5,900 jobs (18.9 percent) between 1995 and 2005. During the first half of the decade, the region added advanced service jobs at a rate higher than the national average. From 1995 through 2000, the region added 8,600 jobs (an increase of 27.6 percent), but from 2000 through 2005, it lost 2,700 advanced service jobs (a decline of 6.8 percent).

Buffalo, NY

Metropolitan Buffalo added jobs at a relatively slow rate prior to the 2001 recession, reached its jobs peak in 2000, and lost jobs in most of the following years. The region gained 18,900 jobs (a 3.5 percent increase) from 1995 through 2000, and lost 11,600 jobs (a 2.1 percent decline) from 2000 through 2005. During the 1995–2005 period, employment grew more slowly than the national average, increasing by just 1.4 percent (7,300 jobs).

Manufacturing employment has fallen every year since 1995. The region lost 2,000 manufacturing jobs

(a decline of 2.3 percent) from 1995 through 2000. It lost an additional 19,600 manufacturing jobs from 2000 through 2005 (a 23.4 percent loss). In total, the metropolitan area lost 21,600 manufacturing jobs (a 25.2 percent loss) over the entire decade. Manufacturing accounted for more than the total of all jobs lost since 2000.

The advanced service sector added jobs steadily throughout the decade, nearly making up for job losses in manufacturing. From 1995 through 2005, the region added 20,900 advanced service jobs. Employment in the sector rose faster in the first half of the decade than the second. From 1995 through 2000, the sector grew by 12,600 jobs (14.2 percent). From 2000 through 2005, it grew by 8,300 jobs (8.2 percent).

Canton, OH

Metropolitan Canton had modest job gains before the 2001 recession and job losses during most of the following years. The region gained 12,200 jobs (a 7.0 percent increase) from 1995 through 2000. It lost most of those jobs during and after the recession, save for a small upturn in total employment in 2005. Total employment fell by 10,600 jobs (5.7 percent) from 2000 through 2005. During the entire period 1995–2005, the region gained just 1,600 jobs (a 0.9 percent growth rate).

Manufacturing employment grew modestly from 1995 through 1998, declined from 1999 through 1998 and declined 2005. The region lost 900 manufacturing jobs (a 1.9 percent loss) from 1995 through 2000 and lost an additional 14,100 manufacturing jobs (31.1 percent) from 2000 through 2005. The result was a 32.4 percent decline in manufacturing employment loss from 1995 through 2005 (a loss of 15,000 jobs). Manufacturing accounted for more than the total of all jobs lost since 2000.

Although the Canton region gained advanced service jobs between 1995

and 2005, the gains did not make up for job losses in manufacturing. Advanced service employment rose by 4,400 jobs (20.9 percent) during the decade. Job growth in this sector was more rapid before the recession than after. From 1995 through 2000, advanced services grew by 4,100 jobs (19.4 percent). From 2000 through 2005, 300 jobs were added (1.2 percent growth).

Chicago, IL

Total employment in metropolitan Chicago grew moderately before the 2001 recession, declined from 2000 through 2003, and rose again in 2004 and 2005. The region gained 346,000 jobs (an 8.2 percent increase) from 1995 through 2000. Despite recent gains, total employment fell by 109,900 (2.4 percent) from 2000 through 2005. Over the entire period 1995–2005, the region gained 236,100 jobs (5.6 percent), well below the national average growth rate.

Manufacturing employment declined almost continuously since 1995, with the largest annual losses occurring in 2001 and 2002. The region lost 35,700 manufacturing jobs (a decline of 5.3 percent) from 1995 through 2000 and another 141,300 (22.2 percent) from 2000 through 2005. The result was a loss of 177,000 manufacturing jobs (a 26.3 percent decline) over the entire decade, the largest total loss of all regions included in this analysis. Manufacturing accounted for more than the total of all jobs lost since 2000.

Employment in the advanced service sector rose during the decade but was unable to offset the loss of manufacturing jobs. The region gained 138,400 advanced service jobs from 1995 through 2005, adding jobs during the first half of the decade, and losing them in the second. From 1995 through 2000, advanced services grew by 179,300 jobs (18.2 percent). From 2000 through 2005, they declined by 40,900 jobs (3.5 percent).

“There are some U.S. manufacturers whose productivity does not and is not likely to overcome the labor cost advantage of low-wage countries.”

"Federal and state policies must help manufacturing-dependent regions replace those manufacturing jobs that cannot be retained."

Cincinnati, OH

Metropolitan Cincinnati posted healthy employment gains prior to the 2001 recession, lost jobs from 2000 through 2002, and has added jobs in each subsequent year. The region gained 97,500 jobs (a 10.6 percent increase) from 1995 through 2000, and an additional 17,900 (1.8 percent) from 2000 through 2005. During the entire 1995–2005 period, the metropolitan area added 115,400 jobs (12.5 percent, or just short of the national growth rate).

Overall, manufacturing employment was unchanged from 1995 through 2000. The region experienced its greatest manufacturing job losses in 2001 and 2002. These contributed to a total loss of 24,400 manufacturing jobs (a 16.5 percent decline) from 2000 through 2005. Accordingly, manufacturing employment for the entire decade declined by 16.5 percent, slightly better than the national rate.

Advanced service employment increased every year from 1995 through 2005, easily making up for the job losses in manufacturing. The sector added 55,000 jobs from 1995 through 2005. Job growth in the sector was more rapid during the first half of the decade than it was in the second. From 1995 through 2000, advanced services grew by 39,800 jobs (22.3 percent). From 2000 through 2005, they grew by 15,200 (7.0 percent)

Cleveland, OH

The Cleveland region had moderate job gains prior to the recession, peak employment in 2000, and job losses every year thereafter. The region gained 75,000 jobs (an increase of 7.1 percent) from 1995 through 2000. During and immediately after the 2001 recession, total employment dropped precipitously, and by 2005 the number of jobs in the metropolitan area was below its 1996 level. From 2000 through 2005, the region lost 65,200 jobs (a 5.7 percent decline). During the entire decade, job gains

amounted to just a 0.9 percent increase (a total of 9,800 jobs).

Manufacturing employment declined every year since 1995, with its greatest losses occurring during and immediately after the recession (2001–2002). The region lost 5,400 manufacturing jobs (2.7 percent) from 1995 through 2000, a small number of jobs relative to the 47,300 it lost (a 24 percent decline) from 2000 through 2005. This accounted for 72.5 percent of all jobs lost since 2000. During the entire decade, manufacturing employment fell by 52,700 (26.1 percent).

Employment in advanced services increased moderately from 1995 through 2005, but job gains in this sector did not make up for job losses in manufacturing. Advanced service employment rose by 20,500 jobs (9.6 percent) over the decade, reaching its peak in 2000. From 1995 through 2000, the sector grew by 31,900 jobs (14.9 percent). From 2000 through 2005, it lost 11,400 jobs (4.6 percent).

Davenport, IA

Total employment in metropolitan Davenport grew moderately prior to the 2001 recession, reached a peak in 1999, and has not yet recovered to that level. From 1995 through 2000, the region added 15,200 jobs (an increase of 8.8 percent). Despite gains in 2004 and 2005, the metropolitan area lost 1,200 jobs from 2000 through 2005. During the entire period 1995–2005, total employment increased by 8.1 percent (14,000 jobs), only a modest increase relative to the national average.

Manufacturing employment grew from 1995 through 1998, declined through 2003, and has partially rebounded since 2003. From 1995 through 2000, the region gained 1,500 manufacturing jobs (a 5.3 percent increase), but it lost 4,100 manufacturing jobs (a decline of 13.9 percent) from 2000 through 2005. The result was a loss of 2,600 manufacturing jobs

(a 9.3 percent decline) over the entire decade, relatively less severe than the national experience. Manufacturing accounted for more than the total of all jobs lost since 2000, although it did gain 1,300 manufacturing jobs from 2003 through 2005.

The region saw healthy job gains in its advanced service sector over the course of the decade, making up for job losses in manufacturing. Employment in the sector rose by 8,700 jobs (31.1 percent) from 1995 through 2005. From 1995 through 2000, advanced services grew by 4,400 jobs (15.7 percent), and from 2000 through 2005, it grew by 4,300 jobs (13.3 percent).

Dayton, OH

The Dayton region posted slight job gains prior to the recession, and declined at a brisk pace over the remaining period. The region gained 14,700 jobs from 1995 through 2000 (3.5 percent), but by 2003 the number of jobs in the region had fallen below its 1995 level. Total employment fell by 25,900 jobs (5.9 percent) between 2000 and 2005, resulting in a loss of 11,200 jobs (a 2.7 percent decline) over the entire decade.

Manufacturing employment remained basically unchanged from 1995 through 2000 (with some variation during the intervening years), adding just 300 jobs (an increase of 0.4 percent) during the period. Sharp declines during and shortly after the recession contributed to a loss of 21,600 manufacturing jobs (a decline of 27.0 percent) from 2000 through 2005. During the entire decade, manufacturing employment declined by 21,300 (a 26.7 percent loss and a much faster rate of decline than the national average). Losses in the sector accounted for 83.4 percent of all jobs lost in the region since 2000.

Employment in advanced services increased during the decade, but not enough to make up for the loss of manufacturing jobs. From 1995 through

2005, advanced service employment rose by 9,400 jobs (12.9 percent). The sector gained 7,000 jobs (an increase of 9.6 percent) from 1995 through 2000. It reached its peak in 2001 and declined slightly in several subsequent years. Overall, employment in the sector increased by 2,400 (3.0 percent) from 2000 through 2005.

Detroit, MI

After moderate gains prior to the 2001 recession, total employment in metropolitan Detroit declined substantially between 2000 and 2002, and continued downward thereafter. From 1995 through 2000, the region added 169,000 jobs (an increase of 8.3 percent). However, nearly all those gains were erased between 2000 and 2005 as the metropolitan area lost 165,700 jobs (7.5 percent) during this period. During the entire decade, total employment increased by only 0.2 percent (an addition of 3,300 jobs).

Manufacturing employment in the region grew by 15,600 jobs from 1995 through 2000 (an increase of 4.2 percent). However, sharp declines in 2001 and 2002 left manufacturing employment levels below their pre-recession low, with additional losses in each subsequent year. The region lost 103,300 manufacturing jobs from 2000 through 2005 (a decline of 26.6 percent). During the entire decade, manufacturing employment declined by 87,700 jobs (a decline of 23.5 percent), well above the national rate of decline. Manufacturing accounted for 62.3 percent of all jobs lost in the region since 2000.

The Detroit region saw moderate employment gains in its advanced service sector from 1995 through 2005, although these gains were not sufficient to offset the job losses in manufacturing. Advanced service employment rose by 31,500 (6.4 percent) from 1995 through 2005. This sector gained jobs prior to the recession but lost jobs almost continuously thereafter. From 1995 through 2000,

advanced services grew by 69,300 (14.0 percent). From 2000 through 2005, the sector lost 37,800 jobs (6.7 percent).

Evansville, IN

Metropolitan Evansville saw moderate job gains prior to the 2001 recession. Employment during the decade peaked in 2002. From 1995 through 2000, the region added 14,200 jobs (an increase of 8.6 percent). From 2000 through 2005, it lost 700 jobs (a decline of 0.4 percent), although the region posted a small gain in 2005. During the entire decade (1995–2005), total employment increased by 8.2 percent (13,500 jobs), well below the national average growth rate.

Metropolitan Evansville reported almost the same number of manufacturing jobs in 2005 as in 1995. The region gained 2,200 manufacturing jobs (a 6.3 percent increase) from 1995 through 2000, but lost 2,400 (a 6.5 percent decline) from 2000 through 2005. The result was a net loss of 200 manufacturing jobs (a 0.6 percent decline) over the entire decade, much smaller than the nationwide percentage loss of manufacturing jobs.

Employment in advanced services increased moderately from 1995 through 2005, easily offsetting the small decline in manufacturing employment. The sector gained 3,500 jobs (15.2 percent) over the decade, although it lost jobs from 2001 through 2004. From 1995 through 2000, advanced services grew by 5,100 jobs (22.1 percent). From 2000 through 2005, the sector lost 1,600 jobs (5.7 percent).

Flint, MI

Metropolitan Flint has been losing jobs since its peak employment in 1997. The region lost 11,500 jobs (6.6 percent) from 1995 through 2000, and another 8,700 jobs (5.3 percent) from 2000 through 2005. During the entire

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period 1995–2005, the region lost 20,200 jobs (a decline of 11.5 percent).

The decline in manufacturing has been even more dramatic. Since 1995, job losses have been large and persistent. The region lost 17,400 manufacturing jobs (a 36.1 percent decline) from 1995 through 2000, and an additional 9,100 (a 29.5 percent decline) from 2000 through 2005. In total, the region lost 26,500 manufacturing jobs during the decade, a decline of 55.0 percent, far exceeding the rate of decline in all the other metros in this analysis. Manufacturing accounted for more than the total of all jobs lost since 2000.

Employment in advanced services increased by 3,700 jobs (18.4 percent) from 1995 through 2005, not nearly enough to offset the losses in manufacturing. From 1995 through 2000, the region added 4,200 advanced service jobs, while it lost 500 in the subsequent period from 2000 through 2005.

Fort Wayne, IN

Total employment in metropolitan Fort Wayne climbed at a moderate rate prior to the 2001 recession, posting most of its gains in the two-year period from 1996 through 1998. The region gained 11,300 jobs (an increase of 5.5 percent) from 1995 through 2000. After declining in 2001 and 2002, total employment has grown each year, although not by enough to make up for earlier losses. From 2000 through 2005, the region lost 3,700 jobs (a decline of 1.7 percent). During the entire period 1995–2005, total employment increased by 3.7 percent (7,600 jobs), only a minor increase relative to the national average job growth rate.

Manufacturing employment changed very little from 1995 through 1998, declined from 1998 through 2004, then grew again in 2005. The region lost 2,000 manufacturing jobs (a 4.3 percent decline) from 1995 through 2000 and an additional 7,700 jobs (a 17.3 percent decline) from

2000 through 2005. During the entire decade, the region lost 9,700 jobs (a 20.9 percent decline), a greater rate of loss than the national average. Manufacturing accounted for more than the total of all jobs lost since 2000. However, the region did gain 700 manufacturing jobs in 2005.

Advanced service employment peaked in 1998 and has fallen every year since. During the entire decade, the advanced service sector lost 900 jobs (a decline of 2.4 percent), although from 1995 through 2000, employment in the sector increased by 3,100 jobs (8.4 percent). From 2000 through 2005, the sector lost 4,000 jobs (a 10.0 percent decline).

Grand Rapids, MI

Metropolitan Grand Rapids saw strong job gains prior to the 2001 recession; however, declines during and after the recession put an end to its impressive job growth. From 1995 through 2000, the region added 53,400 jobs (an increase of 15.2 percent), although it lost 11,900 jobs (a decline of 2.9 percent) from 2000 through 2005. During the entire decade, total employment increased by 11.8 percent (41,500)—just short of the national average growth rate.

Manufacturing employment increased from 1995 through 1998, declined substantially from 1999 through 2003, and experienced small declines in 2004 and 2005. The region gained 4,700 manufacturing jobs (an increase of 5.5 percent) from 1995 through 2000, but lost 16,300 (an 18.1 percent decline) from 2000 through 2005. The result for the entire decade was a loss of 11,600 manufacturing jobs (a decline of 13.6 percent), less severe than the national decline. Manufacturing accounted for more than the total of all jobs lost since 2000.

Employment in advanced services increased dramatically prior to the recession, declined subsequently, but still made up for the loss in manufac-

turing over the entire decade. From 1995 through 2005, advanced service employment rose by 19,200 jobs (30.8 percent). From 1995 through 2000, advanced services employment grew by an impressive 20,200 jobs (32.4 percent). From 2000 through 2005, it decreased by 1,000 jobs (1.2 percent).

Indianapolis, IN

Metropolitan Indianapolis had healthy job growth from 1995 through 2005, gaining jobs in every year except 2002. From 1995 through 2000, the region added 94,900 jobs (an increase of 12.5 percent). From 2000 through 2005, it added another 34,300 jobs (an increase of 4.0 percent). Consequently, total employment increased by 129,200 jobs (17.0 percent) from 1995 through 2005, outpacing the national average growth rate. The Indianapolis area had the highest total job growth rate of any of the 25 metropolitan areas analyzed in this report.

Manufacturing employment declined slightly from 1995 through 2000, posting a loss of 200 jobs (a 0.2 percent decline). From 2000 through 2005, the region lost 11,300 manufacturing jobs (a 10.1 percent decline). During the entire decade, the region lost 11,500 manufacturing jobs, or a 10.2 percent decline, which was lower than the national rate of decline.

The Indianapolis region gained advanced service jobs almost continuously from 1995 through 2005, with job gains in this sector making up for losses in manufacturing. During the entire decade, the region added 46,000 advanced service jobs. Most of these gains occurred prior to the 2001 recession, as the region added 35,100 (an increase of 22.9 percent) advanced service jobs from 1995 through 2000. From 2000 through 2005, it added another 10,900 (5.8 percent).

Lancaster, PA

Total employment in metropolitan Lancaster increased every year from 1995 through 2005, resulting in a rate of job growth well above the national average. The region gained 23,300 jobs (an increase of 11.5 percent) from 1995 through 2000 and another 9,200 jobs (a 4.1 percent increase) from 2000 through 2005. During the entire period 1995–2005, total employment in the region increased by 16.0 percent (32,500 jobs).

Manufacturing employment fell slightly prior to the recession and more rapidly thereafter. From 1995 through 2000, the region lost just 500 manufacturing jobs (a decline of 0.9 percent), but from 2000 through 2005, it lost 11,700 (a decline of 20.8 percent). The result was a decline of 12,200 manufacturing jobs (21.5 percent), outpacing the national rate.

Employment in advanced services increased every year from 1995 through 2005, although these gains were not large enough to offset the job losses in manufacturing. Advanced service employment rose by 10,600 jobs (41.6 percent—the largest percentage gain of all metros analyzed) during the decade. From 1995 through 2000, advanced services grew by 7,100 jobs (27.8 percent). From 2000 through 2005, the sector grew by 3,500 jobs (10.7 percent).

Milwaukee, WI

Total employment in metropolitan Milwaukee grew at a moderate rate prior to the 2001 recession, declined during and after, and has not yet recovered to its pre-recession peak. The region gained 63,900 jobs (an increase of 7.9 percent) from 1995 through 2000 and lost 32,500 jobs (a decline of 3.7 percent) from 2000 through 2005. During the entire period 1995–2005, total employment in the region grew by 3.9 percent (an increase of 31,400 jobs), nearly 10 percentage points slower than the national growth rate.

Manufacturing employment had modest gains in 1997 and 1998, but has declined every year since. From 1995 through 2000, the region added 900 manufacturing jobs (an increase of 0.6 percent), while from 2000 through 2005 it lost 30,600 manufacturing jobs (a decline of 18.6 percent). During the entire decade, manufacturing employment fell by 18.2 percent (29,700 jobs), higher than the national rate, but better than those of most of the other 24 metropolitan areas. Manufacturing accounted for 94.2 percent of all jobs lost in the region since 2000.

From 1995 through 2005, employment in advanced services increased by 16,000 jobs (9.6 percent), but the gains in this sector were not enough to make up for job losses in manufacturing. The region added 23,100 advanced service jobs from 1995 through 2000, and lost 7,100 such jobs between 2000 and 2005.

Peoria, IL

Metropolitan Peoria saw moderate job gains preceding its recent employment peak in 2000. After several years of job losses during and after the 2001 recession, the region began adding jobs again in 2004 and was nearly back to its former peak level by 2005. From 1995 through 2000, total employment in the metropolitan area grew by 16,600 jobs (10.2 percent). From 2000 through 2005, the region lost 800 jobs (a decline of 0.4 percent). During the entire 1995–2005 period, total employment increased by 9.7 percent (15,800 jobs), well short of the national growth rate.

The Peoria region was the only one of the 25 metropolitan areas that gained manufacturing jobs between 1995 and 2005. It gained 7,600 manufacturing jobs (an incredible 28.4 percent increase) from 1995 through 2000, with most of those gains occurring in 1996. From 2000 through 2005, the region lost 4,400 manufacturing jobs (a 12.8 percent decline), although it did gain 3,200 manufac-

"A combination of trade, health care, and economic and workforce development policies can help to retain and expand employment in high productivity manufacturing in the United States."

B

turing jobs from 2003 through 2005. This late surge equaled the gain over the entire decade, as manufacturing employment increased by 11.9 percent from 1995 through 2005.

Advanced service employment increased by 5,000 jobs (19.8 percent) from 1995 through 2005. Job growth in this sector was more rapid during the first half of the decade than during the second half. From 1995 through 2000, advanced services grew by 2,800 jobs (11.1 percent). From 2000 through 2005, it grew by 2,200 jobs (7.9 percent).

Reading, PA

Overall, total employment in metropolitan Reading increased moderately from 1995 through 2000, with the region gaining 13,000 jobs (an 8.2 percent increase). It, however, lost 2,900 jobs from 2000 through 2005. The result was a 6.4 percent increase in total employment (a gain of 10,100 jobs) over the entire decade, much slower than the national growth rate.

Manufacturing employment declined almost continuously from 1995 through 2005, experiencing its most significant losses from 2000 through 2003. The region lost 1,300 manufacturing jobs (a 3.0 percent decline) from 1995 through 2000, and an additional 10,200 jobs (24.6 percent) from 2000 through 2005. The result was a decline in manufacturing employment of 26.9 percent (11,500 jobs) over the entire decade, significantly worse than the national average. Manufacturing accounted for more than the total of all jobs lost since 2000.

The region gained 5,000 advanced service jobs from 1995 through 2005 (a 20.8 percent increase), although these gains were not large enough to make up for job losses in manufacturing. Almost all of the job growth in the sector occurred prior to the recession. From 1995 through 2000, advanced services grew by 4,900 jobs (20.4 per-

cent). From 2000 through 2005, it grew by only 100 jobs (0.3 percent)

Rochester, NY

Total employment in metropolitan Rochester increased moderately prior to the 2001 recession. However, an overall job loss from 2000 through 2003 combined with sluggish growth in recent years has left total employment below its 1998 level. From 1995 through 2000, the region gained 28,500 jobs (an increase of 5.7 percent). From 2000 through 2005, it lost 17,700 jobs (a 3.3 percent decline), with most of the decline occurring in 2002. Overall, total employment increased by just 2.2 percent (10,800 jobs) over the entire decade.

Manufacturing employment in the region has declined rapidly, falling each year since its peak in 1997. The region lost 11,100 manufacturing jobs (a 9.8 percent decline) from 1995 through 2000 and lost an additional 26,300 manufacturing jobs (a 25.6 percent decline) from 2000 through 2005. The sector accounted for more than the total of all jobs lost since 2000. During the entire decade, manufacturing employment declined by 32.9 percent (37,400 jobs), the second largest percentage decline of all metropolitan areas analyzed.

Employment in advanced services increased during the decade, but not enough to offset job losses in manufacturing. From 1995 through 2000, advanced service employment increased by 13,900 jobs (a 17.3 percent increase). From 2000 through 2005, however, employment in the sector declined by 2,000 jobs (2.1 percent). In total, the region gained 11,900 advanced service jobs (a 14.8 percent increase) from 1995 through 2005.

Scranton, PA

Metropolitan Scranton had modest job gains prior to the recession, losses in 2001 and 2002, and gains in each sub-

sequent year. The region added 15,400 jobs (an increase of 6.3 percent) from 1995 through 2000. From 2000 through 2005, it lost 1,200 jobs (a decline of 0.5 percent). During the entire 1995–2005 period, total employment in the region increased by 5.8 percent, well shy of the national growth rate.

Manufacturing employment fell almost continuously from 1995 through 2005. The region lost 800 manufacturing jobs from 1995 through 2000 (a 1.7 percent decline), and from 2000 through 2005, it lost 10,500 more manufacturing jobs (a decline of 23.2 percent). The result for the decade was a decline in manufacturing employment of 24.5 percent (a loss of 11,300 jobs), significantly higher than the national rate of decline. Manufacturing accounted for more than the total of all jobs lost since 2000.

Employment in advanced services increased over the course of the decade but not enough to compensate for job losses in manufacturing. Advanced service employment rose by 7,500 jobs (20.7 percent) from 1995 through 2000 and fell by 400 jobs (0.9 percent) from 2000 through 2005. The result was a 19.6 percent increase in advanced service employment (a gain of 7,100 jobs) over the entire decade.

Toledo, OH

Total employment in metropolitan Toledo increased steadily until its peak in 2000. Sharp declines during and after the 2001 recession left total employment below its 1997 level. The region gained 24,300 jobs (an increase of 7.5 percent) from 1995 through 2000, but from 2000 through 2005 total employment fell by 16,300 jobs (4.7 percent). Consequently, over the entire 1995–2005 period, total employment in the region increased by only 2.5 percent (8,000 jobs).

Manufacturing employment grew

modestly prior to the recession, increasing by 1,400 jobs (2.3 percent) from 1995 through 2000. The region lost a small number of manufacturing jobs in 2000. More substantial manufacturing job losses began occurring in 2001. Losses occurred in every year since, although the rate of decline has slowed in recent years. From 2000 through 2005, the region lost 11,300 manufacturing jobs (a decline of 18.1 percent). Overall, manufacturing employment declined by 16.2 percent (9,900 jobs) from 1995 through 2005. Manufacturing accounted for 69.3 percent of all job losses in the region since 2000.

In total, the region had only modest job gains in its advanced service sector during the decade. Employment in this sector increased by 3,500 jobs (7.3 percent) from 1995 through 2005, offsetting roughly one-third of the job losses in manufacturing. The sector gained 6,800 jobs (a 14.2 percent increase) from 1995 through 2000. From 2000 through 2005, it lost 3,300 advanced service jobs (a 6.0 percent decline).

York, PA

Metropolitan York gained 12,700 jobs (an increase of 7.9 percent) from 1995 through 2000. During and immediately after the 2001 recession, employment in the region declined, but growth in 2004 and 2005 resulted in a net gain of 4,100 jobs (an increase of 2.4 percent) from 2000 through 2005. During the entire decade, total employment in the region increased by 10.5 percent, below the national rate, but better than most other metros analyzed.

Manufacturing employment fell almost continuously from 1995 through 2005. Most of these losses occurred between 2000 and 2003. The region lost 1,600 manufacturing jobs (a 3.4 percent decline) from 1995 through 2000 and an additional 7,400 (a 16.2 percent decline) from 2000

through 2005. The result was a 19.0 percent decline in manufacturing jobs (a total loss of 9,000) over the decade, a rate more severe than the national average.

From 1995 through 2005, the region gained advanced service jobs in every year except 2001 and 2002 (although the declines in these years were relatively large). Overall, job gains in this sector did not make up for job losses in manufacturing. Advanced service employment increased by 2,300 jobs (10.9 percent) from 1995 through 2005. From 1995 through 2000, the sector grew by 3,000 jobs (14.2 percent), and from 2000 through 2005, it declined by 700 jobs (2.9 percent).

Youngstown, OH

The Youngstown region gained a small number of jobs prior to the 2001 recession, but a dramatic decline in 2001 left total employment at the lowest point since 1995. From 1995 through 2000, total employment increased by 7,000 jobs (an increase of 2.8 percent), while it fell by 11,700 jobs (a decline of 4.6 percent) between 2000 and 2005. Consequently, total employment over the entire 1995–2005 period was down 1.9 percent (a loss of 4,700 jobs).

Employment in manufacturing declined in each year since 1995. The region lost 6,500 manufacturing jobs (a decline of 10.9 percent) from 1995 through 2000, and another 12,200 (a 23.0 percent decline) from 2000 through 2005. The result was a loss of 18,700 manufacturing jobs over the entire decade, producing a rate of job loss (31.4 percent) well above the national average. Manufacturing accounted for more than the total of all jobs lost since 2000.

Employment in advanced services remained relatively flat from 1995 through 2005, growing by just 600 jobs during the decade (an increase of 1.8 percent). The region gained 1,300

advanced service jobs (an increase of 4.0 percent) from 1995 through 2000 and lost 700 jobs (a decline of 2.1 percent) from 2000 through 2005.

Endnotes

1. The analysis uses Bureau of Labor Statistics and Bureau of Economic Analysis data.
2. Many of the services these industries produce—such as Internet services, securities brokerage, and legal services—are consumed by people who live outside the region in which the services are produced, either because the services can be performed remotely or because consumers often travel to the producers' locations.
3. Thus, the Davenport, IA, metropolitan area is included in the Great Lakes region because the majority of its employment is in Illinois. Other included metropolitan areas that straddle the region's boundary are Cincinnati, OH and Evansville, IN.
4. For convenience, this report refers to metropolitan areas by the name of the first city that appears in the full title of the metropolitan area. Appendix A lists the included metropolitan areas by their full titles.
5. Manufacturing employment in the United States rose each year from 1995 through 1998 and then fell each year from 1999 through 2005. The Great Lakes states generally exhibited similar patterns of manufacturing job change, gaining manufacturing jobs for part or all of the late 1990s and losing them in every subsequent year. The states' peak years of manufacturing employment occurred in 1997, 1998, or 1999. Ohio lost manufacturing jobs in 1997 and gained them again in 1998. Wisconsin gained manufacturing jobs in 2005.
6. A similar group of 18 metropolitan areas (Akron, OH; Allentown, PA; Ann Arbor, MI; Buffalo, NY; Canton, OH; Chicago, IL; Cleveland, OH; Dayton, OH; Detroit, MI; Flint, MI; Grand Rapids, MI; Lancaster, PA; Milwaukee, WI; Reading, PA; Rochester, NY; Scranton, PA; Toledo, OH; and Youngstown, OH) lost a larger percentage of manufacturing jobs from 2000 to 2005 than the national average.
7. These 13 were Akron, OH; Allentown, PA; Buffalo, NY; Chicago, IL; Cleveland, OH; Flint, MI; Indianapolis, IN; Lancaster, PA; Reading, PA; Rochester, NY; Scranton, PA; York, PA; and Youngstown, OH.
8. These 11 were Ann Arbor, MI; Canton, OH; Cincinnati, OH; Davenport, IA; Dayton, OH; Detroit, MI; Evansville, IN; Fort Wayne, IN; Grand Rapids, MI; Milwaukee, WI; and Toledo, OH.
9. These 15 were Buffalo, NY; Canton, OH; Chicago, IL; Cleveland, OH; Davenport, IA; Detroit, MI; Evansville, IN; Fort Wayne, IN; Grand Rapids, MI; Milwaukee, WI; Peoria, IL; Reading, PA; Rochester, NY; Scranton, PA; and Toledo, OH.
10. The correlation coefficient between the 1995–2005 percentage changes in manufacturing employment and total employment for all 25 metropolitan areas is .57, and is statistically significant at the .01 level.
11. The correlation coefficient between the 1995–2005 percentage changes in advanced service employment and total employment for all 25 metropolitan areas is .62, and is statistically significant at the .01 level.
12. Authors' estimates based on Michigan Manufacturing Technology Center analyses.
13. The final three state economic development policy recommendations made here are explained in more detail in Dan Luria, Matt Vidal, and Howard Wial, "Full-Utilization Learning Lear' in Component Manufacturing: A New Industrial Model for Mature Regions, and Labor's Stake in its Success." Sloan Industry Studies Working Paper WP-2006-03, Alfred P. Sloan Foundation, 2005.
14. Because of a data limitation for advanced services employment for the Allentown, PA, region in 2005, the text presents data for this sector from 1995 through 2004. Manufacturing employment in metropolitan Allentown fell by 16,700 jobs (26.8 percent) from 1995 through 2004.

Acknowledgments

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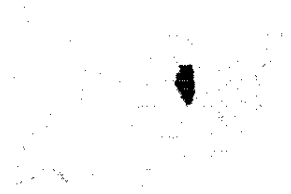
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ILLINOIS SPOTLIGHT

From Site Selection magazine, March 2007



Eye on Innovation

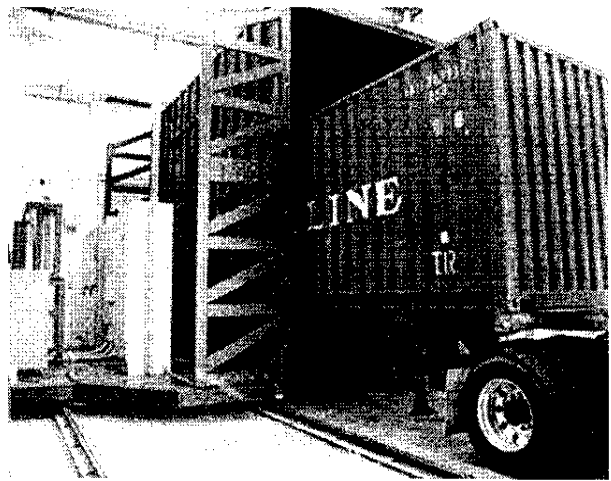
Security and energy push R&D and manufacturing projects in Illinois.

A Chicago area firm specializing in advanced cargo and transportation security testing is poised for dramatic growth if its technology is chosen for a key government security program. **Bio-Imaging Research** (BIR), based in the Chicago suburb of Lincolnshire, is a specialist in the development of security and X-ray equipment for non-destructive testing. It is one of three firms developing a prototype Cargo Advanced Radiography System (CAARS) that would be installed at ports and border crossings to scan cargo entering the U.S.

BIR is working with L-3 Communications on a contract valued at up to \$450 million. CAARS requirements include the automatic detection of heavily shielded nuclear material that is perceived to be the biggest threat to the U.S. Two other companies also have prototype contracts, and the three are expected to share 2008 production contracts that will eventually total more than \$1.3 billion.

"That's a big piece of what we expect for our future business," says Bio-Imaging Research's chairman, president and CEO John Moore. "Right now we are building that prototype with production scheduled for 2008." Moore adds that his company is evaluating several sites in Illinois for a possible testing facility.

Bio-Imaging is one of many Illinois companies specializing in security-related R&D to receive a state Innovative Product Grant. Another is **Advanced Diamond Technologies** (ADT), a spin-off from Argonne National Laboratory. ADT, headquartered in Champaign with facilities at Argonne, is developing a form of



Bio-Imaging Research of Lincolnshire, Ill., has developed the Intelli-X system for inspecting cargo and vehicles. The Department of Homeland Security is currently testing the product at the Laredo, Texas, border crossing.



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ultrananocrystalline diamond, known as UNCD, as a platform material for biomedical, telecommunication and energy-related applications. The \$140,000 IPG grant allows ADT to create 10 new jobs and begin mass production and commercialization of nanoprobes made from UNCD for biomolecular imaging and biomanufacturing of sensors to detect weaponized pathogens such as anthrax.

Jack Lavin, director of the Illinois Dept. of Commerce and Economic Opportunity, says homeland security is one of the technology sectors targeted by the state. Illinois is providing grants of up to \$150,000 to companies, and is working with universities and community colleges to develop security curricula.

A cluster of companies in the homeland security business is developing in the Northeast part of Illinois, Lavin says. The state's role as a strong transportation center is driving much of the growth, as firms are working to make rail, air and highway transportation more secure.

Energy Industry On Front Burner

One of the most active sectors in the state is energy. Projects are percolating on many fronts, including a major announcement by **BP** that the University of Illinois, Urbana-Champaign will be one of the partners in a \$500-million research program that will explore how bioscience can be used to increase energy production and reduce the impact of energy consumption on the environment. The University of California Berkeley and the Lawrence Berkeley National Laboratory are the other partners in the Energy Biosciences Institute (EBI).

As part of the EBI, 340 acres (138 hectares) of farmland at the Urbana campus will be devoted to the study and production of feedstock for biofuels production. Researchers will explore the potential of using corn crop residues, switchgrass, miscanthus (a hybrid grass that can grow as tall as 13 ft. [4 m.]), and other plants as fuel sources.

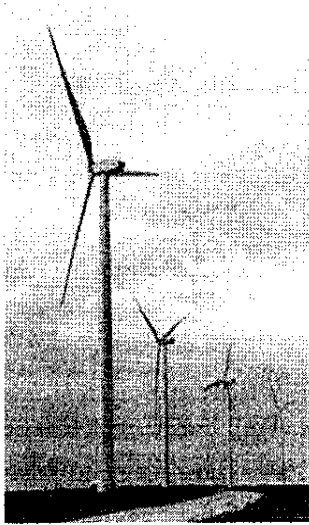
"This will place us at the forefront of farm bioenergy production," says Stephen P. Long, a crop sciences professor who will lead the initiative at the University of Illinois.

Not all of the wind in Illinois is in Chicago. One of the world's largest wind farms is taking shape in McLean County, in the state's center. **Horizon Wind Energy** is building a 198-megawatt wind project, the first phase of a planned 400-megawatt wind farm, which when complete will be one of the largest land-based wind farms in the world and will employ up to 40. Horizon plans to spend \$700 million on the project, which it expects to complete by the end of 2007. The facility will produce enough energy with its 240 wind turbines to meet the annual needs of about 120,000 homes.



Stephen P. Long, a crop sciences professor, will lead the BP Energy Biosciences Institute initiative at the University of Illinois.

Wind turbines need towers to support them, and that's the business of Trinity Structural Towers, a wholly owned subsidiary of Fort Worth-based **Trinity Industries**, which also has subsidiaries active in the railcar, barge and construction sectors. The company plans a \$15-million investment to renovate a company-owned industrial facility in Clinton in north-central Illinois. Trinity expects to create 140 jobs. Trinity re-entered the wind business in 2004 and also has wind tower plants in Fort Worth.



Trinity Structural Towers, part of Texas-based Trinity Industries, will build wind turbine towers at the former railcar manufacturing facility of a fellow Trinity subsidiary in Clinton, in north-central Illinois.

"We already had an idle railcar facility in Clinton that we had not used in a few years," says James Perry, vice president and treasurer of Trinity Structural Towers and of Trinity Industries. "While the modifications are substantial to convert it to wind tower manufacturing, we felt it made sense to use an existing facility, and that's what we've done in other areas as well."

Perry says the facility, which will serve the Midwest market, will be operational by mid-2007. The wind tower business is strong and has grown rapidly, he says, and will likely continue in that direction with the extension of federal tax credits through the end of 2008.

Biofuel development is also burgeoning in the state with several projects afoot. **Biofuels Company of America** will produce 45 million gallons of biodiesel at a facility it is building in Danville adjacent to an existing soybean crushing plant. The project is a joint venture between Biofuels Company of America and **Bunge North America**, which owns the soybean processing plant and will supply the oil.

The energy sector expansion comes as the state moves forward with Gov. Rod Blagojevich's energy independence plan that includes initiatives to boost ethanol production and invest in clean coal technology. The plan includes incentives to build up to 20 new ethanol plants and five new biodiesel plants.

Chicagoland Collects More Headquarters

Pabst Brewing Co. joined the crew of Chicago headquarters in 2006.

Miller actually does the brewing of Pabst Blue Ribbon and the company's other brands, a move made after Pabst moved its headquarters from its longtime Milwaukee home to San Antonio in 1996. Pabst's new headquarters is in the Chicago suburb of Woodridge, home to most of the company's executives. The state gave Pabst nearly \$1 million in an Opportunity Returns grant for the move.

Today, all of Pabst's current 37 active brands are brewed by other companies. The new Chicago headquarters is home to about 40 executives handling marketing, sales, HR and accounting. The company will maintain customer service operations in San Antonio, says Pabst President and CEO Kevin Kotecki. Pabst selected Chicago after also considering Minneapolis, Denver and Milwaukee.

"Chicago has a very broad and deep labor pool and we have great access to talent here, which is an important factor for us," Kotecki says. "Chicago is one of the easiest cities to travel in and out of with its two airports. We're 15 minutes from Midway and 25 minutes from O'Hare."

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Manufacturing in Illinois

Illinois is one of the nation's manufacturing leaders, boasting annual value added productivity by manufacturing of over \$105 billion in 2005. About three-quarters of the state's manufacturers are located in the Northeastern Opportunity Return Region, with 40 percent of Illinois' approximately 16,100 manufacturing plants located in Cook County.

Chemical manufacturing, with an annual value added by manufacturing of \$17 billion, is the leading industry in the state. Food manufacturing is second with value added of \$14.5 billion. Machinery manufacturing is third with an annual value added of \$12.2 billion.

The next largest manufacturing industries in Illinois are fabricated metal products (\$11.0 billion), plastics and rubber products (\$6.9 billion), transportation equipment (\$6.4 billion), and computer and electronic products (\$5.9 billion).

In 2006, 35 Illinois-based manufacturers were included in Industry Week's list of the Top 500 US Manufacturers.

The \$71 billion gross output of the 16,100 manufacturers operating in Illinois represents 13.2 percent of the Illinois Gross State Product.

PRODUCTIVITY IN MANUFACTURING – 2005

Value-Added in Largest Industrial States

| Rank | State | Production Worker Hours (Millions) | Value Added (Millions) | Value Added Per Production Worker Hour |
|------|-----------------|------------------------------------|------------------------|--|
| | United States | 19,069.64 | 2,204,094.96 | 115.58 |
| 1 | California | 1,809.76 | 217,546.03 | 120.21 |
| 2 | Texas | 1,120.38 | 172,960.16 | 154.38 |
| 3 | Ohio | 1,174.54 | 124,986.17 | 106.41 |
| 4 | Illinois | 963.16 | 105,324.87 | 109.35 |
| 5 | Pennsylvania | 945.00 | 104,858.32 | 110.96 |
| 6 | North Carolina | 820.01 | 101,268.43 | 123.50 |
| 7 | Michigan | 943.30 | 92,335.53 | 97.89 |
| 8 | Indiana | 835.08 | 90,120.46 | 107.92 |
| 9 | New York | 727.18 | 87,756.13 | 120.68 |
| 10 | Louisiana | 216.15 | 69,910.56 | 323.44 |

Source: U.S. Department of Commerce, ANNUAL SURVEY OF MANUFACTURES, 2005

Updated: September 2007

2006 ILLINOIS BASED INDUSTRY WEEK US 500

| IL Rank | US Rank | Company | Primary Industry | City | Revenue (\$ millions) | Total Equity (\$ millions) |
|---------|---------|----------------------------------|--|--------------|-----------------------|----------------------------|
| | 13 | | Aerospace And Defense | | 61,532 | 4739 |
| 1 | | Boeing Co. | | Chicago | | |
| 2 | 28 | Kraft Foods Inc. | Food | Northfield | 34,356 | 28,555 |
| | 21 | | Communications Equipment | | 42,879 | 17,142 |
| 3 | | Motorola Inc. | | Schaumburg | | |
| 4 | 22 | Caterpillar Inc. | Machinery | Peoria | 41,517 | 6,859 |
| 5 | 45 | Deere & Co. | Machinery | Moline | 22,147 | 7,491 |
| 6 | 43 | Abbott Laboratories | Pharmaceuticals | Abbott Park | 22,476 | 14,054 |
| 7 | 63 | Sara Lee Corp. | Food | Chicago | 15,944 | 2,449 |
| 8 | 112 | OfficeMax Inc. | Paper | Itasca | 8,965 | 1,985 |
| | 73 | | Fabricated Metal Products | | 14,055 | 9,017 |
| 9 | | Illinois Tool Works Inc. | | Glenview | | |
| 10 | 104 | Navistar International Corp. | Motor Vehicles | Warrenville | 9,724 | 531 |
| | 101 | | Medical Instruments And Equipment | | 10,378 | 6,272 |
| 11 | | Baxter International Inc. | | Deerfield | | |
| 12 | 138 | Smurfit-Stone Container Corp. | Paper | Chicago | 7,157 | 1,807 |
| 13 | 114 | Fortune Brands Inc. | Miscellaneous | Lincolnshire | 8,769 | 4,728 |
| | 107 | | Publishing And Printing | | 9,316 | 4,124 |
| 14 | | R.R. Donnelley & Sons Co. | | Chicago | | |
| | 171 | | Publishing And Printing | | 5,517 | 4,319 |
| 15 | | Tribune Co. | | Chicago | | |
| 16 | 165 | Brunswick Corp. | Miscellaneous | Lake Forest | 5,665 | 1,871 |
| | 160 | | Stone, Clay, Glass And Concrete Products | | 5,810 | 1,534 |
| 17 | | USG Corp. | | Chicago | | |
| 18 | 191 | Tenneco Automotive Inc. | Motor Vehicle Parts | Lake Forest | 4,685 | 221 |
| 19 | 190 | Wm. Wrigley Jr. Co. | Food | Chicago | 4,686 | 2,388 |
| 20 | 194 | BorgWarner Inc. | Motor Vehicle Parts | Chicago | 4,585 | 1,875 |
| 21 | 266 | Pactiv Corp. | Plastics | Lake Forest | 2,917 | 853 |
| 22 | 156 | Ryerson Tull Inc. | Primary Metals | Chicago | 5,908 | 648 |
| 23 | 217 | Alberto-Culver Co. | Chemicals | Melrose Park | 3,772 | 1,758 |
| 24 | 216 | FMC Technologies Inc. | Machinery | Chicago | 3,790 | 886 |
| 25 | 290 | Corn Products International Inc. | Food | Westchester | 2,621 | 1,374 |
| | 272 | | Computers And Other Electronic Products | | 2,861 | 2,280 |
| 26 | | Molex Inc. | | Lisle | | |
| | 176 | | | | 5,305 | |
| 27 | | Mosaic Co.* | Chemicals | Lake Forest | | 3,530 |
| 28 | 327 | Packaging Corp. of America | Paper | Lake Forest | 2,146 | 691 |
| 29 | 332 | Andrew Corp. | Primary Metals | Orland Park | 1,839 | 1,507 |
| 30 | 384 | Dade Behring Holdings Inc. | Chemicals | Deerfield | 1,739 | 809 |
| 31 | 385 | Sauer-Danfoss Inc. | Machinery | Lincolnshire | 1,739 | 465 |
| 32 | 411 | AptarGroup Inc. | Plastics | Crystal Lake | 1,601 | 946 |
| | 341 | | Communications Equipment | | 2,041 | 2,938 |
| 33 | | Tellabs Inc. | | Naperville | | |
| 34 | 485 | Federal Signal Corp. | Motor Vehicle Parts | Oak Brook | 1,211 | 386 |
| 35 | 415 | Metal Management Inc. | Primary Metals | Chicago | 1,589 | 383 |

Source: Industry Week Leadership in Manufacturing

Global Access from Illinois

Illinois has long been aware of the significance of international trade. The Illinois Office of Trade and Investment within the Illinois Department of Commerce and Economic Opportunity was established in 1965 to assist Illinois companies in locating distribution channels for their products in foreign markets. Illinois was among the first states to operate an international trade office when it opened a facility in Brussels, Belgium in 1968.

Today, the state has expanded its breadth and depth in the promotion of international trade and the responsibility of attracting foreign direct investment. The OTI provides Illinois companies with a variety of export programs and services through a multi-level infrastructure comprising:

- **Local Assistance** -- Six International Trade Centers and two NAFTA Opportunity Centers are located in five areas throughout the state and provide expert individualized assistance for small and medium-sized Illinois firms looking to succeed in exporting.
- **State Assistance** -- The OTI's Chicago Headquarters is the center for Illinois export assistance efforts, and identifies and participates in international trade events throughout the world with small/medium-sized Illinois firms.
- **International Assistance** -- Foreign Offices represent the OTI world presence in nine strategic regions throughout the world: Brussels, Tokyo, Hong Kong, Mexico City, Warsaw, Toronto, Johannesburg, Shanghai and Jerusalem.

These levels are integral to fulfilling the OTI mission to create Illinois jobs through increased Illinois exports and foreign direct investment.

International markets play a critical role in the Illinois economy. International powerhouses such as Caterpillar Inc., Deere & Company, Archer Daniels Midland, Motorola, Abbott Labs and Boeing, are headquartered

in Illinois, helping to make Illinois the sixth largest exporting state in the nation. Exports of manufactured goods and agricultural products from Illinois in 2006 were more than \$42.08 billion. Nearly 448,400 Illinois jobs are linked to exports.

Illinois ranks #1 in the Midwest as a destination for foreign investment. The state has attracted over 4,669 foreign establishments that employ more than 310,000 Illinoisans.

Illinois advantages include O'Hare International Airport, one of the world's busiest, which is served by all of the major international carriers. Thirteen port districts are located in the state, offering companies direct links to the Atlantic Ocean and the Gulf of Mexico. Foreign trade zones, which offer low-cost production and warehousing facilities for imported and export-bound products, are located at the Illinois International Port District in Chicago, the Tri-City Regional Port District in Granite City, and in Peoria, Rockford, the Quad Cities, Lawrenceville, and Decatur.

More than 170 export managing/trading companies and 125 international freight forwarders and custom house brokers maintain offices in Illinois. Over 70 nations maintain consulates in the state and over 30 international banks have established branches or representative offices in Chicago.

Illinois hosted over 1.5 million international visitors in 2005 that spent nearly \$1.7 billion. The top international markets were Canada, UK, Mexico, Germany and Japan.

Updated: March 2007

Global Access from Illinois

Foreign Consulates in Illinois

| | | | | |
|------------------------|--------------------|-----------|-----------------------|-----------------|
| Argentina | Croatia | Haiti | Luxemburg | Singapore |
| Australia | Cyprus | Honduras | Mexico | Slovak Republic |
| Austria | Czech Republic | Hungary | Mongolia | South Africa |
| Barbados | Denmark | Iceland | Nepal | Spain |
| Belgium | Dominican Republic | India | New Zealand | Sri Lanka |
| Belize | Ecuador | Indonesia | Norway | Sweden |
| Bolivia | Egypt | Ireland | Pakistan | Switzerland |
| Bosnia and Herzegovina | El Salvador | Israel | Peru | Tanzania |
| Brazil | Estonia | Italy | Philippines | Thailand |
| Bulgaria | Finland | Jamaica | Poland | The Netherlands |
| Canada | France | Japan | Portugal | Turkey |
| Chile | Germany | Jordan | Romania | Ukraine |
| China | Greece | Korea | Rwanda | United Kingdom |
| Columbia | Grenada | Liberia | Sao Tome & Principe | Uruguay |
| Costa Rica | Guatemala | Lithuania | Serbia and Montenegro | Venezuela |

Top Exporting States

| Rank | State | 2006 Exports (Billions) |
|------|--------------|----------------------------|
| | U.S. | 1,037.1 |
| 1 | Texas | 150.9 |
| 2 | California | 127.7 |
| 3 | New York | 57.4 |
| 4 | Washington | 53.1 |
| 5 | Illinois | 42.1 |
| 6 | Michigan | 40.4 |
| 7 | Florida | 38.5 |
| 8 | Ohio | 37.8 |
| 9 | New Jersey | 27.0 |
| 10 | Pennsylvania | 26.3 |

Top Illinois Exports

| Rank | Industry | 2006 Exports (Millions) |
|------|----------------------------------|----------------------------|
| | All Industries | 42,084.6 |
| 1 | Machinery, except electrical | 11,793.7 |
| 2 | Chemicals | 5,832.5 |
| 3 | Computer and electronic products | 5,439.6 |
| 4 | Transportation equipment | 4,713.5 |
| 5 | Electrical equipment | 2,859.8 |
| 6 | Food and kindred products | 1,935.6 |
| 7 | Fabricated metal products | 1,650.9 |
| | Miscellaneous manufactured | |
| 8 | products | 1,580.4 |
| 9 | Primary Metals | 1,084.7 |
| 10 | Plastics and Rubber Products | 1,075.9 |

Source: WISER

Updated: March 2007

Global Access from Illinois

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CHICAGO MANUFACTURING CAMPUS OPENS WITH SUPPLIERS MANUFACTURING JUST-IN-TIME INVENTORY

Featured Stories

Press Releases



- Twelve suppliers produce parts at the Chicago Manufacturing Campus, representing the industry's largest supplier park in the United States.
- The suppliers are Brose North America Inc., Decoma International Inc., Facil LLC, Flex-N-Gate, Lear Corp., Plastech Engineered Products Inc., Summit Polymers Inc., S-Y Systems Technologies America LLC, TDS Automotive, Tower Automotive Inc., Visteon Corp., and ZF Lemforder Corp.

CHICAGO, Aug. 10, 2004 - Ford Motor Company and 12 automotive suppliers officially opened the Chicago Manufacturing Campus today, the industry's largest supplier park in size and scope in the United States.

"When we talk about 'bull's-eye sourcing,' this is exactly what we mean," said Tony Brown, vice president, Ford Global Purchasing. "At the Chicago Manufacturing Campus, suppliers are working in tandem with our flexible manufacturing processes at the nearby Chicago Assembly Plant."

Suppliers share four multi-tenant buildings with 1.5 million square feet of manufacturing and office space on a 155-acre site. They employ approximately 1,400 people. The suppliers are Brose North America Inc., Decoma International Inc., Facil LLC, Flex-N-Gate, Lear Corp., Plastech Engineered Products Inc., Summit Polymers Inc., S-Y Systems Technologies America LLC, TDS Automotive, Tower Automotive Inc., Visteon Corp. and ZF Lemforder Corp.

Located one-half mile from the assembly plant, the suppliers provide 60 percent of the plant's inventory with just-in-time deliveries. This results in freight-related savings of \$50 for each vehicle the plant builds. Reduced inventory and transportation costs flow through to Ford and ultimately to Ford's customers.

"Our supplier campus is not a typical sequencing center in which suppliers receive large shipments and sequence parts for just-in-time delivery to the assembly line," Brown said. "Components are being manufactured here, and that gives us tremendous quality control."

On-site supplier manufacturing is a key component of flexible manufacturing. Ford and its suppliers invested \$250 million in the development of the campus.

The park also allows for easy cross-tier supplier relationships. For example, S-Y Systems ships main-body wire harnesses directly to the plant. At the same time, it delivers wire harnesses to Lear, Visteon and Brose for use in their components that go into the new models. These cross-tier relationships add value and create synergistic opportunities between suppliers.

The project also resulted in significant environmental improvements with the restoration of 6.5 acres of wetlands. A part of Wolf Creek, located between Wolf Lake and the Calumet River, was reconstructed through the site. Swales and native grasses were planted to manage stormwater runoff. The industrial site was redeveloped under the City of Chicago Brownfield Initiative.

Chicago Assembly today unveiled its flexible manufacturing system, producing three distinct models on one vehicle platform, the 2005 Ford Five Hundred, Ford Freestyle and Mercury Montego. The plant is capable of building eight models on two platforms.

Following is a brief description of the 12 suppliers occupying the campus:

Brose North America Inc.

Brose North America, headquartered in Auburn Hills, Mich. and Coburg, Germany, will produce door systems, window regulators and latches in its 62,000-square-foot facility at the campus. Brose has 7,500 employees in 30 locations worldwide. The Chicago facility employs 130.

Decoma International Inc.

Decoma, based in Concord, Ontario, designs, engineers and manufactures automotive exterior components and systems, including bumpers, front and rear-end modules, plastic body panels, roof modules, exterior trim components, sealing and greenhouse systems and lighting components for cars and light trucks. It has about 15,000 employees in 49 locations worldwide.

Facil LLC

Facil is a fastener service provider. Based in Auburn Hills, MI, its 22,500-square-foot Chicago facility employs 15. It has 200 employees in the United States and Europe.

Flex-N-Gate Corp.

Urbana, Ill.-based Flex-N-Gate is a supplier of large structural steel stamped automotive components and systems such as bumpers, engine mounts, grilles, hinges, instrument panels, pedal systems and running boards.

Lear Corp.

Headquartered in Southfield, Mich., Lear is making headliners for the three vehicles at the Chicago Assembly Plant. Its facility at the campus is 53,760 square feet and employs 70. Lear has 110,000 employees in 280 facilities in 34 countries. It manufactures automotive interiors in six segments: seating, doors, instrument panels, overhead systems, electronics and electrical, flooring and acoustics.

Plastech Engineered Products Inc.

Dearborn, Mich.-based Plastech has 114 employees at its 188,960-square-foot facility. It makes interior trim for the Ford Freestyle and Ford Five Hundred. Plastech has 6,000 employees worldwide and manufactures injection molded and blow molded plastic components with interior, exterior and under-hood applications.

Summit Polymers Inc.

Summit Polymers Inc. supplies consoles to the vehicles at the Chicago Assembly Plant. The Portage, Mich.-based company has 2,300 employees.

S-Y Systems Technologies America LLC

Headquartered in Dearborn, Mich., S-Y Systems engineers and designs electronic and electrical distribution systems for the Ford Freestyle, Ford Five Hundred and the Mercury Montego. Its Chicago facility is 38,400 square feet. S-Y Systems has 450 employees worldwide.

TDS Automotive

TDS Automotive is a specialized provider of value-added logistics services. The company, based in London, Ontario, provides complex material handling and material integration solutions, including transforming a number of parts into modules, and assembling vehicle kits that demand complicated packing. With over 5,000 employees TDS operates in multiple locations throughout North America, South America, Europe and Asia. Its 200,000-square-foot facility in Chicago employs 80.

Tower Automotive

Based in Novi, Mich., Tower Automotive produces rear floor pan assemblies, front engine cradle assemblies, front apron assemblies, front rail inner assemblies, body shell assemblies and closure reinforcements at its 420,000-square-foot facility at the campus. The assemblies are used on all three models at the Chicago Assembly Plant. At full production, the plant will employ more than 400 employees. Tower Automotive is a global designer and producer of structural components and assemblies.

Visteon Corp.

Dearborn, Mich.-based Visteon is supplying cockpit module assemblies, bolster integrated cooling module assemblies, fuel tank assemblies and climate aux assemblies to the three vehicles produced at the Chicago Assembly Plant. Its 215,000-square-foot plant at the campus employs 270. Visteon has 72,000 employees in 25 countries.

ZF Lemforder Corp.

ZF Friedrichshafen AG is a worldwide supplier of driveline and chassis technology. Its 134,000 square-foot Chicago facility employs 50 to provide front and rear axle systems to the Ford Five Hundred, Ford Freestyle and Mercury Montego. Headquartered in Friedrichshafen, Germany, it is

among the 15 largest automotive suppliers in the world. The company has a total workforce of 53,500 at 119 locations in 25 countries. ZF operates a large manufacturing network in North America, combined with global research and development capabilities, to provide advanced technology to the region. The ZF Group North American Operations Technical Center is located in Northville, Michigan. ZF Lemforder Corp is the Car Chassis Technology Division of ZF.

The Ford Parts Depot also is in the campus.

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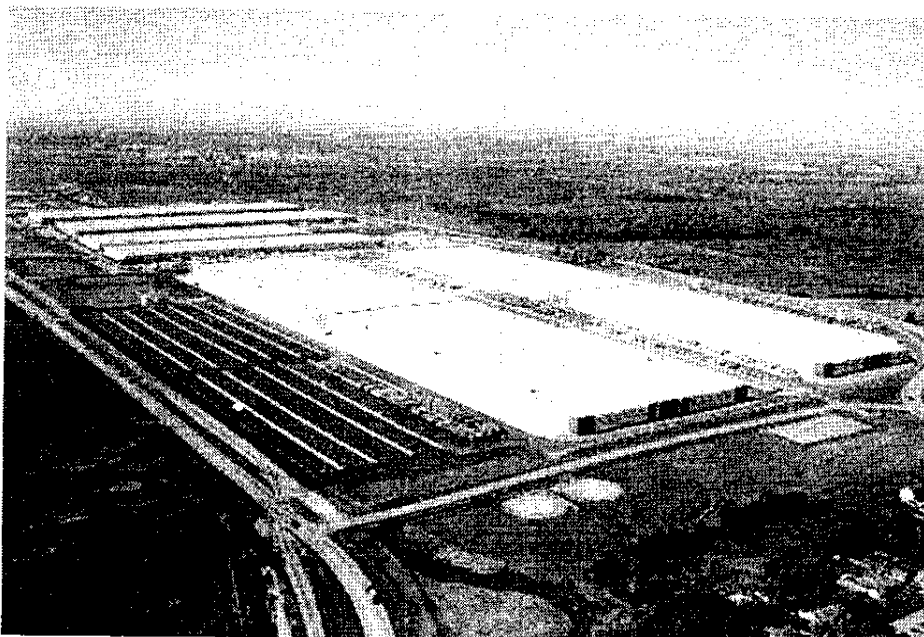
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Building Freight's Future

JERRY W. SZATAN

Chicago's freight and distribution sector continues to grow, but future vitality depends on addressing infrastructure challenges.

Wal-Mart built two bulk distribution centers totaling 3.4 million square feet (315,870 sq m) at CenterPoint Intermodal Center, located next to the Burlington Northern Santa Fe Railway's Chicago Logistics Park in Elwood, Illinois.



CHICAGO IS THE NATION'S busiest rail hub; an estimated 50 percent of U.S. rail freight passes through the city's rail yards via 500 freight trains daily, according to World Business Chicago (WBC), an economic development organization. The area is the only place where six Class 1 North American railroads interchange traffic and is also one of the world's largest intermodal container handlers. National rail traffic set a record for carloads in 2006, up 1.2 percent over 2005, but intermodal freight grew by 5 percent that year, setting a fifth consecutive yearly record, according to the Washington, D.C.-based American Association of Railroads (AAR). Both rail shipping and distribution center growth are being fueled by offshore manufacturing expansion. International container traffic was up 7.5 percent in 2006, according to the Calverton, Maryland-based Intermodal Association of North America.

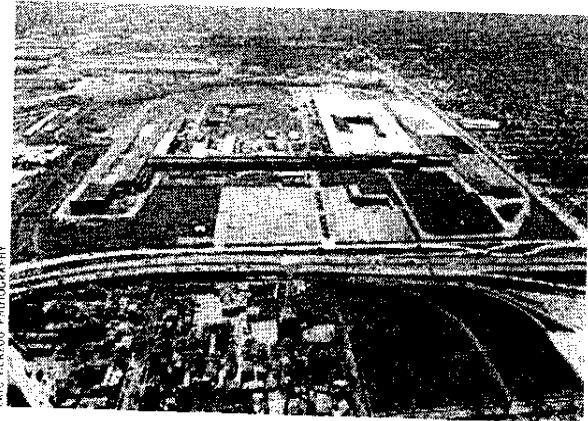
More than 500 million square feet (46.4 million sq m) of warehouse/distribution space exists in the Chicago area, accounting for almost 48 percent of all available industrial real estate there, according to WBC, and another 17.5 million square feet (1.625 million sq m) is under construction. Air freight distribution clusters around O'Hare International Airport. The I-55 distribution corridor in fast-growing Will County continues to boom. Large regional distribution centers are being built in communities located 50 to 100 miles (80.5 to

161 km) from downtown. Infill development serves those needing closer access to downtown or a more central location for Chicago market operations. In 2002-2003, two new outlying rail intermodal facilities were focal points for investment. [See "On Track," June 2003, page 65.]

The Burlington Northern Santa Fe Railway (BNSF) opened its 715-acre (289.5-ha) Logistics Park Chicago in Elwood, near Joliet, and the intersection of I-55 and I-80 about 50 miles (80.5 km) southwest of Chicago in 2002, offering direct rail and truck access, specialized automotive facilities, and intermodal facilities capable of over 1 million lifts yearly. Chicago area-based CenterPoint Properties developed Logistics Park and the adjacent 1,100-acre (445.3-ha) CenterPoint Intermodal Center, which has attracted 1 million-plus-square-foot (92,903-plus-sq-m) distribution centers for Georgia Pacific (which consolidated facilities from the Chicago area and Wisconsin) and DSC Logistics and two (1.6 million- and 1.8 million-square-foot/148,644- and 167,225-sq-m) Wal-Mart bulk distribution centers and other smaller users.

In 2003, Union Pacific (UP) completed its 1,200-acre (485.8-ha) Global III intermodal facility in Rochelle, Illinois, with capacity to handle more than 3,000 containers per day. The community lies at the intersection of I-39 and I-88, about 90 miles (145 km) west of Chicago and 25 miles (40 km) from United Parcel Service's second-largest airport hub and one of its three national heavy freight hubs at the Rockford International Airport. The BNSF and UP main lines intersect in Rochelle and a city-owned short line railroad connects certain industrial areas to both, offering rail users the opportunity to negotiate rates and service. The community sees opportunity in using containers that arrived holding manufactured consumer goods to export grain, including dried distillers' grain, a livestock feed that is a by-product of nearby ethanol production.

National and local industrial park developers are active with distribution-oriented parks, and major companies have built regional megadistribution centers in the region, some attracted by proximity to the intermodal center. Recent projects include Lowe's 1.2 million-square-foot (111,483-sq-m) center that opened in March in Rockford (about 90 miles [145 km]



CenterPoint Properties demolished a shuttered aluminum mill (above) on a 242-acre (98-ha) infill site in McCook, outside Chicago, to develop a beverage company plant (left).

northwest of Chicago), Target's 1.5 million-square-foot (139,354-sq-m) center in DeKalb in 2006, Wal-Mart's 1.2 million-square-foot (111,483-sq-m) center in Sterling (120 miles [193 km] west of Chicago) in 2006, expanding this year, and a second 1 million-square-foot (92,903-sq-m) center in nearby Princeton, and PetSmart's 1 million-square-foot (92,903-sq-m) center in Ottawa along I-80 in 2005.

The large centers often are retailers where industry consolidation has produced survivors with increased market share, many growing rapidly, who frequently find it more efficient to operate one huge facility rather than two smaller ones. A single large center can hold inventory for many stores, reducing individual in-store and overall company inventory. Sites, typically measuring well over 100 acres (40.5 ha), are larger to accommodate expansion needs and parking for large numbers of trailers. Seeking big sites and low land costs and trying to avoid traffic congestion, companies locate these facilities in outlying areas. Proximity to intermodal centers offers reduced local transportation (drayage) costs and faster deliveries.

Declining supplies of large tracts of relatively close-in land and rising prices have led to new development in areas that have been overlooked until recently, including south along I-57, west along I-80 in Grundy County, and in northwest Indiana.

Infill projects typically involve redevelopment of well-located but functionally obsolete facilities in industrial areas in the city and suburbs. In McCook, about five miles (8 km) west of Midway Airport near the intersection of I-55

and I-294, CenterPoint demolished a shuttered 3.5 million-square-foot (325,160-sq-m) aluminum plant and plans 3 million square feet (278,709 sq m) of new facilities on the 242-acre (98-ha) site. McCook Business Center II currently houses food and beverage distributors, a cold storage facility, and other light manufacturing and distribution. The adjacent McCook Business Center I has 1.5 million square feet (139,354 sq m) of new space on a 155-acre (62.7-ha) site that once held a 1.7 million-square-foot (157,935-sq-m) General Motors locomotive plant. Denver-based ProLogis, which has a significant suburban presence, entered the city of Chicago in 2006 by purchasing from Union Pacific Corporation for \$23 million a 48.5-acre (19.6-ha) shuttered intermodal rail yard about five miles (8 km) southwest of the Loop along I-55. Plans are to build 800,000 square feet (74,322 sq m) of industrial and distribution facilities.

Industrial buildings, including warehouses, in Cook County (which includes Chicago) face higher property taxes than in other Illinois counties resulting from Cook County's practice, unique among counties in that state, of assessing commercial and industrial property at a higher percentage of market value than other property types. The result can be effective tax rates that are double those of neighboring counties. Companies have addressed this by applying for a "6B" tax abatement halving assessment levels for new commercial and industrial investment for ten years, renewable for another ten years, and then phasing out. This past November, the Cook County

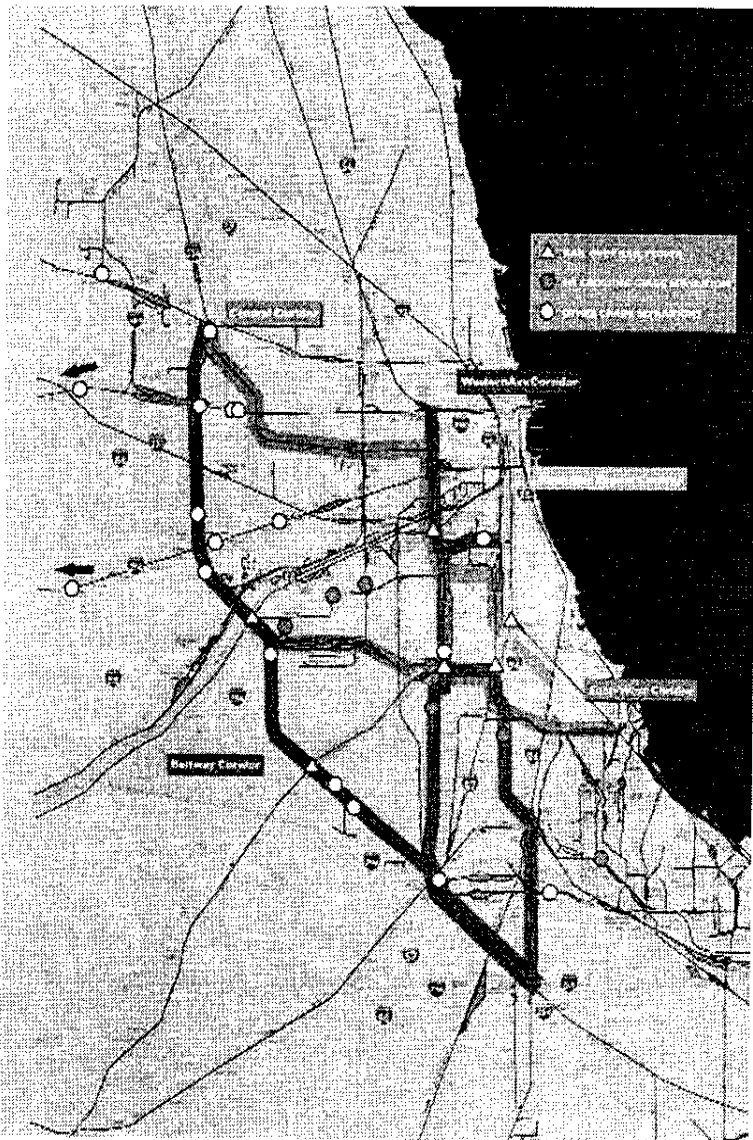
Board created a new classification, Class 8, providing permanent renewability for reduced assessment for new investment in areas needing economic revitalization, contingent upon municipal and county approval. The county board certified several townships in southern Cook County eligible, though projects still need municipal approval.

Chicago's current 37,500 freight rail cars daily are expected to increase to 67,000 daily within 20 years on tracks shared by 700 commuter trains each week and Amtrak. Many trains cross now-busy roads at grade level, slowing trains and inconveniencing motorists. Congestion and slow travel times getting rail and truck freight across Chicago, already a major issue, are growing concerns.

Chicago Metropolis 2020, a nonprofit civic/business organization promoting long-term planning, regional cooperation, and smart investment in the Chicago region, issued *The Metropolis Freight Plan: Delivering the Goods* in December 2004, which explores the region's freight rail system and options to prevent gridlock and keep the sector vital. Recommendations include the following:

- ▷ Developing barrier-free tolling technology and a system of user fees and variable pricing on the most congested highways to provide economic incentives for truckers and other drivers to use those highways in nonpeak periods, reducing rush-hour congestion.
- ▷ Designating and protecting freight centers in the suburbs to ensure that public and private industrial development investments are targeted to those corridors that can most effi-

LANDWRITES



Six Class 1 railroads, the city of Chicago, and the state of Illinois partnered on CREATE, a plan to coordinate investment to speed rail and road traffic in five regional corridors.

ciently support new industrial development and minimize freight trips.

- ▷ Preserving land for future rail corridors and intermodal terminals to enhance rail-to-truck freight transfer and delivery efficiency and maximize rail's ability to carry freight and reduce highway congestion.
- ▷ Directing highway spending to eliminate gaps—up to 12 miles (19.3 km) in some areas—in the region's state-designated truck route network to reduce delays and prevent unnecessary travel by heavy trucks.
- ▷ Creating county organizations to coordinate better planning of truck routes.

▷ Organizing a regional policy board to coordinate transportation and land use planning.

Progress has been made on some recommendations, says Jim LaBelle, deputy director of Metropolis 2020, and leader for policy development in freight, land use, and transportation. In 2006, the Chicago Metropolitan Agency for Planning combined the Chicago Area Transportation Study, the region's transportation planning agency, and the North-eastern Illinois Planning Commission, the land use planning agency, into a single body. Next steps may include financing power to encourage public/private cooperation on developments of regional impact. The region has "put a toe in the water on variable pricing for roads" in which trucks pay \$1 per toll more during peak hours, says LaBelle, who believes that variable pricing

will become more widespread. Other recommendations, such as preserving land for freight use, have to overcome hurdles of forging agreement among multiple jurisdictions.

A key recommendation is to complete the \$1.5 billion Chicago Region Environmental and Transportation Efficiency program (CREATE), originally envisioned in 2003 as a ten-year agreement among the region's six Class 1 railroads, the city of Chicago, Metra (commuter rail), and the state of Illinois to eliminate rail bottlenecks by coordinated upgrading of public and private infrastructure. The program encompasses 78 projects including highway-rail grade separations, rail flyovers, railroad infrastructure (switches, track, signals) projects, and viaduct improvements along five rail corridors in five counties in Illinois and one in

Indiana. The AAR calls it a "first of its kind" partnership.

Anticipated benefits include increased rail speed, lessening delays to shippers and making rail more attractive; decreased delays for motorists and rail passengers; reduced highway needs and new construction costs and highway user costs nationally; and improved air quality regionally and nationally.

This past September, CREATE received \$100 million from federal SAFETEA-LU (Safe, Accountable, Flexible, and Efficient Transportation Act: A Legacy for Users) funds, to which the railroads will add \$100 million, the state of Illinois is anticipated to add \$100 million by issuing bonds, and the city of Chicago will contribute \$30 million, for a total of \$330 million over the next three years. This will fund 31 projects that will be completed or under construction by 2009. LaBelle notes that CREATE funding has not moved as quickly as proponents had hoped and that the next opportunity for federal funds likely will be in 2009. Projects chosen for initial funding were those that the partners agreed promised the largest benefits in terms of safety, efficiency, and congestion relief, says N. Marcia Jimenez, CREATE project director for the Chicago Department of Transportation.

Jimenez emphasizes that the Chicago area rail operations have national impacts and infrastructure improvements will lead to national benefits. Sixty-five percent or more of the freight from the ports of Long Beach, Seattle-Tacoma, and New Jersey eventually moves through Chicago. Congestion in Chicago is felt up and down the line; for example, one of the key benefits of CREATE is better air quality nationally as more efficient trains attract shippers and reduce truck traffic. The AAR, citing continued traffic growth, says expansion of rail capacity is a key issue nationally this year. As mentioned earlier, Chicago is the country's freight capital and the key hub in the national system. CREATE, says Jimenez, is a beginning to build capacity and efficiency regionally—an effort whose economic and environmental benefits will also be felt nationally. **U**

JERRY W. SZATAN is a Chicago-based consultant and writer on corporate site selection and community economic and real estate development.



COVER STORY June 10, 2008, 5:00PM EDT

Can the U.S. Bring Jobs Back from China?

Pricey oil is dulling the mainland's edge in manufacturing. But American industry may not be ready to seize the opportunity

by Paul Engard

Christina Lampe-Onnerud has a long-lasting, fast-charging battery for notebook computers that she believes will revolutionize the industry. Her company, Boston-Power, would like to make the batteries in the U.S., which she says is feasible despite high American wages.

But Lampe-Onnerud has had trouble finding anyone in the U.S. even to make a prototype, let alone manufacture the battery in bulk. China, by contrast, is home to more than 200 battery manufacturers. On visits to the mainland, Lampe-Onnerud toured dozens of factories with ample staff and laboratories, and none wanted the millions of dollars up front that one contract manufacturer in the U.S. had demanded. She recalls a negotiating session last year that started at 9 a.m. and ended with a midnight dinner. Despite parting with 30 unresolved questions, "at 9:00 the next morning, the entire management team was there with pressed white shirts and a PowerPoint presentation addressing every issue," she says. "That's how badly they wanted the business." In six months, Boston-Power was ramping up production in a 400-worker factory in Shenzhen.

This would seem to be a good time for an American manufacturing renaissance. The economics of global trade are starting to tilt back in favor of the U.S. to a degree unseen in a generation. Since 2002 the dollar has plunged by 30% against major world currencies and is falling against the yuan. Wages in China are rising 10% to 15% a year. And spiking oil prices are driving up shipping rates. The cost of sending a 40-foot container from Shanghai to San Diego has soared by 150%, to \$5,500, since 2000. If oil hits \$200 a barrel, that could reach \$10,000, projects Toronto financial-services firm CIBC World Markets.

But as the experience of Boston-Power and countless companies like it shows, the map of global commerce can't be redrawn overnight. American factories and supplier networks in many industries have withered in the era of globalization, so it will take lots of time and capital before the U.S. can become a big player again. In electronics, for instance, there has been a mass migration of component makers to China in the past decade. Ditto for suppliers to Midwest heavy-equipment makers and North Carolina's furniture industry.

The bulk of goods made in China—clothing, toys, small appliances, and the like—probably won't be coming back, because they require abundant cheap labor. If anything, their manufacture will go to other low-wage nations in Asia or Latin America. And in industries from machinery to motorbikes, China's productivity gains nearly offset rising wages and fuel prices.

In areas where the U.S. is at the forefront of innovation—renewable energy, nano materials, solid-state lighting—the U.S. must compete with Asian and European nations willing to lavish entrepreneurs with start-up capital, cash grants, and cheap loans. Similar help may be needed to persuade U.S. companies to build capacity.

EATING INTO "THE CHINA PRICE"

The global industrial landscape certainly appears to be in the early stages of a realignment. The euro's breathtaking rise against the dollar has spurred European makers of cars, steel, aircraft, and more to shift production to the U.S. Now the soaring cost of fuel is making it pricier to send goods across the Pacific. Consider Japan's steel industry, which depends on imported iron ore and coal to create high-end metal for Japanese automakers in the U.S. In 2003 it cost \$15 to ship a ton of iron ore costing \$30 from Brazil to Japan. By last fall, while the ore had jumped to \$80 per ton, shipping costs had risen to \$90. Shipping of raw materials now accounts for 13% of the price of rolled steel used in car bodies, estimates CLSA Asia-Pacific Markets. The finished steel must then be sent to factories in the U.S., pumping up the price even further.

Rising costs are starting to eat into what American managers fearfully call the China Price, the once-formidable 40% to 50% cost advantage enjoyed by Chinese manufacturers—and demanded by customers. "Fuel prices just shot up so fast that everyone was caught flat-footed," says Allen J. Delattre, who heads Accenture's (AOL) global supply chain practice. "Now logistics costs are an overarching priority." Richard Sinkin, a San Diego consultant who scouts manufacturing sites in the U.S., Mexico, and China for multinationals, also senses a major strategic shift. "A lot of clients who were thinking about going to China are now saying, Not at these prices," says Sinkin. "The high cost of fuel is going to radically transform the way people look at the geography of their manufacturing."

Examples of production shifts abound. Chinese steel exports to America are down 20% in the past year, notes CIBC, while U.S. steel output has jumped 10% despite the slowdown in construction. Big electronics manufacturers are expanding assembly of high-end telecommunications, computer, and medical equipment in Mexico and some parts of the U.S. for greater proximity to corporate buyers. Tesla Motors, which has just begun production of its \$109,000, electric-powered sports car, transferred assembly of battery packs from Thailand to a plant next to its San Carlos (Calif.) headquarters. Thailand's low factory wages were more than offset by the costs of shipping thousand-pound battery packs across the Pacific. "We were seeing tens of millions of dollars of value sitting on the water for months," says Darryl Siry, Tesla's vice-president for marketing. "It was one of those things that became obvious all of a sudden, and you said, Why are we doing this?"

Look behind these examples, though, and obstacles to a broad manufacturing migration become clear. Iron castings maker Donsco, on the banks of the Susquehanna River in eastern Pennsylvania, illustrates the dilemma. In recent years, Donsco has laid off hundreds of workers as customers shifted production of gear boxes, oil rig parts, and much more to Chinese competitors. Now, Donsco says it's flooded with order inquiries from U.S.-based clients. "All of a sudden our customers are saying, Whoops, it's cheaper to buy in our backyard," says Donsco Chairman Art Mann Sr. While Donsco managed to keep its doors open, many of its U.S. rivals shut down, so there's now a shortage of capacity.

STAYING PUT, FOR NOW

Despite growing demand, Mann says Donsco will be "real cautious" about spending the \$30 million and two years needed to build a new foundry. The impact of this reluctance is being felt in Belen, N.M., where CEMCO, a maker of rock-crushing and farming equipment, is looking to cut costs and logistical headaches. The company today imports many metal parts from Asia but would prefer to buy domestically because of rising shipping rates and the weak dollar. "American foundries now can compete head-to-head on cost, but there aren't many foundries, welders, machinists, and quality-control engineers," says James B. Turk, CEMCO's chief financial officer. "What we had 10 years ago is gone." Where did all the capacity go? Mainly to China, where modern foundries are proliferating.

The furniture industry has undergone a similar transformation. Hundreds of factories have shut their doors across the

U.S. South, while giant plants churning out beds, armoires, and coffee tables have sprung up in industrial estates that sprawl for miles and miles outside Chinese cities such as Dongguan, just north of Hong Kong. It's true that wages are up, the Chinese plants import much of their wood from North America, and bulky bed frames and mattresses consume a lot of space in shipping containers. Yet Stylution Group's 1,600-worker complex in Dongguan isn't going anywhere. Stylution churns out 1 million mattresses and 300,000 bedroom sets every year, exporting about half of them. "It's not easy to pick up and move," says Stylution's marketing manager, Frank Masiello. Besides, he says, most of the supply base has gone to China, down to the paint and tiniest screws, and the mainland market is growing fast. "High Point [N.C.] used to be the center," Masiello says. "But over the last eight years, pretty much everything moved here."

The same goes for lighting fixtures, household appliances, and more. An overwhelming majority of many of these products are made in China. And while some companies are shifting production to Vietnam or Indonesia, those countries don't have enough skilled workers to match Chinese quality and efficiency. If global shipping costs continue to rise, some businesses could eventually move their factories back to the U.S., but that process will take years. "In the short term, China is irreplaceable," says Xu Dongsheng, deputy secretary general of the China Household Electrical Appliances Assn.

How has China been able to keep its edge in the face of soaring costs? One factor that's widely overlooked is rising productivity. For the past decade, U.S. manufacturing productivity growth has averaged 4.8%. That's impressive for an industrialized nation, and bodes well for U.S. industry when the economy recovers. But productivity at medium and large Chinese manufacturers—the backbone of country's export boom—has averaged nearly 19% over the same period, says Bart van Ark, chief economist at the Conference Board, a business research group.

While American manufacturers have been tightening their belts, producers in China have been plowing money into bigger and more advanced facilities that are ahead of their U.S. counterparts. Douglas Bartlett, chairman of Bartlett Manufacturing, a Cary (Ill.) maker of high-end circuit boards used in defense and medical systems, doesn't see a big reversal in store. A decade ago the U.S. accounted for one-third of global circuit-board output. Today that's down to 10%, with China making 80%. Chinese boards are still 40% to 50% cheaper than the ones Bartlett makes in the U.S., in part because producers there have superior technology. "When factories went to China, so did the R&D," says Bartlett, who also heads the U.S. Business & Industry Council, a lobbying group for manufacturers. "I can't envision a scenario in which the price gap will drop significantly anytime soon."

Some analysts contend the China Price edge against the U.S. will remain for at least a decade. While the U.S. has become a "midprice" alternative to Western Europe thanks to the plunge in the dollar, says Boston Consulting Group senior partner Harold L. Sirkin, its cost structure in relation to China has changed only marginally. Sirkin points to industrial compressors, which are used to power equipment such as office air-conditioning systems. Three years ago it cost 38% less to make a 1.5-ton compressor in a factory in China than in an American plant. The big driver was Chinese wages and benefits, which were 65% below those in the U.S. Even accounting for rising labor costs in China, the strengthening yuan, and higher shipping rates, Sirkin estimates Chinese-made compressors are still about 30% cheaper. While that puts Mexico within striking distance as a rival site, "this is not enough of a change to bring this production home to America," Sirkin says. "and there is likely no factory and equipment left to come back to."

Expecting the U.S. to recapture industries that have already gone to China may not be realistic. But the new cost equation likely will influence many decisions about where to locate production in the future. America remains the world's biggest manufacturer, after all, because it's still the largest market for everything from drugs and packaged foods to high-end medical equipment. The U.S. may have as good a chance as anyone of being a strong player in nascent industries, whether next-generation wind turbines, medical devices with nano-scale sensors, or electric cars.

The challenge will be to persuade reluctant venture capitalists and corporations to invest again in modern U.S. production facilities.

What would be required, for instance, for the U.S. to re-emerge as a player in batteries? It is an industry, after all, on the cusp of radical technological change that could spur development of future eco-friendly vehicles, cell phones, and home appliances. Boston-Power's Lampe-Onnerud has suggestions, but America may not be ready for them. Washington could lend up to \$50 million in seed capital to promising startups, for example, and state governments could build industrial parks with low-cost facilities and services that rival those found in China. "If we got state and federal support," she says. "we would team up with others in a heartbeat and grow an industry."

LINKS

Clearer Sailing

Cargo ships may soon have an incentive to burn lower-sulfur fuel when sailing off the California coast. Port operators will reimburse shippers the price difference between so-called bunker fuel, a viscous distillate used by big vessels, and a more expensive but cleaner-burning alternative, the *Los Angeles Times* wrote on Mar. 19. The measure, expected to go into effect by July 1, would cut sulfur-oxide air pollution in the L.A. basin by 11%.

With Dexter Roberts in Dongguan, Geri Smith and Adrienne Bard in Mexico City, Peter Goy and Jacob Stokes in New York, and Ian Rowley in Tokyo

Engardio is an international senior writer for BusinessWeek

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WHERE KNOWLEDGE IS POWER

IBISWorld Industry Report

February 25, 2016

Prescription Drug Wholesaling in the US: 42221



EXECUTIVE SUMMARY

The industry is expected to grow at a steady pace over the next five years, driven by the increasing number of prescriptions filled in the United States. The industry is expected to reach a total of \$1.2 billion by 2021, up from \$1.0 billion in 2016. The industry is expected to be dominated by a few large players, with the top five companies accounting for over 80% of the total revenue. The industry is expected to be highly competitive, with many new entrants expected to enter the market in the coming years. The industry is expected to be highly regulated, with the government expected to continue to implement policies aimed at reducing drug costs. The industry is expected to be highly innovative, with many new drugs expected to be developed in the coming years. The industry is expected to be highly profitable, with the top five companies expected to have profit margins of over 20%.

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Industry Definition

This industry comprises establishments primarily engaged in wholesaling biological and medical products; botanical drugs and herbs; and pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions. Participants supply to hospitals and private medical practices, department stores, supermarkets and mass merchandisers, cosmetics retailers and retail pharmacies. Products include medical and pharmaceutical products, medical supplies, veterinary supplies, first-aid supplies, and personal care goods.

ACTIVITIES (PRODUCTS AND SERVICES)

The primary activities of this industry are:

- Antibiotics wholesaling
- Antiseptics wholesaling
- Bandages wholesaling
- Beauty preparations wholesaling
- Beauty supplies wholesaling
- Biological and allied products wholesaling
- Blades, razor, wholesaling
- Botanicals wholesaling
- Colognes wholesaling
- Cosmetics wholesaling
- Dentifrices wholesaling
- Deodorants, personal, wholesaling
- Diagnostic reagents wholesaling
- Diagnostics, in-vitro and in-vivo, wholesaling
- Endocrine substances wholesaling
- First-aid supplies wholesaling
- Gauze wholesaling
- Hair preparations (except professional) wholesaling
- Medical sundries, rubber, wholesaling
- Nonprescription drugs wholesaling
- Perfumes wholesaling
- Plasmas, blood, wholesaling
- Prescription drugs wholesaling
- Radioactive pharmaceutical isotopes wholesaling
- Razors (except electric) wholesaling
- Rubber goods, medical, wholesaling
- Salts, bath, wholesaling
- Shaving preparations wholesaling
- Toilet preparations wholesaling
- Toilet soaps wholesaling
- Toothbrushes (except electric) wholesaling
- Vaccines wholesaling
- Veterinarians' medicines wholesaling

- Vitamins wholesaling

The major products and services in this industry are:

- Prescription drugs
- Nonprescription pharmaceuticals
- Cosmetics and beauty supplies
- Vitamins and nutritional supplements
- Health aids and first aid supplies
- Perfumes
- Medical, hospital and surgical supplies

SIMILAR INDUSTRIES

Industry: ≡ 42145 - Medical Supplies Wholesaling in the US

Description: Establishments primarily engaged in wholesaling surgical, dental, and hospital equipment.

DEMAND & SUPPLY INDUSTRIES

- ≡ 32541 - Pharmaceutical & Medicine Manufacturing in the US
- ≡ 32561 - Soap & Cleaning Compound Manufacturing in the US
- ≡ 32562 - Cosmetic & Beauty Products Manufacturing in the US
- ≡ 33911a - Medical Instrument & Supply Manufacturing in the US
- ≡ 33911b - Ophthalmic Lens Manufacturing in the US
- ≡ 44512 - Convenience Stores in the US
- ≡ 44611 - Pharmacies & Drug Stores in the US
- ≡ 44612 - Beauty, Cosmetics & Fragrance Stores in the US
- ≡ 44619 - Health Stores in the US
- ≡ 45211 - Department Stores in the US
- ≡ 62111a - Medical Doctors in the US
- ≡ 62111b - Specialist Medical Doctors in the US
- ≡ 62211 - Hospitals in the US

Key Statistics

INFLATION ADJUSTED (CONSTANT) PRICES

| | 2004 | 2005 | 2006 | 2007 | 2008 | |
|--------------------------|----------|----------|----------|----------|----------|---------|
| Industry Revenue | *492,200 | *521,000 | *552,000 | *579,500 | *605,500 | \$Mil |
| Industry Gross Product | *67,400 | *70,000 | *72,500 | *75,000 | *77,250 | \$Mil |
| Number of Establishments | *11,242 | *10,927 | *10,850 | *10,790 | *10,750 | Units |
| Number of Enterprises | *9,848 | *9,513 | *9,480 | *9,450 | *9,425 | Units |
| Employment | *271,900 | *265,000 | *270,500 | *275,000 | *279,000 | Units |
| Exports | -- | -- | -- | -- | -- | |
| Imports | -- | -- | -- | -- | -- | |
| Total Wages | *19,200 | *19,600 | *20,200 | *20,700 | *21,200 | \$Mil |
| Domestic Demand | NC | NC | NC | NC | NC | \$Mil |
| Prescriptions filled | *3,275 | *3,383 | *3,495 | *3,610 | n/a | Million |

REAL GROWTH

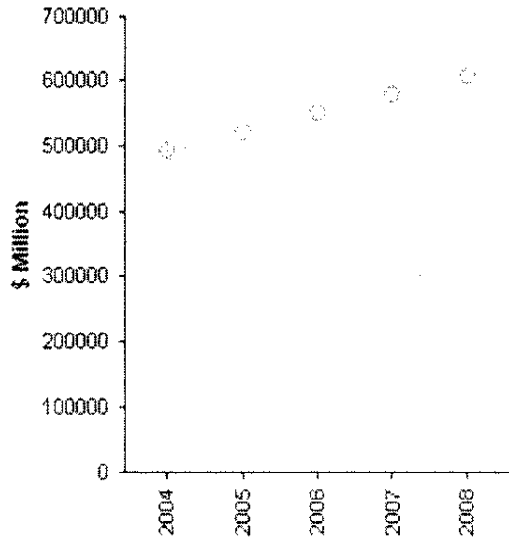
| | 2004 | 2005 | 2006 | 2007 | 2008 | |
|--------------------------|-------|-------|-------|-------|-------|---|
| Industry Revenue | *5.7 | *5.9 | *6.0 | *5.0 | *4.5 | % |
| Industry Gross Product | *3.4 | *3.9 | *3.6 | *3.4 | *3.0 | % |
| Number of Establishments | *-0.2 | *-2.8 | *-0.7 | *-0.6 | *-0.4 | % |
| Number of Enterprises | *-0.4 | *-3.4 | *-0.3 | *-0.3 | *-0.3 | % |
| Employment | *6.5 | *-2.5 | *2.1 | *1.7 | *1.5 | % |
| Exports | NC | NC | NC | NC | NC | % |
| Imports | NC | NC | NC | NC | NC | % |
| Total Wages | *6.1 | *2.1 | *3.1 | *2.5 | *2.4 | % |
| Domestic Demand | NC | NC | NC | NC | NC | % |

RATIO TABLE

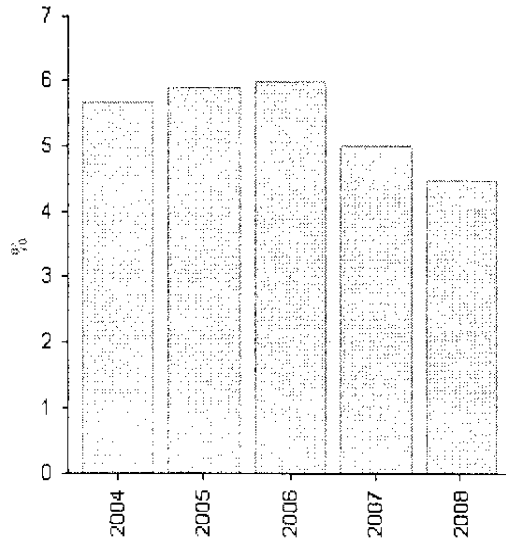
| | 2004 | 2005 | 2006 | 2007 | 2008 | |
|-------------------------------------|-------|-------|-------|-------|-------|-------|
| Imports share of Domestic Demand | NC | NC | NC | NC | NC | % |
| Exports Share of Revenue | NC | NC | NC | NC | NC | % |
| Average Revenue per Employee | *1.81 | *1.97 | *2.04 | *2.11 | *2.17 | \$Mil |
| Wages and Salaries Share of Revenue | *3.9 | *3.76 | *3.66 | *3.57 | *3.5 | % |

GRAPHS

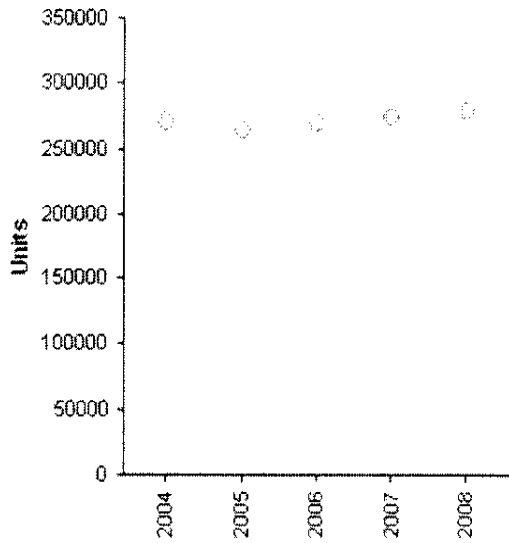
Revenue



Revenue Growth Rate



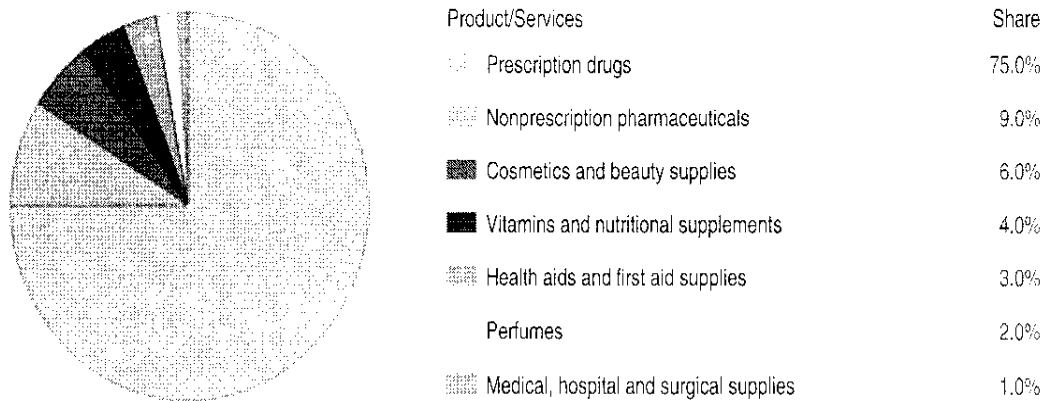
Employment



Note: Unless specified, an asterisk (*) associated with a number in a table indicates an IBISWorld estimate and references to dollars are to US dollars.

Segmentation

PRODUCTS AND SERVICE SEGMENTATION



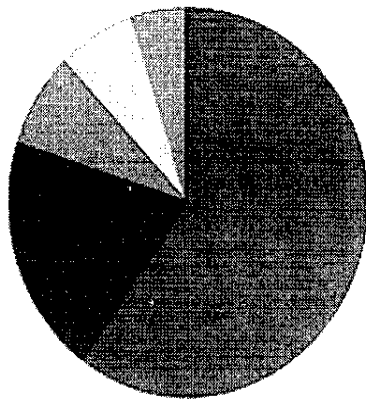
- Pharmaceutical and medical products account for the largest share of industry revenue, amounting to approximately 85% of Drugs and Druggists' Sundries Wholesale sales.
- In the pharmaceutical and medical product segment, IBISWorld estimates that prescription drugs account for 75% of revenue, non prescription pharmaceuticals generate 6% of revenue, and vitamins and nutritional supplements 4%.
- Medical and first-aid supplies account for 1% of revenue. This proportion remains relatively consistent as the demand for these goods is not sensitive to changes in economic conditions. Medical, hospital and surgical goods include surgical and medical products, orthopedic and prosthetic appliances and supplies.
- In contrast, cosmetics, beauty supplies and perfumes which are thought to account for roughly 8% of revenues tend to be more sensitive to fluctuations in economic conditions and thus their relative importance will change in line with changes in discretionary consumer expenditure patterns.
- IBISWorld believes that product varieties with different features are associated with different levels of technological sophistication, different suppliers and different distribution channels within the industry. These factors account for the large number of distribution channels and product varieties.
- Products sold through this wholesale industry have performance differences. Performance differences include such aspects as prescription, tablet versus oral forms as well as other features that are related to technology (R&D) and design.

National Health Expenditure by Object

| | Billion Dollars 2000 | Billion Dollars 2002 | Billion Dollars 2004 | Billion Dollars 2006p |
|--------------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| Health services and supplies | 1261.4 | 1496.3 | 1738.9 | 1987.7 |
| Personal health care expenses | 1135.3 | 1340.2 | 1551.3 | 1769.2 |
| Prescription drugs | 121.5 | 162.4 | 189.7 | 213.7 |
| Other nondurable medical goods | 30.8 | 31.7 | 32.8 | 36.3 |

Source: US Census

MAJOR MARKET SEGMENTS



| Market Segment | Share |
|---|-------|
| Retail Pharmacies | 60.0% |
| Supermarkets and Mass Merchandisers | 20.0% |
| Department Stores | 8.0% |
| Hospitals and Private Medical Practices | 7.0% |
| Cosmetic Retailers | 5.0% |

- Roughly 80% of all human use ethical pharmaceutical products produced by upstream manufacturers are currently distributed via wholesalers.
- Wholesalers then distribute the relevant products to various downstream health care users including hospitals, clinics, HMOs, retail pharmacies etc as well as to the likes of chain stores and mail order companies. According to data produced by IMS Health, retail channels (including pharmacies and other stores involved in the dispensation of prescription products) accounted for 56% of all dispensed prescription sales in terms of dollar sales in 2006, compared with 15% for mail-order pharmacies, 10% for non-federal hospitals, 11% for clinics, 5% for long-term care pharmacies and 1% each for home health care institutions, federal facilities and staff-model HMOs.
- However in some instances, manufacturers may bypass the wholesaler and deal directly with downstream end users including pharmacies, health food chain stores, mail order companies etc.
- On a total product basis, retail pharmacies still constitute by far the largest market segment. In recent years pharmacies and drug stores have been increasing the range of front of store products they stock. These establishments have also been increasing their range of pharmaceuticals and over-the-counter medicines in an attempt to increase market share.
- Supermarkets account for 20% of market demand. Supermarkets and mass merchandisers are also serviced by a variety of industry participants including pharmaceutical wholesalers who stock over-the-counter (OTC) products, as well as by those who supply detergents, soaps, cosmetics and toiletries products.
- Over the current performance period, pharmaceutical wholesalers have lost an increasing proportion of OTC pharmaceuticals, medical supplies (e.g. bandaids, bandages), cosmetics and toiletry sales to external competitors and to the distribution operations of supermarkets, mass merchandisers and health and beauty chains.
- At the consumer level, seniors are the dominant users of medical care. They make up about 13% of the population, but they account for more than 35% of all health care expenditures, 34% of all prescriptions dispensed, and 42% of prescription drug expenditures.

Average annual expenditure per consumer unit

| | Dollars Drugs and medical | Percentage as a percent of total health care costs |
|-----------------------|---------------------------------|--|
| Under 25 | 160 | 25 |
| 25 to 34 | 364 | 18.6 |
| 35 to 44 | 402 | 20.3 |
| 45 to 54 | 602 | 23.6 |
| 55 to 64 | 788 | 26.2 |
| 65 to 74 | 1032 | 28.8 |
| 75 years and older | 1207 | 33.7 |

Source: US Census

INDUSTRY CONCENTRATION

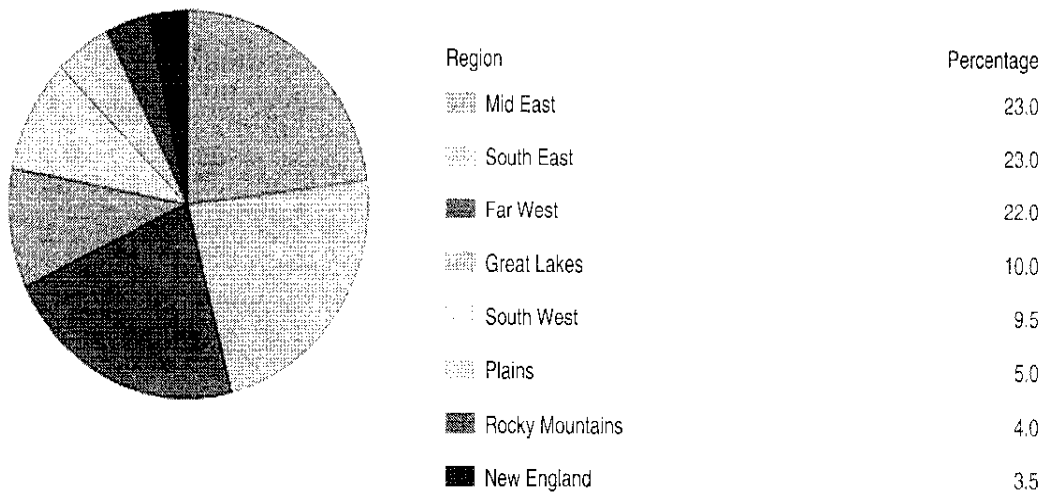
Concentration in this industry is low

The Drugs and Druggists' Sundries Wholesalers Industry is deemed to have a low level of concentration with the top four participants accounting for just under 40% of industry revenues.

GEOGRAPHIC SPREAD

Year: 2008

Establishment location spread by region



- Geographic analysis, by region, shows that business activity is concentrated in the South East region (23% of establishment numbers in 2005), the Mid East (23% of establishments), and the Far West (22% of establishments)

regions of the US. Geographic analysis, by state, shows that California (1,321 establishments in 2005), Texas (517 establishments), New Jersey (585 establishments), and Florida (745 establishments) account for a greater number of establishments, employment, and sales receipts in the industry. These same proportions are expected to hold today

- About 12% of all Americans live in California, which ranked first in population among the 50 states in 2002 with an estimated total of 35 million, an increase of 3.7% since 2000. California replaced New York as the decennial census leader in 1970, with a total of 19,971,069 residents, and has lengthened its lead ever since. Between 1990 and 2000, California's population grew by 13.8%. The population is projected to reach 49 million by 2025. Los Angeles is the second most populous city in the US.
- Demand for products is supported by the fact that Medi-Cal is a statewide program (California) that pays for the medical care of persons who otherwise could not afford it. California has also been a leader in developing new forms of health care, including the health maintenance organization (HMO), which provides preventive care, diagnosis, and treatment for which the patient pays a fixed annual premium. Federal government grants to cover the Medicare and Medicaid services in 2001 totaled \$13.9 billion. A large portion of California's population, 19.5%, remained uninsured in 2002.
- The industry, when compared to population share by region, has an above average concentration in the Mid East and South East regions. This may be due to wholesalers maintaining a close proximity to key markets as it is these regions that have relatively high concentrations of people over 55 years of age which is a key market for downstream industries such as pharmacies and drug stores.

Average annual expenditures per consumer per unit for health care, by region of residence

| | Dollars Total health care | Percentage Health insurance | Percentage Medical services | Percentage Drugs and medical |
|-----------|------------------------------|--------------------------------|--------------------------------|---------------------------------|
| Northeast | 2084 | 50.1 | 26.4 | 23.4 |
| Midwest | 2292 | 49.1 | 24.9 | 26.0 |
| South | 2194 | 49.5 | 24.1 | 26.3 |
| West | 2129 | 45.3 | 40.6 | 23.5 |

Source: US Census

Note: Region of residence in table above does not correspond to IBISWorld regional segmentation.

- Participants in the Drugs and Druggists' Sundries Wholesaling industry locate themselves in areas well supported by infrastructure and close to downstream markets for convenience. Other factors affecting location include proximity to medical supply and pharmaceutical manufacturers, which themselves are thought to be concentrated in the Mid East and South East regions.

At the retail level:

- IBISWorld estimates that industry activity in the Pharmacies and Drug Stores Industry is concentrated in the South East and Mid East regions, with each accounting for 28% and 20% of total 2007 establishment numbers, respectively.
- According to IBISWorld analysis at the retail level, California alone accounts for 10% of industry establishments, primarily as a result of a higher than average population in this state (compared to other US states).
- Other states such as Pennsylvania (6% of establishments), and Florida (5%) also hold a high percentage share. Note that Florida has the highest percentage of 65+ population, with the elderly accounting for 18% of the states population.

- It is this population demographic (65+ age group) that accounts for a significant proportion of drug store customers, especially those purchasing prescription and non-prescription drugs as they become more frail and susceptible to medical conditions.

Market Characteristics

MARKET SIZE

- The Drugs and Druggists' Sundries Wholesalers industry in the US derives most of its revenue from distributing pharmaceuticals to retail pharmacies, as well as to other retailers such as supermarkets, mass merchandisers and department stores. The aging population has been an important factor driving long term growth in the industry, with the elderly generally requiring more medical care and drugs. In 2007 it was anticipated that roughly 3,610 million prescriptions would be filled in the downstream retail drug sector, up from 3,495 million in 2006.
- In 2008, the industry is expected to generate revenues of \$605 billion, up 4.5% from the previous year.
- In the same year the industry is expected to contribute \$77 billion to GDP (gross domestic product). This figure represents around 2% of the overall wholesale sector's value added.
- At 2008 year end, the industry is expected to consist of 10,750 establishments. These firms are expected to employ around 279,000 staff, and pay approximately \$21 billion in wages and salaries. Nearly half of all firms operating in this industry generate revenues between \$1 million and \$5 million per year. These firms also account for the majority of employment in the industry (roughly 65%). Following a considerable spate of consolidation, the industry is currently dominated by three major players. AmerisourceBergen, Cardinal Health and McKesson.

LINKAGES

Demand Linkages

≡ 44512 - Convenience Stores in the US

Supermarkets and convenience stores demand products supplied by Drugs and Druggist Sundry Wholesalers.

≡ 44611 - Pharmacies & Drug Stores in the US

Retailers such as these sell a wide range of medications, medicinal supplies, cosmetics, and toiletry products.

≡ 44612 - Beauty, Cosmetics & Fragrance Stores in the US

Retailers such as these sell a wide range of cosmetics, hair preparations and toiletry products.

≡ 44619 - Health Stores in the US

Retailers such as these sell a wide range of vitamin supplements, as well as natural cosmetic and toiletry products.

≡ 45211 - Department Stores in the US

Industry participants supply a variety of products to department stores including cosmetics, perfumes, soaps and toiletries products.

≡ 62111a - Medical Doctors in the US

Demand medical products from this industry.

≡ 62111b - Specialist Medical Doctors in the US

Demand medical products from this industry.

≡ 62211 - Hospitals in the US

Hospitals demand medical supplies as well as endocrine substances and blood plasma from this industry.

Supply Linkages

Industry participants supply a variety of products to department stores including cosmetics, perfumes, soaps and toiletries products.

Source: Bureau of Economic Analysis

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≡ 32541 - Pharmaceutical & Medicine Manufacturing in the US

Participants in this industry supply pharmaceutical products to this industry.

≡ 32561 - Soap & Cleaning Compound Manufacturing in the US

Participants in this industry supply soaps and toothpastes to this industry

≡ 32562 - Cosmetic & Beauty Products Manufacturing in the US

Participants in this industry supply perfumes, cosmetics, hair preparations, face and body creams, and shaving preparations to this industry.

≡ 33911a - Medical Instrument & Supply Manufacturing in the US

Participants in this industry supply first-aid and other medical products to this industry.

≡ 33911b - Ophthalmic Lens Manufacturing in the US

Participants in this industry supply first-aid and other medical products to this industry.

DEMAND DETERMINANTS

Demand is directly related to expenditure patterns in the Health Care and Social Assistance sector. Industries in the sector include: Physicians, Dentists, Optometrists, Mental Health and Substance Abuse Centers, Medical and Diagnostic Laboratories, Ambulance Services, General and Surgical Hospitals, Nursing and Residential Care facilities. For example doctors and specialists operating in these industries prescribe drugs and diagnostic tests; surgeons and other specialists select procedures, prostheses and devices while hospitals purchase diagnostic and surgical equipment.

Thus factors affecting demand for the above industries include:

- The aging American population and the trend towards more consumer-oriented health care products and devices is increasing the demand for the medical equipment and supply industry to develop technologies and products that enable patients to take a more active role in their own health care.
- With conditions such as heart disease, cancer, AIDS, and hepatitis on the increase, the demand for specialized instrumentation and consumables has increased. This demand is derived from the health of population and the methods employed by medical professionals to treat disease, illness and injury.
- Changes in domestic and international regulations such as more vigorous compliance and enforcement activities carried out by government agencies may delay or prevent the approval of certain products thereby impacting sales at the wholesale level.
- Government programs in the US such as Medicare and Medicaid, private healthcare insurance and managed care plans have attempted to control costs by limiting the amount of reimbursement they will pay for a particular procedure or treatment. Effectively this has led to an increased level of price sensitivity among customers for medical equipment and supplies.
- Product development by manufacturers as well as their marketing practices may also influence demand. Manufacturers are spending ever increasing sums on developing and marketing new products in an attempt to increase demand and product scope in an otherwise mature and saturated marketplace.

DOMESTIC AND INTERNATIONAL MARKETS

Domestic and International Markets Exports

Exports in this industry are low

Exports in this industry are steady

Domestic and International Markets Imports

Imports in this industry are low

Imports in this industry are steady

Domestic and International Markets Analysis

- The US Drugs and Druggists' Sundries Wholesalers Industry is oriented towards the domestic market.
- Indeed IBISWorld estimates that less than 5% of sales revenue in the Drug and Druggist' Sundries Wholesaling industry is generated from export sales.
- However of note is the fact that many of the products distributed by this industry are sourced from overseas suppliers although international trade in the Drugs and Druggists' Sundries Wholesaling is accounted for under the relevant upstream NAICS manufacturing classes: 32541 - Pharmaceutical and Medicine Manufacturing; 33911 - Medical Equipment and Supply Manufacturing; 32561 - Soap and Cleaning Compound Manufacturing; and 32562 - Toilet Preparation Manufacturing.

BASIS OF COMPETITION

Competition in this industry is high

Competition in this industry is increasing

The Drugs and Druggists' Sundries Wholesaling Industry is characterized by a high level of competition.

Competition within this industry is primarily based upon:

- Service range - This can include a range of value added services, such as the provision of buying, marketing, management and training and merchandising services to downstream drug stores and other retail outlets.
- Product mix - This includes the ratio of prescription products to over-the-counter products and other medicinal items relevant to this class, as well as the ratio of generic to branded products. For example existing and established companies that offer a wide range of quality or branded products gain greater market presence and product acceptance.
- Price - Price competition is particularly fierce within the over-the-counter (OTC) pharmaceuticals segment and related medical areas as supermarkets actively expand this area of their business. Price competition is also growing in the face of scheduling status changes as an increasing number of products are now being granted unscheduled status and as such can now be sold without a prescription and/or outside of pharmacies.
- Relationships with drug stores and other downstream retail outlets -

Other variables impacting on competition levels within the industry are outlined below:

- Pharmaceutical wholesale distribution operations tend to have narrow profit margins so an industry participant's earnings depend significantly on its ability to distribute a large volume and variety of products efficiently and to provide quality support services to external customers.
- Product demand in the industry is sensitive to changes in price (elastic price demand). The lower than average profit margins are indicative of an industry that operates on the basis of high volumes and lower margins.
- Competition is also function of product life cycle. Products in the introduction phase compete mainly on the basis of performance. As products begin to advance in the life cycle, and substitute products come into existence, the basis of competition begins to shift to price, and brand loyalty.

According to Cardinal Health, there are three national wholesale distributors operating within the pharmaceutical supply chain (Cardinal Health, McKesson Corporation and AmerisourceBergen Corporation) as well as a number of smaller regional wholesale distributors, direct selling manufacturers, specialty distributors and third party logistics companies and self-warehousing chains. These participants compete on the basis of a value proposition which includes pricing, breadth of product lines, service offerings and support services. According to the company, a participant's earnings will depend on its ability to: compete effectively on the basis of price; distribute a large volume and variety of products; provide quality support services; maintain low cost sourcing arrangements with generic pharmaceutical manufacturers and effectively manage inventory and other working capital items.

LIFE CYCLE

Life Cycle Stage

The life cycle stage is mature

Life Cycle Reasons

- Increasing market size, due to the aging population.
- Growth in value added ahead of general economic growth.
- New product releases.

Life Cycle Analysis

The Drugs and Druggists' Sundries Wholesalers industry is deemed to be mature, as indicated by the following factors:

- Industry value added. Over the five years to 2008, industry value added is expected to grow at an average annual rate of 3%, in line with that of the general economy.
- Enterprises. The number of enterprises in the industry is expected to fall by 5% overall in the five years to 2008 in line with the consolidation process within the industry.
- Products. Within the pharmaceutical product segment, new drugs are being introduced onto the market, especially those dealing with conditions such as heart disease and depression. However other product segments such as cosmetics and toiletries are more mature with the market nearing saturation despite constant efforts by manufacturers to reintroduce or reinvent products.
- Technology. The main technological developments in this industry over the current period have been electronic ordering systems. Electronic ordering systems allow products to be ordered over the Internet and allow customers to customize their orders more easily.
- Markets. Given the ageing US population, the market size for this industry has been increasing and is forecast to continue expanding at a strong rate over the period to 2013.

Industry Conditions

BARRIERS TO ENTRY

Barriers to entry in this industry are medium
These barriers are steady

- The existence of several established operators with significant market strength is a key barrier;
- The costs involved in establishing a warehouse and distribution network can also act as a barrier to entry;
- Established relationships with both upstream manufacturers and downstream customers can act as a formidable barrier.
- As with most wholesale industries, potential new entrants require capital investment in buildings and other structures as well as IT systems to establish a warehouse and distribution system and to survive alongside large and existing participants that have efficient systems in place.
- The existence of well established vertically integrated operators who also operate at the manufacturing and/or retail level of the supply chain can act as a significant entry barrier. For example Cardinal Health Inc, which is one of the largest US pharmaceutical distributors also operates the Medicine Shoppe International retail pharmacy franchise and it is also involved in the manufacture of medical and surgical products.
- Some firms in the industry, particularly established firms, are in a better position to escalate their advertising outlays when new entrants enter the industry. As a result, advertising while increasing unit costs for established firms can also raise barriers for new entrants.
- In most segments, customers are much more aware of the brand name of key components. To a certain extent, this gives manufacturers greater bargaining power in selling to firms that target more experienced buyers.
- In the majority of instances, wholesale operators in this industry are required to obtain licenses and accreditation from state and federal agencies. For example, licenses are required to operate as a wholesaler in the state of California.

TAXATION

| Goods | Tax Rate | Tax Type |
|-------|----------|----------|
| Sales | 0 - 7% | Excise |

The Drugs and Druggists' Sundries wholesaling industry is subject to sales tax.

- Sales tax varies according to each American state. There is no national sales tax.
- This industry bears various levels of sales tax in different states of America.
- In general, the sales and use tax is applicable to the majority of products purchased within the Drugs and Druggists' Sundries Wholesaling industry.
- Prescription and non prescription drugs are exempt from any taxes around the nation, except in the state of Illinois, which carries a 1% tax.

Given that the sales and use tax vary from state to state, the following is an example of the rate in some states:

Rate variations

- There is no sales tax imposed on goods sold in the states of Alaska, Delaware, Montana, New Hampshire and Oregon.
- Colorado has the lowest state sales tax rate at 2.9%. Whilst Rhode Island carries the highest state sales tax at 7.0%.
- Local jurisdictions in each state impose local sales and use taxes.

- The general range of local rates for certain cities within states range from 0% to 9.5%.
- For example, New York has a state sales tax of 4.0%, however cities in the state of New York may carry a sales tax rate ranging from 4.5% to 8.5%.

INDUSTRY ASSISTANCE

The level of Industry Assistance is low

The trend of Industry Assistance is steady

There are no specific tariffs for this industry

- Tariffs do not apply to this industry. Instead they are accounted for at the manufacturing level.
- However participants do receive some assistance via industry bodies, providing them with industry exposure opportunities, such as trade shows and conferences, and allowing players to develop links with suppliers and customers.

REGULATION AND DEREGULATION

The level of Regulation is medium

The trend of Regulation is steady

Regulations relevant to the wholesaling industry are generally covered by each American state. In California, the state with the largest representation of drug and druggist wholesalers, the following applies to manufacturers and wholesalers (effective January 1, 2006):

Firms operating with California (summary)

(a) A person may not act as a wholesaler of any dangerous drug or dangerous device unless he or she has obtained a license from the board (Board of Pharmacy).

(b) Upon approval by the board and the payment of the required fee, the board shall issue a license to the applicant.

(c) A separate license shall be required for each place of business owned or operated by a wholesaler. Each license shall be renewed annually and shall not be transferable.

(d) The board shall not issue or renew a wholesaler license until the wholesaler identifies a designated representative-in-charge and notifies the board in writing of the identity and license number of that designated representative. The designated representative-in-charge shall be responsible for the wholesaler's compliance with state and federal laws governing wholesalers. A wholesaler shall identify and notify the board of a new designated representative-in-charge within 30 days of the date that the prior designated representative-in-charge ceases to be the designated representative-in-charge. A pharmacist may be identified as the designated representative-in-charge.

(e) A drug manufacturer licensed by the Food and Drug Administration or licensed pursuant to Section 111615 of the Health and Safety Code that only distributes dangerous drugs and dangerous devices of its own manufacture is exempt from this section and Section 4161.

(f) The board may issue a temporary license, upon conditions and for periods of time as the board determines to be in the public interest. A temporary license fee shall be fixed by the board at an amount not to exceed the annual fee for renewal of a license to conduct business as a wholesaler.

Firms operating outside of California (summary)

(a) A person located outside this state that ships, mails, or delivers dangerous drugs or dangerous devices into this state shall be considered a nonresident wholesaler.

(b) A nonresident wholesaler shall be licensed by the board prior to shipping, mailing, or delivering dangerous drugs or dangerous devices to a site located in this state.

(c) A separate license shall be required for each place of business owned or operated by a nonresident wholesaler from or through which dangerous drugs or dangerous devices are shipped, mailed, or delivered to a site located in this state.

(d) A nonresident wholesaler shall maintain records of dangerous drugs and dangerous devices sold, traded, or transferred to persons in this state, so that the records are in a readily retrievable form.

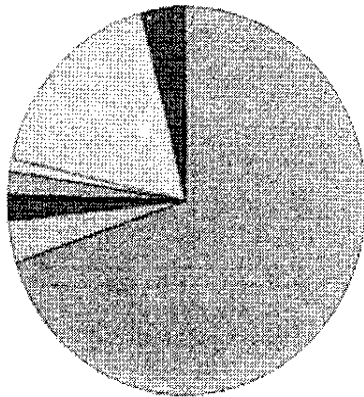
(e) A nonresident wholesaler shall at all times maintain a valid, unexpired license, permit, or registration to conduct the business of the wholesaler in compliance with the laws of the state in which it is a resident. An application for a nonresident wholesaler license in this state shall include a license verification from the licensing authority in the applicant's state of residence.

(f) The board may not issue or renew a nonresident wholesaler license until the nonresident wholesaler identifies a designated representative-in-charge and notifies the board in writing of the identity and license number of the designated representative-in-charge.

(g) The designated representative-in-charge shall be responsible for the nonresident wholesaler's compliance with state and federal laws governing wholesalers. A nonresident wholesaler shall identify and notify the board of a new designated representative-in-charge within 30 days of the date that the prior designated representative-in-charge ceases to be the designated representative-in-charge.

COST STRUCTURE

Year: 2008



| Item | Cost % |
|--------------|--------|
| Purchases | 70.0%* |
| Wages | 3.5%* |
| Advertising | 2.0%* |
| Rent | 2.0%* |
| Depreciation | 1.0%* |
| Other | 17.5%* |
| Profit | 4.0%* |

Cost of materials

- IBISWorld estimates that as is typical of the wholesaling industry, purchases are the largest expense for the Drugs and Druggists Wholesaling Industry. IBISWorld estimates that purchases will account for approximately 70% of industry revenue in 2008.
- Note that purchase costs have increased in recent years in line with new product introductions and the increased consumer use of medications. However this trend has been partially offset by the increased demand for generic products that are relatively cheap compared with brand name pharmaceuticals.
- The larger vertically and horizontally integrated businesses enjoy lower purchasing costs and are better able to move their stock of inventory from areas of weak market and product demand to areas with higher market and product demand.
- Generally, suppliers operate in a more concentrated industry environment which infers that they have greater bargaining power, and are able to achieve cooperative price that puts firms in this industry (because they are less concentrated and more fragmented) at a competitive disadvantage.

Inventory

- Working capital requirements are significant in the Drug and Druggists Wholesaling Industry. Working capital is debtors plus inventory less creditors. Working capital represents money that is tied up in inventory or that customers still owe to the company.
- IBISWorld estimates that inventory (30%) and accounts receivable (35%) account for 65% of total assets. Industry data provided by the Risk Management Association of America indicate that, on average, firms turnover stock every 1.5 months.
- Firms can lower their cost structure as a result of the superior scale of firms (greater spread of fixed costs), from having lower factor costs (for example, the integration of manufacturers and distributors), and from superior product capabilities (product scope).

Labor costs

- The relatively high level of wage expenses reflects the labor intensive nature of the industry. Although skilled sales representatives are required to sell industry products, an increase in the cost of labor will not significantly affect the industry's bottom line.

- Note that wage and salary costs fluctuate with sales revenue and employment levels. The majority of wage and salary costs are incurred in the sales and sales support areas. More than 50% of employees are engaged in sales support. In comparison roughly 30% of employees are sales people.
- Some factors of production, such as managerial expertise and skilled labor are relatively expensive in this industry, but because of the possibility of increased efficiency with such inputs, they can lead to a decrease in the average cost of production and selling.

Other

- Other expenses include general office expenses as well as advertising and promotional costs.
- Advertising expense amounts to 1% of net sales revenue. Most participants incur minimal marketing expenses, instead relying heavily on existing arrangements with suppliers and customers to sell and distribute products. Advertising expenses are higher at the retail level.

Depreciation

- Given the small amounts of capital expenditure, depreciation expense for the industry accounts for a small proportion of revenue. Cash generated from operations and selected borrowings provide the major sources of funds for the growth of the industry.

Profitability

- According to Cardinal Health, a participant's earnings will depend on its ability to: compete effectively on the basis of price; distribute a large volume and variety of products; provide quality support services; maintain low cost sourcing arrangements with generic pharmaceutical manufacturers and effectively manage inventory and other working capital items. It also makes the point that the five primary factors influencing the gross margin for pharmaceutical products are customer discounts, manufacturer cash discounts, distribution service agreement, fees, pharmaceutical price appreciation and manufacturer rebates and incentives.
- In 2006 pre-tax profit margins for the larger players operating within the pharmaceutical product segment were a meager 1.2% for AmerisourceBergen and 1.5% for both Cardinal Health and McKesson.

CAPITAL AND LABOR INTENSITY

The level of Capital Intensity is medium

- The level of capital intensity for the Drugs and Druggists' Sundries Wholesaling industry is medium.
- This reflects the increasing reliance on automated systems including pick-pack-dispatch systems which enable the provision of daily delivery services.
- The capital intensity of the Drugs and Druggists Sundries Wholesale Industry is determined by the ratio of labor costs (wages) to capital (depreciation). IBISWorld estimates that labor expenses are approximately 3.5% of industry revenue while capital expenditures are 1%. This gives a labor to capital ration of 3.5:1, meaning that for every dollar invested in capital, \$3.50 is spent on labor. IBISWorld classifies this as a medium level of capital intensity.
- Wholesalers are increasingly dependent on the provision of superior service as a means of distinguishing themselves from manufacturers or large retail giants such as the supermarkets. Such developments are likely to continue to reduce the level of labor intensity in the industry over the outlook period.

Capital

- An analysis of industry participants indicates that, as a percentage of net revenue, major players within the industry spend approximately 1% to 2% on property, plant and equipment each financial year.
- In terms of capital expenditure firms across the industry maintain their financial condition and their ability to generate adequate amounts of cash while continuing to make significant investments in inventory, warehouse facilities, delivery equipment and computers to better meet the needs of their customers.
- Capital expenditure includes expenditure on warehousing and logistics, and computerized inventory systems. Often service and product quality sets firms apart, neither of which have a high capital component. Businesses capital expansion aims are related to economies of scale: lower cost of products from volume purchasing, new product lines, and financial, administrative and technical support.
- On an industry wide basis IBISWorld estimates that net fixed assets account for roughly 10% of net assets. With the upgrading of fixed assets in the past five years, the value of fixed assets (and therefore capital expenditures) has increased from 9% of total assets to 10% (not an overly significant increase).

Labor

- Around half of the staff in the industry are engaged in various sales support functions (office, clerical, warehousing and customer service). Sales staff account for a further 30% of employment and have relatively higher wage levels. The industry is reliant on a large number of people with skills in marketing, selling, packaging, as well as those people involved in the actual distribution of the products.

TECHNOLOGY AND SYSTEMS

The level of Technology Change is medium

- The businesses in this industry continue to evolve, and the most successful firms have added a broader range of services to manufacturers and end-users. This evolution has resulted from changing trends in the wholesale sector as well as among end-users.
- Within the wholesaling industry, the major types of capital improvement have also converged upon the introduction and/or upgrading of communications technology. Some of this technology includes: online services which allow customers to search inventory lists, check pricing, and place and print-out orders, and be billed using their email.
- Developments in information technology systems have offered the possibility for firms to revolutionize procurement by changing ordering procedures and facilitating better supply chain management practice (to both suppliers and customer markets).
- IBISWorld believes that the main technological developments have been electronic ordering systems. Electronic ordering systems allow ophthalmic products to be ordered over the Internet and allow customers to customize their ordering.
- The Internet has a significant impact on the cost efficiency of the wholesale distribution process, by providing an alternative method for wholesalers to provide services to customers. However this technology can also be used by manufacturers to bypass the wholesale function.
- It is important for players to keep up to date with any changes in products sold by this industry. Although the level of technological change in products offered by this industry is medium to low wholesalers must be made aware of any new launches or product developments in order to provide current customers with state of the art products and win new business.
- The growing acceptance and use of the Internet, as well as other electronic commerce systems, in recent years has, and will continue to have, far-reaching implications for the Drugs and Druggists' Sundries wholesaling industry. In fact, it is expected that information technology will continue to redefine the relationship between distributor, retailer

and customer in the immediate future. Many of the major players in this industry have employed electronic ordering systems for Internet use.

- Electronic ordering systems such as Supply Management On-Line, allow drugs and druggists' sundries products to be ordered over the Internet. Programs such as Optipak, are developed for wholesalers to allow customers to customize their ordering of supplies.
- By ordering over the Internet orders can be stored automatically in the company computer system reducing manual entering errors, speeding the ordering process and providing a more efficient system.
- Other effects of the Internet on industry performance include the sale of pharmacy items such as OTC drugs and prescription medications via the Internet. This phenomenon is already widespread in the USA and is expected to continue over the coming years.
- There have also been significant technological developments in the wholesaling industry in general, including the computerized automation of inventory control, which are of relevance to this industry. These allow inventory to be stored on a national or international basis, requiring fewer regional distribution centers and allowing more efficient distribution.

INDUSTRY VOLATILITY

The level of volatility is low

- This low level of volatility tends to reflect the essential nature of many of the products carried by the industry.
- Public health, and therefore industry demand, is not sensitive to short term changes in the economic environment.
- However, some items of a discretionary nature, such as fragrances and cosmetics, will be affected by changes in economic activity.

GLOBALIZATION

The level of Globalization is medium

The trend of Globalization is increasing

- The US Drugs and Druggists' Sundries Wholesalers Industry is deemed to have a medium level of globalization in line with the increasingly global nature of the overall pharmaceutical industry.
- At the manufacturing level, the international pharmaceutical product manufacturing industry is one of the world's largest manufacturing industries and is characterized by a broad geographical distribution of final production and marketing operations, high levels of foreign penetration in national markets and extensive intra-firm trade. A number of factors help to explain the highly globalized nature of the industry including minimal technical barriers in final drug formulation; the need to meet variations in the evaluation process and government regulations for admission of drugs onto the local market; and the highly segmented nature of individual markets as a result of national health and price regulations.
- In recent years, the trend towards globalization has become more pronounced throughout the entire pharmaceutical supply chain, including at the distribution level.
- Within the US Drugs and Druggists' Sundries Wholesalers Industry, a number of participants (including the likes of Cardinal Health and McKesson Corporation) have operations overseas and it is expected that participants in this industry will continue to expand their global operations in the future.
- Aiding this development will be the growth of online/Internet sales as consumers throughout the world seek out better value purchases. The move by upstream manufacturers to outsource their manufacturing operations to contract manufacturing organizations (CMOs) located in lower cost Asian countries (including India and China) will also aid this development as a greater degree of domestic demand is then met by imported product.

Key Factors

KEY SENSITIVITIES

The key sensitivities affecting the performance of the Prescription Drug Wholesaling industry include:

Average Age of Population

Description: The age distribution of the population.

Due to improved medical treatment, Americans are living longer on average. The aging population increases the demand for products from this industry such as prescription and non-prescription medications.

Health - Number of Hospital Visits

The number of visits to doctors affects the number of prescriptions written and therefore increases the demand for products supplied by this industry.

Per Capita Disposable Income

Description: The level of and/or movements in real per capita disposable income.

The higher the level of disposable income, the greater the capacity to pay for higher price medical treatment and non-essential items such as fragrances and cosmetics.

Private Health Insurance Membership

Description: The number of Americans covered by private health insurance.

Increases in private health insurance memberships allows for more access to medical care and therefore increases the number of doctor visits and number of prescriptions. As a result, demand for drugs and druggists sundries supplies tends to increase.

KEY SUCCESS FACTORS

The key success factors in the Prescription Drug Wholesaling industry are:

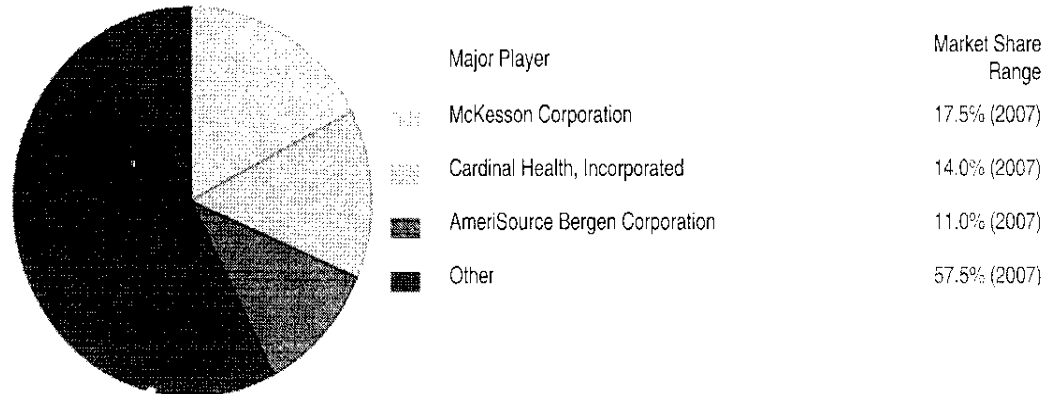
- **Guaranteed supply of key inputs**
Access to, or contracts with, reliable manufacturers or importers.
- **Having an extensive distribution/collection network**
Efficient warehouse & distribution systems.
- **Having contacts within key markets**
Established links with a number of customers. It is preferable that wholesalers deal with a variety of customers and do not have one or two which account for the majority of their business.
- **Provision of superior after sales service**
Exceptional customer service to retain key clientele.

- Having a good technical knowledge of the product
Staff-knowledgeable staff are required to liaise with clients and provide sound product advice.
- Ability to control stock on hand
Stock control - computerized stock controls allow for up-to-date monitoring and analysis of inventory. They can be of use to service clients by advising them of stock levels and expected delivery schedules.
- Production of goods currently favored by the market
Value for money - the products stocked should be perceived as offering value for money (unless the operator has an exclusive up market positioning).

Key Competitors

MAJOR PLAYERS

Market Share



PLAYER PERFORMANCE

McKesson Corporation

Market Share: 17.5%

Background

The largest pharmaceuticals distributor within the US, McKesson Corporation is involved in the distribution of pharmaceuticals, beauty and health care products and medical supplies to retail and institutional pharmacies and to alternate health care sites (including doctors' offices, surgery centers and long term care facilities) within the US and Canada. During 2007 it operated three segments; Pharmaceutical Solutions (95% of revenues for the year ended March 2007); Medical-Surgical Solutions (3%) and Provider Technologies (2%) although this has since been consolidated into just two segments: McKesson Distribution Solutions (which combines Pharmaceutical Solutions and Medical-Surgical Solutions) and McKesson Technology Solutions (its previous Provider Technologies segment). In the year ended March 2007 McKesson generated revenues of \$92.98 billion, up from \$36.7 billion in the year ended March 2000. Of this, its US operations accounted for 93%. Employee numbers as at March 2007 stood at 31,800 up from 21,000 in 2000.

Of interest to this report is its Distribution Solutions segment which is involved in the distribution of ethical and proprietary drugs, medical-surgical supplies and equipment and health and beauty care products throughout North America. The segment is also involved in the provision of specialty pharmaceuticals solutions for biotech and pharmaceutical manufacturers, the sale of pharmacy software and the provision of consulting, outsourcing and other services. It also includes a 49% interest in Nadro, S.A. de CV, the leading pharmaceutical distributor in Mexico and a 39% interest in Parata Systems, LLC which sells automated pharmaceutical dispensing systems to retail pharmacies. Businesses within this segment include McKesson U.S. Pharmaceutical, McKesson Canada, McKesson Health Solutions, McKesson Pharmacy Systems, McKesson Medication Management and McKesson Specialty Distribution

Included within this segment is McKesson's US Pharmaceutical Distribution operations which supplies pharmaceuticals and other healthcare related products to more than 40,000 customers in three primary customer segments: national and regional retail chains (including drug/food combinations, mail order pharmacies and mass merchandisers), institutional healthcare providers (including hospitals, health systems, clinics and other acute-care facilities and long term care

providers), and retail independent pharmacies. This operation serves over 30,000 locations through a network of 30 distribution centers, as well as a master distribution center, a strategic redistribution center and a repackaging facility, serving in all states of the US.

Also of interest is its Medical-Surgical Solutions segment which provides medical-surgical supply distribution, equipment, logistics and other services to healthcare providers including physicians' offices, surgery centers, extended care facilities etc as well as alternate-site healthcare facilities through a network of 29 distribution centers within the US

In the year ended March 2007 its Pharmaceutical Solutions segment had generated revenues of \$88.7 billion, compared with \$83.4 billion in 2006 and \$75.9 billion in 2005. In comparison its Medical-Solutions segment had generated revenues of \$2.4 billion, \$2.0 billion and \$1.8 billion respectively for the years in question. Of note is the fact that a significant portion of its revenue growth has been with a limited number of large customers; in 2007 sales to its ten largest customers (including pharmacy benefits manager Caremark RX, Inc and Walmart) accounted for just over half of its total consolidated revenues.

Financial Performance

Financial summary for McKesson Corporation for the year ended March

| | Million Dollars Revenue | Percent Growth Revenue | Million Dollars Net Income | Percentage Income | Units Employment |
|------|----------------------------|---------------------------|-------------------------------|----------------------|---------------------|
| 2000 | 36734.2 | N/C | 723.7 | N/C | 21000 |
| 2001 | 42010.0 | 14.4% | -48.3 | N/C | 23000 |
| 2002 | 50006.0 | 19.0% | 418.6 | N/C | 24000 |
| 2003 | 57120.0 | 14.2% | 555.4 | 32.7% | 24500 |
| 2004 | 69506.1 | 21.7% | 646.5 | 16.4% | 24600 |
| 2005 | 80514.6 | 15.8% | -156.7 | N/C | 25200 |
| 2006 | 88050.0 | 9.4% | 751.0 | N/C | 26400 |
| 2007 | 92997.0 | 5.6% | 913.0 | | 31800 |

Source: Annual Report

2007

In the year ended March 2007, revenues amounted to \$93.0 billion, up 7% on the previous year. This growth was predominantly derived from its Pharmaceutical Solutions segment (which accounted for 95% of consolidated revenues) which benefited from market growth rates (which in turn reflect growing drug utilization and price increases) as well as the earlier acquisition of D&K Healthcare Resources Inc in the second quarter of 2006. Within its US pharmaceutical distribution operations, direct distribution and service revenues were higher relative to the previous year despite the loss of a large customer as were sales to customer warehouses primarily as a result of new and expanded agreements with customers. In 2007 sales to customers warehouses accounted for 35% of sales compared with 29% for direct sales to institutions, 23% for direct sales to retail chains and 13% for direct sales to independents.

2006

For the year ended March 30, 2006, McKesson achieved 9.4% revenue growth, to \$88.05 billion. The Pharmaceuticals Solutions segment accounted for 95% of this revenue. Growth was attributable to existing customer sales growth and the acquisition of D&K Healthcare Resources, Inc. Net income increase from a loss the previous year, to \$751 million. Chain

stores accounted for 22% of sales, up from 20% to the previous year. Institutions accounted for 32% of sales, declining by 2% as a share of total sales. The remaining 12% of sales were to independent retailers. The Department of Veterans Affairs was signed on as a key new client. Overall, strong performance was due to increasing drug utilization and price gains, partly offset by increased demand for low-priced generic drugs.

2005

For the 12 months ended March 2005, McKesson Corporation reported sales revenue of \$80.51 billion, this was an increase of 15.8% from the previous corresponding period. Driving sales revenue during the year was a 9% increase in revenues from the Pharmaceutical Solutions business as well as a 7.8% increase in sales revenue from the Medical-Surgical Solutions business. US Healthcare pharmaceutical direct distribution and services revenues increased during the period due to new pharmaceutical distribution agreements, the acquisition of D&K Healthcare Resources, expanded agreements with existing customers and continued, although slowed market growth among existing customers. There was a net loss of \$156.7 million due to Securities Litigation charges and competitive price pressures.

2004

Revenues increased 21.6% to \$69.5 billion in 2004 and 14.2% to \$57.1 billion in 2003 primarily reflecting revenue growth in the Pharmaceutical Solutions segment which is attributable to market growth rates as well as new customers and/or expanded business with existing customers. From 2000 to 2004 McKesson's revenues grew on average by 13.6% per year. The growth in the pharmaceuticals segment has impacted on gross profits with this business having a lesser margin than other operations due in part to competitive pricing pressures in the market. Net income increased 16.4% to \$646.5 million in 2004 and 32.7% to \$555.4 million in 2003.

In April 2004 McKesson Corporation acquired all of the issued and outstanding shares of Moore Medical Corp (MMC) for \$12 per share in cash or approximately \$40 million in aggregate. MMC is an Internet-enabled, multi-channel marketer and distributor of medical-surgical and pharmaceutical products to non-hospital provider settings. In addition, in the second quarter of 2003, McKesson acquired the outstanding stock of A.L.I. for an aggregate cash purchase price of \$347.0 million. A.L.I. provides digital medical imaging solutions which are designed to streamline access to diagnostic information, automate clinical workflow and eliminate the need for film purchase and storage.

Cardinal Health, Incorporated

Market Share: 14.0%

Background

The second largest player within the industry, Cardinal Health is a leading distributor of pharmaceuticals, surgical and hospital supplies. Indeed the company claims to distribute approximately one third of all pharmaceutical products distributed within the US. The company's customers include hospitals, clinics, other medical offices and retailers. According to the company, its depth and breadth of products is unique within the industry and as such provides it with a competitive advantage. As at June 2007, the company had 28,800 employees within the US with a further 14,700 employed outside of the US.

Cardinal Health operates four business segments: Healthcare Supply Chain Services - Pharmaceutical; Healthcare Supply Chain Services - Medical; Clinical Technologies and Services and Medical Products Manufacturing. These four segments then align with two major sectors; Healthcare Supply Chain Services which is focused on the company's foundational logistics and distribution capabilities and Clinical and Medical Products. In 2005 Cardinal had reorganized its business which saw it combine its three distribution lines (pharmaceutical, medical products and nuclear pharmacy services) into one division in order to streamline its logistical operations.

Of interest to this report is the first sector and in particular its Healthcare Supply Chain Services - Pharmaceuticals segment under which it distributes a broad line of branded and generic pharmaceutical products, OTC healthcare products and consumer products. Operating as a full service wholesale distributor, the segment also provides a number of customer support services including online procurement, fulfillment and information via cardinal.com, computerized order entry and order confirmation systems, generic sourcing programs, product movement, inventory and management reports and consultation on store operations and merchandising. In addition, the segment operates a pharmaceutical repackaging and distribution for chain and independent drug store customers. Customers serviced include chain and independent drug stores, pharmacy departments of supermarkets and mass merchandisers, hospitals and alternate care providers including mail order pharmacies. Key customers include the likes of CVS Corporation and Walgreen Co with these two customers accounting for roughly 21% of fiscal 2007 revenues. In the same year its top five customers accounted for half of all revenues. In comparison its top five suppliers accounted for approximately 20% of company revenues. Support services are also provided to branded pharmaceutical manufacturers and can include inventory management services, data/reporting services, new product launch support and contract and chargeback administration services.

Of note is the fact that the segment differentiates between bulk and non bulk customers with the former including customers' centralized warehouse operations and customers' mail order businesses while non bulk customers include retail stores, pharmacies, hospitals and alternate care sites. Bulk customers are thought to generate significantly lower segment profits as a percentage of revenue although non bulk customers require more complex servicing.

During fiscal 2005 and fiscal 2006 Cardinal implemented a new fee-for-service arrangement system which relies on written distribution service agreements. Relative to previous business models, the new system is less dependent on manufacturers pricing practices and is more reflective of the level of service provided.

Cardinal Health operates manufacturing and distribution facilities in 45 US states and Puerto Rico; it also has manufacturing facilities outside the United States. These include manufacturing businesses in Argentina, Australia, Brazil, Canada, the Dominican Republic, France, Germany, Italy, Japan, Malaysia, Malta, Mexico, the Netherlands, Thailand, and the UK. With regards to its Healthcare Supply Chain Services - Pharmaceutical segment it has 25 pharmaceutical distribution facilities and three specialty distribution facilities within the US as well as 172 nuclear pharmacy laboratory, manufacturing and distribution facilities.

Acquisitions

Much of the growth enjoyed by Cardinal Health over the past two decades can be attributed to its acquisitive path; since 1980 it has made more than 50 acquisitions. Purchases made in the 1990s include Ohio Valley-Clarksburg (1990, the Mid-Atlantic), Chapman Drug Co. (1991, Tennessee), PRN Services (1993, Michigan), Solomons Co. (1993, Georgia), Humiston-Keeling (1994, Illinois), and Behrens (1994, Texas). In 1994 it acquired the number six drug wholesaler Whitmire distribution which served to propel Cardinal into the number three slot. In the following year it made its biggest purchase yet (\$348 million in stock), that of Medicine Shoppe International, the countries largest franchisor of independent retail pharmacies. Attempts to acquire rival Bergen Brunswig in 1998 were blocked by the Federal Trade Commission

Since 2003 it has made a number of further acquisitions including The Intercare Group, Plc (the UK) for \$570 million in 2003, ALARIS Medical Systems, Inc for \$2,080 million, Medicap and Snowden Pencer Holdings, Inc in 2004, Geodax Technology, Inc in fiscal 5005 and ParMed Pharmaceutical, Inc and Denver Biomedical, Inc in fiscal 2006. Fiscal 2007 saw the purchase of medical equipment manufacturer Viasys Healthcare Inc, data miner MedMined, Care Fusion and SpecialtyScripts LLC.

At the same time it has made a number of divestments including the international and non core domestic businesses of Syncor International Corporation and a significant portion of its specialty distribution business (which had been involved in the trading of excess inventories on the secondary drug market). In fiscal 2007 it sold its Pharmaceutical Technologies and Services business to the Blackstone Group for \$3.3 billion as well as its healthcare marketing services business and its UK based intercare pharmaceutical distribution business.

Financial Performance

Cardinal Health, financial summary

| Year ended June | Million Dollars Revenue | Percent Growth Revenue | Million Dollars Net Income | Percent Growth Net Income | Units Employment |
|-----------------|-------------------------|------------------------|----------------------------|---------------------------|------------------|
| 2000 | 29870.6 | N/C | 679.7 | N/C | 42200 |
| 2001 | 47947.6 | 60.5% | 857.4 | 26.1% | 48900 |
| 2002 | 51135.7 | 6.6% | 1056.2 | 23.2% | 50000 |
| 2003 | 56737.0 | 11.0% | 1405.8 | 33.1% | 50000 |
| 2004 | 65053.5 | 14.7% | 1474.5 | 4.9% | 55000 |
| 2005 | 74910.7 | 15.2% | 1050.7 | -28.7% | 55000 |
| 2006 | 81363.6 | 8.6% | 1000.1 | -4.8% | 55000 |
| 2007 | 86852.0 | 6.7% | 1931.1 | 93.1% | N/A |

Source: IBISWorld Enterprise Data Base

2007

In the year ended June 2007, the company generated revenues of \$86.9 billion, up 9% on fiscal 2006 results with growth coming from all four reportable segments. However operating earnings were 26% lower relative to the previous year in the face of special items (\$772 million) relating to litigation settlement reserves and in-process R&D expenses. Revenues earned from its Healthcare Supply Chain Services - Pharmaceutical segment totaled \$76,573 million, up 9% on the previous year with much of the growth (\$4 billion) coming from its bulk customers with a number of existing customers electing to purchase a greater volume of product from the company as opposed to the manufacturer. Pharmaceutical price appreciation (6.3%) also attributed to the increase as did acquisitions undertaken during the year. During the year, this particular segment accounted for 86% of total segment revenue. Segment profits were 14% higher at \$1,300 million, reflecting revenue growth, increased generic pharmaceutical margin, increased distribution service agreement fees and pharmaceutical price appreciation which was then partially offset by increased customer discounts and increased SG&A expenses.

2006

In the financial year ending June 2006, Cardinal Health posted revenue of \$81,363.6 million, an 8.6% increase from the previous year. However, net income fell 4.8%, to \$1,000.1 million. The distribution segment led growth and accounted for 81% of total revenue. The fall in net income was attributable to falling sales margins resulting from intense competitive pressure. This was partly offset by improved earnings from sales of generic pharmaceuticals. During the year, transition to a fee-for-service business model for general pharmaceuticals was completed. Under the new model, Cardinal Health is compensated for the provision of data relating to sales and distribution trends to manufactures that assist them with market and demand forecasting. In addition, the company receives fee-based compensation for distributing services, and is therefore less dependent on manufacturer's pricing practices.

2005

For the year ending June 2005, Cardinal Health achieved revenue growth of 15.2% with revenues amounting to \$74,910.7 million. Driving revenue growth between the two periods was a 9% increase in sales in the Pharmaceutical Distribution and Provider Services business and a 7% increase in revenue from the Medical Products and Services business. The Pharmaceutical Distribution and Provider Services segment's revenue growth resulted from stronger sales to retail chain customers. Operating earnings the period were adversely impacted by: increased incentive compensation expense; incremental selling, general and administrative expenses associated with the One Cardinal Health initiative designed to streamline the company's operations and develop new capabilities in shared services, which were expected to lower costs across the company in the future; and increased legal expenses.

2004

In the pharmaceutical distribution business, revenue growth of 14.7% in fiscal 2004 was a result of strong sales to existing customers, sales to new customers and price increases across the product group. This segment also benefited from (1) additional contracts, (2) price increases averaging 6%, and (3) an extra business day in the financial year. These revenue gains were offset by continued reduction in business with Kmart Holding Corporation. In addition to the comments above, annualized pharmaceutical price increases of approximately 5% contributed to revenue growth in this segment during calendar 2004. However, the rate of product price increases was lower than the rate experienced over the prior fiscal year.

2003

In 2003, Cardinal Health reported consolidated sales revenue of \$56.737 billion, an increase of 10.9% or \$5.602 billion from the previous corresponding period. Operating in this industry as the pharmaceutical distribution business, revenue growth of 10% in fiscal 2003 was a result of strong sales to customers within the segment's core Pharmaceutical Distribution business, some of which were generated from the addition of new contracts, and pharmaceutical price increases averaging approximately 5%. The most significant growth was in the alternate site and chain pharmacy businesses. The chain pharmacy growth rate would have been stronger had it not experienced a reduction in business with Kmart.

AmeriSource Bergen Corporation

Market Share: 11.0%

Background

The third largest player within the industry, AmerisourceBergen distributes pharmaceuticals and health care products throughout the US and Canada, as well as operates a number of packaging facilities. The company, initially known as Alco Health went public as AmeriSource Health in 1995 and subsequently bought competitor Bergen Bruswig in 2001. The company serves a variety of clients which include hospitals, managed care facilities, drugstores, nursing homes, clinics, supermarkets, and mass merchandisers across the US. In the year ended September 2007 it generated revenues of \$66 billion, up from \$16 billion in 2001. Employee numbers as at year end September 2007 numbered 13,200, compared with 13,700 in 2001.

The Company's operating segments have been aggregated into two reportable segments: Pharmaceutical Distribution (91% of fiscal 2007 sales) and Other (which includes its PharMerica operations). The former segment includes the operations of AmerisourceBergen Drug Corporation (ABDC), AmerisourceBergen Specialty Group (ABSG) and the AmerisourceBergen Packaging Group (ABPG).

- The first of these (ABDC) includes the company's full service wholesale pharmaceutical distribution facilities and other healthcare related businesses in both the US and in Canada. According to the company, ABDC "distributes a comprehensive offering of brand name and generic pharmaceuticals, over-the-counter healthcare products, home

healthcare supplies and equipment, and related services to a wide variety of healthcare providers, including acute care hospitals and health systems, independent and chain retail pharmacies, mail order pharmacies, medical clinics, alternate site facilities and other customers. ABDC also provides pharmacy management, consulting services and scalable automated pharmacy dispensing equipment, medication and supply dispensing cabinets, and supply management software to a variety of retail and institutional healthcare providers".

- ABSG in comparison is involved in the provision of distribution of specialty pharmaceutical products (including vaccines, other injectibles, plasma and other blood products) and other value added services to physicians, clinics, patients and other providers in the oncology, nephrology, plasma and vaccines sectors, as well as an array of services for manufacturers. This business also provides commercialization services, third party logistics, reimbursement consulting services, physician education consulting and other services to biotech and other pharmaceutical manufacturers. In 2007 the specialty pharmaceuticals business generated operating revenues in the order of \$12 billion with the company believing that it commands a significant presence within this rapidly growing part of the pharmaceutical supply chain. It also believes that the business possesses a well developed platform for growth.
- ABPG comprises American Health Packaging (whose operations are closely aligned with those of ABDC), Anderson Packaging (a leading provider of contract packaging services for pharmaceutical manufacturers) and Brecon Pharmaceutical Ltd which operates in the UK.

In the year ended September 2007 its Pharmaceutical Distribution segment generated revenues of \$60,935 million compared with \$55,907 million in 2006 and \$49,319 million in 2005.

In fiscal 2007, the company's largest customer (Medco health Solutions, Inc) accounted for 14% of total company revenues, 8% of operating revenue and 90% of bulk deliveries to customer warehouses, with its second largest customer accounting for a further 8% of operating revenues. Its top ten customers for the year accounted for just over one third of operating revenue.

In recent years AmerisourceBergen has sought to increase its operating efficiencies. To this end it initiated its Optimiz program in fiscal 2001 which has seen it reduce its distribution network within the US from 51 facilities to 26 as of September 2007; 31 facilities were closed during this period with six facilities closed in fiscal 2005 and fiscal 2006 with a further two closed in fiscal 2007 while six new facilities were opened. It also outsourced a considerable portion of its information technology activities. At the same time it implemented new warehouse automation technology as well as adopted "best practices" in its warehousing activities.

Strategy

The company's business strategy solely revolves around the pharmaceutical supply chain and the provision of value added distribution and service solutions to various healthcare providers including pharmacies, health systems and physicians and pharmaceutical manufacturers. It believes that it is well positioned in size and market breadth to continue to grow its distribution business. It also believes that it has one of the lowest cost operating structures in pharmaceutical distribution among its major competitors. Of note is its focus on generic pharmaceuticals in line with their rapid growth within the US market and in recent years it has sought to enhance its position within the generic marketplace. At the same time it has also sought to expand its product/service offering within the general pharmaceutical supply channel. Also of note is its use of acquisitions in order to supplement its organic growth and boost its strategic growth plans.

Acquisitions

In recent years the company has made a number of acquisitions, expanding into areas including inventory management technology, drugstore pharmaceutical supplies, and disease-management services for pharmacies. In 1997 AmeriSource

made its largest purchase of Walker Drug for \$140 million, adding 1,500 drugstores in the Southeast to its customer list. Also, during the year, the company signed a five-year deal to become the exclusive pharmaceutical supplier to Sutter Health, a not-for-profit organization. During 1999 the company acquired pharmaceutical distributor C.D. Smith Healthcare and in 2000 the company initiated an online health products marketplace called NewHealthExchange.com, with McKesson, Cardinal Health, Fisher Scientific and Owens & Minor. In 2002 the company bought a maker of automated pharmacy dispensing equipment, AutoMed Technologies. In fiscal 2006 it acquired three businesses (Trent Drugs Wholesale Ltd, Asenda Pharmaceutical Supplies Ltd and Rep-Pharm Inc) to expand its distribution and service businesses into Canada with these acquisitions making it the second largest pharmaceutical distributor within the Canadian market. It also acquired Access MD Inc to complement the distribution services offered by AmerisourceBergen Canada Corporation. 2006 also saw the purchase of Health Advocates, Inc, a leading provider of Medicare set-aside cost containment services to insurance payors operating within the workers' compensation industry, as well as of ICG of America, inc, a specialty pharmacy and infusion services business specializing in the blood derivative intravenous immunoglobulin in line with its strategy of building its specialty pharmaceutical services to manufacturers.

2007 saw the purchase of Xcenda LLC with the purchase intended to enhance its consulting business within its existing pharmaceutical and specialty services businesses. Its latest acquisition made in October 2007 was that of Bellico Health, a privately held New York distributor of branded and generic pharmaceuticals. Generating revenues of \$2.1 billion in its fiscal year ended June 2007 the business was acquired for \$181 million in cash and will expand AmerisourceBergen's presence in the Metro New York community pharmacy market. The year also saw the sale of its Long Term Care business which had previously been included within the Other business segment. Prior to its sale, Long Term Care had been a leading national dispense of pharmaceutical products and services to patients in long term care and alternate site settings.

Financial Summary

AmerisourceBergen Corporation, financial summary

| Year ending September | Million Dollars Revenue | Percent Growth Revenue | Million Dollars Net Income | Percent Growth Net income | Units Employment |
|-----------------------|-------------------------|------------------------|----------------------------|---------------------------|------------------|
| 2002 | 45234.8 | N/C | 344.9 | N/C | 13700 |
| 2003 | 49657.3 | 9.8% | 441.2 | 27.9% | 14800 |
| 2004 | 53179.0 | 7.1% | 468.4 | 6.2% | 14100 |
| 2005 | 54577.3 | 2.6% | 264.6 | -43.5% | 13400 |
| 2006 | 61203.1 | 12.1% | 467.7 | 76.8% | 14700 |
| 2007 | 66074.3 | 8.0% | 469.2 | 0.3% | N/A |

Source: IBISWorld Enterprise Data Base

2007

In the year ended September 2007, AmerisourceBergen generated revenues of \$66,074 million up 8% on the previous year. This was predominantly attributable to increases in revenues for both its ABDC and ABSG operating segments with the former reporting a 6% increase in operating revenues while ABSG recorded a 23% increase in operating revenues. Overall Pharmaceutical Distribution operating revenues totaled \$60.9 billion, up 9% on the previous year. During the year 62% of segment revenues came from sales to institutional customers following strong growth in its specialty pharmaceutical business compared with 38% for sales to retail customers. Operating income for the segment was 14%

higher at \$733 million reflecting improved operating expense margins. Revenues derived from bulk deliveries totaled \$4.4 billion, down 3% on the previous year.

2006

For the year ended September 2006, the company achieved revenue growth of 12.1%, to \$61,203 million. Net income increased by 51.4% to \$467.7 million. Contributing to a major portion of industry revenue, the Pharmaceutical Distribution business generated \$55,907 million in revenue, 90% of the total, while the PharMerica business accounted for 3%, at \$1,668.3 million. During the year, two new drug distribution centers began operation in Kansas City, MO, and Bethlehem, PA. The establishment of these centers, into which the company began investing in 2001, contributed to the increase in capacity and lower costs. The company also made three acquisition of drug distribution business in Canada, making AmerisourceBergen the second largest player in that country.

2005

For the fiscal year ended September 2005 AmerisourceBergen reported operating revenue of \$54.577 billion, an increase of 2.6% from the previous financial year. While consolidated sales revenue increased by 2.7%, financial reports indicate that sales revenue in the Pharmaceutical Distribution business increased by 2.5% or \$1.206 billion to \$49.319 billion. AmerisourceBergen reported that the Pharmaceutical Distribution business' growth largely reflected US pharmaceutical industry conditions, including increases in prescription drug utilization and higher pharmaceutical prices offset by the increased use of lower priced generics. The revenue in the Pharmaceutical Distribution business has also been affected by industry competition and changes in customer mix.

2004

For the fiscal year ended September 2004 AmerisourceBergen reported operating revenue of \$53.179 billion, an increase of 7.1% from the previous financial year. Operating within this industry the Pharmaceutical Distribution business reported operating revenue of \$48.2 billion for the fiscal year ended September 30, 2004 reflecting an increase of 8% from \$44.7 billion the previous fiscal year. AmerisourceBergen's change in accounting for customer sales returns had the effect of reducing operating revenue growth by 1% for the fiscal year. During the fiscal year, 59% of operating revenue was from sales to institutional customers and 41% was from sales to retail customers; this compares to a customer mix in the prior fiscal year of 57% institutional and 43% retail.

2003

For the 2003 financial year AmerisourceBergen reported sales revenue of \$49.657 billion. Financial reports indicate that in 2003 revenue grew by 9.8% from the previous year, primarily as a result of increased operating revenue in the Pharmaceutical Distribution segment. Growth in this segment alone reached 13% during 2003; of this 56% of operating revenue was from sales to institutional customers and 44% was from retail customers, (in comparison to the customer mix in the prior fiscal year of 53% institutional and 47% retail). Between 2002 and 2003 sales to institutional customers increased as a result of the conversion of bulk delivery and other direct business.

OTHER PLAYERS

Kinray Inc. (Market Share 2007: 0.7-1.0%)

Kinray is the US's largest privately-held distributor of pharmaceutical, generic and health & beauty care products with annual revenues in excess of \$4 billion. Operating as a full line, full service wholesale distributor within a niche market, Kinray distributes drugs, health and beauty products, medical equipment, vitamins and herbals, and diabetes-care products as well as 800 private label pharmacy products under the Preferred Plus Pharmacy brand. In recent years it has tended to focus on higher margin generic drugs and private label home health care products. The company services over 3,000 independent pharmacies in eight states (New York, New Jersey, Connecticut, Pennsylvania, Rhode Island,

Massachusetts & Delaware). Operating out of one 400,000 sq ft facility, employee numbers currently total 1,000, up from 400 in 2000. The company was first founded in 1944.

Claiming to be the fourth largest wholesaler in the country, Kinray generated revenues of \$4,400 million in the year ended December 2006, up from \$1,710 million in 2001. The company claims that it has enjoyed "unparalleled" growth in recent years with a growth rate of 25% per year for the past five years. For 2007 it was listed as number 67 in Forbes Magazine's top privately held companies in America. Its recent financial performance is shown in the table below.

Recent Financial Performance of Kinray for the year ended December

| | Million Dollars Revenue | Percent Growth | Persons Employment | Percent Growth |
|------|----------------------------|----------------|-----------------------|----------------|
| 2000 | 1710 | N/C | 400 | N/C |
| 2001 | 2000 | 17.0% | 600 | 50.0% |
| 2002 | 2500 | 25.0% | 800 | 33.3% |
| 2003 | 2910 | 16.4% | 700 | -12.5% |
| 2004 | 3510 | 20.6% | 1000 | 42.9% |
| 2005 | 4000 | 14.0% | 800 | -20.0% |
| 2006 | 4400 | 10.0% | 1000 | 25.0% |

Source: hoovers.com

Quality King Distributors Inc. (Market Share 2007: 0.7-1.3%)

A privately owned company, Quality King distributes groceries and hair, health, and beauty care products to pharmacy and grocery chains throughout the US. The company's QK Healthcare subsidiary is involved in the distribution of pharmaceuticals. Quality King Distributors' business practice is to buy US name-brand products that have been exported to overseas markets, then re-import them and reintroduce them to the US market below market price. Annual revenues are thought to exceed \$2 billion. As at October 2006, it had 850 employees, down from 1,400 in 2002.

Belco Health Corp. (Market Share 2007: 0.2-0.4%)

Belco Health Corp. distributes drugs primarily to pharmacies and retailers in the US. The company distributes various name-brand and generic pharmaceutical products, as well as over-the-counter drugs and sundries. The company has a medical distribution division which sells professional products to specialty clinics and physicians. Having generated revenues of \$1.5 billion in 2005, it was acquired by AmerisourceBergen in 2007.

Industry Performance

CURRENT PERFORMANCE

Over the five year period to 2008, the US Drugs and Druggists' Sundries Wholesalers Industry enjoyed moderate growth, fueled by rising demand levels. By year end 2008 revenue levels are expected to reach \$605,500 million, up from an estimated \$465,700 million (in constant 2006 prices) in 2003, representing an average increase of 5.4% per annum. Over the same period, growth in industry value added is expected to average 3.4% with value added expected to be worth \$77,250 million by year end 2008. Note however that value added as a proportion of revenues tended to fall over the period in question as a result of declining profit margins arising from increasing competition levels. By year end 2008, employment levels are expected to be in the order of 279,000, compared with an estimated 255,280 in 2003, representing an overall increase of 9%.

Year-on-Year Analysis

In 2003, the industry is estimated to have generated sales of \$466 billion, representing an increase of 8.1% compared to 2002. The year saw private consumption expenditure levels on prescription drugs increase by 11% relative to the previous year although growth in private consumption expenditure on sales of non-prescription drugs was considerably slower at 2%. The year also saw a decline in the amount of federal funding provided to operators in customer industries. During the year Allou Healthcare, Inc. (formerly Allou Health & Beauty Care, Inc) file an involuntary petition for protection under Chapter 11 of the United States Bankruptcy Code.

Real growth rates were then a more moderate 5.8% and 5.9% in 2004 and 2005 respectively as growth rates in private consumption expenditure levels on prescription drugs dropped to 9% and 5% respectively. Note that in 2005 there was a substantial increase in the price of prescription drugs although this was then partially offset by a fall in the price of over-the-counter drugs and other goods sold in the industry as a direct result of the growth of generic products. For example, AmerisourceBergen reported that an increase in prescription drug utilization and higher pharmaceutical prices was offset in part, by the increased use of lower priced generics. Across the industry, these types of competitive issues impacted on industry competition and affected the industry's profitability as changes in customer mix to lower priced generic products impacted the margins generated within the industry.

For 2006, IBISWorld estimated that industry revenue increased by 6.0%. Stronger growth in revenue was aided by a boost in sales volumes arising from the January 2006 launch of the new Medicare Part D outpatient prescription drug plan (part of the Medicare Prescription Drug Improvement and Modernization Act of 2003); indeed according to IMS Health, the program expanded the market by nearly 1% in 2006 with the total number of dispensed prescription volumes increasing by nearly 5%. During the year, the number two player in the industry, Cardinal Health, increased its industry share by switching to a fee-for-service business model for the distribution of generic pharmaceuticals, whereby it generates addition income for data provided to manufacturers on the sales patterns of their products.

In 2007, the Drugs and Druggists' Sundries Wholesaler industry was expected to have generated sales of \$579 billion, an increase of 4.9% from the previous year. Personal consumption expenditure on both prescription and non-prescription drugs was expected to rise, along with the size of the aging population. Once again the performance of the industry was also influenced by volume and drug pricing trends associated with the Medicare Part D programs (with further growth of 1-2% expected in volume). However, industry growth was restrained by relatively slow growth in disposable income (2.0%) and the continued growth in availability and demand for low priced generic drugs.

In 2008 the industry will have to contend with a leveling off of growth arising from the Medicare Part D program which will in turn contribute to a slowdown in growth in retail pharmaceutical dollar sales. Higher generic sales as a number of key products come off patent will also have a bearing on industry performance over the year.

Domestic Demand

The Drugs and Druggist Sundries Wholesalers industry is involved in the distribution of a range of products including medical and pharmaceutical products (including prescription and over the counter drugs), medical and first aid supplies as well as personal care goods.

The demand for such industry products is determined by a number of factors including:

- The age structure of the population - the older the population, all other things equal, the higher the level of demand for pharmaceuticals. As the elderly generally require greater levels of medical attention than younger people, a key driver of prescription drugs is the age of the population, particularly the over 55 age group. According to the US Census, more than 76 million Americans are currently aged 50 and older (while the number of Americans 65 and older is expected to more than double by 2030). Older patients generally have more complicated conditions, more chronic conditions, and more treatment involving multiple medications (prescription drugs).
- General levels of disease rates;
- Utilization/usage rates -
- Government policies on health - these affect factors such as doctors' prescribing habits and the price of pharmaceutical products. Government expenditure on health related areas is also an important variable. Advances in medical technology - this can be a positive or a negative factor affecting demand depending on the development (e.g. a new drug that fights a disease would increase sales, but a new medical procedure which eliminates that disease would cause a drop in demand for pharmaceuticals);
- Economic conditions - the demand for non-essential drugs and for some personal care goods is partly determined by the level of household disposable income.

In recent years there has been a steady rate of growth in the number of pharmaceutical products consumed within the US, reflecting in part the following variables:

- Increasing life expectancies and an aging population which has served to increase the demand for drugs, particularly for degenerative diseases such as cardiovascular, cardiopulmonary, cancers and arthritis;
- The development of new and more sophisticated diagnostic processes and drugs, including the new biotech drugs;
- Increasing standards of health care and changes in practitioner's prescribing habits; In addition a trend toward less restrictive health insurance products may have had the effect of increasing spending on physicians' services. Also, private sector payers continued to adopt disease management programs which tend to support demand for physician services and a range of related products and services (including prescription and non prescription drugs)
- The emergence of new viruses such as HIV and the resurgence of infections and other viruses; and,
- Greater emphasis on prevention and a healthy lifestyle resulting in increasing demand for an expanding range of OTC pharmaceuticals and other health related products.

In view of the above, one good indication of the level of domestic demand within the industry is given by private consumption expenditure levels on both drug preparations and sundries and on toilet articles and preparations. These are shown in the table below. According to data supplied by the Bureau of Economic Analysis, personal consumption expenditures (PCE) devoted to prescription drugs were expected to have increased at an average annual rate of around 15% in the five years to December 2007. In comparison, PCE on non-prescription drugs will increase by 5% per annum.

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As such private consumption expenditure on drug preparations and sundries have had a strong influence on revenue growth over the current performance period.

Personal Consumption Levels, 2002 to 2006

| | Million Dollars | Percent Growth | Million Dollars | Percent Growth |
|------|-----------------|----------------|-----------------|----------------|
| 2002 | 54402 | N/C | 213117 | N/C |
| 2003 | 55972 | 2.9% | 233643 | 9.6% |
| 2004 | 58275 | 4.1% | 251362 | 7.6% |
| 2005 | 61097 | 4.8% | 265213 | 5.5% |
| 2006 | 63804 | 4.4% | 285979 | 7.8% |

Source: Beer Institute

The table below showing pharmaceutical sales via various downstream retail outlets also gives a good indication of changes in domestic demand over the performance period.

Pharmaceutical Sales via all retail channels, 2002 to 2006

| | Billion Dollars | Percent Total | Billion Dollars | Billion Dollars | Percent Total |
|---------------------------|-----------------|---------------|-----------------|-----------------|---------------|
| | 2002 | | 2004 | 2006 | |
| Drug stores (chain) | 75.9 | 41.5% | 90.4 | 102.8 | 41.2% |
| Drug stores (independent) | 35.4 | 19.4% | 40.4 | 43.5 | 17.4% |
| Mass merchandisers | 18.1 | 9.9% | 21.5 | 24.3 | 9.7% |
| Supermarkets | 23.1 | 12.6% | 26.9 | 28.8 | 11.5% |
| Mail Order | 30.2 | 16.5% | 40.8 | 50.4 | 20.2% |
| TOTAL | 182.7 | | 220 | 249.8 | |

Source: National Association of Chain Drug Stores

Pharmaceutical Expenditure

Recent years have seen a continued rise in the total national health expenditure bill for the US. In the late 1990s and at the start of this decade, pharmaceutical expenditure also tended to rise, the result in part of the following variables:

- Increased usage of pharmaceuticals in line with changing doctor's prescribing patterns and increased consumer acceptance;
- Changes in the mix of pharmaceuticals and medicinal products used, aided in part by a steady increase of new, innovative products and product formulations;
- Price increases.

As an example of these rising pharmaceutical costs, pharmaceutical expenditure as a proportion of total health expenditure for the US increased from 8.5% in 1994 to 12.3% in 2004.

However in more recent years growth rates in pharmaceutical expenditure have been more restrained as managed care organizations along with various government agencies have sought to curb their escalating health care expenditure levels. Of particular importance has been the cost-containment strategies employed by MCOs or managed care organizations (including health maintenance organizations, medical insurance programs, hospital/physician alliances, preferred provider organizations etc), many of which have merged into even larger entities. With a significant proportion of the US population

participating in some form of managed care program, the downward pricing pressures exerted by MCOs (who have significant purchasing power) has had a substantial impact on the revenues earned by various industry participants. A number of the cost containment strategies employed by MCOs have focused on the use of co-payments and generic substitution (i.e. a brand-name drug is replaced with a cheaper generic copy).

In 2005 prescription drug costs increased by 5.8%, down from a growth rate of 8.6% in the previous year. A significant deceleration in Medicaid drug spending and a lower number of new product introductions combined with an increasing reliance on tiered co-payment benefit plans and usage of generic drugs helps explain this apparent slowdown. In 2005 prescription medicines accounted for 10% of the total US health care bill. In 2006 however prescription drug sales increased by 8% according to IMS Health data, boosted by the Medicare Part D prescription benefit along with the increased utilization of generics within new therapy classes and the launch of new targeted drugs. It is interesting to note that in 2006 the average brand name prescription price was \$111.02 (up 9% on the previous year) while the average generic price was \$32.23 (up 8%) giving an average prescription price of \$68.26 compared with \$64.86 in 2005. However of this cost wholesalers received just \$2.04 or 3%.

Regulatory Backdrop

Of initial concern to the industry given its pricing pressure ramifications was the Medicare Prescription Drug Improvement and Modernization Act of 2003 which was enacted in December 2003. The Act provided for a voluntary discount card for Medicare beneficiaries from June 2004 onwards and added prescription drug coverage to Medicare from 2006 onwards. While these developments may result in increased usage of pharmaceuticals, there may also be increased pricing pressures for lower prices in view of the stronger purchasing power of private sector providers. As at year end 2004, Medicare discount cards accounted for just over 1% of retail prescriptions filled. Discounts were thought to have been in the order of 20% for branded drugs and 33% for generic drugs. By year end 2006 prescriptions dispensed through the Medicare Part D program accounted for 17% of retail prescriptions. By year end 2007 this proportion was higher again at 20%.

Also of note is the Deficit Reduction Act of 2005 which included provisions changing the prescription drug reimbursement formula for generic pharmaceuticals under Medicaid to one based on the lowest average manufacturers' price in an attempt to reduce the costs of the Medicaid program. With the final rules released by the Centers for Medicare and Medicaid Services in July 2007, major changes to the reimbursement formula are expected to become effective in the second and third quarters of fiscal 2008.

Regulations have also been introduced in a number of states seeking to monitor the pharmaceutical distribution system in view of safety concerns with regards to counterfeit, adulterated or mislabeled pharmaceuticals. For example regulations requiring pedigree tracking and/or chain of custody tracking in certain circumstances became effective on December 1, 2006 under the federal Prescription Drug Marketing Act, although these regulations have already been challenged in a case brought by secondary distributors. However such regulations should they be enforced will add to the regulatory burden and costs associated with the distribution of pharmaceuticals.

Product Mix

The product portfolio of a number of industry participants underwent some fundamental changes over the performance period in line with the changing industry backdrop. The continued introduction of new (and more expensive) drugs initiated a number of changes, as did the continued rise in the use of generic products. Recent years have also seen industry participants expand their product portfolio to include both the newly emerging range of biotech drugs in line with

technological advancements as well as a growing range of complimentary or alternative medicines in view of the growing focus by an increasing number of US consumers on a more holistic approach to their general health and well being.

Moves by manufacturers to either bypass the traditional wholesaler or to seek greater control over the amount of product available in the supply chain also prompted changes in both the product mix and in the business model pursued; prior to this a number of industry participants had engaged in secondary trading although in several situations accusations of wrongdoing had arisen forcing many to moderate/cease this particular practice.

Generics

The performance period saw further growth in the relative importance of generic products as key innovator products began to lose patent protection. According to data produced by PhRMA, generic products accounted for 47% of the pharmaceutical market in 2000, up from 44% in 1997, 33% in 1990 and up from just 17% in 1984. Generic drugs are now thought to command roughly 58% of the market (by volume) though note that recent IMS Health data puts the proportion at a relatively lower 34% by drug volume and 7% by dollar sales. One of the main factors contributing to this increased importance of generics revolves around practices by MCOs which favor generic substitution. What is more interesting is the fact that according to IMS data, generic sales (in dollar) terms rose by 27% and by a further 25% alone in 2002 and 2003, twice the rate of branded sales, though they too also experienced relatively slower growth rates during 2004 (an estimated 10%). According to IMSHealth prescription volumes of unbranded generics increased by 13% in 2006 while sales of unbranded generics grew by 22%. According to Cardinal Health, branded pharmaceuticals with industry wide sales volumes of \$22 billion came off patent protection in fiscal 2007 with a similar level expected to come off patent protection during fiscal 2008.

Such developments have a significant impact upon the operations of industry participants since generic pharmaceuticals are offered at considerably lower prices than branded pharmaceuticals.

HISTORICAL PERFORMANCE

On a historical basis, the main factors influencing Drugs and Druggists' Sundries Wholesalers industry performance have been the health and age of the population; advances in pharmaceutical preparations; new cosmetic and toiletry product developments; and changes in economic conditions.

The demand for more sophisticated health-care items attributed to most of industry growth during the period. Advances in pharmacological technology have allowed for the development of new and sophisticated medications, which are then demanded by consumers. The demand for products at the retail level ultimately impacts demand at the wholesale level.

In addition, many new products were developed in response to increasing consumer awareness of the importance of skin care. Products such as moisturizers with added sunscreen and foundation tints became very popular. These new products boosted industry revenue at the wholesale level.

IBISWorld estimates that the Drugs and Druggists Sundries Wholesale Industry grew by 1% per annum in constant prices over the five-year period to 1998, with industry revenue reaching \$240,600 million in 1998.

IBISWorld estimates that during the 1993 to 1998 period, the total number of enterprises in the Drugs and Druggists Sundries Wholesale Industry increased by 0.8% per annum. To remain competitive, industry participants offered price discounts and focused on stocking new and improved drug formulations as well as product innovations in the cosmetic and toiletry segment.

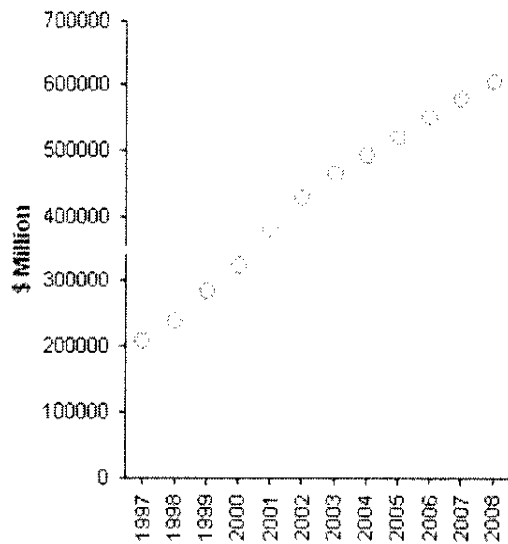
IBISWorld estimates that employment for the industry grew by approximately 1.7% per annum between 1993 and 1998. The average wages and earnings paid per person also increased over the 1993 to 1998 period, growing by 4.7% per annum.

The industry then enjoyed a strong period of growth with revenues rising from an estimated \$286,000 million in 1999 to \$430,800 million in 2002. This saw a corresponding rise in both industry value added and employment levels.

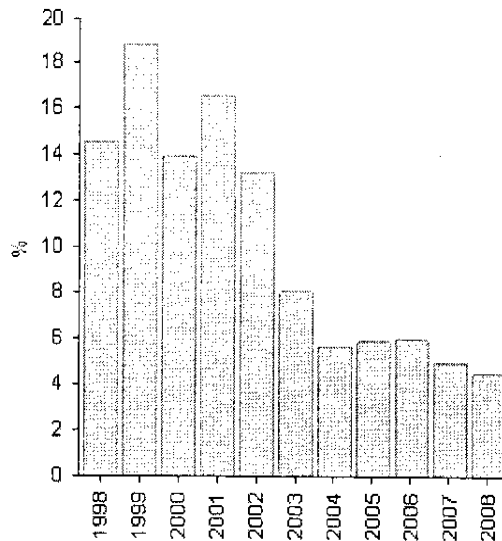
Revenue (constant prices)

| | Revenue \$ Million | Growth % |
|------|--------------------|----------|
| 1997 | 210,000.0 | N/A |
| 1998 | 240,600.0 | 14.6 |
| 1999 | 286,000.0 | 18.9 |
| 2000 | 326,000.0 | 14.0 |
| 2001 | 380,200.0 | 16.6 |
| 2002 | 430,800.0 | 13.3 |
| 2003 | 465,700.0 | 8.1 |
| 2004 | 492,200.0 | 5.7 |
| 2005 | 521,000.0 | 5.9 |
| 2006 | 552,000.0 | 6.0 |
| 2007 | 579,500.0 | 5.0 |
| 2008 | 605,500.0 | 4.5 |

Revenue



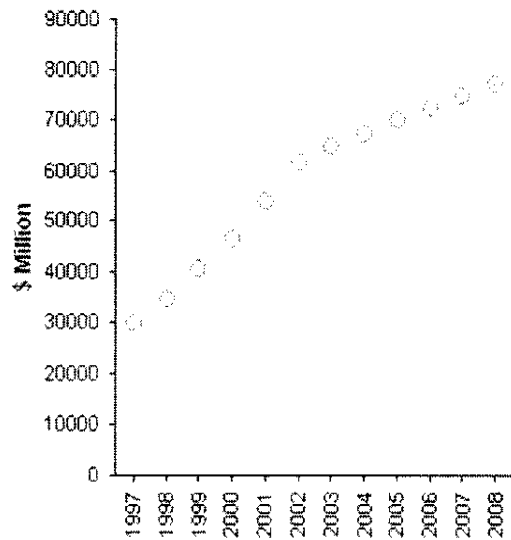
Revenue Growth Rate



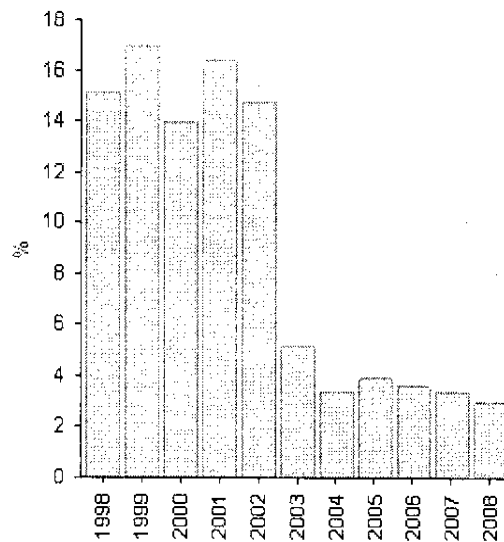
Gross Product (constant prices)

| | Gross Product \$ Million | Growth % |
|------|--------------------------|----------|
| 1997 | 30,200.0 | N/A |
| 1998 | 34,800.0 | 15.2 |
| 1999 | 40,700.0 | 17.0 |
| 2000 | 46,400.0 | 14.0 |
| 2001 | 54,000.0 | 16.4 |
| 2002 | 62,000.0 | 14.8 |
| 2003 | 65,200.0 | 5.2 |
| 2004 | 67,400.0 | 3.4 |
| 2005 | 70,000.0 | 3.9 |
| 2006 | 72,500.0 | 3.6 |
| 2007 | 75,000.0 | 3.4 |
| 2008 | 77,250.0 | 3.0 |

Gross Product



Gross Product Growth Rate

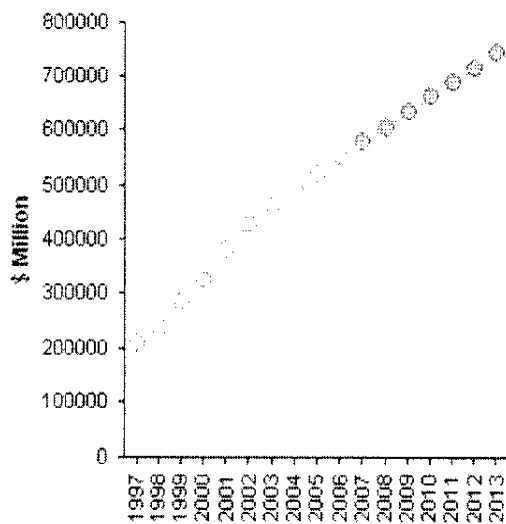


Outlook

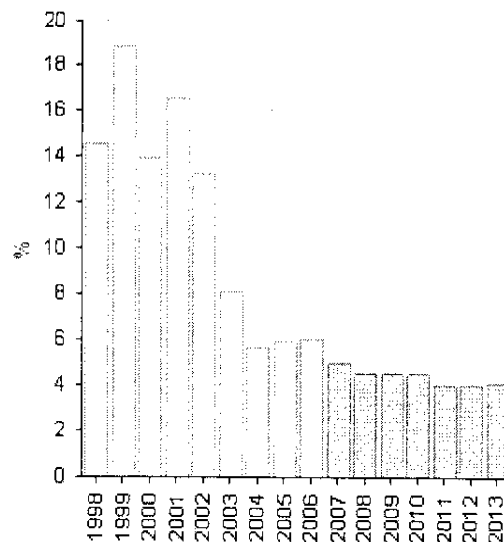
Revenue (constant prices)

| | Revenue \$ Million | Growth % |
|------|--------------------|----------|
| 2007 | 579,500.0 | 5.0 |
| 2008 | 605,500.0 | 4.5 |
| 2009 | 633,000.0 | 4.5 |
| 2010 | 661,500.0 | 4.5 |
| 2011 | 688,000.0 | 4.0 |
| 2012 | 715,500.0 | 4.0 |
| 2013 | 745,000.0 | 4.1 |

Revenue



Revenue Growth Rate



Over the outlook period, the US Drugs and Druggists' Sundries Wholesalers Industry is expected to enjoy moderate growth with industry revenues forecast to increase from an estimated \$605,500 million in 2008 to \$745,000 million in 2013, representing an average growth rate of 4.2% per annum. Over the same period, growth in industry value added will average 3.0% per annum to reach \$89,500 million by 2013.

An aging population, increased patient access to prescription drugs due to the Medicare Part D program, changing community attitudes to health care and continued product development and innovation (including the "lifestyle" drug phenomena, the growth of personalized drugs as well as biotechnology innovations) are expected to underlie the continued growth of the industry, as is direct to consumer advertising and growth in the private health insurance sector. The development of new products in various therapeutic areas will also fuel growth including oncology, Alzheimer's disease and hypertension. At the same time the industry will have to contend with the effects of patent expirations on blockbuster drugs, increasing competition from generics as a result of therapeutic substitution, increasing safety and regulatory issues, and growing price pressures from managed care organizations and the likes.

As in the previous performance period, the industry will have to continue to evolve over the outlook period in order to adapt to its changing environment. Most businesses within this wholesale industry will continue to face rising costs and lower returns. In this environment, IBISWorld forecasts that competitive success will come from economies of scale, and firms' ability to access leading pharmaceutical and healthcare brands. While growing price competition will pressure margins, cost reduction strategies and the strength in the over-the-counter segment of the market will offset this. In the short term, competition is likely to intensify as businesses focus on cost and service as a means to differentiate themselves from one another.

A number of key variables expected to influence the performance of the US Drugs and Druggists' Sundries Wholesalers Industry in the immediate to medium term future are briefly outlined below:

Prescription drug expenditure levels and related policies:

According to the Center for Medicare and Medicaid Services, total US health expenditures is projected to grow at an average annual rate of 7.3% over the outlook period and as recent years, expenditure on prescription drugs is anticipated to continue its upward trend to reach almost 15% of the total national health bill by 2011. While to the benefit of pharmaceutical wholesalers, this anticipated drug expenditure increase will also have flow-on effects for health care policies adopted by state governments, managed health care plan providers etc. Indeed the continued implementation of new cost containment policies are expected to increasingly impact up on the industry, thereby offsetting some of the anticipated volume growth. It is interesting to note that even the health insurance strategies (which also contain a cost containment element) of some of the nation's largest employers (such as Wal-Mart) may impact on the industry.

Also to impact on the industry will be the Deficit Reduction Act (DRA) of 2005 which was signed in February 2006 and which is expected to lead to fundamental changes to Medicaid's drug rebate program. According to the Congressional Budget Office, the DRA will reduce federal Medicaid spending by \$11.5 billion over the five year period to 2010 and by \$43 billion over the next ten years. Also of note is the fact that the act included provisions changing the prescription drug reimbursement formula for generic pharmaceuticals under Medicaid to one based on the lowest average manufacturers' price. With the final rules released by the Centers for Medicare and Medicaid Services in July 2007, major changes to the reimbursement formula are expected to become effective in the second and third quarters of fiscal 2008.

As in the past personal consumption expenditure levels on drugs etc is expected to remain of key importance. Over the five years to 2012, personal consumption expenditure on drugs and sundries products is projected to grow at over 10% per annum. By product segment, the Bureau of Economic Analysis suggests that in the past five years, ten years, and twenty years, growth in personal consumption expenditures (PCE) devoted to prescription drugs has accelerated. By 2010 the number of prescriptions dispensed is expected to exceed the four billion mark, up from 3.4 billion in 2006.

Generics:

In the immediate future, a number of key innovator drugs are expected to lose their patent protection which will have a number of implications for the industry; over the next five years patents for roughly 150 products with combined annual sales of \$60 billion are expected to expire with dramatic consequences for the profile of the industry. In 2008 \$12 billion worth of products are expected to lose patent protection.

This growth will also be boosted in part by Government/managed care institutions' policies designed to change prescription patterns in favor of the bio-equivalent, cheaper, generic drugs. For example, the enactment of the Medicare Prescription Drug Improvement and Modernization Act of 2003 has increased drug benefits for Medicare recipients which in turn translates into a growing reliance on low cost generic drugs; generics are already thought to account for nearly

70% of all scripts filled under the scheme. Recent changes to the Hatch-Waxman legislation (which grant six months exclusivity to the first generic company to win a court challenge of a brand's patent) will also serve to promote the growth of generics.

Growth in importance of non-prescription products:

The continued trend towards switching products from prescription to OTC (over the counter) status will be another important driver influencing the profile of this industry over the outlook period. While the US market is currently thought to lag its Canadian and European counterparts with regards to its acceptance of Rx-to-OTC switches, it is interesting to note that the FDA has recently announced that it hopes to increase the number of switches by 50% over the next few years. Another factor influencing the product segment profile of this industry will be the growth in the relative importance of herbal/botanical or complementary medicines which in turn will create a number of new niche segments. As the acceptance of such products continues to increase, this product segment is also expected to grow in relative importance. Moves by retailers to sell their own 'private-label' OTC products (thought to possess high retail margins) will also fuel the growth of this product segment. Any moves to introduce a "behind the counter" status will also serve to change the profile of the industry; of note is that the FDA held a public meeting in mid November 2007 to discuss the feasibility of establishing a third class of drugs which would cover the likes of cholesterol-lowering statins, oral birth control pills and some higher-dosage pain medications.

Aging Population:

Much has already been made of the potential impact of America's aging population, particularly as its baby boomers begin to "grey". The senior age cohort (those 65 and over) already account for roughly 13% of the nation's population but 34% of its health expenditure bill. As the baby boomers reach their 70s and 80s, their importance as a demographic cohort will continue to increase; by 2030 "seniors" are expected to account for roughly 20% of the US population. Over the five years to 2012, the number of people in the 55 and over age cohort is forecast grow at an average annual rate of 2.6%, compared to forecast annual growth in the total population of around 1%. Over the years, better medical technology has meant that people have lived longer, with the current life expectancy being 77 years. This compares to a figure of only 73.5 years, a quarter of a century ago. This will have a number of implications on the demand for pharmaceutical products as a whole; note that the 65 plus age cohort utilizes healthcare services at around four times the rate of the remainder of the population in the US. As this age cohort continues to expand, it will tend to increase revenue over the outlook period. Lifestyle trends and the subsequent development of lifestyle diseases (obesity, depression, ulcers etc) will also serve to dictate drug development and consumption patterns. It is also interesting to note that a number of the larger pharmaceutical companies have recently launched drug discount cards for low-income seniors with their Together Rx scheme, with others expected to follow suit (for example Pfizer's Living Share Card program).

Other factors, which will also help to gradually change the profile of the industry over the outlook period, include sustained developments in technology, including the increasing use of the Internet and e-commerce (particularly for the dissemination of information on major branded pharmaceuticals, as well as for e-marketing), as well as continued falls in exclusivity times combined with an increased roll out of second and third generation products as a result of technological advancements. Heightened regulatory control over the entire pharmaceutical supply chain, whether it be with regards to drug safety, allowable marketing /advertising practices or with regards to tracking requirements in an attempt to quell the rising threat of counterfeit and/or illegal drugs will also impact on the industry.

Combined, these variables will serve to slowly influence the development of the US Drugs and Druggists Sundries Industry in the short to medium term.

**Chicago Metropolitan Statistical Division
Shift-Share Analysis
2001 – 2006**

Promising industries with high national and local growth rates, that don't meet LQ threshold – possible **new** growth focus (vs. building on existing clusters)?

| Industry | Location Quotient | National Industry Δ | Local Industry Δ | 2006 Employment |
|--|-------------------|---------------------|------------------|-----------------|
| Wholesale electronic markets/agents/brokers | 1.07 | +34% | +31% | 24,158 |
| Drugs & druggists' sundries – wholesale | 1.06 | +6% | +4% | 5,994 |
| Foundries | 1.02 | +17% | +35% | 3,743 |
| Nonferrous metal production/processing | 1.00 | +22% | +67% | 1,532 |
| Land subdivision | .97 | 16% | 14% | 2,573 |
| Architectural/structural metals mfg. | .91 | 4% | 16% | 8,859 |
| Wireless telecom carries (excl. satellite) | .90 | 5% | 37% | 4,549 |
| Waste collection | .90 | 34% | 21% | 2,941 |
| <i>Other textile product mills⁽¹⁾</i> | .76 | 1% | 125% | 1,957 |
| Remediation & other waste mgmt. svcs. | .66 | 15% | 23% | 2,079 |
| Apparel, piece goods, & notions – wholesale ⁽²⁾ | .66 | 4% | 6% | 2,988 |
| Cement/concrete product mfg. | .62 | 12% | 4% | 4,768 |
| <i>Facilities support services⁽³⁾</i> | .57 | 24% | 1785% | 2,066 |
| Iron/steel mills & ferroalloy mfg. | .54 | 30% | 4% | 1,334 |
| Pharmaceutical/medicine mfg. | .28 | 30% | 41% | 2,455 |

(1) Textile bags, awnings, tents, and related products

(2) Piece goods, fabrics, knitting yarns (except industrial), thread and other notions, and/or hair accessories

(3) Typically a combination of services such as janitorial; maintenance; trash disposal; guard and security; mail routing; reception; laundry; and related services.

Process – Chicago Area Shift-Share Analysis

1. ID'ed four-digit SIC codes for industries in the following sectors (total of 223):
 - a. Utilities
 - b. Construction
 - c. Manufacturing
 - d. Wholesale Trade
 - e. Transportation & Warehousing
 - f. Information
 - g. Finance & Insurance
 - h. Real Estate & Rental & Leasing
 - i. Professional, Scientific, & Professional Services
 - j. Management of Companies & Enterprises (essentially holding companies)
 - k. Administrative & Support & Waste Management & Remediation Services
 - l. Arts, Entertainment, & Recreation
 - m. Accommodation & Food Service
 - n. Other Services (Excl. Public Administration)
2. Downloaded historical annual nominal Gross Regional Product (GRP) data for the Chicago-Naperville-Joliet, IL Metropolitan Statistical Division (MSD) from Economy.com.
 - a. inflation-adjusted [historic] GRP data to 2006 dollars using BLS's online Inflation Calculator [can adjust to 2007 or 2008 dollars if desired, but same relationships will hold].
3. Calculated 2006 location quotients (LQs) for all 4-digit industries relative to the U.S.
 - a. All industries meeting 1.20 LQ threshold (count = 73, or 33%) move on to Shift-Share (S-S) analysis.
 - b. For Chicago MSD, where total GRP is 3.0% of U.S. GRP, 1.20 LQ is equivalent to 3.6% of national industry product.
4. For 73 industries meeting LQ threshold, conducted S-S for 2001 to 2006
 - a. 2001 was trough of last recession, per National Bureau of Economic Research (NBER)
 - b. 2006 is most recent available year-end data (2007 estimate will be finalized in early March – currently still considered a "forecast" by Economy.com)
5. By sector (or combination thereof), scatter plotted:
 - a. National industry growth in excess of average national growth (x axis)
 - b. Local industry growth in excess of national average and national industry growth (y axis)

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Breaking News on Food & Beverage Development - North America

Previous page : [Emerging nutraceutical markets](#)

Emerging nutraceutical markets

By Lorraine Heller

5/9/2008- **In the last article in a series on the global nutraceuticals market, NutraIngredients-USA.com examines some of the emerging markets around the world, including Brazil, India, Africa and the Middle East, and Turkey.**

Pooled from Euromonitor, Datamonitor, Mintel and Nutrition Business Journal, the data was gathered by Capsugel's global business development manager for dietary supplements Peter Zambetti.

Zambetti, who is also in the International Alliance of Dietary/Food Supplement Association's (IADSA) global market affairs department, was addressing attendees at the recent Supply Side East trade show in Secaucus, New Jersey.

Brazil

According to Zambetti, Brazil is *"a very difficult market to get into"*.

"The regulations there are difficult, most products are treated as drugs. There are tremendous opportunities but a lot of hurdles - if you want to get in there, it'll be years, not months," he told industry members.

The overall nutraceuticals market in Brazil was worth around \$881m in 2006, said Zambetti. The Latin American market as a whole made up about 3.1 percent of global nutraceutical sales.

In terms of product preferences in the Brazilian market, multivitamins was far ahead any other product, recording sales of around \$250m. Vitamin C was the second most popular product, with sales of over \$100m,

Tonics, child specific products and calcium all pass the \$50m barrier, while other products below \$50m included vitamin B, Gingko Biloba and Vitamin E.

India

According to Zambetti, India present a *"huge market opportunity"*. The market shot forward with a 38 percent increase, he said.

The biggest selling product in the nutraceuticals category in 2006 were minerals, which recorded sales of almost \$120m.

Vitamins were close behind, with sales of almost \$100m. Protein powder came third, with sales of around \$90m.

Fourth in line was Chyawanprash, which contains 48 different ingredients and which hit the \$60m mark.

Multivitamins sold almost \$60m, and glucose powder was next at just over \$40m. Ginseng saw sales of around \$30m, vitamin B and calcium sold around \$20 each, while the vitamin C market was worth just over \$10m.

Africa and the Middle East

Multivitamins were the biggest selling product in these two regions, with combined sales of almost \$300m in 2006.

Vitamin B saw sales of almost \$150m, and vitamin C sold almost \$75m. Calcium and child specific products stood at the \$50m mark, with other products below \$50m including minerals, vitamin E, tonics and fish oils.

Turkey

The nutraceuticals market in Turkey is thought to be worth around \$200m - a small but fast growing market, which grew from almost nothing ten years ago.

Multivitamins were again the largest product category, with sales of just over \$70m in 2006. These were followed by calcium, with sales over \$40m, and minerals, which sold just over \$10m.

Other products under the \$10m mark were child specific products, B vitamins, tonics, vitamins C, D and E, and fish oils.

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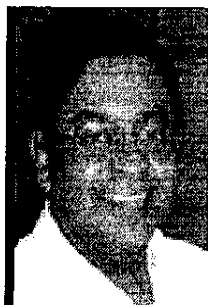
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Agglomeration Economies: The Spark That Ignites a City?

BY SATYAJIT CHATTERJEE

In industrially developed countries, employment is heavily concentrated in cities. A concentration of workers and businesses in one location — what economists call **agglomeration economies** — lowers production costs. In fact, most economists believe that in the absence of agglomeration economies, the spatial distribution of employment would be much more even. In this article, Satyajit Chatterjee discusses his research, which questions this belief. He finds that while agglomeration economies are an important factor, they're *not* the most important one. The combined effects of factors unrelated to agglomeration economies, such as the availability of natural resources and local economic policies, appear to account for the bulk of the spatial concentration of U.S. employment.

The bulk of an industrially developed country's economic activity takes place in cities. Typically, these cities make up a relatively small portion of the country's overall territory. For instance, 83 percent of total



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employment in the U.S. is located in metropolitan areas, and these areas account for 24 percent of the total land area of the country.

Why is employment so heavily concentrated in selected areas of the country? Economists think that spatial concentration of employment (or, more generally, economic activity) develops for two very different reasons. The first reason — and one that comes most readily to mind — is that a location attracts people and businesses because of the presence of some valuable natural resource. Petroleum, coal, lumber, minerals, and proximity to a

navigable river or to the coast are all examples of valuable natural resources. Because such resources are not available everywhere, people and businesses end up flocking to resource-rich areas.

However, the natural resource reason does not explain the full extent of the remarkable spatial concentration we see in reality. For instance, access to a deep harbor was no doubt important for the emergence of Philadelphia as a colonial city, but can it be the main reason for Philadelphia's subsequent evolution into one of America's pre-eminent metropolitan areas? Studies of urban evolution suggest a second reason for spatial concentration: A concentration of workers and businesses in one location lowers production costs because proximity permits workers and businesses to save on the costs of transporting goods and people. Economists refer to this cost advantage as economies of spatial concentration, or *agglomeration economies*, for short.

Agglomeration economies can be a powerful force for attracting large numbers of people to a given location. They can cause a location with some small advantage in terms of natural resources to become a place with a large concentration of diverse businesses and households. While the natural resource initially attracts businesses and households to the location, this original group then becomes the factor that attracts other businesses and households to that location. As the location grows in size, business costs fall and the location's attractiveness as a potential spot for other businesses and households rises, and more people and businesses move in.

Although rising congestion eventually chokes off the inflow of people, agglomeration economies can be the spark that ignites the development of a city.

Economists generally believe that agglomeration economies are the primary factor that leads to the large clusters of people and jobs we see in the real world. In other words, most economists believe that in the absence of agglomeration economies, the spatial distribution of employment would be much more even.

In this article I discuss my research, which tried to determine if this belief is, in fact, accurate. My research indicates that while agglomeration economies are an important contributor to the spatial concentration of employment, they're *not* the most important factor. Contrary to expectations, factors other than agglomeration economies appear to account for the bulk of spatial concentration. It's not clear exactly what these other factors are, but they could be differences in the availability of natural resources across metropolitan areas, differences in economic policies across cities and states, or some other advantage of spatial concentration distinct from agglomeration economies. Whatever the case, my research suggests that agglomeration economies are probably just one of several important factors affecting spatial concentration of employment.

THE FACT OF SPATIAL CONCENTRATION

To determine the contribution of agglomeration economies to spatial concentration, we need a measure of the extent of spatial concentration in U.S. employment. An effective way to do this is by using a Lorenz curve, a graphical tool originally developed to show the extent to which income is unevenly distributed across

people.¹ But Lorenz curves can also be used to show how unevenly employment is distributed across space.

To construct a Lorenz curve of spatial concentration, I first ranked metropolitan areas and rural counties in the continental United States by their employment density, the densest areas being ranked first. Using this ranking, I then calculated the percentage of employment accounted for by the first, or top, 1 percent of the total continental land area, then the

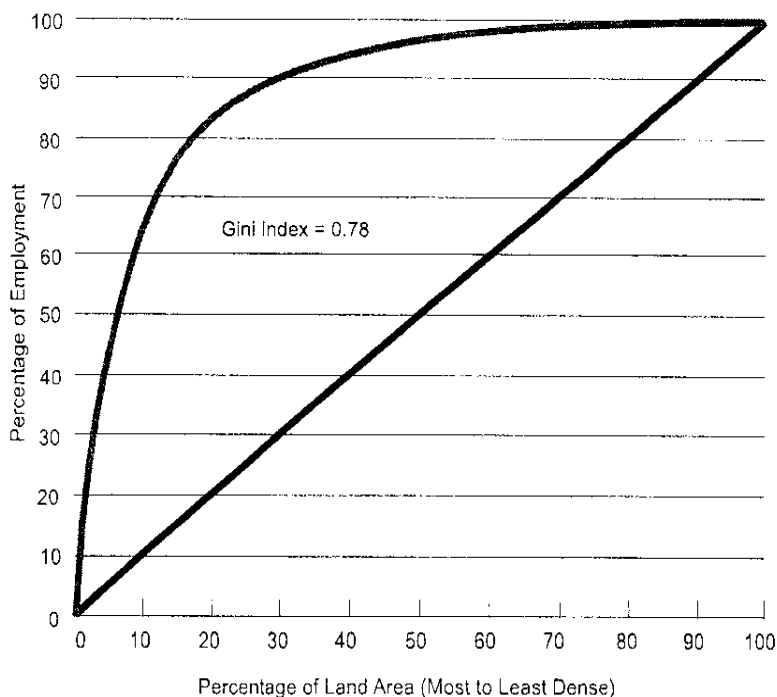
top 2 percent, and so on. The Lorenz curve is simply a graph that plots these calculations (Figure 1). If employment were uniformly distributed over the continental landmass, this graph would coincide with the 45-degree line shown in the figure. That is, the top 1 percent of the continental land area would account for 1 percent of employment, the top 2 percent of the area would account for 2 percent of employment, and so on. But if employment is not uniformly distributed, the graph will be bowed above the 45-degree line — as, in fact, it is.

As Figure 1 indicates, the top 1 percent of total continental land area accounts for about 15 percent of employment, the top 2 percent accounts for about 25 percent, and so on. Indeed, by the time we include the top 20 percent of the continental land area, we can account for more than 80 percent of total employment! Clearly,

¹ The statistician Max O. Lorenz (1880-1962) developed the Lorenz curve. The curve is probably the tool most used to analyze income and other distributions. Remarkably, Lorenz came up with the idea of the curve in his undergraduate thesis at the University of Iowa, circa 1894, at the age of 14! He went on to have a distinguished career, becoming the chief statistician of the Interstate Commerce Commission in Washington, D.C.

FIGURE 1

Spatial Concentration of U.S. Employment, 1999



U.S. employment is very unevenly distributed over space.

The Lorenz curve is an effective visual representation of the degree of spatial concentration of employment. It also provides the basis for the Gini index, a well-known index of concentration. The Gini index is a number between zero and one, and it is a measure of the difference between the Lorenz curve and the 45-degree line. It is computed by dividing the area between the Lorenz curve and the 45-degree line by the total triangular area above the 45-degree line. When employment is uniformly distributed, the Lorenz curve coincides with the 45-degree line, and the Gini index is zero. The more unevenly employment is distributed, the more bowed the Lorenz curve and the larger the area between the curve and the 45-degree line. Thus, the Gini index is higher for a more uneven distribution of employment and lower for a more even one. In Figure 1, the value of the Gini index is 0.78, which means the area between the 45-degree line and the bowed line represents close to 80 percent of the total area above the 45-degree line. This is the measure of spatial concentration I used in my research.

NATURE AND MAGNITUDE OF AGGLOMERATION ECONOMIES

As mentioned earlier, agglomeration economies arise because proximity permits workers and businesses to save on the costs of transporting goods and people. In this section I'll highlight one way in which this happens, then discuss what economists know about the magnitude of agglomeration economies in the U.S.

One reason agglomeration economies arise is that a large concentration of workers allows a business to deal more effectively with fluctuations in the volume of sales. Consider a business whose future demand can be

either high or low, with equal probability. When demand is high, the business needs four workers; when demand is low, it needs only two. The business has to hire workers *before* it knows how large demand will be. Suppose the business chooses to hire three workers. If demand turns out to be low, workers work at two-thirds capacity, and all demand is met. If demand turns out to be high, all workers work at full capacity, but one-quarter of demand is not met. So there is a 50 percent chance that every worker works at less than full capacity.

Agglomeration economies arise because proximity permits workers and businesses to save on the costs of transporting goods and people.

Now imagine that another enterprise in the same line of business moves into the area and this enterprise faces a similar uncertainty with respect to demand. However — and this is the key assumption — the level of the new firm's demand is independent of the level of the first firm's demand. This may happen if the firms have different sets of customers and serve different markets. This means that the combinations of demand across the two firms can take one of four possibilities, all with equal probability: (high, high), (high, low), (low, high), and (low, low). Now, when the two businesses have different levels of demand (which happens with probability one-half), the firm with low demand has an incentive to rent out its one excess worker to the firm with high demand. This is feasible because both firms are in the same location and the cost of moving workers between firms is presumably low. If the two firms shifted workers between them in this way, the only time any worker would work at less than full

capacity is when demand at *both* firms is low, which happens with probability one-quarter.

The movement of workers between businesses in the same location does happen in reality, although it takes the guise of contract workers selling their services to businesses on a temporary basis. For instance, we might have a situation where both businesses hire two permanent employees, and each business has the option to hire additional contract employees in the event the level of demand is high. In this arrangement, there are

four permanent workers and two contract workers. The permanent workers always work at full capacity while contract workers have a 75 percent chance of working at full capacity or a 25 percent chance they won't work at all. Contract workers take on the risk of unemployment, but if the two firms use some of their cost savings to pay contract workers more than full-time employees, contract workers might feel compensated for the risk.

To summarize, physical proximity makes it possible for firms to share workers and so allows businesses to take advantage of the fact that the combined demand of several firms is more stable than the demand of a single firm. This stability permits a group of businesses to better utilize workers than a single business. The improved utilization of workers lowers business costs and provides a reason for firms and workers to cluster together.

Let's turn now to a description of the strategies economists have used to estimate the magnitude of ag-

glomeration economies that stem from better utilization of workers. The most direct way to do this is to measure changes in the utilization of workers due to spatial concentration. However, because it's not easy to directly measure how hard employees work, economists have used more indirect methods. Let's look at two of these methods along with the estimates of agglomeration economies obtained using each one.

The first method uses information on labor hours and equipment purchased (also called capital) and goods (output) sold by different industries in different metropolitan areas. For any given industry, labor and capital purchased will have a higher utilization rate in metro areas with a large concentration of workers and firms. Thus, for any given industry and for any given amounts of labor and capital, more output will be produced in a large metro area than in a small one. The estimate we get from this method suggests that agglomeration economies make businesses in metro areas with more than 2 million people 8 percent more productive than businesses in metro areas with less than 2 million people.²

The second method uses information on hourly wages businesses pay to workers. Businesses that use workers more effectively face lower costs and so make higher profits. Given that, a business would be motivated to locate in a large metro area rather than a small one. But when businesses do so, they compete with one another and end up paying more for each worker they hire. In other words, in a competitive environment, higher worker

² Reported in David Segal's article.

productivity will result in higher wages being paid to workers in large metro areas. By measuring the wages paid to similarly skilled workers in metro areas of varying sizes, we can estimate how much more productive workers are due to agglomeration effects. Studies that follow this approach have found that as a metro area doubles in size, the productivity of its workers rises 3 percent.³

AGGLOMERATION ECONOMIES' CONTRIBUTION TO SPATIAL CONCENTRATION

Given these estimates of the magnitude of agglomeration economies, the question is: How important are these agglomeration effects for the spatial concentration of employment? Answering this question involved two steps.

First, I constructed an economic model of local employment that can exactly reproduce the Lorenz curve in Figure 1, which gives the distribution of workers across metropolitan areas and rural counties in 1999. Second, I constructed a new Lorenz curve for a model economy that's identical to the one in the first step except that in this model, there are no agglomeration economies. If the Lorenz curve for this new model economy turns out to be close to the 45-degree line, I can reasonably conclude that agglomeration effects account for the bowed shape of the Lorenz curve in Figure 1. More generally, any difference between the Lorenz curve in Figure 1 and the Lorenz curve predicted by the model with no agglomeration effects can be attributed to the

³ This estimate is the median value of agglomeration economies across manufacturing industries reported in Leo Sveikauskas's article.

effects of agglomeration economies.

In particular, the difference between the Gini indexes for the two Lorenz curves is a measure of the contribution of agglomeration effects to the spatial concentration of U.S. employment.

Description of the Model

Economy. Briefly, the macroeconomic model in the first step has the following features.⁴ There is a given set of locations, corresponding to the 275 metropolitan areas and 2,248 rural counties in the continental U.S.⁵ Each location can produce two types of goods. One type, which I call *traded goods*, can be shipped without cost to other locations; the second type, which I call *local goods*, cannot be shipped at all. A household living in a given location derives benefit (or what economists call utility) from the consumption of the traded good and from consumption of the local good produced in that location. (The household cannot consume the local good of other locations because local goods cannot be shipped.)

Locations differ in terms of natural resources. In my model, the natural resources available to a location affect the productivity of labor and capital employed in the production of the traded good in that area. It may also affect how much enjoyment a household gets from living there. A location that has high productivity due to the presence of some natural

⁴ With some modifications, this is the same model I have used in previous research. The details of the model are in my article with Gerald Carlino.

⁵ The 275 metropolitan areas consist of 258 primary metropolitan areas and 17 consolidated metro areas. A consolidated metropolitan area is a group of neighboring primary metro areas between which there is a significant amount of commuting.

resources will attract firms making the traded good; an area that's pleasant to live in because it has some other natural amenity will attract households.

As a location with some natural advantage attracts businesses and households, it gains employment. The rise in employment generates agglomeration economies and lowers business costs. This serves to make the location more attractive to businesses, and more businesses move in and create jobs. However, the people who move in to take these jobs make the location increasingly congested, and this congestion causes the price of the local good to rise. The rising price of the local good reduces the purchasing power of the wages workers receive in that location and limits the inflow of workers. The migration of workers between locations will make the wage (adjusted for amenities) equal across all metro areas, and every person seeking work will be employed in some location.

In this model, the distribution of employment across locations reflects the availability of natural resources in each area, the magnitude of agglomeration economies, and the magnitude of congestion costs. The magnitude of the agglomeration effects in the model is consistent with the evidence on agglomeration effects noted in the previous section. Also, the magnitude of congestion costs is consistent with the evidence on congestion costs that researchers have found for U.S. metro areas.

Finally, the model's parameters use values that determine the effects of natural resources on employment, so that the employment density in each metro area and rural county in the model exactly matches the employment density of that metro area or rural county in reality. This final step makes it possible for the model to exactly reproduce the Lorenz curve shown in Figure 1.

What Does the Model Say About the Role of Agglomeration Economies in Spatial Concentration?

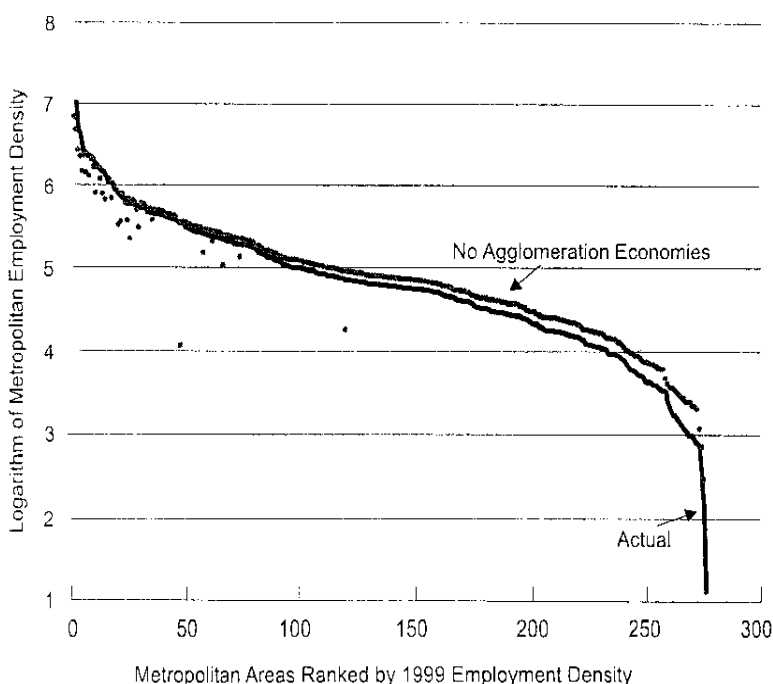
Using this model I can investigate the role of agglomeration economies in the spatial concentration of U.S. employment. As noted earlier, my strategy for doing this is to examine what happens to the spatial distribution of employment in my model when I eliminate the reduction in production costs due to agglomeration economies while keeping all other aspects of the model unchanged. The solid black line in Figure 2 plots actual employment densities for metro areas in 1999; the dotted line plots what happens to employment densities in these metro areas when agglomeration effects are removed. As the figure shows, a relatively small set of high-density locations become less dense and a large set of relatively low-density locations become denser.

The first set includes large metro areas, which benefit the most from agglomeration economies. These metro areas shed employment because they can no longer productively employ as many workers. Workers from these metro areas end up moving to smaller metro areas (and also to rural counties not shown in the figure), and consequently, these areas become denser.

The table lists the top 20 metro areas for which agglomeration economies seem most important. As one would expect, big cities like New York, Los Angeles, Chicago, and Atlanta are on the list. Los Angeles appears to be the city that benefits most from agglomeration economies in that almost 80 percent of its jobs would disappear if agglomeration economies were absent; Phoenix-Mesa is another area that appears to owe a lot of its employment to agglomeration econo-

FIGURE 2

Metropolitan Employment Densities With And Without Agglomeration Economies



mies. Philadelphia also makes the list and appears to owe 20 percent of its jobs to agglomeration economies.

Clearly, agglomeration economies appear to be very important for the development of specific cities, especially Los Angeles and Phoenix-Mesa. But how important is it generally? Figure 3 helps to answer this question. It compares the Lorenz curve when agglomeration effects are removed from the model constructed in step 1 with the Lorenz curve from Figure 1. The new Lorenz curve is less bowed, indicating that in the absence of agglomeration economies, employment is more evenly distributed. The Gini index declines about 16.5 percent, from 0.78 to 0.65.

The most striking feature of the new Lorenz curve is that it's still pretty far from the 45-degree line. Even in this world without agglomeration economies (but which is otherwise similar to the U.S. in important respects), there is considerable spatial concentration of employment. In other words, although the contribution of agglomeration economies is substantial, it's not as large as we might have expected. Recall that most economists consider agglomeration economies the most important reason for spatial concentration. But my model predicts that the U.S. would continue to be spatially concentrated, that is, have very dense areas, even if agglomeration economies were completely absent. Apparently, agglomeration economies are generally not needed to spark the development of cities!⁶

What, Then, Are the Other Determinants of Spatial Concentration? If agglomeration economies are not the key contributor to spatial concentration, what is? Taken at face value, my model suggests that it's the uneven distribution of natural resources that accounts for the bulk of spatial concentration. Indeed, some

researchers have suggested that access to a navigable river or coast is, in fact, a key determinant of spatial concentration in the U.S.⁷ Nevertheless, it's not accurate to say that any concentration left unexplained by agglomeration economies must result from the effects

⁶ It's possible that economists may have mismeasured the magnitude of agglomeration economies and congestion costs, thus affecting the values built into my model. However, when I varied the model's magnitude of agglomeration economies and congestion costs within plausible ranges (while ensuring that the model exactly reproduced the Lorenz curve in Figure 1), the drop in spatial concentration from elimination of agglomeration economies rarely exceeded 50 percent. Therefore, even with generous allowances for mismeasurement, agglomeration economies do not appear to account for the bulk of spatial concentration.

⁷ See the article by Jordan Rappaport and Jeffrey Sachs.

of natural resources. There are other factors, besides geography, that might affect spatial concentration and that are not captured in my simple model.

One potentially important factor is city- or state-specific economic policies. If an area happens to be located in a state with pro-business laws and regulations, it will have an advantage in terms of job creation relative to other areas.⁸ Another factor could be the cost savings from transporting goods from one region to another.⁹ For instance,

⁸ The article by Thomas Holmes presents evidence that state policies affect the location of industry.

⁹ The cost savings from shipping goods within metro areas are captured in the estimates of agglomeration economies used in my model.

TABLE

| Metropolitan Areas | Percentage of Employment Due to Agglomeration Economies |
|---|---|
| Los Angeles-Riverside-Orange County | 79 |
| Phoenix-Mesa | 48 |
| Dallas-Fort Worth | 32 |
| Washington-Baltimore | 29 |
| Houston-Galveston-Brazoria | 28 |
| Denver-Boulder-Greeley | 27 |
| Seattle-Tacoma-Bremerton | 25 |
| Detroit-Ann Arbor-Flint | 23 |
| San Francisco-Oakland-San Jose | 23 |
| Atlanta | 22 |
| Boston-Worcester-Lawrence-Lowell-Brockton | 22 |
| Minneapolis-St. Paul | 22 |
| St. Louis | 22 |
| Chicago-Gary-Kenosha | 20 |
| Philadelphia-Wilmington-Atlantic City | 20 |
| New York-Northern New Jersey-Long Island | 19 |
| Portland-Salem | 18 |
| San Diego | 13 |
| Cleveland-Akron | 12 |
| Pittsburgh | 11 |

part of Philadelphia's attraction as a business location is its proximity to two other large metro areas: Washington, D.C. and New York City. Philadelphia's proximity to these two places means that businesses in Philadelphia can ship goods relatively cheaply to two other large metro areas, thus giving them relatively cheap access to a very large customer base.¹⁰ A third factor could be that some benefits of spatial concentration go beyond reducing the costs of producing goods and services. It's well known, for instance, that most inventive activities take place in cities. Just as spatial concentration can reduce the costs of producing goods and services, it may also reduce the costs of producing new knowledge through better utilization of knowledge workers.¹¹

SUMMARY

Economists have generally pointed to agglomeration economies as the principal reason a country's employment tends to get concentrated in a relatively small number of geographic areas. Agglomeration economies refer to the reduction in business costs that results from a concentration of businesses and workers in the same geographic area. This reduction in business costs provides incentives for workers and firms to cluster together, despite the costs associated with increased congestion. Several empirical studies have found evidence of significant agglomeration economies in U.S. metro areas.

However, the mere existence of agglomeration economies does not

settle the question of whether these effects are the primary cause of the spatial concentration of employment. To settle that point, we need to deter-

Just as spatial concentration can reduce the costs of producing goods and services, it may also reduce the costs of producing new knowledge through better utilization of knowledge workers.

mine if agglomeration economies, as measured, are powerful enough to give rise to the degree of spatial concentration we see in the real world. This

article highlighted research that seeks to make this determination. Contrary to expectations, I found that the bulk of the spatial concentration of employment results from factors other than agglomeration economies.


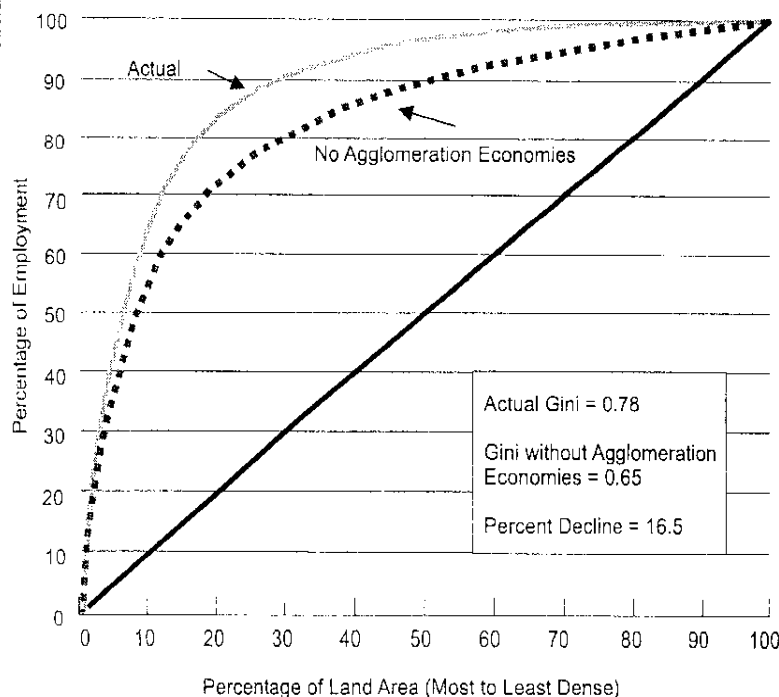
The flip side of my finding is that some set of other factors accounts for the bulk of spatial concentration. Although my research cannot shed light on the contribution of these other factors, it's possible to hazard a guess (based on the work that other economists have done) as to what these other factors might be: natural resources, state and local economic policies, proximity to other metro areas, and spatial concentration's benefits in creating new knowledge. Whatever the case is, my research suggests that agglomeration economies are one of several important factors, but not the principal factor, affecting spatial concentration of employment. 

FIGURE 3

Lorenz Curves With and Without Agglomeration Economies



¹⁰ See the article by Gordon Hanson for evidence in favor of this point.

¹¹ The article by Adam Jaffe, Manuel Trajtenberg, and Rebecca Henderson and my article with Gerald Carlino present evidence that proximity may help in the communication of new knowledge.

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|--|--|--|

him his celebrity status was his eloquent book *The Economic Consequences of the Peace*. Keynes wrote it to object to the punitive reparations payments imposed on Germany by the Allied countries after World War I. The amounts demanded by the Allies were so large, he wrote, that a Germany that tried to pay them would stay perpetually poor and, therefore, politically unstable. We now know that Keynes was right. Besides its excellent economic analysis of reparations, Keynes's book contained an insightful analysis of the Council of Four (Clemenceau of France, Prime Minister Lloyd George of Britain, President Woodrow Wilson of the United States, and Vittorio Orlando of Italy).

Keynes wrote: "The Council of Four paid no attention to these issues [which included making Germany and Austro-Hungary into good neighbors], being preoccupied with others,—Clemenceau to crush the economic life of his enemy, Lloyd George to do a deal and bring home something which would pass muster for a week, the President to do nothing that was not just and right." (Ch. 6, par. VI.2)

In the twenties Keynes was a believer in the quantity theory of money (today called monetarism). His writings on the topic were essentially built upon the principles he had learned from his mentors, Marshall and Pigou. In 1923 he wrote *Tract on Monetary Reform*, and later he published *Treatise on Money*, both on monetary policy. His major policy view was that the way to stabilize the economy was to stabilize the price level, and that to do that the government's central bank must lower interest rates when prices tend to rise and raise them when prices tend to fall.

Keynes's ideas took a dramatic change, however, as unemployment in Britain dragged on during the interwar period, reaching levels as high as 20 percent. Keynes investigated other causes of Britain's economic woes, and *The General Theory of Employment, Interest and Money* was the result.

Keynes's *General Theory* revolutionized the way economists think about economics. It was path breaking in several ways. The two most important are, first, that it introduced the notion of aggregate demand as the sum of consumption, investment, and government spending. Second, it showed (or purported to show) that full employment could be maintained only with the help of government spending. Economists still argue about what Keynes thought caused high unemployment. Some think that Keynes attributed unemployment to wages that take a long time to fall. But Keynes actually wanted wages not to fall, and advocated in the *General Theory* that wages be kept stable. A general cut in wages, he argued, would decrease income, consumption, and aggregate demand.

This would offset any benefits to output that the lower price of labor might have contributed.

Why shouldn't government, thought Keynes, fill the shoes of business by investing in public works and hiring the unemployed? General Theory advocated deficit spending during economic downturns to maintain full employment. Keynes's conclusion initially met with opposition. At the time, balanced budgets were standard practice with the government. But the idea soon took hold and the United States government put people back to work on public works projects. Of course, once policymakers had taken deficit spending to heart, they could not let it go.

Contrary to some of his critics' assertions, Keynes was a relatively strong advocate of free markets. It was Keynes, not Adam Smith, who said "there is no objection to be raised against the classical analysis of the manner in which private self-interest will determine what in particular is produced, in what proportions the factors of production will be combined to produce it, and how the value of the final product will be distributed between them." Keynes believed that once full employment was achieved by fiscal policy measures, the market mechanism could then operate freely. "Thus," continued Keynes, "apart from the necessity of central controls to bring about an adjustment between the propensity to consume and the inducement to invest, there is no more reason to socialize economic life than there was before."

Little of Keynes's original work survives in modern economic theory. Instead, his ideas have been endlessly revised, expanded, and critiqued. Keynesian economics today, while having its roots in *The General Theory*, is chiefly the product of work by subsequent economists including John Hicks, James Tobin, Paul Samuelson, Alan Blinder, Robert Solow, William Nordhaus, Charles Schultze, Robert Heller, and Arthur Okun. The study of econometrics was created, in large part, to empirically explain Keynes's macroeconomic models. Yet the fact that Keynes is the wellspring for so many outstanding economists is testament to the magnitude and influence of his ideas.

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The cuneiform inscription in the logo is the earliest-known written appearance of the word "freedom" (amagi), or "liberty." It is taken from a clay document written about 2300 B.C. in the Sumerian city-state of Lagash.

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**EXPLOITING LOCALIZATION ECONOMIES IN MATURE
INDUSTRIES: THE CASE OF METALWORKING IN SPRINGFIELD, MA**

**Muthukumar . S .
City Planning Program
Georgia Institute of Technology
Spring 1997**

EXPLOITING LOCALIZATION ECONOMIES IN MATURE INDUSTRIES: THE CASE OF METALWORKING IN SPRINGFIELD, MA

SECTION ONE -- INTRODUCTION

The critical role of technology in economic growth is a widely accepted notion -- business and government leaders strongly consider greater and swifter technological innovation as the central ingredient in achieving economic prosperity. Technology is the impetus behind the proliferation of products and processes, and technological innovation permits entrepreneurs to seize advantages over competitors, and promotes the prosperity of one region over another. While technological innovation contributes to economic progress, one must understand that this change is actually a process of *learning* by people, and by organizations and regions. Technological innovation has many roots -- however, over the past several decades, research in innovation has illuminated its *multi-actor nature*, and particularly *the importance of structural and institutional factors* and of the *relational aspects* of the innovative process. While it is true that individual firm competence is the basis of innovative performance, firms operate within “**systems of innovation**” which intermesh their activities with those of other firms and organizations. Further, the process of innovation is *often non-systematic*, and occurs both within and across firms and industries through some impetus intrinsic to the firm or through linkages with other economic actors in the process. Finally, the role of innovation varies by industry type and age and by geographic region, and is influenced by structural and institutional factors, by culture [social or business] and by public policy. *It follows that if the innovation process is expanded and made more efficient, the probability of economic prosperity would be correspondingly higher.*

EXPLOITING LOCALIZATION ECONOMIES IN MATURE INDUSTRIES: THE CASE OF METALWORKING IN SPRINGFIELD, MA

For the purposes of this paper, industries are broadly classified as “**emerging**” or “**mature.**” Technological innovation in each type of industry may be different. There is a wealth of research on technological innovation in “emerging” industries, but somewhat less emphasis seems to be placed on “mature” industries. In spatial location decisions, firms take into account the benefits of *concentration* and of *urbanization*, because both produce positive externalities that can potentially translate into higher firm productivity. These benefits can broadly be termed “**agglomeration economies**” and may be found in cities and areas with high concentrations of similar firms. In older cities and in mature industries the benefits of agglomeration seem to be lower than in the case of emerging industries. This paper seeks to explore the link between agglomeration economies in mature industries and technological innovation through the medium of a case study on machine shops in the Springfield area of the Commonwealth of Massachusetts. Accordingly, after this introduction, *section two* introduces the concept of agglomeration economies. *Section three* describes the background of the metal working industry in the Springfield area and the problems faced by firms in this industry group. *Section four* briefly discusses problem solving attempts, in particular the Machine Action Project. *Section five* attempts to generalize the case to problems faced by mature industries. *Section six* concludes the paper, describing an expanded role for public policy in “retapping” the already existing potential for agglomeration in the context of these mature industries

SECTION TWO -- AGGLOMERATION ECONOMIES

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In the context of economic productivity, it is often seen that the level of productivity is often higher in large cities than in areas of lower population density because of agglomeration economies, which arise when firms locate near one another. The spatial proximity of these firms is an important factor in their productivity owing to positive externalities. A simple example should make the point clear -- if several competing firms require some common semi-processed input which is prohibitively expensive for them to individually acquire, proximal locations would enable a single supplier to efficiently supply the required input to all these firms. Their proximity is extremely advantageous, even though they are competitors!

Ceteris paribus, firms' production costs are lower in large cities because these areas offer a variety of specialized business services. As new firms enter the city [or start up in the city], and the size of the city increases, production costs for other firms in the city are also lowered because more specialized labor markets are created and specialization allows for more efficient operation. However, continued urbanization and increased agglomeration are also accompanied by other diseconomies such as congestion, pollution and crime that eventually offset further agglomeration economies. In the long run, as these diseconomies rise, growth slows down. The traditional view suggested that though the link between agglomeration economies and congestion diseconomies leads to differences in the level of productivity across places, the growth rate of productivity would be the same across places. This traditional view has been sharply questioned through the link between productivity growth and increased education. Within cities with strong agglomeration economies, the higher density of population and employment promotes educational externalities that sustain

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productivity growth at a rate greater than other areas. This modern view focuses on the *development of human capital* -- people's stock of knowledge and production skills. Increased education or training enables people to receive higher wages and to consume more goods and services over time. Firms are willing to pay more. Education or training leads to greater output, and the education may strengthen the worker's ability to learn while doing. Further, as individuals accumulate knowledge and experience, they also contribute to the productivity of others with whom they are in contact through "**knowledge spillovers.**" This phenomenon of knowledge spillover is especially strong in agglomeration economies where communication between individuals and firms is widespread.

In general, two types of knowledge spillovers occur in regions where there is intense communication between individuals and firms, which are deemed important for city growth. The first depends on the concentration of firms in the same or similar industry groups [*localization economies*] and the other depends on the diversity of firms in a given city and the general urban conditions [*urbanization economies*]. This paper focuses largely on localization economies. An oft-repeated example of localization economies can be found in the Silicon Valley area, where many semi-conductor firms have located their research and development facilities because firm concentration provides a nurturing environment where new products and production technologies can be developed. Edward Glaeser et al demonstrate how the semiconductor firms learn from one another because "people talk and gossip, products can be reverse engineered, and employees move between firms."¹ Urbanization economies suggest that industrial variety is more important than specialization for a city, since an exchange of ideas in more diversified settings occurs, which encourages technological innovation.

¹ Glaeser, Edward, Hedi Kallal, Jos, Scheinkman and Andrei Shleifer, "Growth in Cities," in *Journal of Political Economy*, 100 [1992], pp. 1126-1152.

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Studies have been conducted on these spillover effects, and empirical evidence has been found that suggests that a higher average level of human capital in metropolitan areas has external effects that lead to greater productivity.² There is not enough evidence however to suggest that this is a permanent phenomenon.

SECTION THREE -- CASE STUDY: METAL WORKING IN SPRINGFIELD, MA

Springfield is located in the Pioneer Valley in Western Massachusetts and is the third largest city in the state, with a population of about 157,000. Springfield had its origins as a manufacturing town -- the first US Armory was established here in 1794, specializing in manufacturing firearms and fabricated metal products. The manufacturing tradition extended to modern times.

The metalworking industry suffered a sharp decline in the early 1980s owing to a large decline in the domestic consumption of machine tools and precision machinery. The metal working industry has had strong ties with the defense industry and is feeling the pressure of budget cuts. In response to historically volatile demand, the usual firm response was to accumulate a backlog of orders -- when demand picked up again, foreign firms were able to fill these orders more quickly. The industry is under tremendous pressure from foreign competition and firms have trouble competing due to their internal cost structures. Foreign firms, especially Japanese firms captured the lead in both product

² Rauch, James, "Productivity Gains from Geographic Concentration of Human Capital: Evidence from Cities," in *Journal of Urban Economics* 34 [1993], pp. 380-400.

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and process technologies. While the industry does not lag behind foreign competitors in terms of technology today, it is certainly behind in the application of the technology.

Other manufacturing in the region have downsized, streamlined or disappeared throughout the 1980s. State and local policymakers were of the opinion that the metalworking sector was decimated, and economic revitalization required a transition away from traditional manufacturing towards service-based industries. However, in the Springfield area, there were a large and complex network of small closely-held metalworking firms, mostly subcontractors with narrow product lines, producing parts for other manufacturers in the region. Traditionally, in the US, the industry has not been characterized by significant firm concentration. According to the Commerce Department, in 1977, the four largest metal cutting machine tool establishments were responsible for 22% of industry shipments. In 1981, 15 companies accounted for about 70% of the machine tools industry shipment, while the other 30% came from the remaining SMEs in the industry. *The concentration and the networking of firms within this industry in the Springfield area was and is an inherent advantage.* With large scale layoffs in other manufacturing in the region in the 1980s, significant damage was experienced by the SMEs in the metal working industry in the Springfield area.

Machine tool and metal working sales in general have traditionally been sensitive to changes in the business cycle, with extreme cyclicity of its income, profits and cash flow.³ This sales pattern forced the industry into adopting a strategy of “buffering’ business cycles by accumulating order backlogs from boom times. In the past, this enhanced interfirm linkages, as firms in the area

³ Year-to-year swings in machine tool orders of +75% to -50% have occurred -- American Machinist, August 1982, pp. 51, National Machine Tool Builders' Association.

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subcontracted each other in order to handle increased demand. However, this pattern and the subsequent strategy prevented even large metalworking firms from having the capital investment, R&D, and overseas sales structure found in other manufacturing firms of similar size. Further, this tended to increase turnaround time between periods of increased demand, whereas foreign firms recovered much faster. This cyclical nature also had an effect on employment patterns within the industry -- even though wages tend to be higher than other manufacturing sectors, sharp fluctuations have been observed. During lean times, this increased layoffs, and reduced interfirm linkages, both in terms of subcontracting and the transfer of personnel between firms. Successive periods of lean demand eliminated many SMEs and promoted fierce competition among the remaining firms, further reducing interfirm linkages and trust across the industry. This has been responsible for fragmentation and poor long term industry management. Altogether, this has resulted in a conservative management style and the inability of the industry to attract and retain the brightest engineering, managerial and technical talent. In terms of profitability also, sharp fluctuations are observed between peak and lean times.

Managers and owners of SMEs in the Springfield area [and in the US in general] have also been criticized for taking a short-term perspective on their markets. Few companies have invested in R&D, drawing on outside sources for new technology and new product design.⁴ Capital investments have also been somewhat limited -- firms tended to stretch out orders over time and accumulate a backlog, rather than invest in increased capacity to accommodate cyclical changes in demand. Productivity also had been decreasing in the 1980s, in part because of skilled worker retention during

⁴ for instance, from the manufacturers of computers and controllers, industrial system designers and Defense contractors, rather than from internal R&D.

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periods of lean demand, and in part, because of the lower levels of R&D and capital investment, which increase productivity in technology-intensive industries. Marketing strategies have also concentrated on the short term, and on few buyers with little customer-based variation. The market has changed over the last decade, and competition is more global in nature.

In terms of technology, automation of a machine tool's function by computer numeric control [CNC] has been available to US manufacturers for over three decades. In 1982, about 36% of the machine tools purchased in the US were operated by CNC machines. Heavy international competition has promoted success among firms that have lowered their production costs, and most of these were foreign firms. Increased automation, flexible and integrated manufacturing⁵ are being increasingly emphasized. Although there is substantial evidence that the US is at least as technology advanced in metalworking as Japan in flexible and automated technology, the chief difference between the two countries lies in the application of the technology. Additionally, in the Springfield area, few investments were made in automated technology, and machines used in metalworking were relatively old, when compared with competitors, resulting in lowered productivity. Annual productivity growth [output per man hour] declined from 1973 to 1981, and has been relatively stagnant since. In 1978, 40% of US production machinery in the metalworking industry in use was over 20 years old, while the comparable figure for Japan was estimated at 18% [US Department of Commerce].

SECTION FOUR -- REVERSING THE TREND: POLICY RESPONSES IN THE SPRINGFIELD REGION

⁵ integrated manufacturing -- traditional machine tools are used as parts of larger manufacturing systems incorporating the products of non-machine tool manufacturers, such as computers.

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The situation is more optimistic today and the area has a “thriving and competitive agglomeration of over 350 small metalworking firms, many of which are at the forefront of technological and organizational innovation.”⁶ Flynn and Farrant claim that an important part of the explanation lies in a series of *social* and *political* interventions over the last ten years that altered the downward trends faced by the metalworking industry in the Springfield area. The process was catalyzed by the Machine Action Project and the work is being continued today by a local chapter of the National Tooling and Machine Association. Essentially, the programs accelerated *interfirm learning* among firms that created an awareness of common problems faced by the industry, which could be addressed through “*group strategies*.” The program also resulted in an enduring *public-private partnership* that could tailor economic development programs to suit industry needs, and more broadly, the needs of the Springfield region.

The authors argue that the program represents a successful case of the “**bootstrapping**” approach in which new social and industrial structures, organizations and services emerge through a *dynamic process of engagement and mutual adjustment*. In other words, even though the perspective of a small metalworking firm is decidedly partisan, the learning inspired by the bootstrap approach altered the firms’ outlook. Firms negotiate amongst themselves and with public institutions, and adopt programs, policies and strategies, both on the individual and group levels to their mutual benefit. The programs used industry-based research to define pervading industry problems, and emphasized strategies formulated through industry participation. The program also reinforced the need for a

⁶ Farrant, Robert and Erin Flynn, *Seizing Agglomeration’s Potential: The Greater Springfield Massachusetts Metalworking Sector in Transition, 1986-1996*, forthcoming *Regional Studies*, 1997.

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“genuine” public-private partnership and for *flexible* state funding. Unlike most other manufacturing modernization and industrial extension programs throughout the country, which typically work with short-term goals involving technical or organizational problems at the individual firm level, the Machine Action Project demonstrates that “a collective approach of working with and not for industry provides the greatest potential for maintaining and expanding competitive small firms in an economy characterized by constant change.” Working at the individual firm level does provide quantifiable benefits, but does little to promote industrial learning; strengthening linkages between and among firms stimulates innovation both at the technological as well as organizational level. On the other hand, solving common industry problems, such as the dearth of skilled employees, the need for new products or processes, etc. would help in the construction of “social” or “human” capital that is necessary for changing the dynamics of industrial structure in a regional economy.

The original intent of the MAP was to ease the transition away from metalworking in the Springfield region toward modern service-based industries. However, the initial data revealed the existence of a *concentration* of numerous small metalworking firms in a complex *network* within the Springfield region. Rather than retrench the extant labor of the industry, the MAP decided to nurture the remaining metalworking firms that provided machine parts and tools for the machine tool, aerospace, defense and electronics industries. Transitioning workers in the metalworking industry to other service industries would consume time and resources -- instead, regional economic development could be promoted by tapping the localization economies already embodied in the concentration of metalworking firms within the region. In order to “seize agglomeration’s potential,” specific tasks were accomplished.

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A project board of directors was created, consisting of firm owners, local public officials, local banking representatives and members of the educational, academic and press communities. *Research* was conducted on an industry-wide basis, and revealed that more than 30% of private sector employment in many cities in the region was in metalworking, and more importantly, firms *interacted* in a coherent manner. The research also revealed that workers in small firms had more breadth and depth of skill than others in large firms who were more frequently laid off. Further, the research revealed that there was *a shortage of skilled labor* in the region! The board then employed appropriate training and retention strategies, apprenticeship programs and improved the existing curricula in technical schools and colleges in the region to correct the imbalance in supply of skilled metal workers.

Research also revealed that utilization of high technology was *not effective* because of the short supply of repair personnel and trained computer programmers. In response, the MAP established a *training consortium* of local industry, educational and quasi-public institutions to design a curriculum for the installation and repair of computer-controlled machinery. Other *partnerships* were established with Resource Centers and educational institutions to train programmers and provide technical assistance for the effective utilization of high-tech machinery.

Defense cutbacks were also eroding once dependable markets, because subcontracting from prime contractors was reducing in both size and number. *Workshops* and *seminars* were held to improve

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marketing of products, and to widen product lines for firms without resorting to large capital investments.

The MAP strategy evolved from thorough research of the local industrial base, and of *the problems faced by the industry interpreted by both experts and firm owners*. The research was not purely academic, and was *oriented strongly towards action*, by which several areas of potential employment growth [especially in SMEs] were identified within the mature industry.⁷ Further, by acting as a catalyst between local industry, state agencies and academic institutions, the MAP was able to construct specific programs to increase the supply of skilled labor within the region, that were sensitive and responsive to industry needs.

The work initiated by the MAP was extended by the local chapter of the National Machine Tools Association [henceforth NMTA] to improve both technical and organizational skills, focusing on the need for a “continuous and coordinated upgrading of skills to allow employers to utilize existing technology to remain competitive.” *Interfirm learning, managerial skills upgrading and shop modernization projects* were strongly emphasized. In addition, *apprentice programs* combining academic and professional learning and *intensive intermediate and advanced machining courses* were set up to increase the skilled labor pool. The NMTA strategy was founded on the notion that public spending would be more effective if the content and delivery of programs were *designed by industry*, and extended the broker role formerly played by the MAP. Their programs were also

⁷ Fitzgerald, J. and A. McGregor, “Labor Community Initiatives in Worker Training in the United States and the United Kingdom,” in *Economic Development Quarterly* 7 [1993] pp. 172-182.

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designed based on dynamic industry-based and action-oriented research, utilizing the combined resources of the *public-private* partnerships in the region.

Specifically, management seminars were held to teach employees, managers and owners about quality assurance and management techniques increasingly demanded by customers. Owners and managers were invited to *share* their efforts in improving shop operations and management techniques. While acknowledging the fact that fierce competition exists in declining industries, the profusion of firms in the region, the relatively long ownership reigns on firms, the existing networking connections between firms and the previous work done by the MAP helped in bringing the firms together. These meetings provided an opportunity for owners to speak openly about individual and industry problems, and to improve their operational skills. The apprenticeship program students rotate through several shops over a four year period learning all aspects of the metalworking industry, thereby improving the potential for innovation through the employment, exchange, and transfer of apprentices/employees. At the individual firm level, the NMTA aided in facilitating concrete changes in technology, layout, organization and management, including partial funding. The research-based activities also allowed both the MAP and the NMTA to experiment with *flexible funding*. The organizations were also strongly backed both by industry and local government, and hence demonstrated success in continuous improvement both at the firm level and at the program administration level.

SECTION FIVE -- LESSONS FROM THE CASE STUDY

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The case clearly demonstrates the potential for planned public policy intervention. The role of public policy will be elaborated in the conclusion. However, there are certain general characteristics faced by firms in mature or declining industries such as metalworking, which must be identified before any sort of intervention can be planned.

As was seen from the description of the metalworking firms in the Springfield area, mature industry markets are characterized by *slowing demand*, generating head-to-head competition for market share. Customers tend to become more discerning, and drive harder bargains on repeat purchases. Greater emphasis needs to be placed on costs and service, but firms have a problem of “topping out” in increasing production capacity. *Capital investment thus tends to be lower*. Product innovation and new end-use applications are often harder to come by. Other related industries slow down too, and firms with few large customers face severe problems. Machinery and technology used tends to be *dated*, and *average productivity remains stagnant* or actually declines, while *international competition increases*. Profitability in general is reduced. The slower rate of market growth causes competitive pressures to intensify, causing elimination of weaker competitors. With stagnant productivity and lowered profit potential, skilled labor begins to migrate out of the industry, creating a shortfall. *Technological advances occur exogenously*, causing entry of new types of firms, new forms of demand by end-users and changes to the traditional industry form and structure. Additionally, newer firms outside the region and in foreign locations are quicker to invest in and adopt the new technology or management practices, and therefore lower their production costs relative to the firms of the mature industry within the region. In effect, *firms in the mature industry are not as responsive to changes in technology, particularly in application*. Further, since they are

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steadily forced into a position of disadvantage, they hesitate to invest in capital needs or in R&D, which determines the exogenous origin of new technology. The slowing demand, stagnant productivity and lowered profits generates intense competition, and reduces the overall level of trust, cooperation and linkages between firms and consequently, product innovation is harder to achieve. In order to compete strongly, firms have to quickly adapt to new and changing markets, technologies and management techniques. Individual firms may have to prune their product lines, and emphasize cost reduction techniques. They may have to strongly pursue process innovation and different marketing styles to increase sales. Finally, they may also have to purchase weaker firms at bargain prices to accommodate fluctuating demand and/or expand internationally. Most weaker firms are eliminated because of over-reliance on few large customers, or emphasis on the short-term rather than long-term competitive positions and failing to aggressively pursue cost reductions. Stronger firms are those that respond to the technological or market stimulus, exploit growth segments or “niches” within the industry and pursue product differentiation strategies.

The metalworking industry in the Springfield area had an inherent advantage owing to the concentrated network of firms. Rather than transitioning the industry out of the Springfield area, public policy analysts determined that the potential of using the existing agglomeration economies would be more fruitful. Note that most studies conclude that concentration of similar firms in a region is neither a necessary nor sufficient condition for successful collaboration or innovation. However, *the probability of innovation and diffusion of knowledge is much higher in areas with known agglomeration economies*. Innovative milieus tend to locate in or near highly urbanized areas, and concentrated networks of similar firms can potentially contribute strongly to enhancing

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innovation. While this is a general observation, agglomeration economies work differently in mature industries. In mature and declining industries, firms engage in intense competition marked by fierce privacy, and it is difficult to foster cooperation or linkages between and among firms in such environments. Low profitability, reduced supply of skilled labor and stagnant productivity reduce investment in technology and R&D. Therefore, without a catalyst, technology is neither born nor diffused!

SECTION SIX -- CONCLUSION: THE ROLE FOR PUBLIC POLICY

The role of public policy is almost self-evident here and from the case. The problems of the metalworking sector and indeed of most mature industries are best addressed by an industry-wide effort. Public policy should be based on a thorough *action-oriented research* of the industrial base, highlighting present problems and future trends. *Research should originate in the industrial sector* or be conducted *at least in partnership with the industry*. Industry-based research could then be used to tailor programs for local needs. The benefits of all existing advantages in the region including those of agglomeration should be analyzed in order to determine the potential for transforming the industry and/or fostering growth in niche areas within the industry.

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Policy should also be aimed at fostering the *development of local cooperative networks among firms, users and suppliers in the region*. In fact, this is crucial, because these networks can provide a package of services beyond the capacity of most SMEs. *Creating these networks in areas with high concentrations of SMEs would probably be easier than in areas where such localization economies do not exist*. These networks could prove invaluable in the diffusion of technologies and in the transfer of innovative techniques across firms to their mutual benefit.

Since mature industry firms are also characterized by reduced supply of skilled labor, policy efforts must be directed at redressing labor problems. Investments and programs for the training and education of skilled labor including the potential to operate, maintain and innovate new machinery/technology. Apprenticeship programs such as the one in Springfield have clear benefits in that they provide skilled labor and foster innovative potential through the exchange of employees across firms.

Mature and declining industry firms are usually not in a position to invest in new technology or in R&D. This causes stagnation in productivity and losses in market share as customers are captured by other firms with better technology outside the region. Public funding can be used effectively here by *increasing investment in applied research and transferable industry skills and towards improving production and management processes*. Concentrated networks of SMEs lend themselves easier to the effective use of public funds, especially if technological needs are defined in partnership with the industry. Such a concentrated network of firms could collectively invest [in partnership with the state or local government] in technological infrastructure, that they could share to their mutual benefit. In

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addition to the direct benefits, this would promote interfirm learning, cooperation and trust, leading to greater potential for innovation and diffusion. Effectively, technology flows can shape the traditional mature industry, which must then be in a position to transform itself into a more dynamic, technologically receptive and integrated industry. Experiences in other countries such as Japan and Germany suggest that technologically innovative SMEs can competently compete with larger firms if given reasonable access to R&D, funds and credit.

Finally, firms in mature industries usually do not have the time nor resources to investigate other domestic and international markets. Macro-oriented research in technology and marketing in the industry would identify weaknesses in production chains and new potential customer bases. In combination with streamlined export licensing, the global presence of these industries could be ensured.

In summary, successful tapping of the potential of localization economies in mature industries is not the result of a single program. It arises out of a dynamic and disciplined process between firms, industry associations, educational and research institutions and public agencies, characterized by research, sharing of knowledge, experimentation, negotiation, mutual partisan adjustment and reflection. Public policy programs can effectively serve in broker roles to catalyze the process, and ultimately lead to industry-driven initiatives and programs administered by and for the member firms. In other words, tapping the potential of localization economies in mature industries requires the development of social capital in order to develop a coordinated program capable of transforming the stagnant industry into a technologically more dynamic, innovative and competitive industry. The

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development of social capital often requires a jump start that partnerships between industry, financial and research institutions and local government can provide.

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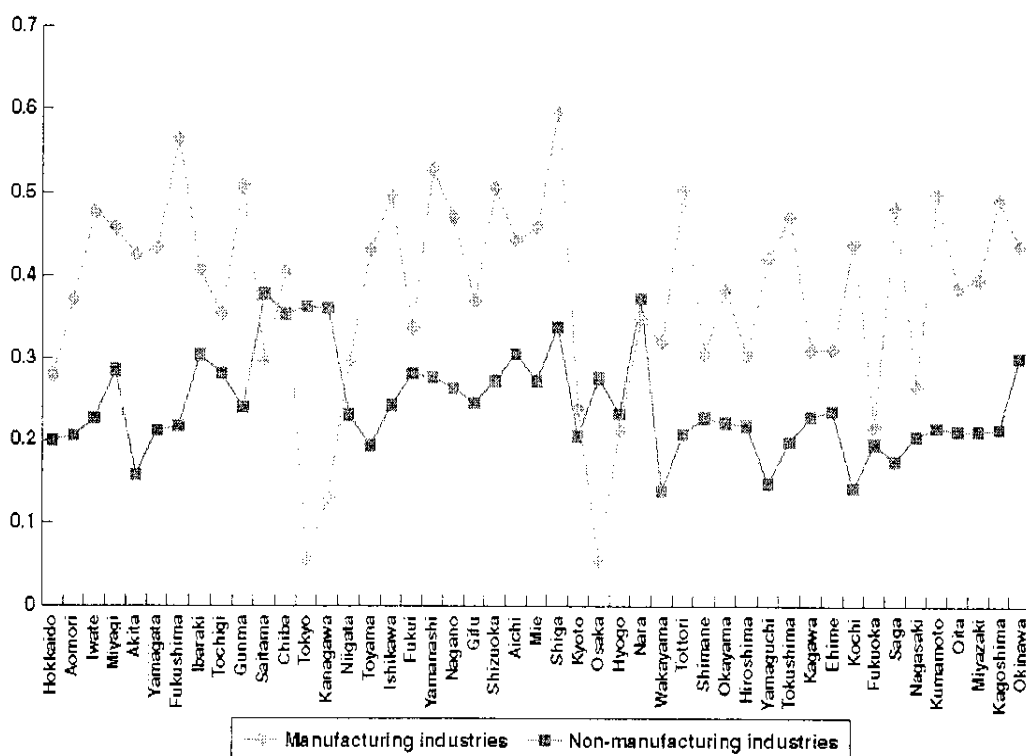
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Growth contribution of localization economies [%: 1980-2001]

The Empirical Research of Industrial Agglomeration Effects on the Regional Economic Growth

— The analysis of manufacturing industries and non-manufacturing industries in the 47 prefectures for 1980-2001 —

1. Changes in Regional Economies and the Solitary Journey of the Capital Region
2. Effects and Impact of Industrial Agglomeration on Economic Growth
3. How to Compete with the Capital Region?

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Changes in Regional Economies and the Solitary Journey of the Capital Region

From the post-war period of high economic growth until the beginning of the 1980s Japan aimed for economic growth and reduction of regional disparities based on the "Comprehensive National Development Plan" which advocates "balanced development of the nation". However, as globalization of economic activity and the "hollowing out" of industry have progressed since the latter half of the 1980s, the industrial competitive advantage of regions can potentially create the economic disparities between large metropolitan areas, such as the capital region, and other local regions.

In recent years, increasing attention has been paid to industrial agglomerations as a stimulus to regional economic activity, and each region is making efforts to promote industrial agglomeration based on programs such as the "Industrial Cluster Project" of the Ministry of Economy, Trade and Industry and the "Knowledge Cluster Initiative" of the Ministry of Education, Culture, Sports, Science and Technology. However, the effects of industrial agglomeration on regional economic growth have not yet been fully clarified. The Central Research Institute of Electric Power Industry, utilizing the CRIEPI Regional Economic Database, verified the effects of industrial agglomeration on manufacturing and non-manufacturing industries in Japanese prefectures for 1980-2001.

Hollowing-out of the manufacturing industries

In Japan, the exodus of factories abroad has progressed, and the hollowing-out of domestic manufacturing has proceeded. The number of establishments and shipments of manufactured goods have decreased since the late 1980's (see Fig. 1). Accordingly, foreign direct investment and the ratio of overseas production have increased in the manufacturing industries, and the hollowing-out of domestic manufacturing, which was the core of regional economies, advanced during the 1980's and the 1990's (see Fig. 2).

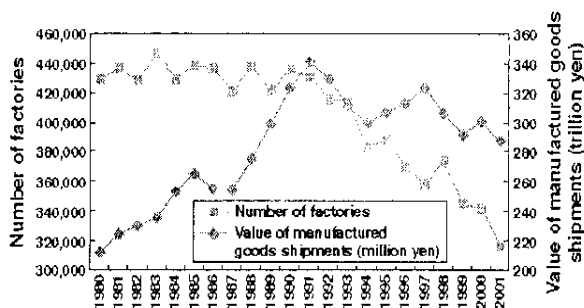


Fig. 1 Changes in the number of factories and value of manufactured goods shipments

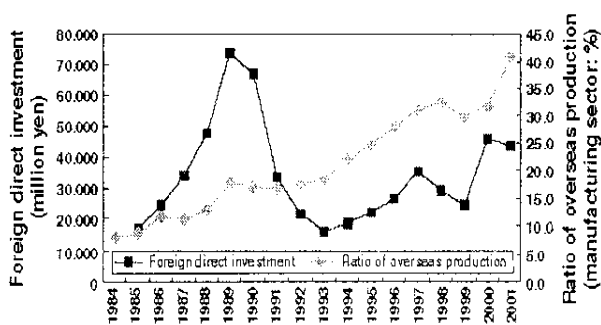


Fig. 2 Changes in overseas production and overseas investment

Economic activity concentrated in the capital region

The employment share of the service sector, which is included in non-manufacturing industries, has increased (see Fig. 3). The concentration of economic activity in the capital region is particularly significant. The capital region has nearly 30% of the total population vs. 10% of the total habitable area. The production share in this region also exceeds 30% (see Table). Total revenues in the service sector have the increasing returns to the population (Reference: CRIEPI "An empirical analysis of the regional productivity disparities in the service industry"). Therefore, it is necessary that local regions improve productivity to achieve economic growth.

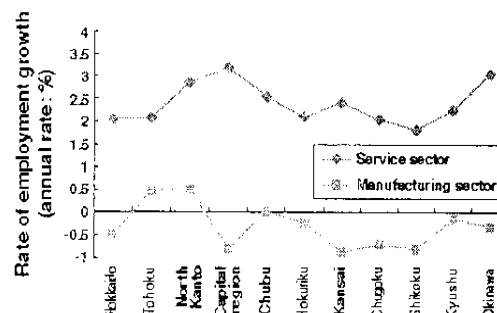


Fig. 3 Service sector which has grown nationwide vs. slumping manufacturing sector

Table. Economic activity concentrated in the capital region (2001)

| | Population (% of total) | Habitable area (% of total) | Value of production (% of total) |
|----------------|-------------------------|-----------------------------|----------------------------------|
| Hokkaido | 4.5 | 18.0 | 4.1 |
| Tohoku | 9.8 | 20.4 | 8.6 |
| North Kanto | 6.3 | 8.4 | 6.0 |
| Capital region | 26.2 | 7.3 | 30.7 |
| Chubu | 13.4 | 10.9 | 14.5 |
| Hokuriku | 2.5 | 3.5 | 2.5 |
| Kansai | 16.3 | 7.0 | 16.0 |
| Chugoku | 6.1 | 6.9 | 5.8 |
| Shikoku | 3.3 | 4.0 | 2.7 |
| Kyushu | 10.7 | 12.6 | 8.6 |
| Okinawa | 1.1 | 1.0 | 0.7 |

How to Compete with the Capital Region?

Creating and promoting competitive industries

Due to the decrease in population—which will accelerate in the future—it is difficult for the Japanese economy to achieve long term sustainable growth. Moreover, the inflow of population to the capital region, which decreased in the mid 1990s, is showing signs of accelerating again (see Fig. 7). Once the location choice of the service sector (non-manufacturing industries) increases in favor of the capital region, that concentration can potentially expand regional disparities by localization economies.

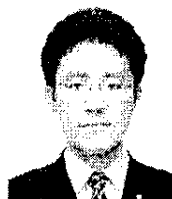
Local regions cannot compete with the Capital region in economic scale. In order to promote economic growth, it is important to create new products and services through product innovation and to enhance industrial competitiveness. Collaborations with industries and universities are expected to strengthen the agglomeration effects in local regions.

Inter-regional networks with foreign countries have become more important

It is also important that local regions form networks with production sites in other countries. For instance, it may be advantageous for the Kyushu region to strengthen linkages with not only other regions within Japan but also other Asian countries in its geographic proximity. It is necessary to investigate the effects of networks on regional economic growth.

Furthermore, the previous research clarifies that industrial agglomerations play a role as incubators of new businesses (reference: CRIEPI “Determinants of regional disparities in starting-up firms in Japan cross-section data evidence”). In order to achieve regional economic growth, it is essential that local governments continue to promote the formation of local clusters in the long term.

Brief Note



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Due to the decrease in population, it is difficult for the national economy to achieve long term sustainable growth. In addition, regional disparities are likely to expand based on differences in industrial competitiveness. In order to realize the sustainable growth of regional economies, productivity of the overall economy needs to be improved by promoting the formation of industrial agglomerations. I have clarified the changes in regional economic structure based on an economic theory, and I aim to provide some policy implications that can contribute the development of regional economies.

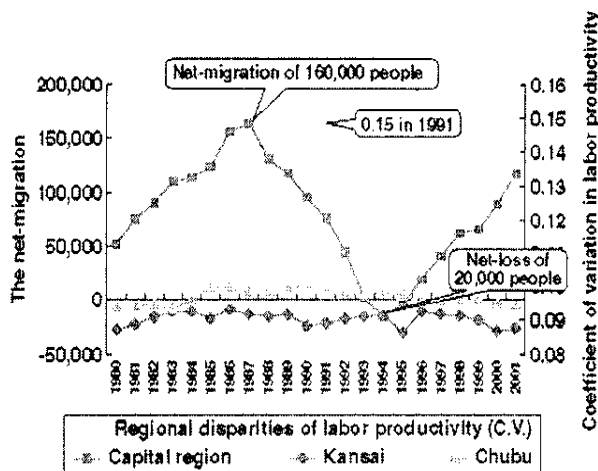


Fig.7 Report on Internal Migration in Japan



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Goods-producing

Natural resources and mining

NAICS 1133--Logging

Sector 21--Mining

Construction

Sector 23--Construction

Manufacturing

Sectors 31, 32, 33--Manufacturing

Durable goods (NAICS 321, 327, 331, 332, 333, 334, 335, 336, 337, 339)

Nondurable goods (NAICS 311, 312, 313, 314, 315, 316, 322, 323, 324, 325, 326)

Service-providing

Trade, transportation, and utilities

Sector 42--Wholesale trade

Sectors 44, 45--Retail trade

Sectors 48, 49--Transportation and warehousing

Sector 22--Utilities

Information

Sector 51--Information

Financial activities

Sector 52--Finance and insurance

Sector 53--Real estate and rental and leasing

Professional and business services

Sector 54--Professional, scientific, and technical services

Sector 55--Management of companies and enterprises

Sector 56--Administrative and waste services

Education and health services

Sector 61--Educational services

Sector 62--Health care and social assistance

Leisure and hospitality

Sector 71--Arts, entertainment, and recreation

Sector 72--Accommodations and food services

Other services

Sector 81--Other services


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Local

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What Drives Profits ? An inquiry into the profit paradox

by

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The 2005 Eastern Economic Association Conference,
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ABSTRACT

This paper investigates the relationship between the different types of income and their uses in the case of the United States, from 1954 to 2004. The methodology employed is that of an unrestricted error-correction model which is widely viewed as an advanced, non-partisan, econometric technique. The introduction of the paper stresses the importance of studying profits in a large-scale model, where a lot of variables underlie complex economic relationships. The first part of the paper presents the a-theoretical framework of error-correction models and describes the main properties of the estimated system. Our study focuses on the place and determinants of corporate profits and provides an illustration of Parguez[2002]'s "Profit Paradox". Doing so, we introduce different concepts of causality and provide a dynamic causal chain that drives profits, both in the short run and the long run. This causal chain is treated both qualitatively (which variable precedes profits) and quantitatively (weight of the impact of a change in the profits' predictors). Part two provides a more theoretical approach to our results. We, in particular, show the coherence of our individual results and provide a restatement of such findings through the behavior of profits since the eighties. Our main findings are :

- (1) Profits cannot be said autonomous, i.e. profits are very much more 'caused' (or determined) variables than 'causing' (or determining) variables.
- (2) *In the short run*, profits do always depend upon *demand variables*, especially upon consumption, indebtedness and government spending ;
- (3) *In the longer run*, profits are again found to be dependent variables, but the factors determining profits behavior are more *income-variables*, especially rents.
- (4) 'Discipline' policies are doomed to fail until the desirable goal of balancing the budget is understood as a *means rather than a natural outcome* of a demand-driven growth.

INTRODUCTION

The motivation of the present paper is an attempt to inquire a possible explanation of the rather ubiquitous support of the business community in favor of ‘discipline’ macroeconomic policies. ‘Discipline policies’ are the fashionable economic doctrine of economic policy ever since the seventies and early eighties in the United States. Such policies postulate that the State, by a perfectly coherent use of fiscal and monetary policies, should impose an adjustment of the economy towards a ‘natural’ growth path fitting all requirements of neoclassical economics (perfect neutrality of demand and money, ergodicity, perfectly flexible labor markets, etc...). Such an adjustment is being operated

- through a balanced budget target (a surplus being the desirable in the long run), achieved by a restrictive fiscal policy leading to a squeeze of the State’s outlays, and
- through monetary policy, which targets zero inflation through the restriction of indebtedness.

Such a disciplinary package should generate the required growth of profits that sustains the growth of investment, which in turn increases the competitiveness of the domestic economy in the world market. Such discipline also constrains consumption, by permanently favoring thriftiness-led saving reflected into increased profits (whatever the mechanism). Herein lies the official explanation of the endorsement of this agenda by some non-neoclassical economists, especially those of strong neo-marxist pedigree.

Is this rather widespread adherence to disciplinary equilibrium ‘for the sake of equilibrium’ rooted into objective characteristics of modern capitalism ? Or is it a purely ideological vision contradicting the very facts ? Those questions are at the core of what has been deemed the profit paradox. It requires to address two related questions :

- (1) what are the objective determinants of profits, and which are most important ?
- (2) assuming profits are demand-led, would a policy-implied growth of aggregate demand engineer a fall in the share of profits below some required level ? Equivalently, are expansionist policies evil because they restrain profits ?

The rest of the paper addresses those two major issues and is organized as follows. Part one presents the econometric framework which is, to the contrary of many papers, not based upon an *a priori* model embodying any specific theory. Our approach makes use of empirical data modeled in an error-correction framework which is widely viewed as a non-partisan econometric/statistical technique. We in turn discuss the choice of variables that ought to be included in the model and check the properties of the data (I.2), briefly present the econometric technique and properties before proceeding to the estimation (I.3), and finally discuss the various concepts of causality among variables and the weight of the causal chain (I.4). The second part of the paper sums up our findings and provides an illustration of their relevance to the recent (80s onwards) American experience.

- PART ONE -
Modeling the evolution of profits

1. THE EVOLUTION OF PROFITS AND CHARACTERIZATION OF RELATED VARIABLES

A good starting point for stating the profit paradox is first to look at the data. National accounts distinguish eight different income categories in Table 1.12 of the NIPAs, which are given below with magnitudes as of 2004Q3 in billions of current Dollars. Appendix 1 presents the comprehensive (yet simply put) definitions of those aggregates used in the NIPAs.

employee compensation (W, \$6,657),
proprietors' income (PI, \$903),
rental income (R, \$153),
corporate income (Π, \$1,118),
net interest (NI, \$546),
taxes on production and imports (less subsidies) (T_{YMS}, \$805),
business current transfer payments (BTr, \$76) and
surplus of government enterprises (\$6).

Total : National income (\$10,264)

A category of income deserving particular attention is that of the proprietor's income. It consists of all income originating from unincorporated sole proprietorships and partnerships businesses. It is the historical third biggest income category of the American economy, ranging between 6% and 13% of national income, only slightly lower than corporate profits. The main problem is that this proprietor's income, as commonly known, itself consists of the other categories of income and that there is no clear way to separate out the various components. As a rough practical rule, we follow Johnson[1958]'s idea and treat one third of proprietors' income as profits, and two thirds as compensation.

As a good starting point, we derive the functional distribution of income of the United States, from 1954 to 2004. We distinguish the three usual shares of income : the share of wages, the share of profits and the share of rents. Those shares are computed as share in the national income (thus leaving the consumption of fixed capital aside) which is here taken net of taxes on production and imports, net of business transfer payments and net of the balance of government enterprises. Every type of income should be understood as before tax. For practical purposes, we aggregate rental income and net interest in one generic category of 'rents'. We thus end up with three shares of income, adding up to 100% :

$$\text{Share of Wages} = (\text{compensation of employees} + 2/3 \text{ of proprietors' income}) / (\text{net national income})$$

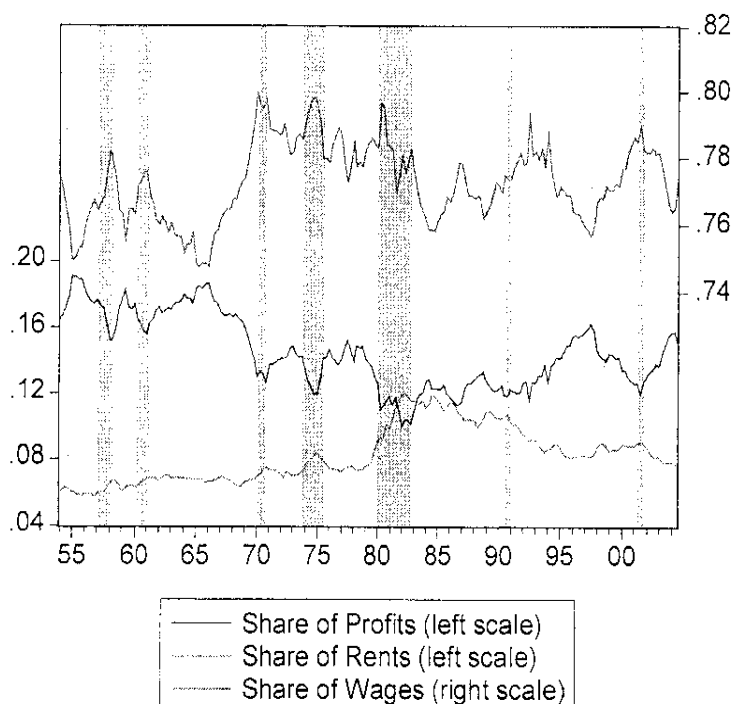
$$\text{Share of Profits} = (\text{corporate profits} + 1/3 \text{ of proprietor's income}) / (\text{net national income})$$

$$\text{Share of Rents} = (\text{rents} + \text{net interest}) / (\text{net national income})$$

Graph 1 plots those three shares of income from 1954 to 2004. Dark-grey areas indicate recessions, while light-grey areas indicate below-average unemployment rate (below 5.5% to 6%). One of the main conclusions drawn from graph 1 is that the functional share, such defined, are very volatile. The share of wages soared from 74.7% in 1966 to 80.0% in 1970 (a 7% increase), the profit share fell from 18.6% in 1966 to 10.0 in 1982 (a 45% drop), and the rental share jumped from 7.3% in late 1978 to 10.0% in late 1980 (a 37% jump). When

unemployment is low and during recessions, the wage share increases and the profit share decreases, so both shares tend to exhibit opposite movements, at least in the short run. Yet the picture is not complete without rental income, which tends to be unrelated to the state of labor market, but which seemingly increases during recessions. Another interesting feature about the rent share is its stable, continuing slow growth from 1954 to 1979, its huge increase under the Volcker monetarist experiment, and its slow decrease from 1982 to 1996 (yet rents are still higher today than in 1978). Finally, there seems to be a break in the evolution of the functional shares in 2001, but it is too early to infer about whether it will persist or not.

Graph 1 – Shares of wages, profits and rents
(shares of before tax incomes in net national product)



Notes : light-grey areas indicate below-average unemployment rate, and dark-grey areas indicate recessions.
 Data from Table 1.12 of the 2004 revision of the National Income and Product Accounts (NIPAs).

Concentrating upon profits, the share of that type of income has broadly followed three distinct phases : stability until 1966, decrease from 1966 until 1983, and increase thereafter. Since those phases last for about 10, 15 and 20 years, there seems to be *persistence* in the profit share movements beyond the above-mentioned short-run volatility. This finding casts doubts about the global stability of the functional income distribution of the United States. More than this, it pushes the curious economic researcher to address the question of what drives profits.

1.1 THE CHOICE OF THE VARIABLES

In order to answer this question, the first step is to decide of a framework. Profits are indeed one variable among a lot of other macroeconomic aggregates, and it is vital step to choose a global framework in which profits evolve. We assume that an accurate picture of profits can be seen through the textbook double identity

$$\sum all \text{ incomes} \equiv Y \equiv C + I + G + X - M \quad [1]$$

where Y stands for GDP or national income, and C , I , G , X and M referring to private consumption and investment, public expenditures, exports and imports. The left hand side of that double identity refers to the income-decomposition of the national income, whereas the right hand side refers to the demand-decomposition of the same aggregate. This double identity is therefore the one linking the different types of income to the various kinds of demands in the economy as a whole. What is at the core of the Profit Paradox is the study of the place and role of profits in such a framework, and the relationships between variables. The interesting feature of such a departing point is that profits appear as one component of a very large system relating income and spending.

Now equation [1] is not very deep unless measured, both quantitatively and qualitatively. In the real world of national accounting, the variables on the right hand side of [1] do not bring any measurement problems¹, and we already mentioned the eight left hand side variables. Yet the NIPAs provide two additional variables that enter the picture of those identities, which are here to link the right hand side to the left hand side : *consumption of fixed capital (private and public, CFC, \$1.497)*, and *net income receipts from the rest of the world (IncRoW, \$+38)*. We thus end up with equation [2], which consists –of the respectable number- of fourteen variables :

$$W + PI + R + \Pi + NI + T_{vms} + BTr \equiv C + I + G + X - M - CFC - IncRoW \quad [2]$$

where the *surplus of government enterprises* has been merged with the taxes on production and imports. Equation [2] features a lot of variables and is thus a picture of the economy's real complexity –and interrelatedness. In the rest of the paper we will take equation [2], an accounting identity, as representative of a real-world economic system which, among other variables, features profits upon which we will concentrate.

1.2 DATA SOURCES AND PROPERTIES

The data used here is that provided by the National and Income Product Accounts (NIPAs) as published by the Bureau of Economic Analysis, Department of Commerce. The dataset consists of 203 quarterly observations per variable and ranges from 1954:1 to 2004:4². The data is in nominal terms since this is the only unit of measurement provided in the national accounts for measuring the various types of income.

¹ National income or GDP are easily found in the NIPAs according to different measures, whether it be in real or nominal or index form, see especially Tables 1.5.5 and 1.12 of the NIPAs. A problem arises regarding the nature of *identity* of [1], since the data provided by the NIPAs on the different types of income do not sum up to the sum of the right hand side variables. This is probably to be explained by the fact that the income source of data are the tax declarations and are not known to be accurately reported. The magnitude of the discrepancy between the two decompositions of GDP varies quite a lot, *between -100 to +100 billions of current Dollars each quarter*, which is a surprising figure since the BEA already includes adjustments to counterbalance this problem. Yet while worth noting, this discrepancy is almost nothing in an eleven trillion Dollar economy and we will leave this question aside.

² All variables are available on a quarterly basis from the NIPAs since 1947:1. Yet the beginning of the sample is characterized by specific economic conditions, namely the Treasury-Fed Accord, the price control experience and the Korean war. Those events surely affected prices, interest rates and money in general. Since those variables are not explicitly present in the model (they are underlying forces behind the dynamics of the fourteen variables, nonetheless), it would be a bad choice to begin estimation during that early specific time. We thus start our analysis during more stable times, after 1954.

Before presenting the econometric tool utilized here, some important preliminary remarks need to be made regarding the properties of the data. First all fourteen variables are linearized by logarithmic transformation because linearity is very desirable property in an estimation procedure that will approximate economic relationships by linear relationships.

Second, the order of integration of each and every individual variable has important implications for the theoretical economist and the applied economist. For the purpose of the present study, only two orders of integrations are useful to recall :

- a series integrated of order zero or $I(0)$ is termed a stationary variable. This property is equivalent of saying that the variable roughly follows a cyclical path through time around a (fixed) deterministic component, that is the series oscillates around a linear trend, a non-zero constant, or zero. Should a variable feature this property, one can *accurately* forecast its future value to always be around the deterministic component.
- A series integrated of order one or $I(1)$ is non-stationary because it does not revert around any fixed deterministic component. In that case present and past behaviors of a series are dominated by stochastic fluctuations or random shocks, which make future values difficult or even impossible to forecast because the variance of the forecast error increases with the time of the forecast. Please note that $I(1)$ variables become $I(0)$ variables once differenced ; in other words the levels of a series are non-stationary but its growth rate is reasonably constant over time. Indeed Nelson & Plosser[1982] find that most macroeconomic aggregates fall into the $I(1)$ category.

The classic way to infer the order of integration is testing for unit root(s). Results presented in Table 1 indicate that none of the series are stationary, except for corporate profits when a time trend is included. Please note that stationarity around a trend is only slightly rejected for all series. No series evolves around a mean or a (fixed, predetermined) trend, except for corporate profits that significantly reverts around such a trend. This implies that, except for profits, shocks or deviations from a path may persist through time, thus creating a new path.

We are left with series that mimic a non-ergodic world, where forecasting can be made but will be more or less wrong because shocks accumulate in an non-orderly way. Profits on the other hand, are found to revert around a trend, thus future profits can be forecasted to be significantly in the range of the future value of the trend, more or less some cyclical adjustment. In this framework, time does not influence profits because we reasonably know what future profits will be. For all other variables, time creates uncertainty so that future values of the variables cannot reasonably be accurately forecast from past values.

On the other hand, once the series are differenced, unit root test results of Table 1 indicate that all series become stationary to a high level of significance. Thus all variables in logs are non-stationary in levels (except for profits around a trend), but their growth rates stationary or $I(1)$, and the origin of this non-stationarity in levels comes from a more or less significant trend.

Table 1 – Unit root tests on series in logs and differenced logs, 1954:1-2004:3

| Variable and determ. Comp. | ADF test (1) | | DFGLS test (2) | | KPSS test (3) | |
|----------------------------|--------------|---------|----------------|---------------------|---------------|----------|
| | log | | log | | log | |
| <i>W</i> | T+C | 0.99*** | -0.70 | -4.11*** | 0.305 | 0.357 |
| | C | 0.62 | 0.71 | -3.98*** | 1.794 | 0.456** |
| <i>PI</i> | T+C | 0.24 | -1.23 | -12.38*** | 0.275 | 0.076*** |
| | C | 0.99 | 4.88 | -9.63*** | 0.793 | 0.215*** |
| <i>R</i> | T+C | 0.74 | -1.44 | -13.80*** | 0.359 | 0.075*** |
| | C | 0.96 | 1.99 | -14.54*** | 1.620 | 0.165*** |
| <i>Π</i> | T+C | 0.02** | -3.42** | -3.33** | 0.115** | 0.021*** |
| | C | 0.88 | 3.26 | -4.01*** | 1.794 | 0.021*** |
| <i>NI</i> | T+C | 0.99 | 0.09 | -7.51*** | 0.389 | 0.190** |
| | C | 0.07* | 1.13 | -5.72*** | 1.728 | 0.906 |
| <i>T_{IMS}</i> | T+C | 0.97 | -1.00 | -5.83*** | 0.288 | 0.252 |
| | C | 0.73 | 0.82 | -0.214 ^a | 1.799 | 0.349** |
| <i>BTr</i> | T+C | 0.55 | -2.28 | -5.48*** | 0.210** | 0.057*** |
| | C | 0.68 | 1.86 | -4.85*** | 1.786 | 0.146*** |
| <i>CFC</i> | T+C | 0.80 | -1.61 | -2.02** | 0.250 | 0.270 |
| | C | 0.86 | 0.89 | -2.91*** | 1.790 | 0.291** |
| <i>IncRoW</i> | T+C | 0.83 | -1.25 | -7.98*** | 0.338 | 0.034*** |
| | C | 0.53 | 1.14 | -4.37*** | 1.610 | 0.135*** |
| <i>C</i> | T+C | 0.74 | -1.96 | -3.72*** | 0.250 | 0.416 |
| | C | 0.80 | -0.50 | -1.45 | 1.798 | 0.440** |
| <i>I</i> | T+C | 0.41 | -2.39 | -8.21*** | 0.262 | 0.042*** |
| | C | 0.80 | 2.71 | -0.54 | 1.785 | 0.072*** |
| <i>G</i> | T+C | 0.86 | -1.33 | -4.09*** | 0.302 | 0.264 |
| | C | 0.87 | 1.40 | -3.23*** | 1.792 | 0.281*** |
| <i>X</i> | T+C | 0.80 | -1.79 | -5.94*** | 0.251 | 0.092*** |
| | C | 0.71 | 2.18 | -5.55*** | 1.784 | 0.180*** |
| <i>M</i> | T+C | 0.91 | -1.13 | -3.58*** | 0.265 | 0.178** |
| | C | 0.91 | 4.29 | -3.53*** | 1.785 | 0.189*** |

(1) ADF test has been run with Hannan-Quinn information criterion to select the lag length. The value reported is the significance level of the AR(1) t-statistic (with MacKinnon[1996] critical values). Initial assumption is that the series contains a unit root and a low (<5%, etc...) value reported indicates the impossibility to reject stationarity ;

(2) DFGLS test is the detrended DF test as provided by Elliott Rothenberg and Stock[1996], used here in conjunction with the Hannan-Quinn information criterion. The values reported here are the detrended residuals' unit root t-statistics, to be compared with the critical values tabulated by the authors of -3.46, -2.93, -2.64 (in a model including a time trend) and -2.58, -1.94, -1.61 (in the case of a model including a constant only) at the 1%, 5% and 10% significance levels. Initial assumption is the same as in the ADF test

(3) KPSS test is performed with Newey-West bandwidth selection and a Bartlett kernel. Critical values at the 1%, 5% and 10% levels are 0.216, 0.146 and 0.119 in a model including a trend and 0.739, 0.463 and 0.347 if no trend is included. Initial assumption is that the series contains no unit root and therefore that is level- or trend-stationary in the case of a lower-than-critical-value KPSS statistic.

^a : test uses an improbably low or high lag length. Results with other information criteria indicate stationarity at the 1% level

* ** and *** indicate stationarity at the 10%, 5% and 1% levels, respectively.

Table 2 – Descriptive statistics of select log-differenced series, 1954:1-2004:3

| | Mean | Median | Std. Dev. | Skewness | Kurtosis | Jarque-Bera | Probability |
|-----------|-------|--------|-----------|----------|----------|-------------|-------------|
| <i>W</i> | 1,70% | 1,71% | 0,009 | -0,22 | 3,31 | 2,37 | 0,31 |
| <i>PI</i> | 1,52% | 1,41% | 0,026 | 0,28 | 7,03 | 140,29 | 0,00 |
| <i>R</i> | 1,22% | 0,72% | 0,062 | 1,28 | 9,25 | 385,75 | 0,00 |
| <i>II</i> | 1,72% | 1,56% | 0,053 | -0,13 | 3,75 | 5,25 | 0,07 |
| <i>NI</i> | 2,31% | 2,16% | 0,032 | 0,03 | 4,61 | 21,98 | 0,00 |
| <i>C</i> | 1,76% | 1,68% | 0,008 | 0,30 | 3,03 | 3,13 | 0,21 |
| <i>I</i> | 1,78% | 2,03% | 0,047 | -0,48 | 4,44 | 25,33 | 0,00 |
| <i>G</i> | 1,57% | 1,49% | 0,013 | -0,11 | 3,27 | 1,02 | 0,60 |
| <i>X</i> | 2,15% | 2,17% | 0,042 | 0,31 | 5,54 | 57,88 | 0,00 |
| <i>M</i> | 2,34% | 2,44% | 0,039 | 0,26 | 5,47 | 53,93 | 0,00 |

Though less fundamental, another interesting property of the data is its statistical properties, summed up in Table 2 above for the major types of income and outlays.

The first three columns presents the mean (or average growth rate per quarter, not at annual rate), the median and the standard deviation of all variables. Trade variables and net interest are the three series who present the highest average growth rate as well as the highest medians and belong to the highest standard deviations group. They are volatile and rapidly growing variables over the sample. Investment and profits are a little less fast-paced variables, but a little more unstable. Consumption and compensation are as fast paced as investment and profits, but are much more stable variables. Finally government spending is rather slow and steady, while rents are the slowest changing variable but the most volatile of all (especially after 1978).

Skewness measures the asymmetry of the distribution of the series around their respective means, with value zero representing perfect symmetry. None of the series can be said symmetric except for the income category of net interest. Wages, corporate profits and investment especially report negative skewness, indicating that the series has a long left tail, indicative of below-mean persistence. The opposite is true for rents, who exhibit a strong, positive skewness.

Kurtosis measures the peakedness or flatness of the distribution of a series, with value 3 as identical to the normal distribution (what one would expect 'in the long run' by the law of large numbers). Except for wages, profits and government spending, kurtosis exceed that value which is a common problem in econometrics known as 'excess kurtosis', indicating excessive peakedness in the data. Rents, again, show a distinctive result of an exceptionally high kurtosis.

Finally, the Jarque-Bera statistic combines the skewness and kurtosis statistics and is associated with a probability of a normal distribution. Except for government spending, wages, consumption and, to a lesser degree, corporate profits, none of the series appear to be distributed according to the normal distribution.

All in all, the statistical properties of the data point towards a lack of normality of the series (except for government spending), which is again a common problem in econometric analysis. But what also stems out of this purely statistical analysis is that rental income is exceptionally non-normal, due as much to very bad skewness as horribly bad kurtosis. Assuredly, a relatively high number of past values of the variables will be necessary in order to fulfill the prerequisite of normal errors for estimation.

2. INTRODUCING A DYNAMIC FRAMEWORK

Equation [2] is disappointing on several respects because it is just an accounting identity. It merely states that the fourteen variables are related to each other and it does not allow us to go much further. Even more annoying is its static nature : by how much would, say, profits increase following a rise in consumption ? Would profits increase of the same amount, or would that rise also mean higher wages ? By how much ? And, above all, what do profits depend upon ? Evidently in equation [2], all variables depend on each other to varying degrees, and that makes dynamic analysis a desirable way to investigate the present case³.

One appropriate econometric tool to handle this kind of dynamic model is the vector autoregressive model or VAR. This class of models takes each variable and links it to all the (past values of the) variables, including its own. By stacking every such-defined variable in a coherent model, VAR models thus form simultaneous equation systems where 'every single thing is allowed to depend upon everything else'. VAR models thus do not embody *a priori* knowledge about whether a (dependent or endogenous) variable is caused or if it is a (independent or exogenous) variable that causes other variables. The fact that past values are included in the system also allows for lagged, dynamic effects to materialize and be taken into account. On the other hand, widely recognized problem pertaining to VAR models is yet their lack of theoretical underpinnings, the fact that the estimation results are somewhat sensitive to the parameters involved, and the high number of coefficients to be estimated. Our purpose for the time being is to estimate an unrestricted VAR model, where every variable may depend on everything else ; we thus use Sims'[1980] general, a-theoretical, framework. Such a typical VAR model would be, in the simple case of a of two variables x and y :

$$VAR(p) : \begin{cases} x_t = a_{11}x_{t-1} + a_{12}x_{t-2} + \dots + a_{1p}x_{t-p} + b_{11}y_{t-1} + b_{12}y_{t-2} + \dots + b_{1p}y_{t-p} + \epsilon_{1t} \\ y_t = a_{21}x_{t-1} + a_{22}x_{t-2} + \dots + a_{2p}x_{t-p} + b_{21}y_{t-1} + b_{22}y_{t-2} + \dots + b_{2p}y_{t-p} + \epsilon_{2t} \end{cases} \quad [3]$$

where x_t, y_t are stationary variables. But since our variables are not stationary variables but variables integrated of order one, the VAR model could be a bad choice.

Following Granger[1983, 1987] representation theorem, equation [3] is only correct in the cointegrated case, that is where variables are not individually stationary but there exists a linear combination which is stationary. More intuitively, equation [3] is only valid if there exists one or several common trends among the fourteen variables. Cointegration can be tested for in the VEC through Johansen's Trace and Maximum Eigenvalue tests.

What we are going to estimate is not a VAR model itself, but a model based on it, called a vector error-correction model or VEC. VARs are too demanding regarding the stationarity of the data in the present case. Besides that, differencing the series in order to make them stationary would result in a huge cost of loosing all the relevant 'common trend' information about the links between variables. The derived error-correction model is a transformation of the previous VAR, following the works of Granger[1987] and Johansen[1988, 1991] :

³ The importance of our approach becomes clearer after that being said. Since all variables are more or less interrelated, it would be a bad choice to analyse equation [2] after taking out a few variables here and there. It is indeed very tempting to reduce the number of variables to analyze, but that would immediately translate into a lower form of analysis because potentially important variables are missing. Suppressing the consumption of fixed capital would result in the hypothesis that it equally affects all other variables, and leaving aside proprietor's income because they are a too-difficult category of income to handle would result in a loss of information. All in all, we are left with all an irreducible identity which forms the basis of national accounting.

$$VEC(k): \quad \Delta X_t = \underbrace{\alpha \cdot \beta' \cdot X_{t-1}}_{long-run} + \underbrace{\sum_{i=1}^{k-1} \Gamma \cdot \Delta X_{t-i}}_{short-run} + \underbrace{\mu_0 + \mu_1 \cdot t}_{deterministic\ component} + \underbrace{\Phi D_t}_{exogenous\ regressors} + \underbrace{\varepsilon_t}_{gaussian\ errors} \quad [4]$$

This representation [4] involves four different parts : a long-run, cointegration part $\alpha \cdot \beta' X_{t-1}$, a short-run part $\sum_{i=1}^{k-1} \Gamma \cdot \Delta X_{t-i}$, a deterministic component $\mu_0 = \alpha \cdot \beta_0 + \gamma_0$ (as a constant) and $\mu_1 = \alpha \cdot \beta_1 + \gamma_1$ (as a trend), and possibly a set of exogenous regressors D_t . We will postpone in-depth discussion to Appendix 2, where the interested reader will find a presentation of the different parameters involved as well as related issues. For the time being, we outline the main features of VEC models in the present case :

- VECs are based upon the cointegrated VAR model, that is a model that contains variables which are cointegrated ;
- are simultaneous equations models. They mimic *systems* and are particularly suitable to the present case because it is highly possible that variables interact on each other ; please note that this is an assumption that could be alleviated by forcing (i.e. restricting) some coefficients to be zero ;
- VECs include past values of every variable, thus allowing for lagged effects ;
- VECs do not assume any nature of the series (explained/dependant/endogenous or explanatory/independent/exogenous) ;
- VECs do not suppose all variables are stationary, and rely upon non stationary variables featuring cointegration. Thus we do not suppose that the system will return to a pre-programmed steady state : should a shock occur, this may have permanent effects ;
- VECs feature a timely dichotomy between short-run and long-run influences.
- Causality can be assessed through various measures and tests ;
- The evolution of the system can be seen through the simulation of an (unexpected) shock on a variable, and then tracing out the evolution of the impacted variable through time.

Those remarks being made, we then proceed to the estimation of this fourteen variable model.

3. ESTIMATION OF THE PARAMETERS

The statistical groundwork being discussed, three steps are being followed to estimate the system in full. Those are (1) the choice of the number of past values to include in the model (choice of k), (2) a discussion about the type of deterministic component relevant in this system, and (3) the estimation of the number of cointegrating relationships.

3.1. CHOICE OF THE LAG LENGTH

How far back is the information contained in the data relevant ? Information criterion can help us set a value to k according to the precision of fit (FPE), the significance of an extra lag (LR sequential test), or maximal information content with a penalizing factor for extra lags (AIC, BIC, HQ...). The basic idea is to include as many past values of the series as possible ; yet including too many irrelevant past values would decrease the explanatory power of our system. Besides that, Johansen's multivariate cointegration technique relies upon a rather tough requirement : Gaussian errors (normally, independently and identically

distributed). This specific requirement makes information criteria not very useful since they tend to underestimate the value of k that whitens the errors (Lütkepohl[1995]).

We have estimated the VAR in (log) levels of the form [3], adding one lag at each step and checked for the Gaussian errors requirements. Multivariate normality has been checked with a Breush-Godfrey[1978] test with the Doornik-Hansen[1994] method. This did not help us choose a lag length since all values of k provided normal errors (because of our big sample size of 203 observations). The independence of the errors has been tested for by an autocorrelation LM test up to 12 lags. It turned out that no serial autocorrelation was present when $k=2$ or 7 (or possibly 4) lags were used. The remaining assumption to fulfill is that of no heteroscedasticity. This has been checked with a White test with no cross terms for our three candidates $k=2,4$ and 7. It turned out that some homoscedasticity is still present when two lags are used, and that a four or seven lag specification is a better choice. Since the absence of autocorrelation is stronger in the case of seven lags, we chose a seven lag specification that matches all the Gaussian errors requirements of Johansen's method.

3.2. DETERMINISTIC COMPONENT AND THE TESTS OF THE NUMBER OF COINTEGRATING RELATIONSHIPS

The next step is that of the test of the presence of common trends among the variables. This is done through the Johansen's cointegration tests, but those in turn rely upon the specification of a deterministic component among five possible choices (see Appendix 2).

Applying the method presented in Appendix 2, we found that case five yielded thirteen cointegrating relationships, but that this specification gave rise to non significant quadratic trend coefficients. We thus rejected the quadratic trend in the data, and carried on with the estimation of case four. Cointegration tests yield eleven cointegrating relationships at the 10% significance level according to the maximum eigenvalue test (Johansen's preferred test). That specification features linear trends in the cointegrating relationships, which all simultaneously turned out to be significant.

We are thus left with a fully-estimated VEC model with seven lags, a deterministic specification of case 4, and eleven cointegrating relationships. As this model contains a lot of variables and lags, it will not be reproduced fully here. Only specific parts of it will be referred to when needed. For example, we can say at this stage that the model explains (R^2) between 60% and 80% of the variance of the growth rates of all variables. This is a very good fit, but those figures drop to the 20%-60% range when degrees of liberty are being accounted for (R^2 bar adjusts for the number of variables in the system, which is high in this case). The better-fitted variables are the consumption of fixed capital and the compensation of employees, while the least-fitted variables are imports, exports, rents and net interest. Those results are understandable since both CFC and W are heavily stable in time, whereas the least-fitted variables heavily depend upon the Dollar exchange rate and the interest rate, which are variables not included in the present analysis.

4. THE DYNAMICS OF THE MODEL

We now turn to the reason why we used this type of model, that is we address the issue of the dynamics between variables. Those can be assessed through two interrelated questions, that qualitative of causality and that quantitative of the weight of shocks. To illustrate the profit paradox, we will now concentrate upon the profit equation of the model, and leave aside

all the other thirteen variables for a while. We thus concentrate on the following corporate profits equation of the model :

$$\Delta \log \Pi = \sum_{i=1}^{11} \alpha_i ECT_{t-i} + \sum_{j=1}^7 \Gamma_{1j} \cdot \Delta \log W_{t-j} + \sum_{l=1}^7 \Gamma_{1l} \cdot \Delta \log PI_{t-l} + \dots$$

$$+ \dots + \sum_{z=1}^7 \Gamma_{1z} \cdot \Delta \log M_{t-z} + Const. + \varepsilon_{1t} \quad [5]$$

which states that the growth rate of corporate profits is explained by all the growth rates of the fourteen variables (including past values of the profits rate of growth), plus eleven ‘error-correction terms or ECTs’ deviations from the ‘steady-state’/‘common trends’/‘cointegrating relationships’. Please remember all other thirteen variables are similarly –and simultaneously– determined elsewhere in the model. For the time being, equation [5] contains $14 \cdot 7 + 11 = 109$ estimated coefficients, representing the influence of $14 + 11 = 25$ distinct variables.

4.1. ‘SHORT RUN’ GRANGER CAUSALITY

In a simultaneous equation model of the VEC type, a common concept of causality is that of Granger[1969]. Taking as example equation [5] above, it states that imports M are causing profits if all the Γ_{1z} ’s are jointly significant. Equivalently, if those coefficients turn out estimated as non-significant or zero, then imports do not exert any influence over profits, and imports could therefore be taken out of the model without any loss of information. Please note the particular definition of causality that Granger causality implies : if a variable is significantly non-neutral in the explanation of another variable, then it is Granger causing. It means that Granger causality is a sort of precedence or predictability test : if a variable significantly helps predict the variance of another variable, then it is Granger-causing. Granger’s causality test is a significance-level test, and does not provide any weight of the impact of the causal chain. Moreover, because of the particular definition of the Granger causality, two variables can be found causing each other (“feedback”). Also note the temporal causality nature of Granger’s test, since it makes use of past values of a variable to explain the present value of another variable. Finally, since Granger causality tests significance levels of variables that are required to be stationary and thus differenced, Granger causality runs from multiple (lagged) differenced series to a single differenced series. Granger causality test results are therefore better understood as a ‘short-run’ precedence test.

Ultimately, Granger causality tests results in a statistic (distributed as chi-square) and a significance level. A low (<5% or 10%, etc...) significance level results in the rejection of the basic hypothesis that the independent variable does not Granger-cause the dependant variable, thus that is a significant causality between the variables.

At this stage, two Granger causality are of particular interest : (1) Granger causality on the profit equation [5] will allow us to discriminate between variables that help better predict the movements of profits and variables that do not, and (2) Granger causality on the whole 14-variable estimated system, which will allow us to detect which variable is system-wide the most highly caused, and which is the least significantly caused.

(1) which variables improve the forecast of the profits’ rate of growth ?

In order to answer this question, we concentrate upon the influences of all the demand variables and leave aside the income variables (whose influence is presented in table 4 and

detailed further in part 5). The results of the Granger causality are provided in Table 3 below, which features both the chi-square statistic and its associated probability.

Table 3 – Granger causality tests on the rate of growth of profits

| Chi-square statistic | probability |
|----------------------|-------------|
| 19.46 | 0.04 |
| 11.06 | 0.13 |
| 12.58 | 0.08 |
| 29.64 | 0.00 |
| 19.23 | 0.00 |

Results are the following : the rate of growth of profits is better predicted by (all variables in rates of growth) exports in the first position, then imports and consumption *ex-aequo*. The following variables do explain the rate of growth of profits, but quite loosely : government spending moves in line with (and before) profits, and investment is the variable that is the worst predictor of all demand variables (though not very bad in an absolute way)⁴.

(2) which variable is the most/least highly caused ?

This question can be assessed by similar Granger causality tests performed on all the equations of the estimated system. We summarize the results in the following Table 4, where each cell represents the probability of a Granger causality running from a row-variable to the every remaining column-variable. Bolded figures indicate significant Granger causality up to the 15% level ; absence of bolding translate into the rejection of such a causality. The ‘all’ row summarizes the influence (probability) of all variables jointly, and presents the associated chi-square statistic. The last row also features a chi-square (increasing) ordering, with [1] indicating the lowest caused variable and [14] referring to the highly caused variable. Broadly speaking, three groups of variables appear according to their level of causality ; below is a brief outline of remarkable results :

Mostly exogenous/independent/autonomous variables (low ranking) :

[1, 2, 3] : Net interest NI, exports X, imports M and rents R appears the least explained variables. Not surprisingly, they turned out the least explained variables according to precision of fit as measured by the R². Again, this is explainable by the fact that those variables are highly sensitive to monetary conditions, which are absent of this model.

[3 *ex aequo*] Compensation of employees W and consumption C. This ranking is somewhat surprising, since one would think of compensation as being firstly determined by production and thus investment. To the contrary, we find that investment is a very poor predictor of compensation ; exports and net interest are the only two highly significant predictors of compensation. The same applies to consumption, who is not significantly caused by compensation, nor is it determined by any type of income. Assuredly, indebtedness plays a major hidden role in here. Only trade variables and government spending appear to be good predictors of consumption in this model.

⁴ Among the income variables, corporate profits do appear Granger-caused by taxes on production and imports (T_{YMS}) and rents (R) and proprietor’s income (PI), but do not appear to be better predicted by net interest NI. Compensation is in between, being a somewhat ‘elastic’ predictor of profits. This could imply that other household revenues are at play, especially indebtedness.

Partly endogenous, partly exogenous variables (middle ranking) :

[7] government spending G and government receipts in the form of taxes on production and imports T_{YMS} appear to be in the middle of the Granger-causality range covered by all variables. This is understandable with reference to the fact that government tax collection is sensitive to the state of the economy (thus to the other variables), and that government spending is more endogenous than previously thought (maybe because of self-imposed budget constraints).

Mostly endogenous/dependent/non-autonomous variables (high ranking)

[10, 11, 14] : Proprietor's income, investment and corporate profits. This ranking is interesting because it is an indication of the fact that those variables are the less autonomous of all fourteen (we already described profits in depth above). Yet the same applies to proprietor's income, which is found to heavily depend on demand variables (except on government spending), as well as compensation and profits (which are two subcategories of proprietor's income). Investment on the other hand, is not better predicted by any demand variable, only highly by compensation, proprietor's income, net interest and rents. Consumption in particular, is not a good predictor of investment at all. What seems to drive investment is on one hand labor income (compensation and proprietor's income), and more surprisingly rental income (rents and net interest) on the other hand. Investment thus appears more linked to income than spending patterns ; equivalently investment can be deemed exogenous *with respect to demand*, which indeed is a surprising result. Interestingly enough, investment seems to be non-related to profits and taxes on production and imports.

Another interesting result stemming out of Table 4 are the significance levels when all variables are included (last row). Except for exports and net interest, all *p-values* are below the 10% level which is an indication of good Granger predictability. Thus all variables are good predictor of all variables, except for the two exceptions mentioned. This reinforces the pertinence of our unrestricted approach, where 'everything may explain everything'.

Finally, Granger causality is not the only type of causality that takes place in the error-correction model. Indeed, our model features several 'common trend' equations associated with deviations from those 'steady-states'. This means that those deviations can also be thought of channels of causality. In other words, a VEC features a 'direct' causal chain assessable through usual Granger causality, and an 'indirect' causal chain through which variables adjust towards or away the 'steady-states'. This latter type of causality can be assessed through the inspection of the significance levels of the adjustment coefficients (\hat{t}_α), as shown in Appendix 2. It turned out that taking those significance levels into account did not alter the above rankings and conclusions.

Table 4 – System-wide Granger causality tests

| C | I | G | X | M | explained/dependent variable | | | | | | R | BTr | |
|------------------|-------------|-------------|-------------|-------------|------------------------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | | CFC | IncRoW | W | PI | NI | T _{YMS} | | | |
| C | --- | 0,61 | 0,27 | 0,03 | 0,75 | 0,24 | 0,83 | 0,05 | 0,04 | 0,39 | 1,00 | 0,72 | 0,35 |
| I | 0,38 | --- | 0,32 | 0,49 | 0,02 | 0,16 | 0,95 | 0,00 | 0,13 | 0,26 | 0,93 | 0,59 | 0,28 |
| G | 0,11 | 0,58 | --- | 0,84 | 0,75 | 0,36 | 0,83 | 0,34 | 0,08 | 0,83 | 0,88 | 0,36 | 0,69 |
| X | 0,03 | 0,24 | 0,89 | --- | 0,30 | 0,09 | 0,07 | 0,02 | 0,00 | 0,87 | 0,47 | 0,19 | 0,75 |
| M | 0,03 | 0,20 | 0,57 | --- | 0,15 | 0,13 | 0,35 | 0,01 | 0,00 | 0,99 | 0,08 | 0,48 | 0,83 |
| CFC | 0,73 | 0,28 | 0,01 | 0,92 | --- | 0,67 | 0,46 | 0,40 | 0,03 | 0,12 | 0,76 | 0,38 | 0,28 |
| IncRoW | 0,57 | 0,92 | 0,48 | 0,56 | 0,00 | --- | 0,28 | 0,22 | 0,02 | 0,78 | 0,92 | 0,03 | 0,30 |
| W | 0,89 | 0,10 | 0,14 | 0,05 | 0,05 | 0,03 | --- | 0,01 | 0,16 | 0,55 | 0,59 | 0,04 | 0,01 |
| PI | 0,48 | 0,00 | 0,71 | 0,75 | 0,26 | 0,49 | 0,16 | --- | 0,00 | 0,47 | 0,13 | 0,06 | 0,48 |
| II | 0,66 | 0,52 | 0,91 | 0,92 | 0,12 | 0,43 | 0,99 | 0,00 | --- | 0,82 | 0,52 | 0,77 | 0,73 |
| NI | 0,21 | 0,03 | 0,04 | 0,69 | 0,06 | 0,58 | 0,00 | 0,67 | 0,45 | --- | 0,12 | 0,94 | 0,14 |
| T _{YMS} | 0,47 | 0,48 | 0,28 | 0,34 | 0,25 | 0,04 | 0,27 | 0,20 | 0,03 | 0,28 | --- | 0,15 | 0,63 |
| R | 0,67 | 0,03 | 0,70 | 0,60 | 0,19 | 0,62 | 0,18 | 0,61 | 0,04 | 0,93 | 0,73 | --- | 0,08 |
| BTr | 0,25 | 0,92 | 0,63 | 0,08 | 0,01 | 0,01 | 0,24 | 0,03 | 0,84 | 0,17 | 0,16 | 0,10 | --- |
| ALL | 0,05 | 0,00 | 0,01 | 0,29 | 0,00 | 0,00 | 0,08 | 0,00 | 0,00 | 0,85 | 0,01 | 0,08 | 0,01 |
| (chi-sq.) | (113,58) | (144,93) | (123,60) | (97,84) | (169,37) | (141,17) | (110,53) | (132,63) | (175,81) | (77,26) | (125,64) | (110,51) | (125,33) |
| [ordering] | [3] | [11] | [7] | [2] | [13] | [11] | [3] | [10] | [14] | [1] | [7] | [3] | [7] |

Note : figures represent Granger-causality probabilities. Low values, like the one put into bold letters, indicate significant causality from a row-variable to a column variable. Last row presents the results when all variables are included in the explanation of variable Y, say, except for Y itself.

4.2. FEVD : PRESISTENCE, 'LONG RUN' CAUSALITY

As previously noted, Granger causality is a 'short-run' type of causality because it runs from lagged *differenced* variables to present *differenced* variables. Besides that, Granger causality is only based on (fixed) significance levels and does not embody any of the dynamics featured in the model. Another interesting way to assess causality in the present model would thus be tracking in time the persistence of the 'short-run' Granger causal chain. Forecast error variance decomposition, or FEVD can help us determine the evolution of causality through time. Yet just as Granger causality, FEVD requires the researcher to understand fully what particular definition of causality it describes.

The idea behind FEVD is to simulate a shock on the fully-estimated system, realize a forecast of every variable up to some chosen horizon, and then decompose the forecast error in components attributable to each and every variable of the system, at each time horizon. This means that a single variable will have its forecast error variance decomposed into all the variables of the system, including its own. In the end, FEVD results in 100% of a variable X being decomposed into fourteen variable influences. Results are therefore interpretable along 'at a h quarter horizon, variable Y is the variable whose change ('innovation') explains the most variable X 's forecast'. Trivially, a variable X that is optimally forecast by *its own* innovations does not depend on other variables, thus X is the most exogenous variable of the system, and thus is the variable that drives the system. In the end, what's of particular interest is, as for the Granger causality, the answer to two questions : (1) '*what are the profits fluctuations due to ?*' and (2) '*what's the most autonomous/driving variable of the whole system ?*'

Before proceeding to FEVD, a cautionary note is required. Since FEVD is obtained after a (one time) shock is simulated, results of FEVD are dependent upon the order the variables shock the system. In other words, the results would be different should a fluctuation of, say, profit occur first, than should an increase in consumption occur first. The idea to overcome this problem is to use the Granger-ordering found above, since variable ranked [1] is the most independent variable, and thus most likely to evolve than the more dependent variable ranked at number [14].

(1) what are the profits fluctuations attributable to ?

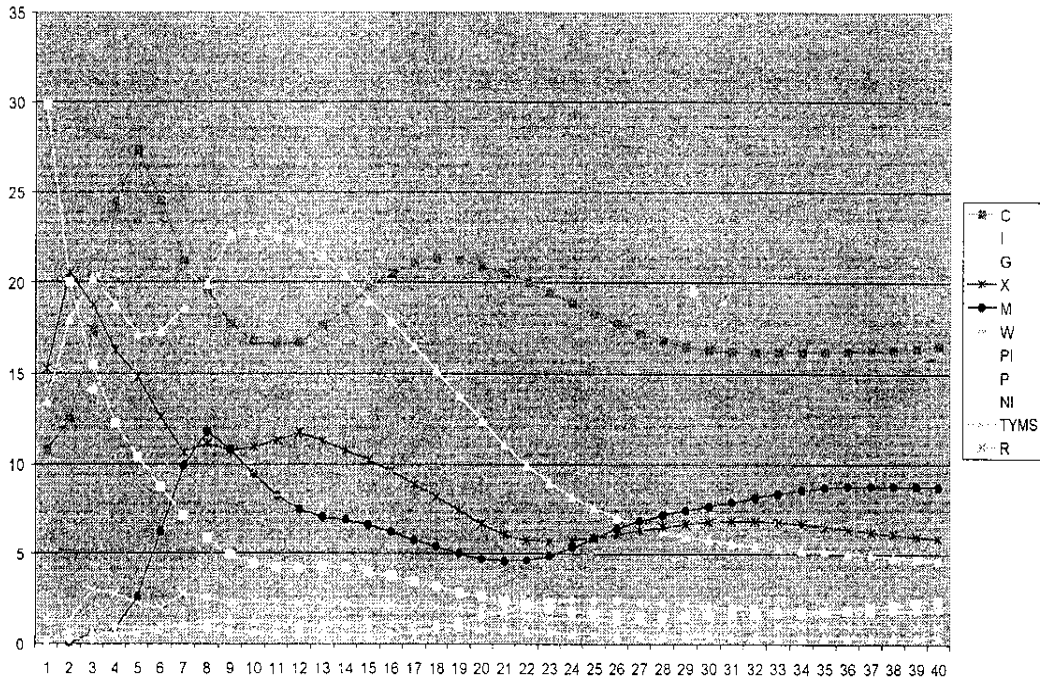
In order to obtain results that are robust to different orderings, we use two different orderings for the FEVD on the profit equation : ordering A is the one derived from Granger causality *system-wide* ([1] through [14] ordering above), and ordering B is derived from Granger causality tests *on the profit equation alone*. Please note that the two orderings make sense, and that the findings should be interpreted as a consensus between the two approaches. We then shock the system according to those two orderings and realize forecasts up to ten years, or 40 quarters. Results are provided on the following two graphs 2A & 2B.

Graph 2A represents the FEVD applied to the profit equation with ordering A. Broadly two results appear :

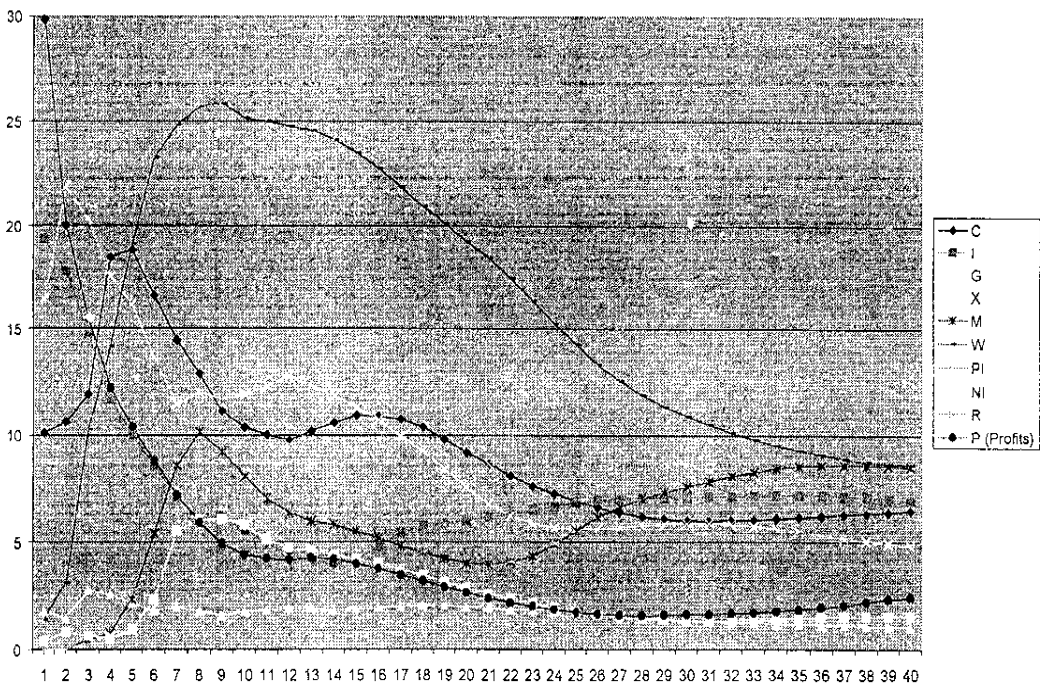
- in the short run (4-5 years after the initial simulated shock) :
The variance of profits is essentially due to (changes in) consumption, investment, exports and compensation. Past profit values do not explain much of the variance of present profit values, except maybe for a year.
- in the longer run (more than five years) :
The variance of profits is essentially due to rents and consumption. The other important variables are then compensation and trade. Of particular interest is that investment effect

on profits (yellow line) that decreases quite quickly, which is understandable in the following way : you need constant investment spending to get profits.

Graph 2A – profit FEVD based on *system-wide* Granger ordering



Graph 2B – profit FEVD based on the *profit equation's* Granger ordering



Graph 2B represents the FEVD applied to the profit equation with ordering B⁵. Broadly two results appear :

- in the short run (before six years after the shock), one variable stands out by far as a major determinant of the variance of profits : compensation. Other meaningful variables are the trade variables, investment and consumption
- in the longer run, the same variables are at work. Trade, investment and consumption are as powerful in explaining the variance of profits, but the influence of compensation has faded a lot and has been replaced by rents. Ten years (=40 quarters) after the initial shock took place, 20% of the (forecast error) variance of profits is explained by the evolution of rents.

When results from graphs 2A and 2B are taken together, it stands out that compensation, consumption, investment and trade are the main driving variables behind profits in the short run. Nonetheless over the longer run, it appears that an additional variable plays a considerable role in the determination of profits : rents. All in all, it seems that profits are mostly driven by demand spending in the short run, through compensation/consumption which is consistent with our previous Granger causality findings. But the results also show that in the longer run, functional income distribution comes into play. After a 5-6 years period, there seems to be a *trade-off* since changes in rents show up as the major force determining profits.

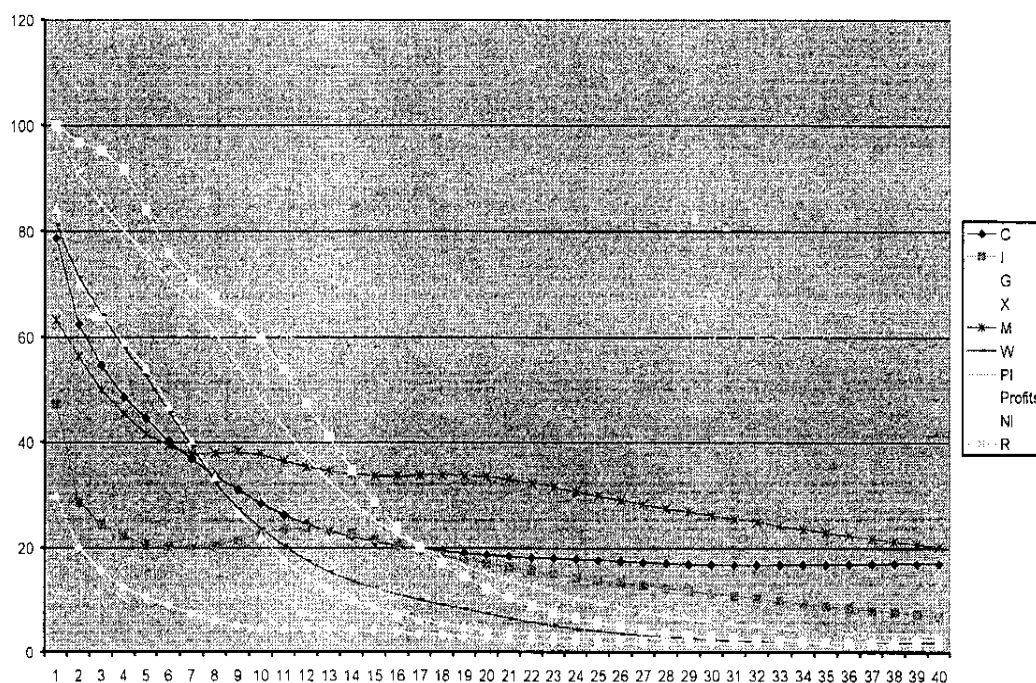
(2) what's the most autonomous/driving variable of the system ?

We so far used FEVD to assess the driving variables of profits alone. Yet this is not the only variable/equation in a highly interrelated system. One can also use FEVD to determine which variable is the most exogenous of the system, and build another ranking from the most endogenous variable to the most autonomous. This can be seen through a FEVD of all variables one after another, then capture each variable auto-explanation level. Such a measure is a degree of exogeneity measure, since a variable that depends the most on itself does not depend on other variables and is thus the most autonomous of the system. Graph 3 traces such an auto-explanation 'exogeneity' measure when a one-time shock is simulated at time $t=1$. Values are computed up to the ten years horizon, and the shock underlying ordering is the one most likely to occur, that derived from Granger causality from [1] to [14].

If one simulates a shock at time $t=1$, all variables react to it and interact between them. What is striking about Graph 3 is that there does not seem to be a dichotomy between short run and long run results. Broadly speaking, variables that are the most exogenous in the short run are still the most independent at a longer horizon (the only exception being net interest, being among the most exogenous in the run and among the least exogenous in the long run). Besides that, all variables appear to be quite exogenous in the short run (with the exception of profits and investment), and this degree of exogeneity decreases through time, as all variables interact on one another. In the long run, all variables become somewhat endogenous, quite to the same degree. Yet one variable clearly stands out : rents, again. Even after a ten year horizon after the one-time shock, rents still explain about 60% of itself, thus only 40% is explained by the remaining 13 variables. Rental income is by far the most exogenous variable of the system, ever since a four-year horizon.

⁵ We checked that the results do not depend upon the place of profits in the initial set of shocks (Graph 1B is when profits are ordered last).

Graph 3 – system-wide FEVD
(percentage of variable Z explained by its own innovations)



Rents have a particular place in this model : ‘short-run’ Granger causality results give rents a very endogenous role in the short run, and at the same time FEVD results indicate that rents are very exogenous in the longer run. This paradox can be better understood by saying that rental income is an ‘adjustment variable’ in the short run, but that it does not fluctuate too much in the long run. Thus rents receives the role of the adjusting variable in the short run, at the same time as rents are a major driving force of the system in the long run.

4.3. IMPULSE/RESPONSE FUNCTIONS AND THE WEIGHT OF SHOCKS

We so far discussed Granger causality which is a qualitative measure of causality, and FEVD which is a quantitative measure of the forecast error variance decomposition. Yet we did not infer about the signs and magnitude of the shocks on the profit equation ; this can be done through the computation of impulse/response functions or IRFs.

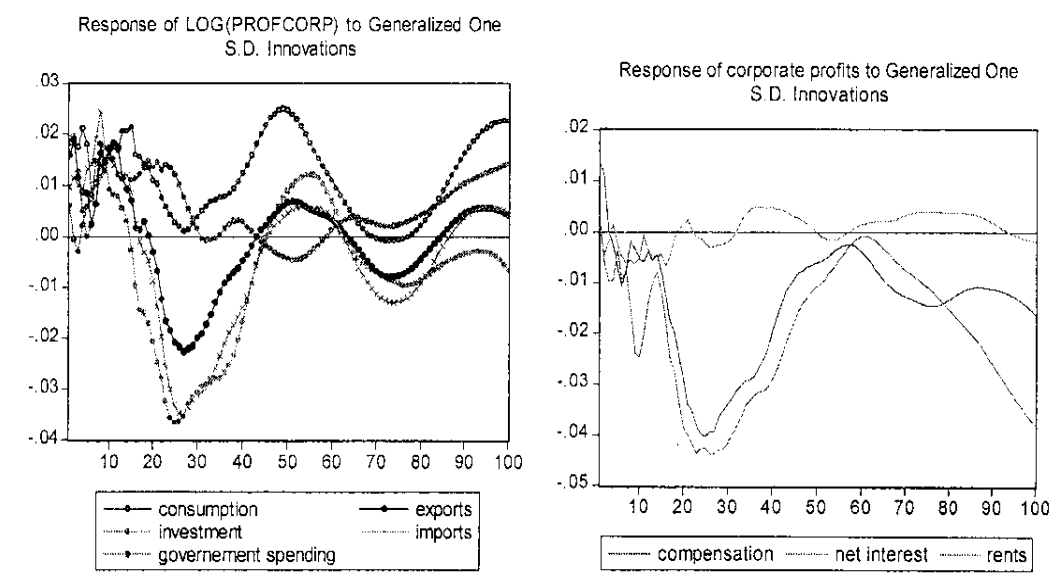
The idea behind IRFs is again to simulate a one-time shock on the system. Because of the amount of variables of the system, we will concentrate upon the profit equation again to illustrate the profit paradox. IRFs consists in keeping track of a ‘response’ variable, here corporate profits, when a shock is simulated on all the variables of the system, including the response variable itself. IRFs thus provide dynamic multipliers, i.e. the sign and magnitude of the evolution of profits conditional on an increase in each variable of the system.

Since a shock has to be simulated, one may think of the same shortcomings of FEVD for example, whose results depend upon the ordering of variables in the shock. A good news is that a recent econometric technique, called generalized impulses (Pesaran & Shin[1998]) provides results that are ordering-independent. Yet a bad news is that IRFs are based upon a

single one-time shock, not a series of shocks. Thus IRF results are some kind of a ‘thought of experiment’ whose results have to be understood as *ceteris paribus* or ‘in the absence of no other shock’.

We simulate a one-time shock on the system by increasing every variable by an arbitrary amount (a unit standard deviation of the variable), and then keep track of the evolution of corporate profits as time increases. Please note that any IRF value represents a ‘spot’ value, and that in order to assess the overall effect of a shock at horizon h , one has to accumulate all the dynamic multipliers before quarter h . Graph 4 presents such results, but due to the number of variables in the system, results are only provided for variables which have proved so far to be interesting :

Graph 4 – IRFs on the profit equation
(demand variables on the left panel, income variables on the right panel)



Note : The observed oscillations of the IRFs are purely due to complex roots in the system are therefore purely due to the parameters involved.

From the IRF stem out the following results :

- consumption and government spending are the only two variables that positively affect profits.
- Exports and imports exert a relatively neutral effect on profits. The effect of imports on profits is slightly lower than the effect of exports, and both effects are negative,
- Investment is neutral to slightly negative on profits.
- Interest is neutral on profits
- Compensation and especially rents are major drags to profits.

- PART TWO -

The profit paradox holds

Part one brought about the proof of the profit paradox without relying on a theory-biased framework. The absolute generality of the tested equation lies in their pure nature of identity. Denying equation [5] would deny equations [1] and [2] and therefore both the very existence of profits and national accounting itself. The estimated equation [5] cannot be deemed 'keynesian', 'post-keynesian' or whatever. Any other definition of profits, be it rooted into the neoclassical production function or into some neo-ricardian relationship, applying some exogenous share of profit to a given aggregate income, is an a priori ideological one.

5. 'DISCIPLINE' POLICIES DO NOT RAISE PROFITS : THEY SQUEEZE THEM !

5.1. THE CRUCIAL ROLE OF CONSUMPTION

Contrary to the dominant conventional wisdom, consumption plays a crucial role in explaining the growth of profits. For the whole period, both in the short term and the long term, its positive impact is much more important than the impact of investment for two reasons :

- first consumption is strongly exogenous (autonomous) while investment is strongly endogenous, like profits. This contradicts the conventional view of an investment driven economy
- second it is true that investment has some positive impact but it fades out very quickly

Consumption being a driving factor of profits, advocating a squeeze of consumption to increase saving is fully contradicting the profit motive. What proves our analysis is that an advanced capitalist economy like the United States is never short of saving while it can be short of consumption, so saving out for thriftiness may be squeezed. Herein lies the objective proof of the inexistence of the so-called natural (potential) growth path which by postulate enshrines the supreme law of thriftiness. All our variables (and therefore the growth rate) are defined relative to their steady-state paths but none is following the neoclassical (or wicksellian) eternal path targeted by disciplinary policies.

On the other side, our results display the existence of a long run negative relationship between employee compensation and profits. How can we reconcile those apparently contradicting outcomes but by relying on the increased reliance of consumption financed through indebtedness ? Desired growth of consumption is the leading animal spirit of the system, being so strong that effective growth consumption been more and more independent of the growth of compensation. Such an empirical result sheds light on fundamental characteristics of an advanced capitalist economy :

- Conventional consumption functions, whatever their nature, no more hold
- Wage-earners debt is in the long run substituted for corporate debt as one major source of profits
- Any policy hindering wage-earners growth of indebtedness hinders the growth of profits. Inversely, encouraging the growth of wage-earners debt for consumption purposes translates into profit growth.

Herein is the straightforward proof that monetary policy targeting very low and stable interest rates is directly fitting the profits target, which explains the United State's monetary policy since the nineties. Inversely, pursuing a monetary policy of interest rates high enough

to squeeze consumption for the sake of zero inflation is directly an anti-profit policy. The present study brings about a proof of interest rates as long as they are the outcome of monetary policy. Interest rates have an impact through consumption and housing, contradicting the conventional view of an investment-driven impact.

5.2. THE POSITIVE IMPACT OF PUBLIC EXPENDITURES

Our findings prove that the growth of public expenditures does not have a negative impact on aggregate profits neither in the short run nor the long run. It could be enough to dismiss the claim for fiscal policies targeting a squeeze of public outlays. Since it is straightforward that taxes cannot raise profits, it is true that targeting a zero deficit (or a surplus) cannot lead to a growth of profits. From our results, it is also fully impossible to deduce an inverse relationship between the growth of investment and the growth of public expenditures. Herein lies the last resort proof of the inexistence of any kind of crowding-out effect.

There is more because public expenditures do have a positive impact on the growth of profits. This effect is weaker than consumption's effect because public expenditures is merely a short run factor of the growth of profits. A possible explanation of that finding is that public expenditures are partly endogenous, and indeed may become more and more endogenous through time like tax collection. Changes in government spending are found to respond to changes in several other variables, which explains why it is not a fully exogenous, thus driving variable. Such an increased endogeneity could also reflect self-imposed constraints for the sake of attaining a mythical long run stable path, as discussed above. In any case, public expenditures do have a much more positive impact on profits than investment has. This alone should be enough to sustain the profit paradox hidden into policies of restraint: such policies themselves contribute to the drain of profits.

Our answer to the first question asked in the introduction : 'what are the factual determinants of profits, and what are the most important ?' can be summed up as follows :

- Pursuing both fiscal policy of squeeze and monetary policy of squeeze leads to a collapse of profits
- Pursuing a fiscal policy of restraint hinders the profits motive as long as it is not matched by a strong growth of indebtedness-financed consumption allowed for by a fully expansionist monetary policy. This case appears to have been the one relevant to the explanation of the clintonomics of the second half of the nineties.
- The most efficient case for the profit motive is to pursue simultaneously an expansionist fiscal policy and an expansionist monetary policy. This being true of course, up until some satisfying low-unemployment equilibrium is found.

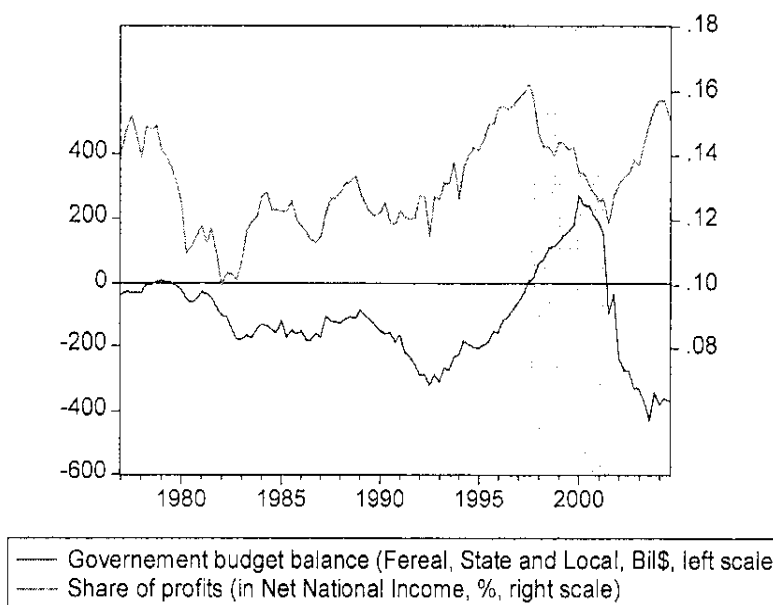
5.3. IS THERE A SHARE OF PROFIT MOTIVE SUPPORTING THE PARADOX ?

This section addresses the second question raised in the introduction, namely 'would a policy-implied growth of aggregate demand engineer a fall in the share of profits below some required level ?' To answer this question, we first provide the factual data of the government deficit and the share of profits (as defined in section I.1 above), drawn together on graph 5.

As mentioned earlier there seems to be some degree of persistence in the behavior of the distributed shares. As for the profit share, we mentioned earlier that it remained roughly unchanged until 1966 and decreased until 1982. In this section we are most interested in the behavior of the share of profits since that time, that is a rise from about 10% in 1982 to about

15% in 2004 (a 50% increase). An interesting pattern emerging from graph 5 is that government balance and aggregate profits exhibit a strong, positive correlation through time.

Graph 5 – Share of profits and government budget balance, 1977-2004



Note : Share of profits is gross of corporate income taxes as defined in section I.1 above. Government balance data encompasses the federal, state and local levels and is provided by the Federal Reserve Board Flow of Funds, Table F.106.C.

A decrease in government budget balance (1978-82, 1989-92) is associated with a decrease in the share of profits, and a reduction of government's deficit is associated with a rise in the share of profits (1992-97). Yet this is not always the case : the share of profits is falling as soon as the deficit transformed into huge surpluses and historically low unemployment (1997-2001). Thus full-employment and surpluses are a drag to the share of profits. From 2001 to 2004, the pattern observed in our previous econometric analysis emerges again.

Please remember from Table 4 our finding that government spending Granger-causes profits, but the contrary is not true, and that demand-variables influence profit the most. Thus apart from short-run movements, what we observe on the previous graph is fully in line with our previous econometric findings. For example the 1977-90 period clearly shows that recurrent and even greater deficits allow the restoration in the share of profits. This is even better seen from 1997 to 2001 when surpluses lead to a fall in the share of profits, and from 2001 to 2004 when the return to deficits turns into a restoration of the share of profits.

This could be enough to prove that expansionist policies did not impose a drop in the share of profits, but instead that government spending and deficit significantly influence positively the share of profits. Therefore expansionist policies do not contradict a share of profits motive (SOPM) if it exists at all.

How can we interpret the observed rise in the share of profits since the eighties ? Such a rise originates from either a profits' growth higher than other incomes', or from a lower growth of other incomes relative to profits' growth. What other type of income had to be adjusted to account for the rise of profits ? From graphs 1 and 4, we see that the wage share did not vary by much from the early 1980s, but that the rent share (possibly including interest)

varied a lot. This finding is in line with our finding that net interest (in the short run) and rents (in the longer run) are two types of income which significantly drive profits (see graphs 2A and 2B of section 4.2). The formidable increase in the rental share observed on graph 1 in 1978-1982 significantly reduced (graph 4) the share of profits (graph 5). Thus rental income, being the most exogenous variable of our system at least in the long run, is inversely related to profits. When the share of rental income (rents plus interest) began to decrease since 1982, profits began to rise. Please note that the change in rental income affects primarily profits, since the wage share remains roughly constant. All our results thus lead to exhibit some sort of trade-off between more profits or more rents. The lowering of interest rates since the early 80s thus translated into more profits *because* rental income was on the decline.

In addition to rental income, we already mentioned the effect of aggregate compensation on profits. Our findings point out a negative relationship from compensation to profits. But since the 80s-onwards period is better characterized (1) by increased household indebtedness and (2) moderate wage increases, both effects have jointly contributed to the rise of profits and the profit share. This finding, again, perfectly fits our previous emphasis on non-income-financed growth of consumption in the generation of profits.

Conclusion : The profit paradox holds because profits are demand-driven. ‘Discipline should be a result rather than a means.

Profits are far from autonomous ; (short-run) Granger causality tests results in their endogeneity, and (‘long run’) FEVD concludes in their high degree of endogeneity as well. Even if they are a significant variable of the system, *profits are better understood as the result of the behavior of all other variables in the system*. There might be some degree of autonomy in the very short run, as illustrated by the system-wide FEVD, but *in the short run profits are also very well predicted by demand-variables, especially consumption, trade and government spending*. This short-run autonomy of profits can be explained by the willingness of executive boards to maintain some value for profits ; since it does not prevail in the long run, this may be called inertia, or ‘short-run share of profit motive’.

Over the long run nonetheless, our results conclude in the direction of the fact that no inertia or ‘share of profit motive’ prevails. Of particular interest is that in the long run, profits seem mostly affected by another type of income : rents. Thus *the demand-driven profits observed in the short-run turn into a ‘distribution conflict’ over the longer run*.

Yet our study draws other conclusions too concerning profits. Three variables stem out in the present study of the behavior of profits. The first two are consumption and government spending, which have proved to be effective (Granger sense) predictor of profits in the short run and the long run, and they are positively related to profits (IRF sense). The third important variable are trade variables, since both exports and imports have proved effective predictors of profits, but the magnitude of the influence is not very large. All in all, demand variables are always very important in explaining the behavior of profits.

One final note should be made about the place of investment in this study. Just like profits, investment turned out very much influenced by the remaining variables, and is thus far to be autonomous. Investment has not proved to be an excellent predictor of profits, except maybe in the short run (conflicting results concerning the role of investment emerge from graphs 1A and 1B). Among short run investment determinants, one may mention only income-variables all predicting well investment *with the notable exception of profits*. Those findings about investment, alone, should be subject of future research.

In the meantime, a general conclusion emerges from all the tools used in this study. ‘Discipline’ policies are doomed to fail as long as the desirable goal of a balanced budget is understood with reference to supply factors only. Introducing demand factors in the analysis, we conclude, shows that *balancing the budget should be the result, not the means*, towards prosperity.

Appendix 1 – NIPA definitions

The ‘guide to the NIPAs’ available on the BEA’s website presents NIPA definitions of the different aggregates used in this study. It reads as follows :

C : Personal Consumption Expenditures (PCE) are goods and services purchased by U.S. residents. PCE consists mainly of purchases of new goods and of services by individuals from private business. In addition, PCE includes purchases of new goods and of services by nonprofit institutions (including compensation of employees), net purchases of used goods by individuals and nonprofit institutions, and purchases abroad of goods and services by U.S. residents. PCE also includes purchases of certain goods and services provided by general government and government enterprises, such as tuition payments for higher education, charges for medical care, and charges for water and other sanitary services. Finally, PCE includes imputed purchases that keep PCE invariant to changes in the way that certain activities are carried out—for example, whether housing is rented or owned, whether financial services are explicitly charged, or whether employees are paid in cash or in kind.

I : Gross Private Domestic Investment (GPDI) consists of *fixed investment* and *change in private inventories*. Fixed investment consists of both *nonresidential* fixed investment and *residential* fixed investment. It is measured without a deduction for CFC and includes replacements and additions to the capital stock. It covers all investment in fixed assets by private businesses and by nonprofit institutions in the United States, regardless of whether the fixed asset is owned by U.S. residents. (Purchases of the same types of equipment, software, and structures by government agencies are included in government gross investment.) It excludes investment by U.S. residents in other countries. *Nonresidential fixed investment* consists of both *structures* and *equipment and software*.

Nonresidential structures consists of new construction (including own-account production), improvements to existing structures, expenditures on new nonresidential mobile structures, brokers’ commissions on sales of structures, and net purchases of used structures by private business and by nonprofit institutions from government agencies. New construction includes hotels and motels and mining exploration, shafts, and wells. Nonresidential structures also include equipment considered to be an integral part of a structure, such as plumbing, heating, and electrical systems. *Equipment and software* consists of purchases by private business and by nonprofit institutions on capital account of new machinery, equipment, furniture, vehicles, and computer software; dealers’ margins on sales of used equipment to business and to nonprofit institutions; and net purchases of used equipment from government agencies, from persons, and from the rest of the world. Own-account production of computer software is also included. For equipment that is purchased for both business and personal use (for example, motor vehicles), the personal-use portion is included in PCE.

Residential fixed investment consists of all private residential structures and of residential equipment that is owned by landlords and rented to tenants. Residential structures consists of new construction of permanent-site single-family and multifamily units, improvements (additions, alterations, and major structural replacements) to housing units, expenditures on manufactured homes, brokers’ commissions on the sale of residential property, and net purchases of used structures from government agencies. Residential structures include some types of equipment that are built into the structure, such as eating and air-conditioning equipment.

Change in private inventories is the change in the physical volume of inventories owned by private business, valued in average prices of the period. It differs from the change in the book value of inventories reported by most business; the difference is the *inventory valuation adjustment*.

X_{net} : Net Exports of Goods and Services. is *exports* less *imports* of goods and services. Income receipts and payments and transfer payments to the rest of the world (net) are excluded.

G : Government consumption expenditures and gross investment, the measure of government-sector final demand, consists of two major components: *Current consumption expenditures* by general government, and *gross investment* by both general government and government enterprises.

Consumption expenditures consists of compensation of general government employees (except own-account investment), consumption of general government fixed capital, and net current purchases from business and from the rest of the world. Consumption expenditures also include changes in inventories and net purchases of used goods. Current receipts for certain goods and services provided by general government agencies—primarily tuition payments for higher education and charges for medical care—are defined as government sales, which are treated as deductions from government consumption expenditures. Gross investment consists of purchases of new structures and of equipment and software by both general government and government enterprises, net purchases of used structures and equipment, and own-account production of structures and of software. Government consumption expenditures and gross investment does not include current transactions of government enterprises, transfer payments, interest paid or received by government, subsidies, or transactions in financial assets and nonproduced assets such as land.

W : Compensation of employees is the income accruing to employees as remuneration for their work. It is the sum of wage and salary accruals and of supplements to wages and salaries.

Wage and salary accruals consists of the monetary remuneration of employees, including the compensation of corporate officers; commissions, tips, and bonuses; voluntary employee contributions to certain deferred compensation plans, such as 401(k) plans; employee gains from exercising nonqualified stock options; and receipts in kind that represent income. Wage and salary accruals consist of *disbursements* and *wage accruals less disbursements*. Disbursements is wages and salaries as just defined except that retroactive wage payments are recorded when paid rather than when earned. Accruals less disbursements is the difference between wages earned, or accrued, and wages paid, or disbursed. In the NIPA's, wages accrued is the measure used for national income, and wages disbursed is the measure used for personal income.

Supplements to wages and salaries consist of employer contributions for social insurance and of other labor income. *Employer contributions for social insurance* consists of employer payments under the following Federal Government and State and local government programs: Old-age, survivors, and disability insurance (social security); hospital insurance; unemployment insurance; railroad retirement; pension benefit guaranty; veterans life insurance; publicly administered workers' compensation; military medical insurance; and temporary disability insurance. *Other labor income* consists of employer payments (including payments in kind) to private pension and profit-sharing plans, publicly administered government employee retirement plans, private group health and life insurance plans, privately administered workers' compensation plans, supplemental unemployment benefit plans, and several minor categories of employee compensation (including judicial fees to jurors and witnesses, compensation of prison inmates, and marriage fees to justices of the peace).

PI : Proprietors' income (with inventory valuation and capital consumption adjustments) is the current production income (including income in kind) of sole proprietorships and partnerships and of tax-exempt cooperatives. The imputed net rental income of owner-occupants of farm dwellings is included; the imputed net rental income of owner-occupants of nonfarm dwellings is included in rental income of persons. Proprietors' income excludes dividends and monetary interest received by nonfinancial business and rental income received by persons not primarily engaged in the real estate business; these incomes are included in dividends, net interest, and rental income of persons.

R : Rental income of persons (with capital consumption adjustment) is the net current-production income of persons (except those primarily engaged in the real estate business) from the rental of real property, the imputed net rental income of owner-occupants of nonfarm dwellings, and the royalties received by persons from patents, copyrights, and rights to natural resources.

PII : Corporate profits (with inventory valuation and capital consumption adjustments) is the net current production income of organizations treated as corporations in the NIPAs. These organizations consist of all entities required to file Federal corporate tax returns, including mutual financial institutions and cooperatives subject to Federal income tax, private non-insured pension funds, nonprofit institutions that primarily serve business, Federal Reserve banks, and federally sponsored credit agencies. With several differences, this income is measured as receipts less expenses as defined

in Federal tax law. Among these differences are the following: Receipts exclude capital gains and dividends received, expenses exclude depletion and capital losses and losses resulting from bad debts, inventory withdrawals are valued at replacement cost, and depreciation is on a consistent accounting basis and is valued at replacement cost using depreciation profiles based on empirical evidence on used-asset prices that generally suggest a geometric pattern of price declines. Because national income is defined as the income of U.S. residents, its profits component includes income earned abroad by U.S. corporations and excludes income earned in the United States by the rest of the world.

Profits before tax is the income of organizations treated as corporations in the NIPA's except that it reflects the inventory-accounting and depreciation accounting practices used for Federal income tax returns. It consists of profits tax liability, dividends, and undistributed corporate profits.

Profits tax liability is the sum of Federal, State, and local government income taxes on all income subject to taxes; this income includes capital gains and other income excluded from profits before tax. The taxes are measured on an accrual basis, net of applicable tax credits.

Profits after tax is profits before tax less profits tax liability. It consists of dividends and undistributed corporate profits.

Dividends is payments in cash or other assets, excluding the corporations' own stock, that are made by corporations located in the United States and abroad to stockholders who are U.S. residents. The payments are measured net of dividends received by U.S. corporations. Dividends paid to State and local governments are included. *Undistributed profits* is corporate profits after tax less dividends.

Inventory valuation adjustment (IVA) is the difference between the cost of inventory withdrawals valued at acquisition cost and the cost of inventory withdrawals valued at replacement cost. The IVA is needed because inventories as reported by business are often charged to cost of sales (that is, withdrawn) at their acquisition (historical) cost rather than at their replacement cost (the concept underlying the NIPAs). As prices change, businesses that value inventory withdrawals at acquisition cost may realize profits or losses. Inventory profits, a capital-gains-like element in business income (corporate profits and nonfarm proprietors' income), result from an increase in inventory prices, and inventory losses, a capital-loss-like element, result from a decrease in inventory prices. In the NIPAs, inventory profits or losses are shown as adjustments to business income; that is, they are shown as the IVA with the sign reversed. No adjustment is needed to farm proprietors' income because farm inventories are measured on a current-market-cost basis.

NI : Net interest is the interest paid by private business less the interest received by private business, plus the interest received from the rest of the world less the interest paid to the rest of the world. Interest payments on mortgage and home improvement loans and on home equity loans are included in interest paid by business because home ownership is treated as a business in the NIPA's. Interest received by private non-insured pension plans is recorded as being directly received by persons in personal income (see below). In addition to monetary interest, net interest includes imputed interest, which is paid by corporate financial business. For regulated investment companies, imputed interest is measured as operating expenses. For depository institutions and life insurance carriers, imputed interest is measured as the difference between the property income received on depositors' or policyholders' funds and the amount of property income paid out explicitly. The imputed interest paid by life insurance carriers attributes their investment income to persons in the period it is earned. The imputed interest payments by financial intermediaries (other than life insurance carriers) to persons, governments, and to the rest of the world have imputed service charges as counterentries in GDP and in income payments to the rest of the world; these charges are included in PCE, in government consumption expenditures and gross investment, and in exports of goods and services, respectively.

BTr : Business transfer payments consists of payments to persons and to the rest of the world by private business for which no current services are performed. Business transfer payments to persons consist primarily of liability payments for personal injury and of corporate gifts to nonprofit institutions. Business transfer payments to the rest of the world consists of nonresident taxes—that is, taxes paid by domestic corporations to foreign governments.

T_{YMS} : Taxes on production and imports consists of (1) tax liabilities that are chargeable to business

expense in the calculation of profit-type incomes and (2) certain other business liabilities to general government agencies that are treated like taxes. Indirect business taxes includes taxes on sales, property, and production. Employer contributions for social insurance are not included. Taxes on corporate incomes are also not included; these taxes cannot be calculated until profits are known, and in that sense, they are not a business expense. Nontaxes includes regulatory and inspection fees, special assessments, fines and forfeitures, rents and royalties, and donations. Nontaxes generally excludes business purchases from general government agencies of goods and services that are similar to those provided by the private sector. Government current receipts from the sales of such products are netted against government consumption expenditures.

GES : Subsidies less current surplus of government enterprises is the monetary grants paid by government agencies to private business and to government enterprises at another level of government. The *current surplus of government enterprises* is their current operating revenue and subsidies received from other levels of government less their current expenses. In the calculation of their current surplus, no deduction is made for net interest paid. The current surplus of government enterprises is not counted as a profit type income, and therefore, it is not counted as a factor charge. Subsidies and current surplus are shown as a combined entry because deficits incurred by some government enterprises may result from selling goods to business at below-market prices in lieu of giving them subsidies.

CFC : Consumption of fixed capital is the charge for the using up of private and government fixed capital located in the United States. It is defined as the decline in the value of the stock of assets due to wear and tear, obsolescence, accidental damage, and aging. For most types of assets, estimates of CFC are based on geometric depreciation patterns; empirical studies on the prices of used equipment and structures in resale markets have concluded that a geometric pattern of depreciation is appropriate for most types of assets. For general government and for nonprofit institutions that primarily serve individuals, CFC is recorded in government consumption expenditures and in PCE, respectively, as a partial measure of the value of the current services of the fixed assets owned and used by these entities. *Private capital consumption allowances* consists of tax-return-based depreciation charges for corporations and nonfarm proprietorships and of historical-cost depreciation (calculated by BEA, using a geometric pattern of price declines) for farm proprietorships, rental income of persons, and nonprofit institutions. *Private capital consumption adjustment* is the difference between private capital consumption allowances and private CFC.

IncRoW : Income receipts from the rest of the world consists of receipts by U.S. residents of foreign interest and dividends, of reinvested earnings of foreign affiliates of U.S. corporations, and of compensation paid to U.S. residents by foreigners. *Income payments to the rest of the world* consists of payments to foreign residents of U.S. interest and dividends, of reinvested earnings of U.S. affiliates of foreign corporations, and of compensation paid to foreigners by U.S. residents.

Appendix 2 – Further comments on VECs.

Let us first recall the general representation of a VEC model containing $X_t=(x_{1t}, \dots, x_{nt})$ I(1) variables indexed in time :

$$\text{VEC}(k): \quad \Delta X_t = \underbrace{\alpha \cdot \beta'}_{\text{long-run}} \cdot X_{t-1} + \underbrace{\sum_{i=1}^{k-1} \Gamma \cdot \Delta X_{t-i}}_{\text{short-run}} + \underbrace{\mu_0 + \mu_1 \cdot t}_{\text{deterministic component}} + \underbrace{\Phi D_t}_{\text{exogenous regressors}} + \underbrace{\varepsilon_t}_{\text{gaussian errors}}$$

where k is the number of past values of each (differenced) variable used to explain the dependant variable, α is a $r \cdot n$ matrix of coefficient loadings to the cointegrating relations (r being the rank of matrix Π), β' contains $r \cdot n$ the ‘long-run’ or ‘steady-state’ coefficients, Γ is the ‘short-run’ or ‘differences’ coefficient matrix, D_t is a set of exogenous variables (not discussed here) and ε_t is a set of Gaussian errors.

The rest of this appendix provides an intuitive interpretation of the cointegrating relationships as well as the two tests measuring their number, presents and discusses the adjustment loadings, and introduces the five cases types of deterministic component.

First, $\beta' x_{t-1}$ are (is) the cointegrating relation(s), that is the relationship(s) that links all variables. Those cointegrating relationships are also called common trends, since they are interpretable as the common forces that bound *all* variables at the same time. This is (these are) cointegrating relationships in the sense that some linear combinations of the series, which are I(1), become I(0), thus fulfilling the stationarity requirements of efficient estimation. The coefficients of such stationary linear combinations are piled into the β' matrix.

Yet the number of such cointegrating relationships remains to be estimated, i.e. we do not know how many different forces drive all the variables. Johansen provides two tests, the trace test and the maximum eigenvalue test, to test for the number of cointegrating relationships. This number is therefore the number of relationships that bound variables. Please note that the asymptotic critical values of those tests crucially depend (1) on whether or not a set of exogenous regressors is present (D_t) and (2) on the deterministic specification of the cointegrating relationships the researcher chooses (μ_0, μ_1 , see below). Note also that there may not be any significant cointegration between the variables.

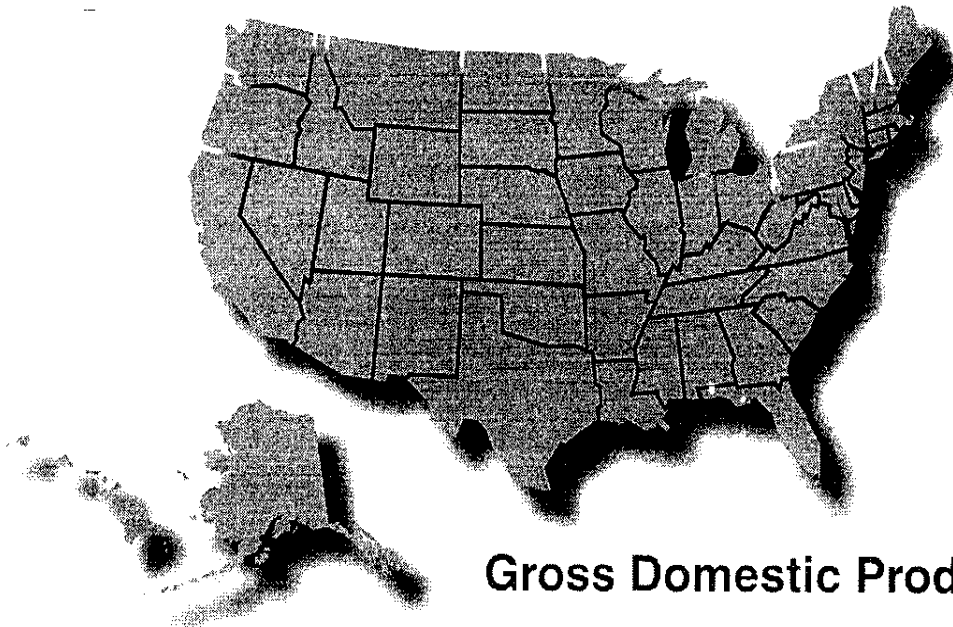
Second, once those cointegrating relationships or ‘long-run’, ‘steady-state’ relationships are estimated, they enter the error-correction part of the model. Those relationships are stationary around the deterministic part of the model and there exists deviations from the trend/constant (see more below). Such deviations are interpreted as errors, which explain every variable of the system. For example, let us think of a system composed of only two variables, say GDP and consumption. Since there are only two variables, there can be at most one cointegrating relationship. Since the share of consumption in GDP is roughly stable, one can think of a common force, or cointegrating relationship, which drive *both* variables. In practice such a cointegrating relationship exists and *roughly* represents the share of consumption of GDP through time, scaled to revert around a trend or a constant. Johansen proves that there exists a representation in which those deviations from the ‘steady-state’ explain every variable in the system. Doing so, we explain both variables as a function of the share of consumption in GDP ; intuitively, if at some point in time we are below the ‘steady-state’ or ‘long-run’ value of the share of consumption in GDP, one of the two variables will have to move in such a way as to restore the ‘long-run’ value of that ratio. For example, in a time characterized by a below-average consumption-GDP ratio, consumption is likely to

increase to restore the long-run value of that ratio. The magnitude of this adjustment of the variables is captured in the α coefficients, which are termed ‘adjustment coefficients’ after Johansen. Please note that those adjustment coefficients need not be all individually or jointly significant ; a system may come out estimated with non-error-correcting variables, or with variables that error-correct in the wrong direction (variables push the process further away equilibrium each time a maladjustment occurs).

Third, as mentioned above the deterministic component of the model is an important choice because it has clear implications for estimation. In the general model above, we specify the deterministic components as $\mu_0 := \alpha\beta_0 + \gamma_0$ and $\mu_1 := \alpha\beta_1 + \gamma_1$. Five cases arise from there on, ranging from a significant quadratic trend in the data to no trend and no constant in the data.

- Case 5 :** no restriction on μ_0, μ_1 implies that there is a quadratic trend in the data, or equivalently that the growth rates follow a timely trend.
- Case 4 :** $\gamma_1 = 0$ implies that there is a linear trend in the data, and this trend does not cancel out in the cointegrating relationships. Thus the cointegrating relationships contain a significant trend, but the rest of the model (the error-correction part) does not contain any trend and features a constant only. This case appears to be a good one, albeit needs to be tested for, since (1) our variables appear to broadly follow a trend (see unit root tests), and (2) this case is particularly suitable for trend-stationary variables as corporate profits is (see unit root tests again).
- Case 3 :** $\mu_1 = 0$ implies that there is a linear trend in the data and it does cancel out in the cointegrating relationship. This case may be the one of choice if the trending series feature a trend that cancels out in the cointegrating relationship. In that case the constant is unrestricted and may belong either to the cointegration space or to the error-correction part of the model.
- Case 2 :** $\mu_1 = 0, \gamma_0 = 0$ but $\beta_0 \neq 0$ implies that there are no linear trends in the data, and the constant is restricted to lie in the cointegration space. This case may be good if the trends we observed earlier on were spurious trends.
- Case 1 :** $\mu_1 = 0, \mu_0 = 0$ implies that there is no deterministic component in the data. This would imply that the cointegrating relationship has zero mean, which is a bad choice since the data does not start from zero in 1954:1.

Please note that Johansen’s classic five cases are all nested into one another, case four being a restricted version of case five, etc... The appropriate method is therefore to start with an assumption of case five, test for the presence of a quadratic trend in the data (*via* a LM test), and if rejected, carry on the analysis with case four. Such a method avoids the annoying pitfall of VECs which states that ‘the deterministic component is an assumption of the researcher’.



Gross Domestic Product (GDP) by State

The Bureau of Economic Analysis prepares annual estimates of GDP by state for all states and the District of Columbia.¹ GDP by state is the state counterpart of the nation's GDP, the Bureau's featured and most comprehensive measure of U.S. economic activity. An industry estimate of GDP by state, or its "value added," is calculated as the sum of incomes earned by labor and capital and the costs incurred in the production of goods and services. The Bureau prepares GDP-by-state estimates in millions of current and chained dollars for 81 North American Industry Classification System (NAICS) industries (table 1), beginning with 1997. (BEA also prepares GDP-by-state estimates for 75 Standard Industrial Classification (SIC)-based industries for 1963–97.) For each industry, current-dollar GDP by state is composed of three components: Compensation of employees, taxes on production and imports less subsidies, and gross operating surplus.

BEA releases advance total and aggregate NAICS industry GDP-by-state estimates in both current and chained dollars six months after the end of the year and two months after the advance release of annual GDP by Industry for the United States. Advance estimates are largely extrapolations of previous GDP-by-state estimates using earnings by state and industry. Revisions to total and aggregate industry-level GDP by state estimates, and new disaggregate-level NAICS industry data are prepared each year, based on more complete source data. The Bureau also prepares regular analyses of the GDP-by-state estimates that accompany the release of new estimates.

1. These estimates were formerly known as Gross State Product or GSP.

Uses of GDP by state

The GDP-by-state estimates are used widely by both public and private sectors for various administrative purposes or for studying economic trends in states and regions. For example:

- Federal government agencies use the estimates as a basis for allocating funds and determining matching grants to states. They also use the estimates in econometric models, such as those used to project energy and water uses by state.
- State governments use the estimates in econometric models to project tax revenues and the need for public services.
- Academic researchers use the estimates for applied economic research.
- Businesses, trade associations, and labor organizations use the estimates for market research.

Availability

BEA disseminates the GDP-by-state estimates in free, interactively accessible files in our Web site at www.bea.gov. BEA also publishes these estimates and their analyses in the Bureau's monthly journal — the *SURVEY OF CURRENT BUSINESS*. Some of the latest *SURVEY* articles include:

- "Gross Domestic Product by State: Advance Estimates for 2006 and Revised Estimates for 2003–2005," in the July 2007 issue.
- "Comprehensive Revision of Gross State Product: Accelerated Estimates for 2003 and Revised Estimates for 1977–2002," by Gerard P. Aman, George K. Downey, and Sharon D. Panek in the January 2005 issue.

• SURVEY articles for recent years are available on our Web site at www.bea.gov.

For more information

Call the GDP-by-state staff at 202-606-5340 or e-mail gdpbystate@bea.gov

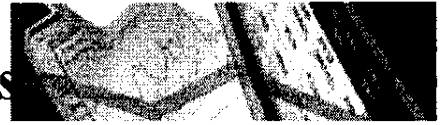
Table 1. Industries for Which GDP-by-State Estimates Are Available

| | 1997 NAICS code | | 1997 NAICS code |
|---|------------------------|---|----------------------|
| Private industries | | Information | 51 |
| Agriculture, forestry, fishing, and hunting | 11 | Publishing including software | 511 |
| Crop and animal production | 111-112 | Motion picture and sound recording industries | 512 |
| Forestry, fishing, and related activities | 113-115 | Broadcasting and telecommunications | 513 |
| | | Information and data processing services | 514 |
| Mining | 21 | Finance and insurance | 52 |
| Oil and gas extraction | 211 | Federal Reserve banks, credit intermediation and related services | 521-522 |
| Mining, except oil and gas | 212 | Securities, commodity contracts, investments | 523 |
| Support activities for mining | 213 | Insurance carriers and related activities | 524 |
| | | Funds, trusts, and other financial vehicles | 525 |
| Utilities | 22 | Real estate, rental, and leasing | 53 |
| Construction | 23 | Real estate | 531 |
| Manufacturing | 31-33 | Rental and leasing services and lessors of intangible assets | 532-533 |
| Durable goods | | Professional and technical services | 54 |
| Wood product manufacturing | 321 | Legal services | 5411 |
| Nonmetallic mineral product manufacturing | 327 | Computer systems design and related services | 5415 |
| Primary metal manufacturing | 331 | Other professional, scientific and technical services | 5412-5414, 5416-5419 |
| Fabricated metal product manufacturing | 332 | Management of companies and enterprises | 55 |
| Machinery manufacturing | 333 | Administrative and waste services | 56 |
| Computer and electronic product manufacturing | 334 | Administrative and support services | 561 |
| Electrical equipment and appliance manufacturing | 335 | Waste management and remediation services | 562 |
| Motor vehicle, body, trailer, and parts manufacturing | 3361-3363 | Educational services | 61 |
| Other transportation equipment manufacturing | 3364, 3365, 3366, 3369 | Health care and social assistance | 62 |
| Furniture and related product manufacturing | 337 | Ambulatory health care services | 621 |
| Miscellaneous manufacturing | 339 | Hospitals and nursing and residential care facilities | 622-623 |
| | | Social assistance | 624 |
| Nondurable goods | | Arts, entertainment, and recreation | 71 |
| Food product manufacturing | 311-312 | Performing arts, museums, and related activities | 711-712 |
| Textile and textile product mills | 313-314 | Amusements, gambling, and recreation | 713 |
| Apparel manufacturing | 315-316 | Accommodation and food services | 72 |
| Paper manufacturing | 322 | Accommodation | 721 |
| Printing and related support activities | 323 | Food services and drinking places | 722 |
| Petroleum and coal products manufacturing | 324 | Other services, except government | 81 |
| Chemical manufacturing | 325 | Government | 92 |
| Plastics and rubber products manufacturing | 326 | Federal civilian | |
| Wholesale trade | 42 | Federal military | |
| Retail trade | 44-45 | State and local | |
| Transportation and warehousing, excluding Postal Service | 48-49 | | |
| Air transportation | 481 | | |
| Rail transportation | 482 | | |
| Water transportation | 483 | | |
| Truck transportation | 484 | | |
| Transit and ground passenger transportation | 485 | | |
| Pipeline transportation | 486 | | |
| Other transportation and support activities | 487, 488, 492 | | |
| Warehousing and storage | 493 | | |

Source: Executive Office of the President, Office of Management and Budget, North American Industry Classification System Manual 1997 (Washington, DC: U.S. Government Printing Office, 1997).



Bureau of Economic Analysis Regional Economic Accounts



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Real GDP by state (millions of chained 2000 dollars)

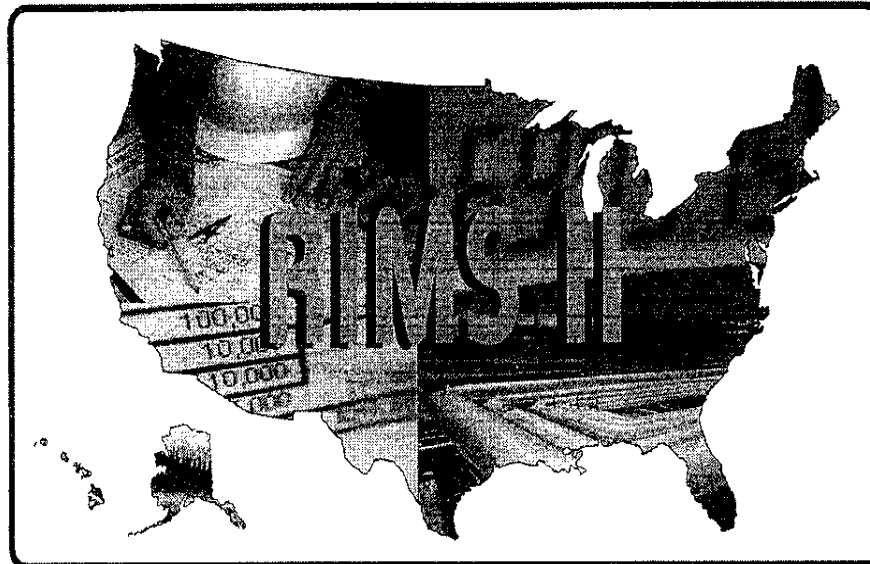
The real estimates of gross domestic product (GDP) by state are measured in chained (2000) dollars. Real GDP by state is an inflation-adjusted measure of each state's gross product that is based on national prices for the goods and services produced within the state.

Last updated: Friday, December 29, 2006

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Regional Economic Multipliers

The Bureau of Economic Analysis (BEA) prepares economic multipliers for states and local area economies. The multipliers are produced by the BEA's Regional Input-Output Modeling System (RIMS II) using state and local area personal income data and national input-output accounts data. RIMS multipliers can be used not only to estimate industry-wide impacts but also the impacts on each of the 20 industry sectors in RIMS II (table 1).

RIMS multipliers are used to study how one industry's production affects the production of other industries in an economy. They are used to estimate how much additional production is created for every initial increase in production and how many additional jobs are created for every new job that is created.

Uses of the regional economic multipliers

The regional economic multipliers are widely used by both the public and private sectors to study economic impacts. For example:

- Federal Government agencies use the regional economic multipliers to study the local impact of government regulation on specific industries and to assess the local economic impacts of Federal actions such as military base closings.
- State and local governments use the multipliers to estimate the regional economic impacts of government policies and projects and of events, such as firms locating within their state, or to assess the impacts of tourism.
- Businesses and private consultants use the multipliers to estimate the economic impacts of a wide range of projects,

such as building a new sports facility or expanding an airport; of natural disasters, such as Hurricane Katrina; or of special events, such as national political conventions.

Information required from users

To effectively use the RIMS II multipliers for impact analyses, users must provide geographically and industrially detailed information on the initial changes in output, earnings, or employment that are associated with a project or special event under study. To provide this information, the user must answer five questions about the project or event:

- What is the affected region?
- Which industries are initially affected?
- Is there more than one phase of the project or program?
- What are the initial changes in output, earnings, or employment?
- Should the initial changes be separated into production costs, transportation costs, and trade margins?

Availability

Multipliers can be ordered from the BEA Web site. A fee is charged to cover the cost of preparing multipliers. Detailed information on RIMS II is available on our Web site at <www.bea.gov>.

For more information

Call the Regional Input-Output Modeling System (RIMS) staff at 202-606-5343, or e-mail <rimsread@bea.gov>.

Table 1. RIMS II Industry Aggregations

| Number | RIMS industries | Input-Output industries included in aggregation |
|--------|---|---|
| 1 | Agriculture, forestry, fishing, and hunting..... | 1111A0-115000 |
| 2 | Mining..... | 211000-21311A |
| 3 | Utilities*..... | 2211A0-221300 |
| 4 | Construction..... | 230000 |
| 5 | Manufacturing..... | 311111-33999A |
| 6 | Wholesale trade..... | 420000 |
| 7 | Retail trade..... | 440000 |
| 8 | Transportation and warehousing..... | 481000-493000 |
| 9 | Information..... | 511110-514200 |
| 10 | Finance and insurance..... | 52A000-525000 |
| 11 | Real estate and rental and leasing..... | 531000-533000 |
| 12 | Professional, scientific, and technical services..... | 541100-5419A0 |
| 13 | Management of companies and enterprises..... | 550000 |
| 14 | Administrative and waste management services..... | 561300-562000 |
| 15 | Educational services..... | 611100-611B00 |
| 16 | Health care and social assistance..... | 621A00-624A00 |
| 17 | Arts, entertainment, and recreation..... | 711100-713A00 |
| 18 | Accommodation and food services..... | 7211A0-722000 |
| 19 | Other services*..... | 8111A0-813B00, S00A00 |
| 20 | Households..... | H00000 |

* Includes Federal Government enterprises.

JACOBS CONSULTANCY

in association with

Cordell & Crumley Communications Strategists



ARRIVALS
TERMINAL

FINAL REPORT

ECONOMIC IMPACT STUDY—2004 Norfolk International Airport

Prepared for

Norfolk Airport Authority
Norfolk, Virginia

October 2007

Final Report

Economic Impact Study—2004
Norfolk International Airport

Prepared for

Norfolk Airport Authority
Norfolk, Virginia

Prepared by

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ECONOMIC IMPACT STUDY

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ECONOMIC IMPACT STUDY

1 INTRODUCTION

In 2005, Jacobs Consultancy* assessed the economic impacts that Norfolk International Airport (the Airport) had on the Airport Service Region and the Commonwealth of Virginia in 2004.

As part of the economic impact study, Jacobs Consultancy did the following:

- Conducted surveys of on-Airport organizations to update and validate employment and expenditure data for the Airport.
- Completed an inventory of off-Airport economic benefits of air travel, such as tourism-related expenditures.
- Developed an input/output model to define the relationship among Airport activity, employment and expenditures, and economic contribution. Two versions of the Regional Input-Output Modeling System (RIMS II) developed by the U.S. Department of Commerce were used in this subtask—one for the Commonwealth of Virginia and another for Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area (MSA) (the Airport Service Region).
- Estimated the economic impact of the Airport on the Airport Service Region and on the Commonwealth of Virginia, based on data collected in the surveys, the inventory of off-Airport economic benefits, and the RIMS II modeling.

2 METHODOLOGY

The methodology used to evaluate the current economic impact of the Airport involved (1) gathering primary data on the direct economic impact of on-Airport organizations, (2) supplementing these primary data with applicable data from prior Airport economic impact studies and related data gathering efforts, (3) using tourism and visitor information for the Airport Service Region to estimate the indirect economic impact, and (4) using models and other statistical techniques to estimate the induced economic impacts of on-Airport activity.

The data sources used in this evaluation were: (1) on-Airport data collected via surveys of on-Airport organizations conducted by Cordell & Crumley Communications Strategists, (2) off-Airport data collected via surveys of Hampton Roads Area

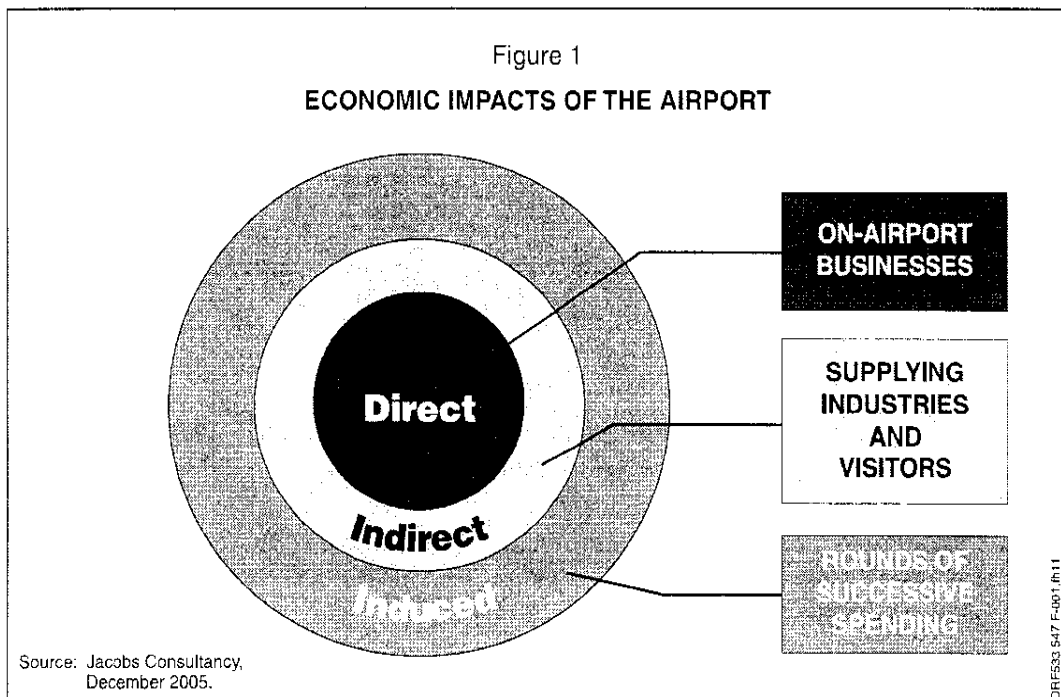
* When Jacobs Consultancy performed the Economic Impact Study in late 2005, the firm was known as Leigh Fisher Associates.

businesses conducted by Cordell & Crumley Communications Strategists, (3) relevant regional, state, and national economic indicators, (4) surveys of Airport passengers conducted by Bonney & Company published in February 2004, (5) the results of economic impact studies for the Airport prepared by the Airport Technology and Planning Group for 1992 and 1997, and (6) where required, inputs from other reports prepared for Norfolk Airport Authority (the Authority) by Jacobs Consultancy.

Whenever possible, calendar year data was used in this study. However, for many of the data sources listed, information was captured for a single point in time and not easily attributed to a specific twelve-month period. For example, the number of employees obtained from the survey of on-Airport organizations conducted by Cordell & Crumley Communications Strategists represents how many people each organization employed when they responded to the survey.

2.1 Definition of Terms

The total economic impact of the Airport is the sum of related direct, indirect, and induced impacts. Figure 1 illustrates the relationship among the direct, indirect, and induced economic impacts of the Airport.



- **Direct Economic Impact.** The direct economic impact of the Airport is the impact generated on-site, including the employment, payroll, and local expenditures of all organizations located at the Airport—airlines, terminal concessionaires, general aviation businesses, ground transportation providers, government agencies such as the Federal Aviation Administra-

tion (FAA), and other organizations. These organizations have a direct and quantifiable impact on the economy of the region served by the Airport.

- ***Indirect Economic Impact.*** The indirect economic impact of the Airport is the impact of visitors coming to the area via the Airport, including employment, payroll, and local expenditures in the area but outside the Airport. Visitors to the area spend money locally on lodging, food and beverages, entertainment, retail, and other items; such spending has an indirect but quantifiable impact on the economy of the region and state served by the Airport.
- ***Induced Economic Impact.*** The induced economic impact of the Airport is the off-Airport impact above and beyond the combined direct and indirect impacts of an economic activity, where additional income is created by successive rounds of spending known as the “multiplier” effect. Induced economic impact includes the employment and expenditures of (1) supplying industries that provide the services, materials, or machinery to support industries that derive business from on-Airport businesses, such as wholesale food distributors, office supply firms, and jet fuel suppliers and (2) expenditures by airport employees on goods and services within the area.

The direct, indirect, induced, and total economic impacts of the Airport are measured in terms of total economic impact, expenditures, payroll, and employment.

- ***Total economic impact dollars.*** The value of output measured in dollars. Total economic impact (expenditures and payroll) was assumed to equal output. This assumption is equivalent to assuming zero profits (revenues = expenses), and ensures conservative results.
- ***Expenditure.*** Total dollars spent on goods and services.
- ***Payroll.*** Total wages or salaries.
- ***Employment.*** The number of jobs.

The results of this study are intended to be estimates of economic impact, stated in terms of expenditures, payroll, and employment related to operations at the Airport. They should not be interpreted as benefits of Airport operations in the sense that such expenditures, payroll, or employment would not occur if the Airport were not in existence; they simply represent dollar flows and jobs in the economy related to activity at the Airport.

In general, the economic impacts presented in this report correspond to the long-term demand for aviation services in the region, regardless of the fluctuations in economic activity that may occur as a result of the entry or exit of specific organizations at the Airport.

2.2 Assessment of Direct Economic Impact

The direct economic impact of the Airport is the impact generated on-site at the Airport, and includes the employment, payroll, and local expenditures of all enterprises located at the Airport—airlines, terminal concessionaires, general aviation businesses, ground transportation providers, government agencies, and other businesses. These enterprises have a direct and quantifiable impact on the economy of the region.

On-Airport Business Survey. A survey form entitled “2004 Airport Tenant Survey” (reprinted here as Figure 2) was used to obtain employment and expenditure data for analysis of direct on-Airport economic impacts. Airport staff provided guidance on the survey content and design.

The survey form was designed to elicit information on employment and associated wage data; expenditures on services and supplies, capital improvements, and local taxes; and other expenditures contributing to the Airport’s economic impact.

The names and addresses of the on-Airport organizations to be surveyed were compiled with the assistance of Authority staff. Survey forms were faxed to the organizations listed in Table 1 in October 2004.

During November and December 2004, telephone calls were made to organizations that had not yet responded. Additional follow-up calls were made until a major portion of the organizations had responded and Jacobs Consultancy and Cordell & Crumley jointly determined that no more responses would be received.

Survey Responses. Table 2 summarizes the response rate for the on-Airport organizations surveyed, by type of organization. Of the 53 on-Airport organizations surveyed, 30 completed the survey form, for an overall response rate of 56.6%. Those 30 on-Airport organizations represent approximately 74.9% of the employment at the Airport and 90% of the employers with over 50 employees. Figure 3 shows the survey response rate in terms of number of surveys and employment represented. The overall response rate is better than the 33% to 35% average response rate for a survey of this type. The employment, payroll, and total economic impact estimates provided in this report, therefore, reflect an above-average sample size.

Partial Responses and Nonresponses. The economic impact of organizations that either did not respond to the survey or provided only partial information was estimated using survey information obtained from similar responding organizations.



NORFOLK INTERNATIONAL AIRPORT

2004 Airport Tenant Survey

Airports are significant contributors to the economy of the regions they serve, specifically in terms of employment, non-wage expenditures and local taxes. The Norfolk Airport Authority is conducting this confidential survey of on-Airport and Airport-related businesses to determine how great an economic contribution Norfolk International Airport makes to the region. Your assistance in providing the information requested below is appreciated. If you have any questions, please contact Cordell & Crumley at 757-460-4183.

Firm or Agency Information

1. Name: _____

Phone: _____ Fax: _____

Form completed by: _____

Employment Information for 2004

2. Number of employees at Norfolk International Airport: _____

3. Number of employees in the Hampton Roads Region supporting operations at Norfolk International Airport: _____

Expenditure Information for 2004

4. How much does your firm (or agency) anticipate it will spend locally supporting operations at Norfolk International Airport in 2004 for:

a. Gross payroll? \$ _____

b. Other expenditures including services, materials, supplies, equipment and capital improvements? \$ _____

c. Local taxes (property/school/special district)? \$ _____

d. Total \$ _____

5. Do you plan to expand your operation at Norfolk International Airport in the next 5 years? If so, please describe your plans.

Please fax this confidential survey to Cordell & Crumley at 757-460-8023.

ORF547 F-003

Table 1

ON-AIRPORT ORGANIZATIONS SURVEYEDNorfolk International Airport
Fall/Winter 2004

| Passenger airlines | Rental car companies |
|--|--|
| American Eagle | Avis Rent A Car |
| Continental Airlines | Budget Rent-A-Car Corporation |
| Delta Air Lines | Dollar Rent A Car Systems (a) |
| Delta Global Services (United Express) | Enterprise Rent-A-Car Company |
| Independence Air | The Hertz Corporation |
| Northwest Airlines | National Car Rental System |
| Piedmont Airlines (US Airways Express) | Thrifty Rent-A-Car System (a) |
| Southwest Airlines | |
| US Airways | |
| | Fixed base operators |
| | Piedmont Hawthorne Aviation |
| Cargo airlines | Government agencies |
| Airborne Express/DHL | Airport mail facility |
| Beamon & Lassiter Air Freight | Customs & Border Protection |
| FedEx | Federal Aviation Administration |
| Hipage Company | Norfolk Airport Authority |
| Majestic Terminal Services | Transportation Security Administration |
| Quantem Aviation Services | |
| Superior Air Freight | |
| Terminal sales/concessionaires | Other entities |
| Anton Airfood of Norfolk | Armed Services YMCA |
| Airport Barber Shop – Shoeshine | BB&T |
| Hudson News Group | CI Travel |
| Gourmet Group | Court One Corporation |
| | Huntleigh Corporation |
| | International Protection |
| | Navy Family Services Center |
| Ground transportation operators | |
| Ascom Transport Systems | |
| Ace Cab/Andy's Cab | |
| Black & White Cabs | |
| Carey VIP & Celebrity Limousines | |
| City Wide Cabs | |
| Duke's Cab Company | |
| East Side Cab Company | |
| Eden Cab Company | |
| Lewis/Waterside Taxi Company | |
| LPR (Airport Express) | |
| Norfolk Checker Taxi | |
| Oceanside Executive Transportation | |
| Southside Cab Company | |

(a) Owned and operated by Dollar Thrifty Group Operations (DTG Operations).

Source: Cordell & Crumley Communications Strategists, fall/winter 2004.

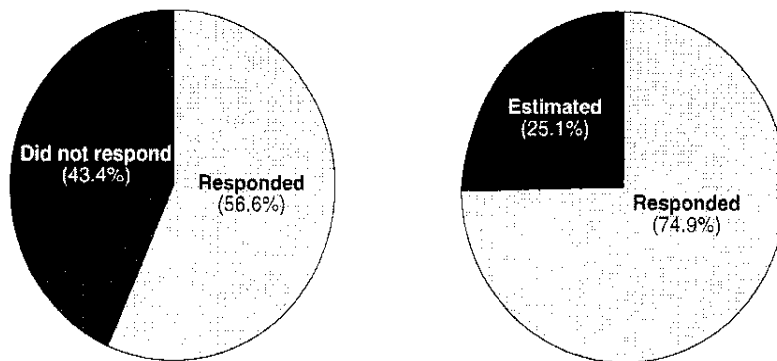
Table 2
ON-AIRPORT SURVEY RESPONSES, BY INDUSTRY TYPE

| | <u>Total surveyed</u> | <u>Number of survey responses</u> | <u>Response rate (percent)</u> |
|-----------------------------------|-----------------------|-----------------------------------|--------------------------------|
| Passenger airlines | 9 | 5 | 55.6% |
| Cargo airlines | 7 | 6 | 85.7 |
| Concessionaires/terminal services | 4 | 3 | 75.0 |
| Rental car companies | 7 | 3 | 42.9 |
| Ground transportation operators | 13 | 4 | 30.8 |
| Fixed base operators | 1 | 1 | 100.0 |
| Government agencies | 5 | 4 | 80.0 |
| Other businesses | <u>7</u> | <u>4</u> | 57.1 |
| Total/average | 53 | 30 | 56.6% |

Source: Cordell & Crumley Communications Strategists, surveys of on-Airport organizations, fall/winter 2004.

Figure 3
ON-AIRPORT SURVEY RESPONSE RATES FOR ORGANIZATIONS AND EMPLOYEES REPRESENTED

Response rate by organization (53 organizations) **Response rate by employees represented** (1,685 on-Airport employees)



Source: Jacobs Consultancy, January 2005, based on surveys of on-Airport organizations, November 2004.

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For those airlines that did not respond to the survey, employment and expenditures were estimated on the basis of the responses by similar responding airlines and the nonresponding airline's passenger numbers. The average number of employees per passenger for the responding airlines was used to estimate the number of employees for the nonresponding airlines. Similarly, the average expenditures (payroll, services, materials and supplies, capital, and others) per passenger for nonresponding passenger airlines were estimated using data from the responding airlines and financial data submitted to the U.S. Department of Transportation (U.S. DOT) by major airlines. The U.S. DOT data were used to account for varying cost structures and labor agreements among airlines.

Employment and expenditures for the nonresponding passenger terminal concessionaires were estimated on the basis of gross revenue data provided by the Authority. The average number of employees per revenue dollar for the responding concessionaires was used to estimate the number of employees for the nonresponding terminal concessionaires. The average expenditure per employee for the responding concessionaires was used to estimate expenditures for the nonresponding concessionaires.

The employees and expenditures of other on-Airport businesses that have revenue-based contracts at the Airport but did not respond to the survey were estimated on the basis of gross revenue data in a manner similar to that used to estimate the employees and expenditures of nonresponding concessionaires.

2.3 Assessment of Indirect Economic Impact

The spending of air passenger visitors in the Airport Service Region composes the indirect economic impact. This spending includes any goods or services purchased by air passenger visitors while in the Airport Service Region, excluding money spent at the Airport. Visitor spending is used by local businesses toward payroll and local expenditures and generates jobs in the Airport Service Region. A survey of enplaning passengers conducted by Bonney & Company in 2004 was used to quantify spending of air passenger visitors.

The total amount spent by air passenger visitors is derived from the number of enplaning passengers, the percentage of visitors (in relation to residents) using the Airport, and the average expenditure per visitor per trip, as follows:

$$\text{Air visitor spending in 2004} = \text{number of enplaned passengers in 2004} \times \text{percent visitors} \times \text{average amount spent per visitor per trip.}$$

Out-of-state travelers were asked to estimate their total amount spent on various items, including lodging, food and beverages, retail stores, rental cars, and other items. Indirect impact excludes spending made by air passenger visitors while at the Airport. This spending, such as rental cars, are already included as part of the

on-Airport tenant survey and are therefore part of direct economic impact. Spending by residents of the Hampton Roads Area using the Airport is not included in indirect spending because it would have been spent locally regardless.

2.4 Assessment of Induced Economic Impact

Induced economic impact is generated by the labor, services, materials, and other items purchased by the companies and employees of on-Airport businesses and visitor industries that provide the direct and indirect economic impacts of the Airport. An airline produces a direct impact; an oil company that sells fuel to the airline produces an induced impact. The goods and services purchased by households as a result of the employment and wages paid to industries with direct Airport-related economic impact are also considered induced impacts. Household spending (personal consumption) by both airline and oil company employees also produces an induced economic impact.

Hampton Roads Area Business Survey. A survey form entitled “2004 Hampton Roads Area Business Survey” (reprinted here as Figure 4) was used to qualitatively assess the impact of the Airport on the Hampton Roads region. The survey was used to validate the results of the Regional Input-Output Analysis described in the following sections. Authority staff provided guidance on the survey content and design.

A total of 52 businesses was surveyed and 13 responded (25.0% response rate). The responding businesses are frequent users of the Airport and all considered access to an airport important to their business. All companies considered business travel important and 85% considered air freight important to their business. All respondents used the Airport more than competing airports in the region, and 62% of respondents have one or more employees that travel for business almost daily. Air cargo services provided at the Airport, such as air freight or air mail, are used by 46% of respondents almost daily. Approximately 40% of the companies responding use both passenger air travel services and cargo air services almost daily.

The average annual gross revenues in the Hampton Roads Area for companies that responded were \$199 million. Responding companies employed, on average 1,120 employees per company. The average annual payroll to local employees was approximately \$80 million, corresponding to an average annual payroll of \$53,340 per employee.

As shown on Figure 4, company representatives were asked to rate the Airport in terms of ease of use, concessions and services, road access, and destinations served:

- 92% rated the ease of use of the Airport as good or better, with 46% rating it very good or excellent
- 83% rated the concessions and services provided at the Airport as good or better, with 50% rating them very good or excellent
- 85% rated access to the Airport as good or better, with 62% rating it very good or excellent
- 92% rated the number of destinations served at the Airport as good or better, with 54% rating it very good or excellent

Illustrating the importance of road access to users of the Airport, all of the respondents that rated ease of use as very good or excellent also rated getting to and from the Airport as very good or excellent. Similarly, respondents that rated ease of getting to and from the Airport as bad or poor, rated ease of use as good or poor. While all but one of the responding companies were within 15 miles of the Airport, companies that use Interstate 64 and the Hampton Roads Bridge Tunnel to reach the Airport tended to rate road access as bad or poor.

2.5 Induced Economic Impacts Modeling Methodology

The Hampton Roads Area Business Survey provided qualitative input from the companies in the region and confirmed that the Airport was important to many of their day-to-day operations. Input-output modeling quantifies the induced effects of the direct and indirect economic impact of the Airport on the Airport Service Region's economy.

RIMS II, which was used for this study, is based on a national input-output model created and maintained by the U.S. Department of Commerce, Bureau of Economic Analysis. The model was adjusted for the specific regions and designed to account for the differences between the economies of these regions and the nation as a whole. Two versions of the regional input-output model were used in this analysis: one for the entire Commonwealth of Virginia and another for the Airport Service Region, consisting of Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area (MSA). In some cases, coefficients in the model were adjusted to account for the Airport-specific nature of certain on-Airport businesses. The coefficients in the model express the change in expenditures, payroll, or employment generated by a unit change in the direct and indirect economic impacts.



NORFOLK INTERNATIONAL AIRPORT

2004 Hampton Roads Area Business Survey

- 1. Zip code of business location: _____
- 2. Type of business: _____
- 3. Number of local employees (number of full-time equivalent employees): _____
- 4. Total annual payroll to local employees: _____
- 5. Estimated annual gross revenues (in the Hampton Roads Area): _____

6. Please rate the following:

| | Not important | | Somewhat important | | Very important |
|---|---------------|---|--------------------|---|----------------|
| How important is it for your business to have access to an airport? | 1 | 2 | 3 | 4 | 5 |
| How important is business travel to your business? | 1 | 2 | 3 | 4 | 5 |
| How important are air mail and freight services to your business? | 1 | 2 | 3 | 4 | 5 |

7. Please rate Norfolk International Airport on the following:

| | Poor | | Good | | Excellent |
|---------------------------------|------|---|------|---|-----------|
| Ease of use | 1 | 2 | 3 | 4 | 5 |
| Concessions and services | 1 | 2 | 3 | 4 | 5 |
| Getting to and from the airport | 1 | 2 | 3 | 4 | 5 |
| Destinations served | 1 | 2 | 3 | 4 | 5 |

8. How frequently do one or more employees from your company travel for business?

- Once per year Several times per year Once per month
- Every 2 weeks Once per week Almost daily Never

9. How frequently does your company use air cargo services such as air freight or air mail?

- Once per year Several times per year Once per month
- Every 2 weeks Once per week Almost daily Never

10. Please estimate the percentage of visitors to your business arriving via Norfolk International Airport: _____

11. Which airport do you and your colleagues use most? Norfolk Newport News Richmond

Please provide any general comments you have about Norfolk International Airport:

Optional Information

Name of company: _____

Name of respondent: _____

Address: _____

Phone: _____

Please fax this confidential survey to Cordell & Crumley at 757-460-8023.

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2.5 Distribution of Economic Impact by Community

The direct economic impact generated by the Airport was allocated to the surrounding communities based on on-Airport employees' residence. For security purposes, a majority of on-Airport employees receive identification badges. Summary information was obtained from these records to indicate the distribution of the community of residence for on-Airport employees. These data were used to allocate on-Airport employment, payroll, and total direct economic impact to the communities in the Airport Service Region. Induced economic impact associated with on-Airport tenants was assumed to mirror the distribution of direct economic impacts.

The indirect economic impact generated by the Airport was allocated to the surrounding communities based on the destination of visitors to the Airport Service Region using the Airport. The Booney & Company survey provided a distribution of where air passenger visitors would stay in the Airport Service Region. These data were used to allocate the indirect economic impact to the communities in the Airport Service Region. Induced economic impact associated with air passenger visitors was assumed to mirror the distribution of indirect economic impacts.

3 ECONOMIC IMPACT OF THE AIRPORT

This section presents the impact of the Airport on the economy of the Airport Service Region and the Commonwealth of Virginia in 2004, determined using the methodology outlined in the previous section. The economic impact of the Airport is presented in terms of the direct, indirect, and induced impact of Airport activity on the overall economy of these areas.

3.1 Direct Economic Impact

Direct economic impact is defined as the employment, payroll, and local expenditures of all organizations located at the Airport directly dependent on aviation, including passenger airlines, cargo airlines, fixed base operators, passenger terminal concessionaires, government agencies, rental car companies, and other aviation support businesses.

Employment. Figure 5 and Table 3 present summaries of on-Airport employment and payroll by industry and show on-Airport tenant expenditures by industry. The data reported represent a combination of data furnished by survey respondents and estimates to account for nonresponses. As shown on Figure 5 and in Table 3, 1,685 people were employed by on-Airport organizations in 2004.

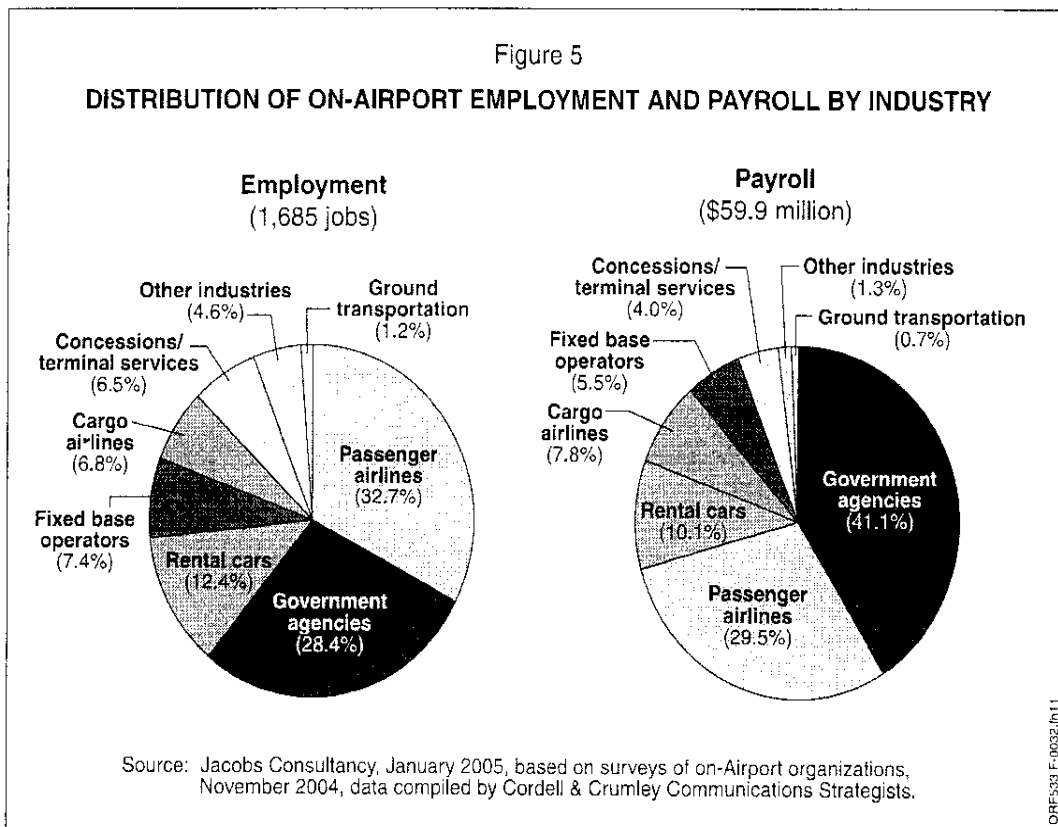


Table 3
ESTIMATED DIRECT ECONOMIC IMPACT BY INDUSTRY IN 2004

| Type of organization | Number of on-Airport employees | (millions) | | Direct economic impact |
|---------------------------------------|--------------------------------|---------------|--------------------|------------------------|
| | | Payroll (a) | + Expenditures (b) | |
| Airlines | | | | |
| Passenger | 551 | \$17.6 | \$ 6.0 | \$ 23.6 |
| Cargo | <u>115</u> | <u>4.7</u> | <u>2.9</u> | <u>7.6</u> |
| | 666 | \$22.3 | \$ 8.9 | \$ 31.2 |
| Terminal concessionaires | | | | |
| Concessionaires/ terminal services | 109 | \$ 2.4 | \$ 5.5 | \$ 7.9 |
| Rental car companies | <u>209</u> | <u>6.1</u> | <u>37.7</u> | <u>43.8</u> |
| | 318 | \$ 8.5 | \$43.2 | \$ 51.7 |
| Other | | | | |
| Ground transportation | 20 | \$ 0.4 | \$ 0.3 | \$ 0.7 |
| Fixed base operators | 125 | 3.2 | 2.4 | 5.6 |
| Government agencies | 479 | 24.7 | 21.4 | 46.1 |
| Other industries | <u>77</u> | <u>0.8</u> | <u>0.2</u> | <u>1.0</u> |
| | <u>701</u> | <u>\$29.1</u> | <u>\$24.3</u> | <u>\$ 53.4</u> |
| Total | 1,685 | \$59.9 | \$76.4 | \$136.3 |

(a) Includes wages, salaries, and proprietors' income.

(b) Includes any other local expenditures.

Sources: Jacobs Consultancy, January 2005, based on surveys of on-Airport organizations, November 2004; data compiled by Cordell & Crumley Communications Strategists.

On-Airport employment has increased steadily since 1997 (2.3% per year on average). The greatest increase has been in governmental agencies, which grew by 23.5% from 1997. A majority of this increase can be attributed to the creation of the Transportation Security Administration (TSA), which oversees baggage and passenger screening at the Airport. In addition, the number of people employed by the passenger airlines has increased since 1997 due to new service from Southwest Airlines (2001) as well as expansion by other carriers.

Table 4 presents the direct impact on employment by municipality in the Airport Service Region in 1997 and 2004. While the percent of direct impact on employment in Virginia Beach was at 37% in both 1997 and 2004, the percent of direct impact on employment in Norfolk decreased by 5% from 36% in 1997 to 31% in 2004.

Table 4

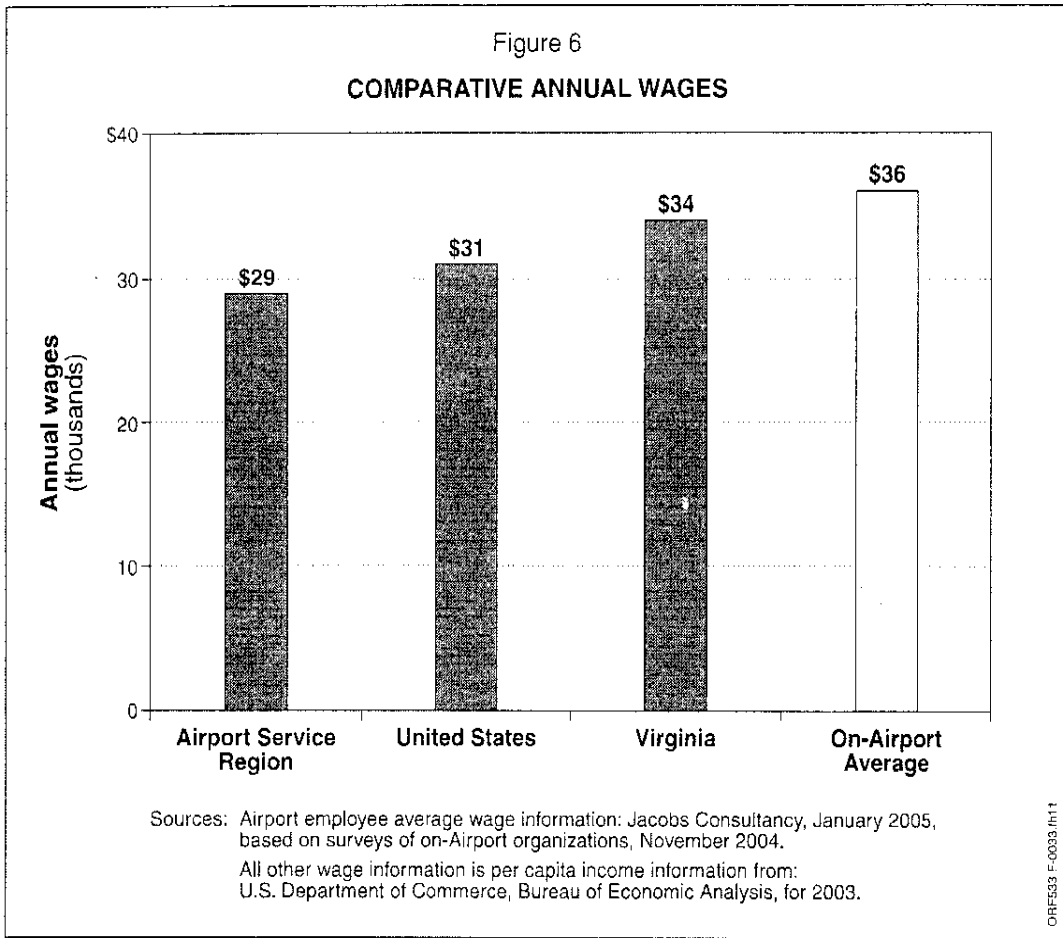
**DIRECT IMPACT ON EMPLOYMENT BY MUNICIPALITY
IN THE AIRPORT SERVICE REGION IN 2004**

| Municipality | 1997 | | 2004 | |
|----------------|----------|-----------|----------|-----------|
| Norfolk | 36% | 518 | 31% | 516 |
| Virginia Beach | 37 | 532 | 37 | 631 |
| Chesapeake | 16 | 230 | 15 | 252 |
| Portsmouth | 2 | 29 | 5 | 77 |
| Suffolk | 1 | 14 | 3 | 47 |
| Hampton | 3 | 43 | 4 | 69 |
| Newport News | 3 | 43 | 3 | 58 |
| North Carolina | na | na | 1 | 11 |
| Other | <u>2</u> | <u>29</u> | <u>1</u> | <u>24</u> |
| Total | 100% | 1,439 | 100% | 1,685 |

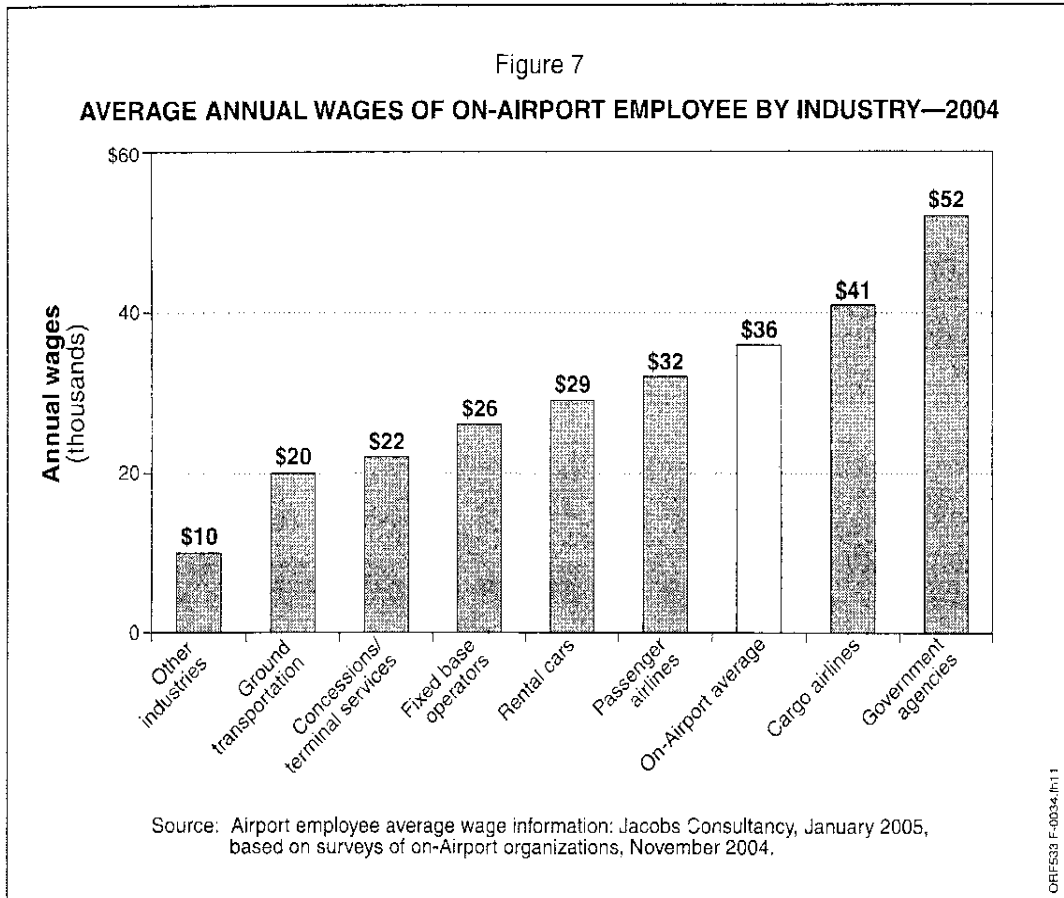
Sources: 1997: *The Economic Impact of Norfolk International Airport*, The Technology and Planning Group, Inc., March 1998; 2004: Jacobs Consultancy interpretation of data provided by the Airport Authority.

Payroll. As shown in Table 3, payroll paid to employees of on-Airport organizations totaled about \$60 million in 2004, an increase of \$16 million compared with the \$44 million in payroll in 1997. Payroll has increased faster between 1997 and 2004 (4.5%) than between 1992 and 1997 (1.1%), attributable to increases in passengers and types of services provided at the Airport since 1997.

Payroll expenditures are increasing faster than employment levels due to inflation and overall increases in the average salary received by on-Airport employees over the same timeframe. The average salary for on-Airport employees was \$27,374 in 1992; \$30,535 in 1997; and \$35,576 in 2004. As illustrated on Figure 6, the estimated average wage per on-Airport employee was 24.1% higher than the per capita income for the Airport Service Region and 5.9% higher than that of the Commonwealth of Virginia.

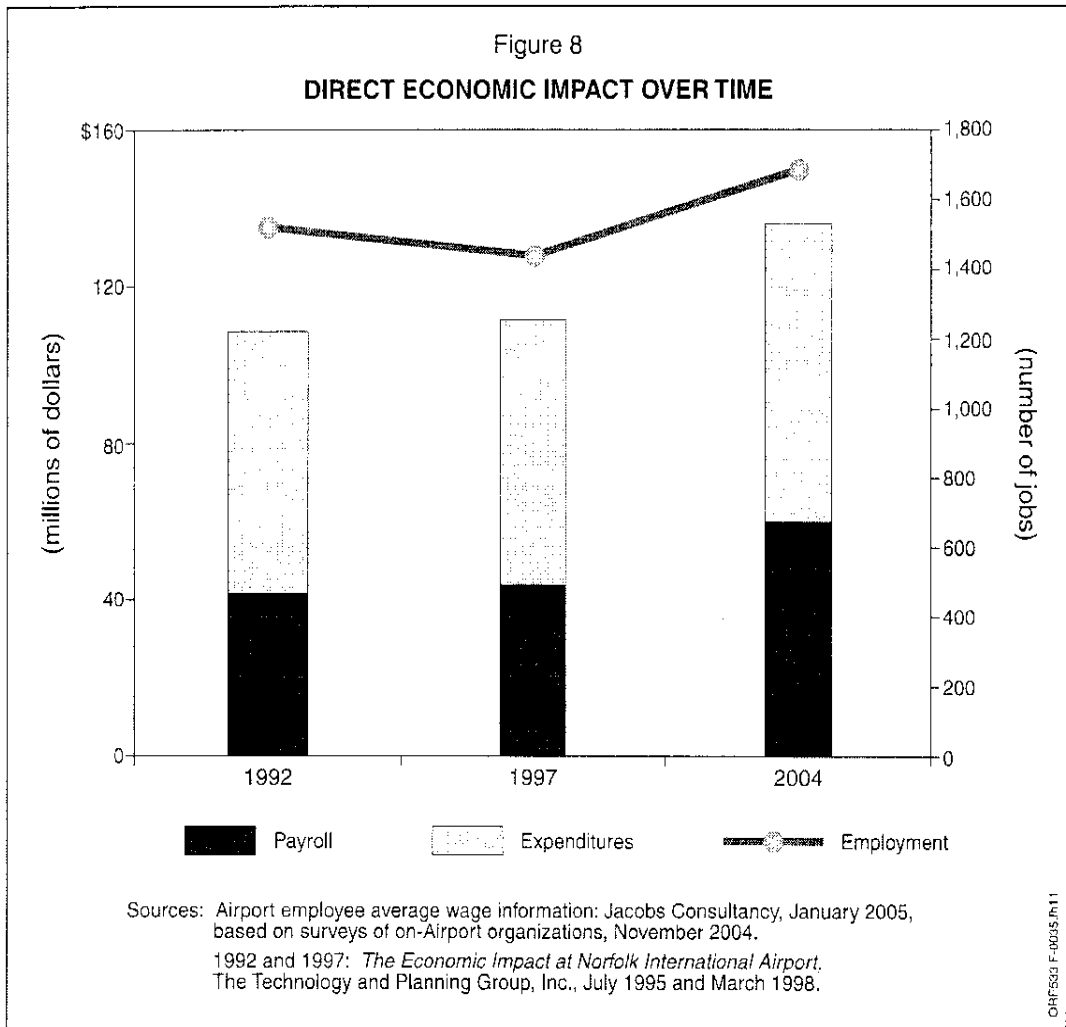


The distribution of the average annual salaries paid to on-Airport employees by industry is shown on Figure 7. Government agencies provide some of the highest paying jobs on-Airport, representing only 28.4% of employees but 41.1% of payroll at the Airport.



Expenditures. Non-payroll expenditures by on-Airport organizations were about \$76 million in 2004 compared with \$68 million in 1997 and \$67 million in 1992. While expenditures grew between 1997 and 2004 (1.8% increase per year), expenditures are a smaller portion of total direct economic impact in 2004 (56.0%) than in 1997 (60.6%).

Total Direct Economic Impact. Overall, the payroll and non-payroll local expenditures of on-Airport businesses—the direct economic impact of the Airport—totaled an estimated \$136 million in 2004, a 22.4% increase from 1997 (\$111 million). Commensurate with payroll, expenditures, and passengers, total direct economic impact grew at an annual average rate of 2.9% between 1997 and 2004, as shown on Figure 8. This growth rate is significantly higher than the 0.5% growth rate between 1992 and 1997.



3.2 Indirect Economic Impact

The indirect impact of the Airport is defined in this evaluation as the spending made locally by air passenger visitors while in the Airport Service Region and in the Commonwealth of Virginia.

The number of air passenger visitors was estimated using enplaned passenger information from the Authority and out-of-state passenger data from the Booney & Company survey. Using out-of-state passengers to estimate the number of visitors does not account for visitors living inside the Commonwealth of Virginia but outside the Airport Service Region. Information regarding visitors who reside outside the Airport Service Region, but in the Commonwealth of Virginia (such as the Washington, D.C. area) is not available. On the basis of data interpreted from the Booney & Company survey of Airport passengers, such visitors represent a small portion of total air passenger visitors. Not accounting for these air passenger visitors understates the indirect economic impact.

According to data provided by the Authority, the number of enplaned passengers at the Airport increased from 1,455,660 in 1997 to 1,891,797 in 2004. According to the Bonney & Company passenger survey, 41% of the passengers were out-of-state travelers. The Bonney & Company survey also found that the average visitor spent a total of \$868 during his or her trip. This spending includes amounts paid for car rentals on-Airport, which are already included in the direct economic impact. With approximately \$139 of visitor spending being transportation-related, the average visitor spent \$729 per trip off-Airport. On the basis of this information, air passenger visitors were estimated to spend about \$566 million in 2004, up from \$236 million in 1997. The number of jobs generated by this visitor spending also increased over the same period from 7,428 in 1997 to 12,580 in 2004.

Of the \$566 million spent by visitors in the Airport Service Region in 2004, an estimated \$211 million funded payroll for local employees. Employment generated by air passengers grew at an annual average rate of 7.6% from 1997 to 2004; whereas, air passenger visitor spending grew at a much faster annual average rate of 13.1% between 1997 and 2004.

While inflation is partly responsible for the higher growth rates of spending than employment, other factors contribute to why these aspects of the local economy were impacted more than employment. First, a moderate increase in impact on employment can be partly justified by the number of air passenger visitors to the Airport Service Region, increasing at an annual average rate of 3.7% between 1997 and 2004. This data suggests that normal hiring rates were sufficient to keep up with demand. Second, the dramatic increase in impact on spending can be largely justified by significant increases in the average amount spent per air passenger visitor per trip. As mentioned previously, the average amount spent per trip off-Airport in 2004 was estimated to be \$729, up from \$335 in 1997. The growth rate of the average amount spent per trip was 11.7% per year between 1997 and 2004.

Increased spending by visitors can be attributed to the higher annual average incomes of air travelers and longer average stays. According to a survey of Airport passengers published by Bonney & Company, the median annual household income of passengers interviewed at the Airport rose from \$52,100 in 1997 to \$64,100 in 2002. Between 2002 and 2003, however, the median household income of Airport passengers increased to \$75,000 for a 17.0% gain in one year, by far the largest increase since the study began. In 2004, the median household income was \$74,100, a slight decrease from record levels in 2003. The same survey also reports that non-local arriving passengers stayed an average of 3.9 nights in the area in 2004, compared with 3.5 nights in 1997. These findings suggest that the average air passenger visitor spends more money over a longer period of time, which would explain why visitor spending increased substantially more than employment from 1997 to 2004. Table 5 and Figure 9 present a breakdown of estimated visitor spending.

Table 5
VISITOR SPENDING BY TYPE

| Type of expenditure | Amount (millions) | | Percent of total | |
|---------------------|-------------------|---------|------------------|--------|
| | 1997 | 2004 | 1997 | 2004 |
| Lodging | \$133.9 | \$299.7 | 56.8% | 53.1% |
| Food and beverages | 63.9 | 147.0 | 27.1 | 26.0 |
| Entertainment | 14.6 | 28.3 | 6.2 | 5.0 |
| Retail stores | -- | 33.9 | n.a. | 6.0 |
| Other (a) | 23.4 | 56.6 | 9.9 | 9.9 |
| Total | \$235.8 | \$565.5 | 100.0% | 100.0% |

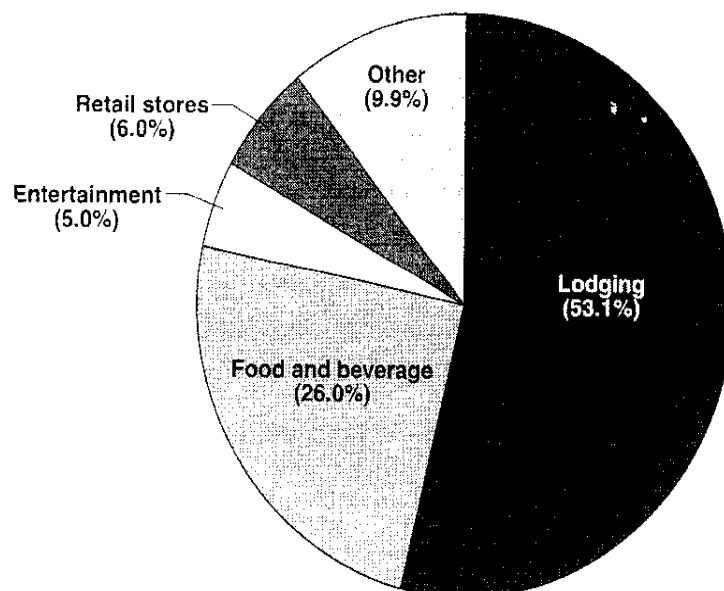
(a) Includes retail for 1997 data.

Source: 1997 – The Airport Technology and Planning Group, Inc., *The Economic Impact of Norfolk International Airport*, March 1998. Breakdown by type of expenditure derived by Jacobs Consultancy.

2004 – Jacobs Consultancy, based on data provided by the Norfolk, Virginia Convention and Visitors Bureau and contained in surveys of Airport passengers conducted by Cooney & Company, February 2004.

Figure 9

DISTRIBUTION OF VISITOR SPENDING



Sources: Jacobs Consultancy, based on data contained in surveys of Airport passengers conducted by Booney & Company, February 2004.

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Table 6 presents the indirect impact on employment by municipality in the Airport Service Region in 1997 and 2004. Like the change in direct impact on employment, the percent of indirect impact on employment in Norfolk also decreased by 5% from 36% in 1997 to 31% in 2004. The percent of indirect impact on employment in Virginia Beach, however, increased substantially from 18% in 1997 to 30% in 2004.

Table 6

**DIRECT IMPACT ON EMPLOYMENT BY MUNICIPALITY
IN THE AIRPORT SERVICE REGION IN 2004**

| Municipality | 1997 | | 2004 | |
|----------------|-----------|--------------|----------|------------|
| Norfolk | 36% | 4,928 | 31% | 3,900 |
| Virginia Beach | 18 | 2,464 | 30 | 3,774 |
| Chesapeake | 7 | 958 | 12 | 1,510 |
| Portsmouth | 3 | 411 | 4 | 503 |
| Suffolk | 1 | 137 | 2 | 252 |
| Hampton | 12 | 1,643 | 6 | 755 |
| Newport News | 6 | 821 | 3 | 377 |
| North Carolina | na | na | 6 | 755 |
| Other | <u>17</u> | <u>2,327</u> | <u>6</u> | <u>755</u> |
| Total | 100% | 13,689 | 100% | 12,580 |

Sources: 1997: *The Economic Impact of Norfolk International Airport*, The Technology and Planning Group, Inc., March 1998; 2004: Jacobs Consultancy interpretation of data provided by the Booney & Company Airport passenger survey, February 2004.

3.3 Induced Economic Impact

As discussed previously, the induced impacts are defined in this evaluation as the additional local business that is generated specifically because of the Airport's presence, including related employment, payroll, and employer expenditures. Induced impact also includes the successive rounds of spending caused by the direct and indirect impacts. This "multiplier effect" measures the extent to which the indirect and induced impacts flow from the direct impact. Table 7 presents the induced economic impacts of the Airport on the Airport Service Region and the Commonwealth of Virginia, respectively.

Table 7
INDUCED ECONOMIC IMPACT IN 2004

| Source of impact | Employment | Local expenditures (millions) | | |
|---------------------------------|--------------|-------------------------------|--------------|--------------|
| | | Payroll | Expenditures | Total |
| Airport Service Region | | | | |
| On-Airport tenants | 2,672 | \$ 67.6 | \$ 76.3 | \$143.9 |
| Air passenger visitors | <u>5,339</u> | <u>148.2</u> | <u>363.0</u> | <u>511.2</u> |
| Total induced impact | 8,011 | \$215.8 | \$493.3 | \$655.1 |
| Commonwealth of Virginia | | | | |
| On-Airport tenants | 2,829 | \$ 74.2 | \$ 76.7 | \$150.9 |
| Air passenger visitors | <u>7,316</u> | <u>161.2</u> | <u>411.1</u> | <u>572.3</u> |
| Total induced impact | 10,145 | \$235.4 | \$487.8 | \$723.2 |

Source: Jacobs Consultancy, December 2005.

Airport Service Region Induced Economic Impact. Off-Airport companies providing supplies and services to businesses located on-Airport were estimated to employ 2,672 people with a total payroll of about \$68 million in 2004 for an induced economic impact of \$144 million in the Hampton Roads Area. In 1997, off-Airport companies were estimated to have employed 1,712 people with a total payroll of \$37 million for an induced economic impact of \$104 million.

The induced impact of visitors arriving at the Airport, whose destination was in the Airport Service Region, contributed to an additional \$511 million locally, increasing from \$337 million in 1997. An estimated \$148 million of this induced impact was used toward payroll, creating an additional 5,339 jobs.

Commonwealth of Virginia Induced Economic Impact. Off-Airport companies in Virginia, but outside of the Airport Service Region, which provide supplies and services to organizations located on-Airport, employed an additional 157 people in 2004, for a total induced employment of 2,829 in Virginia that can be attributed to the Airport. These organizations created an additional induced impact of \$7 million, for a total induced impact of approximately \$151 million. An additional \$7 million is estimated to have been used toward payroll, for a total induced impact on payroll of \$74 million.

The induced impact of visitors arriving at the Airport, whose destination was the Commonwealth of Virginia but was outside the Airport Service Region, contributed to the employment of an additional 1,977 people, for a total induced employment of

7,316 in Virginia that can be attributed to the Airport. Air passenger visitors to Virginia also spent an additional \$61 million outside the Airport Service Region, for a total induced visitor impact of \$572 million. An additional \$13 million was used toward payroll, for a total induced impact on payroll of \$161 million.

Total Induced Economic Impact. The total induced impact of the Airport on the economy of the Airport Service region totaled an estimated \$655 million in 2004. The total induced impact of the Airport on the economy of the Commonwealth of Virginia totaled an estimated \$723 million in 2004.

3.4 Total Economic Impact

Total economic impact is the sum of direct, indirect, and induced impacts. The multiplier effect measures the extent to which the induced impact flows from the direct and indirect impacts. Thus, the direct employment and expenditures of on-Airport employers and indirect expenditures of all visitors “multiply” themselves throughout the regional economy, resulting in the total impact (or contribution) of Airport activity.

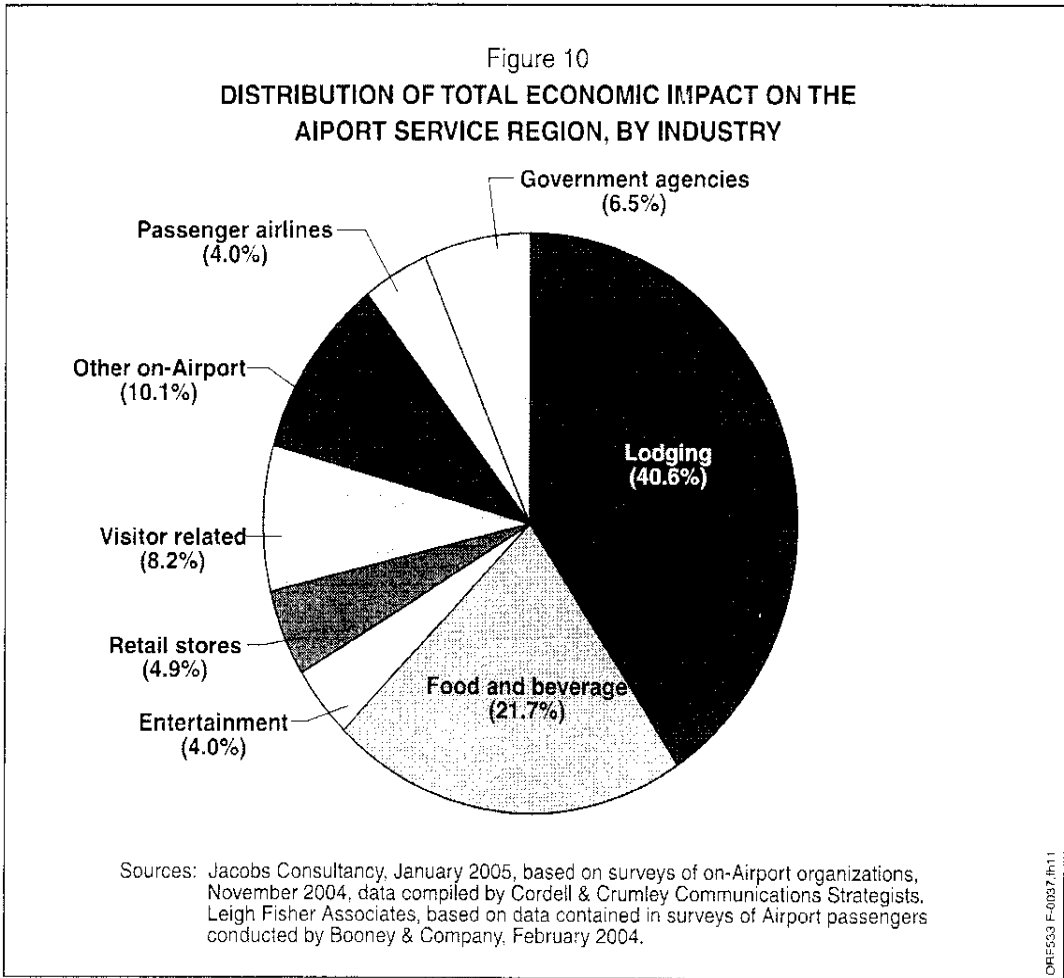
Airport Service Region Total Economic Impact. The overall contribution of Airport activity to the economy of the Airport Service Region is summarized in Table 8 and detailed on Figure 10 and in Table 9. The total economic impact—direct, indirect, and induced—in 2004 is estimated to be approximately \$1.36 billion, compared with \$795 million in 1997.

Table 8

TOTAL ECONOMIC IMPACT ON THE AIRPORT SERVICE REGION IN 2004

| | Employment | Local expenditures (millions) | | |
|----------|--------------|-------------------------------|--------------|--------------|
| | | Payroll | Expenditures | Total |
| Direct | 1,685 | \$ 59.9 | \$ 76.4 | \$ 136.3 |
| Indirect | 12,580 | 210.9 | 354.6 | 565.5 |
| Induced | <u>8,011</u> | <u>215.8</u> | <u>439.3</u> | <u>655.1</u> |
| Total | 22,276 | \$486.6 | \$870.3 | \$1,356.9 |

Source: Jacobs Consultancy, December 2005.



The total impact on employment estimated to result from direct employment is also presented in Table 9. In 2004, a total of 22,276 (16,839 in 1997) direct, indirect, and induced jobs are estimated to result from the direct employment of 1,685 people (1,439 in 1997). In terms of total impact on employment, one job was created for every 5.3 aircraft movements. In 2004, the total impact on employment was 2.9% of the Airport Service Region’s total employment.

The total economic impact in terms of payroll is estimated to be about \$487 million in 2004 (\$300.6 million in 1997), or 35.9% of the total economic impact of \$1.36 billion.

Figure 11 illustrates the historical relationship between growth in the numbers of enplaned passengers and growth in area employment and economic impact in the Airport Service Region. As illustrated, employment in the Airport Service Region related to the Airport has increased at a rate consistent with enplaned passengers, while the total economic impact of the Airport grew at a rate that was approximately double than that of enplaned passengers.

Table 10 compares the total economic impact of the Airport on the Airport Service Region in 1992, 1997, and 2004.

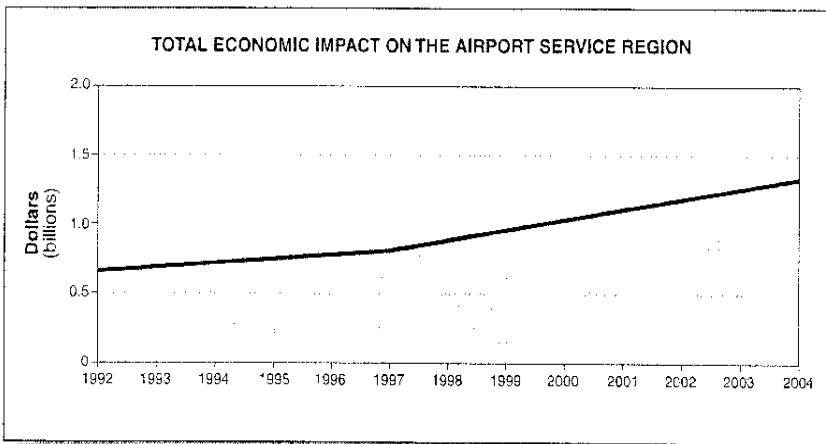
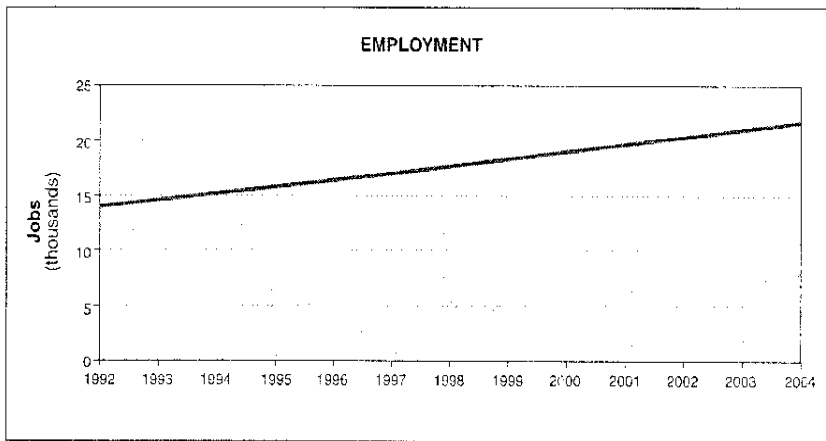
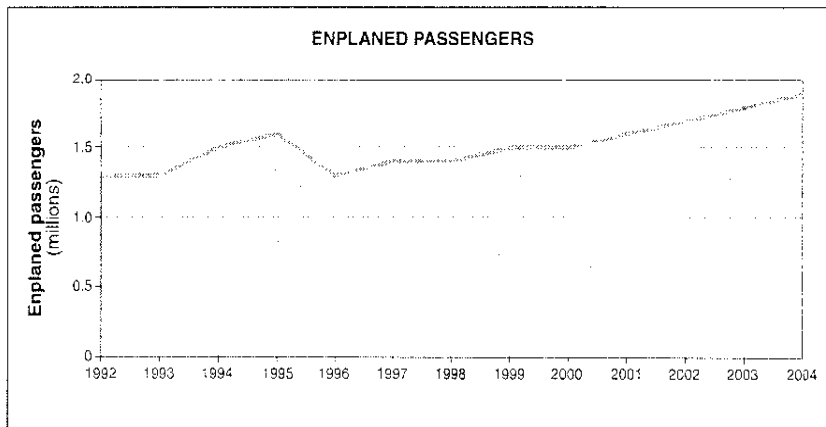
Table 9
**ESTIMATED TOTAL ECONOMIC IMPACT BY INDUSTRY IN 2004
 IN THE AIRPORT SERVICE REGION**

| Type of organization | Number of employees | (millions) | | | Total economic impact |
|--|---------------------|----------------|---|------------------|-----------------------|
| | | Payroll (a) | + | Expenditures (b) | |
| On-Airport (Direct and Induced) | | | | | |
| Airlines | | | | | |
| Passenger | 1,916 | \$ 41.0 | | \$ 12.8 | \$ 53.8 |
| Cargo | <u>400</u> | <u>10.8</u> | | <u>6.2</u> | <u>17.0</u> |
| | 2,316 | \$ 51.8 | | \$ 19.0 | \$ 70.8 |
| Terminal concessionaires | | | | | |
| Concessionaires/ terminal services | | | | | |
| | 157 | \$ 4.2 | | \$ 10.9 | \$ 15.1 |
| Rental car companies | <u>287</u> | <u>10.9</u> | | <u>77.8</u> | <u>88.7</u> |
| | 444 | \$ 15.1 | | \$ 88.7 | \$ 103.8 |
| Other | | | | | |
| Ground transportation | 27 | \$ 0.7 | | \$ 0.5 | \$ 1.2 |
| Fixed base operators | 435 | 7.6 | | 5.0 | 12.6 |
| Government agencies | 1,011 | 50.9 | | 39.0 | 89.9 |
| Other industries | <u>123</u> | <u>1.5</u> | | <u>0.4</u> | <u>1.9</u> |
| | 1,597 | \$ 60.7 | | \$ 44.9 | \$ 105.6 |
| Subtotal on-Airport | <u>4,357</u> | <u>\$127.6</u> | | <u>\$152.6</u> | <u>\$ 280.2</u> |
| Air Passenger Visitors (Indirect and Induced) | | | | | |
| Lodging | 8,726 | \$183.0 | | \$367.2 | \$ 550.2 |
| Food and beverages | 5,838 | 100.9 | | 193.4 | 294.3 |
| Entertainment | 1,038 | 18.8 | | 35.1 | 53.9 |
| Retail Stores | 997 | 23.0 | | 43.9 | 66.9 |
| Other (b) | <u>1,320</u> | <u>33.3</u> | | <u>78.1</u> | <u>111.4</u> |
| Subtotal Air Passenger Visitors | <u>17,919</u> | <u>\$359.0</u> | | <u>\$717.7</u> | <u>\$1,076.7</u> |
| Total economic impact | 22,276 | \$486.6 | | \$870.3 | \$1,356.9 |

(a) Includes wages, salaries, and proprietors' income.

(b) Includes any other local expenditures.

Sources: Jacobs Consultancy, January 2005, based on surveys of on-Airport organizations. November 2004; data compiled by Cordell & Crumley Communications Strategists.
 Data obtained from Hampton Roads Chamber of Commerce, March 2002. Bureau of Economic Analysis, Regional Input-Output Multiplier, RIMS II.



Sources: Norfolk Airport Authority; 1992 and 1997: *The Economic Impact of Norfolk International Airport*, The Technology and Planning Group, Inc., July 1995 and March 1998; 2004: Leigh Fisher Associates.

DHRF547 F-005 (R11)

Figure 11
**SUMMARY OF ENPLANED PASSENGERS,
 EMPLOYMENT, AND TOTAL ECONOMIC IMPACT ON
 THE AIRPORT SERVICE REGION FROM 1992-2004**
 Norfolk International Airport

October 2005

JACOBS
 CONSULTANCY

Table 10

TOTAL ECONOMIC IMPACT ON THE AIRPORT SERVICE REGION OVER TIME

| | Employment | | Payroll (millions) | | Expenditures (millions) (a) | | Total (millions) | |
|-------------|------------|--------|--------------------|---------|-----------------------------|---------|------------------|-----------|
| | 1992 | 1997 | 2004 | 1992 | 1997 | 2004 | 1992 | 2004 |
| Direct | 1,521 | 1,439 | 1,685 | \$ 41.6 | \$ 43.9 | \$ 59.9 | \$ 66.9 | \$ 76.4 |
| Indirect | 5,679 | 7,521 | 12,580 | 70.9 | 98.6 | 210.9 | 109.4 | 354.6 |
| Induced (b) | 6,483 | 7,879 | 8,011 | 122.0 | 158.1 | 215.8 | 255.6 | 439.3 |
| Total | 13,683 | 16,839 | 22,276 | \$234.5 | \$300.6 | \$486.6 | \$431.9 | \$870.3 |
| | | | | | | | \$648.4 | \$795.3 |
| | | | | | | | | \$1,356.9 |

(a) Expenditures from 1992 and 1997 were not reported and were calculated by subtracting payroll from total.

(b) Due to differences in reporting methods for induced impacts, induced impacts for 1992 and 1997 were calculated by subtracting direct and indirect impact from total impact.

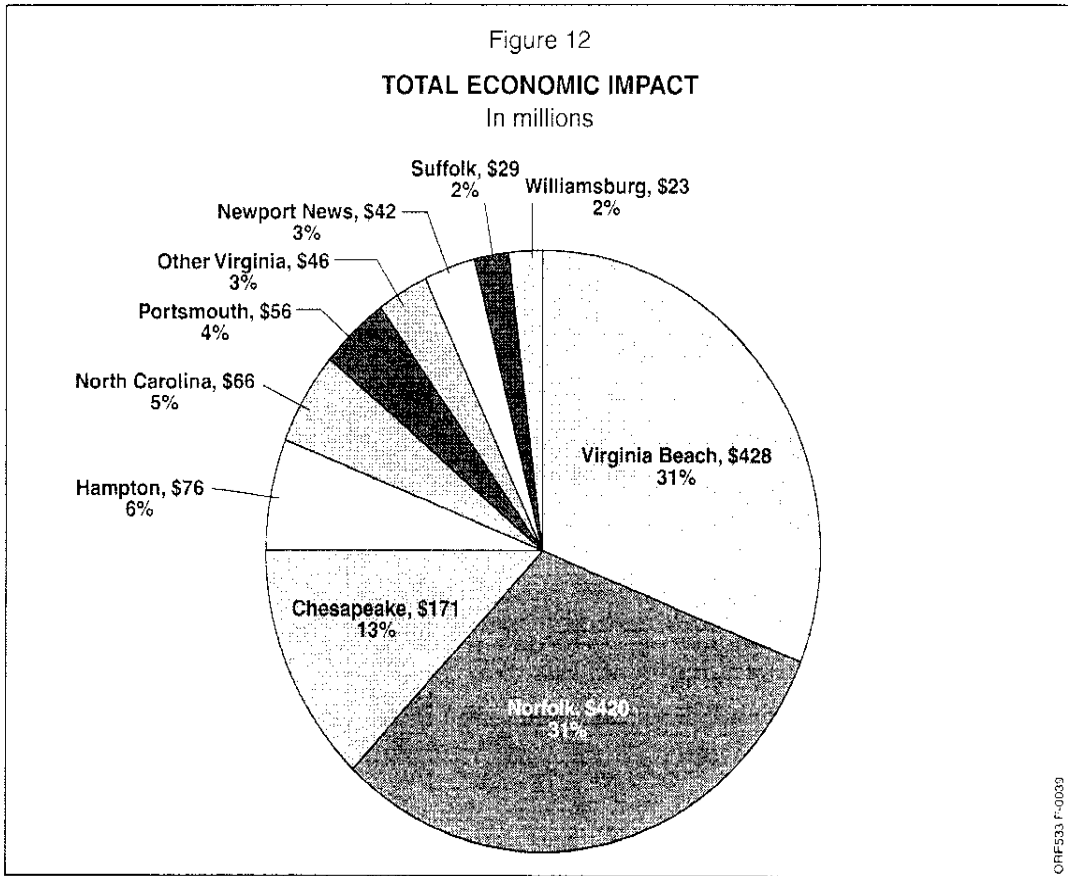
Sources: 1992 and 1997: *The Economic Impact of Norfolk International Airport*, The Technology and Planning Group, Inc., July 1995 and March 1998; 2004: Jacobs Consultancy.

Table 11 presents the total economic impact on employment, payroll, and output by municipality in the Airport Service Region in 1997 and 2004, and Figure 12 presents a distribution of total economic impact by municipality in the Airport Service Region in 2004. The total economic impacts in Virginia Beach, Chesapeake, Portsmouth, and Suffolk each increased by more than 11% per year from 1997 to 2004. The total economic impact in Newport News, however, increased by less than 1% over the entire 7-year period, and the total economic impact in Hampton decreased slightly over the same period. The total economic impact in Norfolk increased by 6% per year from 1997 to 2004.

Table 11
TOTAL ECONOMIC IMPACT BY MUNICIPALITY

| Municipality | Employment | | Payroll | | Total | |
|----------------|------------|--------|---------------|---------------|---------------|-----------------|
| | 1997 | 2004 | 1997 | 2004 | 1997 | 2004 |
| Norfolk | 6,062 | 6,890 | \$104,473,100 | \$150,396,300 | \$282,526,600 | \$419,650,700 |
| Virginia Beach | 3,629 | 7,006 | 70,060,000 | 155,451,300 | 193,628,000 | 427,884,500 |
| Chesapeake | 1,462 | 2,801 | 30,319,700 | 62,124,400 | 65,568,500 | 171,030,400 |
| Portsmouth | 474 | 916 | 8,594,800 | 20,202,800 | 22,901,400 | 55,899,700 |
| Suffolk | 168 | 479 | 3,814,400 | 10,719,000 | 9,213,600 | 29,307,100 |
| Hampton | 1,738 | 1,254 | 28,136,000 | 26,767,300 | 76,262,000 | 76,076,500 |
| Newport News | 916 | 687 | 14,949,500 | 15,152,100 | 41,689,300 | 41,924,800 |
| North Carolina | na | 1,104 | na | 22,388,100 | na | 66,452,700 |
| Other | 2,390 | 1,138 | 40,226,200 | 23,398,700 | 103,515,100 | 68,673,600 |
| Total | 16,839 | 22,276 | \$300,573,700 | \$486,600,000 | \$795,304,500 | \$1,356,900,000 |

Sources: 1997: *The Economic Impact of Norfolk International Airport*, The Technology and Planning Group, Inc., March 1998; 2004: Jacobs Consultancy interpretation of data provided by the Airport Authority and the Booney & Company Airport passenger survey, February 2004.



Commonwealth of Virginia Total Economic Impact. The overall economic contribution of Airport activity on the economy of the Commonwealth of Virginia is summarized in Table 8. The total economic impact is estimated to be \$1.43 billion, as calculated using the input-output analysis described in Section 2. This represents an additional \$68 million in total economic impact in Virginia outside the Airport Service Region.

The total impact on employment in Virginia estimated to result from direct employment related to the Airport is also presented in Table 12. In 2004, a total of 24,410 direct, indirect, and induced jobs is estimated to result from the direct employment of 1,685, an additional 2,134 jobs created in Virginia outside the Airport Service Region.

The total economic impact in terms of wages in Virginia is estimated to equal \$506 million in 2004, an additional \$19 million in payroll for the 2,134 jobs in Virginia outside the Airport Service Area. These wages accounted for 35.5% of the total output of \$1.43 billion.

Table 12
TOTAL ECONOMIC IMPACT ON THE COMMONWEALTH OF VIRGINIA

| | Employment | Local expenditures (millions) | | |
|----------|---------------|-------------------------------|--------------|--------------|
| | | Payroll | Expenditures | Total |
| Direct | 1,685 | \$ 59.9 | \$ 76.4 | \$ 136.3 |
| Indirect | 12,580 | 210.9 | 354.6 | 565.5 |
| Induced | <u>10,145</u> | <u>235.4</u> | <u>487.8</u> | <u>723.2</u> |
| Total | 24,410 | \$506.2 | \$918.8 | \$1,425.0 |

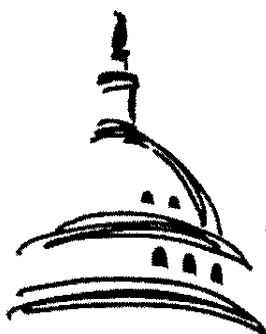
Source: Jacobs Consultancy, December 2005.

CRS Report for Congress

Foreign Investor Visas: Policies and Issues

January 29, 2007

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Congressional
Research
Service

Prepared for Members and
Committees of Congress

Foreign Investor Visas: Policies and Issues

Summary

In the 110th Congress, issues surrounding the entry of foreign investors into the United States are likely to spark legislative debate as Members contemplate comprehensive immigration reform. Congress may face decisions regarding the possible renewal of the immigrant investor visa pilot program, as well as the expansion of the E-2 nonimmigrant treaty investor visa.

There are currently two categories of nonimmigrant investor visas and one category of immigrant investor visa for legal permanent residents (LPR). The visa categories used for nonimmigrant investors are: E-1 for treaty traders; and the E-2 for treaty investors. The visa category used for immigrant investors is the fifth preference employment-based (EB-5) visa category. According to Department of Homeland Security (DHS) statistics, there were 192,843 nonimmigrant investor visa arrivals in the United States in FY2005. For the same time frame, DHS reported the arrival of 346 LPR investors.

When viewed from a comparative perspective, the investor visas of the United States are most closely mirrored by those of Canada. The LPR investor visa draws especially strong parallels to the Canadian immigrant investor visa, since the latter served as the model for the former. Comparing the admissions data between these two countries, however, reveals that the Canadian investor provision attracts many times the number of investors of its United States counterpart. Yet, both countries showed an upward trend in immigrant investor visas in the last two years.

The investor visas offered by the United States operate on the principle that foreign direct investment into the United States should spur economic growth in the United States. According to the classical theory, if these investments are properly targeted towards the U.S. labor force's skill sets, it should reduce the international migration pressures on U.S. workers. To attract foreign investors, research indicates that temporary migrants are motivated most significantly by employment and wage prospects, while permanent migrants are motivated by professional and social mobility. Theoretically, however, it is unclear to what extent potential migration provides additional incentive for investment activity. Investors from developed countries may sometimes lack incentive to settle in the United States since they can achieve foreign direct investment (FDI) and similar standards of living from their home country. Yet, in cases where foreign investors have been attracted, the economic benefits have been positive and significant.

Immigrant investors have been subject to notable administrative efforts in the past couple of years. Attention has been focused on immigrant investment projects, which DHS has sought to expand. In 2005, DHS developed the Investor and Regional Center Unit (IRCU) to govern matters concerning LPR investor visas and investments to better adjudicate petitions and coordinate investments. In part because of these efforts, working with foreign financing from the immigrant investor program has become highly attractive for many domestic investors, particularly through limited partnerships. This report will be updated as warranted.

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Foreign Investor Visas: Policies and Issues

Introduction

In the 110th Congress, issues surrounding the entry of foreign investors into the United States is likely to spark legislative debate. For example, the immigrant investor visa pilot program, which was created to attract foreign investors to permanently emigrate to the United States, is set to expire at the end of FY2008.¹ Additionally, the government of Denmark has lobbied for legislation that would allow its nationals eligibility to enter the United States as E-2 nonimmigrant treaty investors. If such legislation is successful, other governments whose nationals, like Denmark, are currently only eligible for E-1 nonimmigrant treaty trader visas would likely seek similar treatment. Granting visas to foreign investors provides many potential benefits, including increased domestic employment and capital levels. Yet, extending foreign investor visas provides several potential risks as well, such as visa abuses, reduced foreign market growth, and security concerns.

The central policy question surrounding foreign investors — and particularly legal permanent resident (LPR) investors — is whether the benefits reaped from allocating visas to foreign investors outweigh the costs of denying visas to other applicant groups. The subsequent analysis provides a background and contextual framework for the consideration of foreign investor visa policy. After a brief legislative background, this report will provide discussions of immigrant and nonimmigrant investors visas, a comparison of U.S. and Canadian immigrant investor programs, an analysis of the relationship between investment and migration, and finally a review of current issues.

Background

Since the Immigration Act of 1924² the United States has expressly granted visas to foreign nationals for the purpose of conducting commerce within the United States. Although foreign investors had previously been allowed legal status under several Treaties of Friendship, Commerce and Navigation treaties, the creation in 1924 of the nonimmigrant treaty trader visa provided the first statutory recognition of foreign nationals as temporary traders. With the implementation of the Immigration and Nationality Act of 1952 (INA), the statute was expanded to include nonimmigrant treaty investors — a visa for which trade was no longer a

¹ P.L. 108-156.

² 43 Stat 153.

requirement.³ Nonimmigrant visa categories for traders and investors have always required that the principal visa holder stems from a country with which the United States has a treaty.⁴ The nonimmigrant visa classes are defined in §101(a)(15) of the INA. These visa classes are commonly referred to by the letter and numeral that denotes their subsection in §101(a)(15) of the INA, and are referred to as E-1 for nonimmigrant treaty traders and E-2 for nonimmigrant treaty investors.

Unlike nonimmigrant investors, who come to the United States as temporary admissions, immigrant investors are admitted into the United States as LPRs.⁵ With the Immigration Act of 1990,⁶ Congress expanded the statutory immigrant visa categories to include an investor class for foreign investors. The statute developed an employment-based (EB-5) investor visa for LPRs,⁷ which allows for up to 10,000 admissions annually and generally requires a minimum \$1 million investment. Through the Immigrant Investor Pilot Program, investors may invest in targeted regions and existing enterprises that are financially troubled. This pilot program was extended by the Basic Pilot Program Extension and Expansion Act of 2003⁸ to continue through FY2008.

Foreign investors are generally considered to help boost the United States economy by providing an influx of foreign capital into the United States and through job creation. For investor immigrants, job creation is an explicit criterion, while with the nonimmigrant visa categories economic activity is assumed to spur job growth. Additionally, foreign investors are often associated with entrepreneurship and increased economic activity. Critics, however, believe that such investors may be detrimental since they potentially displace potential entrepreneurs that are United States citizens.

³ INA §101(a)(15)(e)(ii).

⁴ INA §101(a)(15)(e).

⁵ The two basic types of legal aliens are *immigrants* and *nonimmigrants*. As defined in the INA, immigrants are synonymous with legal permanent residents (LPRs) and refer to foreign nationals who come to live lawfully and permanently in the United States. The other major class of legal aliens are nonimmigrants — such as tourists, foreign students, diplomats, temporary agricultural workers, exchange visitors, or intracompany business personnel — who are admitted for a specific purpose and a temporary period of time. Nonimmigrants are required to leave the country when their visas expire, though certain classes of nonimmigrants may adjust to LPR status if they otherwise qualify.

⁶ P.L. 101-649.

⁷ INA §203(b)(5).

⁸ P.L. 108-156, 8 USC §1324a note.

Immigrant Investors

There is currently one immigrant class set aside specifically for foreign investors coming to the United States.⁹ Falling under the employment-based class of immigrant visas, the immigrant investor visa is the fifth preference category in this visa class.¹⁰ Thus, the immigrant investor visa is commonly referred to as the EB-5 visa.

Goals. The basic purpose of the LPR investor visa is to benefit the United States economy, primarily through employment creation and an influx of foreign capital into the United States.¹¹ Although some members of Congress contended during discussions of the creation of the visa that potential immigrants would be “buying their way in,” proponents maintained that the program’s requirements would secure significant benefits to the U.S. economy.¹² Proponents of the investor provision offered predictions that the former-Immigration and Naturalization Service (INS) would receive approximately 4,000 applications annually. These petitioners’ investments, the drafters speculated, could reach an annual total of \$4 billion and create 40,000 new jobs.¹³ The Senate Judiciary Committee report on the legislation states that the provision “is intended to provide new employment for U.S. workers and to infuse new capital into the country, not to provide immigrant visas to wealthy individuals” (S.Rept. 101-55, p.21).

Requirements. As amended by the Immigration Act of 1990,¹⁴ the Immigration and Nationality Act (INA) provides for an employment-based LPR

⁹ The INA provides for a permanent annual worldwide level of 675,000 legal permanent residents (LPRs), but this level is flexible and certain categories of LPRs are permitted to exceed the limits, as described below. The permanent worldwide immigrant level consists of the following components: family-sponsored immigrants, including immediate relatives of U.S. citizens and family-sponsored preference immigrants (480,000 plus certain unused employment-based preference numbers from the prior year); employment-based preference immigrants (140,000 plus certain unused family preference numbers from the prior year); and diversity immigrants (55,000). Immediate relatives of U.S. citizens as well as refugees and asylees who are adjusting status are exempt from direct numerical limits. For further discussion see CRS Report RL32235, U.S. Immigration Policy on Permanent Admissions, by Ruth Ellen Wasem.

¹⁰ The INA provides that each category of immigrants has a set of preferences for the classes within that category. These preferences determine the priority of visa distribution for each category depending on certain formulas provided for in the INA. In the case of the LPR investor visa, being the fifth preference (and therefore the lowest) within the employment-based category, it has an annual maximum visa allocation of 10,000.

¹¹ 3 Charles Gordon, Stanley Mailman, and Stephen Yale-Loehr, *Immigration Law and Procedure*, § 39.07 (Matthew Bender, Rev. Ed.).

¹² For debate on this issue, see 136 Cong. Rec. S7768-75 (July 12, 1990).

¹³ The West Group. *New Pilot Program for Immigrant Investors*. 70 Interpreter Releases 1129. August 30, 1993.

¹⁴ P.L. 101-649.

investor visa¹⁵ program designated for individuals wishing to develop a new commercial enterprise¹⁶ in the United States (INA §203(b)(5)). The statute stipulates that

- The enterprise must employ at least 10 U.S. citizens, legal permanent residents (LPRs), or other work-authorized aliens in full time positions. These employees may not include the foreign investor's wife or children.
- The investor must further invest \$1 million¹⁷ into the enterprise, such that the investment goes directly towards job creation and the capital is "at risk."¹⁸ However, if an investor is seeking to invest in a "targeted area"¹⁹ then the required capital investment may be reduced to \$500,000.²⁰ For each fiscal year, 10,000 visas are set aside for EB-5 investors, of which 3,000 are reserved for entrepreneurs investing in "targeted areas."²¹
- The business and jobs created must be maintained for a minimum of two years.²²

According to regulations, enterprises being proposed need not be backed by a single applicant.²³ Multiple applicants may provide financial backing in the same enterprise, provided that each applicant invests the required minimum sum and each applicant's capital leads to the creation of 10 full-time jobs. The applicant may also combine the investment in a new enterprise with a non-applicant who is authorized to work in the United States. Furthermore, each individual applicant must demonstrate that he or she will be actively engaged in day-to-day managerial control

¹⁵ This visa category is for permanent immigrants and should not be confused with the E-2 Treaty Investor nonimmigrant visa.

¹⁶ Since 2002, applicants have also been allowed to invest funds in "troubled businesses." These businesses must have been in existence for at least two years, and must have incurred a net loss of at least 20% of the business' net worth (prior to the loss) during the twelve- or twenty-four-month period prior to filing the petition (8 CFR §204.6(c)).

¹⁷ These funds must be demonstrated to have been obtained lawfully. Generally, any burden of proof to show qualifying status for an EB-5 lies with the applicant (8 CFR §204.6(j)).

¹⁸ Depositing the funds into a corporate account does not qualify as making the investment "at risk." Clear guidelines for demonstrating that the capital is "at risk" do not exist in the regulations (8 CFR §204.6(j)).

¹⁹ "Targeted areas" are either rural areas or areas with unemployment rates of at least 150% of the national average. A "rural area" is defined as one not within a metropolitan statistical area or the outer boundary of a city or town with a population of 20,000 or more.

²⁰ 8 CFR §204.6(f).

²¹ INA §203(b)(5).

²² 8 CFR §204.6(j).

²³ 8 CFR §204.6(g).

or as a policymaker.²⁴ Petitions as a passive investor will not qualify.²⁵ However, since limited partnership is acceptable, regulations do not prevent the investor from living in another location or engaging in additional economic activities.

Immigrant Investor Pilot Program. The Immigrant Investor Pilot Program differs in certain ways from the standard LPR investor visa. Established by §610 of P.L. 102-395 (October 6, 1992), the pilot program was established to achieve the economic activity and job creation goals of the LPR investor statute by encouraging investors to invest in economic units known as “Regional Centers.”²⁶ Regional Center designation must be approved by the Department of Homeland Security’s (DHS) United States Citizenship and Immigration Service (USCIS), and is intended to provide a coordinated focus of foreign investment towards specific geographic regions. Areas with high unemployment are especially likely to receive approval as a Regional Center, since they are less likely to receive foreign capital through foreign direct investment (FDI)²⁷ (although the basic requirements apply to all regional petitions).²⁸ Up to 5,000 immigrant visas²⁹ may be set aside annually for the pilot program. These immigrants may invest in any of the Regional Centers that currently exist to qualify for their conditional LPR status.³⁰

²⁴ This latter criterion may be demonstrated through board membership, status as a corporation officer, or qualifying as a limited partner under the Uniform Limited Partner Act (ULPA) (8 CFR §204.6(i)).

²⁵ 8 CFR § 206.6.

²⁶ A Regional Center is defined as any economic unit, public or private, engaged in the promotion of economic growth, improved regional productivity, job creation and increased domestic capital investment.

²⁷ FDI is defined as an investment made by a foreign individual or company in an enterprise residing in an economy other than where the foreign direct investor is based.

²⁸ The basic requirements for Regional Center designation state that applicants must show how their proposed program will:

- focus on a geographic region (8 CFR 204.6(m)(3)(i));
- promote economic growth through increased export sales, if applicable;
- promote improved regional productivity (8 CFR 204.6(m)(3)(i));
- create a minimum of 10 jobs directly or indirectly per investor (8 CFR 204.6(m)(3)(ii));
- increase domestic capital investment (8 CFR 204.6(m)(3)(i));
- be promoted and publicized to prospective investors (8 CFR 204.6(m)(3)(ii));
- have a positive impact on the regional or national economy through increased household earnings (8 CFR 204.6(m)(3)(iii)); and
- generate a greater demand for business services, utilities maintenance and repair, and construction jobs both in and around the center (8 CFR 204.6(m)(3)(iv)).

²⁹ These 5,000 visas represent a subset of the 10,000 visas allocated for the LPR investor visa.

³⁰ As of June 1, 2004, there were 26 Regional Centers in the United States (USCIS, *EB-5 Immigrant Investor Pilot Program*, Background, June, 2004). Since then, a number of Regional Centers have been added (for example, see letter from Thomas E. Cook, Director (continued...))

The Basic Pilot Program Extension and Expansion Act of 2003³¹ extended the pilot program through FY2008. In response to this legislation USCIS decided to develop a new unit to govern matters concerning LPR investor visas and investments.³² On January 19, 2005, the Investor and Regional Center Unit (IRCU) was created by the USCIS, thereby establishing a nationwide and coordinated program. USCIS believes that the IRCU will serve the dual purpose of guarding against EB-5 abuse and encouraging investment.³³

The USCIS approximates that between 75-80% of EB-5 immigrant investors have come through the pilot program since it began, and that limited partnerships constitute the most significant portion of this group.³⁴

LPR Investor Visa Numbers

In contrast to the high number of applications for other employment-based LPR visas,³⁵ the full allotment of 10,000 LPR investor visas per fiscal year has never been used. As **Table 1** below shows, the number of LPR investor admissions peaked in FY1997, with 1,361 admissions, or 13.6% of the program's visa supply. In subsequent years, the program declined markedly, before increasing up to 346 in FY2005. Despite the low numbers of overall investor admissions, the program has seen a marked increase since the implementation of the Immigrant Investor Pilot Program expansion in 2004.

From FY1992 to FY2004, the cumulative total amount invested into the United States by LPR investor visa holders was approximately \$1 billion and the cumulative number of LPR investor visas issued was 6,024.³⁶ In the earlier years of the program, it attracted a relatively higher rate of derivatives than principals.³⁷ However, in the last three years the distribution of visas between principals and derivatives has more closely approximated parity. Derivatives have historically accounted for

³⁰ (...continued)

of USCIS's Office of Program and Regulations Development, to Bruce V. Malkenhorst, Executive Director of The Redevelopment Agency of the City of Vernon, December 23, 2005).

³¹ P.L. 108-156.

³² USCIS, *EB-5 Immigrant Investor Pilot Program, Background*, June, 2004.

³³ *Ibid.*

³⁴ Based on CRS discussions with Morrie Berez, Chief Adjudications Officer, USCIS Investor and Regional Center Program, November 20, 2006.

³⁵ According to a recent issue of the Department of State (DOS) *Visa Bulletin* (No. 99, Vol. VIII) there are backlogs for all the employment-based immigrant categories except LPR investor visas.

³⁶ U.S. Government Accountability Office, *Immigrant Investors: Small Number of Participants Attributed to Pending Regulations and Other Factors*, GAO-05-256, April 2005, pp. 8-11.

³⁷ Principals are the actual investors. Derivatives are comprised of spouses, children, and other dependents.

approximately 67% of immigrant investor visa recipients, while principals account for 33%.

Table 1. United States LPR Investor Visa Admissions, FY1996-FY2005

| Fiscal Year | EB-5 Visa Admissions | Principals | Derivatives |
|-------------|----------------------|------------|-------------|
| 1992 | 59 | 24 | 35 |
| 1993 | 583 | 196 | 387 |
| 1994 | 444 | 157 | 287 |
| 1995 | 540 | 174 | 366 |
| 1996 | 936 | 295 | 641 |
| 1997 | 1361 | 444 | 917 |
| 1998 | 824 | 259 | 565 |
| 1999 | 285 | 99 | 187 |
| 2000 | 218 | 79 | 147 |
| 2001 | 191 | 67 | 126 |
| 2002 | 142 | 52 | 97 |
| 2003 | 64 | 39 | 25 |
| 2004 | 129 | 60 | 69 |
| 2005 | 346 | 158 | 188 |

Source: CRS presentation of U.S. Department of Homeland Security Office of Immigration Statistics FY2005 data.

According to data from DHS' Performance Analysis System, in the time span of FY1992 through May 2006, authorities had received a cumulative total of 8,505 petitions for immigrant investor visas. Of these petitions, 4,484 petitions had been granted while 3,820 had been denied³⁸ — an approval rate of 52.7%. Furthermore, in this same time span, officials received 3,235 petitions for the removal of conditional status³⁹ from the LPRs of immigrant investors. These petitions were granted in 2,155 cases (a 66.6% approval rate), while the remaining 910 petitions for the removal of conditional status were denied.

Although numerous possible explanations for the overall low admission levels of LPR investor visas exist, the notable drop in admissions in FY1998 and FY1999 is due in part to the altered interpretations by the former-INS of the qualifying requirements that took place in 1998.⁴⁰ The 21st Century Department of Justice

³⁸ The discrepancy between the petitions granted, denied, and received is due to some petitions remaining unadjudicated.

³⁹ "Conditional status" for an LPR immigrant means that the final approval of the LPR is contingent upon fulfilling certain requirements. For immigrant investors, the conditional status lasts for two years before the applicant is reviewed for final approval.

⁴⁰ The West Group, *Sections 203(b)(5) and 216A of the Immigration and Nationality Act*, 75 Interpreter Releases 332, March 9, 1998.

Appropriations Act (2002)⁴¹ provided remedies for those affected by the former-INS' 1998 decision, and provided some clarification to the requirements to promote an increase in petitions.⁴²

A 2005 report from GAO⁴³ listed a number of contributing factors to the low participation rates, including the rigorous nature of the LPR investor application process and qualifying requirements; the lack of expertise among adjudicators; uncertainty regarding adjudication outcomes; negative media attention on the LPR investor program; lack of clear statutory guidance; and the lack of timely application processing and adjudication. It is unknown how many potential investors opted to obtain a nonimmigrant investor visa or pursued other investment pathways. A recent law journal article on investor visas suggested that the two year conditional status of the visa and the alternate (and less expensive) pathways for LPR status often dissuaded potential investors from pursuing LPR investor visas.⁴⁴

According to the GAO study, of the LPR visas issued to investors, 653⁴⁵ had qualified for removal of the conditional status of LPR visa (not including dependents).⁴⁶ GAO estimates that these LPR investors invested approximately \$1 billion cumulatively into their collective enterprises and 99% kept their enterprise in the same state where it was established.⁴⁷ The types of enterprises these investors established were often hotels/motels, manufacturing, real estate, or domestic sales, with these four categories accounting for 61% of the businesses established by LPR-qualified investors. Furthermore, an estimated 41% of the businesses by LPR-qualified investors were set up in California. The subsequent states with the highest percentages of established enterprises were Maryland, Arizona, Florida and Virginia with 11%, 8%, 7%, and 7% respectively (for examples of current investment projects see **Appendix B**).

As **Figure 1** shows, LPR investors admitted to the United States between FY1992-FY2004 were predominantly from Asian countries. Asia accounted for approximately 83% of LPR investors in this time span, a total that is over nine times larger than the second highest contributing region. Europe was the only other region

⁴¹ P.L. 107-273.

⁴² 3 Charles Gordon, Stanley Mailman, and Stephen Yale-Loehr, *Immigration Law and Procedure*, § 39.07 (Matthew Bender, Rev. Ed.)

⁴³ U.S. Government Accountability Office, *Immigrant Investors: Small Number of Participants Attributed to Pending Regulations and Other Factors*, GAO-05-256, April 2005, pp. 8-11.

⁴⁴ Mailman, Stanley, and Stephen Yale-Loehr, "Immigrant Investor Green Cards: Rise of the Phoenix?" *New York Law Journal*, April 25, 2005. At [<http://www.millermayer.com/EB5NYLJ0405.html>], visited January 23, 2007.

⁴⁵ Of these investors, 247 (or 38%) applied for U.S. citizenship.

⁴⁶ The fact that they qualified for LPR status means that they had successfully maintained their business and 10 full-time qualifying employees for more than 2 years.

⁴⁷ GAO's report stated it could not provide reliable figures on the number of jobs created by these enterprises.

require that a treaty exist between the United States and the principal foreign national's country of citizenship.⁵⁰

In the majority of cases, a commerce or navigation treaty serves as the basis for the E-class visa extension (though other bilateral treaties and diplomatic agreements can also serve as a foundation).⁵¹ A number of countries offer both the E-1 and E-2 visas as a result of reciprocal agreements made with the United States, although many countries only offer one. Currently there are 75 countries who offer the treaty class visas. Of these countries, 28 offer only the E-2 treaty investor visa while 4 countries offer only the E-1 treaty trader visa (see **Table 3** in **Appendix A**). In the cases where a country offers both types of visas, an applicant who qualifies for both types of visa may choose based upon his or her own preference. Such decisions, however, would depend upon the specific nature of the business as the E category visas carry different qualifying criteria for renewal.

Although each category has some unique requirements, other requirements cut across all categories of nonimmigrant investor visas. An applicant for any of the nonimmigrant investor categories must satisfy the following criteria:

- the principal visa recipient must be a national of a country with which the United States has a treaty.⁵²
- the principal visa recipient must be in some form of executive or supervisory role in order to qualify as a treaty trader or investor⁵³
- the skills the principal visa recipient possesses must be essential and unique to the enterprise under consideration⁵⁴
- the visa holder must show an intent to depart the United States at the end of the visa's duration of status⁵⁵

⁵⁰ 8 CFR §214.2(e)(6).

⁵¹ 2 Charles Gordon, Stanley Mailman, and Stephen Yale-Loehr, *Immigration Law and Procedure*, § 17.06[2][a] (Matthew Bender, Rev. Ed.).

⁵² Spouses and child dependents are not subject to the same nationality requirements as they can be nationals of any country, regardless of whether that country has treaties with the United States or not.

⁵³ There is no set formula for determining whether a person's role is sufficient to qualify, but is determined on a case by case basis using a number of different factors. These factors normally include such considerations as salary, position, duties, degree of control, and the number of employees under the applicant's supervision.

⁵⁴ A nominal position (e.g. having the title of manager) or title is not sufficient grounds to qualify for an E-class visa. Individuals with highly specialized skills or knowledge pertinent to the employer's business may also qualify, although if the individual's skills are determined to be of only a specialized nature that person must qualify for an H-1B visa (for highly skilled professionals). An example of a skill that has been rejected by DOS as an essential skill is knowledge of a foreign language.

⁵⁵ 8 CFR §214.2(e)(2)(iii).

- if investing in an existing enterprise, the applicant must show that the employer of the treaty trader or investor must be at least 50% owned by nationals of the treaty country.⁵⁶

A person granted an E-class visa is eligible to stay in the United States for a period of two years.⁵⁷ Although an applicant is obligated to show intent of departing the United States at the end of the visa duration, the E-class visas may be renewed for an indefinite number of two year periods provided that the individual still qualifies.⁵⁸ Spouses and child dependents are granted the same visa status and renewal as the principal visa holder so long as the child is under the age of 21, after which the child must apply and qualify for his or her own visa.⁵⁹

Generally with the E-class visas, the individual may not engage in other employment than that which is stipulated,⁶⁰ although incidental activities are generally allowed.⁶¹ If any E-class individual wishes to change employer, he or she is under obligation to contact the Department of State (DOS) and apply for adjustment of status.⁶²

E-1 Treaty Trader⁶³

The E-1 formally traces back to the 1924 Immigration Act, although merchants working under treaty terms were recognized visa holders prior to this act.⁶⁴ Under current law, the E-1 visa is to be issued to an individual who engages in substantial trade between the United States and his or her country of nationality. According to

⁵⁶ This criterion is more salient in the cases of smaller companies since ownership is more constant and concentrated. Large publically traded companies are largely not saddled with having to demonstrate ownership by nationals.

⁵⁷ 8 CFR §214.2(e)(19).

⁵⁸ 8 CFR §214.2(e)(20).

⁵⁹ 8 CFR §214.2(e)(4).

⁶⁰ 8 CFR §214.2(e)(8).

⁶¹ The rules on such incidental activities are quite flexible. The governing principle of such incidental activities is that the primary trade or investment activity remains paramount (see 9 FAM §41.40 n7 (Visa TL-872 February 20, 1975, i.e. prior to 1987 revision) and 9 FAM §41.11 n.3.1).

⁶² 8 CFR §214.2(e)(8).

⁶³ Although technically being a “trader” category as opposed to an “investor” category, there is sufficient grounds for believing that the E-1 traders should be included with the other investor categories. Although their activities must be related to trade, they are still allowed to make investments in United States enterprises. Also, investor categories such as the LPR investor visa have previously held requirements that investments must positively effect export levels in the industry where an investment is occurring (USCIS, *EB-5 Immigrant Investor Pilot Program*, Background, June, 2004).

⁶⁴ The term “treaty merchant,” for example, traces its roots at least back to the 1880 treaty with China to conduct trade (Treaty Between the United States and China, Concerning Immigration, November 17, 1880, art. I, 22 Stat. 826).

immigration regulations, trade is defined as “the exchange, purchase or sale of goods and/or services. Goods are tangible commodities or merchandise having intrinsic value. Services are economic activities whose outputs are other than tangible goods.”⁶⁵ This expanded definition of trade into the service sector allows for a fairly broad understanding of what trade may entail.

The term “substantial trade” has never been explicitly defined in terms of monetary value. Rather, the term is meant to indicate that there is an amount of trade necessary to ensure a continuing flow of international trade items.⁶⁶ For smaller businesses, regulatory qualification for treaty trader status may be derived from demonstrating that the trading activities would generate an income sufficient to support the trader and his or her family.⁶⁷ The qualifications for sufficient volume or transaction have not been explicitly set in the regulations,⁶⁸ but a minimum qualification is that more than 50% of the business’s trade must flow between the United States and the treaty country from which the E-1 visa holder stems.⁶⁹

E-2 Treaty Investor

The E-2 investor visa is a visa category that stems from the 1952 Immigration and Nationality Act (INA). The qualifying applicant for such a visa is coming to the United States in order to “develop or direct the operations of an enterprise in which he has invested, or is in the process of investing a substantial amount of capital.”⁷⁰ Unlike the E-1 visa, the business need not be engaged in trade of any kind. However, the same rules concerning ownership are still applicable.⁷¹ In cases of ownership of an enterprise, the regulations require that the E-2 visa holder control at least a 50% interest in an enterprise.⁷² The burden of proof for E-2 qualification lies with the applicant in the same manner as with the other E-class visas.⁷³

There is no explicit monetary amount for what constitutes a “significant amount of capital.” The DOS has operated under a regulatory proportionality principle that dictates that the amount an individual invests must be enough to ensure the successful establishment and growth of an enterprise, and there must be some level of investment risk assumed by the treaty investor.⁷⁴ Because of this proportionality

⁶⁵ 8 CFR §214.2(e)(2), as amended by 56 Fed. Reg. 10978, 10979 (1989).

⁶⁶ 8 CFR §214.2(c)(10).

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*

⁶⁹ 8 CFR §214.2(c)(11).

⁷⁰ INA §101(a)(15)(E)(ii).

⁷¹ 8 CFR §214.2(e)(3)(ii).

⁷² Certain joint ventures have been deemed permissible by the United States, provided that each joint venture partner have veto power over decisions by the other partner.

⁷³ 8 CFR §214.2(e)(12).

⁷⁴ 8 CFR §214.2(e)(14).

regulation, an investment in a small to medium-sized enterprise is acceptable.⁷⁵ For smaller sized investments, the DOS generally requires that the investment amount be a higher percentage of the enterprise value.⁷⁶ For higher valued enterprises the investment percentage becomes less relevant, provided that the monetary amount is deemed substantial.⁷⁷

As further grounds for regulatory qualification for an E-2 investor visa, investments in marginal enterprises are not eligible for acceptance.⁷⁸ Consequently, the DOS applies a two-pronged test for marginality.⁷⁹ On the one hand, the enterprise in which the applicant seeks to make an investment must be capable of providing more than a minimal living for the investor and his or her family. However, the rules are capable of recognizing that some businesses need time to establish themselves and become viable. Consequently, as a second prong of the test, the investor's enterprise must be deemed capable of making a significant economic impact within five years of starting normal business activity. If neither of these prongs is successfully passed, the enterprise is deemed marginal and the application is rejected.⁸⁰

An additional category of E-class nonimmigrant visa — the E-3 visa for Australian nationals — does exist, but it is set aside for use by specialized workers, and not for investors or traders.⁸¹

⁷⁵ 9 FAM §41.51 n.10.4, as amended, TL:VISA-322 (October 10, 2001).

⁷⁶ Visa Bulletin, Vol. V, No. 20 — Nonimmigrant Treaty Investors U.S. Department of State, Visa Office (1982).

⁷⁷ Ibid.

⁷⁸ 8 CFR §214.2(e)(15).

⁷⁹ 2 Charles Gordon, Stanley Mailman, and Stephen Yale-Loehr, *Immigration Law and Procedure*, § 17.06[3][c] (Matthew Bender, Rev. Ed.).

⁸⁰ Ibid.

⁸¹ A special category of nonimmigrants classified as the E-3 visa has been established and is only available to nationals of Australia. Although agreed upon under the Australian Free Trade Agreement, the agreement itself contained no explicit immigration provision. Rather, the FY2005 supplemental appropriations for military operations in Iraq and Afghanistan (P.L. 109-16) included §501 creating the E-3 visa category. This visa permits the employment by any United States employer of a qualifying Australian national for a specialty occupation. Unlike the other E-class visas, the E-3 carries an annual cap which is currently set at 10,500. However, the other rules generally remain the same as E-1 and E-2 visas, with admissions for two years and unlimited extensions for qualifying individuals.

The E-3 resembles the H-1B-1 visa which allows for similar admissions of specialized workers from Chile and Singapore. After legislation was passed implementing the Chile and Singapore Free Trade Agreements (P.L. 108-77 and P.L. 108-78, respectively), these new laws carved out a portion of §101(a)(15)(H) of the INA for professional workers entering through the free trade agreements. Unlike the other H-1B requirements, H-1B-1 recipients are only required to be *specialized* workers as opposed to *highly specialized*. This visa category also differs from the E-3 visa in that it allows for an 18 month admission and carries an annual cap of 1,400 for Chilean nationals and 5,400 for nationals of Singapore.

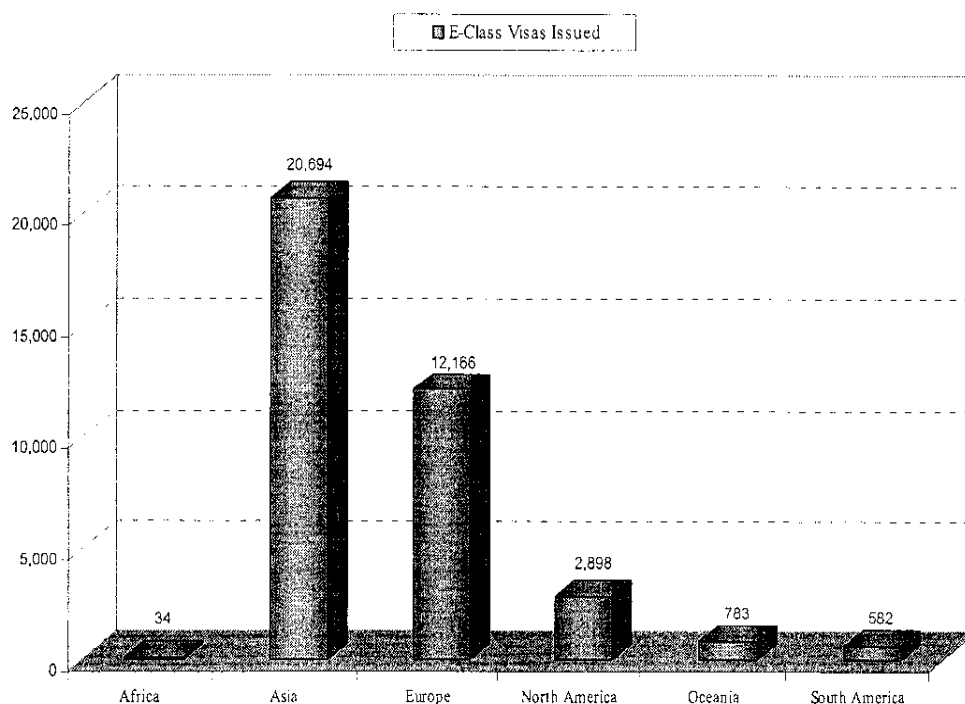
(continued...)

Nonimmigrant Investor Visa Numbers

E-class visas are largely distributed to foreign nationals from the regions of Asia and Europe. This result is not surprising since the majority of treaty countries are in these two regions. Furthermore, one could reasonably expect that the financial requirements embedded in nonimmigrant investor visa categories would result in a high correlation between the nationality of qualifying applicants and country membership in the Organization for Economic Cooperation and Development (OECD) — an organization of capital abundant countries.

As **Figure 2** shows, the Asian region is issued the highest number of E-class visas, with a total of 20,694 visas issued in FY2005. These Asian issuances constitute more than all other regions combined, and represent 55.7% of the worldwide total. Within the Asian region, the biggest user of the E-class visa is Japan, whose nationals accounted for 14,421 of the visa issuances in FY2005, a figure representing 38.8% of the 37,157 worldwide E-class visas issued that fiscal year. Europe's 12,166 E-Class visas accounted for 32.7% of the worldwide total, while the North American share of 2,898 visas represented 7.8%. Oceania, South America, and Africa each accounted for less than 2.2% of the worldwide total, and combined their nationals represented approximately 3.8% of the worldwide E-class visa issuances for FY2005.

Figure 2. E-Class Visas Issued by Region, FY2005



Source: Data is from the U.S. Department of State, Bureau of Consular Affairs (2005)

⁸¹ (...continued)

For further discussion on the E-3 and H-1B-1 visas, see CRS Report RL30498, *Immigration: Legislative Issues on Nonimmigrant Professional Specialty (H-1B) Workers*, by Ruth Ellen Wasem and CRS Report RL32982, *Immigration Issues in Trade Agreements*, by Ruth Ellen Wasem.

The admissions data on nonimmigrant investors offers more detailed insights into the origins of the visa holders. **Table 2** provides cumulative totals of E-class visa admissions into the United States in FY2005 by region of origin, with a detailed breakdown of the Asian region. The figures listed in **Table 2** show that the Asian region accounted for approximately 50% of the nonimmigrant investor visa admissions into the United States. In FY2005, Japan accounted for the majority of nonimmigrant investor admissions with 72,606 admissions.⁸² South Korea's 13,090 nonimmigrant investors admitted account for 6.9% of the United States total for FY2005. It is worth noting that the fast growing markets of China and India (the world's two largest population centers) combined for less than 1,000 admissions. The second largest region of origin for nonimmigrant investor admissions was Europe, with slightly more investors admitted than Japan. And while Europe's 74,338 admissions accounted for 38.6% of the total U.S. nonimmigrant investor admissions in FY2005, the 203 admissions of nationals from African countries accounted for approximately one-tenth of 1% of this same total.

Table 2. Nonimmigrant Treaty Trader and Investor Admissions, FY2005

| Country (or Region) of Origin | Number | Percentage of Total |
|-------------------------------|---------|---------------------|
| <i>Asia:</i> | | |
| <i>Taiwan</i> | 4,613 | 2.5 |
| <i>South Korea</i> | 13,090 | 6.9 |
| <i>China^a</i> | 769 | 0.5 |
| <i>India</i> | 228 | 0.1 |
| <i>Japan</i> | 72,606 | 37.8 |
| <i>All other Asia</i> | 4,228 | 2.2 |
| Total for Asia | 95,534 | 50 |
| <i>All Other Regions:</i> | | |
| Europe | 74,338 | 38.6 |
| South America | 5,338 | 2.9 |
| Africa | 203 | 0.1 |
| North/Central America | 13,159 | 6.9 |
| Australia/New Zealand | 2,735 | 1.5 |
| Total | 192,823 | 100 |

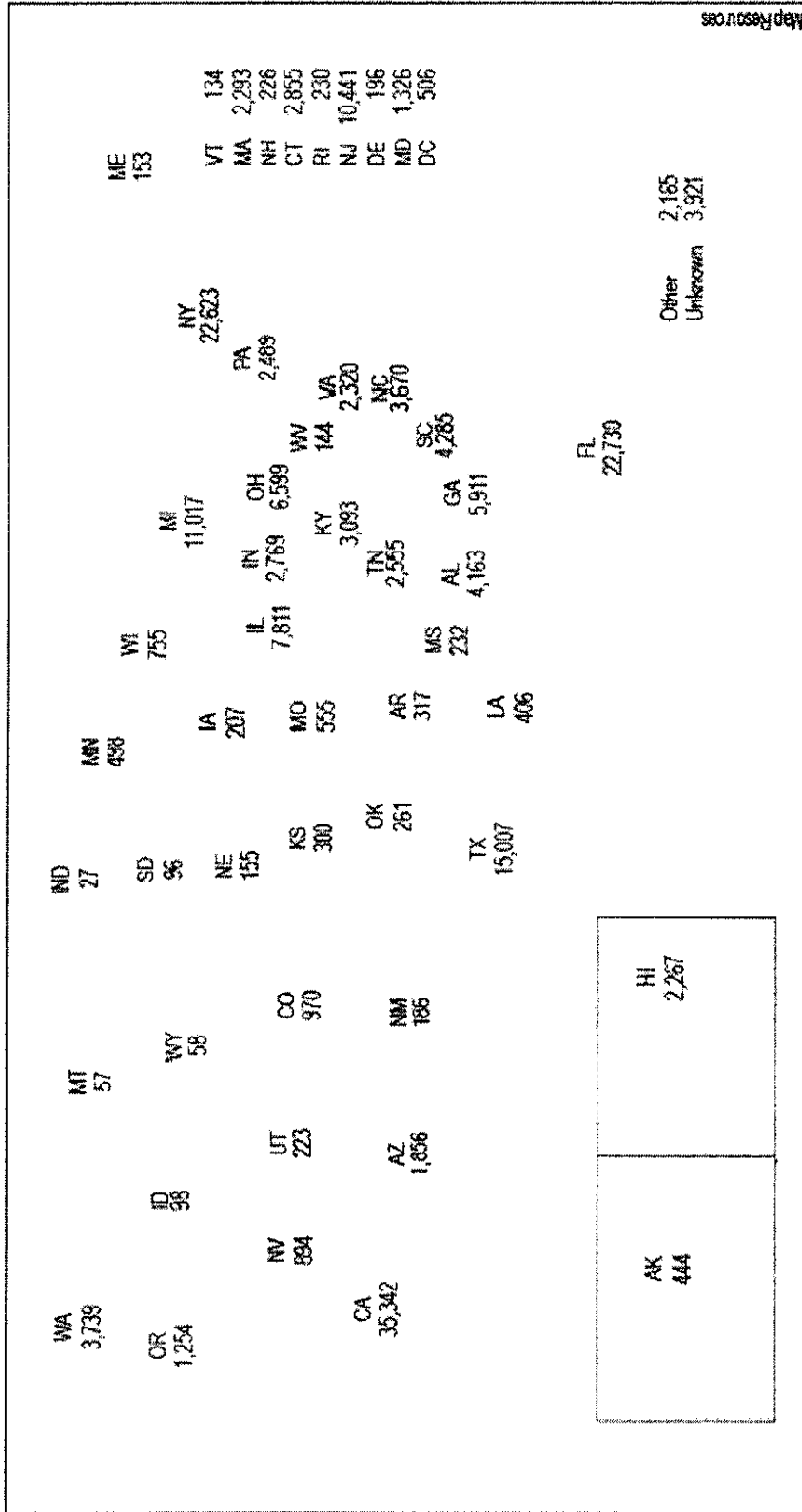
Source: CRS presentation of Department of Homeland Security Office of Immigration Statistics FY2005 data.

a. Denotes People's Republic of China, Hong Kong, and Macau.

⁸² Admissions figures differ significantly from visa issuance figures because individuals may leave the United States and return on the same visa, as long as the visa is still valid. Thus, some individuals may be counted multiple times in the admissions data.

The Department of Homeland Security (DHS) offers statistics on the admissions of nonimmigrants and their destination state. **Figure 3** indicates the destination states of E-class visa admissions into the United States for FY2005. The state with the highest number of nonimmigrant investors as their destination in FY2005 was California with 35,431 admissions, accounting for 18.4% of the admissions total. Following California, the next three biggest recipients of nonimmigrant investors were Florida, New York, and Texas with 22,765, 22,705, and 15,048 admissions each, respectively. In the respective order, these state admissions accounted for 11.8%, 11.8% and 7.8% of the admissions total in FY2005. The only other states with a combined total of more than 10,000 E-class admissions were Michigan and New Jersey. Michigan was the destination state of 11,034 nonimmigrant investors admitted, while New Jersey attracted 10,460 admissions. These totals accounted for 5.7% and 5.4% of the United States admissions total, respectively. The remaining states represented the destination states for approximately 31% of nonimmigrant investors.

Figure 3. Nonimmigrant Trader and Investor Admissions by Destination State, FY2005



Source: CRS presentation of DHS Office of Immigration Statistics data.

Historically, more investors have applied to enter the United States as nonimmigrants than immigrants, possibly because the less stringent requirements for the nonimmigrant investor visa make it easier to obtain. However, relative to other nonimmigrant categories, the admission levels of investor nonimmigrants are low. With the ease of movement, technological advances, and ease of trade restrictions, many investors may be choosing to invest in the United States from abroad and enter the United States on B-1 temporary business visas or visa waivers.⁸³

U.S. and Canadian Comparisons

Although there are many countries with investor visa programs — including the United Kingdom, Australia, and New Zealand — the Canadian investor program has the strongest parallels to those of the United States. These parallels are in part due to the fact that the U.S. immigrant investor program was modeled after its Canadian counterpart. The Canadian program allows investors who have a net worth of at least \$800,000 (Cdn) to make a \$400,000 (Cdn) investment through Citizenship and Immigration Canada (CIC).⁸⁴ The Canadian government additionally offers an entrepreneurial visa for foreign nationals with a net worth of \$300,000 (Cdn).⁸⁵ These nationals are required to invest and participate in the management of a certain sized business, and they must produce at least one new full-time job for a non-family member.⁸⁶ Between 1986 and 2002, the Canadian investor visa program attracted more than \$6.6 billion (Cdn) in investments.⁸⁷ From FY1992 through FY2004, United States LPR investor immigrants had invested an estimated \$1 billion in U.S. businesses.⁸⁸

According to published accounts, the Canadian investor visa was developed initially to attract investors from the British colony of Hong Kong.⁸⁹ The visa was created in 1986 in response to the significant numbers of investors seeking to migrate from Hong Kong in anticipation of the transfer of the colony from British to Chinese

⁸³ According to the DHS Office of Immigration Statistics' *2005 Yearbook of Immigration Statistics*, in FY2005 there were 2,432,587 admissions of B-1 visa holders and 2,261,354 admissions for business purposes on visa waivers.

⁸⁴ Citizenship and Immigration Canada, "Business Immigrant Links: FAQs," November 11, 2005, at [<http://www.cic.gc.ca/english/business/bi-faqs.html>], visited January 23, 2007.

⁸⁵ *Ibid.*

⁸⁶ *Ibid.*

⁸⁷ Mailman, Stanley, and Stephen Yale-Loehr. "Immigrant Investor Green Cards: Rise of the Phoenix?" *New York Law Journal*, April 25, 2005. At [<http://www.millermayer.com/EB5NYLJ0405.html>], visited January 23, 2007.

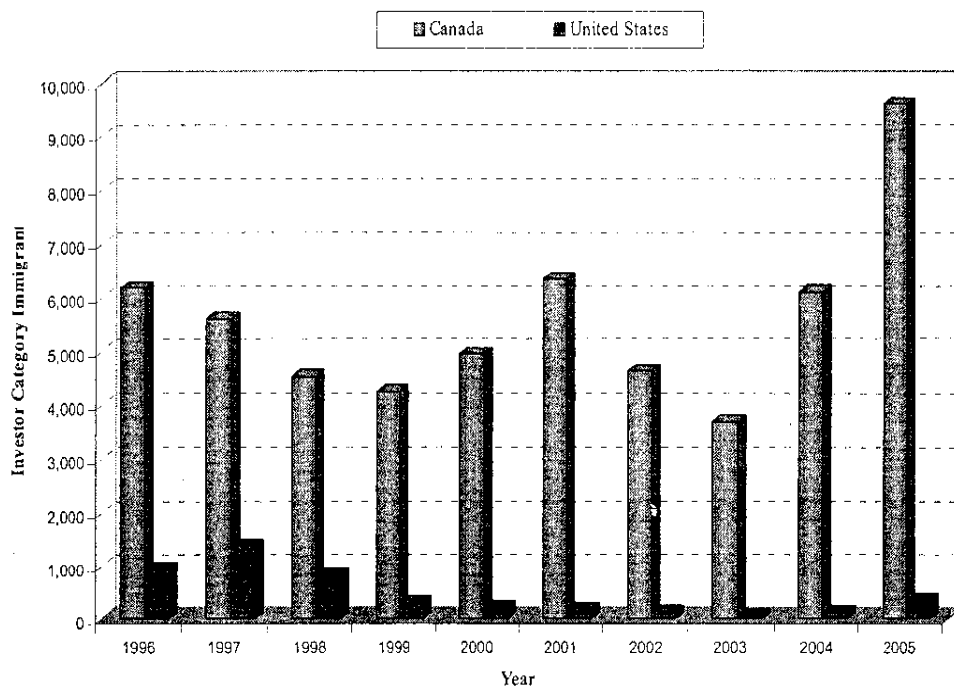
⁸⁸ U.S. Government Accountability Office, *Immigrant Investors: Small Number of Participants Attributed to Pending Regulations and Other Factors*, GAO-05-256, April 2005, pp. 8-11.

⁸⁹ Denton, Herbert H. "Canada Lures Hong Kong Immigrants: Well-Off Businessmen Willing to Invest Are Granted Special Status." *Washington Post*, March 8, 1986, pp. A11, A18.

control. For these investors, the visa offered an opportunity to establish legal permanent residence in a country that was perceived to be more embracing of individual property rights and open markets.⁹⁰ These immigrant investors from Hong Kong, along with other immigrant investors, have cumulatively invested over \$3 billion in the Canadian economy.⁹¹

As **Figure 4** demonstrates, the annual number of immigrant investor visas issued over the past decade has remained multiple times higher than that of its United States counterpart. The margin between these two programs was closest in 1997, when the Canadian issuance of 5,595 immigrant investor visas was approximately 400% higher than the U.S. total of 1,361 immigrant investor visas issued. Although these ratios have fluctuated, the sizable Canadian advantage in this measure has remained. In terms of the absolute levels, the Canadian immigrant visa level for 2005 represented a 10-year high, while the U.S. level for the same time period represented approximately 25% of its 10-year high. Both countries have shown an upward trend in immigrant investor visas in the last two years.

Figure 4. Immigrant Investors to Canada and the United States, 1996-2005



Source: Data are from the United States Government Accountability Office (2005) and Citizenship and Immigration Canada (2005).

What is unclear from the data is whether the competition between the U.S. and Canadian program (as well as investor programs in other countries) constitutes a zero-sum game. There are no data available showing the motive for migration among investors, or if they perceive the United States and Canada as interchangeable

⁹⁰ Ibid.

⁹¹ Citizenship and Immigration Canada, "Business Immigrant Links: FAQs." November 11, 2005, at [<http://www.cic.gc.ca/english/business/bi-faqs.html>], visited January 23, 2007.

investment locations. If the investors are motivated purely by the economic returns, then economic theory⁹² suggests that equalizing the program financial requirements should result in more equal rates of petitions. Furthermore, a lowering of the financial requirements should increase the supply for both countries. However, if the immigrant investors are motivated to migrate by non-financial considerations, then equalizing the United States program requirements with its Canadian counterpart is likely to have little impact on the current trends.

Analysis of the Relationship Between Investments and Migration

Classical economic theory has posited that trade liberalization (including the reduction of investment restrictions) establishes a conditional inverse theoretical relationship between foreign direct investment (FDI) and migration.⁹³ In other words, as trade increases, migration pressures decrease. The theory posits that an increased level of FDI should reduce migratory pressures through growth in the targeted economy. As economic growth produces a higher demand for labor, workers in that economy feel less pressure to seek employment in foreign economies, provided that the new jobs complement the workforce's skills. For example, if economic growth creates demand for skilled labor, then an unskilled labor force should not experience any reduced migration pressures. Thus, while FDI increases host-country growth, there is not necessarily a direct reduction in host-country migration pressures.

The investor visas offered by the United States operate on the principal that FDI into the United States should spur economic growth in the United States. According to the classical theory, if these investments are properly targeted towards the U.S. labor force's skill sets, it should reduce the migration pressures on U.S. workers. Such economic growth from FDI should further spur greater demand for trade. In FDI between capital abundant countries such as the OECD member states (between whom a marked majority of FDI flows), the empirical evidence has largely supported this notion.⁹⁴ Furthermore, it has provided an increased per capita income in these states, as well as boosted the general standard of living.

What is less clear from the empirical research is the degree to which potential migration provides any additional incentive for investment activity in the United States. The classical trade theory asserts that trade and migration are substitutes,⁹⁵ and

⁹² Xenogiani, Theodora. "Migration Policy and Its Interactions with Aid, Trade and Foreign Direct Investment Policies: A Background Paper." *OECD Development Centre*, Working Paper No. 249, June, 2006.

⁹³ For a brief discussion, see Xenogiani, Theodora. "Migration Policy and Its Interactions with Aid, Trade and Foreign Direct Investment Policies: A Background Paper." *OECD Development Centre*, Working Paper No. 249, June, 2006, p.36.

⁹⁴ *Ibid.*

⁹⁵ For further discussion on immigration and trade see CRS Report RL32982, *Immigration Issues in Trade Agreements*, by Ruth Ellen Wasem.

that trade liberalization should reduce migratory pressures.⁹⁶ These basic propositions are generally agreed to hold in the long term. Consequently, in the long term classical trade theory suggests there should be little migration of investors from countries with liberalized trade arrangements with the United States.⁹⁷ Instead, these investors would achieve their investments through conventional FDI. Furthermore, the theory suggests that investors would be more likely to migrate from countries with restrictive trade policies (a policy more highly correlated with less economically developed countries).

Critics of the classical economic models contend that despite elegant predictions, the models produced by the theory frequently do not capture the costs of international finance. Such critics argue that foreign investments often occur at the expense of local businesses, and result in exploitive practices of local labor.⁹⁸ These criticisms are particularly common when critiquing the economic relationship between capital abundant countries and less economically developed countries (LEDC). According to the argument, more powerful countries can leverage their power to construct investment relationships that shift a disproportionate amount of profits to the capital abundant countries. Simultaneously, a greater share of the costs⁹⁹ are shouldered by the less powerful country. Classical economists generally respond by noting that these investments are still producing growth in the LEDCs, making the countries better off than without the investments. However, LEDCs remain a source of contention between the classical economic theorists and their critics.

Less Economically Developed Countries. Some scholars have expressed doubt about the posited trade/migration substitutability, suggesting that the relationship in the short or medium term could look different from the long term.¹⁰⁰ One of the arguments put forward is that trade and migration are complementary for countries with different levels of development.¹⁰¹ Under such a scenario, economic

⁹⁶ This migratory pressure reduction should occur through the increased exports of unskilled labor-intensive goods, as well as the resulting fact-price equalization and subsequent convergence of wages.

⁹⁷ There exists the possibility that foreign investment and capital trade objectives of many investors are accomplished through multinational corporations. Under the construct of a multinational corporation, returns to the investor are achieved through the foreign direct investment by the corporation and through the migration of managers and technical experts to facilitate production efficiency.

⁹⁸ For example, see Banerjee, Subhabrata Bobby, and Stephen Linstead, "Globalization, Multiculturalism and Other Fictions: Colonialism for the New Millennium?" *Organization*, vol. 8, no. 4 (2001), pp. 683-722.

⁹⁹ These costs may include tax shelters, government sponsored benefits, subsidies, and the like.

¹⁰⁰ Schiff, M. "How Trade, Aid, and Remittances Affect International Migration." World Bank Policy Research Working Paper No. 1376, Washington, DC, 1994.

¹⁰¹ Xenogiani, Theodora. "Migration Policy and Its Interactions with Aid, Trade and Foreign Direct Investment Policies: A Background Paper." *OECD Development Centre*, (continued...)

growth in a sending country would provide potential migrants with the economic means to overcome relatively high migration costs. Other observers point to such factors as imperfect credit markets and currency fluctuations as significant “push” factors for potential migrants.¹⁰² These latter factors, however, are generally more highly correlated with LEDCs. Therefore, both the complementary and substitutability theories of trade and migration suggest that higher demand for investor out-migration should currently lie in the populations of LEDCs. However, as noted earlier, investor visas issued to regions with LEDCs are relatively few.

What makes the visa program distinct from conventional FDI is that it involves trade through the import of human capital. Consequently, these visas have potential for creating a so-called “brain drain” migration out of less-developed sending-countries.¹⁰³ LEDCs are by definition limited in their capital levels, and economic theory would suggest that exporting capital from a capital scarce country would inhibit its growth and development.¹⁰⁴ Classical theorists would argue that the United States would be better served by sending FDI into LEDCs, thereby promoting economic growth in LEDCs and a subsequent higher demand for U.S. goods.¹⁰⁵ Such investment, the theory dictates, would promote job growth both in the United States and abroad.¹⁰⁶ Instead, targeting investors from capital abundant countries for sector specific investments would serve a more complementary role for the global market.¹⁰⁷

¹⁰¹ (...continued)

Working Paper No. 249, June, 2006, p. 31-33.

¹⁰² Ibid.

¹⁰³ A large majority of the issued visas have been to foreign nationals from relatively capital abundant countries.

¹⁰⁴ For further discussion of FDI into the United States see CRS Report RS21857, *Foreign Direct Investment in the United States: An Economic Analysis*, by James K. Jackson.

¹⁰⁵ FDI does entail some degrees of risk and reward for both the home and host economies. For the home economy, FDI can improve competitiveness and performance of firms by providing value-added activities, better employment opportunities, better export performance, and higher national income. At the same time, engaging in FDI also runs the risks of lower additions to both domestic investment and capital stock, as well as loss of competitiveness and jobs in certain parts of the economy. For the host economies, the benefits include increases in employment and potential multiplier effects on other parts of the economy through productivity growth. Accepting FDI, however, does run the risk that domestic firms are crowded out of the market (United Nations *World Investment Report*, 2006).

¹⁰⁶ From the classical economic perspective, the immigrant investor pilot program is counter-intuitive. In the case of investors from developed countries there is little incentive for them to settle in the United States since they can achieve similar standards of living and all of their FDI objectives from their home country. As for LEDCs, a drain of their capital may provide short-term benefits to the United States, but would inhibit growth and trade in the long run. The flight of investors from Hong Kong in the late-1980s and the 1990's was a unique economic situation that has since subsided. Other than the Hong Kong scenario, there is seemingly little incentive for investors to relocate.

¹⁰⁷ The complementary roles would be achieved through what economists refer to as
(continued...)

By attracting capital abundant country investors, the United States' economic growth and productivity could be stimulated without adversely affecting the consumption and trade potential of the investor's country of origin.

Temporary and Permanent Investors. Some recent scholarly work has drawn a distinction between the decision-making factors of potential temporary and permanent migrants.¹⁰⁸ Amongst temporary migrants, it is the employment prospects and wage differentials that are significant variables in deciding whether to migrate. Differences in both gains and price levels should affect the cost/benefit calculation of the potential migrants, as these variables will affect potential levels of consumption and savings. For permanent migrants, however, the prospects for professional and social mobility are the main motivating factors.

The distribution of visas among Asian countries shows marked country-specific tendencies among investor visa petitioners. Specifically, the polarization among petitioners towards either immigrant (permanent) or nonimmigrant (temporary) visas suggests that a significant proportion of applicants are substituting immigrant visas for nonimmigrant visas, or vice versa. For example, while Japan accounted for 37.8% of all the foreign nationals arriving on nonimmigrant treaty trader and investor visas in FY2005 (**Table 2**), its nationals represented only 1% of all the LPR investor visas issued in the time frame FY1992-FY2004 (embedded in "Other Asia" of **Figure 1**). Conversely, from the same two sets of data-samples, nationals of Taiwan accounted for 39% of immigrant investors issued, but only 2.5% of nonimmigrant arrivals. In the context of the aforementioned theory, **Table 2** and **Figure 1** above suggest that Japanese investors are seeking to capitalize on wage differentials, while Taiwanese, Chinese, and (to some extent) South Korean investors are pursuing professional and social mobility.

Although some considerations weigh more heavily on the decisions of immigrant and nonimmigrant investors, no single explanation accounts for the behavior of investor visa petitioners. Japan, for example, has some trade restrictions with the United States through voluntary export restraint agreements limiting auto and steel exports to the United States, suggesting from the theoretical standpoint that Japanese investors would choose to temporarily migrate.¹⁰⁹ The Japanese governments have also complained that the post-9/11 customs regulations and

¹⁰⁷ (...continued)

"comparative advantage." Theoretically, each country should be able to produce a good or service more efficiently than the world average, thereby making the good or service exportable. By attracting investments in these comparatively advantaged sectors, costs should decrease while production increases. Thus, consumers at both ends of a trading relationship are able to consume more goods.

¹⁰⁸ Xenogiani, Theodora. "Migration Policy and Its Interactions with Aid, Trade and Foreign Direct Investment Policies: A Background Paper." *OECD Development Centre*, Working Paper No. 249, June, 2006, p. 31-33.

¹⁰⁹ CRS Report RL32649, *U.S.-Japan Economic Relations: Significance, Prospects, and Policy Options*, by William H. Cooper.

practices of the United States inhibit U.S./Japanese trade.¹¹⁰ Despite the suggestion by these factors that Japanese investors are temporarily substituting trade with migration, it is also plausible that Japan's weak economic performance has reduced the professional mobility opportunities — a motivation associated with permanent migration. From 1991-2000, Japan's real (adjusted for inflation) average GDP growth rate was 1.4%, and it fell to 0.9% from 2001 to 2003.¹¹¹ Yet, regardless of motivation, Japanese investors are predominantly choosing to temporarily migrate to the United States.

The fact that China, Taiwan and South Korea have had strong economic performance in the last decade and relatively higher levels of immigrant investors to the United States, suggests that these investors are migrating for more than financial purposes. These investors may be more strongly motivated by the family and/or social network connections to previously migrated investors and other LPRs in the United States. These theoretically derived motives, however, must be further tested empirically before any conclusive behavioral statements can be made.

Multiplier Effects. Classical economic theory holds that investments provide for multiplier effects throughout the economy by increasing demand for other goods and services. For example, an increase in demand for corn may increase the demand for storage facilities, which results in an increase in construction contracts. The U.S. Department of Commerce has quantified these effects through the Regional Input-Output Modeling System (RIMS II).¹¹² The RIMS II multipliers have become a significant factor in assessing indirect economic activity and employment effects for Immigrant Investor Pilot Program petitions.¹¹³ Using the regional multipliers for various industries, foreign investment funds are frequently shown to yield increases in demand across an economy that are several times higher than the direct input by an investor. Thus, despite the relatively low number of investors entering the United States, the impact of each investment by a foreign investor is a multiplied factor greater than the direct investment, depending upon which industry and region is being invested in. Furthermore, studies showing the direct economic investments of foreign investors may not fully capture the economic impact of these investors upon a region.¹¹⁴

¹¹⁰ Ibid.

¹¹¹ Ibid.

¹¹² For an explanation of the RIMS II multiplier, see U.S. Department of Commerce, *Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II)*, Third Edition, March, 1997.

¹¹³ According to the USCIS Chief Adjudications Officer for EB-5 visas, well established input-output models such as RIMS II are useful in assessing investments for limited partnerships, where the direct effects of an investment are difficult to demonstrate (based on CRS discussions with Morrie Berez, Chief Adjudications Officer, USCIS Investor and Regional Center Program, November 20, 2006). Such established economic models are permitted under regulations (8 CFR 204.6(m)(3)).

¹¹⁴ A recent study commissioned by the National Venture Capital Association found that over the past 15 years, immigrants have started 15% of venture-backed U.S. public
(continued...)

Administrative Efforts

In recent years, significant efforts have been made by administrative agencies to both promote investment by foreigners in the United States economy, and to close perceived loopholes for visa exploitation. At the center of these efforts has been the USCIS' changes to the Immigrant Investor Pilot Program, which addressed fraud concerns and the development of a Regional Center unit for coordination and targeting of foreign investments.

Fraudulent Investments. During the late 1990's, the LPR investor visa was suffering from high levels of fraudulent applications.¹¹⁵ There has been concern that potential immigrants could use schemes of pooling their funds and transferring the money to demonstrate the existence of sufficient capital.¹¹⁶ Furthermore, applicants could potentially use promissory notes that would allow for their repayment after a six year time period. Since the LPR was only conditional for two years, some observers feared that these investors could pull out of their respective investments after being granted their LPR, have the promissory notes forgiven, and the enterprise would collapse. As a result, the USCIS has engaged in a policy of not accepting promissory notes, although the regulations state that petitions with promissory notes may be considered for approval.¹¹⁷ Additionally, the creation of the Investor and Regional Center Unit (IRCU) has allowed greater scrutiny of applications through

¹¹⁴ (...continued)

companies. The value of these companies currently exceeds \$500 billion, and most of the companies were in technology-related industries. The study found that these companies employ 220,000 people in the United States, and 400,000 globally. Some of the more prominent companies included by the study's criteria include Google, Yahoo!, eBay, and Intel (Stuart Anderson and Michael Platzer, *American Made: The Impact of Immigrant Entrepreneurs and Professionals on U.S. Competitiveness*, National Venture Capital Association, November 15, 2006, pp. 5-8).

Although the study shows the potential benefits of immigrant entrepreneurs, it does not directly reflect on the investor visa categories. Most of the immigrants that founded these enterprises came to the United States as children, teenagers, graduate students, or were hired on H-1B visas in their mid-twenties. Thus, it is unclear to what extent these individuals would have qualified as either immigrant or nonimmigrant investors under the current regulations. Furthermore, the study's findings includes numbers from both companies wholly founded by immigrants and companies founded through partnerships with United States citizens (Ibid).

¹¹⁵ Some have expressed concern regarding the investor visas being a means for some foreign nationals to channel illegal funds into the United States. Opponents of the LPR investor visa raised objections during congressional debates by asserting that the LPR investor category would allow individuals to become United States citizens who had profited from drug cartels. According to DHS, there does exist documented past abuses in the alien investor program (U.S. Government Accountability Office, *Immigrant Investors: Small Number of Participants Attributed to Pending Regulations and Other Factors*, GAO-05-256, April 2005, pp. 39.). However, since the implementation of the "no promissory notes" policy, the fraudulent cases have largely disappeared.

¹¹⁶ Based on CRS discussions with Morrie Berez, Chief Adjudications Officer, USCIS Investor and Regional Center Program, November 20, 2006.

¹¹⁷ Ibid.

increased resources and coordination of petitions processing. Petitioners now must provide extensive documentation that traces the source of their funds to show that the capital was legally obtained.¹¹⁸

IRCU Expansion. Prior to the creation of IRCU, the former-INS had been criticized for becoming more restrictive in application reviews for Regional Center designation, including allowing some applications to remain pending for more than three years.¹¹⁹ In 2005, concerns were raised by both Members and advocates that the IRCU still did not process applications quickly enough,¹²⁰ and that staff members had competing obligations within IRCU.¹²¹ Proponents of the Immigrant Investor Pilot Program believe it has attracted a significant amount of capital and that addressing these criticisms would further increase the levels of foreign investments through the LPR investor visa.¹²² USCIS has responded to these criticisms by expanding the number of Regional Centers available for LPR investor investments. Most recently, IRCU has been expanded into Western Pennsylvania.

Working with foreign financing from the immigrant investor program has become highly attractive for many domestic investors. A number of current investment projects are using LPR investor financing because it is less costly for the domestic investors. For domestic investors, employing LPR investor funds becomes a significantly cheaper option than a bank loan, since there is no requirement to pay interest on the financing. Additionally, because the enterprises are less saddled with financing debt they are more quickly able to turn a profit. The LPR investor visa

¹¹⁸ This practice has made it especially difficult for investors from countries with business practices based on convention (as opposed to legal documentation) to qualify for investor visas. Documentation requirements may force a potential investor to trace funds back several decades, effectively disqualifying investors from countries where credible historical records of income tax documents do not exist (Wolfsdorf, Bernard P., Naveen Rahman-Bhora, Tien-Li Loke Walsh, and Kim Tran. "A Review of the Immigrant Investor Program." *Immigration Law Today*, July/August, 2006, pp. 27-33).

¹¹⁹ Lincoln Stone, *INS Decisions Cloud Future of Investor Pilot Program*, 6 *Bender's Immigration Bulletin* 233 (March 1, 2001).

¹²⁰ Rep. Sensenbrenner wrote a letter to USCIS Director Eduardo Aguirre on April 6, 2005 asking the USCIS to institute premium processing and concurrent filing for immigrant investor petitions (Mailman, Stanley, and Stephen Yale-Loehr. "Immigrant Investor Green Cards: Rise of the Phoenix?" *New York Law Journal*, April 25, 2005. At [<http://www.millermayer.com/EB5NYLJ0405.html>], visited January 23, 2007.).

¹²¹ Letter from Lincoln Stone, Chair of the Investor Committee of the American Immigration Lawyers Association, to Michael Aytes, USCIS Acting Associate Director of Operations, November 16, 2005.

¹²² Lincoln Stone, the Chair of the Investor Committee of the American Immigration Lawyers Association, noted the generated level of capital in four targeted areas. According to an informal survey Stone had conducted of four targeted centers (California Consortium for Agricultural Export, Philadelphia Investment Development Corporation, Golden Rainbow Freedom Fund, and South Dakota International Business Institute), these centers had attracted \$121.3 million in capital in their two-year existence (Letter from Lincoln Stone, Chair of the Investor Committee of the American Immigration Lawyers Association, to Michael Aytes, USCIS Acting Associate Director of Operations, November 16, 2005.).

petitioners are still able to qualify for conditional LPR status under these investment structures through the multiplier rules for employment and capital that the USCIS employs. Thus, limited partnerships of domestic investors with LPR investor visas has become a popular option for financial stabilization and enterprise start-up in Regional Centers as diverse as Philadelphia and South Dakota.

New Orleans. In the efforts to rebuild the sections of New Orleans damaged by Hurricane Katrina, developers and officials alike have taken an interest in attracting foreign capital. USCIS officials are working closely with New Orleans officials to establish New Orleans as another Regional Center for LPR investor visa investments. Officials at USCIS are hopeful that the program success that the Philadelphia targeted center is experiencing can be replicated in New Orleans. Since being designated a Regional Center, Philadelphia has attracted over 100 LPR investors and most of their investments are being used to help finance the renovation and transformation of the 1100 acre shipyard (for further discussion, see **Appendix B**).

Potential Issues for Congress

Several issues related to investor visas may surface during the 110th Congress. For example, the immigrant investor pilot program is scheduled to sunset at the end of FY2008. The immigrant investor pilot program visa was last extended under the Basic Pilot Program Extension and Expansion Act of 2003.¹²³ There are currently no other programs for targeting investments by immigrant investors to the United States.

Additional investor visa issues that could surface may relate to temporary investors. In terms of nonimmigrant visas, the Danish government has been lobbying the United States to grant E-2 treaty investor visas to Danish nationals. Originally, this provision was granted to the Danes on May 2, 2001 as part of a protocol to the treaty granting nationals of Denmark E-1 nonimmigrant trader visa eligibility. The protocol was never ratified, however, due to congressional objections over the inclusion of immigration provisions in a trade agreement. Subsequently, Representative Sensenbrenner introduced H.R. 3647, which was passed in the House on November 16, 2005, and would have allowed nationals of Denmark to enter and operate in the United States as investors under E-2 treaty investor nonimmigrant visas. Currently, Danish nationals are only allowed E-1 treaty trader visas. Denmark is one of four countries whose nationals are eligible for E-1 treaty trader visas, but not E-2 treaty investor visas (see **Table 3** in **Appendix A**).

¹²³ P.L. 108-156.

Appendix A

Table 3. E-Class Visa Privileges by Year of Attainment

| Country | Classification | Year of Visa |
|----------------------------------|----------------|--------------|
| Albania ^a | E-2 | 1998 |
| Argentina | E-1 | 1854 |
| Argentina | E-2 | 1854 |
| Armenia | E-2 | 1996 |
| Australia | E-1 | 1991 |
| Australia | E-2 | 1991 |
| Australia | E-3 | 2005 |
| Austria | E-1 | 1931 |
| Austria | E-2 | 1931 |
| Azerbaijan ^a | E-2 | 1901 |
| Bahrain ^a | E-2 | 1901 |
| Bangladesh ^a | E-2 | 1989 |
| Belgium | E-1 | 1963 |
| Belgium | E-2 | 1963 |
| Bolivia | E-1 | 1862 |
| Bolivia | E-2 | 2001 |
| Bosnia & Herzegovina | E-1 | 1982 |
| Bosnia & Herzegovina | E-2 | 1982 |
| Brunei ^b | E-1 | 1853 |
| Bulgaria ^a | E-2 | 1954 |
| Cameroon ^a | E-2 | 1989 |
| Canada | E-1 | 1993 |
| Canada | E-2 | 1993 |
| Chile | E-1 | 2004 |
| Chile | E-2 | 2004 |
| Chile | H-1B-1 | 2004 |
| China (Taiwan) | E-1 | 1948 |
| China (Taiwan) | E-2 | 1948 |
| Colombia | E-1 | 1948 |
| Colombia | E-2 | 1948 |
| Congo (Kinshasa) ^a | E-2 | 1989 |
| Congo (Brazzaville) ^a | E-2 | 1994 |
| Costa Rica | E-1 | 1852 |
| Costa Rica | E-2 | 1852 |
| Croatia | E-1 | 1982 |
| Croatia | E-2 | 1982 |
| Czech Republic ^a | E-2 | 1993 |
| Denmark ^b | E-1 | 1961 |
| Ecuador ^a | E-2 | 1997 |
| Egypt ^a | E-2 | 1992 |

| Country | Classification | Year of Visa |
|-------------------------|----------------|--------------|
| Estonia | E-1 | 1926 |
| Estonia | E-2 | 1997 |
| Ethiopia | E-1 | 1953 |
| Ethiopia | E-2 | 1953 |
| Finland | E-1 | 1934 |
| Finland | E-2 | 1992 |
| France | E-1 | 1960 |
| France | E-2 | 1960 |
| Georgia | E-2 | 1997 |
| Germany | E-1 | 1956 |
| Germany | E-2 | 1956 |
| Greece ^b | E-1 | 1954 |
| Grenada ^a | E-2 | 1989 |
| Honduras | E-1 | 1928 |
| Honduras | E-2 | 1928 |
| Iran | E-1 | 1957 |
| Iran | E-2 | 1957 |
| Ireland | E-1 | 1950 |
| Ireland | E-2 | 1992 |
| Israel ^b | E-1 | 1954 |
| Italy | E-1 | 1949 |
| Italy | E-2 | 1949 |
| Jamaica ^a | E-2 | 1997 |
| Japan | E-1 | 1953 |
| Japan | E-2 | 1953 |
| Jordan | E-1 | 2001 |
| Jordan | E-2 | 2001 |
| Kazakhstan ^a | E-2 | 1994 |
| Korea (South) | E-1 | 1957 |
| Korea (South) | E-2 | 1957 |
| Kyrgyzstan ^a | E-2 | 1994 |
| Latvia | E-1 | 1928 |
| Latvia | E-2 | 1996 |
| Liberia | E-1 | 1939 |
| Liberia | E-2 | 1939 |
| Lithuania ^a | E-2 | 2001 |
| Luxembourg | E-1 | 1963 |
| Luxembourg | E-2 | 1963 |
| Macedonia | E-1 | 1982 |
| Macedonia | E-2 | 1982 |
| Mexico | E-1 | 1994 |
| Mexico | E-2 | 1994 |
| Moldova ^a | E-2 | 1994 |
| Mongolia ^a | E-2 | 1997 |
| Morocco ^a | E-2 | 1991 |
| Netherlands | E-1 | 1957 |

| Country | Classification | Year of Visa |
|--------------------------------|----------------|--------------|
| Netherlands | E-2 | 1957 |
| Norway | E-1 | 1928 |
| Norway | E-2 | 1928 |
| Oman | E-1 | 1960 |
| Oman | E-2 | 1960 |
| Pakistan | E-1 | 1961 |
| Pakistan | E-2 | 1961 |
| Panama ^a | E-2 | 1991 |
| Paraguay | E-1 | 1860 |
| Paraguay | E-2 | 1860 |
| Philippines | E-1 | 1955 |
| Philippines | E-2 | 1955 |
| Poland ^a | E-2 | 1994 |
| Romania ^a | E-2 | 1994 |
| Senegal ^a | E-2 | 1990 |
| Singapore | E-1 | 2004 |
| Singapore | E-2 | 2004 |
| Singapore | H-1B-1 | 2004 |
| Slovak Republic ^a | E-2 | 1993 |
| Slovenia | E-1 | 1982 |
| Slovenia | E-2 | 1982 |
| Spain | E-1 | 1903 |
| Spain | E-2 | 1903 |
| Sri Lanka ^a | E-2 | 1993 |
| Suriname | E-1 | 1963 |
| Suriname | E-2 | 1963 |
| Sweden | E-1 | 1992 |
| Sweden | E-2 | 1992 |
| Switzerland | E-1 | 1855 |
| Switzerland | E-2 | 1855 |
| Thailand | E-1 | 1968 |
| Thailand | E-2 | 1968 |
| Togo | E-1 | 1967 |
| Togo | E-2 | 1967 |
| Trinidad & Tobago ^a | E-2 | 1996 |
| Tunisia ^a | E-2 | 1993 |
| Turkey | E-1 | 1993 |
| Turkey | E-2 | 1990 |
| Ukraine ^a | E-2 | 1996 |
| United Kingdom | E-1 | 1815 |
| United Kingdom | E-2 | 1815 |

Source: CRS presentation of data from the U.S. Department of State Foreign Affairs Manual, 9 FAM §41.51.

- a. Countries with only E-2 visa privileges.
- b. Countries with only E-1 visa privileges.

Appendix B

There are currently numerous targeted economic regions set up for the Immigrant Investor Pilot Program for the EB-5 visa category. These targeted areas have focused on different types of investments in order to achieve economic benefits for the given region. Below are descriptions of a couple of the projects that are currently in place under the Immigrant Investor Pilot Program and the results these projects are producing.

South Dakota International Business Institute

The South Dakota International Business Institute (SDIBI), Dairy Economic Development Region (DEDR) is the only regional targeting center currently run by a state government. Approved in June 2005, this Regional Center was the result of a state-wide effort to find an improved method of attracting foreign capital to South Dakota. From the state's perspective, the EB-5 pilot investor program offered a more promising solution than the E-2 nonimmigrant visa, since officials could offer investors the benefit of LPR status.¹²⁴ Additionally, the job-creation criterion of the EB-5 visa aligned well with the state's focus on job creation from foreign investments (as opposed to isolated capital injections). In its application for Regional Center designation, the state said it would focus its efforts on attracting dairy farm investors. USCIS agreed to the designation on the condition that South Dakota would allow for limited partnerships of foreign investors with domestic farmers.¹²⁵ As a result, South Dakota currently has enterprises fully owned and operated by foreign investors, as well as limited partnerships.

Since the regional designation took effect, South Dakota has attracted 60 foreign investors to its dairy industry (with an additional 10 applications still pending).¹²⁶ These foreign investors have injected approximately \$30 million into the South Dakota economy, with an additional \$6 million in matching funds coming from local farmers. Furthermore, this combined \$36 million in invested funds has resulted in almost \$90 million in bank financing for the various dairy investment projects. As a direct consequence of these foreign investments, 240 additional jobs have been created and 20,000 additional cows have been brought to South Dakota.¹²⁷ Using the RIMS II multipliers for investment and employment,¹²⁸ the foreign investments from EB-5 immigrants have resulted in a total of 638 additional jobs and over \$360 million in additional funds to the regionally targeted economy.

¹²⁴ Based on CRS discussion with Joop Bollen, Director of the South Dakota International Business Institute, November 28, 2006.

¹²⁵ Letter from William R. Yates, Associate Director of USCIS Office of Operations, to Joop Bollen, Director of the South Dakota International Business Institute, June 11, 2005.

¹²⁶ Based on CRS discussion with Joop Bollen, Director of the South Dakota International Business Institute, November 28, 2006.

¹²⁷ Ibid.

¹²⁸ For the South Dakota targeted region, the RIMS II multipliers are 2.9 for investment and 2.66 for employment.

According to SDIBI/DEDR Director Joop Bollen, the pilot program has afforded South Dakota “a tremendous opportunity,” not only because of the direct investments and multiplier effects, but because of the other investments made by the foreign investors.¹²⁹ According to Director Bollen, the attraction of foreign investors has had significant spillover effects into the restaurant and meat packing industries. As a result, SDIBI/DEDR hopes to focus on attracting additional investments for its meat packing plants. As such, Director Bollen stated that it was of paramount concern to the SDIBI/DEDR that USCIS have sufficient resources to quickly adjudicate EB-5 immigrant visa petitions. If the adjudication process is too long, Director Bollen stated, then the opportunity cost may make a South Dakota dairy investment unappealing to foreign investors.¹³⁰

CanAm Enterprises

CanAm Enterprises is a private financial advising group which serves to structure, promote and administer the Philadelphia Industrial Development Center (PIDC) Regional Center. The group works in conjunction with the City of Philadelphia through the PIDC to facilitate the city development (mainly in the city’s shipyard area) and provide investor credibility. This public/private partnership was developed to aid the transition of Philadelphia from a manufacture-based to a service based economy.¹³¹ The main strategy has been to use collateralized loans to attract investments in industries that provide long-term full time employment. By doing so the city hopes that investors will wish to invest in other projects and sectors of the city’s economy.¹³²

When the Philadelphia Naval Base was closed as part of the base closures of the 1970s, the base was handed over to the PIDC for transformation to civilian use. Despite the city’s efforts the shipyard was unable to remain competitive in the ship construction industry.¹³³ However, with the passage of requirements following the Exxon Valdez oil spill¹³⁴ (and the ongoing regulations from the Jones-Shafroth Act),¹³⁵ the civilian shipbuilding industry in the United States became economically

¹²⁹ Based on CRS discussion with Joop Bollen, Director of the South Dakota International Business Institute, November 28, 2006.

¹³⁰ Ibid.

¹³¹ Based on CRS discussions with Tom Rosenfeld, President & CEO, CanAm Enterprises, November 28, 2006.

¹³² Ibid.

¹³³ Based on CRS discussions with Tom Rosenfeld, President & CEO, CanAm Enterprises, November 28, 2006.

¹³⁴ P.L. 101-380.

¹³⁵ The Jones-Shafroth Act is a section of the Merchant Marine Act of 1920 (46 U.S.C. 883; 19 CFR 4.80 and 4.80b). Designed to protect the United States shipping fleet, the law requires that cargo moving between U.S. ports be carried by ships that are built in the United States and at least 75% owned by American citizens or corporations.

viable again.¹³⁶ The federal government and the city of Philadelphia combined to invest over \$400 million into the Philadelphia shipyard. Additionally Norwegian shipbuilding companies were brought in as investors in the shipyard and provided valuable training and human capital to the shipyard. Since production restarted, EB-5 investors have become increasingly important for providing funds to remove production bottlenecks. A recent example includes the use of EB-5 funds for the development of a more advanced painting technology for the ships.¹³⁷

Philadelphia is one of the Regional Centers that has been most successful in attracting foreign investors through the EB-5 visa. There are approximately 60 EB-5 visa investors in Philadelphia who have invested a total of \$75 million into the city.¹³⁸ Additionally, there are around 30 petitions that are under review for other investment projects. The lead official at CanAm Enterprises told CRS that while they believe the funds have been important to the city, the human capital the investors bring is equally important. This official stated that the investors being brought to the United States represented highly competent entrepreneurs, who not only made investments in the city beyond their initial investment, but also facilitated greater economic activity through exchanges with their existing foreign networks.¹³⁹

¹³⁶ Based on CRS discussions with Tom Rosenfeld, President & CEO, CanAm Enterprises, November 28, 2006.

¹³⁷ Ibid.

¹³⁸ Ibid.

¹³⁹ Ibid.

Exhibit Volume 3 of 3

Chicagoland Foreign Investment Group

**ANALYZING THE ECONOMIC IMPACT
OF TRANSPORTATION PROJECTS
USING RIMS II, IMPLAN AND REMI**

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INTRODUCTION

The early parts of this new century confront public transit managers and planners with unparalleled demands. There are more competing interests for the finite transit dollar, and an increasing need to complete comprehensive transit project economic impact analysis, project accountability studies and alternatives assessments. Elected local, state and federal representative and executive branch policy makers as well as average citizens are increasingly asking, "What is the economic importance of this project? Or "How does this project (or alignment) compare with another competing transportation investment for the limited public transportation dollar?" Ultimately the question is "What 'bang' do I get for investment of this buck?"

In order to answer this question, one requires a systematic analysis of the economic impacts of these projects and programs on the affected regions. The most commonly used tool for studying the impact of these projects is the input-output model. These models not only capture the direct effects of the project, but they also capture secondary indirect and induced effects.

There are a wide range of commercially available input-output models that can be used to evaluate differing transit projects. They range from the relatively inexpensive and fairly simple U.S. Department of Commerce, Regional Input-Output Modeling System (RIMS II)¹ to the moderately priced and more complex Minnesota IMPLAN² input-output model. One may also opt for the most sophisticated and expensive integrated input-output-econometric model currently available for analysis of this type developed by Regional Economic Modeling, Inc. know as REMI³. While the choice of models is complex, other use issues are also important to consider.

In addition to selecting the appropriate input-output software, there are a number of technical issues to resolve. Among these are questions of:

- What are the mechanics of applying RIMS, IMPLAN or REMI models?
- What is a proper interpretation of the results of the model?
- What is the difference between direct and indirect economic impact?
- What are final demand multipliers and how do we evaluate and use them and how do they work in estimating economic impacts?
- What do the final demand multipliers for output and earnings mean and how do we evaluate and use them and how do they work in estimating economic impacts?
- How do we compare the outcome of each proposed project with every other competing project?

1 See for example "Regional Multipliers: A user Handbook for the Regional Input-Output Modeling System (RIMSII)", U.S. Department of Commerce, Economics and Statistics Administration, Bureau of Economic Analysis, Second Edition, May, 1992, ISBN 0-16-037944-X

2 "IMPLAN Professional Social Accounting & Impact Analysis Software", Minnesota IMPLAN Group, Inc., Second Printing, February 1997.

3 "Regional Economic Modeling A Systematic Approach to Economic Forecasting and Policy Analysis", Treyz, I., George, University of Massachusetts at Amherst, 1993, Kluwer Academic Publishers, Third Printing 1994

- How do we best display and interpret the results for policy makers and what are the most important things for them to understand to evaluate the analysis results?

A number of these questions deal with complex (and often important) technical policy issues that even trained transportation economists grapple each time they undertake a public transit analysis anywhere in the country. Yet many of these key issues such as appropriate discount rate, project length, management of streams of earnings and expenditures render themselves to fairly well accepted standard responses in most applications. These methods are often taught as a standard parts of our graduate level quantitative training in transportation economics, engineering and planning programs across the country.

Yet for others, while an answer is neither particularly simple nor standardized, the approach to securing the answer is formalized into very clear and unambiguous steps. For example gathering the data, and performing the analysis and presenting the conclusions in a lucid fashion involves a well-developed series of steps (even if not always practiced) within the transportation economics discipline.

Unfortunately neither the standardized responses to key issues nor the formalized steps needed to complete a complex analysis are provided in a standard text book in a straightforward manner for transit managers, planners and operators. Each time the public transit system requires an “economic impact” analysis the process begins again as if it were the first time (each time). Even if the managers of the transit properties are contracting the work out to consultants (who will perform the impact analysis) they often do not have a clear idea of answers to the following questions:

1. What models or options exist to perform an economic impact analysis?
2. Which models or options are best suited to differing transit analysis needs and budgets (i.e. “Should we perform city specific or urban-wide regional analysis?” How quickly are the models available and what are their respective costs? .
3. What staffing and data needs and analysis limitations are associated with each method; and
4. How do you best manage and critique the final work product provided by consultants when performing this analysis?

While no document can address each of these issues, the following sections of this report will address a number of them. Specifically, this report will briefly describing each model, explain the theoretical and technical similarities and differences between the models, and provide a general guide for when it is appropriate to use each of the three models identified above. The final sections of this report will compare the results from these models for two hypothetical transit projects: the purchase and operation of a bus fleet and the construction and operation of a light rail transit. This examination of models, and standard analysis and display and discussion of findings and comparison and contrasts of results will provide a single reference to guide transit planners and analysts in future applications.

INTRODUCTION TO THE MODELS

RIMS II⁴

Effective planning for public- and private-sector projects and programs at the national, state, and local levels requires a systematic analysis of the economic impacts of these projects and programs on the affected regions. In turn, systematic analysis of economic impacts must account for the inter-industry relationships within regions because these relationships largely determine how regional economies are likely to respond to project and program changes. Thus, regional input-output (I-O) multipliers, which account for inter-industry relationships within regions, are useful tools for conducting economic impact analysis.

RIMS II is based on an accounting framework called an I-O table. For each industry, an I-O table shows the industrial distribution of inputs purchased and outputs sold. A typical I-O table in RIMS II is derived mainly from two data sources: BEA's national I-O table, which shows the input and output structure of nearly 500 U.S. industries, and the BEA's regional economic accounts, which are used to adjust the national I-O table to show a region's industrial structure and trading patterns.

Using RIMS II for impact analysis has several advantages. RIMS II multipliers can be estimated for any region composed of one or more counties and for any industry, or group of industries, in the national I-O table. The accessibility of the main data sources for RIMS II keeps the cost of estimating regional multipliers relatively low. Empirical tests show that estimates based on relatively expensive surveys and RIMS II-based estimates are similar in magnitude.

RIMS II is widely used in both the public and private sector. In the public sector, for example, the Department of Defense uses RIMS II to estimate the regional impacts of military base closings. State transportation departments use RIMS II to estimate the regional impacts of airport construction and expansion. In the private sector, analysts and consultants use RIMS II to estimate the regional impacts of a variety of projects, such as the development of shopping malls and sports stadiums.

Availability of Multipliers

For any region composed of one or more counties, RIMS II can provide two series of tables of I-O multipliers: Series 1 is for 490 detailed industries, and series 2 is for 38 industry aggregations. Each series consists of four tables: (1) final-demand output multipliers, (2) final-demand earnings multipliers, (3) final-demand employment multipliers, and (4) summary final-demand multipliers for output, earnings, and employment and direct-effect multipliers for earnings and employment.

⁴ This section is taken from "Measuring Gross Economic Impacts Associated with the Amtrak High Speed Rail Corridor Program," prepared by the Center for Urban Transportation Research University of South Florida, March 2000, pp. 4-7.

RIMS II Methodology

RIMS II uses BEA's 1992 national I-O table, which shows the input and output structure for approximately 500 industries. Since a particular region may not contain all the industries found at the national level, some direct input requirements cannot be supplied by that region's industries. Input requirements that are not produced in a study region are identified using BEA's regional economic accounts. Currently, data for 1997 are used.

The RIMS II method for estimating regional I-O multipliers can be viewed as a three-step process. In the first step, the producer portion of the national I-O table is made region-specific by using four-digit SIC location quotients. In the second-step, the household column from the national I-O table is made region-specific. In the last step, the Leontief inversion approach is used to estimate multipliers. This inversion approach produces output, earnings, and employment multipliers, which can be used to trace the impacts of changes in final demand on the directly and indirectly affected industries.

Accuracy of RIMS II

Empirical tests indicate that RIMS II yields multipliers that are not substantially different in magnitude from those generated by regional I-O models based on relatively expensive surveys. For example, a comparison of 224 industry-specific multipliers from survey-based tables for Texas, Washington, and West Virginia indicates that RIMS II average multipliers overstate the average multipliers from the survey-based tables by approximately 5 percent. For the majority of individual industry-specific multipliers, the difference between RIMS II and survey-based multipliers is less than 10 percent. In addition, RIMS II and survey multipliers show statistically similar distributions of affected industries.

Advantages of RIMS II

There are numerous advantages to using RIMS II. First, the accessibility of the main data sources makes it possible to estimate regional multipliers without conducting relatively expensive surveys. Second, the level of industrial detail in RIMS II helps avoid aggregation errors, which often occur when industries are combined. Third, RIMS II multipliers can be compared across areas because they are based on a consistent set of estimating procedures nationwide. Fourth, RIMS II multipliers are updated to reflect the most recent local-area wage-and-salary and personal income data.

Applications of RIMS II

RIMS II multipliers are used in a wide variety of impact studies. For example, the U.S. Nuclear Regulatory Commission has used RIMS II multipliers in environmental impact statements required for licensing electrical-generating facilities. The U.S. Department of Housing and Urban Development has used RIMS II multipliers to estimate the impacts of various types of urban redevelopment expenditures. In addition, BEA has provided

RIMS II multipliers to numerous individuals and groups outside the Federal Government. Among other applications, RIMS II multipliers have been used to estimate the regional impacts of the following: opening or closing military bases, energy conservation, offshore drilling, opening or closing manufacturing plants, shopping malls, new sports stadiums, and new airport facilities.

Data Requirements and Outputs

In order to apply the RIMS II multipliers the spending data for the project or program(s) in question are required. The data have to be classified with respect to each of the following traits:

| | |
|---------------------|---|
| Industry Category | Spending has to be classified by spending category consistent with the industry classification used by RIMS (see section below on spending categories). |
| Year of Expenditure | The time of expenditure needs to be specified in order to determine the time period of the economic consequences and in order to adjust the spending to 1997 dollars for use in the estimation of jobs. The RIMS models were calibrated on 1997 dollars and the estimate of jobs requires spending inputs in terms of 1997 dollars. |
| Location | The spending location also needs to be specified so that the multipliers for the appropriate region can be applied. |

The results of the analysis are expressed in terms of three measures of economic activity: Earnings (sometimes expressed as wages and salaries), Output (sometimes referred to as economic activity), and Jobs.

| | |
|----------|---|
| Earnings | Earnings refers to a measure, expressed in millions of dollars, of the change in the value earnings that are received by households from the production of regional goods and services for the time period covered by the cost estimate. |
| Output | This is a measure of the economic activity created by the spending. It refers to the change in the dollar value of production in all sectors of the economy to satisfy the new demands resulting from spending. Each time a dollar changes hands for products or services it increases the measure of output. By including products as well as labor, the output measure is inclusive of and typically significantly larger than the measure of earnings. Economic output is typically referred to as the Gross National Product (GNP) at the national level. The measure of output is in the same year dollars as the measure of spending used in the calculation. |

| | |
|------|--|
| Jobs | This measure refers to the employment or jobs expressed as full time person years of employment. The measure refers to person years of employment regardless of the term over which spending is aggregated in the input. Jobs are estimated by adjusting the year of spending to 1997 dollars as that is the calibration year for the multiplier used for jobs estimation. The jobs multiplier are expressed in terms of jobs per million dollars of spending. |
|------|--|

IMPLAN MODEL⁵

In contrast to REMI, IMPLAN is exclusively an input-output model. It is nonsurvey based, and its structure typifies that of input-output models found in the regional science literature. Similar to REMI, IMPLAN assumes a uniform national production technology and uses the regional purchase coefficient approach to regionalize the technical coefficients.

The model generates two types of multipliers: Type I multipliers and what IMPLAN refers to as Type III multipliers. The difference between IMPLAN's Type I and Type III multipliers is an induced consumption effect. Their Type III multiplier differs from the standard Type II multiplier because the consumption function is nonlinear, that is, the marginal propensity to consume is not constant, decreasing as income in the region rises. 2 Population completely responds to employment changes and drives consumer spending. Multipliers are generated for employment, output, value added, personal income, and total income.

Similar to REMI (which is described next), IMPLAN builds its data from top to bottom. National data serve as control totals for state data. In turn, state data serve as control totals for county data. The primary sources of employment and earnings data are County Business Patterns data and BEA data. Furthermore, IMPLAN's procedure for fixing in suppressions in the 1985 model parallels REMI's, except the ES-202 data set is not a primary source of data for counties.

IMPLAN estimates output at the state level by using value added reported by BEA as proxies to allocate U.S. total gross output. Also, IMPLAN allocates state total gross output to counties based on county employment earnings. The use of the BEA Gross State Product series for states, and implicit assumption of uniform value added-to-earnings ratios across counties within a state, parallels REMI's procedure. However, because of REMI's neoclassical production function, differential labor costs cause REMI's labor intensities to differ across states and counties. In addition, REMI adjusts real value added in U.S. dollars reported by BEA for differences in regional unit factor costs.

⁵ This section taken from "A Systematic Comparison of the REMI and Implan Models: The Case of Southern Nevada," Dan S. Rickman and R. Keith Schwer, *The Review of Regional Studies*, Fall 1993, pp. 148-149.

REMI MODEL⁶

The REMI model, as Bolton (1985) states in his review of econometric models, "is a world apart in complexity, reliance on interindustry linkages, and modeling philosophy" from other econometric models. The REMI model is more than an econometric model, though. It may better be described as an eclectic model that links an input-output model to an econometric model. If the econometric responses are suppressed, the model collapses to an input-output model. The econometric specifications are derived from economic theories that are generally neoclassical in nature. The notion of regional equilibrium is central to the model's long-term portrait of regional economic growth.

Although a detailed description of the model is impossible within the scope of the present study, an outline of the basic structure facilitates the evaluation of model performance. Conceptually, the model consists of five basic blocks: (1) output, (2) labor and capital demands, (3) population and labor supply, (4) wages, prices, and profits, and (5) market shares.

The output block contains the input-output component of the model. Final demands drive the output block. Production uses factor inputs, labor, capital and fuel, and intermediate inputs. Coefficients of the production functions are based on national input-output tables produced by the Bureau of Labor Statistics. Intermediate inputs are used in fixed proportions. Factor input use is governed by Cobb-Douglas functions in Block 2. Thus, in contrast to input-output models such as IMPLAN, the relative factor intensities respond to changes in relative factor costs (i.e., wage rate changes, cost-of-capital changes, and changes in fuel prices).

Labor supply in Block 3 responds positively to wage rates because of migration. Also, the ratio of residence-adjusted employment to the potential labor force influences migration. Place-of-work income also is adjusted for place of residence to obtain disposable income. The interaction of labor demand calculated in Block 2 and of labor supply calculated in Block 3 determines wage rates in Block 4. Migration induces government spending through additional taxes paid and consumer spending through increased wage and nonwage income. The increase in real disposable income derived from migration also stimulates residential investment. Nonresidential investment is stimulated by increased capital demand by businesses.

Wage rates affect the competitiveness of local firms relative to firms in other regions in Block 5. Regional competitiveness affects the shares of local and export markets (market shares) that local firms capture. The proportion of the local market captured is known as the regional purchase coefficient (RPC), and the proportion of the export market is known as the interregional and international coefficient. Also, the RPC, which is a measure of self-sufficiency, increases as a region grows because of agglomeration effects.

⁶ This section taken from "A Systematic Comparison of the REMI and Implan Models: The Case of Southern Nevada," Dan S. Rickman and R. Keith Schwer, *The Review of Regional Studies*, Fall 1993, pp. 145-148.

Endogenous consumption, investment, and government expenditures plus exports are the final demands that drive the output block. The endogenous RPC gives the proportions of local expenditures satisfied by imports or local production. Solution values for the endogenous variables in the REMI model must satisfy the equations in all five blocks simultaneously.

By suppressing certain endogenous responses in the REMI model, multipliers comparable to those computed from an input-output model can be obtained. If the responses of labor intensities, labor supply, wage rates, industry RPC's, and endogenous final demands are suppressed, Type I input-output multipliers are obtained. By allowing consumption to be endogenously determined, Type II multipliers are obtained. Complete endogeneity in the REMI model produces what is referred to as Type III multipliers. This Type III multiplier differs from standard Type III input-output multipliers because of the endogeneity of export and propensity to import responses in the REMI model.

The detailed structure of the REMI model requires an extensive amount of data. The input-output component is non-survey based, using national technical coefficients. Of particular importance are data on employment, income, and output. Also, because complete regional accounts consistent with the National Income and Product Accounts are not routinely available, they must be constructed.

REMI uses three sources of employment and wage and salary data: the Bureau of Economic Analysis (BEA) employment, wage, and personal income series, ES-202 establishment employment and wage and salary data, and County Business Patterns (CBP) data published by the Bureau of the Census. The BEA data are annual averages and are reported at the two-digit level for states and at the one-digit level for counties. The ES-202 data, the foundation for the BEA data, are collected monthly in conjunction with the unemployment insurance program at the two-digit level for counties and states, and they are the foundation for the BEA data. CBP data are collected in conjunction with the Social Security program in March of each year.

Confidentiality requirements produce many suppressions in the data. Where suppressions occur, the number of establishments and the ranges of the number of employees for each establishment are supplied by CBP. REMI fills in the suppressions based on the hierarchical structure of the BEA data within regions and within industries. First, all two-digit S.I.C. industries are made consistent within the corresponding one-digit industries for each state simultaneous with all twodigit industries summed to the major region two-digit totals. Second, for counties REMI uses the ES-202 data, if available, and CBP data if ES-202 data is not available. Whichever data set is selected, it is made consistent with BEA one-digit county totals and state two-digit totals.

Output measures are based on regional employment data, the BEA Gross State Product series, and national output-to-employment ratios. REMI begins by applying the national output-to-employee ratio to employment by industry. This application is adjusted by regional differences in labor intensity and total factor productivity. Regional

differences in labor intensity are given by the industry production function and the unit factor costs. Total factor productivity calculations depend on industry value added in production reported in real U.S. dollars by BEA and on adjustments by REMI to the BEA numbers to reflect differences in regional production costs. The ratio of real regional value added per unit of input relative to U.S. value added per unit of input is the REMI relative total factor productivity.

TABLE 1⁷: A Comparison of the Different Models

| Characteristics | REMI | RIMS II | IMPLAN |
|-----------------------------------|---|---|---|
| I. Type | | | |
| | Conjoined input-output and behavior model | Regional input-output | Regional input-output |
| II. General Model Characteristics | | | |
| Base Year | 1977 | 1977 | 1982 |
| Reference Model | National A matrix | National A matrix | National A matrix |
| Open/closed | Open | Both | Both |
| III. Sector Scheme | | | |
| Disaggregated | 493 | 531 | 538 |
| Aggregated | 53 | 39 | User choice |
| IV. Regionalization Technique | | | |
| Product Mix | Keep at a disaggregated level | Keep at a disaggregated level | Keep at a disaggregated level |
| Consumption | BLS regional Consumer Expenditure Surveys | Row adjusted for commuting, column adjusted for savings and state tax leakages | Adjusted using RPC |
| Trade Patterns | Regional purchase coefficients | Regional purchase coefficients | Regional purchase coefficients |
| V. Impacts Measured | | | |
| Output | Yes | Yes | Yes |
| Employment | Yes | Yes | Yes |
| Income | Yes | Yes | Yes |
| VI. Special Features | | | |
| | Occupation impacts Pollution impacts | | |
| VII. Computer Requirement | | | |
| | IBM PC or Mainframe accessible via modem | IBM PC | IBM PC or Mainframe accessible via modem |
| VIII. Costs | | | |
| Purchase Model | | \$275 per region | \$450 Software State packages (counties + state) for \$475-\$2200 |
| Customized Simulation | Available | Not Available | Not Available |
| Other Options | Leasing models is available | | |
| IX. Web Site | http://www.remi.com/ | http://www.bea.doc.gov/bea/regional/rims/ | http://www.mig-inc.com/ |

7 Adapted from "An Assessment of Input-Output Models", for the U.S. Department of Transportation, Federal Highway Administration, Transportation Studies Division, by DRI/McGraw-Hill (Jan 1994), Contract Number DTFH61-93-C-00055

USING RIMS II, IMPLAN AND REMI FOR ECONOMIC IMPACT ANALYSIS

BUS FLEET ANALYSIS

The following example will provide a basis to estimate the economic impacts that would result from the purchase and operation of a bus fleet using each of the models described above. This project would involve capital costs and operating costs that are shown below:

TABLE 2

| BUS FLEET ANNUAL PURCHASE, OPERATION AND MAINTENANCE CASH FLOW ANALYSIS (YEAR 2000\$) | | | | | | | |
|---|---------------------------|--------------------------------|----------------------------|--------------------------------|------------------------------|------------------------------|---|
| Year | Bus Capital Costs—Instate | Bus Capital Costs—Out of State | Total Annual Capital Costs | Annual Operation & Maintenance | Driver and other Labor Costs | Total Annual Operating Costs | Total Annual Bus Costs--Capital & Operating Costs |
| 1 | \$ 28,440 | \$ 540,360 | \$ 568,800 | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 1,094,100 |
| 2 | \$ 28,440 | \$ 540,360 | \$ 568,800 | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 1,094,100 |
| 3 | \$ 28,440 | \$ 540,360 | \$ 568,800 | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 1,094,100 |
| 4 | \$ 28,440 | \$ 540,360 | \$ 568,800 | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 1,094,100 |
| 5 | \$ 28,440 | \$ 540,360 | \$ 568,800 | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 1,094,100 |
| 6 | \$ - | \$ - | | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 525,300 |
| 7 | \$ - | \$ - | | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 525,300 |
| 8 | \$ - | \$ - | | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 525,300 |
| 9 | \$ - | \$ - | | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 525,300 |
| 10 | \$ - | \$ - | | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 525,300 |
| Total | \$ 142,200 | \$ 2,701,800 | \$ 2,844,000 | \$ 528,000 | \$ 4,725,000 | \$ 5,253,000 | \$ 8,097,000 |

These costs represent: (1) the capital cost associated with purchasing the bus fleet (divided into the amount that is spent inside the state, which will affect the economy, and the portion spent outside of the state, which will not affect the economy), and (2) the operating expenses associated with running the bus fleet that includes the maintenance expenses and the driver/labor costs. The above costs are expressed in year 2000 dollars, which means these costs are representative of what it would cost to purchase and run the bus fleet right now.

Using RIMS II

RIMS II is a set of regional multipliers maintained by the Bureau of Economic Analysis, Regional Economic Analysis Division. The following multipliers are used in this example:

TABLE 3

| EXAMPLES OF 1997 RIMS II MULTIPLIERS FOR THE STATE OF FLORIDA THAT CAN BE USED IN TRANSIT IMPACT ANALYSIS | | | | | |
|---|------------------------------|---------------|---------------------|-----------------------|-----------------------|
| COSTS | RIMS II Industries | RIMS II Codes | RIMS II Multipliers | | |
| | | | Output (per dollar) | Earnings (per dollar) | Jobs (per million \$) |
| Operating Costs | Transportation | 25 | 1.9520 | .7250 | 37.9 |
| Capital Costs | Motor Vehicles and Equipment | 21 | 1.4801 | .3302 | 15.6 |

The above multipliers are for the year 1997 so in order to use them, *the costs in Table 2 must be converted to year 1997 dollars.* If regional multipliers are available for a different year, then the costs must be expressed in dollars for whatever year the

multipliers correspond. Since there is inflation every year, a dollar in 2000 is not worth the same as a dollar in 1997 (i.e., one dollar will not buy the same amount of goods in 2000 as it would have in 1997). Inflation is measured by the consumer price index (CPI) and the CPI can be used to inflate or deflate dollars as needed to express them in alternative units. Since the above data is expressed in current year 2000 dollars, we must deflate these dollars and express them in terms of a year that corresponds to the RIMS II multipliers that are available. The below example deflates the above costs and expresses them in equivalent 1997 dollars. This means that the costs will then reflect what it would have cost to purchase and run the bus system in 1997 instead of in 2000.

In order to adjust the costs, we use the consumer price index supplied by the U. S. Bureau of Labor Statistics. The consumer price index series used here is based on an average of prices between 1982-1984. This means that the 1982-1984 is the base year and the CPI is equal to 100. For each year after the 1982-1984 where inflation occurs, the CPI number will be greater than 100. This means that the same products bought in the period 1982-1984 cost more in the current time period than they did in the base period. In order to convert the 2000 dollars to 1997 dollars we must calculate the deflator. The deflator is simply the ratio of the CPI in 1997 to the CPI in 2000. The CPI in 2000 is 171.20 and the CPI in 1997 is 160.52. The third row of the below table shows that the deflator to convert year 2000 dollars to 1997 dollars is:

$$(CPI\ 1997)/(CPI\ 2000) = 160.52/171.20 = .937616822.$$

TABLE 4: CONSUMER PRICE INDEX AND CPI DEFLATORS AND INFLATORS

| | DEFLATORS | INFLATORS |
|-----------------|--|--|
| CPI 2000 171.20 | From 2000\$ to 1999\$ = 166.58/171.2 = 0.9730140 | From 1992\$ to 2000\$ = 171.2/140.32 = 1.2200684 |
| CPI 1999 166.58 | From 2000\$ to 1998\$ = 163.01/171.2 = 0.9521612 | From 1995\$ to 2000\$ = 171.2/152.38 = 1.1235070 |
| CPI 1998 163.01 | From 2000\$ to 1997\$ = 160.52/171.2 = 0.937616822 | From 1997\$ to 2000\$ = 171.2/160.52 = 1.066534 |
| CPI 1997 160.52 | | |
| CPI 1995 152.38 | | |
| CPI 1992 140.32 | | |

Once the appropriate deflator has been calculated, the costs in Table 2 are deflated by multiplying each cost in the table by the deflator, .937616822. This is done in the following table:

TABLE 5

| BUS FLEET ANNUAL PURCHASE, OPERATION AND MAINTENANCE CASH FLOW ANALYSIS (YEAR 1997\$) | | | | | | | |
|---|--------------------------------|-------------------------------------|-------------------------------|--------------------------------------|---------------------------------|---------------------------------|---|
| Year | Bus Capital Costs-- Instate | Bus Capital Costs-- Out of State | Total Annual Capital Costs | Annual Operation & Maintenance | Driver and other Labor Costs | Total Annual Operating Costs | Total Annual Bus Costs--Capital & Operating Costs |
| 1 | \$ 26,666 | \$ 506,651 | \$ 533,316 | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 1,025,847 |
| 2 | \$ 26,666 | \$ 506,651 | \$ 533,316 | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 1,025,847 |
| 3 | \$ 26,666 | \$ 506,651 | \$ 533,316 | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 1,025,847 |
| 4 | \$ 26,666 | \$ 506,651 | \$ 533,316 | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 1,025,847 |
| 5 | \$ 26,666 | \$ 506,651 | \$ 533,316 | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 1,025,847 |
| 6 | \$ - | \$ - | \$ - | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 492,530 |
| 7 | \$ - | \$ - | \$ - | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 492,530 |
| 8 | \$ - | \$ - | \$ - | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 492,530 |
| 9 | \$ - | \$ - | \$ - | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 492,530 |
| 10 | \$ - | \$ - | \$ - | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 492,530 |
| Total | \$ 133,329 | \$ 2,533,253 | \$ 2,666,582 | \$ 495,062 | \$ 4,430,239 | \$ 4,925,301 | \$ 7,591,883 |

Once this has been done, the output and earnings multipliers can be directly multiplied to the costs listed in Table 5 since they are the multipliers that occur per each dollar spent. However, in order to use the jobs multiplier, the costs must be expressed in terms of *millions of dollars* so they have to be converted. To convert the costs in Table 5 to units of millions of dollars, divide the costs by \$1,000,000. This will give the following costs:

TABLE 6: ANNUAL BUS PURCHASE AND OPERATING COSTS (IN YEAR 1997\$)

| YEAR | BUS CAPITAL COSTS—INSTATE | OPERATING EXPENSES | BUS CAPITAL COSTS—INSTATE (in million \$) | OPERATING EXPENSES (in million \$) |
|-------|---------------------------|--------------------|---|------------------------------------|
| 1 | \$ 26,666 | \$ 492,530 | \$0.02666 | 0.4925 |
| 2 | \$ 26,666 | \$ 492,530 | \$0.02666 | 0.4925 |
| 3 | \$ 26,666 | \$ 492,530 | \$0.02666 | 0.4925 |
| 4 | \$ 26,666 | \$ 492,530 | \$0.02666 | 0.4925 |
| 5 | \$ 26,666 | \$ 492,530 | \$0.02666 | 0.4925 |
| 6 | \$ - | \$ 492,530 | \$ - | 0.4925 |
| 7 | \$ - | \$ 492,530 | \$ - | 0.4925 |
| 8 | \$ - | \$ 492,530 | \$ - | 0.4925 |
| 9 | \$ - | \$ 492,530 | \$ - | 0.4925 |
| 10 | \$ - | \$ 492,530 | \$ - | 0.4925 |
| Total | \$ 133,329 | \$ 4,925,301 | \$0.1333 | 4.925 |

Once the costs are in the correct form, the RIMS II multipliers in Table 3 can be applied. The multipliers for output and earnings can be directly applied to the costs on the left hand side of the above table. The jobs multiplier must be applied to the costs on the right hand side of the table. This will yield the following economic impacts for output and earnings:

TABLE 7

| RIMS II ECONOMIC IMPACTS ON OUTPUT AND EARNINGS (IN 1997\$) | | | | |
|---|---------------|--------------------|---------------|--------------------|
| YEAR | OUTPUT | | EARNINGS | |
| | CAPITAL COSTS | OPERATING EXPENSES | CAPITAL COSTS | OPERATING EXPENSES |
| 1 | \$ 39,468 | \$ 961,419 | \$ 8,805 | \$ 357,084 |
| 2 | \$ 39,468 | \$ 961,419 | \$ 8,805 | \$ 357,084 |
| 3 | \$ 39,468 | \$ 961,419 | \$ 8,805 | \$ 357,084 |
| 4 | \$ 39,468 | \$ 961,419 | \$ 8,805 | \$ 357,084 |
| 5 | \$ 39,468 | \$ 961,419 | \$ 8,805 | \$ 357,084 |
| 6 | \$ - | \$ 961,419 | \$ - | \$ 357,084 |
| 7 | \$ - | \$ 961,419 | \$ - | \$ 357,084 |
| 8 | \$ - | \$ 961,419 | \$ - | \$ 357,084 |
| 9 | \$ - | \$ 961,419 | \$ - | \$ 357,084 |
| 10 | \$ - | \$ 961,419 | \$ - | \$ 357,084 |
| TOTAL | \$ 197,340 | \$ 9,614,188 | \$ 44,025 | \$ 3,570,843 |

Since the costs were expressed in year 1997 dollars and the multipliers do not inflate or deflate the costs, the results for output and earnings are also expressed in year 1997 dollars. Table 7 shows that the capital expenditures will have almost a \$200,000 impact

on output and the operating expenses will have a \$9.6 million impact. This table also shows the effect on earnings. The capital expenditures will have a \$44,025 impact on earnings (\$8,805 per year for the five years the dollars are expended) and the operating expenses will have a \$3.57 million impact on earnings (\$357,084 per year for the ten years depicted).

Table 8 shows the economic impact on jobs from the bus fleet expenditures. The capital expenditures will result in 2 jobs and the operating expenses will result in almost 1876 jobs.

TABLE 8

| RIMS II JOBS ECONOMIC IMPACTS | | |
|--------------------------------------|----------------------|---------------------------|
| YEAR | CAPITAL COSTS | OPERATING EXPENSES |
| 1 | 0.42 | 18.67 |
| 2 | 0.42 | 18.67 |
| 3 | 0.42 | 18.67 |
| 4 | 0.42 | 18.67 |
| 5 | 0.42 | 18.67 |
| 6 | - | 18.67 |
| 7 | - | 18.67 |
| 8 | - | 18.67 |
| 9 | - | 18.67 |
| 10 | - | 18.67 |
| TOTAL | 2.08 | 186.67 |

Since the multipliers used were for 1997, the results were expressed in terms of 1997 dollars. The jobs result cannot be adjusted since it is not a dollar value. However, the earnings and output results can be inflated to be expressed in current terms of year 2000 dollars. To inflate the results to year 2000 dollars, we will need to calculate the appropriate inflator. This can be found in Table 4. This table shows that the appropriate inflator is the ratio of the CPI 2000 to the CPI 1997. The 2000 CPI is 171.20 and the 1997 CPI is 160.52. The inflator is then:

$$[\text{CPI 2000}/\text{CPI 1997}] = 171.2/160.52 = 1.066534.$$

Now that the inflator has been calculated, the earnings and output results can be expressed in year 2000 dollars by multiplying the results in Table 7 by the inflator. This yields the following results for the earnings and output totals:

TABLE 9

| RIMS II ECONOMIC IMPACTS ON OUTPUT AND EARNINGS (IN YEAR 2000\$) | | | | |
|---|----------------------|---------------------------|----------------------|---------------------------|
| YEAR | OUTPUT | | EARNINGS | |
| | CAPITAL COSTS | OPERATING EXPENSES | CAPITAL COSTS | OPERATING EXPENSES |
| 1 | \$ 42,094 | \$ 1,025,386 | \$ 9,391 | \$ 380,843 |
| 2 | \$ 42,094 | \$ 1,025,386 | \$ 9,391 | \$ 380,843 |
| 3 | \$ 42,094 | \$ 1,025,386 | \$ 9,391 | \$ 380,843 |
| 4 | \$ 42,094 | \$ 1,025,386 | \$ 9,391 | \$ 380,843 |
| 5 | \$ 42,094 | \$ 1,025,386 | \$ 9,391 | \$ 380,843 |
| 6 | \$ - | \$ 1,025,386 | \$ - | \$ 380,843 |
| 7 | \$ - | \$ 1,025,386 | \$ - | \$ 380,843 |
| 8 | \$ - | \$ 1,025,386 | \$ - | \$ 380,843 |
| 9 | \$ - | \$ 1,025,386 | \$ - | \$ 380,843 |
| 10 | \$ - | \$ 1,025,386 | \$ - | \$ 380,843 |
| TOTAL | \$ 210,470 | \$ 10,253,856 | \$ 46,954 | \$ 3,808,425 |

Tables 9 shows the economic impacts on output and earnings expressed in year 2000 dollars. These results will be compared with the results from the other economic impact models later.

Using IMPLAN

IMPLAN is an input-output model that is similar to RIMS II. However, as the earlier technical discussion detailed, it allows you to use different types of multipliers. The Type II multipliers are the default multipliers and can be used in most circumstances. The Type II multipliers were used in this example.

In Table 2, the costs of purchasing and running the bus fleet were expressed for each year individually in year 2000 dollars. IMPLAN will not allow you to enter the data expressed in year 2000 dollars. Instead, IMPLAN will allow you to enter your data expressed in terms of any year between 1977-1998. Since there is inflation every year, a dollar in 1975 is not worth the same as a dollar in 1998 (i.e., one dollar will not buy the same amount of goods in 1998 as it would have in 1977). Inflation is measured by the consumer price index (CPI) and the CPI can be used to inflate or deflate dollars as needed to express them in alternative units. Since the above data is expressed in current year 2000 dollars, we must deflate these dollars and express them in terms of a year that IMPLAN will accept. The below example deflates the above costs and expresses them in equivalent 1998 dollars. This means that the costs will then reflect what it would have cost to purchase and run the bus system in 1998 instead of in 2000.

In order to adjust the costs, we use the consumer price index supplied by the U. S. Bureau of Labor Statistics. This consumer price index series is based on an average of prices between 1982-1984. This means that the 1982-1984 CPI is equal to 100. For each year after the 1982-1984 where inflation occurs, the CPI number will be greater than 100. This means that the same products bought in the period 1982-1984 cost more than they did in that time period. In order to convert the 2000 dollars to 1998 dollars we must calculate the deflator. The deflator is simply the ratio of the CPI in

1998 to the CPI in 2000. The CPI in 2000 is 171.20 and the CPI in 1998 is 163.01. The second row of Table 4 shows that the deflator to convert year 2000 dollars to 1998 dollars is:

$$(\text{CPI } 1998)/(\text{CPI } 2000) = 163.01/171.2 = .9521612.$$

Now that we have calculated the deflator, we use the deflator by multiplying the year 2000 costs by the deflator in order to express the costs in 1998 dollars. The following table shows the costs in Table 2 adjusted to be expressed in 1998 dollars. These costs are the costs expressed in Table 2 multiplied by the deflator, .9521612.

TABLE 10: BUS FLEET ANNUAL PURCHASE, OPERATION AND MAINTENANCE COSTS (IN 1998 \$)

| Year | Bus Capital Costs— Instate | Bus Capital Costs—Out of State | Total Annual Capital Costs | Annual Operation & Maintenance | Driver and other Labor Costs | Total Annual Operating Costs | Total Annual Bus Costs--Capital & Operating Costs |
|-------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|---------------------------------|------------------------------------|---|
| 1 | \$ 27,079 | \$ 514,510 | \$ 541,589 | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 1,041,760 |
| 2 | \$ 27,079 | \$ 514,510 | \$ 541,589 | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 1,041,760 |
| 3 | \$ 27,079 | \$ 514,510 | \$ 541,589 | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 1,041,760 |
| 4 | \$ 27,079 | \$ 514,510 | \$ 541,589 | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 1,041,760 |
| 5 | \$ 27,079 | \$ 514,510 | \$ 541,589 | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 1,041,760 |
| 6 | \$ - | \$ - | \$ - | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 500,170 |
| 7 | \$ - | \$ - | \$ - | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 500,170 |
| 8 | \$ - | \$ - | \$ - | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 500,170 |
| 9 | \$ - | \$ - | \$ - | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 500,170 |
| 10 | \$ - | \$ - | \$ - | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 500,170 |
| Total | \$ 135,397 | \$ 2,572,549 | \$ 2,707,946 | \$ 502,741 | \$ 4,498,962 | \$ 5,001,703 | \$ 7,709,649 |

In addition, IMPLAN will not allow the user to enter the data on a year-by-year basis. Instead, IMPLAN requires that the costs for each category be summed to one total amount. Then, to enter these costs in the IMPLAN program, they must be assigned a code that identifies which sector of the economy they are spent in. The appropriate sector codes for this example are shown in the following table:

TABLE 11: IMPLAN INPUTS FOR BUS FLEET ANALYSIS

| CATEGORY OF SPENDING | SECTOR | AMOUNT |
|---|--------|--------------|
| Bus capital costs--truck & bus bodies | 385 | \$ 135,397 |
| Annual operation, maintenance & labor (local government passenger transit) | 510 | \$ 5,001,703 |

IMPLAN will provide economic impacts for employment, value added (wages), and output and are shown below for this example.

TABLE 12: IMPLAN ECONOMIC IMPACTS (EXPRESSED IN 1995\$)

| | EMPLOYMENT | VALUE ADDED | DEMAND |
|-----------------|------------|--------------|---------------|
| DIRECT | 178.9 | \$ 798,619 | \$ 4,490,742 |
| INDIRECT | 24.5 | \$ 1,142,086 | \$ 1,979,263 |
| INDUCED | 115 | \$ 4,996,963 | \$ 7,855,670 |
| TOTAL | 318.4 | \$ 6,937,667 | \$ 14,326,675 |

The IMPLAN results are expressed in 1995 dollars so, to determine what the current year 2000 equivalent dollars are, the dollars must be inflated from 1995 dollars to year 2000 dollars. To calculate the inflator, we will need the 1995 CPI and the 2000 CPI from Table 4. The 1995 CPI is 152.38 and the 2000 CPI is 171.20. The inflator is the ratio of the 2000 CPI to the 1995 CPI:

$$(2000 \text{ CPI}) / (1995 \text{ CPI}) = 171.20 / 152.38 = 1.1235070.$$

Now, to express the above economic impacts in year 2000 dollars, we multiply the value added and demand numbers by the inflator. This yields the following economic impacts expressed in year 2000 dollars.

TABLE 13: IMPLAN ECONOMIC IMPACTS (EXPRESSED IN 2000\$)

| | EMPLOYMENT | VALUE ADDED | DEMAND |
|-----------------|------------|--------------|---------------|
| DIRECT | 178.9 | \$ 897,254 | \$ 5,045,380 |
| INDIRECT | 24.5 | \$ 1,283,142 | \$ 2,223,716 |
| INDUCED | 115 | \$ 5,614,123 | \$ 8,825,900 |
| TOTAL | 318.4 | \$ 7,794,517 | \$ 16,096,120 |

Table 13 shows that IMPLAN provides results for direct, indirect, and induced economic impacts. These results are then summed to provide the total economic impact of the project.

Using REMI

REMI will accept data in 1992 or 1999 dollar units. Since the costs for the project are expressed in year 2000 dollars, we must deflate the costs to either year 1992 or year 1999 dollars. In this example we will deflate the costs to year 1999 dollars. From Table 4 we see that the CPI for 2000 is 171.20 and the CPI for 1999 is 166.58. To calculate the deflator to convert the year 2000 costs to year 1999 costs, we find the ratio of the 1999 CPI to the 2000 CPI = $166.58 / 171.20 = .9730140$. To deflate the costs, multiply each value in Table 2 by the deflator just calculated. This yields the following costs expressed in 1999 dollars:

TABLE 14

| BUS FLEET ANNUALIZED PURCHASE AND OPERATION AND MAINTENANCE CASH FLOW ANALYSIS (IN 1999\$) | | | | | | | |
|--|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|---------------------------------|--|
| Year | Bus Capital Costs— Instate | Bus Capital Costs—Out of State | Total Annual Capital Costs | Annual Operation & Maintenance | Driver & other Labor Costs | Total Annual Operating Costs | Total Annual Bus Costs—Capital & Operating Costs |
| 1 | \$ 27,673 | \$ 525,778 | \$ 553,450 | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 1,064,575 |
| 2 | \$ 27,673 | \$ 525,778 | \$ 553,450 | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 1,064,575 |
| 3 | \$ 27,673 | \$ 525,778 | \$ 553,450 | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 1,064,575 |
| 4 | \$ 27,673 | \$ 525,778 | \$ 553,450 | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 1,064,575 |
| 5 | \$ 27,673 | \$ 525,778 | \$ 553,450 | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 1,064,575 |
| 6 | \$ - | \$ - | \$ - | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 511,124 |
| 7 | \$ - | \$ - | \$ - | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 511,124 |
| 8 | \$ - | \$ - | \$ - | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 511,124 |
| 9 | \$ - | \$ - | \$ - | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 511,124 |
| 10 | \$ - | \$ - | \$ - | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 511,124 |
| Total | \$ 138,363 | \$ 2,628,889 | \$ 2,767,252 | \$ 513,751 | \$ 4,597,491 | \$ 5,111,243 | \$ 7,878,495 |

In REMI, the corresponding sectors are chosen in a different manner than in IMPLAN. Although the sector descriptions are the same, they are entered in a different way. REMI will ask you to select the policy variable categories that will be used. The corresponding REMI sectors for the costs in this example are the following:

TABLE 15: REMI INPUTS FOR BUS FLEET ANALYSIS

| COST | POLICY VARIABLE CATEGORIES | DETAIL SELECTION |
|--------------------------------|---|---------------------------------------|
| Bus Capital Cost (In State) | Output Block→Detailed Industry Output→Durables→Motor Vehicle Sales | Truck & Bus Bodies |
| Annual Operating Cost | Output Block→Detailed Industry Output→Government Spending→State & Local Services | Local Government Passenger Transit |

Once these sectors have been chosen, unlike IMPLAN, REMI will allow you to input the costs on a year-by-year basis. Once the costs have been entered and the analysis has been run, REMI will provide numerous economic impacts including effects on the population as well as the economy. The results that are comparable to IMPLAN'S are for the following categories:

TABLE 16: REMI BUS FLEET ECONOMIC IMPACTS (INPUT 1992\$)

| Year | Employment (Thous) | GRP (Bil 92\$) | Demand (Bil 92\$) |
|-------|--------------------|----------------|-------------------|
| 1 | 0.02734 | 0.001068 | 0.001953 |
| 2 | 0.02637 | 0.001068 | 0.001831 |
| 3 | 0.02637 | 0.0009766 | 0.001953 |
| 4 | 0.02246 | 0.000885 | 0.001709 |
| 5 | 0.02441 | 0.001007 | 0.001831 |
| 6 | 0.02051 | 0.000824 | 0.001404 |
| 7 | 0.02246 | 0.0009766 | 0.001587 |
| 8 | 0.02441 | 0.001038 | 0.001953 |
| 9 | 0.02246 | 0.0009155 | 0.001648 |
| 10 | 0.02246 | 0.0009766 | 0.001709 |
| Total | 0.23925 | 0.0097353 | 0.017578 |

These are the economic impacts on employment, gross revenue product and demand. The Employment results are expressed in terms of thousands of jobs and GRP and Demand results are expressed in terms of billions of dollars. This is different from IMPLAN which expresses its output in what ever units the results are in so that \$500,000,000 is expressed as \$500,000,000 instead of as \$.5 billion dollars. Since the above economic impacts are less than a billion dollars, the GRP and demand impacts are expressed as a fraction of a billion dollars instead of in units which may make more sense. To convert the above results, multiply the employment impacts by 1,000 and the GRP and Demand results by \$1,000,000,000. This will yield the following:

TABLE 17: REMI BUS FLEET ECONOMIC IMPACTS (IN 1992\$)

| YEAR | EMPLOYMENT | GRP (1992\$) | DEMAND (1992\$) |
|-------|------------|--------------|-----------------|
| 1 | 27.34 | \$ 1,068,000 | \$ 1,953,000 |
| 2 | 26.37 | \$ 1,068,000 | \$ 1,831,000 |
| 3 | 26.37 | \$ 976,600 | \$ 1,953,000 |
| 4 | 22.46 | \$ 885,000 | \$ 1,709,000 |
| 5 | 24.41 | \$ 1,007,000 | \$ 1,831,000 |
| 6 | 20.51 | \$ 824,000 | \$ 1,404,000 |
| 7 | 22.46 | \$ 976,600 | \$ 1,587,000 |
| 8 | 24.41 | \$ 1,038,000 | \$ 1,953,000 |
| 9 | 22.46 | \$ 915,500 | \$ 1,648,000 |
| 10 | 22.46 | \$ 976,600 | \$ 1,709,000 |
| TOTAL | 239.25 | \$ 9,735,300 | \$ 17,578,000 |

The economic impacts are now expressed in units that are comparable units to the IMPLAN results. However, the results are still expressed in 1992 dollars, so to express them in current year 2000 dollars we must inflate the dollars. To make the conversion, we must calculate the appropriate inflator. From Table 4, we know the 2000 CPI is 171.20 and the 1992 CPI is 140.32. The inflator to convert 1992 dollars to year 2000 dollars is:

$$(CPI\ 2000)/(CPI\ 1992) = 171.20/140.32 = 1.2200684.$$

Now, to convert the dollars, multiply each value in Table 17 by the inflator, and this will yield the following results:

TABLE 18: REMI BUS FLEET ECONOMIC IMPACTS (IN 2000\$)

| YEAR | EMPLOYMENT | GRP (2000\$) | DEMAND (2000\$) |
|--------------|---------------|----------------------|----------------------|
| 1 | 27.34 | \$ 1,303,033 | \$ 2,382,794 |
| 2 | 26.37 | \$ 1,303,033 | \$ 2,233,945 |
| 3 | 26.37 | \$ 1,191,519 | \$ 2,382,794 |
| 4 | 22.46 | \$ 1,079,761 | \$ 2,085,097 |
| 5 | 24.41 | \$ 1,228,609 | \$ 2,233,945 |
| 6 | 20.51 | \$ 1,005,336 | \$ 1,712,976 |
| 7 | 22.46 | \$ 1,191,519 | \$ 1,936,249 |
| 8 | 24.41 | \$ 1,266,431 | \$ 2,382,794 |
| 9 | 22.46 | \$ 1,116,973 | \$ 2,010,673 |
| 10 | 22.46 | \$ 1,191,519 | \$ 2,085,097 |
| TOTAL | 239.25 | \$ 11,877,732 | \$ 21,446,362 |

A Comparison of the Bus Fleet Analyses

TABLE 19: COMPARING THE RESULTS FROM RIMS II, IMPLAN, AND REMI

| | RIMS II | IMPLAN | REMI |
|---------------|---------------|--------------|---------------|
| OUTPUT | \$ 10,253,856 | \$16,096,120 | \$ 21,446,362 |
| INCOME | \$ 3,808,425 | \$ 7,794,517 | \$ 11,877,732 |
| JOBS | 187 | 318 | 239 |

Rail Transit Analysis

All of the analysis will be done using the following initial information about costs:

TABLE 20: RAIL TRANSIT PROJECT TEN YEAR CONSTRUCTION AND OPERATING EXPENSES (IN YEAR 2000 \$)

| Year | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATING EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|--------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ 1,000,000 | \$ 50,000 | \$ 15,000 | \$ 150,000 | \$ 2,850,000 | \$ - | \$ - | \$ - | \$ - | \$ 4,065,001 |
| 2 | \$ 2,000,000 | \$ 100,000 | \$ 25,000 | \$ 300,000 | \$ 5,700,000 | \$ - | \$ - | \$ - | \$ - | \$ 8,125,002 |
| 3 | \$ 1,000,000 | \$ 50,000 | \$ 2,500 | \$ 750,000 | \$ 14,250,000 | \$ 2,850,000 | \$ 150,000 | \$ - | \$ - | \$ 19,052,503 |
| 4 | \$ - | \$ - | \$ - | \$ 300,000 | \$ 5,700,000 | \$ 1,900,000 | \$ 100,000 | \$ - | \$ 50,000 | \$ 8,050,004 |
| 5 | \$ - | \$ - | \$ - | \$ 300,000 | \$ 5,700,000 | \$ 1,425,000 | \$ 75,000 | \$ - | \$ 150,000 | \$ 7,650,005 |
| 6 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,500,000 | \$ 1,500,006 |
| 7 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,575,000 | \$ 1,575,007 |
| 8 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,653,750 | \$ 1,653,758 |
| 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,736,438 | \$ 1,736,447 |
| 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,823,259 | \$ 1,823,269 |
| Total | \$ 4,000,000 | \$ 200,000 | \$ 42,500 | \$ 1,800,000 | \$ 34,200,000 | \$ 6,175,000 | \$ 325,000 | \$ - | \$ 8,488,447 | \$ 55,231,002 |

These costs represent: (1) the cost associated with purchasing the land where the railway will be built, (2) the cost of legal services to purchase the land, (3) the real estate cost associated with purchasing the land, (4) the cost of constructing the railway, (5) the cost of the railroad equipment or rolling stock, and (5) the operating expenses associated with running the railway. The above costs are expressed in year 2000 dollars, which means these costs are representative of what it would cost to purchase the land, construct, and run the rail line right now.

Using RIMS II

The RIMS II multipliers were explained in the previous example. Since the above example was studying the economic impact of purchasing and operating a bus fleet, the same multipliers cannot be used in this example. In order to study the economic impact of the rapid rail project, the appropriate multipliers must be used. A few of the multipliers that could be used are described in the following table:

TABLE 21: EXAMPLES OF 1997 RIMS II MULTIPLIERS FOR FLORIDA THAT CAN BE USED IN THIS ANALYSIS

| COST COMPONENTS | RIMS II Industries (bold italics indicates multipliers used in this analysis) | RIMS II CODES | RIMS II MULTIPLIERS | | |
|------------------------|--|----------------|------------------------|--------------------------|--------------------------|
| | | | OUTPUT (per dollar) | EARNINGS (per dollar) | JOBS (per million \$) |
| Operating Costs | <i>Railroads and related services</i> | 65.01 | 2.23 | 0.69 | 25.67 |
| Financing Fees | Security and commodity brokers | 70.03 | 2.10 | 0.68 | 26.28 |
| ROW Fees | <i>Real estate agents, managers, operators, and lessors.</i> | 71.0201 | 2.13 | 0.70 | 27.12 |
| Capital Costs | <i>Legal, engineering, accounting and related services</i> | 73.0302 | 2.18 | 0.73 | 27.52 |
| | <i>Other new construction</i> | 11.09 | 2.06 | 0.71 | 28.22 |
| | New building construction, office, industrial and commercial | 11.08 | 1.65 | 0.42 | 14.90 |
| | Maintenance and repair construction, other | 12.03 | 1.91 | 0.64 | 18.76 |
| | New construction, highways and streets | 11.04 | 2.12 | 0.82 | 19.52 |
| | Maintenance and repair of highways and streets | 12.0214 | 1.59 | 0.26 | 12.49 |
| Rolling Stock | <i>Railroad equipment</i> | 61.03 | 2.20 | 0.86 | 30.60 |

The following multipliers were taken from the above table and were used in this analysis. Since the analysis is only interested in the economic impact of the project on the Florida economy, the multipliers will not be applied to the out-of-state expenditures. Table 22 below shows the multipliers used for each expenditure category in this example:

TABLE 22: FINAL DEMAND MULTIPLIERS FROM RIMS II

| TYPES | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSES | |
|----------|--------------|------------------------|-------------|---------------|--------------|---------------|--------------|----------------------|--------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State |
| JOB | - | 27.521 | 27.119 | - | 28.218 | - | 30.602 | - | 25.672 |
| EARNINGS | - | 0.731 | 0.703 | - | 0.708 | - | 0.860 | - | 0.694 |
| OUTPUT | - | 2.181 | 2.135 | - | 2.062 | - | 2.198 | - | 2.233 |

As explained in the previous bus fleet analysis, the costs must be expressed in dollars for whatever year the multipliers correspond. The above multipliers are for the year 1997 so in order to use them, *the costs in Table 20 must be converted to year 1997 dollars*. Since the above data is expressed in current year 2000 dollars, we must deflate these dollars and express them in terms of a year that corresponds to our RIMS II multipliers. The below example deflates the above costs and expresses them in equivalent 1997 dollars. This means that the costs will then reflect what it would have cost to construct and run the rail system in 1997 instead of in 2000.

In order to adjust the costs, we use the consumer price index supplied by the U. S. Bureau of Labor Statistics. This consumer price index series is based on an average of prices between 1982-1984. This means that the 1982-1984 CPI is equal to 100. For each year after the 1982-1984 where inflation occurs, the CPI number will be greater than 100. This means that the same products bought in the period 1982-1984 cost more in the current time period than they did in the base period. In order to convert the 2000 dollars to 1997 dollars we must calculate the deflator. The deflator is simply the ratio of the CPI in 1997 to the CPI in 2000. The CPI in 2000 is 171.20 and the CPI in 1997 is 160.52. The third row of table 4 shows that the deflator to convert year 2000 dollars to 1997 dollars is:

$$(CPI\ 1997)/(CPI\ 2000) = 160.52/171.2 = .937616822.$$

Once the deflator has been calculated, the costs in Table 20 are deflated by multiplying each value by the deflator. Once this has been done, this will yield the following costs of running the rail system expressed in year 1997 dollars:

TABLE 23 : RAIL TRANSIT PROJECT TEN YEAR CONSTRUCTION AND OPERATING EXPENSES (IN 1997\$)

| YEAR | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATING EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|--------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ 937,617 | \$ 46,881 | \$ 14,064 | \$ 140,643 | \$ 2,672,208 | \$ - | \$ - | \$ - | \$ - | \$ 3,811,413 |
| 2 | \$ 1,875,234 | \$ 93,762 | \$ 23,440 | \$ 281,285 | \$ 5,344,416 | \$ - | \$ - | \$ - | \$ - | \$ 7,618,139 |
| 3 | \$ 937,617 | \$ 46,881 | \$ 2,344 | \$ 703,213 | \$ 13,361,040 | \$ 2,672,208 | \$ 140,643 | \$ - | \$ - | \$ 17,863,947 |
| 4 | \$ - | \$ - | \$ - | \$ 281,285 | \$ 5,344,416 | \$ 1,781,472 | \$ 93,762 | \$ - | \$ 46,881 | \$ 7,547,819 |
| 5 | \$ - | \$ - | \$ - | \$ 281,285 | \$ 5,344,416 | \$ 1,336,104 | \$ 70,321 | \$ - | \$ 140,643 | \$ 7,172,773 |
| 6 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,406,425 | \$ 1,406,431 |
| 7 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,476,746 | \$ 1,476,753 |
| 8 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,550,584 | \$ 1,550,591 |
| 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,628,113 | \$ 1,628,121 |
| 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,709,519 | \$ 1,709,528 |
| Total | \$ 3,750,467 | \$ 187,523 | \$ 39,849 | \$ 1,687,710 | \$ 32,066,495 | \$ 5,789,784 | \$ 304,725 | \$ - | \$ 7,958,911 | \$ 51,785,516 |

In order to apply the jobs multiplier, the costs must be converted to millions of dollars as in the previous bus fleet example. This is done by dividing each value by \$1,000,000. Once the conversion has been done and the multiplier has been applied to each year's costs, the following impacts result:

TABLE 24: FULL DIRECT AND INDIRECT ECONOMIC IMPACTS ON JOBS

| YEAR | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|--------------|---------------|--------------|----------------------|--------------|---------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | | 1.29 | 0.38 | | 75.40 | | 0.00 | | 0.00 | 77.08 |
| 2 | | 2.58 | 0.64 | | 150.81 | | 0.00 | | 0.00 | 154.03 |
| 3 | | 1.29 | 0.06 | | 377.02 | | 4.30 | | 0.00 | 382.68 |
| 4 | | 0.00 | 0.00 | | 150.81 | | 2.87 | | 1.20 | 154.88 |
| 5 | | 0.00 | 0.00 | | 150.81 | | 2.15 | | 3.61 | 156.57 |
| 6 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 36.11 | 36.11 |
| 7 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 37.91 | 37.91 |
| 8 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 39.81 | 39.81 |
| 9 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 41.80 | 41.80 |
| 10 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 43.89 | 43.89 |
| TOTAL | | 5.16 | 1.08 | | 904.86 | | 9.33 | | 204.32 | 1124.74 |

Table 24 shows that over 1,000 jobs will result from the project including over 900 resulting from the construction expenditure and over 200 from the annual operating expenses. Table 25 below shows the effects of the project on earnings.

TABLE 25: FULL DIRECT AND INDIRECT TRANSIT ECONOMIC IMPACTS ON EARNINGS

| Year | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|--------------|---------------|--------------|----------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ 34,256 | \$ 9,891 | \$ - | \$ 1,891,389 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,935,536 |
| 2 | \$ 68,512 | \$ 16,486 | \$ - | \$ 3,782,778 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,867,775 |
| 3 | \$ 34,256 | \$ 1,649 | \$ - | \$ 9,456,944 | \$ - | \$ 120,910 | \$ - | \$ - | \$ - | \$ 9,613,759 |
| 4 | \$ - | \$ - | \$ - | \$ 3,782,778 | \$ - | \$ 80,607 | \$ - | \$ 32,517 | \$ - | \$ 3,895,901 |
| 5 | \$ - | \$ - | \$ - | \$ 3,782,778 | \$ - | \$ 60,455 | \$ - | \$ 97,550 | \$ - | \$ 3,940,782 |
| 6 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 975,497 | \$ - | \$ 975,497 |
| 7 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,024,271 | \$ - | \$ 1,024,271 |
| 8 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,075,485 | \$ - | \$ 1,075,485 |
| 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,129,259 | \$ - | \$ 1,129,259 |
| 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,185,722 | \$ - | \$ 1,185,722 |
| Total | \$ 137,023 | \$ 28,026 | \$ - | \$ 22,696,665 | \$ - | \$ 261,972 | \$ - | \$ 5,520,300 | \$ - | \$ 28,643,987 |

The above table shows there will be a \$28.6 million dollar impact on income as a result of this project. Over \$22 million will result from the construction of the rapid rail and almost \$5.5 million will result from the annual operating expenses. Table 26 below shows the economic impact on output as a result of the project.

TABLE 26: FULL DIRECT AND INDIRECT TRANSIT ECONOMIC IMPACTS ON OUTPUT

| YEAR | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|----------------------|---------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ - | \$ 102,242 | \$ 30,023 | \$ - | \$ 5,508,757 | \$ - | \$ - | \$ - | \$ - | \$ 5,641,022 |
| 2 | \$ - | \$ 204,485 | \$ 50,038 | \$ - | \$ 11,017,513 | \$ - | \$ - | \$ - | \$ - | \$ 11,272,036 |
| 3 | \$ - | \$ 102,242 | \$ 5,004 | \$ - | \$ 27,543,783 | \$ - | \$ 309,146 | \$ - | \$ - | \$ 27,960,176 |
| 4 | \$ - | \$ - | \$ - | \$ - | \$ 11,017,513 | \$ - | \$ 206,098 | \$ - | \$ 104,694 | \$ 11,328,305 |
| 5 | \$ - | \$ - | \$ - | \$ - | \$ 11,017,513 | \$ - | \$ 154,573 | \$ - | \$ 314,083 | \$ 11,486,169 |
| 6 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,140,829 | \$ - | \$ 3,140,829 |
| 7 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,297,870 | \$ - | \$ 3,297,870 |
| 8 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,462,764 | \$ - | \$ 3,462,764 |
| 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,635,902 | \$ - | \$ 3,635,902 |
| 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,817,697 | \$ - | \$ 3,817,697 |
| TOTAL | \$ - | \$ 408,970 | \$ 85,065 | \$ - | \$ 66,105,080 | \$ - | \$ 669,817 | \$ - | \$ 17,773,839 | \$ 85,042,771 |

This table shows that there will be a \$85 million dollar impact on output resulting from this project. Construction will be responsible for \$66 million of this impact and the annual operating expenses will create an impact of almost \$18 million.

Since the multipliers used were for 1997, the results were expressed in terms of 1997 dollars. The jobs result cannot be adjusted since it is not a dollar value. However, the earnings and output results can be inflated to be expressed in current terms of year 2000 dollars. To inflate the results to year 2000 dollars, we will need to calculate the appropriate inflator. This can be found in Table 4. This table shows that the

appropriate inflator is the ratio of the CPI 2000 to the CPI 1997. The 2000 CPI is 171.20 and the 1997 CPI is 160.52. The inflator is then:

$$[\text{CPI 2000}/\text{CPI 1997}] = 171.2/160.52 = 1.066534.$$

Now that the inflator has been calculated, the earnings and output results can be expressed in year 2000 dollars by multiplying the results in Table 25 and Table 26 by the inflator. This yields the following results for the earnings and output totals:

TABLE 27: RIMS II ECONOMIC IMPACTS ON EARNINGS (IN YEAR 2000\$)

| | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSE | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|---------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| TOTAL | \$ - | \$ 146,140 | \$ 29,890 | \$ - | \$ 24,206,760 | \$ - | \$ 279,403 | \$ - | \$ 5,887,587 | \$ 30,549,780 |

TABLE 28: RIMS II ECONOMIC IMPACTS ON OUTPUT (IN YEAR 2000\$)

| | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSE | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|---------------------|---------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| TOTAL | \$ - | \$ 436,180 | \$ 90,725 | \$ - | \$ 70,503,300 | \$ - | \$ 714,383 | \$ - | \$ 18,956,400 | \$ 90,700,987 |

Tables 27 and 28 show the economic impacts on earnings and output expressed in current year 2000 dollars.

Using IMPLAN

As stated previously, IMPLAN is an input-output model that is similar to RIMS II. However, as the earlier discussion detailed, it allows you to use different types of multipliers. The Type II multipliers are the default multipliers and can be used in most circumstances. The Type II multipliers were used in this example.

As explained in the bus fleet analysis, the costs must be deflated before they can be entered into IMPLAN. Since the above data is expressed in current year 2000 dollars, we must deflate these dollars and express them in terms of a year that IMPLAN will accept. The below example deflates the above costs and expresses them in equivalent 1998 dollars. This means that the costs will then reflect what it would have cost to construct and run the high speed rail system in 1998 instead of in 2000.

In order to adjust the costs, we use the consumer price index supplied by the U. S. Bureau of Labor Statistics. This consumer price index series is based on an average of prices between 1982-1984. This means that the 1982-1984 CPI is equal to 100. For

each year after the 1982-1984 where inflation occurs, the CPI number will be greater than 100. This means that the same products bought in the period 1982-1984 cost more than they did in that time period. In order to convert the 2000 dollars to 1998 dollars we must calculate the deflator. The deflator is simply the ratio of the CPI in 1998 to the CPI in 2000. The CPI in 2000 is 171.20 and the CPI in 1998 is 163.01. The second row of table 4 shows that the deflator to convert year 2000 dollars to 1998 dollars is:

$$(CPI\ 1998)/(CPI\ 2000) = 163.01/171.2 = .9521612.$$

Now that we have calculated the deflator, we use the deflator by multiplying the year 2000 costs by the deflator in order to express the costs in 1998 dollars. The following table shows the costs in Table 20 adjusted to be expressed in 1998 dollars. These costs are the costs expressed in Table 20 multiplied by the deflator, .9521612.

TABLE 29: RAIL TRANSIT PROJECT TEN YEAR CONSTRUCTION AND OPERATING EXPENSES (IN 1998 \$)

| Year | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATING EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|--------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ 952,161 | \$ 47,608 | \$ 14,282 | \$ 142,824 | \$ 2,713,659 | \$ - | \$ - | \$ - | \$ - | \$ 3,870,536 |
| 2 | \$ 1,904,322 | \$ 95,216 | \$ 23,804 | \$ 285,648 | \$ 5,427,319 | \$ - | \$ - | \$ - | \$ - | \$ 7,736,312 |
| 3 | \$ 952,161 | \$ 47,608 | \$ 2,380 | \$ 714,121 | \$ 13,568,297 | \$ 2,713,659 | \$ 142,824 | \$ - | \$ - | \$ 18,141,054 |
| 4 | \$ - | \$ - | \$ - | \$ 285,648 | \$ 5,427,319 | \$ 1,809,106 | \$ 95,216 | \$ - | \$ 47,608 | \$ 7,664,902 |
| 5 | \$ - | \$ - | \$ - | \$ 285,648 | \$ 5,427,319 | \$ 1,356,830 | \$ 71,412 | \$ - | \$ 142,824 | \$ 7,284,038 |
| 6 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,428,242 | \$ 1,428,248 |
| 7 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,499,654 | \$ 1,499,661 |
| 8 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,574,637 | \$ 1,574,644 |
| 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,653,368 | \$ 1,653,377 |
| 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,736,037 | \$ 1,736,046 |
| Total | \$ 3,808,645 | \$ 190,432 | \$ 40,467 | \$ 1,713,890 | \$ 32,563,914 | \$ 5,879,596 | \$ 309,452 | \$ - | \$ 8,082,370 | \$ 52,588,818 |

Once the costs have been deflated, the total expenditure in each category must be used since IMPLAN will not allow the costs to be entered on a year-by-year basis. Then, to enter these costs in the IMPLAN program, a code must be assigned that identifies which sector of the economy they are spent in. The appropriate sector codes for this example are shown in the following table:

TABLE 30: RAIL TRANSIT INPUTS

| CATEGORY OF SPENDING | SECTOR | AMOUNT |
|---|--------|---------------|
| Legal & Other Services | 494 | \$ 190,432 |
| Real Estate | 462 | \$ 40,467 |
| Construction--New Highways & Streets | 51 | \$ 32,563,914 |
| Rolling Stock--Railroad Equipment | 394 | \$ 309,452 |
| Operational Expenses--Railroad & Related Services | 433 | \$ 8,082,370 |

IMPLAN does not have a specific sector code for construction of railroad track. Therefore, the IMPLAN staff advised that the sector code for construction of new highways and streets be used since it is the best substitute.

IMPLAN will provide economic impacts for employment, value added (wages), and output (expressed in 1995 dollars) and are shown below for this example.

TABLE 31: IMPLAN ECONOMIC IMPACTS (EXPRESSED IN 1995\$)

| | EMPLOYMENT | VALUE ADDED | DEMAND |
|----------|------------|---------------|---------------|
| DIRECT | 338.2 | \$ 16,069,480 | \$ 39,315,768 |
| INDIRECT | 164.4 | \$ 7,870,395 | \$ 14,318,607 |
| INDUCED | 250.3 | \$ 10,876,946 | \$ 17,099,528 |
| TOTAL | 752.9 | \$ 34,816,821 | \$ 70,733,905 |

To determine what the current year 2000 equivalent dollars are, the dollars must be inflated from 1995 dollars to year 2000 dollars. To calculate the inflator, we will need the 1995 CPI and the 2000 CPI. The 1995 CPI is 152.38 and the 2000 CPI is 171.20. The inflator is the ratio of the 2000 CPI to the 1995 CPI:

$$(2000 \text{ CPI}) / (1995 \text{ CPI}) = 171.20 / 152.38 = 1.1235070.$$

Now, to express the above economic impacts in year 2000 dollars, we multiply the value added and demand numbers by the inflator. This yields the following economic impacts expressed in year 2000 dollars.

TABLE 32: IMPLAN ECONOMIC IMPACTS (EXPRESSED IN 2000\$)

| | EMPLOYMENT | VALUE ADDED | DEMAND |
|----------|------------|---------------|---------------|
| DIRECT | 338.2 | \$ 18,054,173 | \$ 44,171,541 |
| INDIRECT | 164.4 | \$ 8,842,444 | \$ 16,087,055 |
| INDUCED | 250.3 | \$ 12,220,325 | \$ 19,211,439 |
| TOTAL | 752.9 | \$ 39,116,942 | \$ 79,470,037 |

Using REMI

REMI will accept data in 1992 or 1999 dollar units. Since the costs for the project are expressed in year 2000 dollars, we must deflate the costs to either year 1992 or year 1999 dollars. In this example we will deflate the costs to year 1999 dollars. From Table 4, we see that the CPI for 2000 is 171.20 and the CPI for 1999 is 166.58. To calculate the deflator to convert the year 2000 costs to year 1999 costs, we find the ratio of the 1999 CPI to the 2000 CPI:

$$(CPI \ 1999) / (CPI \ 2000) = 166.58 / 171.20 = .9730140.$$

To deflate the costs, multiply each value in Table 20 by the deflator just calculated. This yields the following costs expressed in 1999 dollars:

TABLE 33: RAIL TRANSIT PROJECT TEN YEAR CONSTRUCTION AND OPERATING EXPENSES (IN 1999\$)

| Year | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATING EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|--------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ 973,014 | \$ 48,651 | \$ 14,595 | \$ 145,952 | \$ 2,773,090 | \$ - | \$ - | \$ - | \$ - | \$ 3,955,303 |
| 2 | \$ 1,946,028 | \$ 97,301 | \$ 24,325 | \$ 291,904 | \$ 5,546,180 | \$ - | \$ - | \$ - | \$ - | \$ 7,905,741 |
| 3 | \$ 973,014 | \$ 48,651 | \$ 2,433 | \$ 729,761 | \$ 13,865,450 | \$ 2,773,090 | \$ 145,952 | \$ - | \$ - | \$ 18,538,353 |
| 4 | \$ - | \$ - | \$ - | \$ 291,904 | \$ 5,546,180 | \$ 1,848,727 | \$ 97,301 | \$ - | \$ 48,651 | \$ 7,832,767 |
| 5 | \$ - | \$ - | \$ - | \$ 291,904 | \$ 5,546,180 | \$ 1,386,545 | \$ 72,976 | \$ - | \$ 145,952 | \$ 7,443,562 |
| 6 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,459,521 | \$ 1,459,527 |
| 7 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,532,497 | \$ 1,532,504 |
| 8 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,609,122 | \$ 1,609,130 |
| 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,689,578 | \$ 1,689,587 |
| 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,774,057 | \$ 1,774,067 |
| Total | \$ 3,892,056 | \$ 194,603 | \$ 1,353 | \$ 1,751,425 | \$ 33,277,079 | \$ 6,008,362 | \$ 316,230 | \$ - | \$ 8,259,378 | \$ 53,740,539 |

Unlike IMPLAN, REMI does not have a sector coding that corresponds specifically to "Railroads and related services," the code we used for the operational expenses in IMPLAN. The REMI staff advised that the "Local government passenger transit" code be used instead. However, like IMPLAN, REMI does not have a specific sector code for construction of rail line so the REMI staff advised that the "New Highways" sector code be used instead since it would be the best substitute. In REMI, the corresponding sectors are chosen in a different manner than in IMPLAN. Although the sector descriptions are the same, they are entered in a different way. REMI will ask you to select the policy variable categories that will be used. The "Policy Variable Sorting" should be by "Variable Type", and then the corresponding REMI sectors for the costs are the following:

TABLE 34: REMI SECTOR CODES FOR RAIL EXPENDITURES

| Cost | Policy Variable Categories | Detail Selection |
|--------------------|--|------------------------------------|
| Legal Services | Output Block → Detailed Industry Output → Services → Miscellaneous Professional Services Sales | Legal Services |
| Real Estate | Output Block → Detailed Industry Output → Finance, Insurance & Real Estate → Real Estate Sales | Real Estate |
| Construction | Output Block → Detailed Industry Output → Non-Durables → Construction Sales | New Roads |
| Rolling Stock | Output Block → Detailed Industry Output → Durables → Rest of Transportation Equipment Sales | Railroad Equipment |
| Operating Expenses | Output Block → Detailed Industry Output → Government → State and Local Services | Local Government Passenger Transit |

There is an alternative method that can be used when entering the high speed rail data into REMI. In the above example, we identified the "Policy Variable Sorting" as "Variable Type" and located the appropriate sector by the block it fell under. Alternatively, you can identify the "Policy Variable Sorting" as "Study Type." Under "Study Type" several options are listed: Energy & Natural Resources, Economic Development, Labor Legislation, Environmental Policies, Welfare, Transportation, and Taxation & Budget. In this example, the high speed rail is a transportation project so that is the study you would select. Once that option has been selected, REMI will then provide an option for you to choose between a new highway project or a high speed rail project. In this example, you would choose the high speed rail project. REMI then will break down the project into ten parts: Construction of the rail line, other related construction/land purchase, manufacturing of rolling stock, program implementation, operation of high speed rail, highway user savings, high speed rail user savings, direct effects to air transportation, consumer cost savings, and funding of high speed rail system. There is another option listed for "other options." The packaged program offers a bit of a guide to find the appropriate sector for the cost components of the project and may offer guidance concerning what variables should be included in the economic impact analysis. However, use of the "Study Type" option is limited since there are only certain packaged studies included. As can be seen in this example, the only transportation projects that could be analyzed in this format are for the construction of new highways or a new high speed rail system.

Once these sectors have been chosen, unlike IMPLAN, REMI will allow you to input the costs on a year-by-year basis. Once the costs have been entered and the analysis has been run, REMI will provide numerous economic impacts including effects on the population as well as the economy. The results that are comparable to IMPLANS' are for the following categories:

TABLE 35: REMI RAIL TRANSIT ECONOMIC IMPACTS (IN 1992\$)

| YEAR | Employment (Thous) | GRP (Bil 92\$) | Demand (Bil 92\$) |
|-------|--------------------|----------------|-------------------|
| 1 | 0.06934 | 0.002838 | 0.005188 |
| 2 | 0.1338 | 0.005585 | 0.01007 |
| 3 | 0.3301 | 0.0137 | 0.02521 |
| 4 | 0.1162 | 0.004913 | 0.008728 |
| 5 | 0.1143 | 0.004913 | 0.008301 |
| 6 | 0.04395 | 0.00177 | 0.002502 |
| 7 | 0.05078 | 0.001892 | 0.002991 |
| 8 | 0.05957 | 0.00238 | 0.004089 |
| 9 | 0.06445 | 0.002533 | 0.004272 |
| 10 | 0.07324 | 0.003021 | 0.005249 |
| TOTAL | 1.05573 | 0.043545 | 0.0766 |

These are the economic impacts on Employment, Gross Revenue Product (GRP) and Demand. The Employment results are expressed in terms of thousands of jobs and GRP and Demand results are expressed in terms of billions of dollars. This is different from IMPLAN which expresses its output in what ever units the results are in so that

\$500,000,000 is expressed as \$500,000,000 instead of as \$.5 billion dollars. Since the above economic impacts are less than a billion dollars, the GRP and demand impacts are expressed as a fraction of a billion dollars instead of in thousand or million dollar units which may make more sense. To convert the above results, multiply the employment impacts by 1,000 and the GRP and Demand results by \$1,000,000,000. This will yield the following calculations:

TABLE 36: REMI RAIL TRANSIT ECONOMIC IMPACTS (IN 1992 DOLLARS)

| YEAR | EMPLOYMENT | GRP (1992\$) | DEMAND (1992\$) |
|-------|------------|---------------|-----------------|
| 1 | 69.34 | \$ 2,838,000 | \$ 5,188,000 |
| 2 | 133.8 | \$ 5,585,000 | \$ 10,070,000 |
| 3 | 330.1 | \$ 13,700,000 | \$ 25,210,000 |
| 4 | 116.2 | \$ 4,913,000 | \$ 8,728,000 |
| 5 | 114.3 | \$ 4,913,000 | \$ 8,301,000 |
| 6 | 43.95 | \$ 1,770,000 | \$ 2,502,000 |
| 7 | 50.78 | \$ 1,892,000 | \$ 2,991,000 |
| 8 | 59.57 | \$ 2,380,000 | \$ 4,089,000 |
| 9 | 64.45 | \$ 2,533,000 | \$ 4,272,000 |
| 10 | 73.24 | \$ 3,021,000 | \$ 5,249,000 |
| TOTAL | 1055.73 | \$ 43,545,000 | \$ 76,600,000 |

The economic impacts are now expressed in units that are comparable to the IMPLAN results. However, the results are still expressed in 1992 dollars, so to express them in current year 2000 dollars we must inflate the dollars. To make the conversion, we must calculate the appropriate inflator. From Table 4, we know the 2000 CPI is 171.20 and the 1992 CPI is 140.32. The inflator to convert 1992 dollars to year 2000 dollars is:

$$(CPI\ 2000)/(CPI\ 1992) = 171.20/140.32 = 1.2200684.$$

Now, to convert the dollars, multiply each value in Table 36 by the inflator, and this will yield the following results:

TABLE 37: REMI RAIL TRANSIT ECONOMIC IMPACTS (IN 2000 DOLLARS)

| YEAR | EMPLOYMENT | GRP (2000\$) | DEMAND (2000\$) |
|-------|------------|---------------|-----------------|
| 1 | 69.34 | \$ 3,462,554 | \$ 6,329,715 |
| 2 | 133.8 | \$ 6,814,082 | \$ 12,286,089 |
| 3 | 330.1 | \$ 16,714,937 | \$ 30,757,924 |
| 4 | 116.2 | \$ 5,994,196 | \$ 10,648,757 |
| 5 | 114.3 | \$ 5,994,196 | \$ 10,127,788 |
| 6 | 43.95 | \$ 2,159,521 | \$ 3,052,611 |
| 7 | 50.78 | \$ 2,308,369 | \$ 3,649,225 |
| 8 | 59.57 | \$ 2,903,763 | \$ 4,988,860 |
| 9 | 64.45 | \$ 3,090,433 | \$ 5,212,132 |
| 10 | 73.24 | \$ 3,685,827 | \$ 6,404,139 |
| TOTAL | 1055.73 | \$ 53,127,878 | \$ 93,457,239 |

A COMPARISON OF THE RAIL TRANSIT ANALYSES

TABLE 38

| | RIMS II | IMPLAN | REMI |
|--------|--------------|--------------|--------------|
| OUTPUT | \$90,700,987 | \$79,470,037 | \$93,457,239 |
| INCOME | \$30,549,780 | \$39,116,942 | \$53,127,878 |
| JOBS | 1,125 | 753 | 1056 |

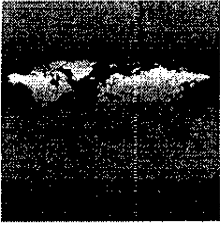
Advantages and Disadvantages of Using the Different Models

One advantage of using either IMPLAN or REMI instead of RIMS II is that since they are computer software packages, you can modify your model specification easily if you want to include or omit variables. Changing the model is simply a matter of clicking a button (so to speak). Since RIMS II is simply a spreadsheet analysis where the user is responsible for actually setting up the multiplier worksheet, every time a new variable is added, the worksheet must physically be changed. Additionally, IMPLAN is a more user-friendly software package. Although both packages are fairly easy to use, IMPLAN seems to make entering the required data easier. An additional benefit of using IMPLAN is that it explicitly breaks the impacts into direct, indirect and induced effects.

The benefit of using RIMS II is that you may not have to inflate or deflate any of your data. If you are using current year data and you want your results expressed in current year dollars, then you simply apply the multipliers to the costs and you are done. As the discussion indicated earlier, this is not the case with IMPLAN and REMI. The software packages limit the user to entering the expenditure data in term of certain years. This means that if the data is expressed in current year dollars, then it must be deflated before being entered into the program. Also, since the programs express the results in either 1995 or 1992 dollars, the results must be inflated to be expressed in current year dollars.

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TEA PLANNED INVESTMENT – WATERGATE HOTEL, WASHINGTON, DC



WATERGATE HOTEL & CONDOMINIUM DEVELOPMENT



Location: Washington, DC

Proposed Uses: 5-Star Luxury Hotel
Luxury Condominiums
World Class Spa
World Class Restaurant

Total Development: \$205.0 million

Estimated CARc Investment*: \$20.0- \$30.0 million

Estimated CARc Ownership: 40 – 50%

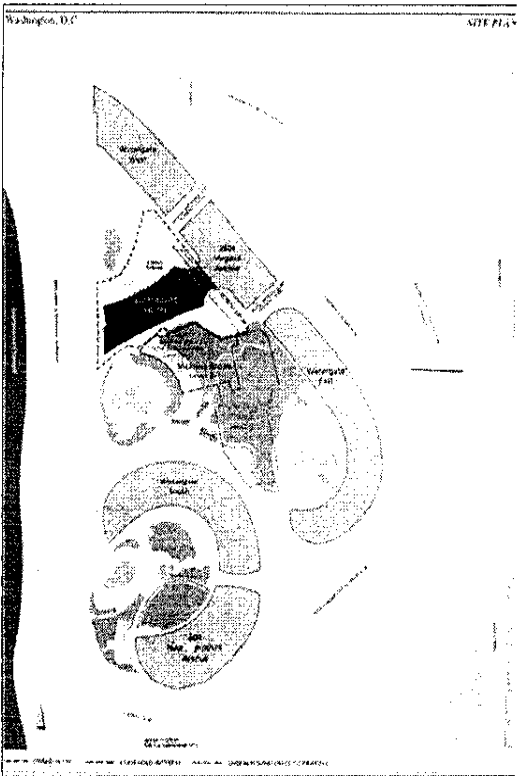
Construction Period: 18 months

Developer: Monument Realty (www.monumentrealty.com)

Project Exceeds Job/Investor Requirements

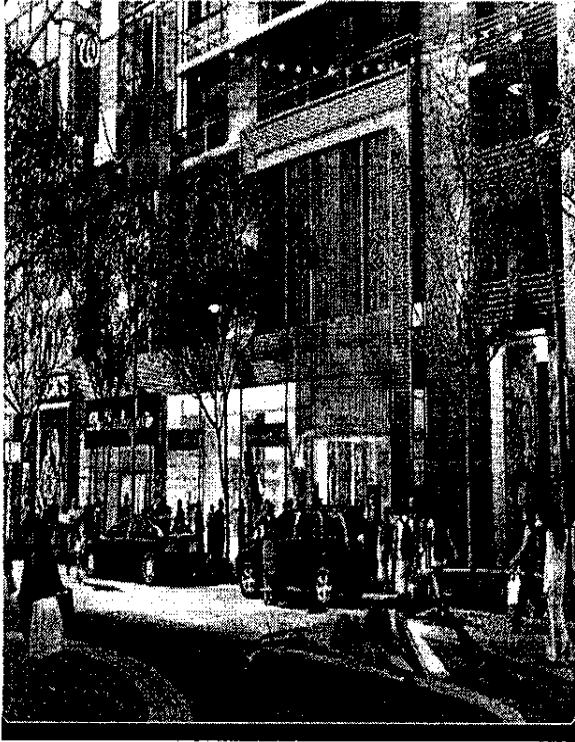
Project Pro Forma meets CARc JOB Fund underwriting goals

Minimum Investor Capital Contribution: \$500,000



**Letter of Intent signed. Subject to definitive documentation.*

ADDITIONAL TARGETED INVESTMENTS (TEA), HALF STREET – WASHINGTON, DC



Location: Washington, DC

**Proposed Uses: Commercial Office
Hotel
Residential
Entertainment
Retail**

Estimated Total Development: \$700.0 million

Estimated CARc Investment: TBD

Estimated CARc Ownership: TBD

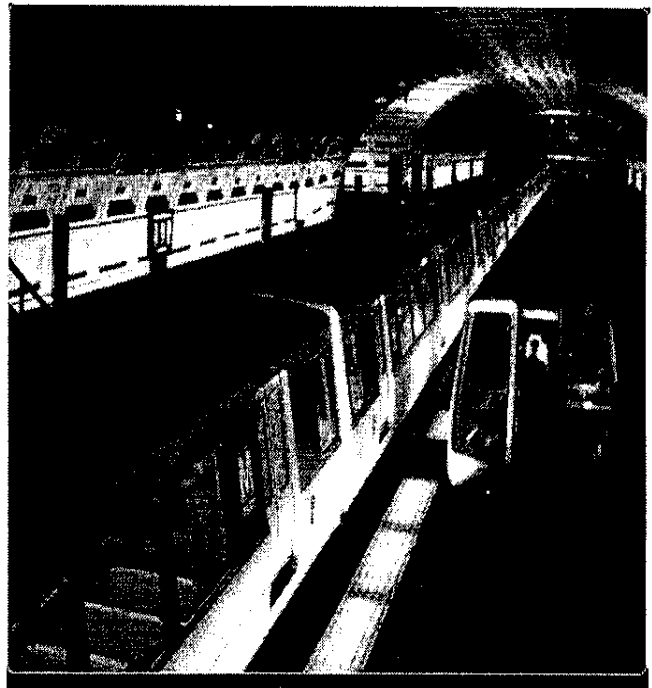
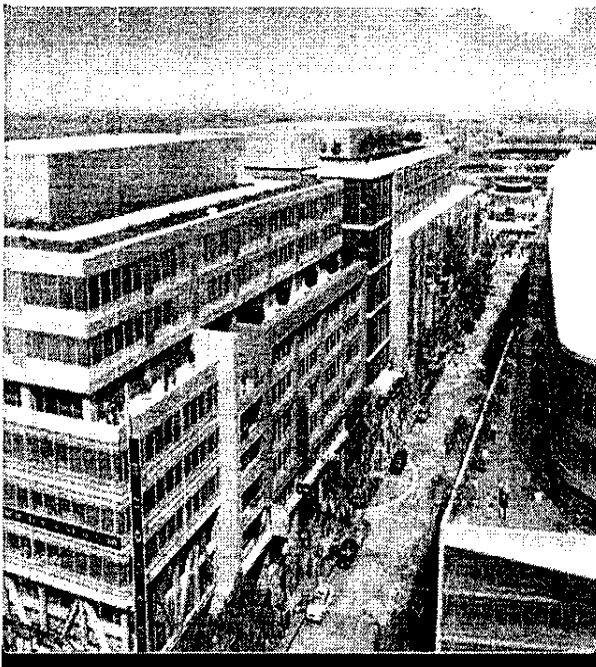
Construction Period: 18 - 30 months (multi phased)

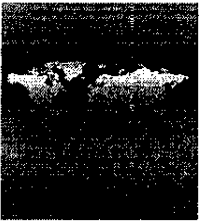
Developer: Monument Realty (www.monumentrealty.com)

Project Exceeds Job/Investor Requirements

Project Pro Forma meets CARc JOB Fund underwriting goals

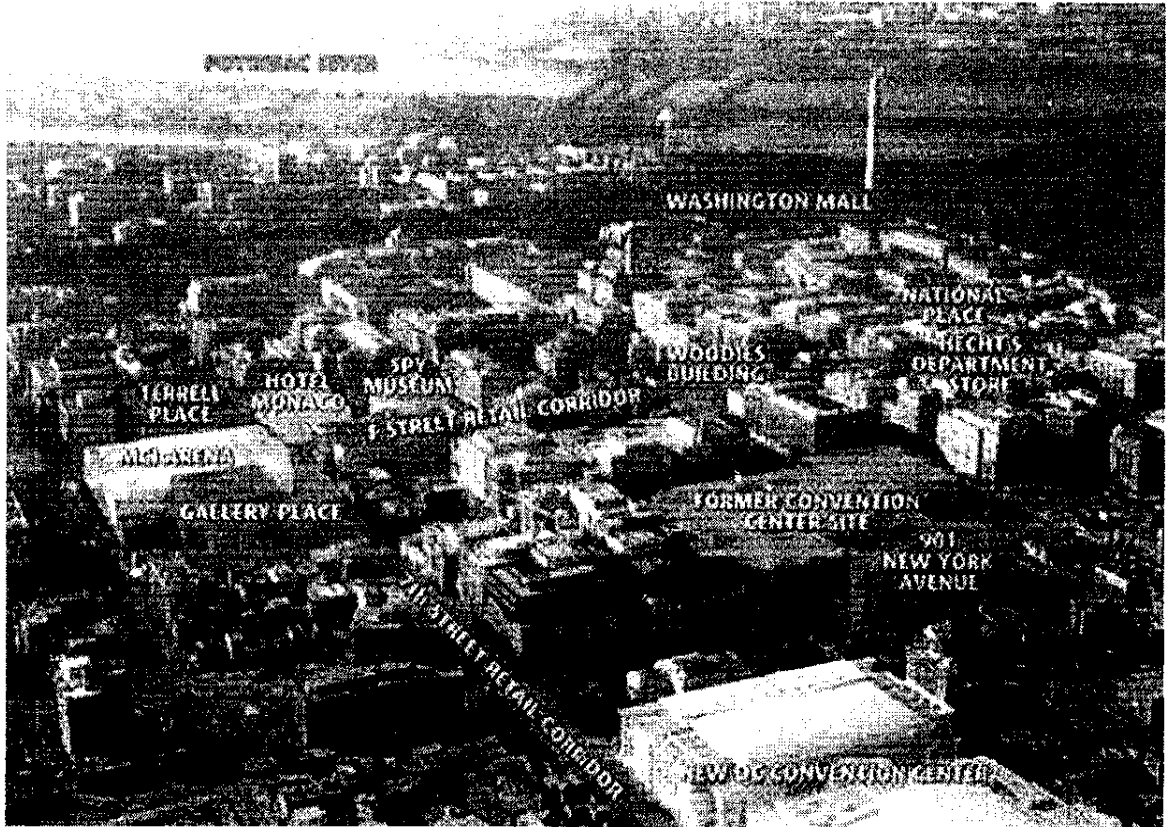
Minimum Investor Capital Contribution: \$500,000





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ADDITIONAL TARGETED INVESTMENTS (TEA) – FORMER CONVENTION CENTER, WASHINGTON, DC



Proposed Uses: Commercial Office
 Residential
 Retail

Est. Total Development: \$850.0 million

Estimated CARc Investment: TBD

Estimated CARc Ownership: TBD

Construction Period: 18 - 30 months

Developer:

Hines Company (www.hines.com)

Archstone Smith (www.archstone.com)

Project Exceeds Job/Investor Requirements

Project Pro Forma meets CARc JOB Fund underwriting goals

Minimum Investor Capital Contribution:
 \$500,000





OLD CONVENTION CENTER
SITE REDEVELOPMENT

News

Press Releases

December 17, 2007

CITY DEVELOPERS AGREE ON FINANCING PLAN FOR OLD CONVENTION SITE

By Jonathan O'Connell, Washington Business Journal

D.C. Mayor Adrian Fenty announced Monday the financial details of an agreement with Hines and Archstone-Smith for an \$850 million development of the old convention center site.

The project's plans include 250,000 square feet of retail, 760 housing units and 465,000 square feet of office space, parks and entertainment areas.

In the deal, the city will sell or provide long-term leases for land between Ninth and 11th streets NW along H Street, the southern portion of what is now a surface parking lot.

In return, the city will get \$200 million in benefits, including \$55 million to make 134 of the housing units affordable, \$48 million in infrastructure improvements, including the extension of 10th and Eye streets, \$28.5 million in rent and \$14 million to provide entertainment in a public square between four of the six buildings.

Fenty called the project the "capstone of downtown development" and said it would transform the area into a "live, work and play environment unlike anywhere else in D.C."

The city still controls a 53,700 square-foot parcel on the north end of the site, a plot pegged by former mayor Anthony Williams as a place to relocate the city's central library from the Martin Luther King Jr. Memorial Library. When asked about his plans for the site, Fenty deferred to Neil Albert, deputy mayor for economic development, who said that retail or housing might be appropriate but that "there might be civic uses that might be just as good."

Hines and Archstone Smith have first right to develop the District's remaining site, and have made plans that include space for big box retail needing in the range of 100,000 to 150,000 square feet.

Konrad Schlater, the city's project manager for the old convention center site, said the developers would present their ideas for that plot to the city during the first quarter of 2008, after which time the city would make its choice. He said there was interest from big retailers, but not from department stores.

The developers have been vetting a number of names for the project but have not announced one, although both Fenty and Ken Miller of Archstone-Smith used the term "city center" - one of the rumored names to describe the project at the announcement.

Council members Jack Evans, D-Ward 2, and Kwame Brown, D-at large and chair of the economic development committee, joined the mayor for the announcement, at the Walter E. Washington Convention Center.

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Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes | Detailed industry code and title | Related 1997 NAICS codes |
|--|--|---|--------------------------|
| AGRICULTURE, FORESTRY, FISHING, AND HUNTING | | MANUFACTURING | |
| 1110 Crop production | | 3110 Food manufacturing | |
| 1111A0 Oilseed farming | 11111, 11112 | 311111 Dog and cat food manufacturing | 311111 |
| 1111B0 Grain farming | 11113, 11114, 11115, 11116, 11119 | 311119 Other animal food manufacturing | 311119 |
| 111200 Vegetable and melon farming | 1112 | 311211 Flour milling | 311211 |
| 1113A0 Fruit farming | 11131, 11132, 111331- 4, 111336, 111339 | 311212 Rice milling | 311212 |
| 111335 Tree nut farming | 111335 | 311213 Malt manufacturing | 311213 |
| 111400 Greenhouse and nursery production | 1114 | 311221 Wet corn milling | 311221 |
| 111910 Tobacco farming | 11191 | 311222 Soybean processing | 311222 |
| 111920 Cotton farming | 11192 | 311223 Other oilseed processing | 311223 |
| 1119A0 Sugarcane and sugar beet farming | 11193, 111991 | 311225 Fats and oils refining and blending | 311225 |
| 1119B0 All other crop farming | 11194, 111992, 111998 | 311230 Breakfast cereal manufacturing | 31123 |
| 1120 Animal production | | 311310 Sugar manufacturing | 31131 |
| 112100 Cattle ranching and farming | 1121 | 311320 Confectionery manufacturing from cacao beans | 31132 |
| 112300 Poultry and egg production | 1123 | 311330 Confectionery manufacturing from purchased chocolate | 31133 |
| 112A00 Animal production, except cattle and poultry and eggs | 1122, 1124, 1125, 1129 | 311340 Nonchocolate confectionery manufacturing | 31134 |
| 1130 Forestry and logging | | 311410 Frozen food manufacturing | 31141 |
| 113A00 Forest nurseries, forest products, and timber tracts | 1131, 1132 | 311420 Fruit and vegetable canning and drying | 31142 |
| 113300 Logging | 1133 | 311511 Fluid milk manufacturing | 311511 |
| 1140 Fishing, hunting and trapping | | 311512 Creamery butter manufacturing | 311512 |
| 114100 Fishing | 1141 | 311513 Cheese manufacturing | 311513 |
| 114200 Hunting and trapping | 1142 | 311514 Dry, condensed, and evaporated dairy products | 311514 |
| 1150 Agriculture and forestry support activities | | 311520 Ice cream and frozen dessert manufacturing | 31152 |
| 115000 Agriculture and forestry support activities | 115 | 311611 Animal, except poultry, slaughtering | 311611 |
| MINING | | 311612 Meat processed from carcasses | 311612 |
| 2110 Oil and gas extraction | | 311613 Rendering and meat byproduct processing | 311613 |
| 211000 Oil and gas extraction | 211 | 311615 Poultry processing | 311615 |
| 2121 Coal mining | | 311700 Seafood product preparation and packaging | 3117 |
| 212100 Coal mining | 2121 | 31181A Bread and bakery product, except frozen, manufacturing | 31181-2 |
| 2122 Metal ores mining | | 311813 Frozen cakes and other pastries manufacturing | 311813 |
| 212210 Iron ore mining | 21221 | 311821 Cookie and cracker manufacturing | 311821 |
| 212230 Copper, nickel, lead, and zinc mining | 21223 | 311822 Mixes and dough made from purchased flour | 311822 |
| 2122A0 Gold, silver, and other metal ore mining | 21222, 21229 | 311823 Dry pasta manufacturing | 311823 |
| 2123 Nonmetallic mineral mining and quarrying | | 311830 Tortilla manufacturing | 31183 |
| 212310 Stone mining and quarrying | 21231 | 311911 Roasted nuts and peanut butter manufacturing | 311911 |
| 212320 Sand, gravel, clay, and refractory mining | 21232 | 311919 Other snack food manufacturing | 311919 |
| 212390 Other nonmetallic mineral mining | 21239 | 311920 Coffee and tea manufacturing | 31192 |
| 2130 Support activities for mining | | 311930 Flavoring syrup and concentrate manufacturing | 31193 |
| 213111 Drilling oil and gas wells | 213111 | 311941 Mayonnaise, dressing, and sauce manufacturing | 311941 |
| 213112 Support activities for oil and gas operations | 213112 | 311942 Spice and extract manufacturing | 311942 |
| 21311A Support activities for other mining | 213113-5 | 311990 All other food manufacturing | 31199 |
| UTILITIES | | 3121 Beverage manufacturing | |
| 2211 Power generation and supply | | 312110 Soft drink and ice manufacturing | 31211 |
| 2211A0 Power generation and supply | 2211 (1) | 312120 Breweries | 31212 |
| 2212 Natural gas distribution | | 312130 Wineries | 31213 |
| 221200 Natural gas distribution | 2212 | 312140 Distilleries | 31214 |
| 2213 Water, sewage and other systems | | 3122 Tobacco manufacturing | |
| 221300 Water, sewage and other systems | 2213 | 312210 Tobacco stemming and redrying | 31221 |
| CONSTRUCTION | | 312221 Cigarette manufacturing | 312221 |
| 2300 Construction | | 312229 Other tobacco product manufacturing | 312229 |
| 230000 Construction | 23 | 3130 Textile mills | |
| | | 313100 Fiber, yarn, and thread mills | 3131 |
| | | 313210 Broadwoven fabric mills | 31321 |
| | | 313220 Narrow fabric mills and schiffli embroidery | 31322 |
| | | 313230 Nonwoven fabric mills | 31323 |
| | | 313240 Knit fabric mills | 31324 |
| | | 313310 Textile and fabric finishing mills | 31331 |
| | | 313320 Fabric coating mills | 31332 |
| | | 3140 Textile product mills | |
| | | 314110 Carpet and rug mills | 31411 |
| | | 314120 Curtain and linen mills | 31412 |
| | | 314910 Textile bag and canvas mills | 31491 |
| | | 314992 Tire cord and tire fabric mills | 314992 |
| | | 31499A Other miscellaneous textile product mills | 314991, 314999 |
| | | 3150 Apparel manufacturing | |
| | | 315111 Sheer hosiery mills | 315111 |

Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes | Detailed industry code and title | Related 1997 NAICS codes |
|--|--------------------------|---|--------------------------|
| 315119 Other hosiery and sock mills | 315119 | 325320 Pesticide and other agricultural chemical manufacturing | 32532 |
| 315190 Other apparel knitting mills | 31519 | 3254 Pharmaceutical and medicine manufacturing | |
| 315200 Cut and sew apparel manufacturing | 3152 | 325400 Pharmaceutical and medicine manufacturing | 3254 |
| 315900 Accessories and other apparel manufacturing | 3159 | 3255 Paint, coating, and adhesive manufacturing | |
| 3160 Leather and allied product manufacturing | | 325510 Paint and coating manufacturing | 32551 |
| 316100 Leather and hide tanning and finishing | 3161 | 325520 Adhesive manufacturing | 32552 |
| 316200 Footwear manufacturing | 3162 | 3256 Soap, cleaning compound, and toiletry manufacturing | |
| 316900 Other leather product manufacturing | 3169 | 325611 Soap and other detergent manufacturing | 325611 |
| 3210 Wood product manufacturing | | 325612 Polish and other sanitation good manufacturing | 325612 |
| 321113 Sawmills | 321113 | 325613 Surface active agent manufacturing | 325613 |
| 321114 Wood preservation | 321114 | 325620 Toilet preparation manufacturing | 32562 |
| 32121A Veneer and plywood manufacturing | 321211-2 | 3259 Other chemical product and preparation manufacturing | |
| 32121B Engineered wood member and truss manufacturing | 321213-4 | 325910 Printing ink manufacturing | 32591 |
| 321219 Reconstituted wood product manufacturing | 321219 | 325920 Explosives manufacturing | 32592 |
| 321911 Wood windows and door manufacturing | 321911 | 325991 Custom compounding of purchased resins | 325991 |
| 321912 Cut stock, resawing lumber, and planing | 321912 | 325992 Photographic film and chemical manufacturing | 325992 |
| 321918 Other millwork, including flooring | 321918 | 325998 Other miscellaneous chemical product manufacturing | 325998 |
| 321920 Wood container and pallet manufacturing | 32192 | 3260 Plastics and rubber products manufacturing | |
| 321991 Manufactured home, mobile home, manufacturing | 321991 | 326110 Plastics packaging materials, film and sheet | 32611 |
| 321992 Prefabricated wood building manufacturing | 321992 | 326120 Plastics pipe, fittings, and profile shapes | 32612 |
| 321999 Miscellaneous wood product manufacturing | 321999 | 326130 Laminated plastics plate, sheet, and shapes | 32613 |
| 3221 Pulp, paper, and paperboard mills | | 3261A0 Foam product manufacturing | 32614, 32615 |
| 322110 Pulp mills | 32211 | 326160 Plastics bottle manufacturing | 32616 |
| 3221A0 Paper and paperboard mills | 32212, 32213 | 326192 Resilient floor covering manufacturing | 326192 |
| 3222 Converted paper product manufacturing | | 32619A Plastics plumbing fixtures and all other plastics products | 326191, 326199 |
| 322210 Paperboard container manufacturing | 32221 | 326210 Tire manufacturing | 32621 |
| 32222A Coated and laminated paper and packaging materials | 322221-2 | 326220 Rubber and plastics hose and belting manufacturing | 32622 |
| 32222B Coated and uncoated paper bag manufacturing | 322223-4 | 326290 Other rubber product manufacturing | 32629 |
| 322225 Flexible packaging foil manufacturing | 322225 | 3270 Nonmetallic mineral product manufacturing | |
| 322226 Surface-coated paperboard manufacturing | 322226 | 327111 Vitreous china plumbing fixture manufacturing | 327111 |
| 322231 Die-cut paper office supplies manufacturing | 322231 | 327112 Vitreous china and earthenware articles manufacturing | 327112 |
| 322232 Envelope manufacturing | 322232 | 327113 Porcelain electrical supply manufacturing | 327113 |
| 322233 Stationery and related product manufacturing | 322233 | 327121 Brick and structural clay tile manufacturing | 327121 |
| 322291 Sanitary paper product manufacturing | 322291 | 327122 Ceramic wall and floor tile manufacturing | 327122 |
| 322299 All other converted paper product manufacturing | 322299 | 32712A Clay refractory and other structural clay products | 327123-4 |
| 3230 Printing and related support activities | | 327125 Nonclay refractory manufacturing | 327125 |
| 32311A Commercial printing | 323110-5, 323119 | 327213 Glass container manufacturing | 327213 |
| 323116 Manifold business forms printing | 323116 | 32721A Glass and glass products, except glass containers | 327211-2, 327215 |
| 323117 Books printing | 323117 | 327310 Cement manufacturing | 32731 |
| 323118 Blankbook and looseleaf binder manufacturing | 323118 | 327320 Ready-mix concrete manufacturing | 32732 |
| 323121 Tradebinding and related work | 323121 | 327331 Concrete block and brick manufacturing | 327331 |
| 323122 Prepress services | 323122 | 327332 Concrete pipe manufacturing | 327332 |
| 3240 Petroleum and coal products manufacturing | | 327390 Other concrete product manufacturing | 32739 |
| 324110 Petroleum refineries | 32411 | 327410 Lime manufacturing | 32741 |
| 324121 Asphalt paving mixture and block manufacturing | 324121 | 327420 Gypsum product manufacturing | 32742 |
| 324122 Asphalt shingle and coating materials manufacturing | 324122 | 327910 Abrasive product manufacturing | 32791 |
| 324191 Petroleum lubricating oil and grease manufacturing | 324191 | 327991 Cut stone and stone product manufacturing | 327991 |
| 324199 All other petroleum and coal products manufacturing | 324199 | 327992 Ground or treated minerals and earths manufacturing | 327992 |
| 3251 Basic chemical manufacturing | | 327993 Mineral wool manufacturing | 327993 |
| 325110 Petrochemical manufacturing | 32511 | 327999 Miscellaneous nonmetallic mineral products | 327999 |
| 325120 Industrial gas manufacturing | 32512 | 331A Iron and steel mills and manufacturing from purchased steel | |
| 325130 Synthetic dye and pigment manufacturing | 32513 | 331111 Iron and steel mills | 331111 |
| 325180 Other basic inorganic chemical manufacturing | 32518 | 331112 Ferroalloy and related product manufacturing | 331112 |
| 325190 Other basic organic chemical manufacturing | 32519 | 331210 Iron, steel pipe and tube from purchased steel | 33121 |
| 3252 Resin, rubber, and artificial fibers manufacturing | | 331221 Rolled steel shape manufacturing | 331221 |
| 325211 Plastics material and resin manufacturing | 325211 | 331222 Steel wire drawing | 331222 |
| 325212 Synthetic rubber manufacturing | 325212 | 331B Nonferrous metal production and processing | |
| 325221 Cellulosic organic fiber manufacturing | 325221 | 331311 Alumina refining | 331311 |
| 325222 Noncellulosic organic fiber manufacturing | 325222 | 331312 Primary aluminum production | 331312 |
| 3253 Agricultural chemical manufacturing | | 331314 Secondary smelting and alloying of aluminum | 331314 |
| 325311 Nitrogenous fertilizer manufacturing | 325311 | 331315 Aluminum sheet, plate, and foil manufacturing | 331315 |
| 325312 Phosphatic fertilizer manufacturing | 325312 | 331316 Aluminum extruded product manufacturing | 331316 |
| 325314 Fertilizer, mixing only, manufacturing | 325314 | 331319 Other aluminum rolling and drawing | 331319 |
| | | 331411 Primary smelting and refining of copper | 331411 |

Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes | Detailed industry code and title | Related 1997 NAICS codes |
|---|-----------------------------|---|-----------------------------|
| 331419 Primary nonferrous metal, except copper and aluminum..... | 331419 | 333295 Semiconductor machinery manufacturing..... | 333295 |
| 331421 Copper rolling, drawing, and extruding..... | 331421 | 333298 All other industrial machinery manufacturing..... | 333298 |
| 331422 Copper wire, except mechanical, drawing..... | 331422 | | |
| 331423 Secondary processing of copper..... | 331423 | 3333 Commercial and service industry machinery | |
| 331491 Nonferrous metal, except copper and aluminum, shaping..... | 331491 | 33331A Automatic vending, commercial laundry and drycleaning machinery..... | 333311-2 |
| 331492 Secondary processing of other nonferrous..... | 331492 | 333313 Office machinery manufacturing..... | 333313 |
| 3315 Foundries | | 333314 Optical instrument and lens manufacturing..... | 333314 |
| 331510 Ferrous metal foundries..... | 33151 | 333315 Photographic and photocopying equipment manufacturing..... | 333315 |
| 33152A Aluminum foundries..... | 331521, 331524 | 333319 Other commercial and service machinery manufacturing.. | 333319 |
| 33152B Nonferrous foundries, except aluminum..... | 331522, 331525, 331528 | | |
| 3321 Forging and stamping | | 3334 HVAC and commercial refrigeration equipment | |
| 332111 Iron and steel forging..... | 332111 | 333411 Air purification equipment manufacturing..... | 333411 |
| 332112 Nonferrous forging..... | 332112 | 333412 Industrial and commercial fan and blower manufacturing.. | 333412 |
| 332114 Custom roll forming..... | 332114 | 333414 Heating equipment, except warm air furnaces..... | 333414 |
| 33211A All other forging and stamping..... | 332115-7 | 333415 AC, refrigeration, and forced air heating..... | 333415 |
| 3322 Cutlery and handtool manufacturing | | 3335 Metalworking machinery manufacturing | |
| 332211 Cutlery and flatware, except precious, manufacturing..... | 332211 | 333511 Industrial mold manufacturing..... | 333511 |
| 332212 Hand and edge tool manufacturing..... | 332212 | 333512 Metal cutting machine tool manufacturing..... | 333512 |
| 332213 Saw blade and handsaw manufacturing..... | 332213 | 333513 Metal forming machine tool manufacturing..... | 333513 |
| 332214 Kitchen utensil, pot, and pan manufacturing..... | 332214 | 333514 Special tool, die, jig, and fixture manufacturing..... | 333514 |
| | | 333515 Cutting tool and machine tool accessory manufacturing.... | 333515 |
| | | 33351A Rolling mill and other metalworking machinery..... | 333516, 333518 |
| 3323 Architectural and structural metals manufacturing | | 3336 Turbine and power transmission equipment manufacturing | |
| 332311 Prefabricated metal buildings and components..... | 332311 | 333611 Turbine and turbine generator set units manufacturing..... | 333611 |
| 332312 Fabricated structural metal manufacturing..... | 332312 | 33361A Speed changers and mechanical power transmission equipment..... | 333612-3 |
| 332313 Plate work manufacturing..... | 332313 | 333618 Other engine equipment manufacturing..... | 333618 |
| 332321 Metal window and door manufacturing..... | 332321 | | |
| 332322 Sheet metal work manufacturing..... | 332322 | 3339 Other general purpose machinery manufacturing | |
| 332323 Ornamental and architectural metal work manufacturing.... | 332323 | 333911 Pump and pumping equipment manufacturing..... | 333911 |
| 3324 Boiler, tank, and shipping container manufacturing | | 333912 Air and gas compressor manufacturing..... | 333912 |
| 332410 Power boiler and heat exchanger manufacturing..... | 33241 | 333913 Measuring and dispensing pump manufacturing..... | 333913 |
| 332420 Metal tank, heavy gauge, manufacturing..... | 33242 | 333921 Elevator and moving stairway manufacturing..... | 333921 |
| 332430 Metal can, box, and other container manufacturing..... | 33243 | 333922 Conveyor and conveying equipment manufacturing..... | 333922 |
| | | 333923 Overhead cranes, hoists, and monorail systems..... | 333923 |
| 332A Ordnance and accessories manufacturing | | 333924 Industrial truck, trailer, and stacker manufacturing..... | 333924 |
| 33299A Ammunition manufacturing..... | 332992-3 | 333991 Power-driven handtool manufacturing..... | 333991 |
| 332994 Small arms manufacturing..... | 332994 | 333992 Welding and soldering equipment manufacturing..... | 333992 |
| 332995 Other ordnance and accessories manufacturing..... | 332995 | 333993 Packaging machinery manufacturing..... | 333993 |
| | | 333994 Industrial process furnace and oven manufacturing..... | 333994 |
| 332B Other fabricated metal product manufacturing | | 333995 Fluid power cylinder and actuator manufacturing..... | 333995 |
| 332500 Hardware manufacturing..... | 3325 | 333996 Fluid power pump and motor manufacturing..... | 333996 |
| 332600 Spring and wire product manufacturing..... | 3326 | 33399A Scales, balances, and miscellaneous general purpose machinery..... | 333997, 333999 |
| 332710 Machine shops..... | 33271 | | |
| 332720 Turned product and screw, nut, and bolt manufacturing.... | 33272 | 3341 Computer and peripheral equipment manufacturing | |
| 332811 Metal heat treating..... | 332811 | 334111 Electronic computer manufacturing..... | 334111 |
| 332812 Metal coating and nonprecious engraving..... | 332812 | 334112 Computer storage device manufacturing..... | 334112 |
| 332813 Electroplating, anodizing, and coloring metal..... | 332813 | 334113 Computer terminal manufacturing..... | 334113 |
| 332910 Metal valve manufacturing..... | 33291 | 334119 Other computer peripheral equipment manufacturing..... | 334119 |
| 332991 Ball and roller bearing manufacturing..... | 332991 | | |
| 332996 Fabricated pipe and pipe fitting manufacturing..... | 332996 | 334A Audio, video, and communications equipment manufacturing | |
| 332997 Industrial pattern manufacturing..... | 332997 | 334210 Telephone apparatus manufacturing..... | 33421 |
| 332998 Enameled iron and metal sanitary ware manufacturing..... | 332998 | 334220 Broadcast and wireless communications equipment..... | 33422 |
| 332999 Miscellaneous fabricated metal product manufacturing..... | 332999 | 334290 Other communications equipment manufacturing..... | 33429 |
| | | 334300 Audio and video equipment manufacturing..... | 3343 |
| 3331 Agriculture, construction, and mining machinery | | 3344 Semiconductor and electronic component manufacturing | |
| 333111 Farm machinery and equipment manufacturing..... | 333111 | 334411 Electron tube manufacturing..... | 334411 |
| 333112 Lawn and garden equipment manufacturing..... | 333112 | 334413 Semiconductors and related device manufacturing..... | 334413 |
| 333120 Construction machinery manufacturing..... | 33312 | 33441A All other electronic component manufacturing..... | 334412, 334414-9 |
| 333131 Mining machinery and equipment manufacturing..... | 333131 | | |
| 333132 Oil and gas field machinery and equipment..... | 333132 | 3345 Electronic instrument manufacturing | |
| 3332 Industrial machinery manufacturing | | 334510 Electromedical apparatus manufacturing..... | 334510 |
| 333210 Sawmill and woodworking machinery..... | 33321 | 334511 Search, detection, and navigation instruments..... | 334511 |
| 333220 Plastics and rubber industry machinery..... | 33322 | 334512 Automatic environmental control manufacturing..... | 334512 |
| 333291 Paper industry machinery manufacturing..... | 333291 | 334513 Industrial process variable instruments..... | 334513 |
| 333292 Textile machinery manufacturing..... | 333292 | 334514 Totalizing fluid meters and counting devices..... | 334514 |
| 333293 Printing machinery and equipment manufacturing..... | 333293 | 334515 Electricity and signal testing instruments..... | 334515 |
| 333294 Food product machinery manufacturing..... | 333294 | | |

Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes | Detailed industry code and title | Related 1997 NAICS codes |
|--|-----------------------------|---|-----------------------------|
| 334516 Analytical laboratory instrument manufacturing | 334516 | 337212 Custom architectural woodwork and millwork | 337212 |
| 334517 Irradiation apparatus manufacturing | 334517 | 337214 Office furniture, except wood, manufacturing | 337214 |
| 33451A Watch, clock, and other measuring and controlling device manufacturing | 334518-9 | 337215 Showcases, partitions, shelving, and lockers | 337215 |
| | | 337910 Mattress manufacturing | 33791 |
| | | 337920 Blind and shade manufacturing | 33792 |
| 3346 Magnetic media manufacturing and reproducing | | 3391 Medical equipment and supplies manufacturing | |
| 334611 Software reproducing | 334611 | 339111 Laboratory apparatus and furniture manufacturing | 339111 |
| 334612 Audio and video media reproduction | 334612 | 339112 Surgical and medical instrument manufacturing | 339112 |
| 334613 Magnetic and optical recording media manufacturing | 334613 | 339113 Surgical appliance and supplies manufacturing | 339113 |
| | | 339114 Dental equipment and supplies manufacturing | 339114 |
| | | 339115 Ophthalmic goods manufacturing | 339115 |
| | | 339116 Dental laboratories | 339116 |
| 3351 Electric lighting equipment manufacturing | | 3399 Other miscellaneous manufacturing | |
| 335110 Electric lamp bulb and part manufacturing | 33511 | 339910 Jewelry and silverware manufacturing | 33991 |
| 335120 Lighting fixture manufacturing | 33512 | 339920 Sporting and athletic goods manufacturing | 33992 |
| | | 339930 Doll, toy, and game manufacturing | 33993 |
| | | 339940 Office supplies, except paper, manufacturing | 33994 |
| | | 339950 Sign manufacturing | 33995 |
| | | 339991 Gasket, packing, and sealing device manufacturing | 339991 |
| | | 339992 Musical instrument manufacturing | 339992 |
| | | 339994 Broom, brush, and mop manufacturing | 339994 |
| | | 339995 Burial casket manufacturing | 339995 |
| | | 33999A Buttons, pins, and all other miscellaneous manufacturing | 339993, 339999 |
| 3352 Household appliance manufacturing | | WHOLESALE TRADE | |
| 335211 Electric housewares and household fan manufacturing | 335211 | 4200 Wholesale trade | |
| 335212 Household vacuum cleaner manufacturing | 335212 | 420000 Wholesale trade | 42 |
| 335221 Household cooking appliance manufacturing | 335221 | RETAIL TRADE | |
| 335222 Household refrigerator and home freezer manufacturing | 335222 | 4A00 Retail trade | |
| 335224 Household laundry equipment manufacturing | 335224 | 4A0000 Retail trade | 44, 45 |
| 335228 Other major household appliance manufacturing | 335228 | TRANSPORTATION AND WAREHOUSING, EXCLUDING POSTAL SERVICE | |
| 3353 Electrical equipment manufacturing | | 4810 Air transportation | |
| 335311 Electric power and specialty transformer manufacturing | 335311 | 481000 Air transportation | 481 |
| 335312 Motor and generator manufacturing | 335312 | 4820 Rail transportation | |
| 335313 Switchgear and switchboard apparatus manufacturing | 335313 | 482000 Rail transportation | 482 |
| 335314 Relay and industrial control manufacturing | 335314 | 4830 Water transportation | |
| | | 483000 Water transportation | 483 |
| | | 4840 Truck transportation | |
| | | 484000 Truck transportation | 484 |
| | | 4850 Transit and ground passenger transportation | |
| | | 485A00 Transit and ground passenger transportation | 485 (1) |
| | | 4860 Pipeline transportation | |
| | | 486000 Pipeline transportation | 486 |
| | | 48A0 Scenic and sightseeing transportation and support activities for transportation | |
| | | 48A000 Scenic and sightseeing transportation and support activities for transportation | 487, 488 |
| 3359 Other electrical equipment and component manufacturing | | 4920 Couriers and messengers | |
| 335911 Storage battery manufacturing | 335911 | 492000 Couriers and messengers | 492 |
| 335912 Primary battery manufacturing | 335912 | 4930 Warehousing and storage | |
| 335921 Fiber optic cable manufacturing | 335921 | 493000 Warehousing and storage | 493 |
| 335929 Other communication and energy wire manufacturing | 335929 | INFORMATION | |
| 335930 Wiring device manufacturing | 33593 | 5111 Newspaper, book, and directory publishers | |
| 335991 Carbon and graphite product manufacturing | 335991 | 511110 Newspaper publishers | 51111 |
| 335999 Miscellaneous electrical equipment manufacturing | 335999 | 511120 Periodical publishers | 51112 |
| 3361 Motor vehicle manufacturing | | | |
| 336110 Automobile and light truck manufacturing | 33611 | | |
| 336120 Heavy duty truck manufacturing | 33612 | | |
| 336A Motor vehicle body, trailer, and parts manufacturing | | | |
| 336211 Motor vehicle body manufacturing | 336211 | | |
| 336212 Truck trailer manufacturing | 336212 | | |
| 336213 Motor home manufacturing | 336213 | | |
| 336214 Travel trailer and camper manufacturing | 336214 | | |
| 336300 Motor vehicle parts manufacturing | 3363 | | |
| 3364 Aerospace product and parts manufacturing | | | |
| 336411 Aircraft manufacturing | 336411 | | |
| 336412 Aircraft engine and engine parts manufacturing | 336412 | | |
| 336413 Other aircraft parts and equipment | 336413 | | |
| 336414 Guided missile and space vehicle manufacturing | 336414 | | |
| 33641A Propulsion units and parts for space vehicles and guided missiles | 336415, 336419 | | |
| 336B Other transportation equipment manufacturing | | | |
| 336500 Railroad rolling stock manufacturing | 3365 | | |
| 336611 Ship building and repairing | 336611 | | |
| 336612 Boat building | 336612 | | |
| 336991 Motorcycle, bicycle, and parts manufacturing | 336991 | | |
| 336992 Military armored vehicles and tank parts manufacturing | 336992 | | |
| 336999 All other transportation equipment manufacturing | 336999 | | |
| 3370 Furniture and related product manufacturing | | | |
| 337110 Wood kitchen cabinet and countertop manufacturing | 33711 | | |
| 337121 Upholstered household furniture manufacturing | 337121 | | |
| 337122 Nonupholstered wood household furniture manufacturing | 337122 | | |
| 337124 Metal household furniture manufacturing | 337124 | | |
| 337127 Institutional furniture manufacturing | 337127 | | |
| 33712A Other household and institutional furniture | 337125, 337129 | | |
| 337211 Wood office furniture manufacturing | 337211 | | |

Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes | Detailed industry code and title | Related 1997 NAICS codes |
|--|---------------------------|---|--------------------------|
| 511130 Book publishers | 51113 | 5414 Specialized design services | |
| 5111A0 Database, directory, and other publishers | 51114, 51119 | 541400 Specialized design services | 5414 |
| 5112 Software publishers | | 5415 Computer systems design and related services | |
| 511200 Software publishers | 5112 | 541511 Custom computer programming services | 541511 |
| 5120 Motion picture and sound recording industries | | 541512 Computer systems design services | 541512 |
| 512100 Motion picture and video industries | 5121 | 54151A Other computer related services, including facilities management | 541513, 541519 |
| 512200 Sound recording industries | 5122 | 5416 Management and technical consulting services | |
| 5131 Radio and television broadcasting | | 541610 Management consulting services | 54161 |
| 513100 Radio and television broadcasting | 5131 | 5416A0 Environmental and other technical consulting services | 54162, 54169 |
| 5132 Cable networks and program distribution | | 5417 Scientific research and development services | |
| 513200 Cable networks and program distribution | 5132 | 541700 Scientific research and development services | 5417 |
| 5133 Telecommunications | | 5418 Advertising and related services | |
| 513300 Telecommunications | 5133 | 541800 Advertising and related services | 5418 |
| 5141 Information services | | 5419 Other professional and technical services | |
| 514100 Information services | 5141 | 541920 Photographic services | 54192 |
| 5142 Data processing services | | 541940 Veterinary services | 54194 |
| 514200 Data processing services | 5142 | 5419A0 All other miscellaneous professional and technical services | 54191, 54193, 54199 |
| FINANCE AND INSURANCE | | MANAGEMENT OF COMPANIES AND ENTERPRISES | |
| 52A0 Monetary authorities, credit intermediation and related activities | | 5500 Management of companies and enterprises | |
| 52A000 Monetary authorities and depository credit intermediation | 521, 5221 | 550000 Management of companies and enterprises | 55 |
| 522A00 Nondepository credit intermediation and related activities | 5222, 5223 | ADMINISTRATIVE AND WASTE MANGEMENT SERVICES | |
| 5230 Securities, commodity contracts, investments | | 5613 Employment services | |
| 523000 Securities, commodity contracts, investments | 523 | 561300 Employment services | 5613 |
| 5240 Insurance carriers and related activities | | 5615 Travel arrangement and reservation services | |
| 524100 Insurance carriers | 5241 | 561500 Travel arrangement and reservation services | 5615 |
| 524200 Insurance agencies, brokerages, and related | 5242 | 561A All other administrative and support services | |
| 5250 Funds, trusts, and other financial vehicles | | 561100 Office administrative services | 5611 |
| 525000 Funds, trusts, and other financial vehicles | 525 | 561200 Facilities support services | 5612 |
| REAL ESTATE AND RENTAL AND LEASING | | 561400 Business support services | 5614 |
| 5310 Real estate | | 561600 Investigation and security services | 5616 |
| 531000 Real estate | 531 | 561700 Services to buildings and dwellings | 5617 |
| S008 Owner-occupied dwellings | | 561900 Other support services | 5619 |
| S00800 Owner-occupied dwellings | | 5620 Waste management and remediation services | |
| 5321 Automotive equipment rental and leasing | | 562000 Waste management and remediation services | 562 |
| 532100 Automotive equipment rental and leasing | 5321 | EDUCATIONAL SERVICES | |
| 532A Consumer goods and general rental centers | | 6100 Educational services | |
| 532A00 General and consumer goods rental except video tapes and discs | 53221, 53222, 53229, 5323 | 611100 Elementary and secondary schools | 6111 |
| 532230 Video tape and disc rental | 53223 | 611A00 Colleges, universities, and junior colleges | 6112, 6113 |
| 5324 Machinery and equipment rental and leasing | | 611B00 Other educational services | 6114, 6115, 6116, 6117 |
| 532400 Machinery and equipment rental and leasing | 5324 | HEALTH CARE AND SOCIAL ASSISTANCE | |
| 5330 Lessors of nonfinancial intangible assets | | 6210 Ambulatory health care services | |
| 533000 Lessors of nonfinancial intangible assets | 533 | 621A00 Offices of physicians, dentists, and other health practitioners | 6211, 6212, 6213 |
| PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES | | 621600 Home health care services | 6216 |
| 5411 Legal services | | 621B00 Other ambulatory health care services | 6214, 6215, 6219 |
| 541100 Legal services | 5411 | 6220 Hospitals | |
| 5412 Accounting and bookkeeping services | | 622000 Hospitals | 622 |
| 541200 Accounting and bookkeeping services | 5412 | 6230 Nursing and residential care facilities | |
| 5413 Architectural and engineering services | | 623000 Nursing and residential care facilities | 623 |
| 541300 Architectural and engineering services | 5413 | 6240 Social assistance | |
| | | 624400 Child day care services | 6244 |

Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes |
|--|--|
| 624A00 Social assistance, except child day care services | 6241, 6242, 6243 |
| ARTS, ENTERTAINMENT, AND RECREATION | |
| 71A0 Performing arts, spectator sports, museums, zoos, and parks | |
| 711100 Performing arts companies | 7111 |
| 711200 Spectator sports | 7112 |
| 711A00 Promoters of performing arts and sports and agents for public figures | 7113, 7114 |
| 711500 Independent artists, writers, and performers | 7115 |
| 712000 Museums, historical sites, zoos, and parks | 712 |
| 7130 Amusements, gambling, and recreation | |
| 713940 Fitness and recreational sports centers | 71394 |
| 713950 Bowling centers | 71395 |
| 713A00 Other amusement, gambling, and recreation industries | 7131, 7132, 71391, 71392, 71393, 71399 |
| ACCOMMODATION AND FOOD SERVICES | |
| 7210 Accommodation | |
| 7211A0 Hotels and motels, including casino hotels | 72111, 72112 |
| 721A00 Other accommodations | 72119, 7212, 7213 |
| 7220 Food services and drinking places | |
| 722000 Food services and drinking places | 722 |
| OTHER SERVICES, EXCEPT PUBLIC ADMINISTRATION | |
| 8111 Automotive repair and maintenance | |
| 8111A0 Automotive repair and maintenance, except car washes | 81111, 81112, 811191, 811198 |
| 811192 Car washes | 811192 |
| 811A Electronic, commercial, and household goods repair | |
| 811200 Electronic equipment repair and maintenance | 8112 |
| 811300 Commercial machinery repair and maintenance | 8113 |
| 811400 Household goods repair and maintenance | 8114 |
| 8120 Personal and laundry services | |
| 812100 Personal care services | 8121 |
| 812200 Death care services | 8122 |
| 812300 Drycleaning and laundry services | 8123 |
| 812900 Other personal services | 8129 |
| 813A Religious, grantmaking and giving, and social advocacy organizations | |
| 813100 Religious organizations | 8131 |
| 813A00 Grantmaking and giving and social advocacy organizations | 8132, 8133 |
| 813B Civic, social, professional and similar organizations | |
| 813B00 Civic, social, professional and similar organizations | 8134, 8139 |
| SPECIAL INDUSTRIES | |
| S001 Federal and state and local government enterprises | |
| 491000 Postal service | 491 |
| S00A00 Other government enterprises | |
| S002 Households | |
| H00000 Households | |

1. Includes Federal Government enterprises.

2008

2008

Appendix C.—RIMS II Industry Aggregations

| Aggregate industry code and title | RIMS II detailed industry codes ¹ |
|--|--|
| Agriculture, forestry, fishing, and hunting | |
| 1 Crop and animal production..... | 1111A0-112A00 |
| 2 Forestry, fishing, and related activities..... | 113A00-115000 |
| Mining | |
| 3 Oil and gas extraction | 211000 |
| 4 Mining, except oil and gas | 212100-212390 |
| 5 Support activities for mining | 213111-21311A |
| Utilities* | |
| 6 Utilities* | 2211A0-221300 |
| Construction | |
| 7 Construction | 230000 |
| Manufacturing | |
| 8 Wood product manufacturing..... | 321113-321999 |
| 9 Nonmetallic mineral product manufacturing | 327111-327999 |
| 10 Primary metal manufacturing..... | 331111-33152B |
| 11 Fabricated metal product manufacturing | 332111-332999 |
| 12 Machinery manufacturing | 333111-33399A |
| 13 Computer and electronic product manufacturing | 334111-334613 |
| 14 Electrical equipment and appliance manufacturing | 335110-335999 |
| 15 Motor vehicle, body, trailer, and parts manufacturing | 336110-336300 |
| 16 Other transportation equipment manufacturing | 336411-336999 |
| 17 Furniture and related product manufacturing | 337110-337920 |
| 18 Miscellaneous manufacturing | 339111-33999A |
| 19 Food, beverage, and tobacco product manufacturing..... | 311111-312229 |
| 20 Textile and textile product mills..... | 313100-31499A |
| 21 Apparel, leather, and allied product manufacturing..... | 315111-316900 |
| 22 Paper manufacturing | 322110-322299 |
| 23 Printing and related support activities | 32311A-323122 |
| 24 Petroleum and coal products manufacturing | 324110-324199 |
| 25 Chemical manufacturing | 325110-325998 |
| 26 Plastics and rubber products manufacturing..... | 326110-326290 |
| Wholesale trade | |
| 27 Wholesale trade..... | 420000 |
| Retail trade | |
| 28 Retail trade | 4A0000 |
| Transportation and warehousing* | |
| 29 Air transportation | 481000 |
| 30 Rail transportation..... | 482000 |
| 31 Water transportation..... | 483000 |
| 32 Truck transportation..... | 484000 |
| 33 Transit and ground passenger transportation*..... | 485A00 |
| 34 Pipeline transportation..... | 486000 |
| 35 Other transportation and support activities* | 48A000-492000, 491000 |
| 36 Warehousing and storage | 493000 |

Appendix C.—RIMS II Industry Aggregations

| Aggregate industry code and title | RIMS II detailed industry codes ¹ |
|---|--|
| Information | |
| 37 Publishing including software | 511110-511200 |
| 38 Motion picture and sound recording industries | 512100-512200 |
| 39 Broadcasting and telecommunications | 513100-513300 |
| 40 Information and data processing services | 514100-514200 |
| Finance and insurance | |
| 41 Federal Reserve banks, credit intermediation and related services | 52A000-522A00 |
| 42 Securities, commodity contracts, investments | 523000 |
| 43 Insurance carriers and related activities | 524100-524200 |
| 44 Funds, trusts, and other financial vehicles | 525000 |
| Real estate and rental and leasing | |
| 45 Real estate | 531000, S00800 |
| 46 Rental and leasing services and lessors of intangible assets | 532100-533000 |
| Professional, scientific, and technical services | |
| 47 Professional, scientific, and technical services | 541100-5419A0 |
| Management of companies and enterprises | |
| 48 Management of companies and enterprises | 550000 |
| Administrative and waste management services | |
| 49 Administrative and support services | 561300-561900 |
| 50 Waste management and remediation services | 562000 |
| Educational services | |
| 51 Educational services | 611100-611B00 |
| Health care and social assistance | |
| 52 Ambulatory health care services | 621A00-621B00 |
| 53 Hospitals and nursing and residential care facilities | 622000-623000 |
| 54 Social assistance | 624400-624A00 |
| Arts, entertainment, and recreation | |
| 55 Performing arts, museums, and related activities | 711100-712000 |
| 56 Amusements, gambling, and recreation | 713940-713A00 |
| Accommodation and food services | |
| 57 Accommodation | 7211A0-721A00 |
| 58 Food services and drinking places | 722000 |
| Other services* | |
| 59 Other services* | 8111A0-813B00, S00A00 |
| Households | |
| 60 Households | H00000 |

* Includes Federal Government enterprises.

1. Appendix B identifies the RIMS II detailed industry codes.

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28

Appendix D.—RIMS II Industry Groups

| Group industry code and title | RIMS II detailed industry codes ¹ | RIMS II aggregate industry codes ² |
|--|--|---|
| 1 Agriculture, forestry, fishing, and hunting..... | 1111A0-115000 | 1-2 |
| 2 Mining..... | 211000-21311A | 3-5 |
| 3 Utilities*..... | 2211A0-221300 | 6 |
| 4 Construction..... | 230000 | 7 |
| 5 Manufacturing..... | 311111-33999A | 8-26 |
| 6 Wholesale trade..... | 420000 | 27 |
| 7 Retail trade..... | 4A0000 | 28 |
| 8 Transportation and warehousing*..... | 481000-493000 | 29-36 |
| 9 Information..... | 511110-514200 | 37-40 |
| 10 Finance and insurance..... | 52A000-525000 | 41-44 |
| 11 Real estate and rental and leasing..... | 531000-533000 | 45-46 |
| 12 Professional, scientific, and technical services..... | 541100-5419A0 | 47 |
| 13 Management of companies and enterprises..... | 550000 | 48 |
| 14 Administrative and waste management services..... | 561300-562000 | 49-50 |
| 15 Educational services..... | 611100-611B00 | 51 |
| 16 Health care and social assistance..... | 621A00-624A00 | 52-54 |
| 17 Arts, entertainment, and recreation..... | 711100-713A00 | 55-56 |
| 18 Accommodation and food services..... | 7211A0-722000 | 57-58 |
| 19 Other services*..... | 8111A0-813B00, S00A00 | 59 |
| 20 Households..... | H00000 | 60 |

* Includes Federal Government enterprises.

1. Appendix B identifies the RIMS II detailed industry codes.

2. Appendix C identifies the RIMS II aggregate industry codes.

| Class of Property | Items Included |
|---------------------------|---|
| <i>3-year property</i> | Tractor units, racehorses over two years old, and horses over 12 years old when placed in service |
| <i>5-year property</i> | Automobiles, taxis, buses, trucks, computers and peripheral equipment, office machinery (faxes, copiers, calculators etc.), and any property used in research and experimentation. Also includes breeding and dairy cattle. |
| <i>7-year property</i> | Office furniture and fixtures, and any property that has not been designated as belonging to another class. |
| <i>10-year property</i> | Vessels, barges, tugs, similar water transportation equipment, single-purpose agricultural or horticultural structures, and trees or vines bearing fruit or nuts. |
| <i>15-year property</i> | Depreciable improvements to land such as shrubbery, fences, roads, and bridges. |
| <i>20-year property</i> | Farm buildings that are not agricultural or horticultural structures. |
| <i>27.5-year property</i> | Residential rental property. |
| <i>39-year property</i> | Nonresidential real estate, including home offices. (Note that the value of land may not be depreciated.) |

3 22

(b)(4)

Application Process

The Center was founded as an Illinois corporation in June of 2008 for the intended purpose of working with private entities and state and local government organizations to promote economic growth, improve regional productivity and job creation, increase domestic capital investment, develop economic research and consultation services for foreign national investors, and serve as Chicagoland's designated Regional Center.

The foreign investor shall have the opportunity to invest in an approved project, while keeping in line with the rules/regulations outlined by title 8, section 204.6 of the Code of Federal Regulations, the Department of Homeland Security's Citizenship and Immigration Services (USCIS). In addition, the investor must comply with the other Federal statutes, in regards to investments from foreign investors into the United States. See **Exhibit 103** for U.S. and Foreign Banks Compliance with the US Patriot Act.

The following outlines the general steps for participation in the business opportunity. As they occur, some of the steps may take place in tandem or in an order somewhat different from what is outlined below. The application cycle may take 30 to 120 days, or longer depending on the business, the industry and the required due diligence. The application cycle typically includes, but is not limited to, the following steps:

- Prior to the release of any confidential information regarding the investment opportunity, the prospective foreign investor shall sign a non-disclosure agreement.

- Once the investor has expressed interest in the project, he/she will be required to complete an Investor Questionnaire.

- Once the Investor Questionnaire is completed and submitted to the Center for review, the Center will confirm with the appropriate government agencies to check for persons at risk or Black Listed by the government.

- Prospective investors shall receive a comprehensive investment package, outlining the Center's current project(s) approved by the Board of Directors for their consideration. The management team will be available to answer any questions/concerns that the investor may have in regards to the proposed projects to gain a thorough understanding of the business plan as well as the general immigration process.
- The investor shall sign Subscription Agreements and other agreements and deposit the required capital investment of a minimum of [REDACTED] into two interest bearing escrow (b)(4) account before the investor's I-526 immigration petition is submitted to the USCIS. See **Exhibit 105-106** for I-526 Immigrant Petition application and instructions. The initial investment of \$500,000 will be deposited into an escrow account to be dispersed to the subject Company, upon approval of the I-526. The remaining [REDACTED] will be deposited into a separate escrow account.

(b)(4)

- The Center's management team shall compile any documents created by the Center as required by the USCIS for approval of the investor's I-526. These documents will include the subscription agreement, business plan, operating agreements, and any other documents necessary for the proper filing of an I-526 Immigrant Petition by Alien Entrepreneur.
- The investor shall hire a legal firm, specializing in immigration law, shall thoroughly review the foreign investor's application prior to submitting it to the USCIS. Each investor can choose an attorney of his/her choice to file an I-526 petition with the USCIS, and the Center will cooperate with the attorney as long as the investor qualifies for the project. Furthermore, before any application is submitted, the application must be given to the immigration attorneys for the regional center for final review.
- Additionally, the investor must prove that the funds for the investment derive from a lawful source. Lawful sources of funds include: profits from the sales of a property, stocks or bonds, profits from business, business transactions, gifts, and inheritances. To prove the source of investment funds, USCIS may require tax returns, bank records, proof

of ownership in any businesses, financial statements for each business and business licenses, and other documents showing legitimate source of funds.

(b)(4)

- In the event that the investor's Immigrant Petition (I-526) is denied, the investor's full [REDACTED] dollar investment plus [REDACTED] shall be retrieved from the escrow accounts and returned to the investor, less any interest accrued and miscellaneous expenses. Any proceeds from interest accrued while the investors funds are held in escrow shall be used to pay for fees accumulated by the escrow agent. One-half of any remaining proceeds from interest accrued, after the escrow agent has been paid his/her fees, shall be distributed to the investor; the other half of the interest proceeds after the escrow agent has been paid shall be retained by the Center for its time and effort incurred in the application process of the potential foreign investor. However, prior to returning the funds to the investor, each investor will be granted a 90 day period to reapply for their Immigrant Petition and make attempt to resolve or fulfill any missing documents or address any concerns the USCIS may have that can potentially overturn their I-526 denial.

- In the event that the foreign investor's I-526 is approved by the USCIS but is then denied by the relevant U.S. Consulate abroad, the Center shall have already released the funds to the subject Company. In this event, the Center will provide the investor with two options: (1) The investor can chose to maintain their investment in the subject company, for the duration of five years as part of the investors investment portfolio, or (2) the investor shall grant the subject Company a period of 120 days to repay the investor their investment while using the 120 days to find an alternative investor to replace the foreign investors anticipated funds.

- Ninety days prior to the two-year anniversary of the investor's I-526 approval, the Center's management team shall use its best efforts to assist the investor with filing the required I-829 petition, as well as provide the investor with the verifying documentation

for direct and indirect job creation. When filing for the I-829, the investor must also show that the subject Company continued to pursue the business plan that was presented to the USCIS with the investor's I-526 petition. The I-829 removes the temporary conditions of legal permanent residence. The Center plans to enlist Dr. Shahram to assist with these economic impact reports.

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Due Diligence Checklist

The Center will be looking for the following items in each business plan obtained from the previously mentioned project applicants; **however, LaSalle County Business Development Center, Inc. understands that many of the required documents do not apply to newly established businesses.**

(b)(4)



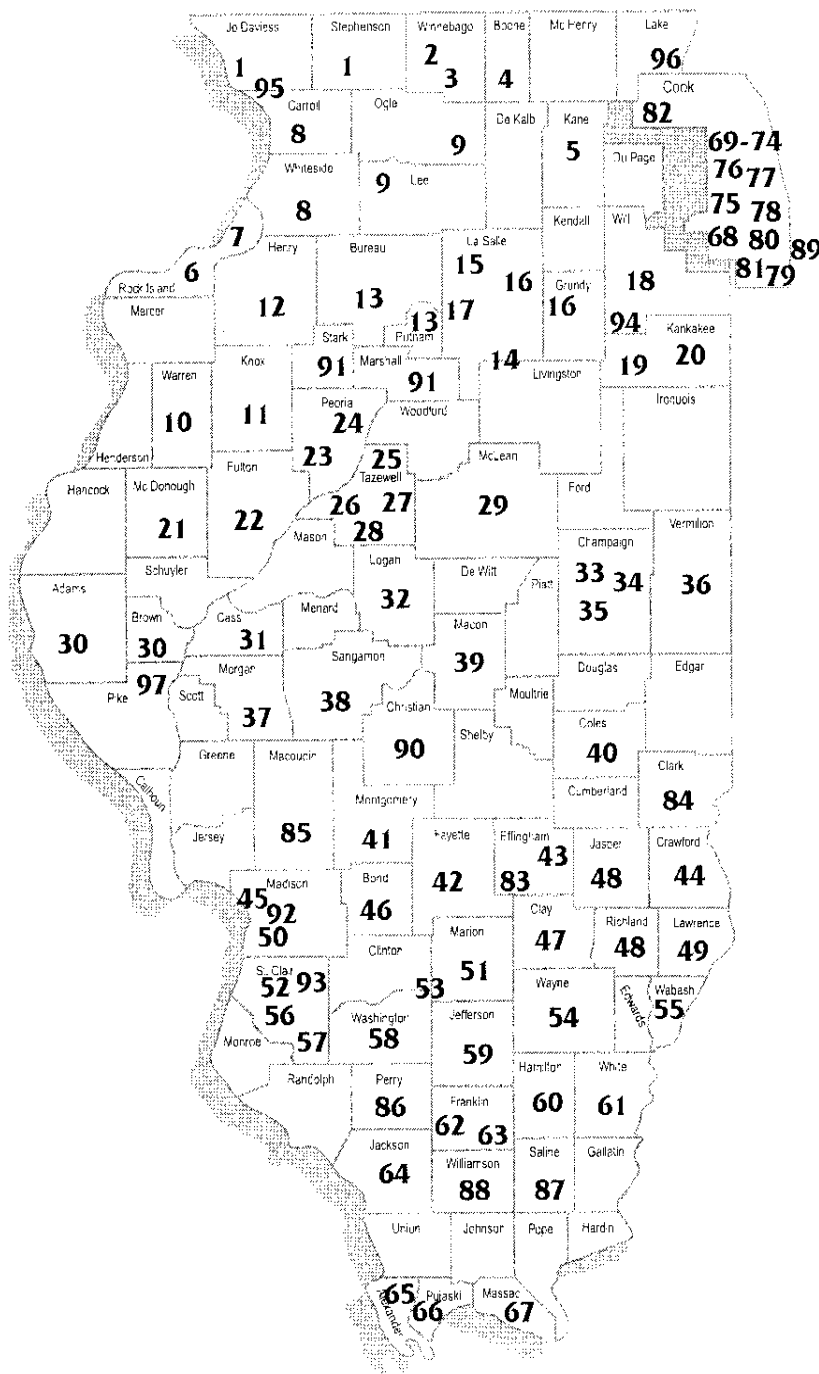
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- Danville/Tilton/Vermilion County (36)
- Decatur/Macon County (39)
- Des Plaines River Valley (18)
- Dixon/Lee County/Ogle County (9)
- East Peoria (26)
- East St. Louis/Washington Park (52)
- Effingham/Effingham County (43)
- Elgin (5)
- Fairfield/Wayne County (54)
- Flora/Clay County (47)
- Ford Heights/Sauk Village (89)
- Freeport/Stephenson County/Jo Daviess County (1)
- Galesburg (11)
- Gateway Commerce Center (92)
- Greenville/Smithboro (46)
- Harvey/Phoenix/Hazel Crest (81)
- Hoffman Estates (82)
- Illinois Valley (17)
- Jackson County (64)
- Jacksonville/Morgan County (37)
- Jo-Carroll (95)
- Joliet Arsenal (94)
- Kankakee County (Manteno) (19)
- Kankakee River Valley (20)
- Kewanee (12)
- Lawrenceville/Lawrence County (49)
- Lincoln/Logan County (32)
- Macomb/McDonough County (21)
- Macoupin County (85)
- Marshall County/Stark County (91)
- Massac County (67)
- Maywood (76)
- McCook/Hodgkins (68)
- McLeansboro/Hamilton County (60)
- Mendota (15)
- Monmouth (10)
- Montgomery County (41)
- Morton (27)
- Mound City/Pulaski County (66)
- Mt. Carmel/Wabash County (55)
- Mt. Vernon/Jefferson County (59)
- Nashville/Washington County (58)
- Olney/Richland County/Jasper County (48)
- Ottawa/LaSalle County/Grundy County (16)
- Pekin/Tazewell County (28)
- Peoria (24)
- Perry County (86)
- Quad Cities (7)
- Quincy/Adams County/Brown County (30)
- Rantoul (33)
- Riverbend (45)
- Robinson/Crawford County (44)
- Rockford (3)
- Rock Island (6)
- Salem/Marion (51)
- Saline County (87)
- South Beloit/Rockton/Winnebago County (2)
- Southwestern Madison County (50)
- Springfield (38)
- St.Clair County Mid America (93)
- Streator Area (14)
- Summit/Bedford Park (75)
- Taylorville/Christian County (90)
- Urbana (34)
- Vandalia/Fayette County (42)
- Washington (25)
- Waukegan/North Chicago (96)
- Western Illinois Economic Develop. Authority (97)
- West Frankfort (63)
- Whiteside County/Carroll County (8)
- Williamson County (88)

ILLINOIS ENTERPRISE ZONES

April 2007

- Altamont (83)
- American Bottoms (57)
- Bartonville/Peoria County (23)
- Beardstown (31)
- Belleville (56)
- Belvidere/Boone County (4)
- Benton/Franklin County (62)
- Bloomington/Normal/McLean County (29)
- Bureau/Putnam Area (13)
- Cairo/Alexander County (65)
- Cal-Sag (80)
- Calumet Region (78)
- Canton/Fulton County (22)

- Carmi/White County (61)
- Greater Centralia Area (53)
- Champaign/Champaign County (35)
- Chicago I (69)
- Chicago II (70)
- Chicago III (71)
- Chicago IV (72)
- Chicago V (73)
- Chicago VI (74)
- Chicago Heights (79)
- Cicero (77)
- Clark County (84)
- Coles County (40)

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China Chamber of Commerce for Import & Export of Medicines & Health Products



Trade Development Bureau, Ministry of Commerce of P.R.China

China Great Wall Exhibition Co., Ltd.



China Great Wall International Exhibition Co., Ltd.

World Health Organization

UNEP

UNEP



Hong Kong Trade Development Council



Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria



Department of International Cooperation, State Administration of Traditional Chinese Medicine, P.R.C



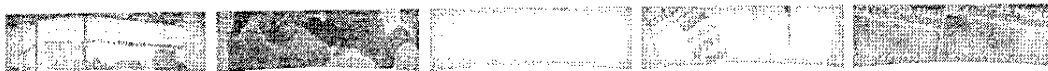
Natural Products Association



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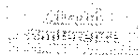


26 - 29 January 2009
Dubai International Convention & Exhibition Centre



EXHIBITOR PROFILE

-July08



The Arab Health Exhibition and Congress is the premier international healthcare event in the Middle East bringing together the world's leading healthcare manufacturers, tradesmen, organisations and professionals.

The 2008 edition of Arab Health achieved record success, showcasing products and services by nearly 2200 exhibitors, representing over 65 countries and attracting nearly 50,000 participating professionals from healthcare sector all over the world.

Arab Health attracts a powerful blend of healthcare professionals and provides them with an excellent opportunity to assess and cater to the burgeoning healthcare sector in the Middle East, estimated to be worth over \$100 billion per year and increasing at an estimated annual rate of 16%. The show also provides its participants with access to established as well as emerging global markets outside the region.

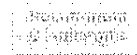
With a long history spanning more than three decades and showcasing over 3900 product categories on exhibit, Arab Health forms the most preferred networking event for the healthcare industry in the world.

Astounding Results of the Arab Health 2008 Exhibitor Survey:

- 94% of exhibitors met or surpassed their overall objectives in terms of establishing contacts for future sales
- 91% of exhibitors stated that the number of visitors met or surpassed their expectations
- 95.5% of exhibitors stated that the quality of visitors met or surpassed their expectations
- 91% of exhibitors would recommend exhibiting at Arab Health

Arab Health has grown substantially over the last six years and the 2008 edition was "venue-bound". With Arab Health 2009 nearly sold out, there will be no additional space to accommodate the estimated 20-30% increase in demand we are forecasting for next year.

You can still benefit from the excellent sponsorship opportunities at Arab Health to ensure you stand out of the clutter. Write to ahsponsorship@iirm.com for more details on enhancing your presence at Arab Health.



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- Press Release February 2007
- Press Release September 2006
- Press Release May 2006



- Trade Fairs in Düsseldorf International
- About us
- Imprint

The 14th edition of **MEDICAL FAIR INDIA**, formerly named HOSPIMedica India, the most well-established fair in India for medical & hospital equipments and accessories, jointly organized by Messe Düsseldorf, Germany and its Indian subsidiary Messe Düsseldorf India Pvt. Ltd., ended successfully at Bombay Exhibition Center, Goregaon Mumbai.

India's only multi-faculty medical exhibition and conference was held from 14th to 16th March 2008 and attracted 170 exhibitors from 17 countries with group participations from China, Taiwan & Germany. Apart from a sizeable Indian participation, there was a huge international presence from Australia, Belgium, China, Germany, Hong Kong, Israel, Italy, Japan, Korea, Malaysia, Pakistan, Russia, Singapore, Spain, Taiwan, U.A.E., U.K and U.S.A. and India. Medical equipment manufacturers from all over the world showcased the latest innovations in the medical field. [read more](#)

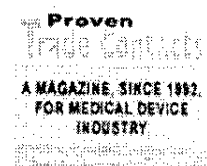
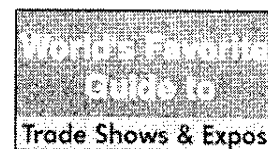
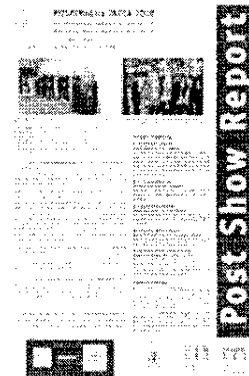
MEDICAL FAIR INDIA is the only event in India, which is truly multi-faculty in nature. There are various medical associations in India (catering to various disciplines like cardiology, orthopaedics, physicians, radiology, surgery, neurology etc) which conduct individual conferences.

Unfortunately, all these events are only restricted to that specific discipline only. But there are a large number of medical equipment and healthcare organisations, who are having a wide range of products, covering several disciplines / faculties.

To attend many such conferences, all over the country becomes highly inconvenient and uneconomical for them. For such organisations, a practical solution is to participate in **MEDICAL FAIR INDIA**, which is the only available business platform. It also serves as a meeting ground for medical professionals and the industry, to look at viable medical solutions. The concept is so popular and firmly entrenched, that this is now the oldest running medical exhibition, in India.

Some of the major associations and hospitals, which have been involved with **MEDICAL FAIR INDIA** from all our past shows, are mentioned below:

- A.I.I.M.S
- Cardiology Society of India
- Delhi Medical Association
- Delhi Ophthalmic Society
- E.S.I.S Corporation
- Escorts Heart Institute
- Indraprastha Apollo Hospital
- Maulana Azad Medical College
- N.A.C.O
- Ministry of Health & Family Welfare



Free Business Information!

Sri Ramachandra Medical College

ARCON

Federation of Blood Banks

Leelawati Hospital

Apollo Hospitals, Hyderabad

Armed Forces Medical Services

I.C.R.C

Delhi Diabetes Research Centre

Association of Hospitals, Mumbai

FORTIS Hospital

Global Hospital

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arena

arena

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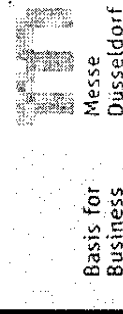


MEDICA: has long been the world's largest medical marketplace annually organised in November in Düsseldorf

The No. 1 for:

- Number of trade visitors
- Quality of trade visitors
- Internationality of visitors
- Number of exhibitors
- Quality of exhibitors
- Internationality of exhibitors
- Product spectrum

MEDICA: The annual highlight for the medical industry worldwide



MEDICA The No. 1 medical trade fair worldwide



The three pillars of MEDICA

- MEDICA – the trade fair with forums and theme parks
- MEDICA – the congress
- Der Deutsche Krankenhausstag (German Hospital Conference)

MEDICA: an incomparable range of products, congress themes, informative events and training seminars

Basis for
Business



MEDICA The No. 1 medical trade fair worldwide



- **How MEDICA is viewed by the visitors**
- As an international meeting point for 136,000 trade visitors from virtually every state in the world with some 4,300 exhibitors from 80 countries
- As a business platform for worldwide contacts
- As a pool of knowledge for the further development of medical know-how
- As a trend barometer for product and market potential
- As a community event for experts from all continents

MEDICA: pure dynamics

Basis for
Business



MEDICA The No. 1 medical trade fair worldwide



■ Visitor target groups for MEDICA

- Doctors in practice
- Hospital doctors
- Hospital management
- Hospital nursing staff
- Hospital technical managers
- Laboratory management
- Physiotherapists
- Medical trade
- Medical industry
- Assistants (hospital, doctors' surgeries, laboratories)
- Cost unit

MEDICA: concentrated on professionals in medical care

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MEDICA The No. 1 medical trade fair worldwide



■ The significance of MEDICA - the trade fair

- Platform for an unparalleled, broad international range of medical products and services
- Product-orientated communications meeting point for all procedures in in-patient and out-patient care
- A reflection of worldwide competition, as a result of the internationality of the exhibitors

MEDICA – the trade fair: a comprehensive product spectrum – unique in the world

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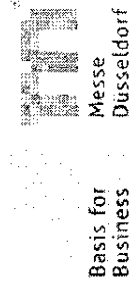
MEDICA The No. 1 medical trade fair worldwide



■ **MEDICA - a reflection of the world market**

- Virtually all market leaders participate
- MEDICA as a platform which demonstrates strength of performance
- A virtually complete picture of the medical-technical industry
- Strong presence of new companies and research establishments as a trend setter for new developments worldwide

MEDICA: in the focus of the global players

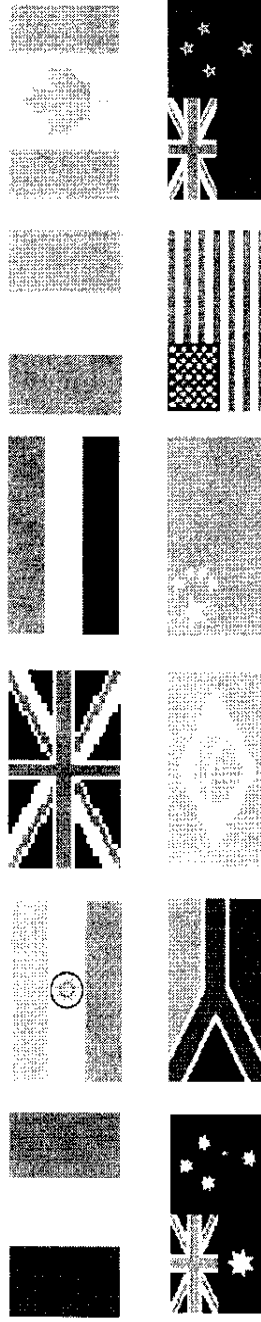


MEDICA The No. 1 medical trade fair worldwide



Group stands - a clear indication of international performance strength

- MEDICA as a base for some 25 national and 90 international pavilions
- From USA, Great Britain, France and Italy
- India, Brazil, China and Canada
- To New Zealand, Australia, Egypt and South Africa

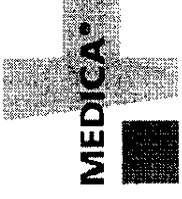


MEDICA: The platform for the unparalleled presentation of national professionalism via group stands

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MEDICA The No. 1 medical trade fair worldwide



- **MEDICA in Düsseldorf - for example, the marketplace for:**
 - German importers with American suppliers
 - Chinese buyers of large medical-technical equipment with German suppliers
 - Brazilian producers with Portuguese dealers
 - Saudi Arabian hospital owners with French manufacturers
 - Australian manufacturers with Italian importers
 - Mexican designers with Swedish suppliers
 - South African raw material suppliers with British consumers
 - American dealers with American manufacturers
 - Dutch delegations with Indian business partners

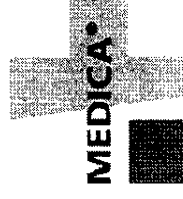
MEDICA: Meeting point for the medical community

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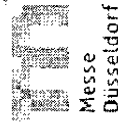
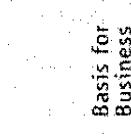
MEDICA The No. 1 medical trade fair worldwide



The sectors covered by MEDICA

-  Electromedicine / medical technology
-  Laboratory technology
-  Diagnostics
-  Physiotherapy / orthopaedic technology
-  Commodities and consumer products
-  Information and communications technology
-  OR equipment / medical furniture and fittings
-  Textiles
-  Facility management / building technology

MEDICA: from prevention, diagnostics, therapy to rehabilitation – a comprehensive service for patient care



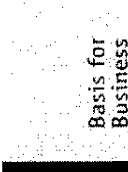
MEDICA The No. 1 medical trade fair worldwide



■ **MEDICA's distinguishing features:**

- Innovative → 50% of all products displayed are less than 3 years old
- Many world premieres take place at MEDICA
- Up-to-date → Held annually, it is always at the forefront of events
- Visionary → Being able to see in advance what the future holds
- Dynamic → Quick recognition of market changes and trends

MEDICA: from prevention, diagnostics, therapy to rehabilitation – a comprehensive service for patient care

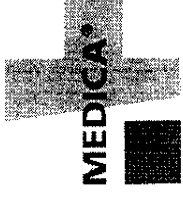


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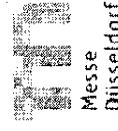
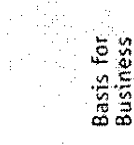
MEDICA The No. 1 medical trade fair worldwide



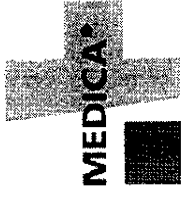
■ The significance of the MEDICA congress

- The MEDICA congress is the traditional hub of the overall MEDICA trade fair
- Since the 70s the congress has provided further medical education unique throughout Europe
- Some 20,000 doctors use more than 300 seminars to refresh their knowledge and obtain the latest information for their daily patient care
- National and international professional scientific institutions hold their annual conferences and symposiums at MEDICA

The MEDICA Congress: The world's largest arena for medical education and innovation in medical care



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■ **The significance of the MEDICA congress**

- Top-calibre scientists from around the world complement the national further education programme with themes and visions of medical care in the future.
- International industry sessions provide MEDICA exhibitors with the opportunity to introduce their innovations into congress seminars

The MEDICA Congress: The world's largest arena for medical education and innovation in medical care

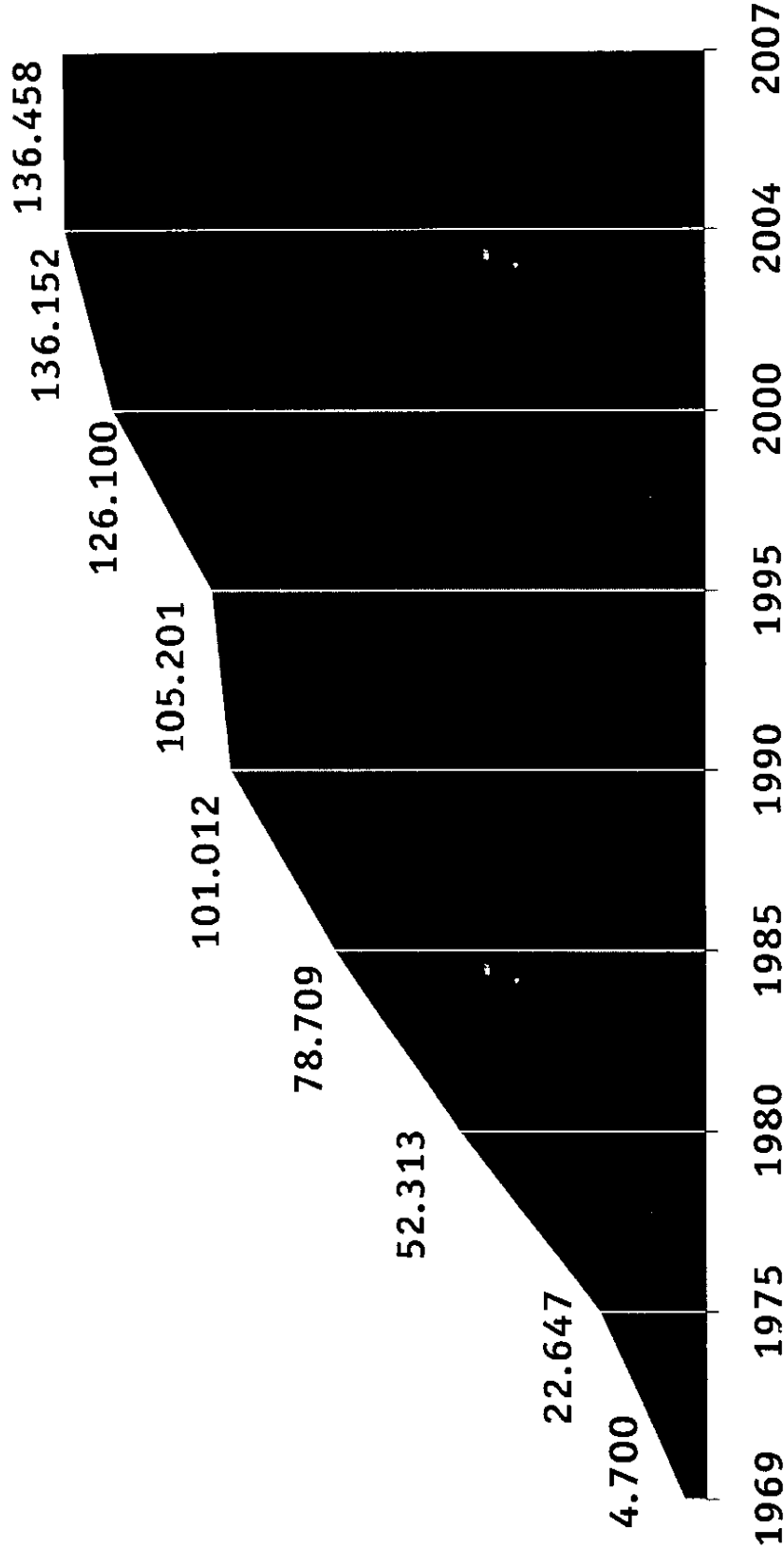
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Development of visitor numbers



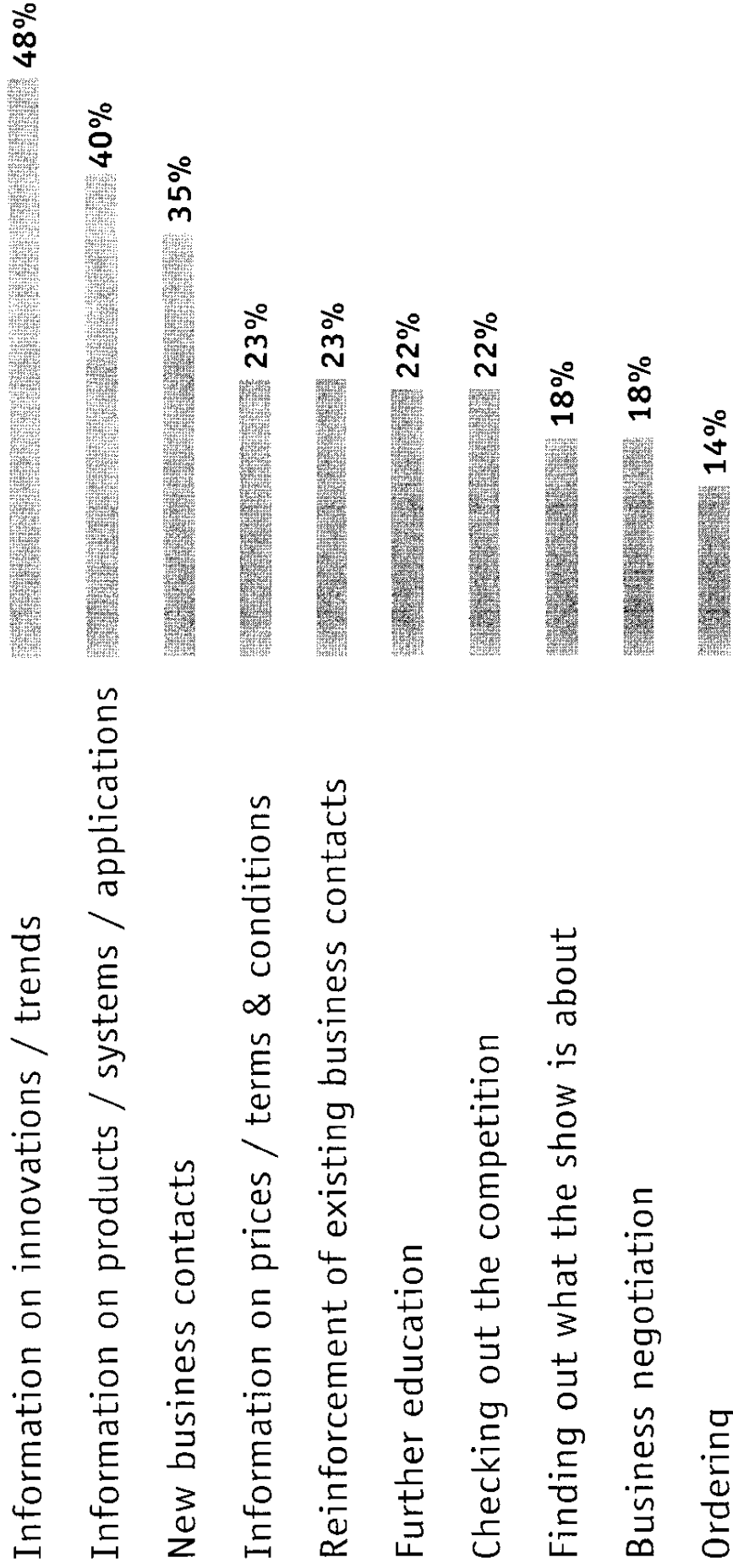
MEDICA: steady increase



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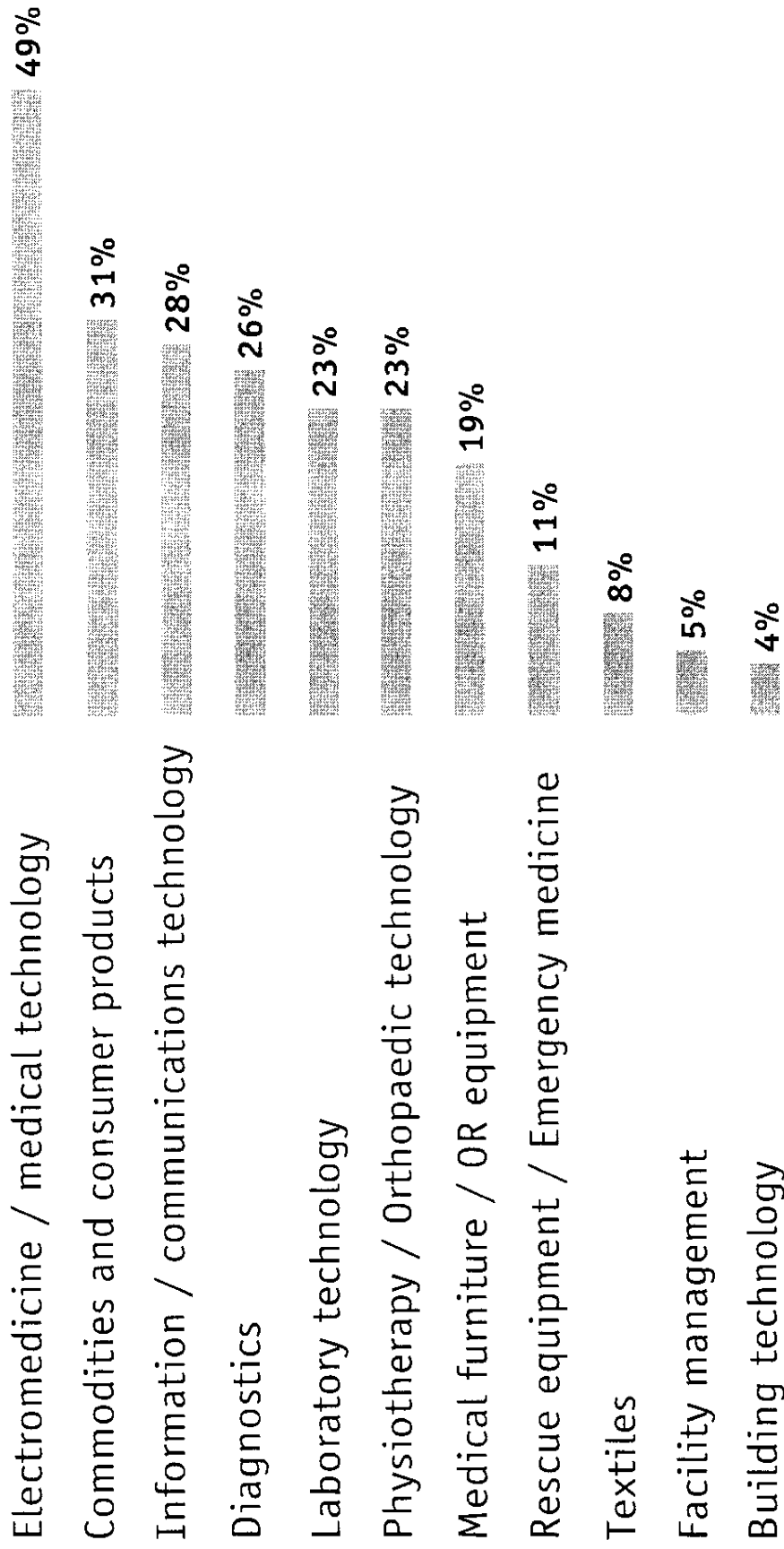
Reasons for visiting the show (multiple choice)



MEDICA: one show – many objectives

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Visitor areas of interest (multiple choice)



MEDICA: A wide range to interest the visitor

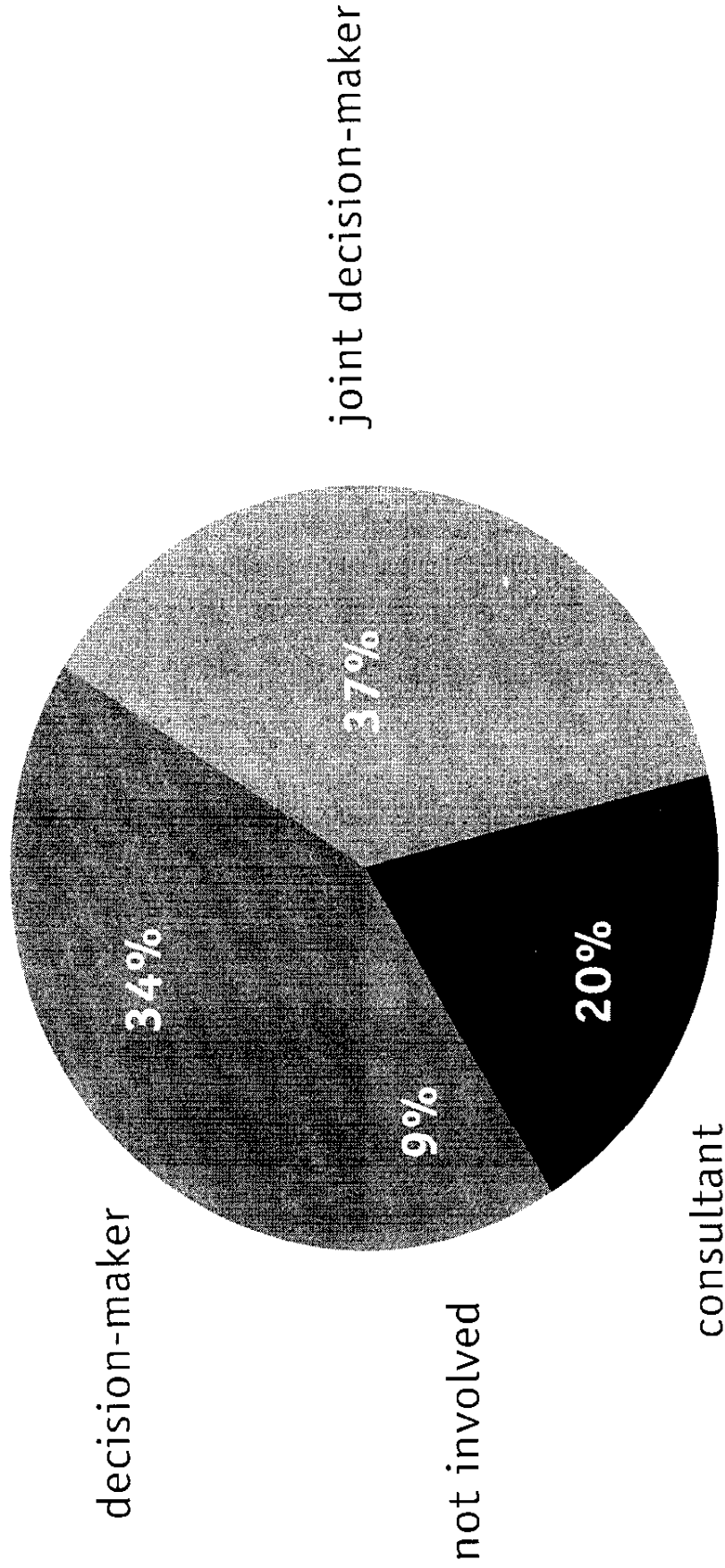
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Decision-making status of visitors

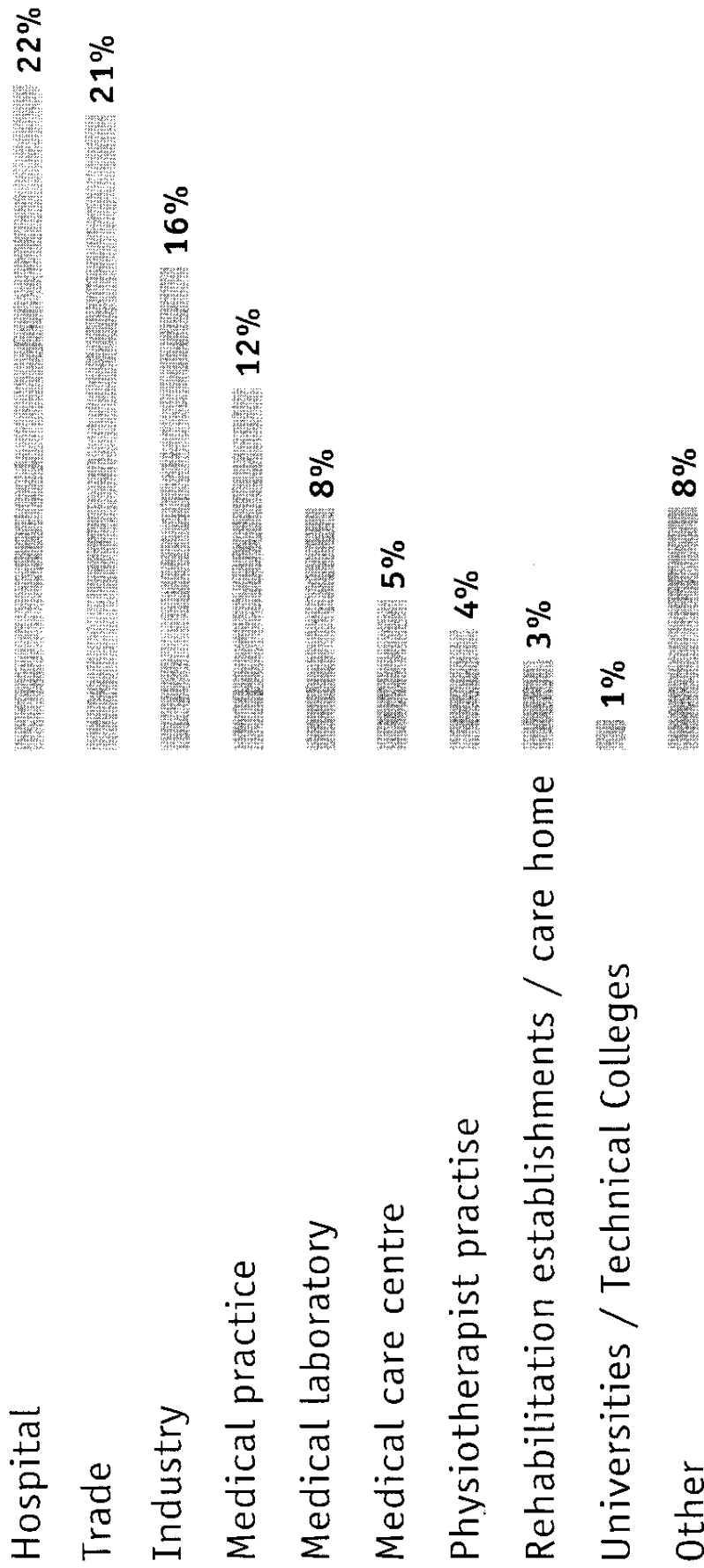
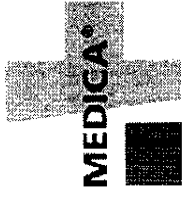


MEDICA: top-calibre decision-makers



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Work areas of visitors



MEDICA: Information medium for various professions









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Country of origin of visitors



| | |
|---|------------|
|  Germany: | 57% |
|  Abroad: | 43% |
|  Europe: | 57% |
|  Non Europe: | 43% |
|  Asia / Australia: | 61% |
|  Africa: | 10% |
|  Northamerica: | 16% |
|  South- and Central-America | 13% |

MEDICA: Exhibitors and visitors from all over the world

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Business





IMTS Fact Sheet

Name of Show: IMTS 2008 - International Manufacturing Technology Show

Show Sponsor: AMT-The Association For Manufacturing Technology

Show Dates: September 8-13, 2008

Show Location: McCormick Place, Chicago, IL USA



IMTS 2008 Show Dates:

SEPTEMBER

8-13

McCormick Place - Chicago, IL USA



About the Event:

IMTS 2008 is the 27th edition of the premier manufacturing technology show in North America. More than 1,500 exhibiting companies will occupy 1.2 million net square feet of exhibit space at the McCormick Place complex in Chicago, Illinois. IMTS is held every even-numbered year in Chicago and attracts more than 91,000 buyers and sellers from 119 countries.

Pavilions:

To help guide attendees to booths quickly and easily, we organize exhibits in Pavilions that are geared toward specific industries, technologies and solutions. Following is the list of Pavilions: Abrasive Machining/Sawing/Finishing; Controls & CAD/CAM; EDM; Gear Generation; Machine Components/Cleaning/Environmental; Metal Cutting; Metal Forming & Fabricating/Lasers; Quality Assurance; and Tooling and Workholding Systems.

Attendees:

Manufacturing industry professionals from the United States and from over 119 countries from around the world attend IMTS. They attend to see more than 15,000 new machine tools, controls, computers, software, components, systems and processes that can improve their efficiency. They will also gain valuable ideas and insights from over 1,500 of the worlds leading equipment producers. They come to look and they come to buy.

Exhibitors:

Over 1,500 exhibitors from the metalworking industry will display their products and productivity solutions at McCormick Place in Chicago covering 1.2 million net square foot of show floor. Leading manufacturers will display their equipment in the following product category pavilions: Metal Cutting: Contains everything from machining centers and assembly automation to Flexible Manufacturing Systems and lathes. Tooling & Work holding Systems: Features jigs, fixtures, cutting tools of all types and related accessories. Metal Forming & Fabricating/Laser: Home to all type of presses as well as laser systems, coil and strip handling equipment, heat treating and more.

Other pavilions at IMTS include Abrasive Machining /Sawing/Finishing; Controls & CAD-CAM; EDM; Gear Generation; Machine Components/ Cleaning/ Environmental and Quality Assurance.

IMTS 2008 Manufacturing Business and Technology Forum

"Where Technology and Business Connect" The IMTS Forum brings together experts from the industry to give you the most useful and up-to-date technical information available.

Program to be presented by five partners: AMT-The Association For Manufacturing Technology, Society of Manufacturing Engineers, Center for Automotive Research, American Society for Precision Engineering, MTConnect, Tooling U, and National Tooling & Machining Association. [Learn more.](#)

Show Registration Fees for IMTS 2008

Exhibits Only Registration

» [\\$25 on or before August 1, 2008](#)

» \$50 after August 1, 2008

To save money, take advantage of the special price given for groups. To qualify as a group, you must have 5 or more people from the same company, and everyone must register at the same time. Group registration is \$15.00/person.

Manufacturing Business and Technology Forum Registration

1. **Super Pass** - access to all conferences and the exhibit floor all week
 - o [\\$600 on or before August 1, 2008](#)
 - o \$700 after August 1, 2008
2. **Daily Pass** - access to all conferences on one day and to the exhibit floor all week
 - o [\\$400 on or before August 1, 2008](#)
 - o \$500 after August 1, 2008

» [Complete registration information](#)

» [Register NOW!](#)

Show Management

AMT - The Association For Manufacturing Technology
7901 Westpark Drive
McLean, VA 22102-4206 USA
<http://www.amtonline.org>

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CONNECTING GLOBAL TECHNOLOGY

International Manufacturing Technology Show: September 8-13, 2008 McCormick Place Chicago, IL
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AGRI TECH EXPO - 2008

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Fast Facts

| | |
|------------------------------|----------------------------------|
| Show Organizer (s): | canndid |
| Event Date (s): | Aug 15, 2008 - Aug 17, 2008 |
| Hours: | 10:00 am - 8:00 pm |
| Venue: | SRI SUBHALAKSHMI MAHAL |
| Address: | MUTHIALPET, M.G.ROAD,PONDICHERRY |
| No. of Exhibitors: | 100 |
| No. of Attendees: | 5000 |
| Exhibition Floor Size: (sqm) | 3000 |
| Phone: | 91 - 044 - 42034758 |
| Fax: | 91 - 044 - 42034758 |

Industry Focus

Agriculture

Products and Services Focus

agri equipments , machinery products and services

Summary

AGRI TECH EXPO - 2008 The objective of this expo is to bring together under one roof, the manufacturers, traders and distributors in the Agricultural community, so that they can showcase the latest range of products and services to the small and medium farming community from all over the country. AGRI TECH EXPO - 2008 is a perfect platform to educate farmers on the latest trends in agriculture both in terms of practice and technology and also it provides the awareness among the farming community on the natural resource such as land, water and also about the harmful effects of using chemical fertilizers in excess. ABOUT THE ORGANIZER CANNDID is formed as a group of young, dynamic and professional event organizers who have an extremely successful track-record of organizing exhibitions in Tamilnadu which have proved highly beneficial for the exhibitors and the visitors for sourcing of new customer contact and expert tie-ups with leading companies.

General Information

ABOUT PONDICHERRY Pondicherry is located on the coromandal coast, about 160 kms south of Chennai, lies the union territory of Pondicherry. It noticed for its peace and neat places. Pondy once colonized by the French. Till now it stands as a living memorial of the French culture in India. It is bounded by Bay of Bengal and other three sides by the South Arcot district of Tamilnadu. Agriculture is one of the most important occupations for the people of Pondicherry. About 45% of the total population depends directly or indirectly on farming. The main crop of this territory is paddy. The plantation wealth of the Pondicherry lies in Mahe region mainly. Crops like coconuts, condiments and spices are grown in

less quantity. Pulses, groundnut and chilies are other crops grown in Yanam. The cash crops like Sugarcane, cotton and groundnuts are now grown in various parts of the territory. Most of the areas are irrigated. The major sources of irrigation are tanks and tube wells. Milk production is another source of income for the rural people. It is organized by the co-operative societies located in different villages. Pondicherry is also successful in having a cooperative milk producers' society which pasteurizes the milk and distribute in the entire region. Fishing is another important occupation for the coastal people as the territory extends a length of 45 km of coastline. There are some 28 sea fishing villages in this region

Attendee Information

5000

Exhibitor Information

Agro Machineries / Equipments, Agro Processed Foods / Oils / Aquaculture Agri Education and Research, Sericulture Sericulture

Show Organizer Information

canndid [India]



Disclaimer: Please confirm dates and venues with organizers before attending shows.

Update Show

Related Trade Shows

More

- Amman International Motor Show Exhibition
- MIFB 2008 - The 9th Malaysia International Food & Beverage Trade Fair
- Venture Forum Peru 2008
- American Veterinary Medical Association Annual Convention
- All About Food Expo 2008

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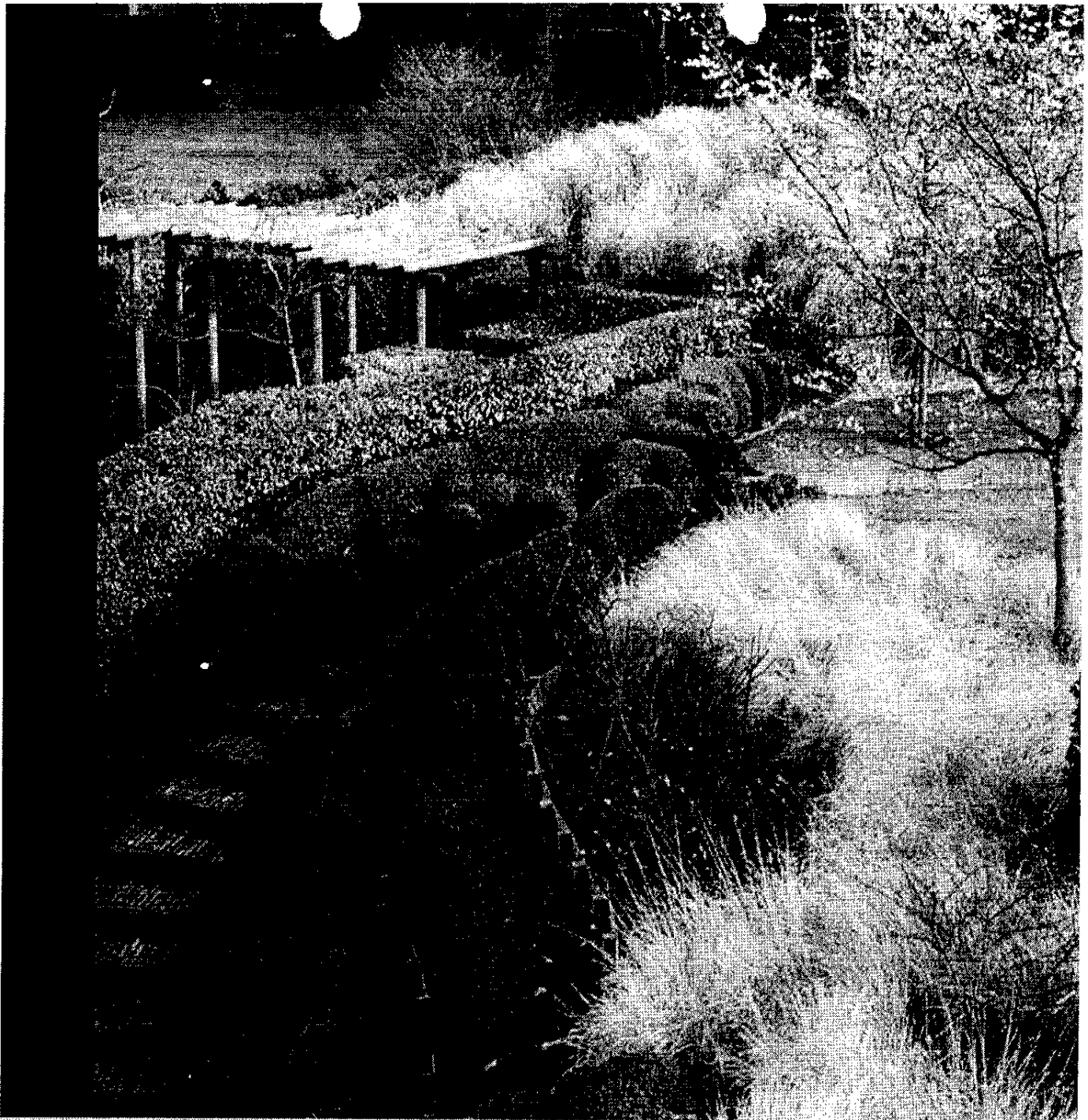
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Capgemini
CONSULTING TECHNOLOGY OUTSOURCING

 **Merrill Lynch**

World Wealth Report

2008

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To Our Readers,

In our 12th year evaluating what are considered to be the key indicators impacting the global high net worth marketplace, we are pleased to present the 2008 *World Wealth Report*. Together, Capgemini and Merrill Lynch utilize more than 20 years of collaborative experience to analyze the macroeconomic factors that drive and inhibit wealth generation and to better understand how they influence high net worth individuals (HNWIs) around the world.

By most standards, 2007 was a very eventful year—for the wealth management industry, and the entire global economy. The first half of 2007 consisted of steady worldwide growth, while the second half was marked by a sharp divergence between mature and emerging economies. The U.S. economic slowdown weighed heavily on key mature regions. However, strong performances in emerging markets boosted HNWI gains around the globe. Although real GDP and market capitalization, the two key drivers of wealth creation, were weaker than in 2006, world growth was strong in 2007 and drove solid increases in both HNWI populations and overall wealth.

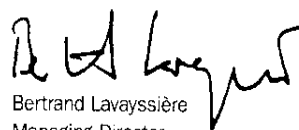
Our 2007 findings reveal that HNWIs assumed a more defensive approach to asset allocation in response to marked changes in economic environments. Steering away from some alternative investments, HNWIs favored safer options on more familiar grounds. As investor confidence rebounds, our expectation is that HNWIs will gravitate once again to less-conservative investments—particularly to the high returns and growth opportunities offered in emerging markets.

This year's Spotlight section focuses on the growing need for wealth management firms to create more customized infrastructure and service models to better target global HNWI growth markets. To meet the needs of increasingly diverse HNWI populations, leading firms are assessing their capabilities and tailoring key delivery models to ensure that service is aligned with the unique needs of clients in any given market.

We are pleased to present you with this year's Report and hope that you will find continued value in our latest insights.



Robert J. McCann
Vice Chairman and President
Global Wealth Management
Merrill Lynch & Co., Inc.



Bertrand Lavayssière
Managing Director
Global Financial Services
Capgemini

State of the World's Wealth

HNWI SECTOR GAINS IN 2007

- **10.1 million individuals worldwide held at least US\$1 million in financial assets, an increase of 6.0% over 2006**
- **Global HNWI wealth totaled US\$40.7 trillion, a 9.4% gain from 2006, with average HNWI wealth surpassing US\$4 million for the first time**
- **The Ultra-HNWI “wealth band” experienced the strongest growth, gaining 8.8% in population size and 14.5% in accumulated wealth**
- **Emerging markets, especially those in the Middle East and Latin America, scored the greatest regional HNWI population gains**
- **India, China and Brazil had the highest HNWI population growth at the country level**
- **HNWI financial wealth is projected to reach US\$59.1 trillion by 2012, advancing at an annual growth rate of 7.7%**

2007: A Story of Two Halves

For the global economy, 2007 was a transitional year that began and ended with sharply opposing macroeconomic environments: Momentum that was carried over from 2006 sustained unabated growth in the early months. By the latter end, heightened uncertainty and instability marked the deep change that was underway.

Overall, market performances were solid in 2007. However, closer analysis of the key drivers and inhibitors of wealth reveals how the many fundamental changes that took place over the course of the year led to deteriorating economic conditions in key markets, including the United States and several mature European nations. Evenly split, the two halves of the year tell very different stories: steady global growth in the first six months, followed by sharply diverging paths between mature and emerging economies in the second half.

In early 2007, strong economic gains spurred impressive performances in equity markets and various investment products, reflecting high levels of investor confidence. Robust growth in emerging markets, driven by high commodity prices and rising domestic demands, supported solid growth in mature economies. Stock markets worldwide performed well into the summer, led by Latin America and Emerging Asia, which saw roughly 25% and 17% growth, respectively, through July.¹ A variety of investment products performed well during the first half of the year; for instance, total announced private equity deals worldwide were on pace to shatter their 2006 record.²

The second half of 2007, however, revealed a distinct and growing divergence between mature and emerging economies—with the

advantage going to emerging nations. Whether hobbled by the downturn taking hold in the United States or challenged by the slowed growth of a major trading partner, with few exceptions, the performances of mature economies weakened significantly in the closing months of the year. In the European Union, for example, growth was dampened by a confluence of key market forces: slowing domestic consumer spending, a result of high levels of personal debt amid tightening credit conditions; a drop-off in exports brought on by easing demand in the United States, which received nearly 24% of E.U. goods and services shipped abroad; and an appreciating euro.³ Growth slowed among other global powers as well: In Japan—the world's second-largest economy—a decline in housing investment and low levels of consumer confidence took their toll.⁴ In essence, a long period of “easy money” in mature economies was routed by financial and credit market turmoil.

By contrast, emerging markets proved resilient and posted robust gains in the second half of 2007, even as uncertainty grew in mature markets. Building on their core competency, export-driven growth, many emerging economies converted sharp increases in energy and commodity prices into sources of high profitability and significant growth. Both GDP and market capitalization gains, particularly in Brazil, Russia, India and China—the BRIC nations—were strong, capping another impressive year for HNWI growth and investment opportunity. Given these nations' more stable consumption habits, rising domestic demand and healthy business environments, the slowing United States economy, which accounts for 21% of global GDP,⁵ did not appear to significantly compromise their economic growth in 2007.

¹ Latin America and Asia MSCI Emerging Market Indexes, accessed March 6, 2008

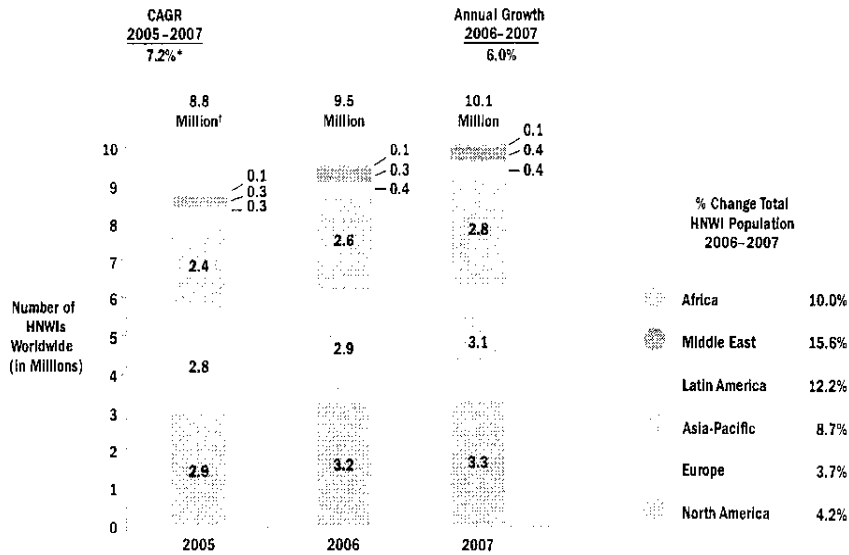
² “For Deal-makers, Tale of Two Halves: Year-end Review of Markets & Finance,” *The Wall Street Journal*, January 2, 2008

³ The Economist Intelligence Unit, “European Union Regional Overview,” January 2008

⁴ The Economist Intelligence Unit, “Japan Country Report,” January 2008

⁵ Alex Patelis, “Global Macro Outlook for 2008,” Merrill Lynch, March 5, 2008

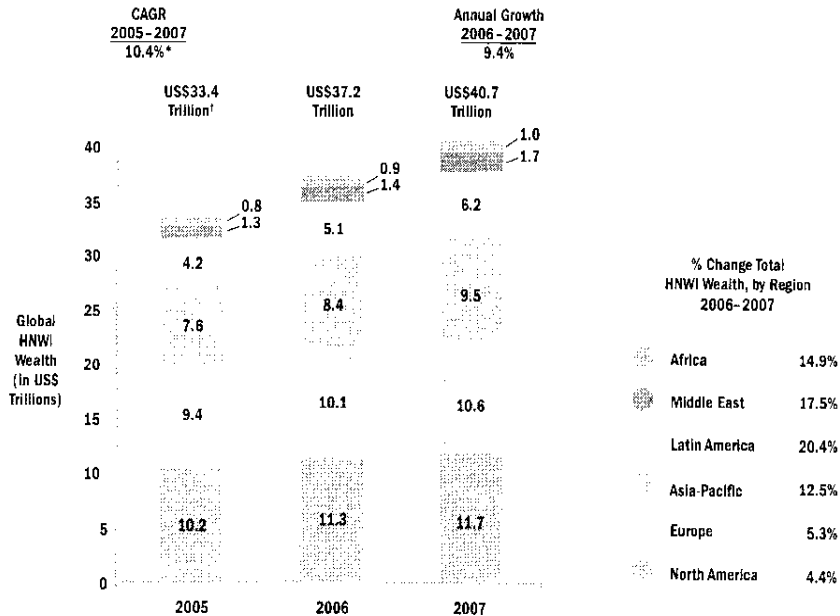
Figure 1. | **HNWI Population, 2005 – 2007 (by Region)**
(In Millions)



Note: High Net Worth Individuals (HNWIs) hold at least US\$1 million in financial assets, excluding collectibles, consumables, consumer durables and primary residences

Ultra-High Net Worth individuals (Ultra-HNWIs) hold at least US\$30 million in financial assets, excluding collectibles, consumables, consumer durables and primary residences

Figure 2. | **HNWI Wealth Distribution, 2005 – 2007 (by Region)**
(US\$ Trillions)



† Bahrain and Qatar were added to model for years 2005 onward

* These CAGRs have been adjusted to account for the inclusion of Bahrain and Qatar in the model for years 2005 onward

Note: All chart numbers are rounded
Source: Capgemini Lorenz curve analysis, 2008

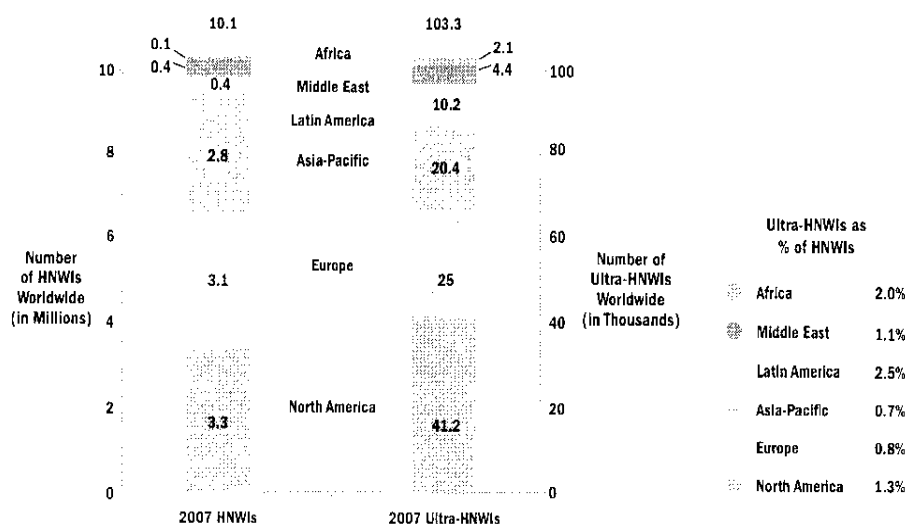
Despite these diverging trends, global growth remained solid for the year, in terms of both real GDP and market capitalization—two primary drivers of wealth generation. Strong worldwide gains in the first half of 2007 boosted HNWI growth across the globe; while in the second half, resilient emerging economies offset slowdowns in key mature economies.

Strong, yet Milder, Growth in 2007

Following the unprecedented level of world GDP growth in 2006, global performances in 2007, on average, decelerated slightly and returned to levels in line with those of 2005. The global HNWI population grew by 6.0%—to more than 10 million individuals for the first time—compared with 8.3% growth in 2006. HNWI population gains were highest in the Middle East, Eastern Europe⁶ and Latin America, expanding by 15.6%, 14.3% and 12.2%, respectively. These growth rates far exceeded those of more mature economies, in large part stemming from impressive gains in commodity exports and growing international acceptance of emerging financial centers as global players.

In 2007, global wealth continued to consolidate among the world's HNWIs. Last year, total HNWI wealth grew by 9.4%, to US\$40.7 trillion—a slight deceleration from the 11.4% growth witnessed in 2006—while the number of HNWIs themselves advanced by only 6.0%. The largest regional gains in wealth were in Latin America and the Middle East, up by 20.4% and 17.5%, respectively. For their part, Ultra-HNWIs posted the highest gains of any “wealth band,” both in population, up 8.8%, and total assets, up 14.5%.

Figure 3. } **Geographic Distribution of HNWIs and Ultra-HNWIs, 2007 (by Region)**



Source: Capgemini Lorenz curve analysis, 2008

Emerging Markets Lead the Way

While many factors drive or inhibit HNWIs' financial prospects from year to year, the most significant levers are real GDP growth, domestic savings rates and market capitalization performances. In 2007, the global economy grew by 5.1%,⁷ down slightly from the 5.3% global growth recorded in 2006. The highest-growth regions in 2007 included Eastern Europe, Latin America and Asia-Pacific—where gains in emerging nations were in marked contrast to the slowdowns taking place in more mature economies.

In the United States, real GDP growth in 2007 eased to 2.1%,⁸ down from 2.9% in 2006. Although growth rates reached 3.8% and 4.9%, respectively, in the second and third quarters,⁹ a slowdown in the fourth quarter weighed heavily on the yearly average—the compounded result of a cooling housing market, the destabilizing influence of losses from real estate-related securities and the tightening of credit conditions.

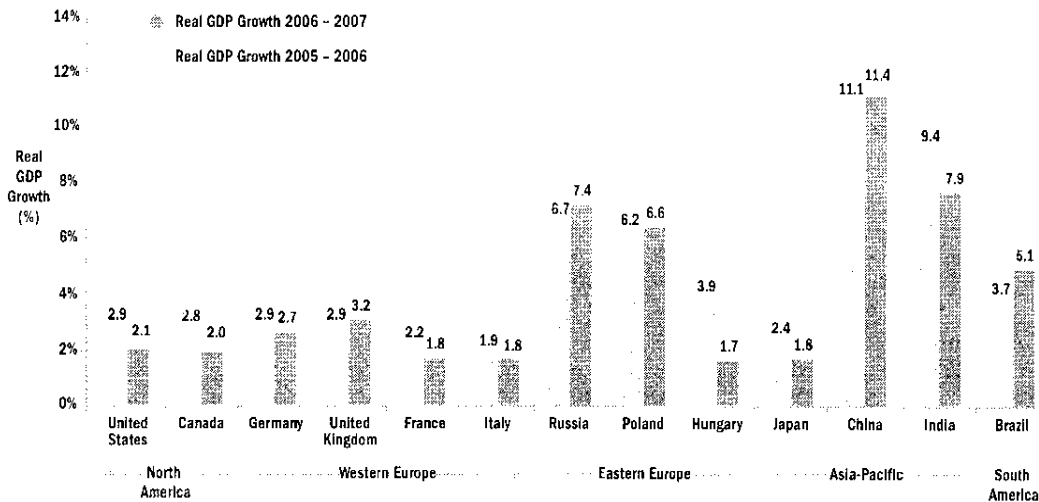
⁶ Eastern Europe includes Czech Republic, Hungary, Poland, Romania, Russia, Slovak Republic, Slovenia, Turkey and Ukraine

⁷ The Economist Intelligence Unit, Country Reports, January 2008

⁸ The Economist Intelligence Unit, "United States Country Report," January 2008

⁹ Bureau of Economic Analysis, National Economic Accounts, accessed February 21, 2008

Figure 4. Real GDP Growth in Select Economies, 2005 – 2007



Note: 2005 – 2006 Real GDP Growth rates may vary from figures in the 2007 *World Wealth Report*, according to Economist Intelligence Unit updates
 Source: The Economist Intelligence Unit, January 2008

In 2007, average real GDP growth rates for the member nations of the Organisation of Economic Cooperation & Development (OECD) and the European Union (EU-27) decelerated, although growth trends varied by country. Mature economies, such as those of Germany, France, Italy, Canada and Japan, experienced slower growth in 2007. The United Kingdom was a notable exception, with real GDP growth of 3.2%,¹⁰ up from 2.9% in 2006. Despite widespread slowdowns in the fourth quarter, mature markets did lend support to the 5.1% global growth rate in 2007, given that average GDP growth in emerging markets was just under 6.0%.¹¹

Most emerging economies continued to display impressive real GDP growth in 2007—boosted largely by thriving export sectors and heightened domestic demand. Despite weaker figures than in 2006, Argentina and Venezuela led Latin America with real GDP growth rates of 8.4% and 7.8%,¹² respectively, thanks to booming oil and commodity exports. Sharp increases in oil prices, highlighted by the 57.2% gain on crude oil futures,¹³ greatly boosted growth in oil-exporting nations, especially those concentrated in the Middle East. In Asia-Pacific, growth in the Philippines accelerated to 6.9%,¹⁴ as greater total consumption¹⁵ aided a recovery of fixed capital investment. In Eastern Europe, Poland and the Czech Republic were among the top performers, with GDP gaining through strong private consumption.

BRIC Nations Are at the Forefront of Global Growth

In 2007, the BRIC nations continued their roles as pivotal economies, building on relationships with their mature trading partners and capitalizing on the growth of their emerging counterparts. As mature economies slowed, the BRIC nations turned in particularly strong performances. They posted in aggregate the greatest gains in HINWI populations, 19.4%, and accumulated wealth, 25.1%, driven both by impressive economic gains and robust market capitalization growth. As a result of these record-setting performances, the BRIC nations are rapidly winning fiscal credibility and increasingly playing a central role on the world stage.

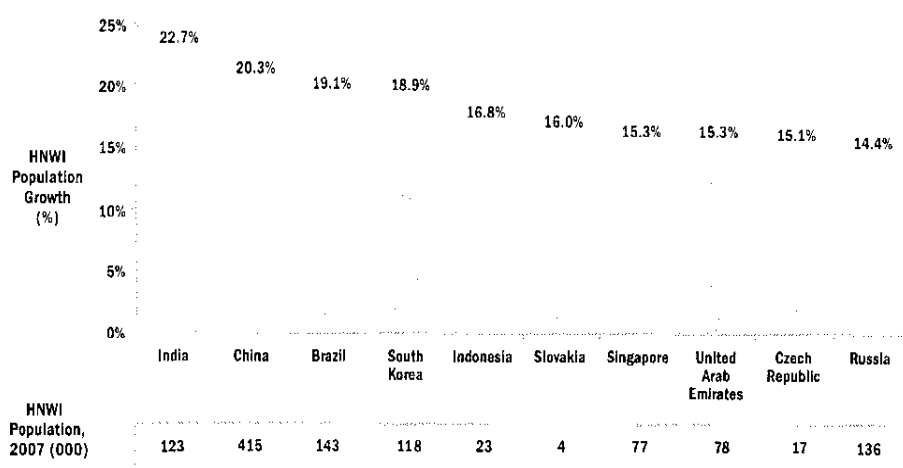
¹⁰ The Economist Intelligence Unit, "United Kingdom Country Report," January 2008
¹¹ Capgemini analysis, "Emerging Markets" refers to those countries included in the MSCI Emerging Market Index
¹² The Economist Intelligence Unit, "Argentina and Venezuela Country Reports," January 2008
¹³ "Year-end Review of Markets & Finance," *The Wall Street Journal*, January 2, 2008
¹⁴ The Economist Intelligence Unit, "Philippines Country Report," January 2008
¹⁵ Total Consumption = Private Consumption + Public (Government) Consumption

Today, the greatest single impediment to the BRIC nations' continued growth is the high level of inflation now sweeping the globe and most pronounced in emerging markets. In Russia, year-over-year money-supply growth in excess of 50% has kept inflation rates propped at around 12%.¹⁶ Similar levels of excess liquidity are evident in China and across the Middle East. With BRIC nations' inflation rates averaging roughly 7.5% at year-end,¹⁷ it is increasingly clear that this is the challenge most likely to shape 2008 outlooks.

In 2007, India led the world in HNWI population growth, rocketing ahead 22.7% and exceeding gains of 20.5% in 2006. Boosted by market capitalization growth of 118%¹⁸ and real GDP growth of 7.9%, HNWI sector gains reached all-time highs. Although the country's real GDP growth decelerated from 9.4% in 2006, current growth levels are considered more stable and sustainable. Market capitalization growth more than doubled from roughly 50%, accounting for greater HNWI gains.¹⁹ India's two largest exchanges, the Bombay Stock Exchange and the National Stock Exchange of India, benefited from rapidly expanding initial public offering (IPO) markets and heightened international interest; by the end of 2007, they ranked among the world's top-12 exchanges in total market capitalization terms.²⁰ Once recognized as a manufacturing superpower, characteristic of a more nascent market, much of India's recent growth has been driven by the technology, financial services, property, construction and infrastructure sectors. Growth in these arenas is indicative of the developing state of the Indian economy relative to other high-growth players.

China ranked second in HNWI population growth, advancing 20.3% in 2007, more than two-and-a-half times greater than its 2006 pace. Market capitalization and real GDP growth rates exploded last year, at 291%²¹ and 11.4%, respectively. Fueled by impressive price increases and strong IPO activity, the Shanghai Exchange grew to be the sixth-largest exchange in the world in terms of total market capitalization.²² Yet, despite rapid growth in its financial services sector, China's economy still is built on its manufacturing capacity. This helps explain why its HNWI population growth is slower than that of India—and why the gap continues to widen between China's richest citizens, a group with a particularly high concentration of wealth, and the middle-class, which continues to grow in size but remains largely unable to cross the HNWI threshold. Nonetheless, 2007 HNWI growth in China greatly exceeded its 2006 performance of 7.8% growth, reflecting strong economic fundamentals and great potential for future gains.

Figure 5. HNWI Population Growth, 2006 – 2007 (by Market)



Note: Growth rates and absolute HNWI numbers are rounded
Source: Capgemini Lorenz curve analysis, 2008

¹⁶ Bloomberg, accessed March 2008
¹⁷ Capgemini analysis, data derived from Economist Unit Country reports, January 2008
¹⁸ World Federation of Exchanges, "Focus Report," January 2008
¹⁹ Capgemini/Merrill Lynch, 2007 *World Wealth Report*
²⁰ World Federation of Exchanges, "Focus Report," January 2008
²¹ *Ibid.*
²² *Ibid.*

The HNWI population in Brazil grew an impressive 19.1% last year, up significantly from 10.1% growth in 2006. Riding a wave of robust market capitalization growth of 93%³¹ and real GDP growth of 5.1%, Brazil enjoyed the third-highest HNWI growth rate in 2007 among the countries analyzed. At the same time, net private capital flows to Latin America doubled in 2007, contributing to the Bovespa Stock Exchange's fourth-place ranking among the world's largest IPO markets and 7.2% market-share gain.³⁴ This lent support to the establishment and global integration of the Brazilian financial system. With well-developed agricultural, mining, manufacturing and service sectors, and as a major exporter of raw materials, energy products and other commodities, Brazil reaped the benefits of sharp increases in food and energy prices throughout last year. Further, Brazil is the world's largest exporter of ethanol,³⁵ giving it an important stake in the alternative energy market, which is gaining popularity as oil and conventional energy prices continue to rise around the world.

Russia was also home to one of the world's 10 fastest-growing HNWI populations, despite growth decelerating from 15.5% in 2006 to 14.4% in 2007. Solid gains in 2007 of 37.6%³⁶ in market capitalization and 7.4% in real GDP³⁷ were testaments to the growing international interest in the country as a global player. Indeed, despite serious problems, such as a critical lack of modern infrastructure, environmental degradation and a declining population, the ongoing development of external relationships is likely to improve the economy's fundamentals. Moscow is emerging as a respected and global financial center, highlighted by its playing host to the world's top-two IPOs in 2007. Notably, Russia is currently the world's largest exporter of gas and its second-largest producer of oil,³⁸ which allowed it to capitalize on sharp increases in energy prices through its exports of natural resources.

Domestic Savings Play Key Role in Wealth Accumulation

Domestic savings rates, important by-products of GDP and total consumption levels, are key drivers of wealth accumulation in a given year.

In 2007, most European nations saw domestic savings climb, a likely result of high and rising interest rates throughout 2006 and much of 2007. Among countries experiencing a drop-off in savings, most recorded greater decelerations in GDP growth than fluctuations in consumption behavior, underscoring the impact slowdowns had on mature markets. The United States had one of the world's lowest savings rates in 2007, at 10.9% of GDP, down from 11.4% in 2006, due to slowed GDP growth and increases in consumer and public spending. Also, the U.S. Federal Reserve held the target federal funds rate quite high, at 5.25%,³⁹ through July. However, indications of a slowing economy led to several sharp rate cuts during the remainder of 2007, further contributing to a decline in savings.

The characteristic rapid development of emerging economies goes hand in hand with very high levels of growth and consumption relative to their mature counterparts. In 2007, the savings rates of most emerging economies surpassed the benchmark average of the Group of Seven (G7) nations: 20.2% of GDP—a trend representative of the differences between emerging and mature economies.

Across the globe, key interest rates remained high through much of 2007. However, few central banks pursued rate cuts toward year-end. Given that monetary policy maintains the balance between growth and inflation, banks that cut rates in the second half of 2007, such as the U.S. Federal Reserve and the Bank of England, pursued economic stimulation as a priority, while most others were concerned with the inflationary pressures associated with rising food and energy prices.

Market Capitalization Growth Explodes in Emerging Markets

Given that HNWIs hold a significant portion of their wealth in stock markets, market capitalization performance is an important determinant of HNWI wealth generation. Representative of global market performances, the various Dow Jones World Indexes³⁰ experienced moderate returns in 2007, averaging 6.8%, well below the 17.3% average struck in 2006.³¹ As a result, stock market gains did not have as positive an impact on HNWI wealth generation last year as they did in 2006.

³² World Federation of Exchanges, "Focus Report," January 2008

³⁴ "World's top IPO worth \$8B," *As a Pulse*, December 27, 2007

³⁵ "Brazil Foreign Min: Trade Deal for Environment Needs Ethanol," *Dow Jones International News*, January 26, 2008

³⁶ Russia Trading System, <http://www.rts.ru/en>, accessed April 2008

³⁷ The Economist Intelligence Unit, "Russia Country Report," January 2008

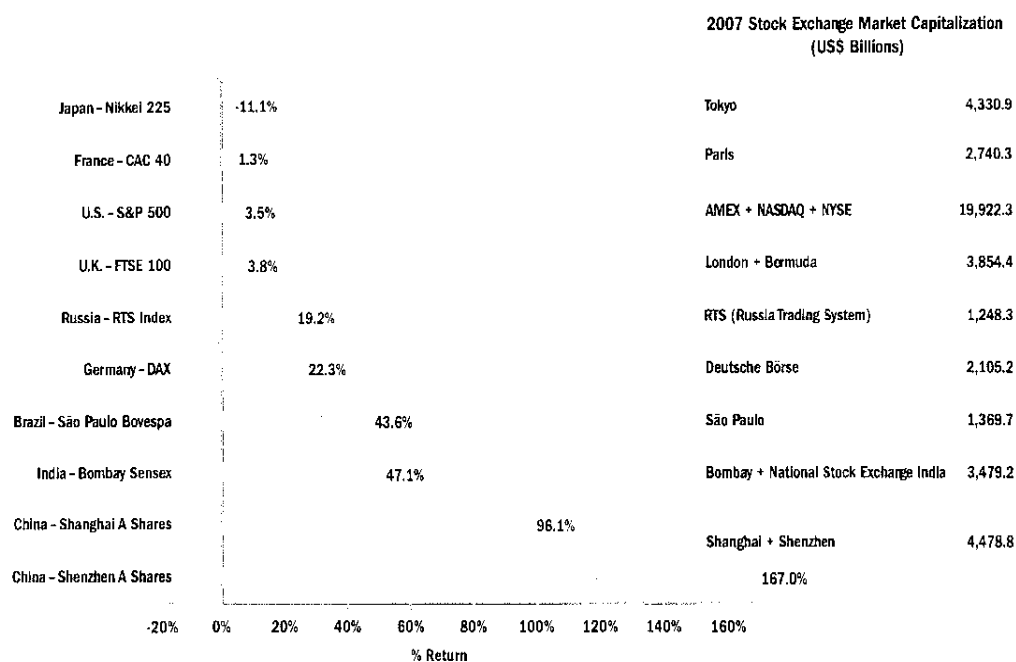
³⁸ "Gas version of OPEC fails to ignite," *The Australian*, February 4, 2008

³⁹ U.S. Federal Reserve, www.federalreserve.gov, accessed February 12, 2008

³⁰ The Dow Jones World indexes consist of the large-cap, mid-cap and small-cap segments

³¹ Capgemini analysis using reported figures of each Dow Jones World Index

Figure 6. | Returns on Global Stock Market Indexes, 2007



Note: Stock market capitalization values include all companies listed on the exchange.
 Source: "Year-End Review of Markets & Finance," *The Wall Street Journal*, January 2, 2008; Russia Trading System, <http://www.rts.ru/en>, accessed April 2008

In 2007, the divide between market capitalization growth in mature and emerging economies was significantly more pronounced than in previous years. Traditional United States, European and Asian stock indexes experienced moderate growth, while many emerging markets extended winning streaks of robust gains. In the United States, the Dow Jones Industrial Average and S&P 500 fell considerably, dropping from their respective growth rates of 16.3% and 13.6% in 2006 to 6.4% and 3.5% in 2007. Meanwhile, the NASDAQ saw its growth accelerate slightly, from 9.5% to 9.8%, supporting still-solid performances.³²

At the same time, most major European and Asian indexes were contained to low-single-digit growth, with the world's worst performer, the Nikkei 225, contracting 11.1%.³³ The German DAX, Europe's best performer, was the only major traditional index to outpace its 2006 performance and sustain double-digit growth. Although market capitalization growth rates varied widely among the traditional exchanges of mature markets, from Hong Kong's 54.8% growth to Tokyo's 6.1% contraction,³⁴ 2007 performances across the board were consistently weaker than 2006 levels.

While growth among traditional stock exchanges slowed in 2007, it exploded in several emerging markets' exchanges and placed them among the largest in the world. The Shanghai and the Shenzhen Stock Exchanges experienced the highest growth worldwide, at 303% and 244%,³⁵ respectively. While they did host China's very active IPO market, raising US\$64.5 billion in proceeds, growth in the two exchanges was mostly fueled by organic price increases. For example, new stock issues rose an average 191% on their first day of trading.³⁶ India's Bombay Exchange and the National Stock Exchange of India followed closely on China's heels, with respective growth rates of 122% and 115%.³⁷ Indian IPO activity in 2007 ranked fifth in the world in number of issues (95) and seventh in terms of total proceeds (US\$8.3 billion). However, market capitalization growth was driven mostly by price increases in the very active financial services, property, construction and infrastructure sectors.³⁸

³² "Year-end Review of Markets & Finance," *The Wall Street Journal*, January 2, 2008; Yahoo!Finance, accessed February 13, 2008

³³ Yahoo!Finance, accessed February 13, 2008

³⁴ World Federation of Exchanges, "Focus Report," January 2008

³⁵ *Ibid.*

³⁶ "RMB 447 bln raised from IPOs on China's stock market in 2007," *Xinhua News Agency*, January 2, 2008

³⁷ World Federation of Exchanges, "Focus Report," January 2008

³⁸ "India's boom spawns new wealth," *The Australian*, February 8, 2008

Record Wave of IPOs, Other Investments Draw HNWIs to Emerging Markets

Emerging markets made significant contributions to record-level worldwide IPO activity in 2007. Overall, more than 1,300 IPOs raised roughly US\$300 billion during the year,³⁹ with emerging markets capturing seven of the top-10 issues. The BRIC nations exhibited particular strength in this arena, accounting for 39% of global IPO volume in 2007, up from 32% in 2006.⁴⁰ Russian banks Sberbank and VTB raised nearly US\$17 billion together and ranked first and second in the 2007 race for largest public offerings. Brazil's Bovespa, the largest exchange in Latin America, ranked fourth in IPO activity among global exchanges, riding a 7.2% gain in market share as the volume of IPOs in Brazil nearly tripled.⁴¹ The 2007 offerings of China CITIC Bank and China Railway ranked among the world's largest, while PetroChina's Shanghai A-share offering, which raised US\$8.94 billion, was the largest-ever issuance of its kind.⁴² In India, IPO proceeds increased roughly 80% during the year, led by realty giant DLF's US\$2.3 billion issue.⁴³

Along with heightened market interest and activity, net private capital flows to emerging markets increased in 2007. While China attracted the largest absolute amount of private capital in 2007 at a country level, drawing in roughly US\$55 billion, Emerging Europe was the most popular regional destination, attracting US\$276 billion—enough to put it ahead of last year's leader, Emerging Asia.⁴⁴ The 20% drop in private capital flows experienced by Emerging Asia in 2007, in part, reflects that equity flows helped policymakers accumulate foreign exchange reserves, which reached roughly US\$1 trillion in China alone.⁴⁵ Notably, private capital flows to Latin America more than doubled to US\$106 billion in 2007, from US\$52.6 billion a year earlier.⁴⁶ Financing needs are expected to grow in countries such as Russia, where current accounts will likely become deficits, despite limitations on foreign-financing and other inflow constraints.

Hedge funds also performed well in 2007—another investment arena that reflected the growing strength of emerging markets. Although down slightly from 2006, average hedge fund gains in 2007 reached 12.6%.⁴⁷ On average, hedge fund returns outperformed most traditional stock indexes in 2007, boosted by 20.3% average gains in emerging markets.⁴⁸ In recent years, an increasing proportion of hedge fund assets (estimated at US\$1.7 trillion⁴⁹) has come from institutional investors, who account for the majority of the nearly US\$195 billion in net new money invested in 2007,⁵⁰ versus individual wealthy clients—shifting the main driver of the industry's growth.

Last year, venture capitalist fundraising and investing reached their highest levels since 2001, fueled largely by the growth of capital-intensive sectors, such as life sciences and clean technology. In 2007, 235 funds raised nearly US\$35 billion—only a 2.6% increase from 2006 in the number of funds, but a 9.4% increase in raised capital.⁵¹ In targeting life sciences and clean technology, venture capitalists recognized a market opportunity with great potential—driven by high food and energy prices. In fact, the renewable energy sector hosted record IPO issuances last year, led by the US\$6.5 billion IPO of a Spanish utilities group, Iberdrola Renovables, and the US\$1.2 billion IPO of Brazilian sugar and ethanol producer Cosan.⁵² Overall, total investment in clean technology increased 35%, to US\$117 billion, in 2007, exceeding expectations and helping drive immense growth in the sector—illustrated by numerous clean technology benchmark indexes gaining more than 50% for the year.⁵³

Mature Economies Slow as Market Volatility Rises, Credit Tightens

The downturn in the United States, whose effects, by and large, were limited to other mature economies—as evidenced by slowed GDP growth and weak equity market performances in parts of Europe and Asia—was fueled by three main factors: a cooling housing market, tightened credit availability, and greater volatility and price declines in equity markets. At the source of the problems, the negative wealth effect of falling home prices threatened to curtail consumers' spending and their ability to borrow against their homes' value. Meanwhile, declining home values also reduced banks' collateral and led to tighter lending standards—and, ultimately, to a rise in mortgage payment delinquency rates and, inevitably, home foreclosures. These, in turn, raised the level of risk associated with real estate-related

³⁹ "Year-end Review of Markets & Finance," *The Wall Street Journal*, January 2, 2008.

⁴⁰ Rachel Morajee, "Emerging markets push IPOs to record," *Financial Times*, December 21, 2007.

⁴¹ *Ibid.*

⁴² Conrad Tan, "Global IPOs raise record US\$," *The Business Times Singapore*, December 19, 2007.

⁴³ *Ibid.*

⁴⁴ Institute of International Finance, "Capital Flows to Emerging Market Economies," October 21, 2007.

⁴⁵ International Monetary Fund estimate as of December 2007.

⁴⁶ Institute of International Finance, "Capital Flows to Emerging Market Economies," October 21, 2007.

⁴⁷ Credit Suisse/Tremont Hedge Index, www.hedgeindex.com, accessed February 15, 2008.

⁴⁸ Emerging Market Credit Suisse/Tremont Hedge Index, www.hedgeindex.com, accessed February 15, 2008.

⁴⁹ Gregory Zuckerman, "Hedge funds weather stormy year," *The Wall Street Journal*, January 2, 2008.

⁵⁰ Margot Patrick, "Hedge fund investors to shed light on industry in new guide," *Dow Jones International News*, January 30, 2008.

⁵¹ Thomson Financial & National Venture Capital Association, "2007 Venture Fundraising," January 14, 2008.

⁵² Rachel Morajee, "Emerging markets push IPOs to record," *Financial Times*, December 21, 2007.

⁵³ National Venture Capital Association and PricewaterhouseCoopers, "2007 Venture Capital Investing," January 21, 2008.

loans, particularly in the subprime segment (loans made to borrowers with poorer credit ratings), and reduced the market values of mortgage-backed securities and other similar assets. As a result, investment institutions involved with the sector absorbed multibillion-dollar write-downs, heightening uncertainty among investors and leaving equity markets jittery. Liquidity constraints resulting from these losses were exacerbated by the tightening of credit markets, quickly evident among many financial products and asset types, such as collateralized debt and loan obligations, asset-backed commercial paper, auction rate securities, liquidity puts, financial insurers and structured investment vehicles.⁵⁴ Ultimately, this chain of events impacted both consumers and institutions, impeding their ability to maintain liquidity and operate businesses.

In line with housing market downturns, REIT indexes incurred significant losses globally in 2007 after posting robust gains in 2006. Relatively stagnant performances in the first half of the year were supported by privatization efforts, whereas tighter credit conditions weighed on activity in the second half. Both the Dow Jones Equity REIT Index (U.S.) and the Dow Jones Wilshire Global REIT Index lost approximately 25% over the course of 2007—illustrative of global declines in real estate prices and devaluations of mortgage-related securities.⁵⁵

In the second half of 2007, worldwide equity market performances reflected the divergence between mature and emerging markets. The MSCI Global Indexes recorded 0.1% and 3.2% contractions in Europe and the United States, respectively, in the second half of the year, versus respective gains of 10.4% and 6.3% in the first half.⁵⁶ By contrast, the Emerging Market MSCI Global Indexes excelled—led by Latin America in the first half of 2007, which gained 25.3% through the end of June, and the BRIC nations in the second half, up an explosive 34.1% between July and December.⁵⁷

The repercussions of equity market losses in mature economies reverberated throughout international credit markets in the second half of 2007. One U.S. Federal Reserve Board survey⁵⁸ indicated the extent of tightening lending practices: About 30% of respondents reported that credit standards “tightened somewhat” for firms of all sizes, while 40% of respondents claimed the cost of credit lines and the premiums charged on riskier loans did so as well. Roughly 8% of respondents felt premiums charged on riskier loans “tightened considerably.”

The economic slowdown in the United States drove a severe depreciation of the U.S. dollar against most major currencies worldwide. Notably, the dollar fell 10.5%, 15.8% and 17.0%, respectively, relative to the euro, the Canadian dollar and the Brazilian real.⁵⁹ A combination of levers—including foreign players’ loss of confidence in both the value of the U.S. dollar and the country’s overall economic strength, rising concerns of inflationary pressures, and the U.S. Federal Reserve’s decision to stimulate economic growth rather than contain inflation—all put sustained downward pressure on the U.S. dollar’s value.

Fundamental Problems Spur the U.S. Downturn

By general consensus, August 2007 marked the beginning of the economic slowdown in the United States. However, several fundamental problems, which originated years earlier, exacerbated the downturn’s impact. For instance, markets were seriously jolted by the collapse of several hedge funds; efforts by Countrywide Financial Corp.—the country’s top mortgage lender—to avoid insolvency by drawing down US\$11.5 billion from credit lines; and coast-to-coast home foreclosures, up by a staggering 93% year-over-year in July.⁶⁰ Yet, it seems likely that better control of issues such as the overextension of consumers and housing markets, as well as high levels of securitization, could have mitigated some of the repercussions of a downturn.

While most pronounced in the United States, unsustainable spending behavior was also evident in several other mature economies in 2007, namely in Australia, the United Kingdom and several other European nations, including Finland and Norway. Near-zero household savings rates in each of these countries, in comparison with the healthier savings rates in other economies, such as France (13.1%), Germany (11.1%) and Italy (6.8%),⁶¹ that also experienced slowed GDP growth, in part, highlight the evident consumer overextension.

⁵⁴ Allan Sloan, “On the brink of disaster,” *www.cnnmoney.com*, March 31, 2008

⁵⁵ Dow Jones REIT Indexes, *www.djindexes.com*, accessed February 15, 2008

⁵⁶ USA and Europe MSCI Global Indexes, *www.msci.com*, accessed March 5, 2008

⁵⁷ Latin America and BRIC Emerging Market MSCI Global Indexes, *www.msci.com*, accessed March 5, 2008

⁵⁸ U.S. Federal Reserve Board, “Senior Loan Officer Opinion Survey on Bank Lending Practices,” January 2008

⁵⁹ *www.ozforex.com*, accessed February 2008

⁶⁰ “The US Credit Crunch Timeline,” *The Toronto Star*, December 16, 2007

⁶¹ Organization of Economic Cooperation & Development (OECD), “Economic Outlook No. 82,” accessed April 2008

Debt levels have a high correlation with savings rates. Not surprisingly, the United States, along with other nations that have low savings rates, has comparatively high levels of debt.⁶² In these countries, debt-ridden households allocate a much greater portion of disposable income to mortgages and long-term loans, further challenging overextended consumers in the wake of both slowing wealth growth and a higher dependency on home equity. Compared with international and historical trends, the U.S. consumer has long been overextended, particularly since 2001. In the recent turn of events, as market enthusiasm subsided, the discrepancy between perceived and actual wealth levels was realigned, curtailing consumption and investment perhaps more sharply than likely would have occurred in a downturn.

The motors driving the booming but overextended U.S. housing markets in recent years also intensified the downturn's impact. Over the past decade, strong economic growth, low interest rates and high levels of confidence, coupled with consumers' pronounced willingness to incur debt, all fueled housing markets' growth. Meanwhile, loose lending standards compromised the appropriateness of loan sizes and candidate eligibility, effectively raising the associated risk of each loan. When runaway real estate prices began to subside, as early as in 2006, the ensuing negative wealth effects were exacerbated by the overextension of the housing markets, illustrated by mortgage payment delinquency rates and home foreclosures increasing at a much greater rate than otherwise would have been expected, especially among subprime borrowers. In fact, while the subprime adjustable-rate-mortgage segment accounted for only 6.8% of outstanding loans, it represented roughly 43% of total home foreclosures.⁶³

Finally, the extensive use of securitization in the United States greatly magnified the consequences of a housing market downturn, as is evident in the industry-wide losses on real estate-related securities. The United States accounts for roughly 79% of global securitization issuances,⁶⁴ highlighting the immense investment opportunities in most sectors and the high dependency, in this case, on real estate performance. Ultimately, a wide array of investment products was revalued at lower market prices, resulting in industry-wide write-downs of more than US\$150 billion—with some projections calling for significantly greater credit-related losses before reaching bottom.⁶⁵

2008 Updates

A flurry of developments in international credit and equity markets, all stemming from the U.S. economic slowdown, shaped the opening months of 2008. Early on, greater downside risks to growth in the United States, along with the far-reaching implications of tightening international credit markets, weighed heavily on equity markets around the globe. By mid-January, losses incurred in virtually all geographic markets exceeded 10%.⁶⁶ Since then, however, mature markets have stabilized somewhat, bringing average 2008 losses down to roughly 4%, and emerging markets have actually reclaimed and exceeded incurred losses, generating an average net gain by mid-April.⁶⁷

Since the close of 2007, economic indicators in the United States have deteriorated further; notably: slowing consumer spending, cooling housing markets and softening labor market conditions. U.S. consumer confidence reached a 16-year low in March, falling from 70.8 to 69.5,⁶⁸ weighed down by record-level food and energy prices and significant financial market turmoil. In fact, the U.S. Department of Agriculture reported that domestic food prices rose 4% in 2007, a 17-year high that is significantly greater than the 2.5% average annual increase recorded over the previous 15 years. Further compounding U.S. economic difficulties, crude oil prices climbed persistently higher in the opening months of 2008, setting new records well above US\$120 per barrel. Also, reduced demand for housing depressed new home sales to a 13-year low in February.⁶⁹ Finally, jobless claims rose to a two-year high in early April,⁷⁰ after employers cut 80,000 jobs in March—the largest cut in five years.⁷¹

Although research may suggest that the fundamental challenges faced by major financial systems are contained within the United States, the global reach of securitization has hurt many international banks heavily invested in U.S. markets, particularly in real estate-related positions. Credit constraints and widespread unease culminated in the near-collapse of Bear Stearns, the fifth-largest U.S. investment bank. In the nine months leading to April 2008,

⁶² Organization of Economic Cooperation & Development (OECD), "Economic Outlook No. 80," estimates as of 2005

⁶³ Mortgage Bankers Association of America, "Delinquencies and Foreclosures increase in Latest MBA National Delinquency Survey," December 6, 2007

⁶⁴ International Financial Services, London, "2006 Annual Issuance"

⁶⁵ "Goldman sees \$1.2 trillion global credit loss," Yahoo!News, March 25, 2008

⁶⁶ Dow Jones World Indexes, SunGard PowerData, accessed April 18, 2008

⁶⁷ Capgemini analysis, data derived from Dow Jones World Indexes and MSCI regional indexes

⁶⁸ Reuters/University of Michigan Surveys of Consumers, March 2008

⁶⁹ U.S. Department of Housing and Urban Development, "New residential sales in February 2008," U.S. Census Bureau News, March 26, 2008

⁷⁰ Jeannine Aversa, "Jobless claims shoot up to 2-year high," Yahoo!Finance, April 3, 2008

⁷¹ "Employers slashed 80,000 jobs in March," Yahoo!Finance, April 4, 2008

UBS, Switzerland's largest bank, reported total write-downs of US\$40 billion from exposure to the U.S. subprime market, the largest of any bank. In the first quarter of 2008 alone, UBS absorbed US\$19 billion in write-downs and a US\$12.1 billion net loss.⁷² Due to the lack of transparency in troubled asset classes, financial institutions around the world are acting aggressively to strengthen their capital bases and stave off any potential for collapse. Ultimately, business fundamentals are strong in the Euro Area and most emerging markets, making it unclear to what extent credit constraints will continue to threaten growth outside of the United States.

Equity markets, including the strong-performing emerging markets, tumbled worldwide in the early months of 2008, weighed down by weak U.S. growth prospects and the global impact of tightening credit. Representative of emerging markets, the MSCI Emerging Market Indexes for the BRIC nations, the Middle East and Asia fell sharply in the month of January, by 15.5%, 14.8% and 14.5%, respectively.⁷³ While the heightened volatility of equity markets around the world should not undermine the fundamental strength and growth potential of emerging markets, the extent and severity of the situation leaves authoritative powers in extremely delicate situations, attempting to stabilize troubled equity markets that appear to be as much a source of the problems as a by-product—a key factor in distinguishing the current situation from typical economic slowdowns.

In some cases, authorities have responded with aggressive and unconventional solutions to match the complex nature of the problems that surfaced. The U.S. Federal Reserve cut its target interest rate by 225 basis points in the first four months of the year,⁷⁴ aiming to stimulate economic growth and mitigate downside risks. Through April, other major central banks hesitated to follow suit and lower their target rates, largely due to concerns over historically high food and energy prices boosting inflation. Building on its initial responses, the Fed next created three mediums by which to inject markets with short-term money: the Term Auction Facility, the Primary-Deal Credit Facility and the Term Securities Lending Facility. These offerings, totaling more than a half trillion U.S. dollars, have been made widely available—including to investment banks, which are not typically granted access to the Fed's funding.⁷⁵

Amid heightened liquidity pressures and dwindling investor confidence, more than 20 hedge funds have frozen invested assets since November 2007 in order to avoid bank runs—preventing mass sell-offs, asset devaluations and margin calls.⁷⁶ These actions convey both the extreme measures financial institutions are willing to take to protect their portfolios and the widespread unease of investors.

To date, numerous financial institutions have obtained additional funding from foreign investors—specifically, sovereign wealth funds—to ease liquidity concerns. These sovereign wealth funds are state-owned investment vehicles that often disclose little information about their transactions. As a result, they have attracted significant media attention by purchasing minority stakes in leading financial institutions around the world. In the United States alone, such investments totaled more than US\$100 billion through February 2008.⁷⁷ However, given the lack of information transparency, published reports put the worldwide number of sovereign wealth funds between 30 and 40 and cite them as having control of an estimated US\$2 trillion to US\$3 trillion—a figure that may have quadrupled between 2003 and 2007.⁷⁸ These funds are playing an increasingly significant role in global markets. Nevertheless, like many other investment vehicles, sovereign wealth funds have generally infused capital at levels below thresholds that would trigger review and approval by federal banking agencies (typically, less than 10% of voting shares).

Conclusion

The early months of 2008 revealed further complications to the conditions facing the global economy at the end of 2007, heightening uncertainty among investors regarding the near-term global outlook. Deepening credit market woes threaten growth prospects in key mature markets. However, still-strong fundamentals in emerging markets are likely to sustain high levels of growth—a divergence that will likely impact consumer and business segments and shape policy choices. The balance between emerging market strength and mature market recovery is likely to persist through 2008, with the short-term outlook subject to variability given that aspects of potential risk may still be unknown.

⁷² "UBS writes off \$19 billion," *Yahoo!Finance*, April 1, 2008

⁷³ Select Emerging Market MSCI Global Indexes, www.msci.com, accessed March 5, 2008

⁷⁴ The Federal Reserve Board—Open Market Operations, www.federalreserve.gov/fomc, January 2008

⁷⁵ Allan Sloan, "On the brink of disaster," www.cnnmoney.com, March 31, 2008

⁷⁶ Matthew Goldstein, "Hedge funds frozen shut," *BusinessWeek*, March 17, 2008

⁷⁷ Bob Davis, "U.S. pushes sovereign funds to open to outside scrutiny," *The Wall Street Journal*, February 26, 2008

⁷⁸ Scott G. Alvarez, U.S. General Counsel, "Sovereign Wealth Funds," www.federalreserve.gov/newsevents/testimony/alvarez20080305a.htm, March 5, 2008

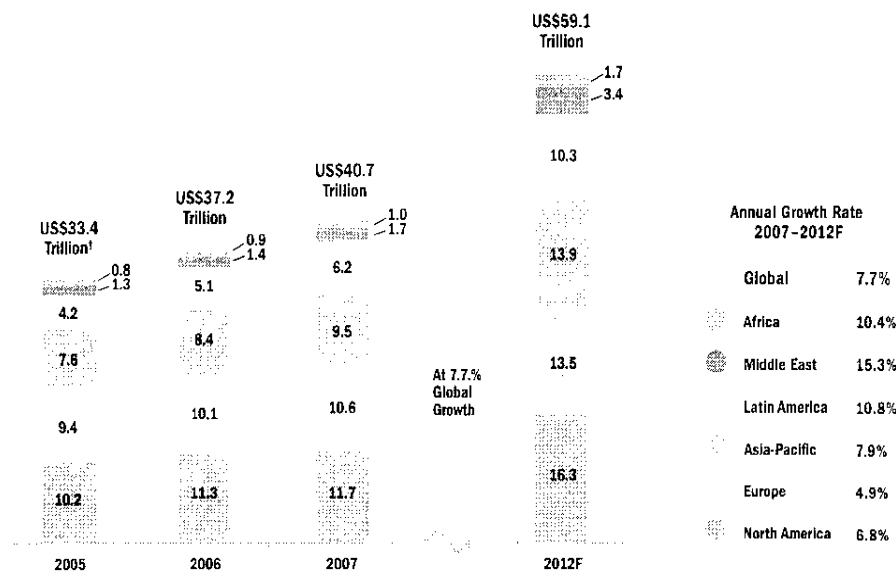
By and large, the global economy has two distinctive obstacles to overcome: inhibitors to growth in mature markets and high risks of inflation in emerging markets. How well these challenges are met will shape global HNWI growth prospects going forward.

Given 2007 performances and taking into consideration recent developments in world markets, we project that global HNWI wealth will grow to US\$59.1 trillion by 2012, advancing at a rate of 7.7% per year.

This upward revision of last year's *World Wealth Report* projections is based on several factors: Recent economic downturns in the United States have been shorter by historical comparison attributed, in part, to increasingly effective monetary policy. Therefore, the current complications are not expected to weigh on growth prospects as heavily as they may have in the past. Similarly, research suggests that emerging markets' recoveries have outpaced analysts' expectations.

Moreover, as HNWI portfolios continue to grow more diversified over the long term, spread across international boundaries and asset classes, their investments become increasingly mobile. Thus, as growth in one region or market slows, HNWIs can move freely, reallocating their funds to other areas, often more quickly than the troubled market itself can react and recover. Ultimately, this evolution will make HNWI investments less vulnerable to market downturns.

Figure 7. | HNWI Financial Wealth Forecast, 2005 – 2012F (by Region)
(US\$ Trillions)



† Bahrain and Qatar were added to the model for years 2005 onward
 Note: All chart numbers are rounded
 Source: Capgemini Lorenz curve analysis, 2008

HNWIs Retrench to Safer, More Familiar Investments

- **HNWIs moved to safer investment categories, with cash/deposits and fixed-income securities accounting for 44% of HNWI financial assets, up 9 percentage points from 2006**
- **Fixed-Income Securities saw a 6 percentage-point increase in asset allocation, accounting for 27% of holdings, up from 21% in 2006**
- **Globally, HNWI's continued to decrease their holdings in North America**
- **HNWIs showed greater interest in domestic market investments, preferring more familiar grounds amid heightened levels of economic uncertainty**

The diverging macroeconomic environments in the two halves of 2007 helped define HNWI's asset allocation strategies last year. Building on the optimism of 2006, the early months of 2007 showed HNWIs betting heavily on riskier asset classes. However, as the year wore on and financial market turmoil and economic uncertainty intensified, HNWIs began to retrench, shifting their investments to safer, less volatile asset classes. By year-end, HNWIs were moving in favor of cash/deposits and fixed-income securities in an effort to mitigate their risk exposure in increasingly uncertain economic times. HNWIs also increased allocations to domestic products over the course of the year, a scenario consistent with an increasing desire to invest in more familiar grounds.

HNWIs Seek Refuge in Lower-Risk Assets

In 2007, HNWIs sought refuge in safer, more traditional investment vehicles, increasing their overall portfolio allocations to cash/deposits and fixed-income securities by 9 percentage points, to 44% of their holdings.⁷⁹ Of this amount, fixed-income securities accounted for 27%, up from 21% a year earlier, and cash/deposits rose to 17%, from a 14% share in 2006.⁸⁰

Latin American and North American HNWIs allocated more of their holdings to fixed-income securities than any of their peers, at 39% and 29%, respectively.⁸¹ Given the slowing economy in the United States and the currency value erosion, HNWIs increasingly invested in non-U.S.dollar-denominated bonds and stocks, hedging against growing risks in the United States by anchoring their investments to stronger-performing economies—and their respective currencies.⁸²

HNWI investors in Asia and Europe led in allocations to cash/deposits, setting aside 25% and 21%, respectively.⁸³ This is consistent with Asia's historical tendency toward high personal savings rates

relative to other regions. In 2006, for instance, Asian HNWIs allocated 24% of their financial assets to cash/deposits, compared with only 14% by their European peers.⁸⁴

Overall macroeconomic indicators weakened in Europe in 2007: GDP growth slowed in most of the continent's major economies and investor confidence receded, especially towards the end of the year. Additionally, European stock markets, with the exception of Germany's, performed relatively poorly during 2007 compared with the previous year. As a result, European HNWIs shifted their allocations to cash/deposits, from 14% in 2006 to 21% in 2007.⁸⁵ Given that European HNWIs already had a relatively high allocation to fixed income, many of them reallocated assets to cash/deposits in order to maintain a diversified portfolio while minimizing risks.

Alternative Investments' Popularity Eases

The economic downturn, and the heightened levels of uncertainty it created for investors in the second half of the year, deterred HNWIs from increasing their allocations to alternative investment vehicles. HNWI allocations to alternative investments were shaped by the balance between the uncertainty spurred by the economic turmoil and the strong performances of select products within that asset class. Ultimately, HNWIs trimmed their allocations to alternative investments by a single percentage point, from 10% of their financial assets in 2006 to 9% in 2007.⁸⁶

Counterbalancing HNWI concerns, growth opportunities developed as a result of shifting economic strengths. For instance, gold, among other commodities, gained popularity as a hedge against inflation and the sliding U.S. dollar, boosting gold futures by 31.4% in 2007.⁸⁷ Additionally, various hedge funds froze client withdrawals starting in late 2007, which helped minimize reductions in allocations to alternative investments.

⁷⁹ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

⁸⁰ *Ibid.*

⁸¹ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

⁸² George Mannes, "The Best Ways to Protect Your Money Today," *Money*, May 1, 2008

⁸³ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

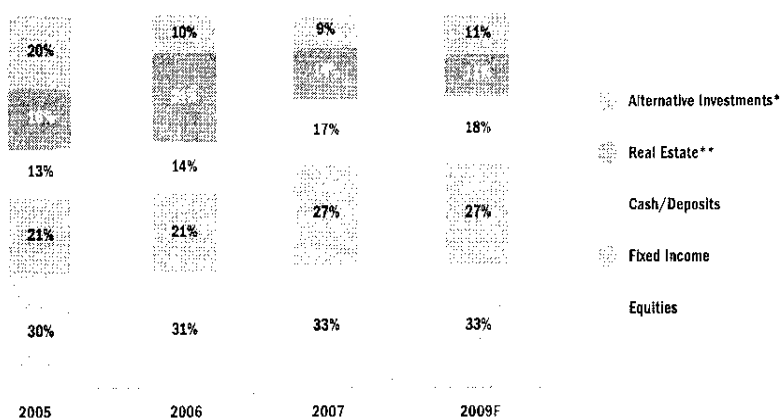
⁸⁴ Capgemini/Merrill Lynch Financial Advisor Survey, March 2007

⁸⁵ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

⁸⁶ *Ibid.*

⁸⁷ "Year-end Review of Markets & Finance," *The Wall Street Journal*, January 2, 2008

Figure 8. | **HNWIs' Allocation of Financial Assets, 2005 – 2009F (by Category)**



* Includes: Structured products, hedge funds, derivatives, foreign currencies, commodities, private equity, venture capital, other (may include: structured credit, managed futures, investments of passion, etc.)
 ** Includes: Commercial real estate, REITs and other investment properties

Source: Capgemini/Merrill Lynch Financial Advisor Surveys, March 2006, March 2007, April 2008

Globally, hedge funds represented the largest portion—over 30%—of alternative investments.⁸⁸ During the course of the year, HNWIs seemed to grow more distrustful of hedge funds as subprime mortgage-related turmoil intensified. The collapse of two Bear Stearns hedge funds, resulting from losses stemming from highly leveraged mortgage-backed security positions, deepened investors' concerns over participation in hedge funds, limited pricing transparency and the investment vehicles they were likely to impact.⁸⁹ Ultimately, however, hedge funds' average gains of 12.6% in 2007 were enough to outweigh HNWIs' worries.⁹⁰ Consequently, HNWIs made only slight adjustments to their overall allocations to alternative investments.

Real Estate Loses Momentum

In 2006, real estate experienced record returns across various categories. Many HNWIs took profits from these increased values during 2007, and moved their money into other asset classes. However, HNWIs across the globe pulled out of real estate investments earlier and more significantly than anticipated, finishing 2007 with only 14% of their financial assets allocated to real estate, a 10 percentage-point drop from 2006 levels.⁹¹

REITs Fail to Meet High Expectations

While 2006 was a year of impressive returns for REITs, results in 2007 fell short of high expectations. REIT performances were split by the two halves of the year, scoring mild gains in the first half of 2007 and pulled down by tightening credit markets and deteriorating economic conditions in the second. However, REIT performances varied widely across regions, with differences most widely seen across Asia and North America.

Asian REITs performed particularly well in the first half of 2007, during which time 11 new REITs were listed—more than in any other region.⁹² This brought REIT market capitalization to more than US\$80 billion, roughly twice the size attained by the end of 2005.⁹³ While evidence suggested that Asia was becoming the new "REIT Tiger,"⁹⁴ the unfolding credit crisis in the second half of the year led many investors in the region to adopt a more cautious approach. The unsettled economic climate and significant market corrections caused the Asian REIT market capitalization to contract to US\$ 78.7 billion, producing an overall negative sentiment and undermining annual market results.⁹⁵ The year closed with only 18 new REITs introduced, compared with 35 in 2006.⁹⁶

⁸⁸ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008
⁸⁹ "The US Credit Crunch Timeline," *The Toronto Star*, December 16, 2007
⁹⁰ Credit Suisse/Tremont Hedge Index, www.hedgeindex.com, accessed February 15, 2008
⁹¹ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008
⁹² CB Richard Ellis, "REITs Around Asia, 1H 2007"
⁹³ Ibid.
⁹⁴ Ernst & Young, "Global REIT Report, REIT Market Overview," October 2007
⁹⁵ CB Richard Ellis, "REITs Around Asia, 2H 2007"
⁹⁶ Ibid.

In the United States, 2007 marked the end of seven consecutive years of positive returns for REITs. According to various indexes, U.S. REITs reported net losses of up to 26.2% in 2007, down significantly from the 30.8% average gains posted in 2006.⁹⁷ Even when many regional markets performed well, the first six months' results in North America were lackluster. The number of listed REITs contracted by 23%, to 169 (down from 220), in large part due to private equity deals taking REITs out of the listed markets.⁹⁸

Tightening credit markets added to other deteriorating economic conditions in the second half of 2007, with significant worldwide impact. Indeed, the United States accounted for 5.7 percentage points of the 14.7% contraction in the 2007 S&P/Citigroup World REIT Index.⁹⁹ Amid these global conditions, REITs lost ground with HNWIs, accounting for 17% of their real estate asset allocations in 2007, down from 22% in 2006.¹⁰⁰

Global Direct Commercial Real Estate Performs Well

Globally, direct commercial real estate investments rose 8.4% (US\$59 billion), during 2007, amounting to US\$759 billion.¹⁰¹ During the first six months of 2007, high levels of investor confidence and healthy deal-making environments drove record transaction volumes to US\$394 billion.¹⁰² However, as credit markets tightened and real estate valuations deteriorated, transaction volumes steadily declined over the second half of the year.

In Europe, transaction volumes increased only 1.9% from 2006 to 2007, whereas in the Americas, they rose about 10%, to US\$312 billion.¹⁰³ For its part, the United States netted US\$291 billion.¹⁰⁴ Likewise, investments in the Asia-Pacific region increased by 27.4%, led by Japan, owner of approximately 50% of regional volumes.¹⁰⁵ Consistent with these trends, HNWIs in North America and Asia increased their exposure to commercial real estate in 2007, while globally, the portion of HNWIs' financial assets allocated to commercial real estate remained unchanged.

The Middle East remained the region with the most exposure to commercial real estate, with 33% of HNWI real estate investments allocated to this asset.¹⁰⁶ The Dubai emirate, for instance, is undergoing massive construction projects, both commercial and residential, and offering incentives, such as tax-free property sales, to boost transactions. While these investment vehicles are not readily accessible to overseas investors, local HNWIs are able to leverage their domestic-market knowledge to generate profitable returns on such investments.¹⁰⁷

HNWIs Retrench to More Familiar Domestic Markets

At the regional level, the geographic distribution of HNWI investments underwent significant changes in 2007, with allocations to domestic markets gaining strong favor. We view this as a temporary, tactical move dictated by caution, as investors across all regions await further developments in the global markets.

HNWIs outside the United States moved to diminish their exposure to U.S. markets, the primary victims of the subprime and credit market turmoil. For instance, HNWIs in the Middle East and Latin America, who, among non-U.S. investors, traditionally have had the highest proportion of their financial assets allocated to North American markets, decreased their exposure to this part of the world by five and nine percentage points, respectively.¹⁰⁸ Globally, HNWI allocations to North America accounted for 42% in 2007, but have been decreasing in recent years.¹⁰⁹

Globally, the geographic distribution of HNWIs' investments changed only slightly from 2006 to 2007. Allocations to North America, Asia-Pacific and Africa decreased by a single percentage point, while those to Europe remained unchanged. Meanwhile, allocations to Latin America and the Middle East increased by two and one percentage points, respectively.¹¹⁰

⁹⁷ Dow Jones Equity REIT Index, www.djindexes.com, accessed February 15, 2008

⁹⁸ Ernst and Young, "Global REIT Report, REIT Market Overview," October 2007

⁹⁹ S&P/Citigroup Global Equity Indexes, www.globalindices.standardandpoors.com, accessed February 26, 2008

¹⁰⁰ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

¹⁰¹ Jones Lang LaSalle, "Global Direct Commercial Real Estate Investment Reaches Record Levels in 2007 Despite Credit Crunch," New Global Capital Flows Research, January 31, 2008

¹⁰² *Ibid.*

¹⁰³ *Ibid.*

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

¹⁰⁶ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

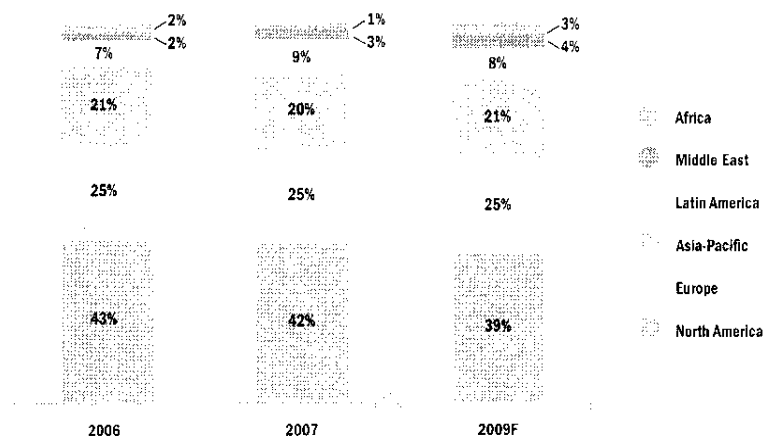
¹⁰⁷ Tom Burroughes, "Wealth Management," *The Business*, August 4, 2007

¹⁰⁸ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

¹⁰⁹ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

¹¹⁰ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

Figure 9. : Geographic Distribution of HNWI's Financial Assets, 2006 – 2009F (by Region)



Source: Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

Looking Ahead

As HNWIs across all regions regain confidence in financial markets, they will move from cash/deposits and fixed-income securities back into less risk-averse investments. Globally, we forecast the portion of HNWI assets invested in alternative investments will increase by two percentage points through 2009.¹¹¹ Asia-Pacific will likely lead the way, with a projected three percentage-point increase.¹¹²

Global allocation of HNWI investments to North America is expected to continue to erode, from 42% in 2007 to 39% by 2009.¹¹³ Additionally, as HNWIs shift away from a "retrenching-to-domestic-markets" strategy, they are likely to favor the higher-risk/higher-return investments of fast-growing markets. The BRIC nations, as well as North Africa and Latin America, will continue to benefit from the rising prices of commodities and natural resources. Additionally, HNWI allocations to Eastern Europe should continue to increase as it further benefits from strengthening relations with members of the European Union.

As signs of financial market recovery appear, we project that HNWIs will likely return to their pursuit of high returns, particularly in emerging and frontier markets—such as Bangladesh, Jamaica, Slovenia, and many other countries in Africa, South Asia, Eastern Europe, and the Caribbean—and alternative investments.

¹¹¹ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

¹¹² *Ibid.*

¹¹³ *Ibid.*

Green Investing Gains Traction in 2007

As the world community has grown more attentive to environmental concerns, such as global warming and climate change, the presence of related investment opportunities has greatly increased, driving robust growth of green investing in 2007. Whether perceived as an investment opportunity or a responsibility of global citizenship, overall participation in green initiatives has risen rapidly in recent years due to the fundamental need for sustainable development, and, as a result, the undeniable growth potential of the green sector. Furthermore, it seems the era of economically viable green power has finally arrived, as the impact of soaring oil prices on consumer attitudes and the widespread acceptance of global warming implications converge. Individuals, businesses and governments alike are actively pursuing the integration of green initiatives into everyday systems and investment strategies, adapting to and preparing for what is quickly becoming the way of the future. Capitalizing on the fundamental strength of demand for green initiatives, the investment community has been particularly invigorated by the attractive financial returns of green investments that have accompanied the already appealing environmental and social benefits generated.

More Investors Bet on Green

In much greater size and proportion than in recent years, investors have been supporting innovative research and development initiatives in search of alternative fuels, renewable energy and other advanced technologies. Today, investors are presented with many vehicles through which to back green initiatives, such as mutual funds, ETFs and other pooled products or alternative investments. In 2007, these investment vehicles drove robust growth in green sectors. For example, total investment in the clean technology sector increased to US\$117 billion in 2007, up 41% from 2005,¹¹⁴ with particular strength in the wind and solar segments. In fact, in the three years ending November 2007, gains in the wind segment exceeded 300%, while solar posted the highest growth in 2007, roughly 150%.¹¹⁵ Furthermore, the solar segment produced the highest proportion of IPOs of any green sector over the course of last year, including the Merrill Lynch-led US\$6.5 billion issuance of Iberdrola Renovables, the world's largest renewable energy company.¹¹⁶ Despite being burdened by poor overall market conditions in late 2007 and early 2008, green investing trends have been driven by an underlying commitment to sustainable development, which takes profit incentives into consideration alongside social responsibilities. As a result, the sector will likely weather short-term fluctuations and deliver strong returns in the long run.

Venture capital has played a leading role in green investing throughout North America and Europe, as investments in the sector reached nearly US\$5.2 billion in 2007, up from US\$3.6 billion in 2006 and only US\$714 million in 2001.¹¹⁷ In 2007, US\$3.9 billion of venture capital was invested in the United States in green technology, of which roughly US\$1.8 billion was invested in California alone—accounting for approximately 45% of all green investments in North America.¹¹⁸ Given the greater freedom with which individuals, relative to institutions, can allocate their assets, venture capital has flowed largely from wealthy private clients as opposed to stringently controlled institutional investors. In addition, private equity firms will likely play an increasingly active role and represent another important investing outlet as innovative technologies continue to emerge. Also, many top-tier banks showed heightened involvement in green stock market listings in 2007—Credit Suisse, Merrill Lynch and Morgan Stanley set the pace, handling deals worth US\$2.8 billion, US\$2.4 billion and US\$2.3 billion, respectively.¹¹⁹ Financial institutions of all classes are quickly realizing the growth potential of the green sector and are acting accordingly to secure an early stake in the market.

Heightened Interest Drives New Market Opportunities

Scientific evidence today overwhelmingly points to a massive expansion in greenhouse gases as the foremost consequence of rapid industrialization and driver of climate change. The widespread acceptance of such theories has warmed the international political climate to broader environmental issues and, as a result, has encouraged the general public to integrate green standards into their personal and professional lives. Informational broadcasts by the mass media and documentaries, such as Al Gore's *An Inconvenient Truth*, have raised public awareness of the global impact of everyday activities and habits and driven greater appreciation of the need for green initiatives. As a result, heightened public awareness has reshaped business dynamics and raised expectations for government and business endeavors, creating significant opportunities for future growth.

¹¹⁴ "Folding green: the investment boom," *The Observer*, February 24, 2008

¹¹⁵ "Green Light for Renewable Energy," *Davy Research Report*, November 2007

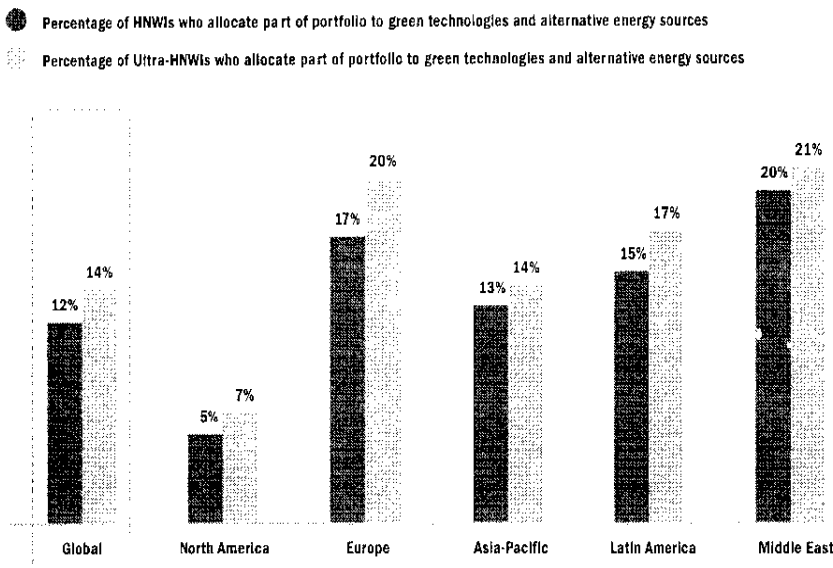
¹¹⁶ "Is 'green' power money misguided? Market is booming, but dot-com memories make some worry business of green," *International Herald Tribune*, March 1, 2008

¹¹⁷ "Green tech investments growing fast," *The San Francisco Chronicle*, January 17, 2008

¹¹⁸ *Ibid.*

¹¹⁹ "Is 'green' power money misguided? Market is booming, but dot-com memories make some worry business of green," *International Herald Tribune*, March 1, 2008

Figure 10. | HNWI^s and Ultra-HNWI^s Interest in Green Investing, 2007 (by Region)



Source: Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

Governments across the globe have played an active role in stimulating the growth of green initiatives, paving the way for lucrative market opportunities. Depleting fossil fuel reserves, volatile fuel prices, energy security worries and emission concerns are some of the key factors that convey the international nature of the issues at hand and, to date, have driven aggressive government advocacy of green initiatives.¹²⁰ European powers have been long-standing leaders and pioneers of green initiatives. In January 2008, Norway made an extraordinary pledge to be “carbon neutral” by 2030, such that it would generate no net greenhouse gases into the air.¹²¹ Despite concerns regarding carbon neutrality and the practice of offsetting domestic emissions with contributions to emission-reduction schemes abroad, Norway represents the high ambition necessary to bring about meaningful change. Britain may become the first country in the world to introduce legally binding CO₂ reduction targets if a climate change bill, aimed at reducing the country’s emissions 20% by 2010, is passed, as expected, in summer 2008.¹²² In the United States, state-level policies, tax credits and cost-recovery systems are among the incentives that have been offered to encourage innovation. However, Abu Dhabi is exploring, arguably, the most ambitious plan of all: to create the world’s first carbon-neutral metropolis.¹²³ Intended to host 100,000 inhabitants and likely to absorb billions of investment dollars in clean technology initiatives, this futuristic project illustrates Abu Dhabi’s resolve to be a pioneer of post-oil alternatives, and is drawing significant global media attention. As climate change and other environmental concerns take center stage in the global arena, government bodies have demonstrated a keen interest in advancing even the most daring green initiatives in order to induce meaningful change and secure future economic and political stability.

Businesses “go green” in an effort to adapt to changing market dynamics and capitalize on growth opportunities, as heightened public interest redefines the rubrics by which companies are evaluated and governments raise the incentives to participate in environmentally conscious endeavors. A flurry of start-ups has sprouted in search of innovative technologies and other alternative solutions they hope will meet the fundamental needs critical for sustainable economic growth. Developing anything from online dashboards that monitor environmental activity in buildings (e.g., energy and water usage) to real-time tracking of transportation systems through GPS and mobile phone networks to improve efficiency and cut fuel costs, to thin-film solar panels that boast longer lifetimes at lower costs,¹²⁴ businesses are devoting resources to bring about improvements in all facets of daily life. Even the construction industry has fostered pioneering green initiatives that have altered the landscape of international building standards. For instance, the Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a third-party certification program that has become an international benchmark for high-performance green building standards; it is currently being utilized in 41 countries, representing both mature and emerging nations.¹²⁵

¹²⁰ HSBC, “The US Market, Global Natural Resources & Energy,” December 3, 2007

¹²¹ “Lofty pledge to cut emissions comes with caveat in Norway,” *The New York Times*, March 22, 2008

¹²² Heather Green and Kerry Capell, “Carbon Confusion,” *BusinessWeek*, March 17, 2008

¹²³ Stanley Reed, “Guess who’s building a green city,” *BusinessWeek*, December 24, 2007

¹²⁴ “The most promising green tech startups,” *Green Wombat*, October 30, 2007

¹²⁵ U.S. Green Building Council, “LEED Rating Systems,” www.usgbc.org, accessed April 28, 2008

Around the world, scientists and entrepreneurs have been fusing creativity with abundant resources to extend green initiatives beyond their current reach. Business mogul and social activist Richard Branson hosted a private conference in early 2008 on his remote Caribbean island, Necker Island, to discuss with world leaders and other business executives possible green initiatives that would bring about both meaningful change and lucrative returns.¹²⁶ Efforts aimed at expanding the scope of alternative solutions are quickly increasing in number as individuals and companies of all backgrounds have been converting environmental and social concerns into actionable business opportunities in new and innovative ways.

Globally, consumers increasingly favor “environmentally friendly” products and more prudent green standards, putting pressure on businesses to meet new market demands. Even traditional industries have realigned their strategies to incorporate green initiatives in recognition of more sophisticated consumer expectations. Among others, the likes of Siemens, Wal-Mart and GE have executed mergers and acquisitions of green pure-plays to augment their own internal environmental-sustainability initiatives. Introducing environmental considerations to business decision processes has become increasingly important and, as a result, businesses across the globe have demonstrated concerted efforts to adapt to a changing global environment.

HNWIs Attracted to Growth in Green Investing

Green investing encompasses a wide range of industries, making the classification of applicable investment products quite subjective. Furthermore, green investments often match very different criteria and include anything from “best-in-class” oil rigs to true pioneers of clean technology. As a result, the green investing market is difficult to size. However, trends evident in the broader Socially Responsible Investing (SRI) category—which encompasses environmentally and socially screened assets—provide useful insight into the narrower green universe. Institutional investors and HNWIs held more than 70% of the US\$2.71 trillion SRI assets under management in 2007, representing an increasingly attractive target for financial institutions and advisors. Given the high development risk associated with the sector, green investing caters largely to institutions and HNWIs—more sophisticated investors willing to assume greater financial risk in hopes of high returns.

Roughly 12% of HNWIs and 14% of Ultra-HNWIs around the world allocate part of their investment portfolio to green technologies and alternative energy sources.¹²⁷ Regionally, the most environmentally attuned HNWI and Ultra-HNWI populations, as measured by the percentage of affluent investors allocating to green investing, were found in the Middle East and Europe—with participation rates ranging from around 17% to 21% in 2007, all exceeding global averages. By comparison, only 5% of HNWIs and 7% of Ultra-HNWIs in North America allocated part of their portfolio holdings to green investing. It is interesting to note that North America was the only region in which social responsibility was the primary driver of HNWIs’ green investing. Among all HNWIs worldwide, approximately half pointed to financial returns as the primary reason for their allocations to green investing. The combination of lucrative returns and social responsibility underpin the rising popularity of green investing among HNWIs across the globe.

With Future Sustainability at Stake, Green Investing Will Grow

Investors, businesses and governments can no longer ignore the realities of climate change and other environmental risks. Therefore, all are looking for ways to systematically integrate eco- and sustainable investing into their moneymaking decisions.¹²⁸ Amid government efforts to promote and reward the pursuit of green initiatives, and the increasing dependence of corporate profitability on sustainable development, green products will be more commonly incorporated in households and businesses on the premise of practicality and efficiency gains. Furthermore, the sheer size of the energy market, estimated at US\$6 trillion,¹²⁹ coupled with the fundamental need for energy to drive economic growth, underpins the long-term, global security of green investing, even though higher levels of risk are often associated with nascent marketplaces, such as the green sector. Ultimately, the unilateral pursuit of economic progress against a backdrop of sustainability will be driven by consciously aligning investment choices with values and concern for the environment.

¹²⁶ “On an island paradise, talking about global warming’s silver lining,” *The New York Times*, March 22, 2008

¹²⁷ 2008 Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

¹²⁸ “Personal wealth: Profiting from climate change,” *The Edge—Singapore*, July 16, 2007

¹²⁹ “Environment—Where the money is,” *The Wall Street Journal*, March 24, 2008

HNWIs' Pursuit of "Passion Investments" Is Not Deterred by Economic Volatility

HNWIs and Ultra-HNWIs allocate and spend a significant portion of their wealth on investments of passion: art collections, luxury autos, yachts, sports teams, memorabilia, wine collections, luxury travel and health/wellness, for example. However, allocations vary considerably from region to region, and between mature and emerging economies. Further differences emerge when allocations are studied in terms of whether they are tangible passion investments, such as art collections, or luxury expenditures, such as high-end travel, which are more experiential in nature.

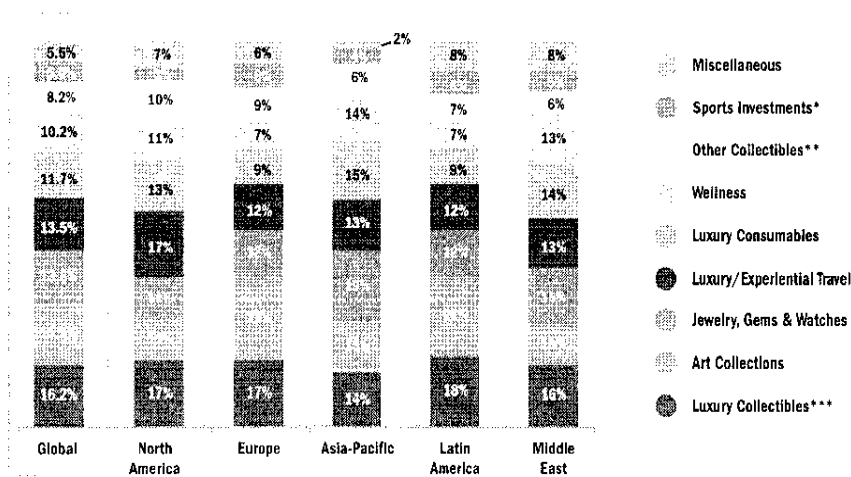
In 2007, luxury collectibles, accounting for 16.2% of passion investments, and fine art, representing 15.9%, continued to be the most popular choices of HNWIs worldwide.¹³⁰ Jewelry held third place, with 13.8%, and luxury/experiential travel ranked fourth, with 13.5%.¹³¹ These four categories are the most expensive of the passion investments studied, and together account for over half of all HNWIs' expenditures on luxury items.¹³²

Despite Rising Costs and Financial Market Turmoil, HNWIs Did Not Give Up Expensive Purchases

The Forbes' Cost of Living Extremely Well Index (CLEWI), which tracks the year-over-year cost of a basket of luxury goods, rose 6.2% from 2006 to 2007, more than double the rate of inflation.¹³³ Despite these significant price increases, various luxury segments reported record sales figures in 2007, testifying to the unquenchable appetite of HNWIs for luxury items.

Over the course of the past year, wealthy individuals from emerging markets demonstrated significant influence in the global luxury marketplace. Thus, even as financial market turmoil impacted the United States during the second half of 2007, luxury goods makers, high-end services providers and auction houses all found ready clients in the emerging markets of the world—most notably China, India, Russia and the Middle East—thereby sustaining their own growth. "We used to think in terms of hedge funds when targeting new customers," says David Norman, worldwide cochair of Sotheby's Impressionist and Modern Art Department. "Now, we look for barrels of oil."¹³⁴

Figure 11. HNWIs' Investment-of-Passion Dollars, 2007 (by Region)



* "Sports Investments" represents sports teams, sailing, race horses, etc.
 ** "Other Collectibles" represents coins, wine, antiques, etc.
 *** "Luxury Collectibles" represents automobiles, boats, jets, etc.
 Source: Capgemini/Merrill Lynch Financial Advisor Survey, Apr. 2008.

¹³⁰ Capgemini/Merrill Lynch Financial Advisor Survey, 2008.

¹³¹ Ibid.

¹³² Ibid.

¹³³ Forbes CLEWI, updated September 20, 2007.

¹³⁴ Kelly Crow, "Art Auctions Look Abroad," *The Wall Street Journal*, November 2, 2007.

Luxury Collectibles

Private jets, yachts, high-end automobiles and other luxury collectibles again accounted for HNWI's largest investments of passion, with wealthy Latin Americans at the forefront of this trend. While North Americans traditionally have been the largest purchasers of private jets, their position was eclipsed in 2007—the first year that orders for Gulfstream jets from overseas buyers surpassed those from North Americans, according to U.S.-based General Dynamics.¹³⁵

Luxury automobile makers reported similar trends for 2007. Ferrari recorded unprecedented growth in emerging markets. Its sales to Asia-Pacific rose by 47.2%, while the Middle East grew by 32.3%. This compared with strong—but single-digit—growth in the United States and Germany, historically Ferrari's largest markets.¹³⁶ Limited-edition and classic car prices remained immune to the economic downturn, and custom-built motorcycles experienced a boom in demand, with aficionados paying more than US\$300,000 for some of these one-of-a-kind "works of art."¹³⁷

The yacht market, long dominated by HNWI's from the Middle East, has been taken by storm by Russian buyers in recent years—further evidence of a surge in demand from emerging market buyers. The "Eclipse," perhaps the largest privately owned yacht in the world and still under construction, is believed to be the property of one of Russia's oil billionaires. Meanwhile, yacht brokers report that "at least 20% of the business for new vessels longer than 200 feet is coming from Russia—more than from any other country, including the United States."¹³⁸

Fine Art

Globally, fine art retained its position as one of the most popular investments of passion. Demand was greatest for contemporary and iconic art in mature and emerging markets alike. Similar to previous years, more European (22%) and Latin American (21%) HNWI's invested in fine art than did their North American (11%), Middle Eastern (10%) or Asian counterparts (13%) in 2007.¹³⁹

Newly minted millionaires from Moscow, to Mumbai, many of whom have made fortunes in the global commodities boom, were active auction participants.¹⁴⁰ Christie's International and Sotheby's both profited from the expanding Russian economy. Their combined 2007 Russian sales totaled US\$324.9 million, up 45% from US\$223.6 million in 2006.¹⁴¹ Accordingly, Christie's plans to open a showroom in Moscow in 2008 to better serve its Russian client base, which has grown significantly over the years.¹⁴²

While some critics suggest that U.S. HNWI's driving role in the global art market has weakened after several decades of influence, auction houses have found that art sales have not been impacted by the tumultuous economy. In fact, during Christie's November 2007 auction of post-war and contemporary paintings, 50.8% of the presented items were bought by HNWI's from the United States, up from a reported 48.5% in 2006.¹⁴³

2007 also saw two growing trends within the art market: online auctions and private sales. Christie's online auction sales did particularly well during the year, with buyers comfortably bidding up to US\$1 million over the Internet for items that they couldn't view firsthand.¹⁴⁴ Private sales at auction houses, too, were on the rise during 2007, as more Ultra-HNWI's chose to avoid being named in the press on select purchases.¹⁴⁵

Jewelry, Gems and Watches

Jewelry, gems and watches attracted the largest share of passion investment allocations in the Middle East and Asia, while ranking third on a global basis. Wealthy collectors avidly pursued "fancy or colored diamonds," causing prices to soar last year.¹⁴⁶ In October 2007, Sotheby's sold a 6.04-carat emerald-cut blue diamond for a record US\$1.32 million per carat.¹⁴⁷ Although market watchers speculate about a "bubble," prices are expected to climb even higher in 2008 because of the growing demand. Men's luxury watches, too, were highly prized by collectors from around the world, with exclusive and limited-edition models from Patek Philippe, Franck Muller and other watchmakers viewed as enduring "collection" pieces.¹⁴⁸

¹³⁵ Stephen Manning, "Private Jet Sales Up, Fueled by Overseas Buyers," *The Post and Courier*, March 16, 2008

¹³⁶ Fiat Group, Annual Report, December 31, 2007

¹³⁷ "2008 Collectors Guide," *Forbes*, December 24, 2007

¹³⁸ Robert Frank, "The Wealth Report: The Russians Are Coming...," *The Wall Street Journal*, January 12, 2007

¹³⁹ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

¹⁴⁰ Kelly Crow, "Art Auctions Look Abroad," *The Wall Street Journal*, November 2, 2007

¹⁴¹ John Varoli, "Sotheby's, Christie's Report Record Russian Art Sales in 2007," *Bloomberg.com*, January 11, 2008

¹⁴² Interview with Toby Usnik, Christie's, New York, April 25, 2008

¹⁴³ *Ibid.*

¹⁴⁴ *Ibid.*

¹⁴⁵ *Ibid.*

¹⁴⁶ "A Dazzling Palette," *Worth*, January/February 2008

¹⁴⁷ *Ibid.*

¹⁴⁸ "2008 Collectors Guide," *Forbes*, December 24, 2007

Luxury/Experiential Travel

With luxury goods increasingly within the reach of the upper-middle-class, especially in more mature markets, HNWI's continued to purchase "exclusive experiences" as a way to differentiate themselves. According to the founder of the travel firm DreamMaker International, HNWI's are "fixated on the story—and [want to] tell their friends what they did."¹⁴⁵ Whether it's an impromptu trip to Italy to race a Ferrari, Lamborghini and several Porsches from Florence to Portofino, or a three-week adventure across the world, with brief stops in some of the world's most exotic locales—from Africa's Serengeti to Peru's Machu Picchu—Ultra-HNWI's are ready to spend large sums of money to "live the dream" in the most luxurious conditions.¹⁵⁰

HNWI's also are seeking out philanthropic trips that give them the opportunity to do charitable work, while still enjoying luxurious accommodations. Tour operators arrange for wealthy clients to visit schools, health clinics and poor neighborhoods to see firsthand how financial donations might be implemented. HNWI demand for such trips has grown 15% over the past two years, according to luxury tour operator Artisans of Leisure.¹⁵¹

Other Luxury Categories

Luxury goods makers also reported strong growth in 2007. Richemont, the world's second-largest such firm after LVMH Group, reported that its sales rose 14% in the last three months of 2007, to 1.7 billion euros.¹⁵² Wealthy consumers in the Middle East, Asia-Pacific and North America showed the highest level of spending on Luxury Consumables (clothing, designer apparel and accessories, etc.).

Globally, HNWI's and Ultra-HNWI's allocated 10.2% to Health and Wellness spending, which included visits to high-end spas, investments in personal fitness facilities, as well as full body scans. At the regional level, HNWI's from the Middle East, Asia-Pacific and North America allocated the most to this particular category of passion investments.

Sports Investments, Club Memberships, Wine Collections and other personal interests rounded out the remaining categories for investments of passion. Wine distributors in Europe and the United States reported that sales of mid-priced wines slowed during the latter half of 2007 and the early months of 2008, while those of "good value" and expensive wines increased¹⁵³—in part, due to stepped-up interest from emerging market buyers from China and Russia investing their new wealth in wine collections.

While, globally, investment-of-passion interests were weighted more heavily toward tangible items, such as art collections, yachts, personal jets and the like, regional differences could be discerned. Asian HNWI's allocated the most to "intangible categories," such as luxury and experiential travel, health and wellness, and luxury consumables.¹⁵⁴ Luxury expenditures by Middle Eastern and North American HNWI's also exceeded global averages.¹⁵⁵ Compared with Ultra-HNWI's, who favored more tangible investments, such as art collections, HNWI's, in general, were more likely to spend on "intangibles."¹⁵⁶

Looking Ahead

The global art market and luxury industry segments tend to be "latecomers to economic downturns." Accordingly, some industry analysts have voiced concern that these sectors may yet be impacted by the financial market turmoil of late 2007.¹⁵⁷ However, historically, investments in fine art, private planes, luxury automobiles and other high-priced collectibles have been more immune to economic downturns, as their Ultra-HNW buyers tend to be less adversely affected by such trends. "Affordable (and aspirational) luxury goods,"¹⁵⁸ which are more accessible to HNWI's as well as to less affluent individuals, may suffer more of an impact if the downturn is sustained.

Despite these concerns, analysis suggests that new wealth and growing consumer demand in Asia-Pacific, Eastern Europe and the Middle East will continue to outweigh the pressures of an economic slump in Western markets.¹⁵⁹

¹⁴⁵ Dan Wilchins, "What the Rich Want: The Trip Is Nothing without a Story to Tell Your Friends," *Reuters*, November 3, 2007

¹⁴⁶ Gene Sloan, "For \$100,000. See the World from a Richly Detailed 757," *USA Today*, March 28, 2008

¹⁴⁷ Jennifer Alsever, "When a Luxury Vacation Cultivates Philanthropy," *The New York Times*, December 9, 2007

¹⁴⁸ "Swiss Luxury Goods Still Sparkle Thanks to Eastern Promise," *Agence France Presse*, February 4, 2008

¹⁴⁹ Interview with Mehmet Yorukoglu, House of Burgundy, Inc., New York, April 2008

¹⁵⁰ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

¹⁵¹ *Ibid.*

¹⁵² *Ibid.*

¹⁵³ "Swiss Luxury Goods Still Sparkle Thanks to Eastern Promise," *Agence France Presse*, February 4, 2008

¹⁵⁴ Aaron Pressman, "Low Expectations for the High End," *BusinessWeek*, May 5, 2008.

¹⁵⁵ "Swiss Luxury Goods Still Sparkle Thanks to Eastern Promise," *Agence France Presse*, February 4, 2008

Spotlight: Wealth Management Firms Adapt to Meet Unique Needs of Growth Markets

The global pool of HNWIs is shifting in a way that presents enormous potential for wealth management firms. World wealth continues to grow broadly, despite fluctuations in markets and economic conditions, and global demographic and economic trends are bringing entirely new segments of clients into the HNW band all the time.

Some firms have already begun to grow and transition successfully into new markets, despite the volatile times, but the task is not an easy one. It requires firms to assess their own capabilities, strengths and limitations, and, most importantly, adapt existing go-to-market strategies to the unique needs of growth markets, both at home and abroad.

Not all firms will find the transition easy, or even viable, given their existing service models and information technology (IT) and operations structures. Fundamentally, the cost/benefit analysis of a short-term approach versus a long-term growth strategy for each market is needed. The question is: How much transformation will be required—and what specific issues of execution are involved to deliver a service proposition that clients demand and deserve, especially when those clients hail from unfamiliar territory?

In reality, designing a winning strategy, particularly for growth, means defining an effective model that incorporates a host of complex factors. While these factors are obviously interrelated, each must be resolved to pursue growth rationally—while taking into account what the firm is, and what it wants to be.

In designing a winning growth strategy, firms particularly need to look at six key dimensions. (See Figure 12.)

- Target-client needs
- Firm identity
- Service-delivery model
- Operations and technology
- External environment and factors
- Products and services

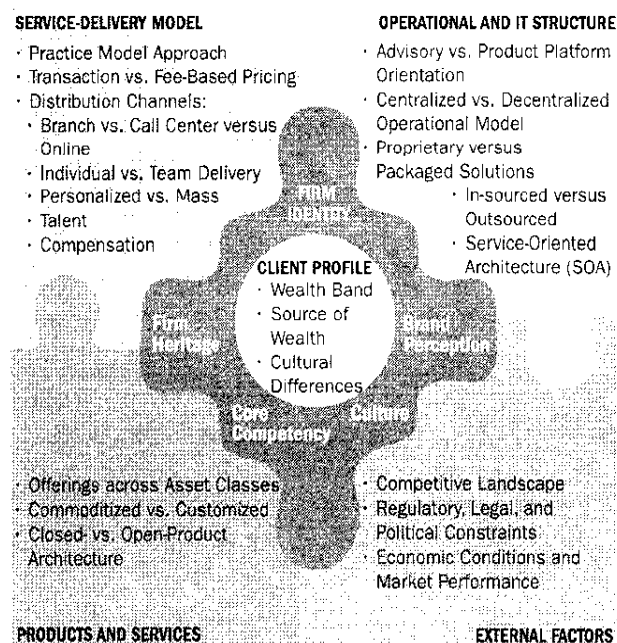
Client needs are the nucleus of any wealth management solution, so firms have to understand and respond to those needs first. However, they also have an opportunity to influence many of the other dimensions of the strategic equation—albeit some more than others.

Above All, Growth Depends on Winning Over the Client

HNW clients are demanding comprehensive and tailored services from the multiple firms with whom they do business; wealth managers are waging an impressive response to differentiate themselves. In the ensuing competition, however, different types of wealth management firms have begun to vie for the same clients—as well as for those they traditionally have not served.

Wealth management firms are making strategic investments to differentiate themselves in the eyes of existing and would-be HNW and Ultra-HNW clients. For example, retail banks and insurance firms are investing in advisory services to become wealth managers of choice for the burgeoning retirement segment, and to establish links with those in younger generations who will be beneficiaries of inter-generational wealth transfer. This move has taken them into territory once dominated by private banks and trusts—forcing those players to look at how best to differentiate their own propositions for their HNW and Ultra-HNW clients. Some private banks and trusts are looking to institutional capabilities, such as overlay management tools (once reserved just for fund managers), to offer clients more comprehensive asset allocation, rebalancing and portfolio oversight. Investments in reporting capabilities, which offer clients more detail and analysis of their comprehensive holdings, are on the rise. Other wealth management firms are investing in “client experience” initiatives to bring a more personalized, family office-like service to HNW delivery, or introducing customizable client solutions to respond to

Figure 12. | **Wealth Management Strategy: The Sum of Many Parts**



the growing demands of clients, who want improved visibility into embedded risk, holistic analysis of their assets and other benefits. These strategies all complement retention, while offering the potential for organic growth, but only if firms can execute them effectively.

Some leading firms have adopted more qualitative traits to define their HNWIs, such as demographics, investing behavior, geographic scope and source of wealth, since clients can no longer be segmented simply by their level of wealth. This approach helps them to distinguish and better serve clients—even among those in the same wealth band. For instance, comparing investing approaches and goals may reveal significant differences among a wealthy entrepreneur, a HNWI whose wealth is inherited, an affluent entertainer or sports figure and a baby boomer who has just cashed out a hefty retirement-savings account. By recognizing such distinctions, firms can tailor their approach—and some are going so far as to deploy teams of specialists dedicated to individual micro-segments.

Cultural factors are another variable when expanding into new regions. Consider, for example, the differences between wealthy individuals in Asia-Pacific and those in the Middle East—two fast-growing HNWI sectors. In the Asia-Pacific region, many HNWI are first-generation, self-made entrepreneurs, with limited access to sophisticated wealth management services. In the Middle East, most wealth is inherited, and cultural and religious constraints mean Sharia-compliant products and services are a must to meet client needs and expectations.

Clearly, then, as wealth management firms increasingly compete for the same HNWI clients, and the clients themselves become more demanding, the pressure is on firms to understand the essence of client needs in existing and growth markets, even if they have already developed an accurate read on HNWI in their established markets. Without this insight, firms will find it difficult to develop a distinguishing proposition.

Growth Can Elude Firms that Aim to Be What They Are Not

In seeking to capture a new market, firms also can hone their growth strategy and more easily differentiate themselves by looking first at who they are in the context of the wealth management process—their history, core competencies and brand identity. While many firms purport to be capable in all aspects of wealth management—from the advisory component to trading and execution—firms tend to excel in one area or the other, based on their history.

In short, if a firm's identity and capabilities do not align well with the needs of the target market, it will need to bolster its position—either by developing the missing capabilities or acquiring them via a joint venture or other partnership. A self-diagnosis is therefore needed before deciding which tactics to deploy to attain growth. It is especially important for firms to acknowledge and account for their roots. After all, different wealth management firms develop their value proposition from polar positions. (See Figure 13.)

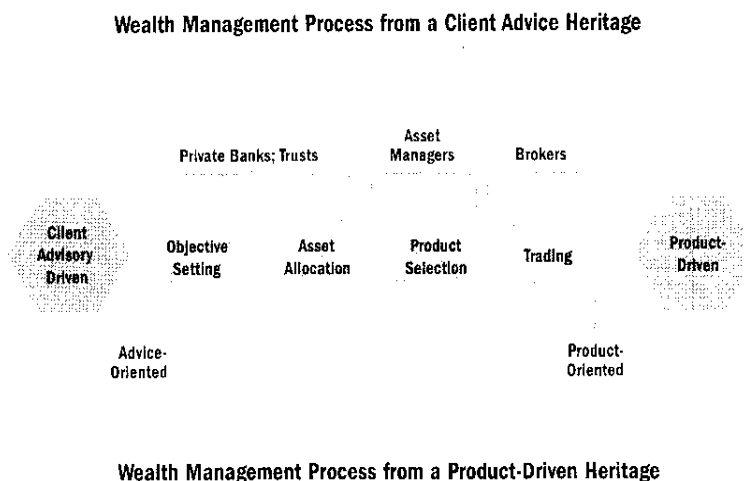
Firms with an advisory-centric approach focus on holistic client needs, develop a strategy to meet clients' financial objectives and execute against those needs with the product mix at their disposal. In essence, they are focused on the art of translating client needs into financial objectives. At the other end of the spectrum, firms with a product-centric approach excel in understanding market opportunities around specific products and how best to bring these products to clients. Both approaches combine the science of execution with the art of delivery—an “art” at which some are better than others, due largely to their respective heritages.

A firm's self-assessment also takes place, of course, against a backdrop of evolving client, market and competitive trends. These shifts are transforming the way clients perceive value in wealth management firms, and the way in which different wealth managers are positioned to deliver that value back to their clients. As a result, the approaches and models that have driven success in one market may not form the best basis for an appropriate and effective strategy for targeting growth in new markets. So, firms looking to develop winning value propositions for both existing and target growth markets need to resolve whether those propositions can comfortably coexist in the firm.

External Factors and Products/Services Need Attention, but May Not Be Big Growth Levers

When firms seek to develop an effective organizational model for growth, they consider external factors, a dimension in which they may find they have relatively little influence. For example, the regulatory environment and privacy laws may dictate or restrict what types of products can be sold to certain clients and limit the ability of “foreign” firms to serve local-market clients without investment in local infrastructure. In such circumstances, firms may have to reach clients

Figure 13. | Wealth Management Value Chain



through a partnership or joint venture. Economic conditions, market stability, political factors and the competition of local financial institutions are other contributing factors. Brand is another issue: A firm's brand may be perceived in a positive light in their local market, but acquire negative connotations in other markets—sometimes compounded by political, economic or popular sentiment. These issues all impact the go-to-market strategy.

Meanwhile, as the wealth management market continues to mature, and becomes more global, products and services are becoming more commoditized, making it more difficult to differentiate on product. As a result, firms need to make strategic decisions as to whether they will simply provide commoditized products, or focus on unique, customized product solutions. They also need to decide whether to restrict their offering to proprietary products, or embrace an open-architecture model. In some markets, private banks are partnering with the institutional side of their businesses to find unique private equity placements or IPO participation for their HNW and Ultra-HNW clients—i.e., one-off opportunities that are hard to match. In new markets, some firms have taken the lead from the results of their self-assessments and focused on products or advice, depending on their innate strengths and weaknesses.

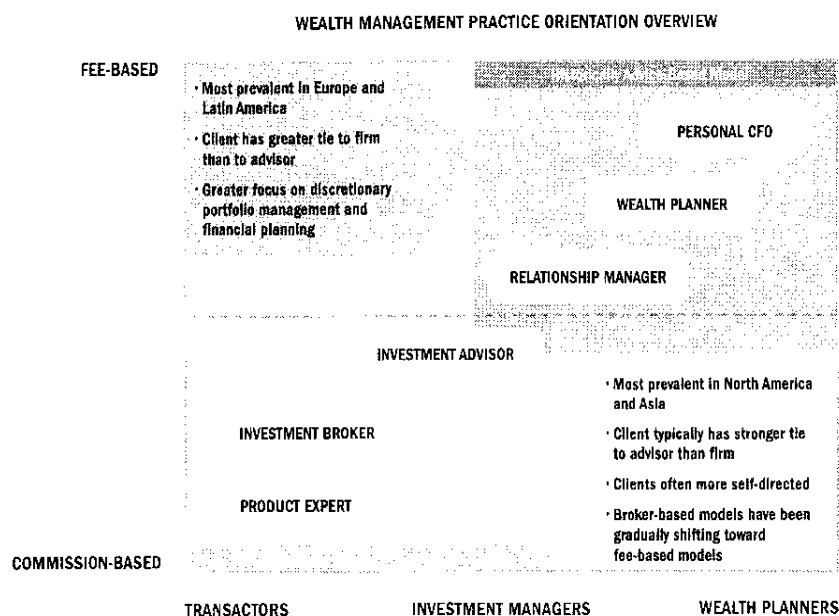
Aligned Service-Delivery Models Can Drive Significant Value

In contrast to external factors and products/services, service-delivery models can be directly influenced—and they offer significant potential for driving value in new markets. Leading wealth management firms have always known one-size-does-not-fit-all in the HNW segment, but the imperative when targeting new markets is to design a service-delivery model that is flexible enough in its architecture to accommodate diverse client needs and the diverse advisors serving them—even for firms that are not able or keen to invest heavily in the underlying technology.

Over time, many firms have acquired or developed a full spectrum of services through mergers and acquisitions or organic growth strategies, but the root of their service models often lies in their heritage, affecting key variables—from advisor talent to distribution channels, practice models and pricing structures. Successfully deploying the right type and combination of solutions is as much art as science, and may prove to be the critical differentiator—or the critical flaw—for a firm moving from one market to another.

A closer look at the typical wealth management practice models highlights how firms operate and deliver value. Practice models generally fall into three major categories: Transactors, Investment Managers and Wealth Planners. Each has a direct correlation to the preferred pricing structure—i.e., fee- versus commission-based. (See Figure 14.)

Figure 14. | Wealth Management Practice Orientation Overview



Transactors:

- Product Expert: Handles high-volume transactions involving sophisticated products or asset classes, such as foreign exchange derivatives
- Investment Broker: Handles transactions involving basic asset classes, such as equities, fixed income and options

Investment Managers:

- Investment Advisor: Offers strategic investment planning, as well as playing a hands-on role in constructing, reviewing and rebalancing client portfolios
- Relationship Manager: Establishes and nurtures client relationships, delegating portfolio management to internal or external managers

Wealth Planners:

- Wealth Planner: Offers holistic advice in accordance with client's finances and short-/long-term goals, such as real estate, retirement and generational wealth transfer
- Personal CFO: Aspires to provide quasi family-office services, often acting in a lead discretionary role coordinating with the client's other trusted advisors

The significance of these practice-model categories is that each reflects a different advisory approach, borne of a different perspective. While some firms claim to have a single practice orientation, many actually use multiple models in and across regions—and often leverage different models within their core markets to capitalize on the strengths of individual advisors. As they move into new markets, firms can create or exacerbate friction among the different advisory approaches they use. Importantly, practice orientations need not be mutually exclusive, but the mix of intra-firm practice models does need to be consciously managed.

When firms move into new markets and need to adapt existing service models or deploy new ones, management of coexisting service models can help them to flourish. This dynamic is also a factor for firms that consider partnering with or acquiring a local firm, or simply hiring local talent. For instance, a failure to understand the implications of prevalent practice models and those followed by new rainmakers can cripple the best-formulated strategy.

Locally dominant wealth management players are already testing their approach to service models by straying from what was once their base market to pursue opportunities. Most, however, still have a lot of work to do on the “art” facet of service delivery—the dimension in which leading firms are rallying their talent, organizational culture and distribution models to pursue new markets. In the successful pursuit of growth, however, it’s incumbent upon firms to fill any critical gaps between the identity and strengths they have and those they need to deliver service excellence in a new market.

A Rightly-Sized and Executed IT Strategy Can Reduce Risks of Entering a New Growth Market

New service-delivery models also pose a challenge for operations and IT because they add complexity and stress to the already complex task of supporting core wealth management activities, and meeting associated demands of risk, compliance and data management. For instance, middle-office staff, and integrated workflows and tools, are especially critical in cementing new-client relationships. During the relationship’s “on-boarding” stage, firms must be able to execute key middle-office activities effectively, such as setting up new-client portfolios and establishing initial statement cycles, to support both advisors and clients during the transition.

Simply stated, the imperative for firms is to develop from the outset an IT strategy that meets their operational objectives for new markets. Accordingly, leading firms are already assessing their existing operations and IT structures to gauge the degree to which they can be applied to other markets. In the process, it is not unusual to find strategic “blind spots,” especially when planning to serve a global constituency of HNWIs, advisors and operations personnel.

After all, globally relevant and effective platforms can deliver myriad capabilities, from integrated front, middle and back offices, and multicurrency and multijurisdictional transactions, accounting and reporting, to full tax optimization, business-rules automation, straight-through processing and personalized user experiences.

However, to support new service models, it is imperative to discern and plan which capabilities are critical to success, and what options IT has for delivering them. Moreover, those plans must be executed to full effect—which can be tough in practice. In theory, for example, firms often plan to pursue global scope, scale and governance through an incremental expansion of existing platforms into new markets. Then, however, they allow one-off IT decisions for individual new markets—decisions that seem more expedient at the time, and for which there is a more tangible business case in the near term. As a result, though, the initially well-conceived service model and IT strategy are compromised—potentially constraining the effectiveness of advisors and the entire operation, and posing significant risks to the brand as it seeks to establish a place in the new market.

By contrast, an IT strategy that is aligned to the growth strategy and is well defined and executed—leveraging core business platforms and enhancing operational capabilities—can substantially reduce the risks of entering a new growth market. However, no single technology, product or sourcing strategy offers the complete solution; so, given the array of IT options, how do wealth management firms pursue a strategically sound path forward, attaining scalable operational best practices?

Heritage, it turns out, plays an important part in a firm’s existing operations and IT structures as well as its service model—and therefore affects its attempts to achieve global scale and effectiveness. The differentiation among firms is not absolute, but, in general:

- “Transactors” typically have invested in large proprietary end-to-end IT systems, optimized for capturing economies of scale in execution volumes, and they usually have mature, differentiated wealth management processes and robust front- and middle-office IT capabilities.
- “Wealth Planners” have typically sought to capitalize on high-touch relationship management and specialized wealth management processes, so they leverage boutique front-office IT capabilities and back-office and execution platforms, based on application service providers (ASP) or commercial off-the-shelf (CO’S) solutions.

Like the service models themselves, IT and operations structures have typically grown out of the firm's historical needs and approaches, potentially leaving a gap between the existing structure and the one needed to support the firm's growth strategy. To fill that gap, wealth management firms of all types have a range of go-to-market options—from installing quick-hit information-sharing systems that augment manual processes and workflows, and running regional operational and technology centers, to establishing robust service-oriented architectures (SOAs) with fully integrated transaction, accounting and reporting platforms.

For example, firms entering a new geographic market may not have a clearly defined operating or practice model, so investing in an overly integrated IT structure is neither appropriate nor necessary—and could end up constraining the practice model as it evolves. In such cases, it is rational and viable—and relatively quick—for the firm to move forward with a set of manual processes and limited information-sharing (e.g., via manual data entry). In effect, this approach focuses on defining the required processes, then automating and optimizing them—and that may be all that is required to execute transactions effectively (e.g., in the local currency), meet local compliance mandates and fulfill a high-touch service pledge to clients. As the new market's business scale grows over time and the business case is proven, firms can undertake the next stage of IT/operations evolution.

Similarly, some firms have a siloed approach in existing operations—perhaps as a result of acquiring firms with different systems in the past, or reflecting some legal need to hive off certain activities—and it may be senseless to deconstruct those silos simply to enter a new market. In fact, firms may be able to operate quite effectively with a technology silo, a middle-office silo, and so on, overlaying requisite capabilities and reconciling across the silos to meet operational and service-model objectives like achieving a top-down view of a business line. These silos may or may not converge at some point on a single processing site or technology platform, but firms nevertheless can achieve some standardization of processes—providing standards around risk and compliance, how customers are serviced, the look and feel of reports, and so on—across the different silos.

Another option is to adopt a service-oriented architecture (SOA) approach: A business-driven paradigm that injects operational flexibility through a framework of business activities, services, policies, practices and software. SOAs are a pragmatic choice in cases where core IT platform capabilities and operational scale are fundamental to business-case realization, and SOA adoption is viable for all firm types, large and small. The SOA approach:

- Provides a standard way of representing and interacting with software assets.
- Supports the creation of new internal applications from existing components.
- Simplifies the integration of core functions and third parties in legacy applications and elsewhere.

As such, SOA allows for judicious incremental IT investments, which can unlock value embedded in mature legacy platforms, while providing contemporary capabilities, such as fluid workflows, improved straight-through processing, business-rules automation and business-activity monitoring.

Clearly, there is no universal remedy for structuring IT and operations in existing or new growth markets; the solution depends in large part on the business case—and the state of the existing model. To select the most appropriate and viable path forward, firms must iterate around some key considerations, including:

- Stability and efficacy of the existing IT capabilities and operating model, and their applicability to target markets
- Scale of the target market
- Sophistication of required capabilities
- Level of integration needed in IT/operations
- Availability and maturity of industry utilities, components and service providers

Wealth Management Firms Encounter New Challenges When Addressing Growth-Market Needs

Figure 15A. | Global Private Bank Uses Advice to Target Lower Wealth Tier in Emerging Markets

Situation
This private bank successfully serves both HNW and Ultra-HNW clients in its home market. As part of a broader growth strategy, it had invested heavily in a comprehensive reporting platform that allowed advisors to view clients' relationship holdings and serve them across regions. It rolled out the same advisory model and platform around the globe, differentiating itself by using a holistic advisory approach.

Growth Strategy
The bank was able to expand into emerging wealth markets in Asia by configuring the existing platform and limiting the functionality and complexity for a more-simplified advisory approach, in line with a tiered service model approach.

Lessons Learned
By utilizing an existing platform, and understanding local-market needs and expectations, the bank successfully differentiated itself by delivering sought-after advice to a lower-tier wealth segment.

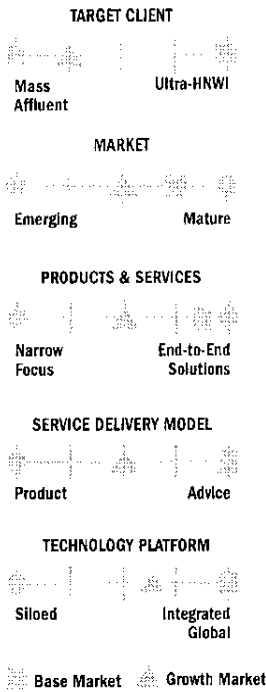


Figure 15B. | European Private Bank Struggles to Extend Offering Overseas

Situation
In its home market, the bank serves HNW and Ultra-HNW clients from all over the world, providing a breadth of services to clients, including advisory and concierge services, but limited in the way of innovative products.

Growth Strategy
In both mature and emerging markets, the firm has led with the brand cache, but limited its service offerings and advice, instead looking to attract various wealth segments with some unique product propositions, but limited. The organizational model retained domestic orientation, and each market deployed their own siloed technology platform.

Lessons Learned
While enjoying moderate success, the firm has struggled to gain top billing in many markets. The siloed technology platform has inhibited the firm's effectiveness in growth markets by limiting access to home-market assets. Additionally, while struggling to gain traction, the private bank remains committed to its heritage domestic model, having strong convictions it will significantly differentiate them in their growth markets. As a result they have conceded convergence with the target market objectives will exceed originally forecasted timelines.

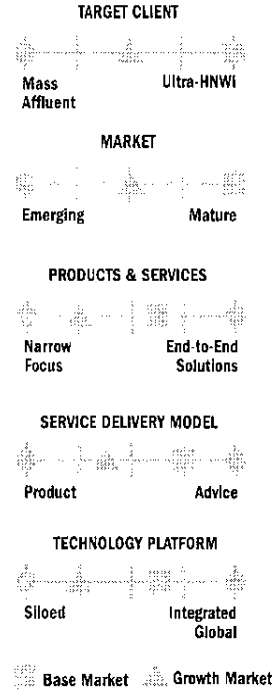


Figure 15C. | Brokerage Firm Overcomes Technology Constraints to Capture Emerging Market Ultra-HNW Clients

Situation
In its home market, the firm focuses heavily on its advisory process, and has invested in an extensible platform that serves Mass Affluent and HNW clients. However, because the platform was only U.S. dollar-based, it was difficult to extend the platform for global scale without major overhaul and investment.

Growth Strategy
Instead, for its international growth strategy, it focused on the Ultra-HNW client segment, which it believed was looking primarily for unique product propositions—such as structured products and unique private equity participation.

Lessons Learned
Despite a U.S. dollar-based technology platform, the firm understood the needs of targeted Ultra-HNW clients, and paid much attention to cultural differences. It has succeeded with the product approach in emerging Europe and Russia, as well as in the Middle East with its Sharia products.

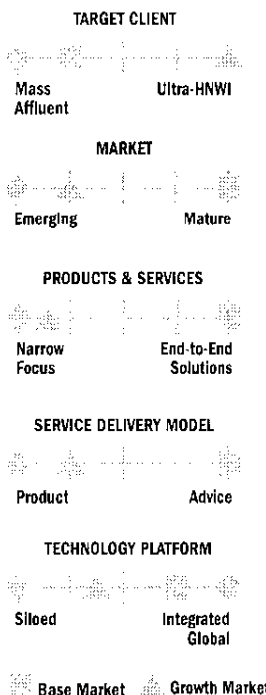
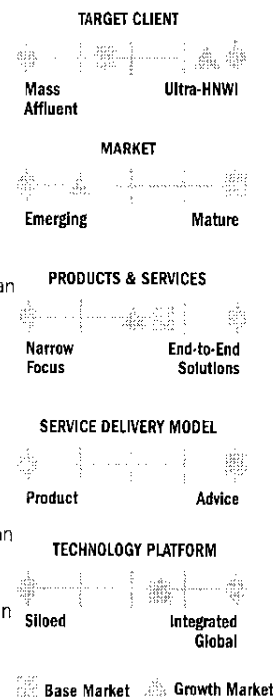


Figure 15D. | Boutique Bank, Misreading Needs, Fails in Bid for New Latin American HNW Clients

Situation
A small boutique private bank, serving HNW clients in its home market with advisory services, had a limited technology platform, but had access to a wide array of products for its clients with an open-architecture.

Growth Strategy
The firm decided to target the growing Latin American base of millionaires by locating itself in Miami, Florida, a travel and business hub for many Latin American clients. The firm assumed it would also gain some U.S. HNW market share as a secondary target due to the location. It hoped to gain market share with its highly personalized approach, advice, and the open-architecture.

Lessons Learned
The boutique bank did not succeed with its plan, assuming that the Latin American clients needed the same products as U.S. HNW clients. It failed to offer the products and services that Latin American clients needed when offshoring their money to the United States, with requisite tax advice.



Conclusion

The hallmarks of wealth management—sophisticated, discerning clients; complex services; and stiff competition—are all compounded in the HNW segment, where firms have long deployed superior talent, expertise and technology to differentiate themselves. The stakes are rising anew, as global economic and demographic trends produce new growth opportunities, forcing firms to search for go-to-market strategies able to attract new client segments through organic growth. In the process, firms are tackling an eternal dilemma: How to execute successfully to capture growth opportunities, differentiate themselves among target clients, and—ideally—become a firm of choice for the HNW and Ultra-HNW clients they serve.

When seeking to enter new markets, wealth management firms inevitably encounter challenges they do not face in their established markets. To define and execute a successful growth strategy, firms will need to respond to all the forces described, and ask and answer serious questions around the key dimensions of strategy. For example:

- Do we have a comprehensive understanding of client needs in our new target markets?
- Have we made an honest assessment of who we are and who we aspire to be?
- What are our long- and short-term growth strategies?
- How do we best leverage our existing capabilities and strengths to determine the most pragmatic and effective service-delivery model and operational/IT capabilities for enabling success in new markets?
- How can we improve speed to market entry, and what strategic sourcing options make the most sense?

Ultimately, the greatest success will be realized by those firms that comprehensively understand their clients, and are able to leverage their existing strengths to transform and adapt their service delivery and technology to cater effectively to client needs in their target growth markets.

The War for Talent Intensifies

More HNWI's Seek "Trusted Advisors"

The "trusted advisor" relationship is the cornerstone to long-term relationships between clients and advisors, as well as wealth management firms. While most HNWI's and UHNWI's have relationships with multiple wealth management firms,¹⁶⁰ many clients seek long-term "trusted advisors" who can help them navigate complex topics and strategies. HNWI's are becoming increasingly "hands-on" and sophisticated in their financial needs and investment behaviors. As a result, these wealthy individuals seek advisors they can trust for comprehensive wealth management services, not only guidance on investments. Clients expect advisors to understand them in the context of a larger relationship that encompasses personal and family finances as well as business partnerships or estate planning.

However, as HNWI population and wealth continue to climb, so does the number of clients seeking private bankers and wealth managers. Since 2002, total wealth held by HNWI's has grown by more than 50%, from US\$26.7 trillion to US\$40.7 trillion. During the same period, the number of HNWI's worldwide has increased by nearly three million individuals.¹⁶¹ This has compounded the demand for talented advisors from wealth management firms. Yet, the expectations of advisors may differ from one market to another. In many mature markets, for example, large retiree populations seek advice on how to draw steady income from their retirement assets. But in several emerging markets, HNW clients seek advisors who understand both the global financial markets and nuances of the local culture, as they desire to capture more sophisticated products as their wealth grows. Wealth management firms have adapted in response to the changes in their client base, shifting the industry from a transaction-driven business to an advice-oriented and fee-based business.

¹⁶⁰ Capgemini/Merrill Lynch Financial Advisor Survey, 2008

¹⁶¹ Capgemini analysis, 2008

In mature markets advisor talent is increasingly in demand by HNW clients and in emerging markets even more so. The challenge remains, however, in matching each client with their specific needs with the appropriate advisor. Client demand for a "trusted advisor" further exacerbates this trend as HNWIs tend to favor older—and, presumably, more experienced, dedicated and talented – private bankers and wealth managers. The average advisor in North America is now 52 years old, and industry experts estimate that, within five years, 42% of the advisors now practicing will pass 60 years of age and near retirement.¹⁶² Similar age trends among advisors exist globally. Some analysts speculate that if more advisors retire than enter the sector, the demand for talent will sharply increase. However, wealth management firms globally are actively hiring the next generation of advisors.

Developing and Attracting Top Talent Is a Major Investment

A decade or two ago, traditional firms had relatively linear tracks for recruiting and training future advisors. Today, however, wealth management firms have broadened the spectrum from which they seek out new talent. Before becoming an advisor, new recruits may be placed in different tracks to learn about the business, and conversely, firms learn about them before placing them in appropriate roles helping them build their client base. Attracting advisors involves recognizing the desired mix of personality and skill. Equally important for meeting the needs of HNW clients and earning their trust are relationship management skills as well as technical skills. And so, executives and recruiters attempting to tip the outcome of "the war for talent" in their firm's favor have tried innovative spins on current strategies to grow, including looking for successful executives outside wealth management with similar skills, for new hires. Some firms have sought out successful lawyers, accountants, educators, consultants and salespeople to join their ranks.^{163,164} While new to wealth management, these hires from other industries making a mid-career switch often relate well to a wealthy clientele that may prefer older, or "life-experienced" advisors. Yet, as wealth transfer and estate planning becomes more important to HNW clients, firms are still seeking hires that can relate to and earn the trust of a younger generation.

However, given the increased costs of educating, training, and grooming talent to become future advisors, many wealth management firms have had to balance their programs with situational acquisitions that make sense. Despite the intensity of effort, capital, and resource on the part of firms, attrition among advisors is still high, as the job of an advisor is rigorous, demands discipline, as well as strong relationship and technical skills. Interviewing 15 to 20 candidates for every individual that eventually becomes an advisor is not unusual.¹⁶⁵ Some firms have reported drop-out rates in training programs between 40% and 60% over a five-year period.¹⁶⁶ Not that the acquisition of talent is necessarily an easier option. To acquire talent, firms find themselves balancing opportunity costs of promising upfront and guaranteed bonuses and capital firms could use instead to develop new and less experienced advisors, who are likely to have a greater loyalty as they mature and prosper.¹⁶⁷ The competition for talent has risen to an extent that bidding wars among firms for top advisors are not uncommon, with promised bonuses equaling two or three times the payouts from just a few years ago.¹⁶⁸ In many instances, firms need years to recoup recruitment costs for highly experienced financial advisors.

Strategies for Motivating Talent to Stay for the Long Haul

Advisor turnover and retirement—and the attendant impact on clients—is a constant concern for wealth management firms. While turnover rates can vary by firm size and location, many firms face rising attrition. To combat this trend, some of the industry's innovative firms have experimented with novel ways to reward performance and loyalty. For example, firms are increasingly using the promise of a career path to aid advisor retention. Other wealth management firms are using more traditional tactics such as equity, as well as defined percentage payouts on new assets they bring to the firm.¹⁶⁹ Firms have reengineered compensation packages, revising voluntary deferred compensation and additional retirement options. In the past, firms used voluntary deferred compensation and longer vesting periods to compensate financial advisors and increase retention. Indeed, vesting periods in wealth management tend to be longer than for other sectors in the finance industry as relationships between client and advisor can take years to establish. But today, several firms have rethought their arrangements and have adjusted the defined vesting periods to incent advisors to behave strategically in the client's and the firm's long-term interests. For example, before advisors retire, wealth management firms have arranged a compensation plan that extends income into retirement, which works well for the client, the advisor and the firm. The advisor, reaching retirement, can carefully transition clients to colleagues, ensuring key relationships are maintained, while remaining a mentor/consultant for the firm/client relationship. The transition for clients is thus evolutionary and easier.

Time is increasingly becoming an important factor in the acquisition and retention of talent, as advisors weigh the advantages of the short- and long-term implications of their compensation packages. Several innovative wealth management firms have looked outside the sector

¹⁶² Helen Kearney and Lee Conrad, "The War For Talent," *On Wall Street*, March 1, 2008

¹⁶³ Jane Croft, "War for Talent Fuels Pay Rises for Recruits," *Financial Times*, June 20, 2007

¹⁶⁴ Capgemini research, 2008

¹⁶⁵ Interview with Phil Sieg, Merrill Lynch, April 2008

¹⁶⁶ Dennis Gallant, "The Top Producer Syndrome," *Registered Rep*, September 1, 2007

¹⁶⁷ Capgemini analysis, 2008

¹⁶⁸ Halah Touryalai, "Independent Together," *Registered Rep*, March 1, 2008

¹⁶⁹ Joseph Giannone, "UBS sets awards plan to boost assets, keep brokers," *Reuters*, May 22, 2008

for competitive compensation structures. For example, using a model frequently used in real estate investment firms,¹⁷⁰ wealth management executives and recruiters combine upfront and guaranteed bonuses into a multi-year compensation package and significant carried interest. Spreading out compensation, for example, from a four-year to a nine-year vesting period, allows a firm to pay more over the long term, and less upfront, as well as help keep the talent investment with the firm. From both the advisor and firm perspective, multi-year bonuses, together with voluntary deferred compensation and retirement plans, complete a competitive compensation package. And spreading a bonus over several years benefits executives concerned with the retention of talent, as it lessens the temptation for advisors to leave, and frees capital for firms to use elsewhere until the payout date.

Advisor Retention Correlates with Quality of Support

While compensation levels contribute to advisor satisfaction and retention, the quality of support a wealth management firm provides to its advisors is also a driver of advisor and client satisfaction.¹⁷¹ Because HNW clients tend to follow their “trusted advisors” when the advisors switch firms, both advisor retention and client retention correlate with the quality of support. As a way to enhance advisor and client retention, many firms invest in operational support and client-experience initiatives to deliver not just a “trusted advisor” but a “trusted firm” to the client. Thus, when advisors retire or switch firms, the clients are likely to trust the firm despite the change. Many firms now focus on enabling advisors to meet their clients’ needs more effectively as a way to lessen a clients’ desire to switch firms. Investments are being made in front-office operations and support as well as specialized technology so advisors cannot easily replicate the advisor-client relationship and related services if they go elsewhere.

Leading firms are investing in analytic tools that all advisors can use as training or coaching tools to provide them with a better understanding of the client needs. By providing advisors with real-time, detailed analytics to identify which clients are underserved and offer actionable recommendations, more advisors are likely to support clients effectively and holistically. Firm executives also are studying these “needs-based” analytics to pinpoint best practices unique to their organization and business models that are experiencing the most success. These analytic tools can help to identify advisors with the greatest retention-risk factors, and therefore, can help firms assess what impact their attrition could have on client satisfaction. Such warning allows executives to engage these at-risk advisors proactively.

In recent years, firms also have begun to place greater value on team-based models over individual advisors. Team models enable a firm to provide their clients with access to specialists, whose collective expertise covers the full spectrum of wealth management needs services to meet their growing demands and expectations. Firms too benefit from “team financial advisors” in the form of greater performance—10% to 20% over individual financial advisors—and higher retention rates.¹⁷² Additionally, convincing HNW clients to leave a firm is more difficult when more than one “trusted advisor” is integral to the long-term relationship. For those firms embracing a team-based model, a retiring advisor is not as daunting, as maturing advisors transition the client to other “trusted” team members. Team models enable strategies to develop talent, allowing firms to develop promising advisors with senior colleagues while enhancing the trust between advisors and clients.

Several leading firms have also developed in-house practice management consulting groups focused on maximizing the effectiveness of financial advisors in supporting their clients’ needs. These groups provide advisors teams with training on best practices, global perspectives, and objective evaluations with attendant recommendations to advise a client better. The support from the consulting groups range from individual consulting engagements (both short- and long-term) to one-on-one coaching, and may even include access to a best practice knowledge base. By investing in these in-house practice consulting groups, firms demonstrate their commitment to advisor satisfaction and success. Such investments and support can distinguish a firm in the recruiting and retention of talented advisors while enhancing the firm’s ability to earn the trust of its clients.

The competition for talent has led to firms taking more innovative approaches to invest in their wealth advisors. These strategies, including attracting individuals from outside the sector and enhancing the quality of support for current advisors, have not only facilitated firms to better support their advisors, but have also enabled them to more effectively meet their growing HNW client needs.

¹⁷⁰ Russell Reynolds Associates, “2007 Recruiting Trends: Asset and Wealth Management”

¹⁷¹ J.D. Power and Associates, “2007 Financial Advisor Satisfaction Study,” May 2, 2007

¹⁷² Interview with Richard Orlando, Merrill Lynch, April 11, 2008

Appendix A: Methodology

The *World Wealth Report* covers 71 countries in the market-sizing model, accounting for more than 98% of global gross national income and 99% of world stock market capitalization.

We have estimated the size and growth of wealth in various regions using the Capgemini Lorenz curve methodology, which was originally developed during consulting engagements with Merrill Lynch in the 1980s. It is updated on an annual basis to calculate the value of HNWIs financial wealth at a macro level.

The model is built in two stages: first, the estimation of total wealth by country, and second, the distribution of this wealth across the adult population in that country. Total wealth levels by country are estimated using national account statistics from recognized sources, such as the International Monetary Fund and the World Bank, to identify the total amount of national savings in each year. These are summed over time to arrive at total accumulated country wealth. As this captures financial assets at book value, the final figures are adjusted based on world stock indexes to reflect the market value of the equity portion of HNWIs wealth (in conjunction with the Economist Intelligence Unit's efforts to provide the most accurate data, select historical figures reported in the 2008 *World Wealth Report* have been updated since publication in previous reports).

Wealth distribution, which differs by country, is based on formalized relationships between wealth and income. Data on income distribution is provided by the World Bank, Global Insight and by countries' national statistics. We then use the resulting Lorenz curves to distribute wealth across the adult population in each country. To arrive at financial wealth as a proportion of total wealth, we have used statistics from countries with available data to calculate their financial wealth figures and extrapolated these findings to the rest of the world.

The financial asset wealth figures we publish includes the values of private equity holdings stated at book value as well as all forms of publicly quoted equities, bonds, funds and cash deposits. It excludes collectibles, consumables, consumer durables and real estate used for primary residences. Offshore investments are theoretically accounted for, but only insofar as countries are able to make accurate estimates of relative flows of property and investment in and out of their jurisdictions. We accommodate undeclared savings in the report.

In response to industry and media requests, in 2005, we revised the methodology to move from reporting our annual findings at a regional to a country level. In addition to applying up-to-date annual statistics, we made adjustments to estimate the number of HNWIs and their financials more precisely at a country level. We have continued with this approach in this year's report.

This year, we continued to enhance our macroeconomic model with increased analysis of domestic economic factors that influence wealth creation. We have worked, for example, with colleagues from Capgemini and Merrill Lynch in over 30 countries to best account for the impact of domestic, fiscal and monetary policies over time on HNWIs wealth generation.

Given exchange rate fluctuations over the past years, especially with respect to the U.S. dollar, we again assessed the impact of currency fluctuations on our

results. From our analysis, we conclude that our methodology is robust and exchange rate fluctuations do not have a significant impact on our results.

The translation to U.S. dollars is made using a yearly average exchange rate. Wealth is calculated in the *WWR* model by first calculating cumulative savings at a country level, going back about 100 years. As our model calculates cumulative wealth in U.S. dollar terms using a time series of data going back over 100 years, the impact of a sharp currency appreciation for a year or two has a negligible effect. For example, our analysis shows that if exchange rates in 2007 had remained at the same level as in 2006, global HNWIs wealth in 2007 would have been only 0.2% lower than our reported figure of US\$40.7 trillion.

The information contained herein was obtained from various sources; we do not guarantee its accuracy or completeness nor the accuracy or completeness of the analysis relating thereto. This research report is for general circulation and is provided for general information only; any party relying on the contents hereof does so at its own risk.

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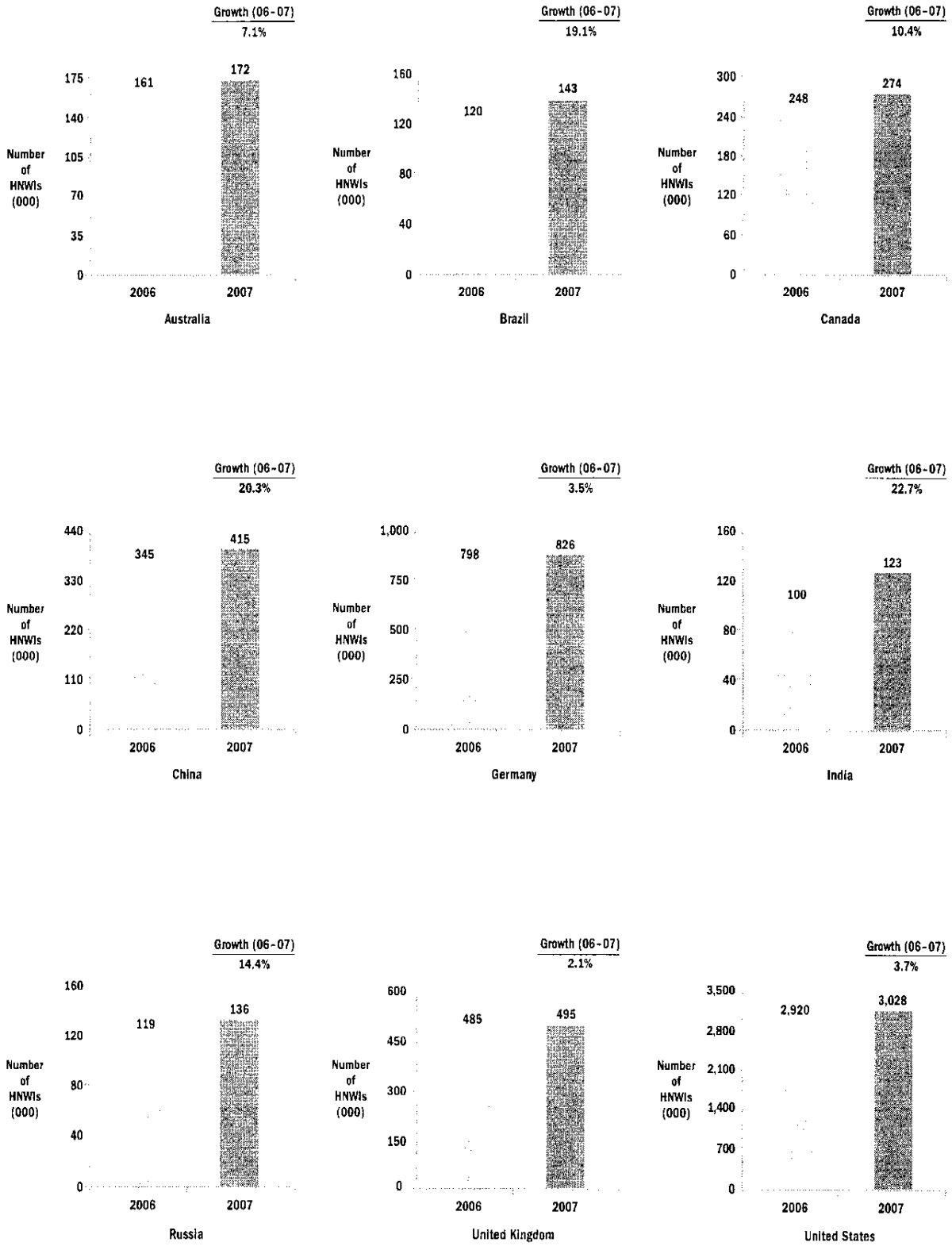
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We extend a special thanks to those firms that gave us insights into events that are impacting the Wealth Industry on a global basis as well as those participating in this year's Financial Advisor Survey: ABN AMRO Private Banking; ANZ Private Bank; Banco Urquijo; BBVA Patrimonios; Citigroup Private Bank and Smith Barney; Christie's; Credit Suisse; Morgan Stanley; Marshall & Ilsley Wealth Management; Popular Banca Privada; Santander Banca Privada; Schretlen & Co.; and Van Lanschot.

Appendix B: Select Country Breakdown



Source: Capgemini Lorenz curve analysis, 2008

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| Bangkok | +662 685 3548 | Mumbai | +91 22 6632 8000 |
| Beirut | +961 1 983 004 | New York City | +1 212 236 5500 |
| Beverly Hills | +1 310 858 1500 | Panama | +507 263 9911 |
| Boston | +1 800 937 0866 | Paris | +33 1 5365 5555 |
| Brussels | +32 2 7619520 | Pasadena | +1 626 817 6888 |
| Buenos Aires | +5411 4317 7500 | Rome | +39 06 684 01801 |
| Chicago | +1 800 937 0466 | San Francisco | +1 415 955 3700 |
| City of Industry | +1 626 965 6691 | Santiago | +562 370 7000 |
| Dubai | +9714 397 5555 | São Paulo | +5511 3175 4100 |
| Dublin | +353 1 243 8877 | Seoul | +82 2 3707 0400 |
| Geneva | +41 22 703 1717 | Shanghai | +8621 6132 4888 |
| Hong Kong | +852 2844 5678 | Singapore | +65 6331 3888 |
| Houston | +1 713 658 1200 | Sydney | +61 2 9225 6500 |
| London | +44 20 7628 1000 | Taipei | +886 2 8758 3600 |
| Los Angeles | +1 213 627 7900 | Tel Aviv | +972 3 607 2000 |
| Luxemburg | +352 49 49 111 | Tokyo | +81 3 6225 8300 |
| Madrid | +34 91 432 9900 | Washington, DC | +1 202 659 0232 |
| Melbourne | +61 3 9659 2666 | Zurich | +41 44 297 74 00 |

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Cap

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- Why Bahrain
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- Highly-skilled workforce
- A great place to live
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 - ICT
 - Manufacturing
 - Healthcare
 - Education and training
 - Alternative energy
 - Tourism
- The role of the EDB
- Key services
- Major development projects

Bahrain is unique. Nowhere else in the Middle East is quite so business-friendly.

We have been welcoming foreign investors for decades, so we understand their needs and how to help them prosper.

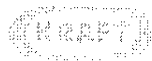
The Gulf market is growing fast, by 5.6% a year. The combined GDP of the Gulf Cooperation Council (GCC) states – Saudi Arabia, the United Arab Emirates, Kuwait, Qatar, Oman and Bahrain – is already worth \$735 billion, and by 2050 could close the gap with G-7 economies.

The population of the Gulf has grown ten-fold in 50 years, to 40 million in 2006, one of the highest rates in the world.

The oil price windfall has been reinvested in new infrastructure, including transport, telecommunications, education, training and healthcare. Regionally, around \$1 trillion infrastructure investments are in the pipeline. By 2010 this could total \$3 trillion.

With its unique location at the heart of the Gulf, Bahrain is perfectly positioned to exploit one of the fastest-growing markets in the world.

FOR INFORMATION ON THE INVESTMENT OPPORTUNITIES IN BAHRAIN, PLEASE CONTACT THE BAHRAIN ECONOMIC DEVELOPMENT BOARD (EDB) AT THE FOLLOWING ADDRESS: BAHRAIN ECONOMIC DEVELOPMENT BOARD, P.O. BOX 33989, MANAMA, KUWAIT. TEL: +965 1733 3333. FAX: +965 1733 3334. WWW.BAHRAIN.EDB.BH



ANDREW TREVIS
Plant Director, Kraft

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Bahrain offers significant investment opportunities in several important economic sectors, including:

- Financial services >
- Business and professional services >
- Information communication technology >
- High value-added manufacturing >

Bahrain facts and figures

- The Middle East's fastest growing economy - ranked 19th worldwide, ahead of France and Germany
- The region's lowest taxes, with zero corporate tax
- The Gulf's lowest operating and living costs
- A 40 year track record as the Gulf's leading financial centre
- More licensed financial institutions than anywhere else in the Gulf
- Unrivalled access to the booming Gulf market worth \$735 billion annually
- One hour's drive from 50% of Saudi Arabia's economy
- More flight connections within the region than any other Gulf state
- The only Gulf state with a Free Trade Agreement with the United States



Bahrain

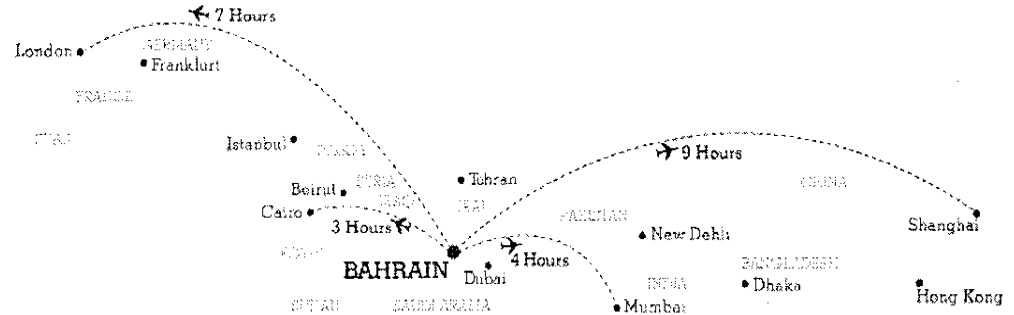
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Bahrain offers fast and efficient access to every market in the Middle East by air, sea and road, making it an ideal logistics hub. Saudi Arabia, the United Arab Emirates and Qatar are all less than 1.5 hours' drive or flight away.

By air

Bahrain is home to Gulf Air, with more flights to more cities in the region than any other Gulf carrier. The airport is also undergoing a major expansion to increase passenger and freight capacity.

By sea

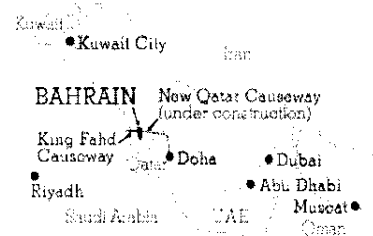
Bahrain's new Khalifa bin Salman Port will be one of the largest in the Middle East, transforming Bahrain from a regional port into a major international transshipment base.

By road

The King Fahd causeway provides a direct link to Saudi Arabia, the largest market in the region. Its 24 million people are just one hour's drive away.

In 2012 a second causeway will complete a new trans-Gulf highway running from Saudi Arabia through Bahrain to Qatar, the United Arab Emirates and Oman, connecting the entire Gulf market with Bahrain at the centre.

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Bahrain's strategic location in the Gulf region, with direct access to the world's largest markets, makes it an ideal logistics hub. The King Fahd Causeway provides a direct link to Saudi Arabia, the largest market in the region. Its 24 million people are just one hour's drive away. In 2012 a second causeway will complete a new trans-Gulf highway running from Saudi Arabia through Bahrain to Qatar, the United Arab Emirates and Oman, connecting the entire Gulf market with Bahrain at the centre.

DAVE SPARGO
Regional Director
DHL
Middle East, Bahrain



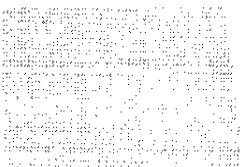
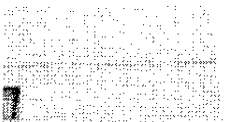
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Free Trade Agreements:

- Bahrain has the freest economy in the Middle East, ranked 19 worldwide, ahead of France and Germany. We strive to maintain or improve that position every year.
- Part of the Arab Free Trade Zone
- Bilateral trade and economic agreements with 43 other countries, including China, France, India, Singapore and the UK
- Free Trade Agreement with the United States

Businesses enjoy:

- Zero corporate taxes
- Protection of an established legal system
- The most transparent regulatory system in the region
- Intellectual property protection
- Global best-practice standards
- Low inflation
- No 'free zone' restrictions

Sovereign credit ratings¹

- Standard & Poor's - A stable
- Moody's - A3
- Fitch - F1

¹ S&P Credit Rating 2007, Moody's Credit Rating 2007, and Fitch Issuer Rating 2007

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Bahrain offers significant investment opportunities in several important economic sectors, including:

- [Financial services >](#)
- [Business and professional services >](#)
- [Information communication technology >](#)
- [High value-added manufacturing >](#)

The freest economy in the Arab world

| Rank | Country |
|------|----------------|
| 1. | Hong Kong |
| 2. | Singapore |
| 3. | Ireland |
| 4. | Australia |
| 7. | Canada |
| 10. | United Kingdom |
| 18. | Mauritius |
| 23. | Germany |
| 39. | Kuwait |
| 42. | Oman |
| 48. | France |
| 60. | Saudi Arabia |
| 63. | UAE |
| 66. | Qatar |
| 74. | Turkey |
| 115. | India |
| 126. | China |

Source: The Heritage Foundation/Wall Street Journal Index of Economic Freedom 2008



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The cost of doing business is lower in Bahrain than elsewhere in the region:

The cost of living is low and wages are competitive, ensuring that businesses who wish to employ expatriate labour can do so more cost-effectively than in other Gulf states.

Office rents are lower too, and with recent and ongoing privatisations in the utilities sector, businesses can take advantage of highly competitive utility rates.

Bahrain also has the lowest taxes in the GCC.

- No corporation tax
- No income tax
- No value-added tax
- No withholding tax
- No capital gains tax
- No wealth tax
- No inheritance tax
- No death duties

AVERAGE MONTHLY SALARIES

| Country | 16,000 | 19,150 |
|---------|--------|--------|
| Bahrain | 12,750 | |

AVERAGE MONTHLY LEASE RATES

| Country | 76 | 51 |
|---------|----|----|
| Bahrain | 33 | |

Bahrain Dubai Doha Bahrain Dubai Doha

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Bahrain offers significant investment opportunities in several important economic sectors, including:

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- [Information communication technology >](#)
- [High value-added manufacturing >](#)

Bahrain is the ideal location for business

- 0% corporate taxation
- GDP growth rate 6.9%
- Unemployment rate 3.9%
- Inflation rate 3.5%
- Low labour costs
- Low energy costs
- The freest economy in the Arab World

Competitive costs

- Low cost of living
- Competitive wages
- Low office rents
- Competitive utility rates

NOTICE REGARDING NATIVE LANGUAGE TRANSLATION

Investor hereby agrees that it is the sole responsibility of Investor to ensure proper translation of this Agreement into their native language if necessary for Investor's understanding of the rights and obligations contained herein. Any language translation of this Agreement provided by any of the parties hereto is not a binding legal document, and is being provided solely for the Investor's convenience, and shall not in any way be construed as a contract or any part of the Agreement as set forth in English. None of the parties hereto are liable for any inaccuracies in any language translation or for any misunderstandings due to differences in language usage or dialect. In the event of any inconsistencies between this Agreement as set forth in English and any language translation, this Agreement as set forth in English and as executed shall govern. The Investor assumes the responsibility for fully understanding the nature and terms of the rights and obligations under this Agreement as set forth in English. None of the parties shall sign any translation of this Agreement.

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TRADE COMPLIANCE CENTER

Making America's Trade Agreements Work for You!

| Agreement Title | Size Guide |
|--|------------|
| Albania Bilateral Investment Treaty | 107k Yes |
| Argentina Bilateral Investment Treaty | 77k Yes |
| Armenia Bilateral Investment Treaty | 92k Yes |
| Azerbaijan Bilateral Investment Treaty | 119k Yes |
| Bahrain Bilateral Investment Treaty | 107k Yes |
| Bangladesh Bilateral Investment Treaty | 97k Yes |
| Bolivia Bilateral Investment Treaty | 115k Yes |
| Bulgaria Bilateral Investment Treaty | 70k Yes |
| Cameroon Bilateral Investment Treaty | 92k Yes |
| Congo, Democratic Republic Of (Kinshasa) Bilateral Investment Treaty | 97k Yes |
| Congo, Republic Of (Brazzaville) Bilateral Investment Treaty | 124k Yes |
| Croatia Bilateral Investment Treaty | 116k Yes |
| Czech Republic Bilateral Investment Treaty | 81k Yes |
| Ecuador Bilateral Investment Treaty | 101k Yes |
| Egypt Bilateral Investment Treaty | 235k Yes |
| Estonia Bilateral Investment Treaty | 93k Yes |
| Georgia Bilateral Investment Treaty | 101k Yes |
| Grenada Bilateral Investment Treaty | 66k Yes |
| Honduras Bilateral Investment Treaty | 110k Yes |
| Jamaica Bilateral Investment Treaty | 93k Yes |
| Jordan Bilateral Investment Treaty | 111k Yes |
| Kazakhstan Bilateral Investment Treaty | 144k Yes |
| Kyrgyzstan Bilateral Investment Treaty | 141k Yes |
| Latvia Bilateral Investment Treaty | 95k Yes |
| Lithuania Bilateral Investment Treaty | 29k Yes |
| Moldova Bilateral Investment Treaty | 107k Yes |
| Mongolia Bilateral Investment Treaty | 155k Yes |
| Morocco Bilateral Investment Treaty | 87k Yes |
| Mozambique Bilateral Investment Treaty | 28k Yes |
| Panama Bilateral Investment Treaty | 103k Yes |
| Poland Business and Economic Relations Treaty | 130k Yes |
| Romania Bilateral Investment Treaty | 79k Yes |
| Senegal Bilateral Investment Treaty | 134k Yes |
| Slovakia Bilateral Investment Treaty | 87k Yes |
| Sri Lanka Bilateral Investment Treaty | 102k Yes |
| Trinidad And Tobago Bilateral Investment Treaty | 180k Yes |
| Tunisia Bilateral Investment Treaty | 102k Yes |
| Turkey Bilateral Investment Treaty | 120k Yes |
| Ukraine Bilateral Investment Treaty | 152k Yes |
| Uruguay Bilateral Investment Treaty | 28k Yes |


UNITED STATES INTERNATIONAL TRADE COMMISSION
**U.S. Trade Balance, by Partner Country 2007
in descending order of trade turnover (imports plus exports)**

| Partner country | | Imports for Consumption | Domestic Exports | Merchandise Trade Balance |
|-------------------------|-----------------------|-------------------------|------------------|---------------------------|
| ----million dollars---- | | | | |
| 1 | 1220.--Canada | \$312,504.5 | \$213,118.7 | (\$99,385.8) |
| 2 | 5700.--China | \$323,085.5 | \$61,013.2 | (\$262,072.3) |
| 3 | 2010.--Mexico | \$210,158.8 | \$119,381.1 | (\$90,777.7) |
| 4 | 5880.--Japan | \$144,927.9 | \$58,095.8 | (\$86,832.2) |
| 5 | 4280.--Germany | \$94,416.2 | \$44,294.1 | (\$50,122.1) |
| 6 | 4120.--United Kingdom | \$56,872.8 | \$45,435.6 | (\$11,437.2) |
| 7 | 5800.--Korea | \$45,368.3 | \$33,011.6 | (\$12,356.7) |
| 8 | 4279.--France | \$41,236.6 | \$25,784.4 | (\$15,452.2) |
| 9 | 5830.--Taiwan | \$38,052.4 | \$24,541.0 | (\$13,511.4) |
| 10 | 4210.--Netherlands | \$19,259.6 | \$30,535.8 | \$11,276.2 |
| 11 | 4759.--Italy | \$35,020.5 | \$12,537.5 | (\$22,483.0) |
| 12 | 3070.--Venezuela | \$37,582.3 | \$9,762.0 | (\$27,820.2) |
| 13 | 3510.--Brazil | \$25,017.7 | \$21,684.1 | (\$3,333.6) |
| 14 | 5170.--Saudi Arabia | \$35,284.5 | \$9,846.9 | (\$25,437.5) |
| 15 | 5570.--Malaysia | \$32,754.7 | \$10,215.3 | (\$22,539.5) |
| 16 | 5590.--Singapore | \$19,080.4 | \$23,576.8 | \$4,496.4 |
| 17 | 5330.--India | \$23,856.9 | \$16,308.6 | (\$7,548.2) |
| 18 | 4190.--Ireland | \$30,292.1 | \$8,426.5 | (\$21,865.6) |
| 19 | 4231.--Belgium | \$15,269.9 | \$22,977.3 | \$7,707.4 |
| 20 | 7530.--Nigeria | \$32,525.0 | \$2,688.6 | (\$29,836.4) |
| 21 | 5081.--Israel | \$20,817.0 | \$9,940.2 | (\$10,876.7) |
| 22 | 5490.--Thailand | \$22,684.7 | \$7,837.2 | (\$14,847.5) |
| 23 | 4419.--Switzerland | \$14,760.9 | \$15,056.1 | \$295.2 |
| 24 | 6021.--Australia | \$8,633.1 | \$17,916.5 | \$9,283.4 |
| 25 | 4621.--Russia | \$19,143.0 | \$6,681.0 | (\$12,462.0) |
| 26 | 5820.--Hong Kong | \$7,037.0 | \$14,881.9 | \$7,844.9 |

| | | | | |
|----|-----------------------|------------|------------|--------------|
| 27 | 4700.--Spain | \$10,499.1 | \$9,650.9 | (\$848.2) |
| 28 | 7210.--Algeria | \$17,397.1 | \$1,626.2 | (\$15,770.9) |
| 29 | 5600.--Indonesia | \$14,410.7 | \$4,132.5 | (\$10,278.1) |
| 30 | 3010.--Colombia | \$9,251.2 | \$7,884.4 | (\$1,366.9) |
| 31 | 4010.--Sweden | \$13,006.7 | \$4,084.1 | (\$8,922.6) |
| 32 | 5650.--Philippines | \$9,397.5 | \$7,335.8 | (\$2,061.6) |
| 33 | 3370.--Chile | \$8,969.5 | \$7,610.2 | (\$1,359.3) |
| 34 | 7910.--South Africa | \$9,131.9 | \$5,204.3 | (\$3,927.6) |
| 35 | 7620.--Angola | \$12,211.0 | \$1,264.0 | (\$10,947.0) |
| 36 | 5050.--Iraq | \$11,007.6 | \$1,527.9 | (\$9,479.7) |
| 37 | 5520.--Vietnam | \$10,541.2 | \$1,823.3 | (\$8,717.8) |
| 38 | 5200.--United Arab Em | \$1,333.7 | \$10,909.5 | \$9,575.8 |
| 39 | 4890.--Turkey | \$4,615.6 | \$6,442.6 | \$1,827.0 |
| 40 | 4330.--Austria | \$7,736.1 | \$2,958.0 | (\$4,778.1) |
| 41 | 2740.--Trin & Tobago | \$8,764.2 | \$1,679.1 | (\$7,085.1) |
| 42 | 4039.--Norway | \$7,243.6 | \$2,919.6 | (\$4,324.0) |
| 43 | 2470.--Dominican Rep | \$4,213.8 | \$5,793.4 | \$1,579.6 |
| 44 | 3570.--Argentina | \$4,258.0 | \$5,115.0 | \$857.0 |
| 45 | 3330.--Peru | \$5,207.1 | \$3,764.3 | (\$1,442.8) |
| 46 | 3310.--Ecuador | \$6,131.0 | \$2,709.3 | (\$3,421.8) |
| 47 | 4099.--Denmark | \$6,108.7 | \$2,652.6 | (\$3,456.0) |
| 48 | 2150.--Honduras | \$3,942.7 | \$4,327.9 | \$385.3 |
| 49 | 2230.--Costa Rica | \$3,915.7 | \$4,224.3 | \$308.6 |
| 50 | 4050.--Finland | \$5,289.7 | \$2,731.0 | (\$2,558.6) |
| 51 | 7290.--Egypt | \$2,380.1 | \$5,311.4 | \$2,931.3 |
| 52 | 2050.--Guatemala | \$3,031.5 | \$3,872.4 | \$840.9 |
| 53 | 5130.--Kuwait | \$4,191.3 | \$2,300.3 | (\$1,891.0) |
| 54 | 6141.--New Zealand | \$3,093.3 | \$2,681.5 | (\$411.9) |
| 55 | 5350.--Pakistan | \$3,577.5 | \$2,012.6 | (\$1,564.9) |
| 56 | 4710.--Portugal | \$3,071.6 | \$2,422.4 | (\$649.2) |
| 57 | 4550.--Poland | \$2,211.3 | \$3,011.4 | \$800.1 |
| 58 | 2110.--El Salvador | \$2,044.1 | \$2,209.6 | \$165.5 |
| 59 | 7250.--Libya | \$3,429.0 | \$490.5 | (\$2,938.4) |

| | | | | |
|----|------------------------|-----------|-----------|-------------|
| 60 | 4370.--Hungary | \$2,798.6 | \$1,112.3 | (\$1,686.3) |
| 61 | 5380.--Bangladesh | \$3,429.2 | \$451.1 | (\$2,978.1) |
| 62 | 2250.--Panama | \$361.4 | \$3,492.4 | \$3,131.0 |
| 63 | 4351.--Czech Republic | \$2,416.8 | \$1,123.5 | (\$1,293.2) |
| 64 | 4840.--Greece | \$1,197.4 | \$2,057.5 | \$860.1 |
| 65 | 2779.--Aruba | \$2,747.4 | \$492.5 | (\$2,254.9) |
| 66 | 7630.--Congo (ROC) | \$3,098.7 | \$138.8 | (\$2,959.9) |
| 67 | 5180.--Qatar | \$477.3 | \$2,550.9 | \$2,073.6 |
| 68 | 2410.--Jamaica | \$685.4 | \$2,236.7 | \$1,551.4 |
| 69 | 2360.--Bahamas | \$394.4 | \$2,422.8 | \$2,028.5 |
| 70 | 7550.--Gabon | \$2,146.9 | \$473.7 | (\$1,673.2) |
| 71 | 2771.--Netherlands Ant | \$710.7 | \$1,897.0 | \$1,186.3 |
| 72 | 5550.--Cambodia | \$2,463.9 | \$137.5 | (\$2,326.4) |
| 73 | 4623.--Ukraine | \$1,236.0 | \$1,282.3 | \$46.3 |
| 74 | 2190.--Nicaragua | \$1,608.4 | \$846.8 | (\$761.6) |
| 75 | 7560.--Chad | \$2,238.3 | \$71.0 | (\$2,167.3) |
| 76 | 5420.--Sri Lanka | \$2,060.3 | \$214.6 | (\$1,845.7) |
| 77 | 4359.--Slovak Republic | \$1,560.8 | \$657.4 | (\$903.4) |
| 78 | 5110.--Jordan | \$1,333.1 | \$831.7 | (\$501.4) |
| 79 | 4634.--Kazakhstan | \$1,240.5 | \$730.9 | (\$509.7) |
| 80 | 5230.--Oman | \$933.0 | \$1,034.9 | \$102.0 |
| 81 | 7140.--Morocco | \$625.9 | \$1,333.9 | \$708.0 |
| 82 | 7380.--Eq Guinea | \$1,682.9 | \$234.5 | (\$1,448.4) |
| 83 | 4632.--Azerbaijan | \$1,727.0 | \$174.5 | (\$1,552.4) |
| 84 | 4850.--Romania | \$1,063.6 | \$650.3 | (\$413.4) |
| 85 | 4239.--Luxembourg | \$527.4 | \$971.8 | \$444.4 |
| 86 | 5660.--Macao | \$1,095.1 | \$216.0 | (\$879.1) |
| 87 | 3530.--Paraguay | \$66.4 | \$1,167.9 | \$1,101.6 |
| 88 | 5250.--Bahrain | \$625.6 | \$565.4 | (\$60.2) |
| 89 | 2450.--Haiti | \$487.6 | \$696.2 | \$208.6 |
| 90 | 4622.--Belarus | \$1,032.7 | \$95.3 | (\$937.4) |
| 91 | 4510.--Lithuania | \$464.2 | \$662.0 | \$197.9 |
| 92 | 3550.--Uruguay | \$492.0 | \$541.7 | \$49.7 |

| | | | | |
|-----|------------------------|---------|---------|-----------|
| 93 | 5210.--Yemen | \$291.9 | \$626.3 | \$334.3 |
| 94 | 7790.--Kenya | \$326.1 | \$576.2 | \$250.1 |
| 95 | 5040.--Lebanon | \$105.3 | \$788.5 | \$683.3 |
| 96 | 7230.--Tunisia | \$448.4 | \$394.9 | (\$53.5) |
| 97 | 4000.--Iceland | \$207.2 | \$616.5 | \$409.3 |
| 98 | 4792.--Slovenia | \$487.8 | \$278.2 | (\$209.6) |
| 99 | 7480.--Cote d'Ivoire | \$585.4 | \$156.1 | (\$429.3) |
| 100 | 4870.--Bulgaria | \$425.4 | \$296.3 | (\$129.0) |
| 101 | 4490.--Latvia | \$328.7 | \$355.1 | \$26.3 |
| 102 | 2440.--Cayman Is | \$25.1 | \$604.3 | \$579.2 |
| 103 | 2320.--Bermuda | \$27.1 | \$591.3 | \$564.2 |
| 104 | 7490.--Ghana | \$198.7 | \$403.9 | \$205.3 |
| 105 | 4720.--Gibraltar | \$3.2 | \$593.5 | \$590.3 |
| 106 | 3350.--Bolivia | \$333.6 | \$262.6 | (\$71.0) |
| 107 | 4791.--Croatia | \$332.2 | \$238.5 | (\$93.6) |
| 108 | 5310.--Afghanistan | \$74.6 | \$473.0 | \$398.4 |
| 109 | 4470.--Estonia | \$295.6 | \$227.3 | (\$68.3) |
| 110 | 4730.--Malta | \$315.2 | \$202.6 | (\$112.5) |
| 111 | 5020.--Syria | \$159.4 | \$356.7 | \$197.3 |
| 112 | 5610.--Brunei | \$341.7 | \$138.4 | (\$203.3) |
| 113 | 2720.--Barbados | \$37.8 | \$418.3 | \$380.5 |
| 114 | 4633.--Georgia | \$188.1 | \$266.0 | \$77.9 |
| 115 | 7990.--Lesotho | \$443.0 | \$7.5 | (\$435.5) |
| 116 | 2390.--Cuba | \$0.3 | \$447.0 | \$446.8 |
| 117 | 7420.--Cameroon | \$306.7 | \$131.5 | (\$175.3) |
| 118 | 8220.--Transshipment | \$0.0 | \$428.2 | \$428.2 |
| 119 | 3150.--Suriname | \$129.4 | \$296.2 | \$166.8 |
| 120 | 4643.--Turkmenistan | \$219.3 | \$183.4 | (\$35.9) |
| 121 | 2430.--Turks & Caic Is | \$12.9 | \$387.2 | \$374.3 |
| 122 | 7880.--Madagascar | \$337.9 | \$31.8 | (\$306.1) |
| 123 | 7920.--Namibia | \$219.7 | \$116.4 | (\$103.4) |
| 124 | 7660.--Congo (DROC) | \$206.4 | \$110.3 | (\$96.1) |
| 125 | 5070.--Iran | \$173.2 | \$143.2 | (\$30.0) |

| | | | | |
|-----|------------------------|---------|---------|-----------|
| 126 | 2080.--Belize | \$86.7 | \$227.9 | \$141.2 |
| 127 | 3120.--Guyana | \$122.9 | \$178.9 | \$56.0 |
| 128 | 7520.--Togo | \$5.0 | \$285.5 | \$280.4 |
| 129 | 4411.--Liechtenstein | \$278.5 | \$11.1 | (\$267.4) |
| 130 | 7610.--Benin | \$5.1 | \$280.3 | \$275.3 |
| 131 | 7749.--Ethiopia | \$88.2 | \$165.9 | \$77.7 |
| 132 | 4644.--Uzbekistan | \$164.9 | \$87.3 | (\$77.6) |
| 133 | 7930.--Botswana | \$187.5 | \$52.5 | (\$135.0) |
| 134 | 2484.--Antigua Barbuda | \$8.7 | \$230.8 | \$222.1 |
| 135 | 7850.--Mauritius | \$187.0 | \$39.6 | (\$147.4) |
| 136 | 7830.--Tanzania | \$46.2 | \$172.0 | \$125.8 |
| 137 | 2482.--Br Virgin Is | \$43.2 | \$161.6 | \$118.4 |
| 138 | 2839.--Martinique | \$7.5 | \$191.5 | \$184.0 |
| 139 | 7650.--Liberia | \$115.3 | \$72.8 | (\$42.5) |
| 140 | 6863.--Fiji | \$152.8 | \$28.1 | (\$124.7) |
| 141 | 2487.--St Lucia Is | \$25.3 | \$155.3 | \$130.0 |
| 142 | 6414.--Fr Polynesia | \$62.3 | \$116.9 | \$54.6 |
| 143 | 7950.--Swaziland | \$148.0 | \$28.6 | (\$119.4) |
| 144 | 7960.--Zimbabwe | \$71.5 | \$103.6 | \$32.1 |
| 145 | 4910.--Cyprus | \$16.6 | \$155.5 | \$138.9 |
| 146 | 7440.--Senegal | \$18.7 | \$150.6 | \$131.8 |
| 147 | 6040.--Papua New Guin | \$106.9 | \$61.8 | (\$45.1) |
| 148 | 7460.--Guinea | \$95.7 | \$71.6 | (\$24.2) |
| 149 | 4802.--Serbia | \$58.1 | \$103.5 | \$45.4 |
| 150 | 2483.--St Kitts-Nevis | \$53.6 | \$103.4 | \$49.8 |
| 151 | 2831.--Guadeloupe | \$4.9 | \$133.7 | \$128.8 |
| 152 | 6412.--New Caledonia | \$79.0 | \$55.5 | (\$23.5) |
| 153 | 4631.--Armenia | \$32.7 | \$100.8 | \$68.2 |
| 154 | 7970.--Malawi | \$69.0 | \$50.9 | (\$18.1) |
| 155 | 7870.--Mozambique | \$5.4 | \$113.6 | \$108.3 |
| 156 | 5360.--Nepal | \$89.9 | \$27.0 | (\$62.8) |
| 157 | 7940.--Zambia | \$48.8 | \$67.4 | \$18.7 |
| 158 | 5740.--Mongolia | \$83.5 | \$25.7 | (\$57.8) |

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|-----|------------------------|--------|---------|----------|
| 159 | 4794.--Macedonia | \$72.7 | \$30.5 | (\$42.2) |
| 160 | 7410.--Mauritania | \$0.7 | \$102.3 | \$101.6 |
| 161 | 7470.--Sierra Leone | \$48.1 | \$54.6 | \$6.5 |
| 162 | 7780.--Uganda | \$26.6 | \$75.4 | \$48.8 |
| 163 | 2481.--Anguilla | \$4.1 | \$87.5 | \$83.4 |
| 164 | 2489.--Grenada Is | \$8.2 | \$80.5 | \$72.4 |
| 165 | 2486.--Dominica Is | \$1.8 | \$81.6 | \$79.9 |
| 166 | 7320.--Sudan | \$7.5 | \$66.9 | \$59.4 |
| 167 | 4641.--Moldova | \$23.1 | \$50.6 | \$27.5 |
| 168 | 7510.--Niger | \$9.1 | \$63.3 | \$54.2 |
| 169 | 2488.--St Vinc & Gren | \$1.2 | \$66.8 | \$65.6 |
| 170 | 6143.--Tokelau Is | \$8.0 | \$54.6 | \$46.6 |
| 171 | 7770.--Djibouti | \$4.5 | \$58.1 | \$53.6 |
| 172 | 4272.--Monaco | \$19.8 | \$37.0 | \$17.3 |
| 173 | 4642.--Tajikistan | \$0.3 | \$52.2 | \$51.9 |
| 174 | 4804.--Montenegro | \$5.5 | \$44.4 | \$39.0 |
| 175 | 4635.--Kyrgystan | \$1.7 | \$47.1 | \$45.3 |
| 176 | 4793.--Bosnia-Hercegov | \$24.7 | \$18.3 | (\$6.3) |
| 177 | 4810.--Albania | \$9.5 | \$33.1 | \$23.5 |
| 178 | 6820.--F St Micronesia | \$4.1 | \$37.5 | \$33.5 |
| 179 | 7450.--Mali | \$9.7 | \$30.4 | \$20.6 |
| 180 | 6810.--Marshall Is | \$13.1 | \$21.2 | \$8.0 |
| 181 | 7600.--Burkina Faso | \$1.5 | \$32.3 | \$30.9 |
| 182 | 5530.--Laos | \$20.0 | \$13.0 | (\$7.0) |
| 183 | 3170.--French Guiana | \$0.4 | \$30.3 | \$29.8 |
| 184 | 7690.--Rwanda | \$12.7 | \$14.2 | \$1.6 |
| 185 | 6224.--Vanuatu | \$0.9 | \$23.6 | \$22.8 |
| 186 | 7540.--Cen African Rep | \$2.9 | \$19.7 | \$16.8 |
| 187 | 6150.--Samoa | \$5.4 | \$16.6 | \$11.1 |
| 188 | 7700.--Somalia | \$0.2 | \$20.7 | \$20.5 |
| 189 | 5683.--Maldives Is | \$2.0 | \$18.2 | \$16.2 |
| 190 | 7800.--Seychelles | \$10.3 | \$9.1 | (\$1.2) |
| 191 | 7500.--Gambia | \$0.1 | \$19.1 | \$18.9 |

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|-----|------------------------|--------|--------|---------|
| 192 | 6864.--Tonga | \$5.5 | \$13.1 | \$7.6 |
| 193 | 4752.--Vatican City | \$0.1 | \$18.3 | \$18.1 |
| 194 | 5083.--West Bank | \$2.1 | \$13.0 | \$10.9 |
| 195 | 1010.--Greenland | \$10.7 | \$4.3 | (\$6.4) |
| 196 | 4751.--San Marino | \$1.4 | \$13.2 | \$11.8 |
| 197 | 6830.--Palau | \$0.4 | \$13.7 | \$13.3 |
| 198 | 4271.--Andorra | \$0.4 | \$12.7 | \$12.3 |
| 199 | 5601.--East Timor | \$0.3 | \$10.9 | \$10.5 |
| 200 | 4091.--Faroe Islands | \$7.1 | \$2.8 | (\$4.3) |
| 201 | 6862.--Nauru | \$0.6 | \$8.1 | \$7.5 |
| 202 | 7580.--St Helena | \$5.3 | \$3.2 | (\$2.1) |
| 203 | 5460.--Burma (Myanmar) | \$0.0 | \$8.5 | \$8.5 |
| 204 | 7670.--Burundi | \$1.1 | \$6.9 | \$5.8 |
| 205 | 7904.--Reunion | \$3.4 | \$4.5 | \$1.1 |
| 206 | 7643.--Cape Verde | \$2.2 | \$5.0 | \$2.8 |
| 207 | 7644.--Sao Tome & Prin | \$0.4 | \$6.7 | \$6.3 |
| 208 | 6024.--Christmas Is | \$4.3 | \$2.4 | (\$1.9) |
| 209 | 7642.--Guinea-Bissau | \$0.0 | \$6.5 | \$6.5 |
| 210 | 6223.--Solomon Is | \$1.1 | \$5.4 | \$4.3 |
| 211 | 5082.--Gaza Strip | \$1.5 | \$4.6 | \$3.2 |
| 212 | 7741.--Eritrea | \$0.4 | \$5.6 | \$5.1 |
| 213 | 3720.--Falkland Is | \$4.8 | \$1.0 | (\$3.9) |
| 214 | 2485.--Montserrat Is | \$0.5 | \$4.0 | \$3.4 |
| 215 | 6142.--Cook Is | \$1.7 | \$2.3 | \$0.6 |
| 216 | 5682.--Bhutan | \$0.8 | \$2.5 | \$1.7 |
| 217 | 6226.--Kiribati | \$1.2 | \$1.1 | (\$0.1) |
| 218 | 6023.--Cocos Is | \$0.9 | \$1.2 | \$0.3 |
| 219 | 6225.--Pitcairn Is | \$0.1 | \$1.9 | \$1.8 |
| 220 | 6022.--Norfolk Is | \$0.4 | \$1.5 | \$1.1 |
| 221 | 1610.--St Pierre & Miq | \$1.6 | \$0.2 | (\$1.4) |
| 222 | 6029.--Heard & McDn Is | \$0.0 | \$1.7 | \$1.7 |
| 223 | 5790.--North Korea | \$0.0 | \$1.7 | \$1.7 |
| 224 | 6144.--Niue | \$0.4 | \$1.0 | \$0.6 |

| | | | | |
|-----|------------------------|-------|-------|---------|
| 225 | 7810.--Br Indian O Ter | \$0.0 | \$1.0 | \$0.9 |
| 226 | 4031.--Svalbard,May Is | \$0.2 | \$0.7 | \$0.5 |
| 227 | 7905.--Fr S & Ant land | \$0.5 | \$0.4 | (\$0.1) |
| 228 | 7890.--Comoros | \$0.5 | \$0.2 | (\$0.3) |
| 229 | 7881.--Mayotte | \$0.3 | \$0.2 | (\$0.1) |
| 230 | 7370.--Western Sahara | \$0.0 | \$0.3 | \$0.3 |
| 231 | 6413.--Wallis & Futuna | \$0.0 | \$0.2 | \$0.2 |
| 232 | 6227.--Tuvalu | \$0.0 | \$0.1 | \$0.0 |

US and Foreign Banks' Compliance with the USA Patriot Act

Regional Workshop
Riga, Latvia
October 30, 2002

**BERNARD S. BAILOR
CAPLIN & DRYSDALE
WASHINGTON, D.C.**

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INTRODUCTION

On October 26, 2001, President Bush signed a new set of laws known as the USA Patriot Act. These new laws were passed in response to the terrorist attacks against the United States on September 11, 2001. They contain numerous new laws designed to combat international crime and terrorism. Included in the Act are laws designed to combat money laundering — particularly terrorism money laundering. Title III of the Act is the “International Money Laundering Abatement and Financial Anti-Terrorism Act of 2001”. The anti-money laundering provisions in Title III of the Act contain numerous provisions applicable to foreign banks that maintain a correspondent banking relationship with United States banks. This paper will discuss the impact of these new laws on foreign banks.

The anti-money laundering provisions of the Patriot Act fall into five categories:

- Increased regulation of private banking and correspondent accounts.
- Provision to impose special measures on financial institutions, international transactions and foreign jurisdictions where there is a primary money laundering concern.
- Broadening the scope of U.S. criminal statutes dealing with money laundering.
- Expanding the subpoena power of U.S. law enforcement agencies.
- Expanding international cooperation.

The provisions providing for increased regulation of private banking and correspondent accounts are likely to have the most direct impact on foreign banks since many foreign banks have correspondent relationships with U.S. banks.

ANTI-MONEY LAUNDERING PROGRAMS

Section 352 of the Patriot Act requires U.S. banks to implement anti-money laundering programs. The anti-money laundering programs must include, at a minimum, (1) the development of internal policies, procedures and controls, (2) the appointment of a compliance officer, (3) an ongoing employee training program, and (4) an independent audit function to test the anti-money laundering program. On April 29, 2002, the U.S. Treasury published regulations requiring that the anti-money laundering programs must meet the following criteria:

- Be reasonably designed to achieve compliance with the Bank Secrecy Act and its implementing regulations.¹
- Be reasonably designed to detect activities indicative of money laundering, including activities designed to evade the requirements of the Bank Secrecy Act.
- Be in writing and approved by senior management of the bank's directors.
- Be based on an assessment of the money laundering or terrorist financing risk of the bank's clients, products and transactions.

U.S. banks are now implementing compliance programs designed to comply with the requirements of the Patriot Act. Foreign banks maintaining a correspondent relationship with a U.S. bank can expect that their transactions with the U.S. bank will receive increased scrutiny. This increased scrutiny will result in more questions to foreign banks concerning both the identity of the customer using the foreign account as well as the purpose of the

transaction. In order to be able to respond to these inquiries, foreign banks should themselves implement special procedures to ensure that they know the identity of the persons using their correspondent relationship and the purpose of their transactions.

INCREASED OVERSIGHT OF CORRESPONDENT AND PRIVATE ACCOUNTS

Section 312 of the Patriot Act requires U.S. banks to establish policies and procedures to detect and report money laundering through correspondent and private banking accounts. While the law directly applies to U.S. banks, its impact will also be felt by foreign banks that maintain a correspondent relationship with a U.S. bank.

In monitoring accounts for money laundering and suspicious activities, U.S. banks generally employ a “Know Your Customer” regime. Under this regime, U.S. banks take steps to verify the identity of their customer. In addition, U.S. banks determine what is a normal transaction for a particular customer and ascertain the purpose of any transaction that does not appear to fall within the pattern of the customer’s normal business activity. Because correspondent accounts are used by persons and organizations who are not customers of the U.S. bank, U.S. banks will require their foreign correspondent to supply the information they need to comply with Section 312.

In addition to requiring U.S. banks to increase their oversight of correspondent accounts of foreign banks, Section 312 also requires U.S. banks to employ enhanced policies, procedures to detect and report instances of money laundering when the following circumstances exist:

¹ The Bank Secrecy Act is the U.S. law that requires U.S. financial institutions, among
Presentation – Bernard S. Bailor

- The correspondent account is requested or maintained by, or on behalf of, a foreign bank operating under an offshore banking license; or
- The correspondent account is requested or maintained by, or on behalf of, a foreign bank under a banking license issued by a foreign country that has been designated as non-cooperative with international anti-money laundering principles or procedures by an intergovernmental group or organization of which the United States is a member, provided the United States representative to the group or organization concurs; or
- The U.S. Secretary of the Treasury determines that the foreign bank or correspondent account warrants special measures due to money laundering concerns.

Section 312 requires that, at a minimum, the enhanced standards shall require the U.S. bank to take reasonable steps to ascertain the identity of each owner and the nature and extent of each owner's interest in a foreign correspondent bank if the shares of that bank are not publicly traded. In addition, under the enhanced scrutiny rules, the U.S. bank must conduct enhanced scrutiny of the correspondent account and determine if the foreign bank maintaining the correspondent account provides correspondent accounts to other foreign banks and, if so, the identity of those foreign banks and its owners.

U.S. banks must apply the enhanced procedures if foreign correspondent bank is operating under an offshore banking license. The term "offshore banking license" means a

other things, to maintain records concerning their customers and their activities.

license to conduct banking activities which, as a condition of the license, prohibits the licensed entity from conducting banking activities with the citizens of, or with the local currency of, the country which issued the license. Offshore banking licenses are common in tax haven and bank secrecy jurisdictions.

Section 312 also requires the U.S. Secretary of the Treasury to issue regulations that further set forth the procedures to be applied in carrying out the due diligence obligations imposed by Section 312. The U.S. Secretary of the Treasury has stated that he expects additional rules will be issued by October 25, 2002.

FOREIGN SHELL BANKING REGULATIONS

Section 313(a) of the Patriot Act prohibits covered financial institutions² from providing correspondent accounts to foreign shell banks and requires those institutions to implement reasonable procedures to ensure that correspondent banking accounts are not being used by foreign shell banks.

Foreign shell banks have a long history of being used to launder money. They are frequently located in tax haven jurisdictions and jurisdictions with bank secrecy laws. Many operate under lax or non-existent bank regulation. Drug traffickers and organized crime groups have used Caribbean shell banks and their correspondent relationships to access the U.S. financial system. The Patriot Act defines a foreign shell bank as a foreign bank without

² A “covered financial institution” is defined in Title 31 U.S.C. § 5318(j) as: (1) any insured bank as defined in section 3(h) of the Federal Deposit Insurance Act (12 U.S.C. § 1813(h)); a commercial bank or trust company; (3) a private banker; (4) an agency or branch of a foreign bank in the United States; (5) a credit union; (6) a thrift institution; (7) a broker or dealer registered with the Securities and Exchange Commission. Covered financial institutions include insured banks organized in U.S. territories, Puerto Rico, Guam, American Samoa, and the Virgin Islands.

a physical presence in any country.³ “Physical presence” is defined as a place of business maintained by a foreign bank that

- Is located at a fixed address, other than solely a post office box or an electronic address;
- Is located in a country in which it is authorized to conduct banking activities;
- Employs one or more individuals on a full-time basis;
- Maintains operating records; and
- Is subject to inspection by the banking authority that licensed the foreign bank to conduct banking activities.⁴

The prohibition against foreign shell banks does not apply to a foreign shell bank that is a “regulated affiliate.” A “regulated affiliate” is a foreign shell bank that: (1) is an affiliate of a depository institution, credit union or foreign bank that maintains a physical presence in the United States or a foreign country; and (2) is subject to supervision by a banking authority in the country regulating the affiliate depository institution.⁵

The Patriot Act prohibits covered financial institutions from providing correspondent accounts to foreign shell banks. Under U.S. law, a “correspondent account” is defined as an “account established to receive deposits from, make payments on behalf of foreign financial

³ 31 U.S.C. § 5318(j)(1).

⁴ 31 U.S.C. § 5318(j)(4)(B).

⁵ 31 U.S.C § 5318(j)(3).

institutions, or handle other financial transactions related to such institutions.⁶ It includes demand deposit, savings deposit or other transaction or asset accounts and a credit account or other extension of credit. The U.S. Department of the Treasury interprets the phrase “correspondent account” very broadly. In a Notice of Proposed Rulemaking, Treasury stated:

“It includes, for example, any account that falls within the definition of “transaction account” under Regulation D of the Board of Governors of the Federal Reserve System (Federal Reserve). It also includes clearing and settlement accounts (which may also fall within the definition of “transaction account”). Such accounts are typically used by foreign banks for remittance of funds in settlement of U.S. dollar transactions with parties other than the U.S. bank at which the account is maintained. In addition, foreign banks maintain fiduciary accounts with U.S. banks for the benefit of such foreign banks or their customers, including custody and escrow accounts. U.S. banks also establish time deposit accounts for foreign banks that are used by foreign banks primarily as funding mechanisms, as well as money market deposit accounts (“MMDAs”) that share limited use for transactions processing. In addition, U.S. banks engage in transactions with foreign banks in securities, derivatives, repurchase agreements, foreign exchange, and other instruments. To the extent that these

⁶ 31 U.S.C. § 5318A(e)(1)(B).

transactions involve an account, they would be covered by the definition of “correspondent account.”⁷

This broad definition of “correspondent account” has generated considerable controversy and the Treasury Department was requested to modify and narrow the scope of the rule. However, the Treasury Department has refused stating:

Treasury believes that, for the purposes of sections 313 and 319(b), the broad statutory definition is appropriate. Congress addressed shell banks separately in section 313, determining that they pose such a significant risk for money laundering that an absolute ban on correspondent accounts is justified. Section 319(b) requires that covered financial institutions maintain records regarding the ownership and an agent for service of process of any foreign bank for which it maintains a correspondent account. There is no clear justification for limiting the requirement to only certain foreign banks or to only those foreign banks for which certain types of correspondent accounts are maintained. Moreover, the principal argument asserted for adopting a more restrictive definition is to reduce the compliance burden that results from a broad definition, so that industry compliance resources may be focused on areas presenting a potentially greater risk. With

⁷ Department of the Treasury, Commentary on Proposed Rules, 66 F.R. No. 249, Page 67461 (December 28, 2001).

respect to this rulemaking, however, covered financial institutions will generally achieve compliance with the requirements of both sections 313 and 319(b) by obtaining one certification from the foreign bank.

Thus, requiring the ownership and process agent information in each case where the covered financial institution must already obtain the foreign bank's certification regarding its shell bank status should impose little additional burden on the covered financial institution. Accordingly, Treasury does not believe that the costs of complying with section 319(b) for all correspondent accounts outweigh the risks of excluding from the scope of coverage of section 319(b) foreign banks for which only certain types of accounts are maintained. Thus, for purposes of the final rule, Treasury is essentially retaining the proposed definition, with technical changes that clarify the definition. The final definition for purposes of these sections includes accounts for making "other disbursements" as well as payments "on behalf of a foreign bank." No inference should be drawn from this determination concerning the appropriate definition of "correspondent account" for purposes of section 312 of the Act.

Treasury is further clarifying the definition of "correspondent account" by defining the term "account" for this purpose. With respect to banks, section 311 of the Act

provides that the term account “(i) means a formal banking or business relationship established to provide regular services, dealings, and other financial transactions, and (ii) includes a demand deposit, savings deposit, or other transaction or asset account and a credit account or other extension of credit.” Treasury believes that the use of the term “regular” in the definition requires an arrangement to provide ongoing services, and would generally exclude infrequent or occasional transactions. Inasmuch as section 311 specifically applies this definition of “account” for purposes of section 313, Treasury is modifying the final rule by adding this definition of “account,” for purposes of defining “correspondent account.” This results in a definition of “correspondent account” that includes any transaction account, savings account, asset account, or extension of credit maintained for a foreign bank, as well as any other relationship with a foreign bank to provide regular services, dealings, and other financial transactions. Treasury anticipates that most isolated or occasional transactions that a covered financial institution conducts with a foreign bank would not constitute a correspondent account for purposes of the final rule.⁸

⁸ Department of the Treasury, Notice of Final Rule, September 18, 2002 (footnotes omitted).

All correspondent accounts in a covered financial institution are covered by the Patriot Act even if these accounts are located in a foreign country. For example, the law applies to a correspondent account with the London branch of a covered financial institution.

While the Patriot Act prohibits transactions with foreign shell banks and directs banks to insure that they are not being used to indirectly provide banking services to foreign shell banks, it does not prescribe the manner in which banks are to comply. However, U.S. Department of the Treasury has provided some compliance guidance to covered financial institutions in the form of “safe harbor” regulations. Under a “safe harbor” regulation, the government agrees that if a covered financial institution follows the regulations, it will be considered to be in compliance with the law.⁹ Consequently, it is anticipated that most, if not all covered financial institutions, will follow the “safe harbor” regulations.

The “safe harbor” regulations are set forth in the Code of Federal Regulations, 31 C.F.R., Part 104. The regulations require each covered financial institution to:

- (1) Ascertain the identity of each of the owners of its foreign correspondent banks unless the bank’s shares are publicly traded;
- (2) maintain a record of the name and address of a person who resides in the United States who has agreed and is authorized to accept legal process for records concerning the account;
- (3) implement enhanced procedures to avoid providing banking services to shell banks.

⁹ Id at 67460. 31 C.F.R. § 104.40(b).

The regulations envision that foreign banks will be requested to provide the information needed for compliance.

Correspondent Bank Certification

The regulations require each covered financial institution to maintain specific records in the United States concerning its correspondent banks.¹⁰ A covered financial institution will be deemed in compliance if it obtains from its foreign correspondent banks a certification concerning its physical presence and ownership.¹¹ A covered financial institution is required to obtain a recertification every two years or at any time it has “reason to believe” the original certification is inaccurate. Central banks and certain other government related banks are excluded from the definition of foreign bank for the purposes of the Patriot Act regulations.¹²

A copy of the Certification that U.S. banks are required to obtain from their foreign correspondent banks is attached as APPENDIX I. There are seven sections to the form as described below.

¹⁰ 31 C.F.R. § 104.40(a).

¹¹ 31 C.F.R. § 104.40(b).

¹² 31 C.F.R. § 104.10(d)(2)(ii). “The term foreign bank includes a branch of a foreign bank in a territory of the United States, Puerto Rico, Guam, American Samoa, or the Virgin Islands. (ii) The term foreign bank does not include: (A) A U.S. agency or branch of a foreign bank; [[Page 67466]] (B) An insured bank organized under the laws of a territory of the United States, Puerto Rico, Guam, American Samoa, or the Virgin Islands; (C) A foreign central bank or foreign monetary authority that functions as a central bank; and (D) The African Development Bank, Asian Development Bank, Bank for International Settlements, European Bank for Reconstruction and Development, Inter-American Development Bank, International Bank for Reconstruction and Development (the World Bank), International Finance Corporation, International Monetary Fund, North American Development Bank, African Development Bank, International Development Association, Multilateral Investment Guarantee Agency, and similar international financial institutions of which the United States is a member or as otherwise designated by the Secretary.”

Accounts Covered By The Certification

Part B of the form requires the foreign bank to certify whether all U.S. correspondent accounts of the foreign bank are covered by the certification or only accounts in a particular financial institution are covered by the certification. If the foreign bank certifies that all of its accounts are covered by the certification, it may provide a single certification on its website and all its U.S. correspondent banks may rely on this certification.

Certification Regarding Physical Location

The first part of the Correspondent bank Certification deals with the physical location of the bank. A foreign correspondent bank must state whether it

- (1) Has a fixed address (other than an electronic address or post office box) in a country where is authorized to conduct banking activities.
- (2) Employs one or more individuals on a full time basis.
- (3) Maintains operating records related to its banking activities.
- (4) Subject to inspection by a banking authority that issued its license.

If the foreign bank does not meet each of above four requirements, it is deemed a foreign shell bank unless it is a “regulated affiliate.” If the correspondent bank is a foreign shell bank, the U.S. bank must terminate the correspondent relationship.¹³

Certification Concerning Use By Other Shell Banks

The second item that the foreign correspondent bank must certify is that it

¹³ 31 C.F.R. § 104.40(d).

“does not use any correspondent account with the Covered Financial Institution to indirectly provide banking services to any foreign bank that does not have a physical presence in any country, and that is not a regulated affiliate.”

This certification is designed to prevent the use of “nested” accounts by foreign shell banks. In making this certification, foreign correspondent banks should carefully check their customers for banks that operate with an “offshore license”¹⁴ and customers that utilize the banks correspondent relationship as a “payable through” account.¹⁵

Certification Concerning Ownership

Part E of the Certification requires the foreign correspondent bank to provide information concerning its ownership. If the foreign correspondent bank is publicly traded or has previously reported its ownership to the U.S. Federal Reserve Board on a Form FR Y-7, it merely has to check the box. Otherwise, the bank must identify its owners as described below.

For purposes of the Certification, “owner” means any person who, directly or indirectly, (a) owns, controls, or has power to vote 25 percent or more of any class of voting securities or other voting interests of Foreign Bank; or (b) controls in any manner the election

¹⁴ An offshore banking license is a license to conduct banking activities but which prohibits the licensee from conducting banking activities in the local currency or with the citizens of the local country.

¹⁵ A “payable-through” account is an account through which a foreign financial institution permits its customers, either directly or indirectly, to engage in banking activities usual in connection with the business of banking in the United States.

of a majority of the directors (or individuals exercising similar functions) of Foreign Bank. For purposes of this Certification, (i) person means any individual, bank, corporation, partnership, limited liability company or any other legal entity; (ii) voting securities or other voting interests means securities or other interests that entitle the holder to vote for or select directors (or individuals exercising similar functions); and (iii) members of the same family¹⁶ shall be considered one person.

In making the certification concerning ownership, the foreign bank should include all persons who meet the definition of “owner.”

Certification Concerning Agent

Each foreign correspondent bank must identify an individual who is a resident in the United States that is authorized to accept service of process on behalf of the foreign correspondent bank.

IMPOSITION OF SPECIAL MEASURES

Section 311 of the Patriot Act authorizes the Secretary of the Treasury require U.S. financial institutions to impose special measures on financial institutions, international transactions and foreign jurisdictions where there is a primary money laundering concern. The special measures authorized are:

- Special record keeping and reporting requirements.

¹⁶ The same family means parents, spouses, children, siblings, uncles, aunts, grandparents, grandchildren, first cousins, stepchildren, stepsiblings, parents-in-law and spouses of any of the foregoing. In determining the ownership interests of the same family, any voting interest of any family member shall be taken into account

- Requiring domestic financial institutions and agencies to obtain information concerning beneficial ownership of accounts opened by foreign persons.
- Requiring domestic financial institutions and agencies to identify each customer utilizing a “payable through” account.¹⁷
- Requiring domestic financial institutions and agencies to identify each customer whose transactions are routed through a correspondent account.
- Prohibit or impose conditions on opening or maintaining correspondent or “payable through” accounts.

The special measures may be applied if the Secretary of the Treasury determines that reasonable grounds exist for concluding that one or more classes of transactions with or involving a foreign jurisdiction raise a concern about money laundering. The special measures may be imposed by order for up to 120 days or by regulation for a longer period. The law requires the Secretary of the Treasury to consider with respect to each foreign jurisdiction, *inter alia*, the following in deciding whether to impose the special measures.

- Evidence that organized crime and or terrorists have transacted business in the foreign jurisdiction.

¹⁷ A “payable-through” account is an account through which a foreign financial institution permits its customers, either directly or indirectly, to engage in banking activities usual in connection with the business of banking in the United States.

- Whether the foreign jurisdiction offers bank secrecy or special regulatory advantages to nonresidents and nondomiciliaries of the jurisdiction.
- The substance and quality of administration of the bank supervisory and counter-money laundering laws of the jurisdiction.
- The extent to which a jurisdiction is characterized by credible international organizations as an offshore banking or tax haven jurisdiction.
- Whether the United States has a mutual legal assistance treaty with the jurisdiction and the experience of the United States in obtaining information about transactions originating in or routed through the jurisdiction.

To date, no special measures have been reported against any bank or jurisdiction.

MONEY LAUNDERING LAW AMENDMENTS

The Patriot Act significantly expands the federal money laundering statute, 18 U.S.C. § 1956 and related forfeiture statutes. The Patriot Act increases the number of predicate acts in the money laundering statute, expands the definition of financial institution in the money laundering law to include foreign banks, and provides for “long arm” jurisdiction over foreign money launderers.

The inclusion of additional predicate offenses in the money laundering statute continues the trend of expanding the U.S. money laundering law towards an “all crimes” statute. The new predicate acts include:

- Bribery of a public official.
- Misappropriation or theft of public funds by a public official.
- Smuggling or export control violations involving items controlled by the U.S. Munitions List or the Export Administration regulations.
- Firearms trafficking offenses.
- False classification of goods for Customs purposes.
- Computer fraud (including unlawful access to computers).
- Any offense that the U.S. is obligated by a multilateral treaty to extradite the offender or submit the case for prosecution if the offender is found in the U.S.

The new predicate offenses involving bribery of a public official and misappropriation or thefts of public funds by a public official are **not** limited to offenses involving public officials in the U.S. Consequently, foreign bribery and corruption offenses will be predicate acts under the U.S. money laundering law. If the other elements of the statute are met, including the jurisdictional requirements, a foreign offense can be the basis of a U.S. money laundering prosecution.

Perhaps the most significant change to the money laundering statute is the assertion of “long arm” jurisdiction over foreign persons. Section 317 of the Patriot Act amends 18 U.S.C. § 1956 and provides that a U.S. District Court shall have jurisdiction over any foreign person, including foreign financial institutions, if service of process is made either (1) under the Federal Rules of Civil Procedure or (2) the laws of the foreign country in which the person is found and the foreign person either:

- Commits a money laundering offense involving a financial transaction that occurs in whole or in part in the U.S., or
- The foreign person converts to their use property in which the U.S. has an ownership interest by virtue of a forfeiture order, or
- The foreign person is a financial institution that maintains a bank account in the U.S.

This broadening of jurisdiction coupled with amendments to the forfeiture laws permitting the forfeiture of funds owned by a foreign person or bank in U.S. interbank accounts greatly expands the reach of the U.S. money laundering laws.

Section 318 of the Patriot Act expands the definition of “financial institution” in the money laundering statute, 18 U.S.C. § 1956, to include foreign banks as defined in the International Banking Act of 1978, 12 U.S.C. § 3101. Thus, for the purposes of money laundering, the term includes:

“any company organized under the laws of a foreign country, a territory of the United States, Puerto Rico, Guam, American Samoa, or the Virgin Islands, which engages in the

business of banking, or any subsidiary or affiliate, organized under such laws, of any such company. For the purposes of this chapter the term "foreign bank" includes, without limitation, foreign commercial banks, foreign merchant banks and other foreign institutions that engage in banking activities usual in connection with the business of banking in the countries where such foreign institutions are organized or operating.”

As a result of this amendment, a transaction through a foreign bank will trigger U.S. jurisdiction over a money laundering offense the same as a transaction through a domestic bank.

Because of these amendments, all foreign banks, face an increased risk of U.S. prosecution under the expanded US money laundering statute. If a money laundering transaction that impacts the U.S. as specified in the statute occurs anywhere in the world, the participants in the transaction may be prosecuted in the U.S. courts. Foreign banks may be subject to prosecution as aiders and abettors. The most likely prosecution theory is that the bank failed to maintain minimum standards for detecting money laundering. There is a pretty well defined consensus throughout the worldwide banking community of minimum anti-money laundering standards. Evidence that a particular bank failed to comply with these standards will likely satisfy the prosecution’s burden of proof in the U.S. courts.

INCREASED INTERNATIONAL COOPERATION

Several provisions of the Patriot Act are designed to increase international cooperation with the U.S. in combating international money laundering. Section 328 directs the Secretary of the Treasury to take steps to encourage foreign governments to require the

inclusion of the name of the originator in all wire transfers sent to the U.S. and other countries. This would obviously facilitate the tracing of wire transfers. Section 330 of the Act is a “sense of Congress” provision encouraging negotiations with foreign countries to encourage foreign financial institutions to maintain adequate records for the purpose of preventing and detecting money laundering and terrorism. Section 330 also encourages negotiations to establish mechanisms whereby such records will be made available to U.S. authorities.

SUBPOENA OF FOREIGN BANK RECORDS

The expanded jurisdiction provisions of the Patriot Act provide for the compulsory production of foreign bank records relating to correspondent accounts maintained in the U.S. by foreign banks. A summons, subpoena or a law enforcement request may demand the records. The demand may require the production of records located outside of the U.S. Failure to comply with the demand will result in the termination of the correspondent relationship. The failure of the U.S. bank to terminate the relationship will result in the imposition of a fine of up to \$10,000 a day. The failure of the foreign bank to comply with judicial process could also be punished as contempt.

APPENDIX I

APPENDIX A TO SUBPART I OF PART 103

CERTIFICATION REGARDING CORRESPONDENT ACCOUNTS FOR FOREIGN BANKS

[OMB Control Number 1505-0184]

The information contained in this Certification is sought pursuant to Sections 5318(j) and 5318(k) of Title 31 of the United States Code, as added by sections 313 and 319(b) of the USA PATRIOT Act of 2001 (Public Law 107-56).

This Certification should be completed by any **foreign bank** that maintains a **correspondent account** with any U.S. bank or U.S. broker-dealer in securities (a **covered financial institution** as defined in 31 C.F.R. 103.175(f)). An entity that is not a foreign bank is not required to complete this Certification.

A **foreign bank** is a bank organized under foreign law and located outside of the United States (see definition at 31 C.F.R. 103.11(o)). A **bank** includes offices, branches, and agencies of commercial banks or trust companies, private banks, national banks, thrift institutions, credit unions, and other organizations chartered under banking laws and supervised by banking supervisors of any state (see definition at 31 C.F.R. 103.11(c)).¹⁸

A **Correspondent Account** for a **foreign bank** is any account to receive deposits from, make payments or other disbursements on behalf of a foreign bank, or handle other financial transactions related to the foreign bank.

Special instruction for foreign branches of U.S. banks: A branch or office of a U.S. bank outside the United States is a foreign bank. Such a branch or office is not required to complete this Certification with respect to Correspondent Accounts with U.S. branches and offices of the same U.S. bank.

Special instruction for covering multiple branches on a single Certification: A foreign bank may complete one Certification for its branches and offices outside the United States. The Certification must list all of the branches and offices that are covered and must include the information required in Part C for **each** branch or office that maintains a Correspondent Account with a Covered Financial Institution. **Use** attachment sheets as necessary.

A. The undersigned financial institution, _____ (“**Foreign Bank**”) hereby certifies as follows:

B. Correspondent Accounts Covered by this Certification: Check **one** box.

¹⁸ A “foreign bank” does not include any foreign central bank or monetary authority that functions as a central bank, or any international financial institution or regional development bank formed by treaty or international agreement.

This Certification applies to **all** accounts established for Foreign Bank by Covered Financial Institutions.

This Certification applies to Correspondent Accounts established by _____ (name of Covered Financial Institution(s)) for Foreign Bank.

C. Physical Presence/Regulated Affiliate Status: Check **one** box and complete the blanks.

Foreign Bank maintains a **physical presence** in any country. That means:

- Foreign Bank has a place of **business** at the following street address: _____, where Foreign Bank employs one or more individuals on a full-time basis and maintains operating records related to its banking activities.
- The above address is in _____ (insert country), where Foreign Bank is authorized to conduct banking activities.
- Foreign Bank is subject to inspection by _____, (insert Banking Authority), the banking authority that licensed Foreign Bank to conduct banking activities.

Foreign Bank does not have a physical presence in any country, but Foreign Bank is a **regulated affiliate**. That means:

- Foreign Bank is an affiliate of a depository institution, credit union, or a foreign bank that maintains a physical presence at the following street address: _____, where it employs one or more persons on a full-time basis and maintains operating records related to its banking activities.
- The above address is in _____ (insert country), where the depository institution, credit union, or foreign bank is authorized to conduct banking activities.
- Foreign Bank is subject to supervision by _____, (insert Banking Authority), the same banking authority that regulates the depository institution, credit union, or foreign bank.

Foreign Bank does **not** have a physical presence in a country and is **not** a regulated affiliate.

D. Indirect Use of Correspondent Accounts: Check box to certify.

No Correspondent Account maintained by a Covered Financial Institution may be used to indirectly provide banking services to certain foreign banks. Foreign Bank hereby certifies that it does **not** use any Correspondent Account with a Covered Financial Institution to indirectly provide banking services to any foreign bank that does not maintain a physical presence in any country and that is not a regulated affiliate.

E. Ownership Information: Check box 1 or 2 below, **if applicable.**

1. **Form FR Y-7 is on file.** Foreign Bank has filed with the Federal Reserve Board a current Form FR Y-7 and has disclosed its ownership information on Item 4 of Form FR Y-7.
2. **Foreign Bank's shares are publicly traded.** Publicly traded means that the shares are traded on an exchange or an organized over-the-counter market that is regulated by a foreign securities authority as defined in section 3(a)(50) of the Securities Exchange Act of 1934 (15 U.S.C. 78c(a)(50)).

If **neither** box 1 nor 2 of Part E is checked, complete item 3 below, **if applicable.**

3. Foreign Bank has no **owner(s)** except as set forth below. For purposes of this Certification, **owner** means any person who, directly or indirectly, (a) owns, controls, or has power to vote 25 percent or more of any class of voting securities or other voting interests of Foreign Bank; or (b) controls in any manner the election of a majority of the directors (or individuals exercising similar functions) of Foreign Bank. For purposes of this Certification, (i) **person** means any individual, bank, corporation, partnership, limited liability company or any other legal entity; (ii) **voting securities or other voting interests** means securities or other interests that entitle the holder to vote for or select directors (or individuals exercising similar functions); and (iii) members of the same family¹⁹ shall be considered one **person**.

| Name | Address |
|------|---------|
| | |
| | |
| | |
| | |

F. Process Agent: complete the following.

The following individual or entity: _____ is a resident of the United States at the following street address: _____, **and** is authorized to accept service of legal process on behalf of Foreign Bank from the Secretary of the Treasury or the Attorney General of the United States pursuant to Section 5318(k) of title 31, United States Code.

¹⁹ The same family means parents, spouses, children, siblings, uncles, aunts, grandparents, grandchildren, first cousins, stepchildren, stepsiblings, parents-in-law and spouses of any of the foregoing. In determining the ownership interests of the same family, any voting interest of any family member shall be taken into account

G. General

Foreign Bank hereby agrees to notify in writing each Covered Financial Institution at which it maintains any Correspondent Account of any change in facts or circumstances reported in this Certification. Notification shall be given within 30 calendar days of such change.

Foreign Bank understands that each Covered Financial Institution at which it maintains a Correspondent Account may provide a copy of this Certification to the Secretary of the Treasury and the Attorney General of the United States. Foreign Bank further understands that the statements contained in this Certification may be transmitted to one or more departments or agencies of the United States of America for the purpose of fulfilling such departments' and agencies' governmental functions.

I, _____ (name of signatory), certify that I have read and understand this Certification, that the statements made in this Certification are complete and correct, and that I am authorized to execute this Certification on behalf of Foreign Bank.

[Name of Foreign Bank}

[Signature]

[Printed Name]

[Title]

Executed on this _____ day of _____, 200__.

Received and reviewed by:

Name: _____

Title: _____

For: _____

[Name of Covered Financial Institution]

Date: _____

Accredited Investors

Under the Securities Act of 1933, a company that offers or sells its securities must register the securities with the SEC or find an exemption from the registration requirements. The Act provides companies with a number of exemptions. For some of the exemptions, such as rules 505 and 506 of Regulation D, a company may sell its securities to what are known as "accredited investors."

The federal securities laws define the term accredited investor in Rule 501 of Regulation D as:

1. a bank, insurance company, registered investment company, business development company, or small business investment company;
2. an employee benefit plan, within the meaning of the Employee Retirement Income Security Act, if a bank, insurance company, or registered investment adviser makes the investment decisions, or if the plan has total assets in excess of \$5 million;
3. a charitable organization, corporation, or partnership with assets exceeding \$5 million;
4. a director, executive officer, or general partner of the company selling the securities;
5. a business in which all the equity owners are accredited investors;
6. a natural person who has individual net worth, or joint net worth with the person's spouse, that exceeds \$1 million at the time of the purchase;
7. a natural person with income exceeding \$200,000 in each of the two most recent years or joint income with a spouse exceeding \$300,000 for those years and a reasonable expectation of the same income level in the current year; or
8. a trust with assets in excess of \$5 million, not formed to acquire the securities offered, whose purchases a sophisticated person makes.

For more information about the SEC's registration requirements and common exemptions, read our brochure, Q&A: Small Business & the SEC.

<http://www.sec.gov/answers/accred.htm>

| Do Not Write in This Block - For USCIS Use Only (Except G-28 Block Below) | | |
|---|---------------------|---|
| Classification <hr/> | Action Block | Fee Receipt <hr/> |
| Priority Date <hr/> | | To be completed by Attorney or Representative, if any <input type="checkbox"/> G-28 is attached Attorney's State License No. _____ |
| Remarks: | | |

START HERE - Type or print in black ink.

Part 1. Information about you.

| | | | |
|--|--|--------------------------------|-----------------|
| Family Name | Given Name | Middle Name | |
| Address: | | | |
| In care of _____ | | | |
| Number and Street | | | Apt. # |
| City | State or Province | Country | Zip/Postal Code |
| Date of Birth (mm/dd/yyyy) | Country of Birth | Social Security # (if any) | A # (if any) |
| If you are in the United States, provide the following information: | | Date of Arrival (mm/dd/yyyy) | I-94 # |
| Current Nonimmigrant Status | Date Current Status Expires (mm/dd/yyyy) | Daytime Phone # with Area Code | |

Part 2. Application type. (Check one)

- a. This petition is based on an investment in a commercial enterprise in a targeted employment area for which the required amount of capital invested has been adjusted downward.
- b. This petition is based on an investment in a commercial enterprise in an area for which the required amount of capital invested has been adjusted upward.
- c. This petition is based on an investment in a commercial enterprise that is not in either a targeted area or in an upward adjustment area.

Part 3. Information about your investment.

| | | | |
|---|--|-----------|-------|
| Name of commercial enterprise in which funds are invested | | _____ | |
| Street Address | | | |
| _____ | | | |
| Phone # with Area Code | Business organized as (corporation, partnership, etc.) | _____ | |
| Kind of business (e.g. furniture manufacturer) | Date established (mm/dd/yyyy) | IRS Tax # | _____ |

RECEIVED: _____ RESUBMITTED: _____ RELOCATED: SENT _____ REC'D _____



Part 3. Information about your investment. (Continued.)

| | | | |
|---|-------------------------|--------------------------------------|-------------------------|
| Date of your initial investment (mm/dd/yyyy) | <input type="text"/> | Amount of your initial investment | \$ <input type="text"/> |
| Your total capital investment in the enterprise to date | \$ <input type="text"/> | Percentage of the enterprise you own | <input type="text"/> |

If you are not the sole investor in the new commercial enterprise, list on separate paper the names of all other parties (natural and non-natural) who hold a percentage share of ownership of the new enterprise and indicate whether any of these parties is seeking classification as an alien entrepreneur. Include the name, percentage of ownership and whether or not the person is seeking classification under section 203(b)(5). **NOTE:** A "natural" party would be an individual person and a "non-natural" party would be an entity such as a corporation, consortium, investment group, partnership, etc.

If you indicated in **Part 2** that the enterprise is in a targeted employment area or in an upward adjustment area, name the county and state:

| | | | |
|--------|----------------------|-------|----------------------|
| County | <input type="text"/> | State | <input type="text"/> |
|--------|----------------------|-------|----------------------|

Part 4. Additional information about the enterprise.

Type of Enterprise (check one):

- New commercial enterprise resulting from the creation of a new business.
- New commercial enterprise resulting from the purchase of an existing business.
- New commercial enterprise resulting from a capital investment in an existing business.

Composition of the Petitioner's Investment:

| | | |
|--|----|----------------------|
| Total amount in U.S. bank account | \$ | <input type="text"/> |
| Total value of all assets purchased for use in the enterprise..... | \$ | <input type="text"/> |
| Total value of all property transferred from abroad to the new enterprise..... | \$ | <input type="text"/> |
| Total of all debt financing..... | \$ | <input type="text"/> |
| Total stock purchases..... | \$ | <input type="text"/> |
| Other (explain on separate paper)..... | \$ | <input type="text"/> |
| Total | \$ | <input type="text"/> |

Income:

| | | | | |
|-----------------------------------|-------|-------------------------|-----|-------------------------|
| When you made the investment..... | Gross | \$ <input type="text"/> | Net | \$ <input type="text"/> |
| Now..... | Gross | \$ <input type="text"/> | Net | \$ <input type="text"/> |

Net worth:

| | | | | |
|-------------------------------|-------|-------------------------|-----|-------------------------|
| When you made investment..... | Gross | \$ <input type="text"/> | Now | \$ <input type="text"/> |
|-------------------------------|-------|-------------------------|-----|-------------------------|

Part 5. Employment creation information.

Number of full-time employees in the enterprise in U.S. (excluding you, your spouse, sons and daughters)

When you made your initial investment? Now Difference

How many of these new jobs were created by your investment? How many additional new jobs will be created by your additional investment?

What is your position, office or title with the new commercial enterprise?

Briefly describe your duties, activities and responsibilities.

What is your salary? \$ What is the cost of your benefits? \$

Part 6. Processing information.

Check One:

- The person named in **Part 1** is now in the United States and an application to adjust status to permanent resident will be filed if this petition is approved.
- If the petition is approved and the person named in **Part 1** wishes to apply for an immigrant visa abroad, complete the following for that person:

Country of nationality:

Country of current residence or, if now in the United States, last permanent residence abroad:

If you provided a United States address in **Part 1**, print the person's foreign address:

If the person's native alphabet is other than Roman letters, write the foreign address in the native alphabet:

- Is a Form I-485, Application for Adjustment of Status, attached to this petition? Yes No
- Are you in deportation or removal proceedings? Yes (Explain on separate paper) No
- Have you ever worked in the United States without permission? Yes (Explain on separate paper) No

Part 7. Signature. *Read the information on penalties in the instructions before completing this section.*

I certify, under penalty of perjury under the laws of the United States of America, that this petition and the evidence submitted with it is all true and correct. I authorize the release of any information from my records that the U.S. Citizenship and Immigration Services needs to determine eligibility for the benefit I am seeking.

Signature Date

NOTE: *If you do not completely fill out this form or fail to submit the required documents listed in the instructions, you may not be found eligible for the immigration benefit you are seeking and this petition may be denied.*

Part 8. Signature of person preparing form, if other than above. (Sign below)

I declare that I prepared this application at the request of the above person and it is based on all information of which I have knowledge.

Signature Print Your Name Date

Firm Name

Address Daytime phone # with area code

**Instructions for I-526, Immigrant
Petition by Alien Entrepreneur****Instructions**

Please read these instructions carefully to properly complete this form. If you need more space to complete an answer, use a separate sheet(s) of paper. Write your name and Alien Registration Number (A #), if any, at the top of each sheet of paper and indicate the section and number of the item to which the answer refers.

What Is The Purpose of This Form I-526?

This form is for use by an entrepreneur to petition the U.S. Citizenship and Immigration Services (USCIS) for status as an immigrant to the United States pursuant to section 203(b)(5) of the Immigration and Nationality Act, as amended. That section of the law pertains to immigrant visas for an investor in a new commercial enterprise.

Who May File Form I-526?

You may file this petition for yourself if you have established a new commercial enterprise:

1. In which you will engage in a managerial or policy-making capacity, and
2. In which you have invested or are actively in the process of investing the amount required for the area in which the enterprise is located, and
3. Which will benefit the U.S. economy, and
4. Which will create full-time employment in the United States for at least ten U.S. citizens, permanent residents, or other immigrants authorized to be employed, other than yourself, your spouse, your sons or daughters, or any nonimmigrant aliens.

The establishment of a new commercial enterprise may include:

1. Creation of a new business;
2. The purchase of an existing business with simultaneous or subsequent restructuring or reorganization resulting in a new commercial enterprise; or
3. The expansion of an existing business through investment of the amount required, so that a substantial change (at least 40 percent) in either the net worth, number of employees, or both, results.

The amount of investment required in a particular area is set by regulation. Unless adjusted downward for targeted areas or upward for areas of high employment, the amount of investment shall be **\$1,000,000 (one million dollars)**. You may obtain additional information from our website at www.uscis.gov, or an American embassy or consulate abroad.

General Instructions.**Fill Out the Form I-526**

1. Type or print legibly in black ink.
2. If extra space is needed to complete any item, attach a continuation sheet, indicate the item number, and date and sign each sheet.
3. Answer all questions fully and accurately. State that an item is not applicable with "N/A." If the answer is none, write "none."

Initial Evidence Requirements.

The following evidence must be filed with your petition:

1. Evidence that you have established a lawful business entity under the laws of the jurisdiction in the United States in which it is located, or, if you have made an investment in an existing business, evidence that your investment has caused a substantial (at least 40 percent) increase in the net worth of the business, the number of employees, or both.

Such evidence shall consist of copies of articles of incorporation, certificate of merger or consolidation, partnership agreement, certificate of limited partnership, joint venture agreement, business trust agreement, or other similar organizational document; a certificate evidencing authority to do business in a state or municipality, or if such is not required, a statement to that effect; or evidence that the required amount of capital was transferred to an existing business resulting in a substantial increase in the net worth or number of employees, or both.

This evidence must be in the form of stock purchase agreements, investment agreements, certified financial reports, payroll records or other similar instruments, agreements or documents evidencing the investment and the resulting substantial change.

2. Evidence, if applicable, that your enterprise has been established in a targeted employment area. A targeted employment area is defined as a rural area or an area which has experienced high unemployment of at least 150 percent of the national average rate. A rural area is an area not within a metropolitan statistical area or not within the outer boundary of any city or town having a population of 20,000 or more.
3. Evidence that you have invested or are actively in the process of investing the amount required for the area in which the business is located.

Such evidence may include, but need not be limited to, copies of bank statements, evidence of assets that have been purchased for use in the enterprise, evidence of property transferred from abroad for use in the enterprise, evidence of monies transferred or committed to be transferred to the new commercial enterprise in exchange for shares of stock, any loan or mortgage, promissory note, security agreement, or other evidence of borrowing that is secured by assets of the petitioner.

4. Evidence that capital is obtained through lawful means. The petition must be accompanied, as applicable, by: foreign business registration records, tax returns of any kind filed within the last five years in or outside the United States, evidence of other sources of capital, or certified copies of any judgment, pending governmental civil or criminal actions, or private civil actions against the petitioner from any court in or outside the United States within the past 15 years.
5. Evidence that the enterprise will create at least ten full-time positions for U.S. citizens, permanent residents, or aliens lawfully authorized to be employed (except yourself, your spouse, sons, or daughters, and any nonimmigrant aliens). Such evidence may consist of copies of relevant tax records, Forms I-9, or other similar documents, if the employees have already been hired, or a business plan showing when such employees will be hired within the next two years.
6. Evidence that you are or will be engaged in the management of the enterprise, either through the exercise of day-to-day managerial control or through policy formulation. Such evidence may include a statement of your position title and a complete description of your duties, evidence that you are a corporate officer or hold a seat on the board of directors, or, if the new enterprise is a partnership, evidence that you are engaged in either direct management or policy-making activities.

Translations. Any document containing foreign language submitted to the Service shall be accompanied by a full English language translation which the translator has certified as complete and accurate, and by the translator's certification that he or she is competent to translate from the foreign language into English.

Copies. Unless specifically required that an original document be filed with an application or petition, an ordinary legible photocopy may be submitted. Original documents submitted when not required will remain a part of the record, even if the submission was not required.

Where To File?

If the new commercial enterprise is located, or will principally be doing business in: Alabama, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Kentucky,

Louisiana, Mississippi, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New Mexico, New York, North Carolina, South Carolina, Oklahoma, Pennsylvania, Puerto Rico, Rhode Island, Tennessee, or Texas, Vermont, the U.S. Virgin Islands, Virginia or West Virginia, mail the petition to:

**USCIS Texas Service Center
P.O. Box 852135
Mesquite, TX 75185-2135**

If the new commercial enterprise is located, or will principally be doing business in: Alaska, Arizona, California, Colorado, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, North Dakota, Ohio, Oregon, South Dakota, Utah, Washington, Wisconsin or Wyoming, mail the petition to:

**USCIS California Service Center
P.O. Box 10140
Laguna Niguel, CA 92607-0526**

What Is the Filing Fee?

The filing fee for the Form I-526 is **\$1,435.00**.

Use the following guidelines when you prepare your check or money order for the Form I-526:

1. The check or money order must be drawn on a bank or other financial institution located in the United States and must be payable in U.S. currency; and
2. Make the check or money order payable to **U.S. Department of Homeland Security**, unless:
 - A. If you live in Guam and are filing your petition there, make it payable to **Treasurer, Guam**.
 - B. If you live in the U.S. Virgin Islands and are filing your petition there, make it payable to **Commissioner of Finance of the Virgin Islands**.
 - C. If you live outside the United States, Guam, or the U.S. Virgin Islands, contact the nearest U.S. consulate or embassy for instructions on the method of payment.

NOTE: Please spell out U.S. Department of Homeland Security; do not use the initials "USDHS" or "DHS."

How to Check If the Fees Are Correct.

The form fee on this form is current as of the edition date appearing in the lower right corner of this page. However, because USCIS fees change periodically, you can verify if the fees are correct by following one of the steps below:

1. Visit our website at **www.uscis.gov**, select "Immigration Forms" and check the appropriate fee;

2. Review the Fee Schedule included in your form package, if you called us to request the form; or
3. Telephone our National Customer Service Center at **1-800-375-5283** and ask for the fee information.

Address Changes.

If you change your address and you have an application or petition pending with USCIS, you may change your address on-line at www.uscis.gov, click on "Change your address with USCIS" and follow the prompts or by completing and mailing Form AR-11, Alien's Change of Address Card, to:

**U.S. Citizenship and Immigration Services
Change of Address
P.O. Box 7134
London, KY 40742-7134**

For commercial overnight or fast freight services only, mail to:

**U.S. Citizenship and Immigration Services
Change of Address
1084-I South Laurel Road
London, KY 40744**

Processing Information.

Acceptance.

Any petition that is not signed or accompanied by the correct fee will be rejected with a notice that it is deficient. You may correct the deficiency and resubmit the petition. However, a petition is not considered properly filed until accepted by USCIS.

Initial processing.

Once the Form I-526 has been accepted, it will be checked for completeness, including submission of the required initial evidence. If you do not completely fill out the form or file it without required initial evidence, you will not establish a basis for eligibility and we may deny your Form I-526.

Requests for more information or interview.

We may request more information or evidence or we may request that you appear at a USCIS office for an interview. We may also request that you submit the originals of any copy. We will return these originals when they are no longer required.

Decision. The decision on the Form I-526 involves a determination of whether you have established eligibility for the requested benefit. You will be notified of the decision in writing.

Approval.

If you have established that you qualify for investor status, the petition will be approved. If you have requested that the petition be forwarded to an American embassy or consulate abroad, the petition will be sent there unless that consulate does not issue immigrant visas. If you are in the United States and state that you will apply for adjustment of status, and the evidence indicates you are not eligible for adjustment, the petition will be sent to an American embassy or consulate abroad. You will be notified in writing of the approval of the petition and where it has been sent, and the reason for sending it to a place other than the one requested, if applicable.

Meaning of petition approval.

Approval of a petition shows only that you have established that you have made a qualifying investment. It does not guarantee that the American embassy or consulate will issue the immigrant visa. There are other requirements that must be met before a visa can be issued. The American embassy or consulate will notify you of those requirements. Immigrant status granted based on this petition will be conditional. Two years after entry, the conditional investor will have to apply for the removal of conditions based on the ongoing nature of the investment.

Denial.

If you have not established that you qualify for the benefit sought, the petition will be denied. You will be notified in writing of the reasons for the denial.

USCIS Forms and Information.

To order USCIS forms, call our toll-free number at **1-800-870-3676**. You can also get USCIS forms and information on immigration laws, regulations and procedures by telephoning our National Customer Service Center at **1-800-375-5283** or visiting our internet website at www.uscis.gov.

As an alternative to waiting in line for assistance at your local USCIS office, you can now schedule an appointment through our internet-based system, **InfoPass**. To access the system, visit our website. Use the **InfoPass** appointment scheduler and follow the screen prompts to set up your appointment.

InfoPass generates an electronic appointment notice that appears on the screen.

Penalties.

If you knowingly and willfully falsify or conceal a material fact or submit a false document with this request, we will deny the benefit you are filing for, and may deny any other immigration benefit.

In addition, you will face severe penalties provided by law, and may be subject to criminal prosecution.

Privacy Act Notice.

We ask for the information on this form, and associated evidence, to determine if you have established eligibility for the immigration benefit for which you are filing. Our legal right to ask for this information can be found in the Immigration and Nationality Act, as amended. We may provide this information to other government agencies. Failure to provide this information, and any requested evidence, may delay a final decision or result in denial of your Form I-526.

Paperwork Reduction Act.

An agency may not conduct or sponsor an information collection and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The public reporting burden for this collection of information is estimated at 1 hour and 15 minutes per response, including the time for reviewing instructions, completing and submitting the form. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: U.S. Citizenship and Immigration Services, Regulatory Management Division, 111 Massachusetts Avenue, N.W., 3rd Floor, Suite 3008, Washington, DC 20529. OMB No. 1615-0026. **Do not mail your application to this address.**

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RICHARD J. DURBIN
ILLINOIS

COMMITTEE ON APPROPRIATIONS

COMMITTEE ON THE JUDICIARY

COMMITTEE ON RULES
AND ADMINISTRATION

ASSISTANT MAJORITY
LEADER

United States Senate
Washington, DC 20510-1501

August 19, 2008

309 HART SENATE OFFICE BUILDING
WASHINGTON, DC 20510-1304
(202) 224-2152
TTY (202) 224-6130

230 SOUTH DEARBORN, 38TH FLOOR
CHICAGO, IL 60604
(312) 353-4952

525 SOUTH EIGHTH STREET
SPRINGFIELD, IL 62763
(217) 492-4062

767 NORTH COURT STREET
MARION, IL 62959
(318) 998-3812

durbin.senate.gov

Chief Maurice "Morrie" Berez
Office of Service Center Operations, Business, & Trade Services
USCIS Foreign Trader, Investor & Regional Center Program
20 Massachusetts Avenue, NW (Room 2123)
Washington, DC 20529

Dear Chief Berez:

I am writing in strong support the LaSalle County Business Development Center as they request to be a participant of the EB-5 program through the US Citizenship and Immigration Services office.

Illinois does not currently have an EB-5 Center and encourage the opportunity to have this program in LaSalle County. The incentives from the EB-5 program will enhance economic development in the area to a great extent. Having a Regional Center would promote economic growth through increased export sales, improve regional productivity, create new jobs, and increase domestic capital investment.

Again, I would like to express my support for the LaSalle County Business Development Center as they request to join the EB-5 program. I urge you to give serious consideration to this request. If you have any questions or need more information, please do not hesitate to contact my Springfield office at 217/492-4062.

Sincerely,



Richard J. Durbin
United States Senator

RJD/sb

JERRY WELLER
11th District, Illinois

COMMITTEE ON
WAYS AND MEANS

SUBCOMMITTEE ON
INCOME SECURITY AND
FAMILY SUPPORT
(RANKING MEMBER)

SUBCOMMITTEE ON TRADE



UNITED STATES
HOUSE OF REPRESENTATIVES

DEPUTY REPUBLICAN WHIP

HOUSE POLICY COMMITTEE

LATIN AMERICA AND
CARIBBEAN WORKING GROUP
(CHAIRMAN)

1 October 2008

Robert Kruszka
Deputy Chief/Service Center Operations
U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services
20 Massachusetts Ave., NW,
Room 2132
Washington, DC 20529

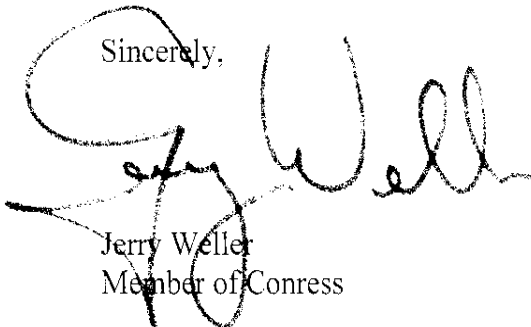
Dear Mr. Kruszka:

I am writing in strong support of the LaSalle County Business Development Center as the request to be a participant of the EB-5 program through the U.S. Citizenship and Immigration Services office.

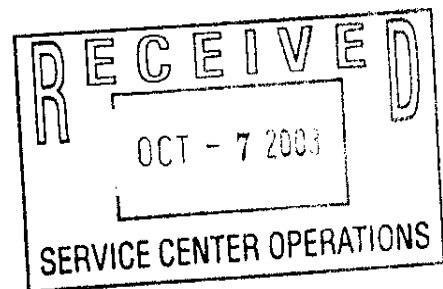
Illinois does not have an EB-5 Center and I strongly encourage the opportunity to have this program in LaSalle County. The incentives from the EB-5 program will enhance economic development in the area to a great extent. Having a regional center would promote economic growth through increased export sales, improve regional productivity, create new jobs, and increase domestic capital investment—the final point being extremely important in today's economy.

Again, I would like to express my support for the LaSalle County Business Development Center's application as they request to join the EB-5 program. I understand that they are waiting patiently for approval and anything thing that can be done to help expedite their application process would be greatly appreciated.

Sincerely,



Jerry Weller
Member of Congress



U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, DC 20515

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WASHINGTON, DC 20515-1311

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[Handwritten Signature]
M.C.

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Chicagoland

Via FedEx # 866408453193

August 28, 2008

Chief, Office of Service Center Operations, Business & Trade Services
USCIS Foreign Trader, Investor & Regional Center Program
ATTN: Chief Foreign Trader, Investor, & Regional Center Program- Marilee Berz
20 Massachusetts Avenue, NW
Room 2125
Washington, DC 20527

Dear Mr. Berz:

It is an honor to propose, on behalf of my client Dr. Henry Starfacci, to the United States Citizenship and Immigration Services two regional centers to be located in the state of Illinois: the LaSalle County Business Development Center, Inc., and the Chicagoland Foreign Investment Group.

The following documents and exhibits have been prepared according to USCIS guidelines for the creation of a Regional Center under the Employment Based Fifth Preference Immigrant Investor Pilot Program. Enclosed please find, for each of the above-mentioned Regional Centers, descriptions of:

- Geographic Area;
- Target Industries;
- Statistical Data and RIMS II;
- Selecting Projects;
- Requirements of Project Applicant;
- Requirements of the Investor; and
- Legal Documents.

We have proposed two Regional Centers for the State of Illinois because some of the proposed industries to be included for acceptance of foreign investment under the EB-5 Program differ, due to the variant demographics and boundaries of these designated regions. Furthermore, the LaSalle County Business Development Center, Inc. has already located businesses and investors who wish to participate in this

financial opportunity, as it relates to the LaSalle County Business Development Center, Inc. Specifically, there are plans to expand a pre-existing water park in LaSalle County which has the advantage to bring in several new employment opportunities and revenues to the area.

We are aware of the September 30, 2008 sunset of the EB-5 Pilot Program, and thus hope that USCIS will expedite the application process. We would greatly appreciate USCIS reviewing the attached documents prior to the sunset date. Consequently, Dr. Sharfaei, his team, and his attorneys are ready to fly to Washington, D.C. at any time to meet with USCIS in order to clarify any portion of the attached proposals in order to facilitate the process.

Sincerely,



Khalil J. Khalil
General Counsel

Enc.

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Executive Summary

The Employment Based, Fifth Preference, also known as EB-5 Pilot Program was created by Section 610 of Public Law 102-395 in 1992 as a different option for foreign investors who were seeking permanent residence in the United States. Rather than having to play an *active* participation with a \$1 million or \$500,000 required investment with the EB-5 visa; by a passive investment through a Regional Center of a minimum \$500,000 (in certain areas), foreign investors can receive permanent visas for their spouses, their children under the age of 21, and themselves. The investor must prove their funds are from a lawful source. The investment must also create at least ten jobs directly or indirectly, improve regional productivity, and increase domestic capital investment. Regional centers must be placed in rural areas or locations that have Targeted Employment Areas (TEAs), which are areas that have unemployment rates 150% of the national average. If the Regional Center is not within a rural area or a TEA, then the minimum investment required is \$1 million as opposed to \$500,000.

This report will go over the plans of creating the Chicagoland Foreign Investment Group. The proposed regional center will be placed will cover the counties of Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, Will, Lake, Kankakee, Boone, Winnebago, Ogle, and Stephenson. Behind all the glitz and glamour of Chicago's beautiful skyline, there is a growing poverty rate. According to Mid-America Institute on Poverty, 21.3% of people living in Chicago live in poverty as of 2005. The report mentions "The Chicago region was hit harder by manufacturing job loss than the nation as a whole from 2000 to 2005." Manufacturing industries are five of the ten planned projects that will be implemented into the region to increase productivity, decrease the high unemployment rates, and retain the labor force that tends to migrate into other regions.

The targeted industries that will be placed into the proposed Chicagoland Foreign Investment Group are Accommodation, Agriculture, Education, Entertainment, Health Care, and Manufacturing. This report will cover why these specific industries have been chosen. Through statistical and economic evidence through data and the RIMS II economic model, the chosen industries will show positive strengths as well as weaknesses. The proposed regional center has

chosen industries that have high productivity to strengthen the local economy as well as industries that the regional center will revitalize within the local economy.

In order to have a successful regional center, plans on marketing to foreign investors have been covered. The proposed regional center will establish marketing offices in countries with a high volume of potential investors. The marketing offices will advertise the attractiveness of Chicagoland's business environment through direct targeting such as trade shows to gain foreign investors. The diverse investment opportunities within the proposed regional center will assist acquiring investors who have different personal interests.

This report follows by going into detail the actions the Chicagoland Foreign Investment Group will take as part of its due diligence on behalf of itself, foreign investors, and participating businesses.

Through the Chicagoland Foreign Investment Group, the foreign investor shall have the opportunity to invest directly in an approved company while keeping in line with the rules and regulations outlined by 8 CFR 204.6 of the Code of Federal Regulations, the Department of Homeland Security's Citizenship and Immigration Services (USCIS), in addition to complying with the Patriot Act in regards to investments from foreign investors into the United States.

Factors of success lie in the reliance on recruiting a strong Finance Committee and Board of Directors to identify and present sound investment opportunities to foreign investors. This requires extensive research into prospective investments through due diligence to evaluate any positive or negative risk factors for the foreign investor. Additionally, establishing international marketing campaigns to attract investors to participate in the EB-5 Program, while working closely with state and local governments to take full benefit of any government programs available for qualifying projects, are attributes that will contribute to the success of Chicagoland Foreign Investment Group.

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Geographical
Area

Delineation of the Regional Center's Borders

The Chicagoland Foreign Investment Group will undertake all projects within the following counties: Boone, Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, Ogle, Stephenson, Will, Winnebago. These counties comprise the Northeast corner of Illinois, extending west to include the top portion of the state (**Exhibit 1**).

There are many areas within this contiguous region of Illinois which meet EB-5 Program qualifications for consideration by the USCIS as a Target Employment Area (TEA). The USCIS defines a TEA as "a geographic area or political subdivision located within a metropolitan statistical area or within a city or town with a population in excess of 20,000 with an unemployment level at least 150 percent of the national unemployment rate" (**Exhibit 2, page 3**). The boundaries of this Regional Center have been drawn to include the Chicago-Naperville-Joliet MSA (Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, and Will Counties) and the Rockford MSA (Winnebago and Boone Counties). Lake County and Kankakee County are also included in the Lake County-Kenosha County MSA and the Kankakee-Bradley MSA, respectively (**Exhibits 3, 4**).

The 2007 national unemployment rate in the U.S. was 4.6 percent (**Exhibit 5**). In order for an area to qualify as a TEA, its 2007 unemployment rate must therefore have been 6.9 percent or higher ($4.6 \times 1.5=6.9$). As can be seen in Table 1, there are a number of cities within these MSA-encompassed counties that currently meet these qualifications (**Exhibit 6, 7**). These numbers must be evaluated each year, and the cities qualifying as Target Employment Areas will change from year to year. Additionally, Table 2 shows that there are many neighborhoods in the city of Chicago operating at alarmingly high unemployment rates (**Exhibit 8, 9**). These neighborhoods also meet qualifications for classification as Target Employment Areas as long as they have populations of over 20,000 residents in a neighborhood. As such, official qualifications for TEA status are to be approved by the Illinois State governor and will be petitioned on a case-by-case basis.

Aside from the counties included in Metropolitan Statistical Areas, the boundaries of this Regional Center have also been structured to include Stephenson and Ogle Counties, which are not located within any MSA (**Exhibit 3**). According to the USCIS, “A Rural Area is a geographical area that is outside a metropolitan statistical area, or part of the outer boundary of any city or town having a population of 20,000 or less as shown by population indicators” (**Exhibit 2, page 3**). Therefore, this categorization applies to all areas encompassed by Stephenson and Ogle Counties.

Table 1: Cities, Villages within Regional Center Boundaries meeting TEA Requirements

| Name | 2000 Population | County | 2007 Unemployment Rate |
|--------------------------|------------------------|------------------|-------------------------------|
| North Chicago city | 35,918.00 | Lake County | 10.2 |
| Harvey city | 30,000.00 | Cook County | 9.1 |
| Kankakee city | 27,491.00 | Kankakee County | 8.8 |
| Zion city | 22,866.00 | Lake County | 8.8 |
| Chicago Heights city | 32,776.00 | Cook County | 8.7 |
| Bellwood village | 20,535.00 | Cook County | 8.6 |
| Round Lake Beach village | 25,859.00 | Lake County | 8.0 |
| Blue Island city | 23,463.00 | Cook County | 7.9 |
| Belvidere city | 20,820.00 | Boone County | 7.8 |
| Maywood village | 26,987.00 | Cook County | 7.6 |
| Calumet City | 39,071.00 | Cook County | 7.4 |
| Dolton village | 25,614.00 | Cook County | 7.4 |
| Rockford city | 150,115.00 | Winnebago County | 7.0 |
| Waukegan city | 87,901.00 | Lake County | 7.0 |

Source: US Census Bureau Census 2000; Illinois Department of Employment Security

Table 2: Chicago Neighborhoods Meeting TEA Requirements

| Cities | 2000 Population [^] | 2007 Unemployment Rate* |
|------------------------|------------------------------|-------------------------|
| ENGLEWOOD | 40,222 | 16.3 |
| NORTH LAWDALE | 41,768 | 16.2 |
| WEST ENGLEWOOD | 45,282 | 15.5 |
| GRAND BOULEVARD | 28,006 | 15.2 |
| EAST GARFIELD | 20,881 | 13.4 |
| WEST GARFIELD | 23,019 | 12.8 |
| DOUGLAS | 26,470 | 11.9 |
| WOODLAWN | 27,086 | 11.4 |
| GREATER GRAND CROSSING | 38,619 | 11.3 |
| SOUTH CHICAGO | 38,596 | 11.2 |
| HUMBOLDT PARK | 65,836 | 10.9 |
| AUSTIN | 117,527 | 10.5 |
| ROSELAND | 52,723 | 10.4 |
| AUBURN GRESHAM | 55,928 | 10.2 |
| CHICAGO LAWN | 61,412 | 9.3 |
| SOUTH SHORE | 61,556 | 9.2 |
| NEW CITY | 51,721 | 8.8 |
| WEST PULLMAN | 36,649 | 8.3 |
| NEAR WEST SIDE | 46,419 | 7.8 |
| WASHINGTON HEIGHTS | 29,843 | 7.8 |
| EAST SIDE | 23,653 | 7.6 |
| CHATHAM | 37,275 | 7.6 |

[^]DECENNIAL CENSUS POPULATION DATA FOR CHICAGO COMMUNITY AREAS

Source: Northeastern Illinois Planning Commission, City of Chicago, U.S. Census Bureau

*ANNUAL AVERAGE UNEMPLOYMENT RATES

UNPUBLISHED, UNOFFICIAL DATA (Revised March 2008)

Source: Illinois Department of Employment Security, Economic Information and Analysis

The USCIS has determined that the required amount of foreign investment in the EB-5 program is dependent on the location of the project: "Depending on the location of the commercial enterprise to be invested in, the required amount of the investment may be either \$1 million or \$500,000. If the investment is located within an approved TEA or RA, the required minimum threshold for investment is \$500,000. Otherwise, an alien

must invest a minimum of \$1 million to qualify" (**Exhibit 2, page 3**). The Chicagoland Foreign Investment Group will take on projects within approved Target Employment Areas or Rural Areas, as well as outside of these areas. Investments made into enterprises whose principle location and place of business is in a non-TEA within one of the metropolitan statistical areas listed above will be in an amount not less than \$1 million. In either case, the requirement of each investor will be to create or preserve a total of ten direct or indirect jobs, as established by the USCIS (**Exhibit 2, page 2**).

Chicagoland Foreign Investment Group

The Chicagoland Foreign Investment Group will encompass twelve metropolitan counties and two rural counties located in Northern Illinois. Through the research team's examination of the Chicagoland area's economic and social situations, it has become apparent that the area has much to gain from the development of a Regional Center within its boundaries. Over the past couple of decades, the state of Illinois has faced economic challenges seen in similar regions across the nation. If approved, the Chicagoland Foreign Investment Group would provide a great stabilizing force to the future of the area's economy and labor providers, promising to improve the lives of millions of residents.

City of Chicago

For decades, Chicago has been recognized as a dual metropolis, "experiencing daily reminders of decay and glitter, despair and aspiration...What sociologists refer to as spatial mismatch is among the region's dominant and most entrenched characteristics: technologically oriented job opportunities requiring high skill levels, mostly concentrated along suburban corridors; poorly educated, underemployed labor pools, more often than not in the most socially isolated locales within central cities; and disparities in transportation networks, inhibiting opportunities for links between residence and work" (**Exhibit 10**). The North Side of the city is known for its bustling business activity, while the South and West Sides have fallen drastically behind. Although the 1990s saw a

decade of immense growth on the business oriented North Side. “The economic boom of the 1990s bypassed poor minority communities in the city, as many predominantly black neighborhoods on the South and West Sides remained mired in poverty as deeply entrenched as a decade earlier” (**Exhibit 11**). Consequently, though some of Chicago's neighborhoods are quite affluent, there are many areas within the city itself that face higher than average unemployment rates and extremely poor living conditions.

In 2007, the Illinois Department of Employment Security estimated that 44 of Chicago's 77 neighborhoods had levels of unemployment higher than the national average of 4.6 percent (**Exhibit 8**). The city of Chicago as a whole had an unemployment rate of 5.6 percent. While the flourishing neighborhoods of Lincoln Park, Lakeview, and the Loop have unemployment rates of only 1.4 percent, twenty nearby neighborhoods had unemployment rates of over 10 percent (**Exhibits 8, 12**). Riverdale, a neighborhood far south, was estimated to have unemployment of 21.7 percent.

The poor employment conditions in these Chicago neighborhoods mirror the social situation of their residents. 2005 poverty rates in Chicago were at 21.3 percent, up from a 1999 rate of 19.6 percent (**Exhibit 13**). These numbers are significantly higher than the corresponding Illinois rates, which were at 10.7 percent in 1999 and 12.0 percent in 2005. The 2007 Report on Illinois Poverty goes on to state that the city of Chicago has 110 high poverty-concentrated census tracts, meaning that over 40 percent of the residents in these areas were poor as of 2005. The 2008 Report on Illinois Poverty states that Cook County has been placed on the “Poverty Warning List” and that corrective action must be taken (**Exhibit 14, page 35**).

Much of the disparity between the wealthy North Side and the poverty-stricken South and West Sides of Chicago stems from the social and economic history of the city (**Exhibit 15**). During the 1900s, the South Side of Chicago was a Mecca for unskilled laborers seeking opportunities away from rural life. Chicago was a manufacturing and meatpacking city, attracting workers from around the country and immigrants from around the world. World Wars I and II increased demand for the outputs of Chicago's

steel mills, and factories happily employed the influx of labor. However, the South Side would eventually prove unable to retain this industrial base. In the mid-1950s, Chicago's major meatpacking companies began to close their production facilities; by 1964 most of the large packers had disappeared. In the 1960s, Chicago's steel mills were also beginning to decline: "The Union Stock Yard finally closed its doors on August 1, 1971, after nearly 106 years of operation. The late 1970s and early 1980s saw the further decline of the city's industrial base, especially among the steel mills on the Southeast Side. The closing of Wisconsin Steel in 1980 signaled the end of Chicago's dominance of the steel industry. U.S. Steel's South Works closed, after more than a hundred years of operation, in 1993." Empty factories and warehouses symbolized the shift in Chicago's employment base from manufacturing to the service industries.

While Chicago had once been a "Promised Land" for anyone willing to work hard, it now offered opportunities mainly to educated men and women (**Exhibit 10, 13**). However, the residents who had migrated to take advantage of the opportunities of the twentieth century remained, resulting in high unemployment and the degradation of neighborhoods with no means to keep up the economy. This poverty has continued to perpetrate itself, as ever more businesses have been forced to leave the region because there is no money to support their presence. Further job loss accompanies these departures, resulting in a cycle which the South Side has been unable to escape, and causing much of the high unemployment that has plagued this part of the city for decades.

The proposed Chicagoland Foreign Investment Group is interested in assisting Chicago in eradicating some of the causes of disparity between various neighborhoods within the city. The research team believes that the presence of a Regional Center to encourage investment in Chicago's Target Employment Areas will vastly benefit the region. By attracting businesses to Chicago's TEAs through the offer of low interest rates and an inviting business environment, the Regional Center will essentially be bringing much needed employment opportunity back to these labor markets. By bringing business and employment to the region, the state of the entire economy will pick up. With residents having more disposable income, retail and similar industries will be more inclined to

enter the market. It is the sincere hope of the Regional Center that its presence and business assistance will help to spur a rebirth within the neighborhoods of Chicago that continue to lag behind the affluent neighborhoods to the North.

Entire Area of Chicagoland Foreign Investment Group

As is true of the city of Chicago itself, the counties within the proposed Regional Center’s boundaries face varying economic situations. The Illinois Poverty Summit reports that there are many Illinois families experiencing “significant hardship” (**Exhibit 13**). The Chicago region portion of the 2007 Report on Illinois Poverty looks specifically at Cook, DuPage, Kane, Lake, McHenry, and Will Counties. All six of these counties had higher poverty rates in 2005 than they did in 1999, as can be seen in Figure 1.

| Poverty Rates and Numbers in 1999 and 2005 | | |
|---|-------------------------|-------------------------|
| | 1999¹ | 2005² |
| Illinois | 10.7% (1,291,958) | 12.0% (1,483,873) |
| Chicago | 19.6% (556,791) | 21.3% (573,486) |
| Cook | 13.5% (713,040) | 15.0% (777,089) |
| DuPage | 3.6% (32,163) | 4.9% (44,921) |
| Kane | 6.7% (26,587) | 8.9% (42,161) |
| Lake | 5.7% (35,714) | 7.1% (48,360) |
| McHenry | 3.7% (9,446) | 4.9% (14,906) |
| Will | 4.9% (24,225) | 5.1% (32,502) |

Figure 1. Source: 2007 Report on Illinois Poverty: Chicago Area Snapshot

The image of Illinois and the Chicago region portrayed by the report is quite bleak. The map shown in Figure 2 compares the levels of poverty in Illinois’s counties, while Figure 3 shows a map of Illinois’s counties that have been put on either a Poverty Watch List or Poverty Warning List (**Exhibit 14, pages 34-39**). The Poverty Watch and Poverty Warning classifications come from an evaluation of Illinois’s counties using a point system, with the higher number of points indicating a worse score. Evaluating four indicators (teen birth rates; poverty rates; unemployment rates; graduation rates), a point is given to a county if its rate is higher than the state average and/or if they have worsened since the previous year. For each indicator a total of two points is possible and

overall a total of eight points is possible. Counties that score four or five points are placed on a Watch List and counties that score six, seven, or eight points are placed on a Warning List. Cook County, as was previously mentioned, has been placed on the more severe Poverty Warning List; Boone, DeKalb, Kankakee, Ogle, Stephenson, and Winnebago Counties have been placed on the Poverty Watch List and will be monitored closely by the state.

State Poverty Map, All Ages in Poverty, 2005

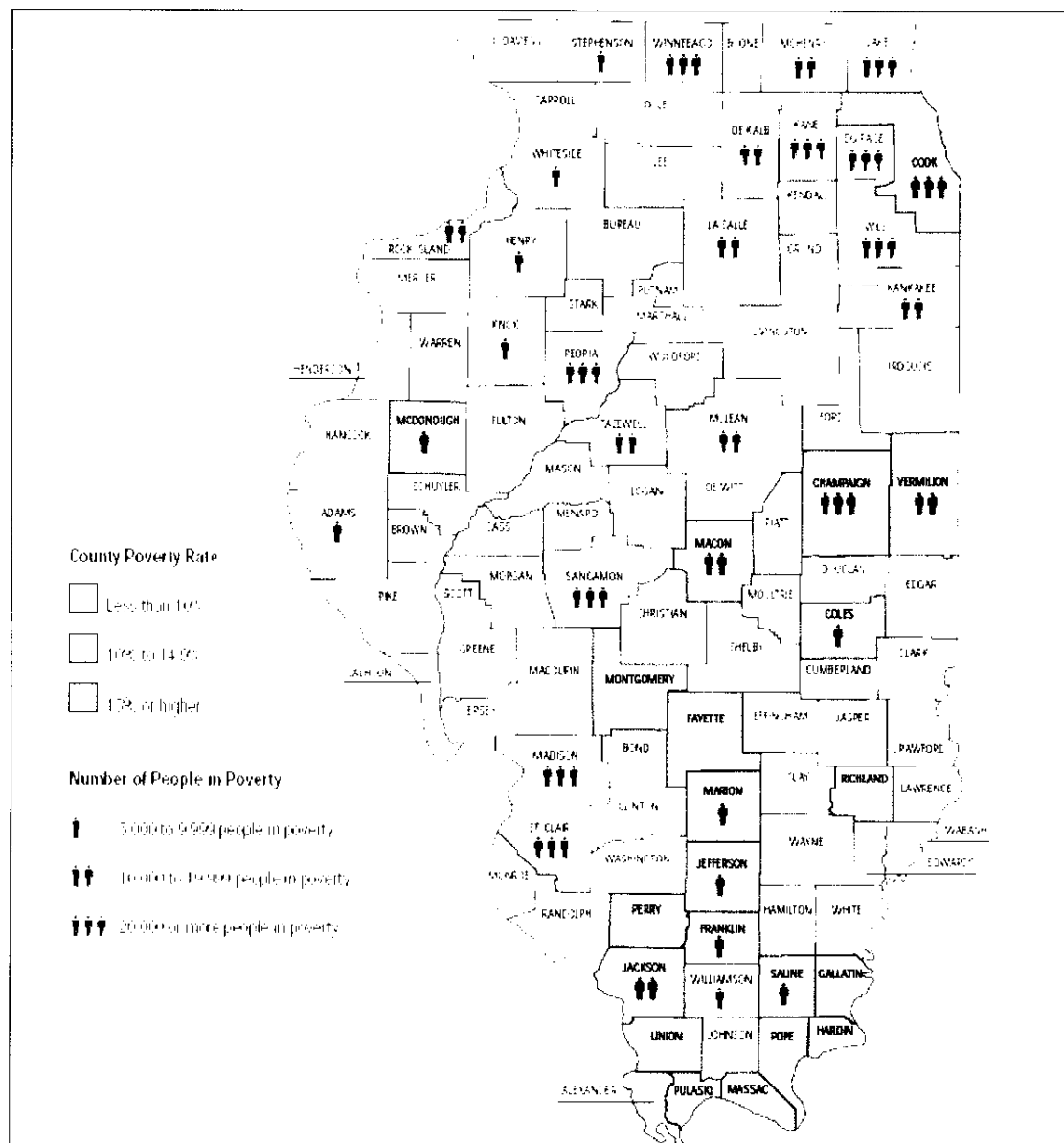
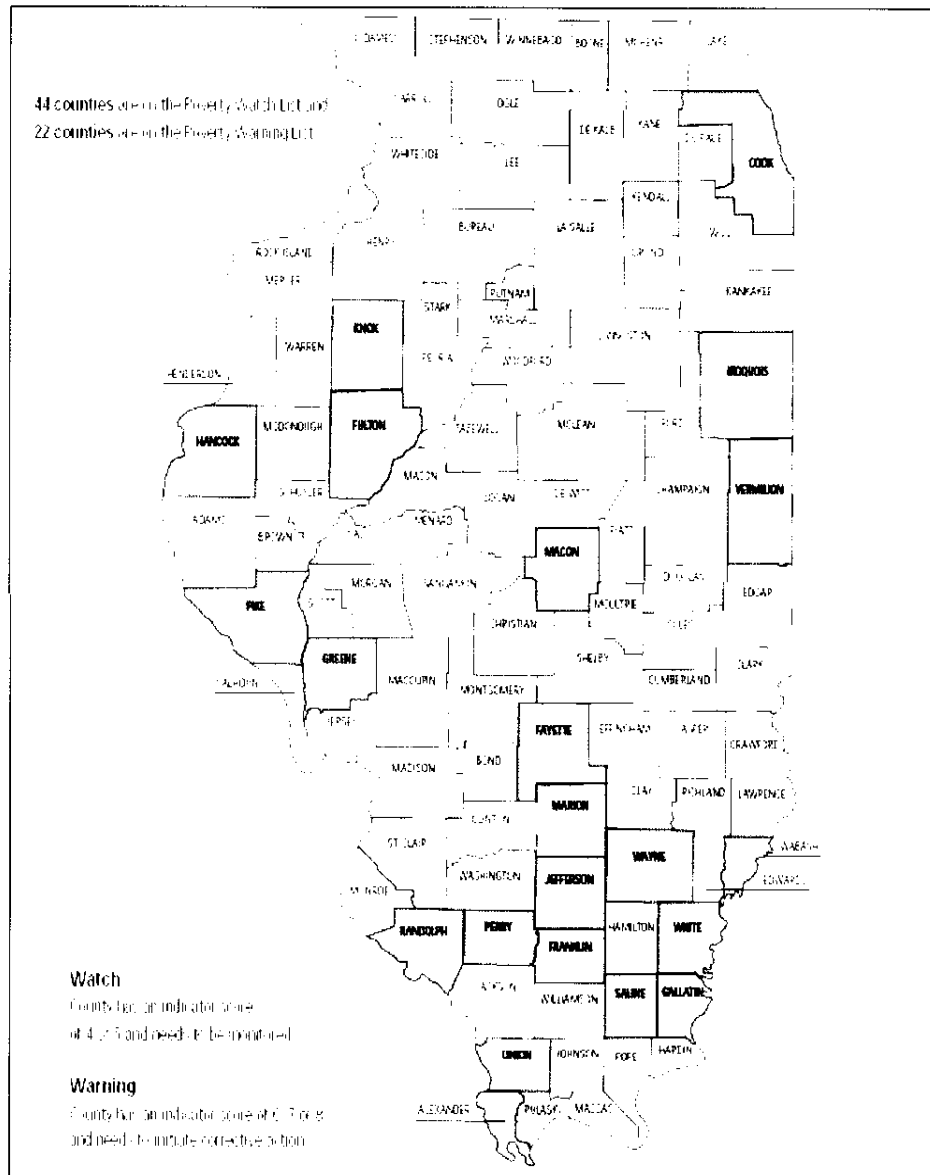


Figure 2. Source: 2008 Report on Illinois Poverty



Illinois Counties of Concern

Figure 3. Source: 2008 Report on Illinois Poverty

Alarming increases in Illinois's poverty rates are accompanied by other baffling indicators during the robust 1990s. The report states that Chicagoland's middle class has become a great deal less significant, as the percentages of low-income and high-income families have grown between 1970 and 2000 (Figure 4). One reason for this is the departure of manufacturing jobs that hit the nation during these years. As discussed earlier, manufacturing job loss has been a main factor in the inability of Chicago's South and West Sides to keep up with the North Side. This trend is seen across the region to varying degrees, and the Chicago region was hit hard by manufacturing job loss from 2000 to 2005; while the Chicago region saw 22.2 percent manufacturing job loss over these years, the nation as a whole saw only 17.6 percent loss (**Exhibit 13, page 2**).

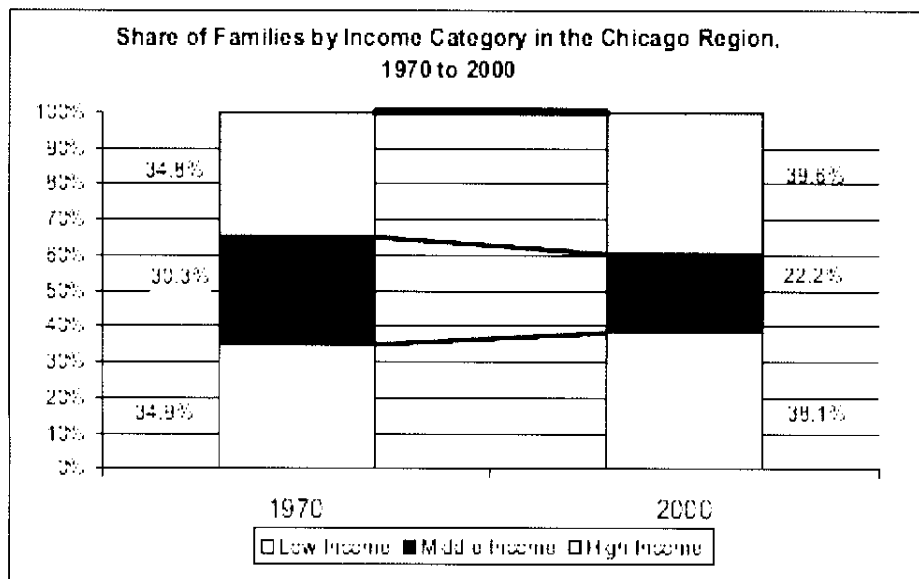


Figure 4. Source: 2007 Report on Illinois Poverty: Chicago Area Snapshot

Loss of employment opportunities, poverty, and a shrinking middle class are all reflected in unemployment rates for the region. Figure 5 shows the May 2008 unemployment rates for each county in Illinois, as well as for the state and the nation (**Exhibit 16**). Every county within the proposed center's boundaries currently has an unemployment rate above the national average, and eleven of the fourteen have unemployment rates above the state average. Table 1 (page 18) shows that unemployment rates for many of these counties are often above state and national averages (**Exhibits 5, 17, 18**). This trend is especially obvious in recent years. Additionally, **Exhibit 7** shows the pockets of high unemployment rates in small cities throughout the region.

Table 1: Labor Market Statistics, 1990-2007. Counties v. Illinois, National Rates

| | Boone | Cook | DeKalb | DuPage | Grundy | Kendall | Kankakee | Kane | Illinois | U.S. |
|-------------|--------------|-------------|---------------|---------------|---------------|----------------|-----------------|-------------|-----------------|-------------|
| 1990 | 7.0 | 7.2 | 4.9 | 4.0 | 9.0 | 4.5 | 6.4 | 5.9 | 6.3 | 5.6 |
| 1991 | 9.8 | 8.2 | 6.5 | 5.2 | 10.6 | 6.0 | 7.5 | 7.8 | 7.3 | 6.8 |
| 1992 | 10.5 | 8.8 | 6.6 | 5.7 | 11.8 | 6.4 | 8.3 | 8.4 | 7.8 | 7.5 |
| 1993 | 11.2 | 8.5 | 6.0 | 5.5 | 11.1 | 5.5 | 7.3 | 7.3 | 7.4 | 6.9 |
| 1994 | 5.5 | 6.5 | 4.5 | 4.1 | 8.4 | 4.8 | 6.5 | 6.0 | 5.8 | 6.1 |
| 1995 | 4.5 | 5.8 | 4.0 | 3.5 | 7.8 | 4.0 | 6.2 | 5.0 | 5.2 | 5.6 |
| 1996 | 5.1 | 5.9 | 4.5 | 3.5 | 7.0 | 4.2 | 5.5 | 5.1 | 5.3 | 5.4 |
| 1997 | 5.4 | 5.3 | 3.9 | 3.1 | 7.1 | 3.3 | 5.4 | 4.5 | 4.8 | 4.9 |
| 1998 | 4.3 | 5.0 | 3.6 | 2.8 | 6.7 | 3.0 | 5.8 | 4.1 | 4.5 | 4.5 |
| 1999 | 4.3 | 5.0 | 3.7 | 2.9 | 6.9 | 3.0 | 5.2 | 4.1 | 4.5 | 4.2 |
| 2000 | 4.9 | 4.8 | 3.6 | 3.3 | 5.3 | 3.3 | 4.6 | 4.3 | 4.5 | 4.0 |
| 2001 | 6.4 | 6.0 | 4.6 | 4.4 | 6.0 | 4.2 | 5.3 | 5.4 | 5.4 | 4.7 |
| 2002 | 7.7 | 7.4 | 5.5 | 5.5 | 7.3 | 5.5 | 6.7 | 6.5 | 6.5 | 5.8 |
| 2003 | 8.1 | 7.4 | 5.7 | 5.5 | 7.9 | 5.7 | 7.3 | 6.7 | 6.7 | 6.0 |
| 2004 | 7.6 | 6.7 | 5.3 | 5.0 | 7.7 | 5.3 | 7.5 | 6.1 | 6.2 | 5.5 |
| 2005 | 6.9 | 6.4 | 5.3 | 4.7 | 7.0 | 5.0 | 6.6 | 5.8 | 5.8 | 5.1 |
| 2006 | 5.8 | 4.7 | 3.9 | 3.4 | 5.1 | 3.8 | 5.8 | 4.2 | 4.6 | 4.6 |
| 2007 | 6.9 | 5.1 | 4.6 | 3.8 | 5.7 | 4.5 | 6.5 | 4.8 | 5.0 | 4.6 |

| | Lake | McHenry | Ogle | Stephenson | Will | Winnebago | Illinois | U.S. |
|-------------|-------------|----------------|-------------|-------------------|-------------|------------------|-----------------|-------------|
| 1990 | 3.8 | 5.4 | 5.1 | 5.9 | 6.5 | 5.4 | 6.3 | 5.6 |
| 1991 | 4.8 | 6.8 | 6.4 | 6.5 | 7.6 | 7.1 | 7.3 | 6.8 |
| 1992 | 5.2 | 7.2 | 6.6 | 7.3 | 8.7 | 7.9 | 7.8 | 7.5 |
| 1993 | 5.1 | 6.5 | 6.8 | 6.0 | 7.7 | 7.5 | 7.4 | 6.9 |
| 1994 | 4.7 | 4.9 | 5.1 | 5.3 | 6.1 | 5.3 | 5.8 | 6.1 |
| 1995 | 3.9 | 4.1 | 4.6 | 4.9 | 5.3 | 3.9 | 5.2 | 5.6 |
| 1996 | 3.7 | 4.1 | 4.1 | 4.4 | 5.3 | 4.5 | 5.3 | 5.4 |
| 1997 | 3.4 | 3.8 | 3.9 | 5.1 | 4.7 | 4.5 | 4.8 | 4.9 |
| 1998 | 3.5 | 3.6 | 3.6 | 4.5 | 4.3 | 4.3 | 4.5 | 4.5 |
| 1999 | 3.2 | 3.5 | 4.0 | 5.4 | 4.3 | 4.4 | 4.5 | 4.2 |
| 2000 | 3.7 | 3.6 | 4.4 | 5.3 | 4.1 | 4.6 | 4.5 | 4.0 |
| 2001 | 4.4 | 4.7 | 5.3 | 5.9 | 5.0 | 6.0 | 5.4 | 4.7 |
| 2002 | 5.5 | 5.6 | 6.3 | 6.5 | 6.3 | 7.4 | 6.5 | 5.8 |
| 2003 | 5.8 | 5.9 | 6.9 | 7.1 | 6.6 | 8.1 | 6.7 | 6.0 |
| 2004 | 5.4 | 5.2 | 6.3 | 6.8 | 6.2 | 7.5 | 6.2 | 5.5 |
| 2005 | 4.8 | 5.1 | 5.5 | 5.4 | 5.8 | 6.6 | 5.8 | 5.1 |
| 2006 | 4.4 | 3.7 | 5.2 | 5.0 | 4.2 | 5.5 | 4.6 | 4.6 |
| 2007 | 5.0 | 4.3 | 5.7 | 5.3 | 4.7 | 6.2 | 5.0 | 4.6 |

Source: U.S. Bureau of Labor Statistics

As is true of Chicago city itself, the counties within the proposed Regional Center's boundaries face varying economic situations depending on where you look. For example, Lake County contains the extremely affluent Lake Forest City, which is very near to Target Employment Area qualifiers North Chicago City and Waukegan City. Lake Forest had a 2007 unemployment rate of 2.8 percent; North Chicago and Waukegan had 10.2 percent and 7.0 percent, respectively (**Exhibit 6, 7**). This pattern is seen across the region. Take the case of Ford Heights in Cook County:

“Ford Heights, in spite of its classification as a suburb, represents a textbook case study of decay and despair. Twenty-five miles from Chicago in southern Cook County, it was identified in 1990 as the nation's poorest suburb...Between 1980 and 2000, the population of Ford Heights declined from 5,437 to 3,456. Ninety-six percent of its residents were African American. Per capita income (adjusted for inflation) declined 22 percent between 1979 and 1989, to \$4,660, compared to Chicago's \$12,889 and Kenilworth's \$69,814. Unemployment in Ford Heights approached 40 percent, and only 30 percent of its housing stock was privately owned. In 2000, it registered the nation's highest percentage of single-mother households (34 percent).” (**Exhibit 10**)

At the same time, there are many cities in the Chicagoland region that have managed to maintain their economy in the face of hardship. Consider Kenilworth:

“Kenilworth, in turn, exemplifies the glitter and aspirations of the dual metropolis. In 1990, it ranked as the wealthiest place in the metropolis (per capita income of \$69,814). It was also the nation's ninth richest community and had one of the highest proportions (163 per 10,000 adults) of listings in *Who's Who in America*: 83 percent of its adult population held at least a bachelor's degree and 98 percent had graduated from high school. Situated in the northeastern corner of Cook County, Kenilworth is one of the eight suburban municipalities known compositely as the North Shore, all linked to Chicago by a railroad operating

since 1855...Cultural homogeneity reinforced by restrictive covenants—white Protestants only—defined what Kenilworth's founder envisioned. Contrived as a sociological island, it was purposefully designed to resist the sweeping social and cultural changes unleashed by the economic transformation of the nineteenth century. By 1990, only 60 of Kenilworth's 2,562 residents were nonwhite. The median housing price exceeded \$500,000.” (**Exhibit 10**)

Ford Heights and Kenilworth are both located in Cook County, and are both about the same distance from the city of Chicago. Lake Forest, North Chicago, and Waukegan are located in close proximity within Lake County, but they face extremely different social situations. It is this characterization of the Chicago region as a dual metropolis which demands that responsibility be taken to keep the poverty-stricken pockets of the region from falling farther behind. The 2008 Report on Illinois Poverty lists education, employment, health, housing, nutrition, and assets as steps on the pathway out of poverty (**Exhibit 14**). The approval of a Regional Center that will assist government officials in attracting businesses to these struggling areas is a move in the right direction. It will create employment opportunities accessible to the people in these poor areas, as well as assist those businesses who wish to bring other benefits to the Chicagoland region.

Chicago's 2016 Olympic Bid

Although the 2016 Summer Olympics are not yet a reality for Chicago, it is important to consider the possibility of this event when considering the approval of a Regional Center for the Chicagoland area.

If Chicago does win the bid for the 2016 Olympics, it is expected that some events would be held on the south side of the city (**Exhibit 19**), creating need for construction and development of the region. As most of the South Side of Chicago falls into the list of Target Employment Areas, the Chicagoland Foreign Investment Group would have the potential to make great financial contributions to the city's Olympic experience.

Officials are predicting that the 2016 Olympic Games would cost around \$2 billion

dollars and that most of this will be paid for with games revenue; however, London's total cost for the 2012 Olympics has already surpassed three times the amount of their 2004 estimate, causing intense criticism from local taxpayers (**Exhibits 20, 21**). The establishment of a Regional Center around the city of Chicago would allow investors to contribute to the establishment of arenas, hotels, and other responsibilities of the Olympic Committee.

In recent years, Illinois state officials have taken measures to determine the needs of their citizens and how to best promote their economic position. Their efforts to identify the needs of each specific region of the state can be seen in the Opportunity Returns program, developed by the state's Department of Commerce and Economic Opportunity¹. State officials have developed this program with the goal to create more jobs within Illinois. The annual Illinois Poverty Report, created by the Illinois Poverty Summit, shows that state officials are taking seriously the poverty that is afflicting so many in Illinois. The proposed Chicagoland Foreign Investment Group will be solely devoted to attracting business projects and investment to the Chicagoland area, in the hopes of assisting the State's efforts to enrich the economy and the situation of its residents. The objective of the Regional Center is to work with Illinois officials in achieving their goals by offering investment in their ambitious projects, as well as drawing a variety of business projects to the region through attractive loans and incentives.

¹ opportunityreturns.com

Competitive Advantage of Locating within Chicagoland Area

The Chicagoland region is a unique location for business development, offering numerous advantages and incentives for potential developers. The location, transportation infrastructure, supportive industries, large and well trained labor force, and business incentive programs offer an attractive environment for new business.

Location and Infrastructure

Chicagoland lies at the heart of the nation and serves as a major global center of business, travel, and transportation. Chicagoland's location and highly developed transportation infrastructure provide convenience for businesses shouldering shipping costs or for tourist attractions looking for a realistic location for in and out-of-state guests. Illinois's modern transportation system utilizes air, ground, rail and waterways to provide direct routes to every U.S. market and to international ports (**Exhibit 22**).

Illinois lies at the heart of the nation's interstate highway system. Coast-to-coast interstates I-70, I-80, and I-90 pass through Illinois. These are joined by major north-south interstates, including I-39, I-55, and I-57, and major east-west interstates, including I-24, I-64, and I-74. In all, 2,169 miles of interstate highway serve Illinois; only two states have more interstate miles. Illinois also hosts major east/west/north/south interchanges located in more than a dozen communities around the state. Supplementing the interstate system, Illinois also has over 16,000 miles of state highways, making the interstate routes accessible from every region of Illinois (**Exhibit 22**).

Illinois is the center of the nation's rail network, and Chicago is the largest U.S. rail gateway; Fifty-two railroads provide service from Illinois to every part of the United States. The Union Pacific's Global III Intermodal Facility in Ogle County is the industry's finest state-of-the-art terminal. This new facility offers customers multiple business advantages, including direct interstate highway routes with easy access to major east-west and north-south markets, the efficient interchange of shipments to and from rail connections, and expedited operations of over 25 trains and 3,000 containers daily

(**Exhibit 22**). Chicagoland is also home to the Metra Rail and Chicago Transit Authority (**Exhibit 23, 24**). These bus and train systems run extensively through downtown Chicago, as well as from the city out to the far suburbs.

Illinois's central location also makes it a natural hub for air travel. Chicago is home to O'Hare International Airport (one of the world's busiest airports), Midway Airport, more than 137 public use airports, 270 heliports and over 840 aviation facilities. An airport with commercial airline service or the capability to handle business jets serves almost every Illinois city with a population exceeding 30,000. 2006 saw 1.7 million tons of cargo and approximately 76.3 million travelers passing through O'Hare, with more than one arrival or departure every minute (**Exhibit 22**).

Illinois has 1,118 miles of navigable waterways bordering or passing through the state. These waterways provide Illinois with a link between the Atlantic Ocean and the Gulf of Mexico (through the St. Lawrence Seaway and Great Lakes). The Illinois waterways are extremely valuable, as they continue to function as cost-effective highways to move Illinois's products to consumers around the globe (**Exhibit 22**).

Supportive Industries and Resources

According to the Illinois Department of Commerce and Economic Opportunity, the major industries in Illinois include chemicals, primary metals, industrial and farm equipment, electric equipment and appliances, electronic components, food processing, and printing. One-fifth of the Gross National Product is produced in the Midwest, and Illinois companies can supply almost any sub-assembly component or finished product, making Illinois a convenient and cost-effective location for growing companies (**Exhibit 25**).

Labor Force

Chicagoland boasts a growing and capable labor force, endowed with the skills needed to help businesses succeed. According to the Illinois Department of Commerce and Economic Opportunity, nearly one-half of the state's 6 million workers are professionals,

skilled technicians, craftspeople or machine operators. More than 4 million of these workers live within the Chicago metropolitan area (**Exhibit 26**).

Illinois workers are well educated, as a large percentage have gained education beyond high school (Figure 1). Illinois workers are also known for their productivity. Illinois's manufacturing is reported to add a value of \$109.35 per hour of labor, ranking it among the best in the Midwest (**Exhibit 26**).

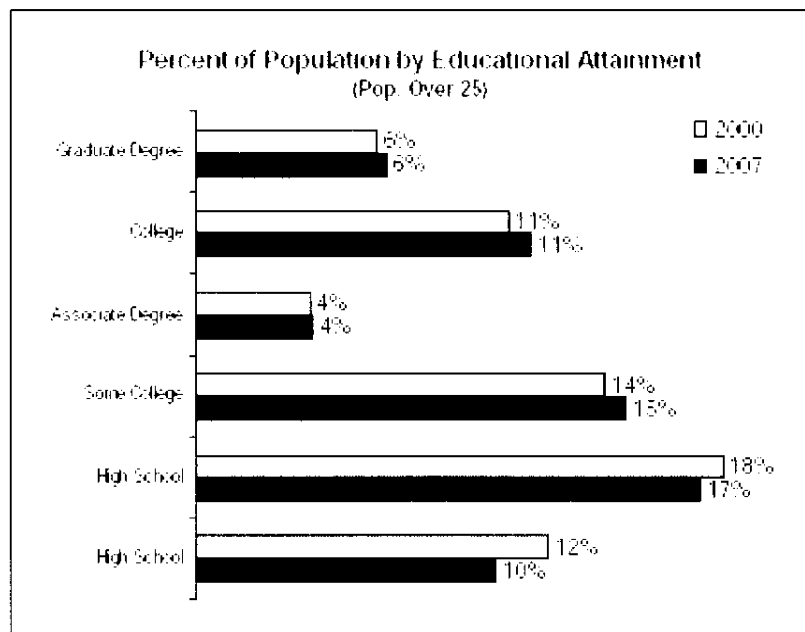


Figure 1. Source: 2007 State of Working Illinois; **Exhibit 27, page 52**

Business Incentive Programs

The State of Illinois Business Portal and the Illinois Department of Commerce and Economic Opportunity have compiled a detailed list of the federal and state assistance available to those choosing to do business in Illinois. This list can be found at <http://business.illinois.gov/assistance.cfm>, and includes grants and loans, tax incentives, start-up incentives, and various programs available to Illinois businesses. Some important portions of this website have been included in **Exhibit 28**.

Target Industries

It is the strong belief of the Regional Center’s petitioners that foreign investment targeted towards the following industries would greatly benefit Chicagoland’s economy and residents. These industries have been chosen with the knowledge that some of them—such as Accommodations and Entertainment—will be focused in non-TEA metropolitan areas, and will require \$1,000,000 investments. Agriculture and Manufacturing, on the other hand, will be focused within the lower-cost rural counties, where an investment of \$500,000 per investor will suffice.

Accommodations

Chicago welcomed a total of 44 million tourists to its doors in 2006, representing a nine percent increase over 2005 (Figure 1). Chicago leads other top destination cities in terms of domestic leisure visitation, while an additional six million business travelers came through Chicago during 2006. \$10.9 billion dollars were generated by travel through Chicago during 2006 (**Exhibit 29**).

| Chicago and Illinois Domestic Travel Volume, 2000-2006 (millions of visitors, <i>leisure and business</i> combined) | | |
|--|----------------|-----------------|
| Year | Chicago | Illinois |
| 2006 | 44.17 | 91 |
| 2005 | 40.18 | 85.53 |
| 2004 | 37.94 | 76.18 |
| 2003 | 34.49 | 77.85 |
| 2002 | 34.85 | 70.73 |
| 2001 | 33.74 | 69.36 |
| 2000 | 36.95 | 68.87 |

Figure 1. Source: Chicago Office of Tourism, 2006 Statistical Information (**Exhibit 29**)

The hotel industry was the most promising sector within the construction industry during 2007 (**Exhibit 30**). The industry posted 86 percent growth in hotel construction starts during the first three quarters of 2007 when compared to the same time period of 2006, reaching a volume of 1.7 million square feet of hotel construction during the nine month period. Meanwhile, the article from **Exhibit 30** claims that “the dollar volume of

nationwide construction starts - including single-family homes, commercial buildings, public works and utilities - is expected to drop 8% this year to \$626.7 billion... [this makes] hotels the hottest product in the market.”

The same article also points out that “the biggest decline [during the first three quarters of 2007] in the Chicago area came in the multifamily sector, which includes townhomes, condominiums and apartments. Construction starts of those properties fell 34% to 12,872 dwelling units.” The May 2008 Chicago Magazine article entitled “Who Will Buy the Condos?” states:

“Chicago’s condo boom has stalled—caught in a perfect storm, with a flood of new units landing in a sinking real-estate market...Between 2000 and 2006, some 22,650 new condos and townhouses came on line in the downtown neighborhoods alone...In most of those years, buyers seemed insatiably hungry, snapping up most of the units built. In 2005, the downtown market’s best year, about 9,000 came on line and 8,000 of them sold. Hints of trouble appeared in 2006 when a surge in new deliveries left about 2,500 condos unsold at the end of the year. That contributed to the logjam that was 2007. The year ended with about 7,700 new and rehabbed condos and townhouses standing unsold (not all were finished or under construction, but all were actively for sale) in a year when only about 4,300 new units were completed” (**Exhibit 31**).

(b)(4)



While there is constant demand to create more accommodations in and around the city, Chicago’s potential to host the 2016 Olympics has made this demand increasingly pertinent. The official website for the Chicago 2016 Olympics projects that over six million tourists from around the world will be staying in Chicago’s hotels, eating in the city’s restaurants, and enjoying the rest of the city’s entertainment (**Exhibit 32**). The

website also believes that “tourists will come to our Olympic City in increasing numbers years after the Games to remember and relive the 2016 spectacle, see the venues, and experience Chicago firsthand.”

Agriculture

As gas prices continue to rise with no end in sight, biofuels such as biodiesel and ethanol are increasingly attractive options for energy replacement. As Congressman Ed Markey (D-Massachusetts) states, “Our goal over the next 10 to 15 years [is to] see a revolution that results in a dramatic increase in SUVs and automobiles that can use these new fuels, and in the number of Americans that can use them, so that we can back out more millions of barrels of oil that come from OPEC every day” (Exhibit 33).

Biodiesel is made from oil-seed crops such as soybeans. As such, there is a growing demand for oil-seed crops, grass, and trees to produce more biodiesel. Increased demand has already required that crops be grown specifically for the sake of biofuel production, separate from food production. This demand does not seem poised to cease in the near future: the U.S Department of Energy states in their report that “an estimated one billion gallons of new ethanol production capacity is already on the drawing board, about 35% of this based on non-grain feedstock such as agricultural and forestry residues. Doubling ethanol production would create a demand for an additional 800 million bushels of corn, or 20-25,000 tons of corn stover, other residues, or switchgrass” (Exhibit 34).

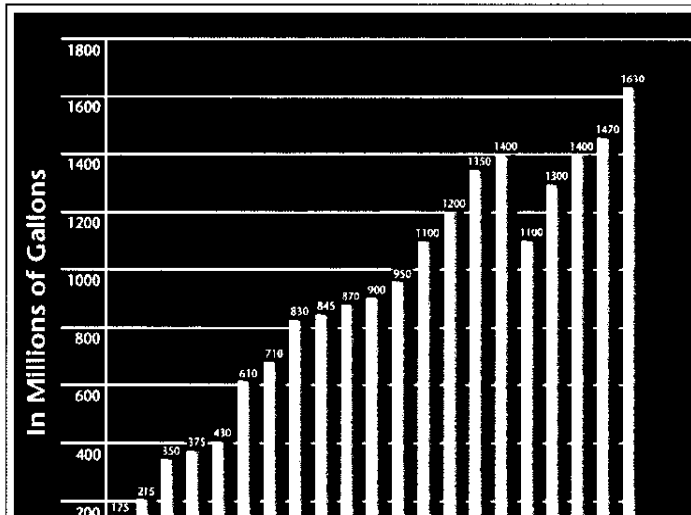


Figure 2: Ethanol production growth in U.S. Source: U.S. Dept of Energy

The demand for Biofuels takes away crop production for food supplies. Some farmers have expressed a conflict in the decision of whether to provide food or fuel with their crops. Chicago Tribune journalist Theresa Schmalshof does not belittle the demand for biofuel, but explains, “The fact is global food demands will double in the next 40 years and world energy demand will grow at least 40 percent in the next 25 years” (**Exhibit 35**). Food production cannot be replaced by energy production; there must instead be more agricultural production channeled to each. The proposed Chicagoland Foreign Investment Group realizes this predicament, and has chosen to focus on agriculture for this reason.

Food research is increasing with high public awareness of diet, health, food safety, and biosecurity. The recent outbreaks of salmonella in tomatoes and jalapenos are an example of why agricultural research is growing in importance (**Exhibit 36**). The demands for efficiency and transparency within the agricultural sector have created high demand for researchers in biofuel technology and food scientists. The Bureau of Labor Sciences (BLS) states, “Job growth among agricultural and food scientists should be about as fast as the average for all occupations. Opportunities are expected to be good over the next decade, particularly for those holding a Masters or Ph.D. degree” (**Exhibit 37**). The BLS report went on to say that even in an economic recession, the employment of agricultural scientists is relatively stable.

Agriculture is also an important industry to support due to the potential for export of agricultural products. At the time of the latest agricultural census in 2002, Illinois ranked second nationally in the export of agricultural commodities, with nearly \$4 billion worth of goods shipped to foreign countries each year. At that time, exports from Illinois accounted for nearly seven percent of all U.S. agricultural exports. Illinois is one of the nation's leading exporters of both soybeans and feed grains, and more than forty-four percent of grain produced in Illinois is sold for export. One reason for this performance is the strong transportation infrastructure accessible by Illinois farmers. This strong production distribution system puts Illinois in an advantageous position to compete in the

global marketplace (**Exhibits 38-41**).²

Education

The Chicagoland Foreign Investment Group plans on investing in the Chicagoland region's education system, in both private and public schooling. The 2007 Chicago Daily Observer article entitled *Investment in Education* highlights the necessity of providing a public education, pointing out that educational attainment is the absolute key to economic security (**Exhibit 42**).

The article tells that the unemployment rate in Illinois for whites who don't have a high school diploma is almost ten percent but drops to 3.5 percent for whites with a college degree. African Americans in the state who haven't graduated high school have an unemployment rate of almost 23 percent, but for those blacks who go on to earn a college degree, the unemployment rate drops to just 4.5 percent. Individuals in Illinois with less than a high school education are three times more likely to be unemployed than those with at least a BA (**Exhibit 27, page 26**).

Over the last 26 years, Illinois workers who stopped their education when they got a high school diploma saw their real, inflation adjusted incomes decline by about nine percent (**Exhibit 42**). Between 1980 and 2006, workers carrying a college degree were the only ones to experience an increase in real wages. Median hourly wages for those with less than a high school diploma fell by 28.7 percent; individuals with only a high school education experienced an 8.7 percent drop; workers with some college but no degree experienced a 4.3 percent drop in median wages. On the other hand, those with at least a college degree experienced a gain of 14.3 percent. (**Exhibit 27, page 35**)

² Further facts and information regarding Illinois agriculture can be found at the websites for the Illinois Department of Agriculture (<http://www.agr.state.il.us/>) and the Illinois Farm Bureau (<http://www.ilfb.org>).

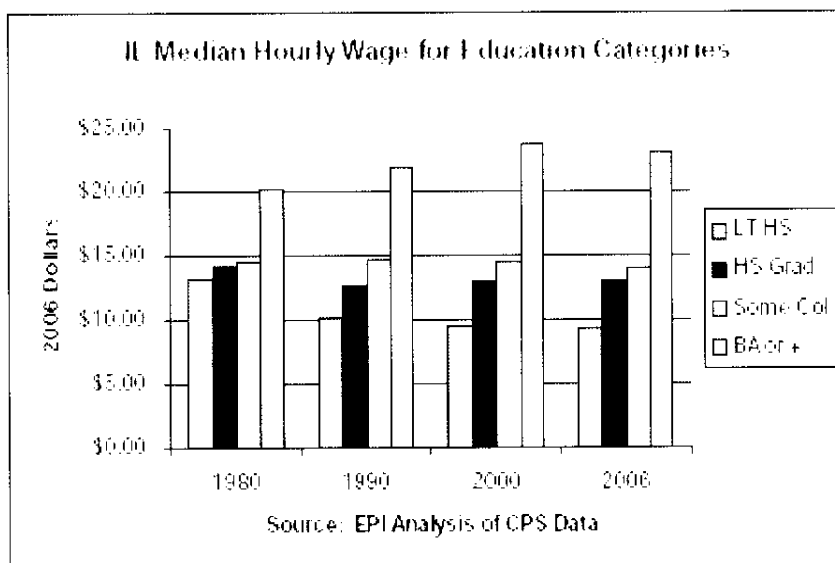


Figure 3. Source: 2007 State of Working Illinois. Exhibit 27, page 35

The Chicago Daily Observer article also points out the very important impact that a successful education program has on an employer’s perspective of a state:

“What business is telling policymakers in Illinois is simple: in a global economy, employers have a lot of choices when it comes to making business location and expansion decisions. The high-end businesses, those that pay good wages and provide decent benefits, like manufacturing or information technologies, demand a highly numerate and literate workforce. If a state’s public education system isn’t up to snuff, high-end businesses will either locate or expand elsewhere. Specifically, in those states or countries that can provide a quality, skilled workforce” (**Exhibit 42**).

Clearly, investment in education is more than a social consideration. Chicago’s Public Schools lag by almost 20 percentage points the state’s annual target for graduation rates. In 2006, the drop-out rate for Chicago Public Schools was 45.2 percent, and only 59 percent of CPS graduates go on to college. Only 35 percent of those students end up with a degree. In a world where median income rises with education, and not having a high school diploma translates to \$260,000 in lost wages over a lifetime, Chicago must step up

its education funding. Chicago spends less on students and teachers than comparable cities, ranking 42nd in elementary teacher pay (**Exhibit 43, 44**).

Education rates do increase as you look outside of the Chicago Public School System, as the greater Northeastern Illinois Region's 2007 educational attainment displays (**Exhibit 27, page 68**):

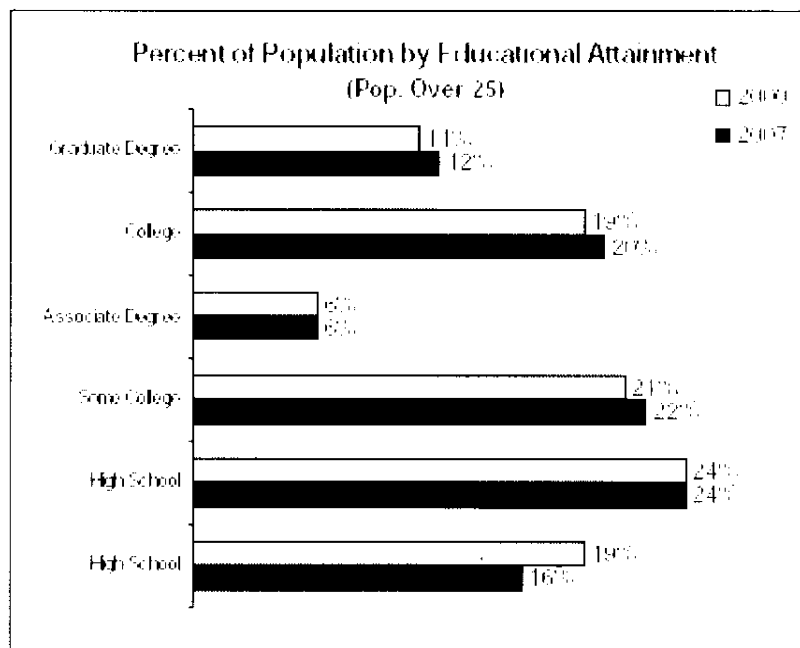


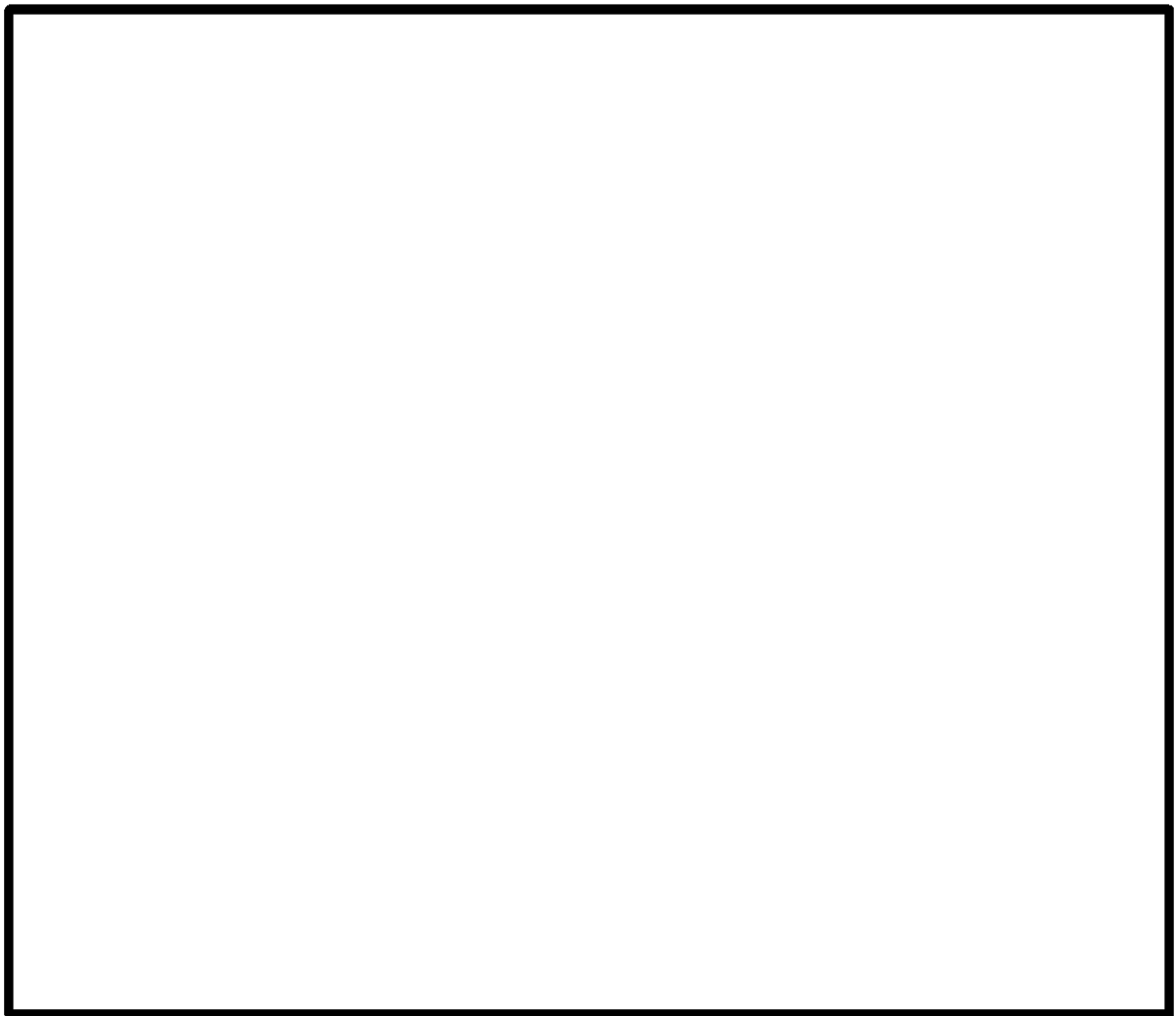
Figure 4. Source: 2007 State of Working Illinois.

Illinois officials, parents, and businesses have expressed that they are serious about improving the region's education system. Investment in education is not only a most important investment in Illinois's children, but is essentially an investment in the long-term stability of the Illinois economy (**Exhibit 45**). Education prepares children to succeed in school and to participate in the workforce as adults, and in today's economy an education is an essential tool for success. The Chicagoland Foreign Investment Group appreciates the importance of education for the future of today's children, as well as for the future of the Chicagoland region's economy.

(b)(4)



(b)(4)



Entertainment

While the Chicagoland area is well known for its entertainment industry, it is the observation of the research team that the industry within the city of Chicago itself caters overwhelmingly to adults. For example, the website Chicagokids.com lists only eight water parks, five miniature golf courses, one zoo, and seven “Amusement” venues within the Chicago Central Region (**Exhibit 49**). This view is shared by the Metropolitan Pier and Exposition Authority, which governs Chicago’s Navy Pier and has considered building a water-based hotel and water park to draw more young people to the popular entertainment district (**Exhibit 50**).

According to the U.S. Census Bureau, 7.5 percent of Chicago city’s population was under the age of five at the time of the 2000 Census; the 2006 estimate increased to 7.6 percent (**Exhibit 51, 52**). An additional 8.4 percent of the city’s population in 2000 was between

the ages of five and eighteen; this decreased to an estimated 6.9 percent in 2006. Children represent an extremely large portion of the Chicago city population, yet most of the region's avenues for entertainment are located outside of the city itself.

The proposed Chicagoland Foreign Investment Group would like to assist businesses that are looking to bring entertainment for children, teenagers, and families into the city of Chicago. The center would consider project proposals brought forth by entertainment businesses outside of this niche and throughout the entire region, but priority would be given to those within the entertainment industry who met these conditions. The research team also believes that these projects will be viable and beneficial to the Chicago city

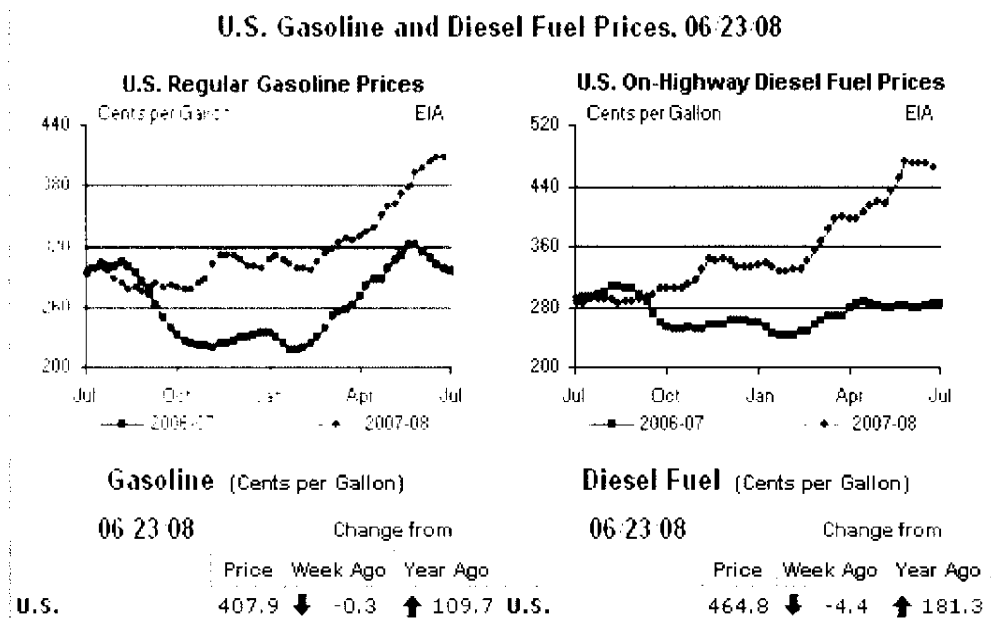


Figure 5. Source: U.S. Energy Information Administration economy because it will give the residents of Illinois and nearby states practical family outing options. As fuel and airline prices continue to rise, travelers looking to cut leisure expenses may choose to stay closer to home (Figure 5).

A movement toward this mindset can be seen in the January 2008 *travelt horizons* survey by the Travel Industry Association *Ypartnership* (Exhibit 53). The data shows that while vacation is a “non-negotiable part of contemporary life,” further rises in gas prices will affect the location and way that people travel. Thirty-eight percent of survey respondents who stated that they would change their plans in response to increased gas prices claimed that they would accomplish this by driving a shorter distance. Similarly, twenty percent

claimed that they would select a different vacation destination. If this shift in vacation plans is realized at these estimates, tourist attractions such as water parks and theme parks present large earning potential for the Chicagoland region.

Health Care

The Chicagoland Foreign Investment Group is interested in targeting investment towards the improvement and development of health care facilities in the region. The facilities will increase the quality and accessibility of health services, promoting health in the Chicagoland Region. The Regional Center research team expects that investment in health care will create many jobs in the Chicagoland region, as the 2007 State of Working Illinois publication has projected that many health care related industries will see high industry growth, as well as high industry occupation growth, within Illinois (**Exhibit 27, pages 54-55**). This is also true of the publication's projections for the Northeastern Region, which contains ten of the proposed Regional Center's fourteen counties. Figure 6, taken from the State of Working Illinois publication, shows that Ambulatory Health Care Services, Nursing and Residential Care Facilities, and Hospitals are all within the region's top twenty projected growth industries (**Exhibit 27, page 70**).

The City of Chicago has a plethora of amazing hospitals and medical facilities, many of which are nationally recognized. But to stay at the top of the industry, professionals must always be looking to the future for expansion and development of new technologies. Currently existing facilities would greatly benefit from investing in unique and state-of-the-art equipment and technology which bring in new patient populations from surrounding areas, increase the amount of patients physicians are able to see, and provide better and more accurate diagnoses and treatments.

| Northeastern Illinois—Top 20 Projected Growth Industries | | | | | | |
|--|--------|--|--------------------|---------------------------------|----------------------|-------------------|
| Rank | NAICS | Title | Employment 2004 | Projected Employment 2014 | Employment Change | Mean Wage 2004 |
| | | All Public and Private Employment | 3,902,500 | 4,322,397 | 419,895 | |
| | | Total - Declining Industries | 674,044 | 629,063 | -44,982 | |
| | | Total - Growing Industries | 3,228,456 | 3,693,334 | 464,877 | |
| 1 | 561/// | Administrative and Support Services | 300,095 | 376,679 | 76,584 | \$31,092 |
| 2 | 541/// | Professional, Scientific and Tech. Services | 282,476 | 352,106 | 69,630 | \$74,260 |
| 3 | 611/// | Educational Services | 330,853 | 386,786 | 55,933 | \$38,512 |
| 4 | 621/// | Ambulatory Health Care Services | 128,090 | 165,687 | 37,596 | \$52,993 |
| 5 | 722/// | Food Services and Drinking Places | 252,584 | 286,554 | 33,970 | \$17,478 |
| 6 | 238/// | Specialty Trade Contractors | 136,272 | 163,409 | 27,137 | \$57,887 |
| 7 | 623/// | Nursing and Residential Care Facilities | 69,560 | 87,167 | 17,607 | \$27,913 |
| 8 | 624/// | Social Assistance | 58,277 | 73,428 | 15,151 | \$23,372 |
| 9 | 813/// | Religious, Civic and Professional Orgs | 100,784 | 114,384 | 13,600 | \$42,463 |
| 10 | 493/// | Warehousing and Storage | 28,114 | 37,784 | 9,670 | \$35,870 |
| 11 | 523/// | Securities, Commodities and Financial Acti | 46,194 | 54,259 | 8,065 | \$111,173 |
| 12 | 622/// | Hospitals | 168,561 | 176,209 | 7,648 | \$47,994 |
| 13 | 713/// | Amusements, Gambling and Recreation Ind | 41,355 | 48,922 | 7,567 | \$21,634 |
| 14 | 551/// | Management of Companies and Enterprises | 69,788 | 76,780 | 6,992 | \$81,072 |
| 15 | 522/// | Credit Intermediation and Related Activities | 113,180 | 118,316 | 5,135 | \$61,635 |
| 16 | 441/// | Motor Vehicle and Parts Dealers | 45,715 | 50,626 | 4,911 | \$49,001 |
| 17 | 444/// | Building Material and Garden Equip. Stores | 34,377 | 39,210 | 4,833 | \$29,679 |
| 18 | 236/// | Construction of Buildings | 38,640 | 43,011 | 4,371 | \$58,473 |
| 19 | 811/// | Repair and Maintenance | 35,843 | 43,156 | 7,313 | \$37,946 |
| 20 | 484/// | Truck Transportation | 40,855 | 44,768 | 3,913 | \$49,734 |

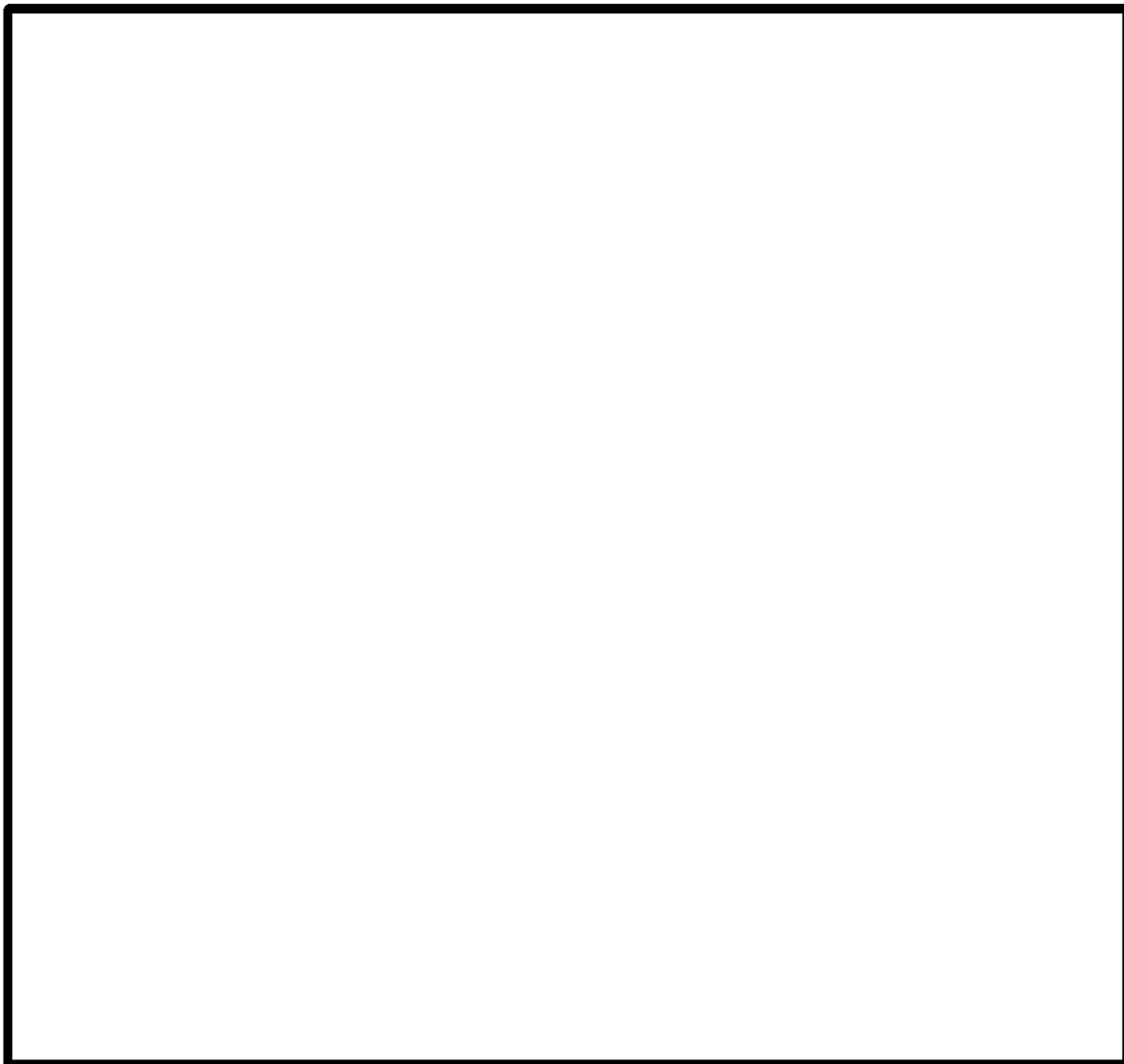
Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

Figure 6. Source: 2007 State of Working Illinois

Additionally, Ogle and Stephenson Counties have many opportunities for growth and development of the health care industry due to their rural demographic. With the advancement of modern technology in the healthcare and telecommunications fields, currently existing facilities can expand to better treat their populations and provide access to care through telemedicine. Immobile populations such as the elderly, chronically ill, and low income individuals and families without access to transportation would be able to stay in the community to receive specialized treatment and follow-up care they previously received in Chicago or other urban areas. Detailed information concerning telemedicine and its many benefits is included in **Exhibits 54 and 55.**

(b)(4)

(b)(4)



Manufacturing

Manufacturing is one of the top five private-sector employers in all of the proposed Regional Centers' counties. (**Exhibit 57, 58, 59**). Chicagoland has a deep manufacturing history, although it has taken a hard hit in the recent past. Illinois lost 20.8% of its factory jobs between 2000 and 2005; The Brookings Institution found that within the ten year period covering 1995-2005, Chicago lost over 100,000 manufacturing jobs (**Exhibit 60**).

However, all of these lost jobs have created a large, unemployed labor pool within the area. This is attractive to companies seeking a location for new factory development, as a large and qualified labor force is an important requirement for any firm. Kevin Kotecki, CEO of Pabst Brewing Co., explains the reasoning behind his company's decision to

relocate their headquarters to Chicago, stating that "Chicago has a very broad and deep labor pool and we have great access to talent here, which is an important factor for us" (**Exhibit 61**).

Chicagoland's position as a leader in United States manufacturing is largely due to the strong production distribution system provided by its extensive transportation infrastructure and subsequent low transportation costs (**Exhibits 62,63**). These factors played a large part in the reasoning behind Ford's creation of their Chicago manufacturing campus in 2004 (**Exhibit 64**). Jerry W. Szatan states in his report, "Chicago is the nation's busiest rail hub; an estimated 50 percent of U.S. rail freight passes through the city's rail yards via 500 freight trains daily, according to World Business Chicago, an economic development organization" (**Exhibit 65**).



**The Stephenson Group LTD.
Chemical Manufacturing
Plant within Stephenson
County**

Due to these positive factors, and despite recent setbacks, the research team believes that business incentives in the Chicago region, combined with attractive loans offered by the proposed Regional Center, will offer motivation to develop in the region. The current state of the United States economy, high fuel and shipping prices, and the plunging U.S. dollar are all indicators of a shift towards establishing future manufacturing plants in the States. The June 19, 2008, Business Week article entitled *Can the U.S. Bring Jobs Back from China?* states:

"The economics of global trade are starting to tilt back in favor of the U.S. to a degree unseen in a generation. Since 2002 the dollar has plunged by 30% against major world currencies and is falling against the yuan. Wages in China are rising 10% to 15% a year. And spiking oil prices are driving up shipping rates. The cost of sending a 40-foot container from Shanghai to San Diego has soared by 150%.

to \$5,500, since 2000. If oil hits \$200 a barrel, that could reach \$10,000, projects Toronto financial-services firm CIBC World Markets” (**Exhibit 66**).

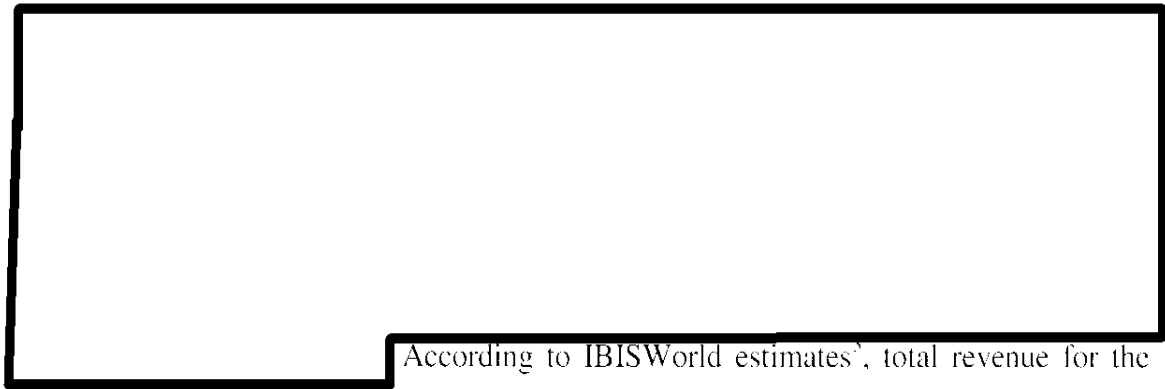
With more favorable conditions for locating within the United States, the region is poised to capitalize on Illinois’s business incentives and take advantage of the additional benefits of the Regional Center.

State officials have identified bringing manufacturing back into Northeastern Illinois as a top priority, as is evidenced by the Northern Stateline Region Opportunity Returns plan (**Exhibit 58**). In order to assist each region of Illinois through business assistance and job creation, Illinois State has developed the Opportunity Returns program. Boone, Ogle, Stephenson, and Winnebago Counties comprise the Northern Stateline Region. Manufacturing, with 48,000 employees as of 2002, is considered to be the backbone of the region’s economy (**Exhibit 58, page 8**). Governor Blagojevich’s Opportunity Returns plan has said of manufacturing in this region: “This sector is starting to show positive signs of economic recovery from the recent downturn, due in part to the region’s inherent advantages coupled with aggressive economic development efforts led by local development organizations” (**Exhibit 58, page 11**). State Officials have determined that the region would further benefit from Illinois State support of manufacturing excellence in the region. As such, they have committed to the realization of the following manufacturing goals: to enhance new technology investment, to open new markets, to reduce the cost of doing business, to provide business intelligence, and to promote manufacturing innovation (**Exhibit 58, pages 11-13**).

(b)(4)

Although the proposed Regional Center would be open to assisting all manufacturing sectors, it will give precedence to Chemical Manufacturing (Pharmaceuticals); Food Product Manufacturing (Nutritional Supplements); Petroleum and Coal Product

(b)(4)



According to IBISWorld estimates³, total revenue for the Prescription Drug Wholesaling Industry has grown each year, and is estimated to reach \$605,500 million US dollars in 2008 (**Exhibit 67**). World Business Chicago has named Pharmaceutical and Medicine Manufacturing as a promising industry within the Chicago Metropolitan Statistical Division. Between 2001 and 2006, the industry saw 41 percent local growth and 30 percent national growth (**Exhibit 68**). **Exhibit 69** provides evidence that many emerging markets around the world also have high demand for vitamins and nutritional supplements. This 2008 article focuses on the demand within Brazil, India, Africa, the Middle East, and Turkey for these exports.

³ IBISWorld is the leading industry market research team providing independent, comprehensive, and up to date research on over 700 industries.

Economic Study Introduction

As stated above, the different industries that the proposed Regional Center will have are Accommodations, Agriculture, Education, Entertainment, Healthcare, and Manufacturing. These industries were chosen after considering different statistics, the analyzed data, as well as the needs of the community. The purpose of this study is to show these industries will bring a positive impact on the local economy by having evidence of employment, regional, and economic growth.

The presence of industries with growing employment shows success of industries within the region through agglomeration economies. Satyahjit Chatterjee explains in his research “A concentration of workers and businesses in one location lowers production costs because proximity permits workers and businesses to save on the costs of transporting goods and people. Economists refer to this cost advantage as economies of spatial concentration, or agglomeration economies, for short.” (**Exhibit 70, page 6**) By lowering production costs, this attracts businesses within the same industry, suppliers, consumers, as well as households into the region.

John Maynard Keynes is considered one of the fathers of modern theoretical macroeconomics. John Keynes’s theories were so influential on modern economics and fiscal policy, that Cambridge created the Cambridge School of Keynesian Economics (**Exhibit 71**). Keynesian Economics is centered on economic growth. Using Keynes’s general formula of aggregate demand, this study will explain economically how bringing new businesses into the region of Chicago will increase the regional growth. Through household consumption, investment, government expenditures, and exports, the different industries placed into the region will increase the Chicago region GDP.

Looking at Illinois statistics as well as RIMS II, an input-output multiplier model, there is evidence of future economic growth in the industries included in the proposed Regional Center. The data will be presented as well as explained. This section is used to give assurance to the foreign investor and the local governing body, that the industries will be profitable, there will be employment, and there will be economic growth.

Statistical Evidence of Increase in Employment

If there is a high consistency of employment or a progressive growth in the targeted industries, it will help the economic growth. The two advantages in having either of these employment trends within the industry are low training costs and an increase in consumption. When a company relocates in an area which already has a large local pool of workers with the skills required, the costs that the company takes on for creating new jobs are relatively low. This is because the company will have to undertake few retraining costs or time, which attracts attention from competing companies. The cluster of companies draws in suppliers because of the attraction of decreased transportation costs. With all the companies coming into one area, households migrate into the area, which also increases consumption. This is all within the study of agglomeration economies. One economics researcher states “Within cities with strong agglomeration economies, the higher the density of population and employment promotes educational externalities that sustain productivity growth at a rate greater than other areas. This modern view focuses on the development of human capital – people’s stock of knowledge and production skills. Increased education or training enables people to receive higher wages and to consume more goods and services over time.”(Exhibit 72, pages 3-4) Localization economies, a part of agglomeration economies, specifically deals with the study of a group of companies within the same industry in the same region. Akihiro Otsuka, a regional economist gives evidence of how agglomeration has accelerated economic growth in Japan (Exhibit 73). This study will look at different figures, provided by the Bureau of Labor Statistics, of employment within the industries that will be implemented in Chicago by the proposed Regional Center.

Reference

The Bureau of Labor Statistics (BLS) is the principal fact-finding agency under the U.S Department of Labor, for the use of the Federal Government in the broad field of labor economics and statistics. Their vision statement declares “With the strongest commitment to integrity and objectivity, the BLS will be premier among statistical agencies, producing impartial, timely, and accurate data relevant to the needs of our users and to the social and economic conditions of our Nation, its workers, and their families.” (Exhibit 74) The data offered in the following figures presented by the BLS must satisfy a number of criteria before

they are given. This includes relevance to current social and economic issues, timeliness in reflecting today's rapidly changing economic conditions, accuracy, consistently high statistical quality, and impartiality in both subject matter and presentation. The industries defined in the following figures are based on the North American Industry Classification System (NAICS).

Figure Interpretation

Figures A through C present the amount of employees within the defined industry in Illinois. When looking at Figures A through C (p.44), the vertical axis on each graph shows the amount of employees in the given industry by the thousand. Months of each year from 1998 to 2008 are placed on the horizontal axis. Below the graphs, each table has the exact numbers of employment in every month of years 1998 through 2008.

Through the NAICS classification system, the US Economic Classification Policy Committee created eleven supersectors which entail all nonfarm industries. This was created for the Current Employment Statistics (CES) program (**Exhibit 75**). This means that data was available for all the industries that are covered within the proposed Regional Center except Agriculture. Some figures might not seem relevant, but they represent the supersector or sector of the industries of interest. Figure A represents the Accommodation industry and the Entertainment industry because these two industries fall under the Leisure and Hospitality supersector. Figure B is the Education and Health Services supersector, which encompasses the Health Care industry and the Education industry. The five different manufacturing sub industries all are represented in Figure C (Manufacturing Sector).

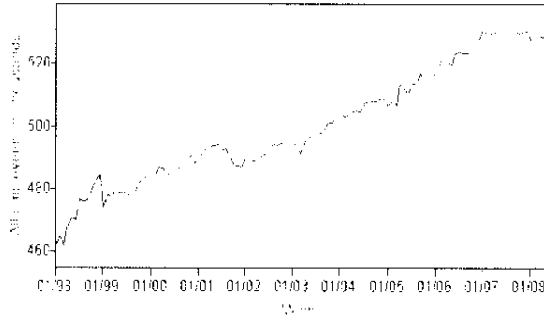
Results and Conclusion

With the exception of the Manufacturing supersector, the other two figures show an increase in employment from 1998 to 2008. The figures that represent the Leisure and Hospitality supersector and the Education and Health Services supersector show very constant growth over the ten year period.

Although the results for the Manufacturing supersector are decreasing, the proposed Regional Center plans on revitalizing the employment level of this industry in the Chicagoland region due

to the strong transportation infrastructure and the business incentives mentioned earlier. The employment for Manufacturing has decreased in the past decade due to outsourcing. With increased shipping costs, many manufacturing establishments will seek to place plants within the United States. Though the employment number is decreasing, in 1998 the number of employees in manufacturing is approximately 913,000 which is greater than either of the other supersectors. This shows that there is a large skilled labor pool.

Series ID: BLS17000000000001
 Seasonally Adjusted
 State: Illinois
 Area: Leisure &
 Supervisor: Leisure and Hospitality
 Industry: Leisure and Hospitality
 Data Type: All Employees, In Thousands

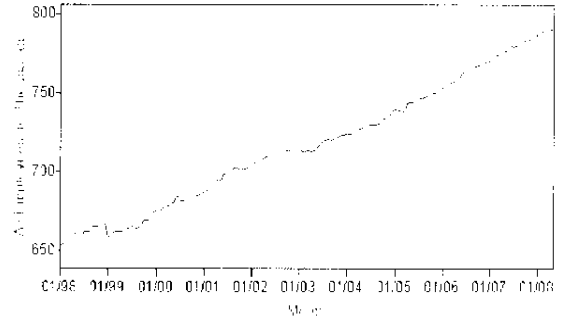


| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1998 | 461.9 | 464.7 | 461.8 | 467.8 | 470.9 | 470.0 | 476.6 | 475.9 | 475.2 | 479.9 | 482.4 | 484.3 | |
| 1999 | 473.6 | 477.8 | 477.5 | 479.4 | 478.7 | 478.7 | 478.4 | 477.6 | 479.5 | 481.9 | 482.6 | 484.2 | |
| 2000 | 483.9 | 494.0 | 487.0 | 486.5 | 484.0 | 486.1 | 485.9 | 486.4 | 483.1 | 483.1 | 490.0 | 490.1 | |
| 2001 | 489.7 | 491.4 | 493.3 | 493.5 | 493.9 | 494.3 | 492.3 | 492.9 | 490.0 | 487.6 | 487.2 | 486.9 | |
| 2002 | 489.9 | 489.1 | 488.8 | 489.2 | 490.1 | 491.2 | 492.8 | 494.0 | 493.6 | 494.7 | 495.2 | 495.9 | |
| 2003 | 495.1 | 493.0 | 491.4 | 495.3 | 496.3 | 497.8 | 497.0 | 497.6 | 499.1 | 501.0 | 500.9 | 503.6 | |
| 2004 | 504.2 | 503.1 | 503.5 | 504.5 | 505.0 | 504.6 | 507.5 | 507.5 | 507.9 | 508.1 | 508.9 | 509.9 | |
| 2005 | 506.3 | 508.3 | 506.9 | 513.6 | 512.0 | 510.3 | 513.5 | 513.6 | 516.7 | 514.9 | 515.9 | 515.7 | |
| 2006 | 517.6 | 520.9 | 520.8 | 520.6 | 519.8 | 523.3 | 523.7 | 523.4 | 523.4 | 525.2 | 526.2 | 523.3 | |
| 2007 | 530.9 | 529.0 | 529.5 | 529.8 | 531.2 | 531.1 | 529.6 | 531.7 | 530.7 | 529.3 | 529.9 | 530.2 | |
| 2008 | 527.8 | 529.2 | 529.3 | 528.4 | 529.1(p) | | | | | | | | |

p: Preliminary

Figure A: Leisure and Hospitality from 1999-2008

Series ID: BLS17000000000001
 Seasonally Adjusted
 State: Illinois
 Area: Education
 Supervisor: Education and Health Services
 Industry: Education and Health Services
 Data Type: All Employees, In Thousands

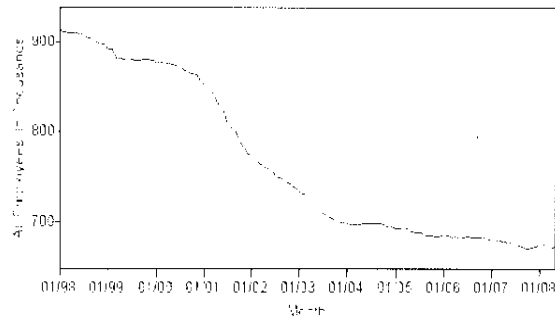


| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1998 | 653.1 | 654.9 | 657.6 | 659.5 | 661.3 | 659.3 | 662.4 | 662.4 | 665.9 | 665.6 | 666.1 | 667.1 | |
| 1999 | 658.6 | 661.2 | 662.3 | 662.2 | 663.1 | 663.7 | 665.7 | 663.6 | 665.9 | 669.4 | 659.8 | 673.4 | |
| 2000 | 676.3 | 676.3 | 677.1 | 679.7 | 679.8 | 684.9 | 681.8 | 682.1 | 683.6 | 682.1 | 684.8 | 685.5 | |
| 2001 | 687.1 | 688.7 | 692.3 | 694.3 | 695.0 | 698.5 | 699.5 | 701.8 | 702.3 | 700.9 | 702.2 | 702.8 | |
| 2002 | 704.8 | 706.9 | 707.5 | 708.7 | 710.9 | 711.2 | 709.8 | 710.8 | 712.6 | 713.6 | 714.8 | 715.1 | |
| 2003 | 714.1 | 713.2 | 713.6 | 713.4 | 715.0 | 718.0 | 719.4 | 721.0 | 720.3 | 722.4 | 722.5 | 723.4 | |
| 2004 | 724.8 | 724.8 | 724.9 | 727.7 | 728.1 | 729.2 | 729.9 | 730.4 | 731.2 | 734.3 | 735.2 | 733.1 | |
| 2005 | 739.8 | 739.0 | 737.8 | 743.6 | 744.2 | 743.8 | 747.2 | 746.8 | 748.6 | 749.7 | 750.2 | 751.9 | |
| 2006 | 753.2 | 755.6 | 756.3 | 757.4 | 759.5 | 763.0 | 762.5 | 765.3 | 767.0 | 767.9 | 769.6 | 769.9 | |
| 2007 | 771.3 | 773.9 | 774.9 | 775.8 | 776.5 | 779.7 | 779.5 | 780.5 | 781.8 | 784.2 | 783.8 | 784.7 | |
| 2008 | 788.3 | 788.7 | 788.7 | 790.9 | 791.7(p) | | | | | | | | |

p: Preliminary

Figure B: Education and Health Services from 1998-2008

Series ID: BLS17000000000001
 Seasonally Adjusted
 State: Illinois
 Area: Manufacturing
 Supervisor: Manufacturing
 Industry: Manufacturing
 Data Type: All Employees, In Thousands



| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1998 | 913.4 | 911.9 | 910.5 | 919.2 | 919.2 | 908.4 | 917.4 | 914.8 | 903.1 | 899.8 | 897.2 | 898.8 | |
| 1999 | 891.7 | 891.7 | 892.3 | 881.8 | 880.5 | 881.3 | 880.9 | 878.9 | 873.3 | 881.3 | 888.5 | 879.2 | |
| 2000 | 877.7 | 877.9 | 877.6 | 876.3 | 874.6 | 873.1 | 872.4 | 868.1 | 865.6 | 864.2 | 863.4 | 859.8 | |
| 2001 | 851.6 | 848.2 | 842.6 | 833.7 | 827.2 | 822.2 | 808.2 | 804.2 | 799.4 | 793.3 | 781.9 | 775.0 | |
| 2002 | 772.8 | 767.6 | 764.5 | 761.5 | 758.7 | 753.3 | 750.5 | 749.3 | 746.2 | 742.6 | 741.1 | 737.3 | |
| 2003 | 734.0 | 731.0 | 727.6 | 723.0 | 719.8 | 713.9 | 709.3 | 706.8 | 704.0 | 702.5 | 699.8 | 699.2 | |
| 2004 | 693.3 | 697.0 | 696.6 | 695.1 | 697.5 | 698.2 | 696.7 | 697.8 | 697.7 | 697.1 | 695.9 | 694.9 | |
| 2005 | 692.7 | 691.8 | 690.6 | 691.9 | 689.9 | 688.0 | 688.0 | 687.1 | 685.5 | 684.7 | 684.6 | 683.7 | |
| 2006 | 686.4 | 689.8 | 682.8 | 683.5 | 681.4 | 683.1 | 684.2 | 682.6 | 682.9 | 682.9 | 682.6 | 681.7 | |
| 2007 | 682.5 | 680.4 | 679.9 | 678.2 | 677.1 | 676.6 | 674.3 | 673.7 | 671.8 | 670.5 | 671.9 | 670.0 | |
| 2008 | 677.0 | 675.1 | 673.5 | 671.6 | 671.2 | | | | | | | | |

p: Preliminary

Figure C: Manufacturing from 1998-2008

Economic Evidence of Regional Growth

In order to show how bringing the Regional Center will help out the Local GDP, we can use the Keynesian formula. The basic Keynesian income-aggregate demand expression states that the sum of regional consumption(C), regional investment (I), government expenditures (G), and net exports (X-M) is equal to the regional GDP(Y) (**Exhibit 76**).

$$C+I+G+(X-M)= \text{GDP or } Y$$

Through the establishment of the proposed Regional Center into the Chicagoland area, we can show how the components of consumption, investment, and net exports will increase, which according to the equation will increase the regional income.

Consumption

The proposed Chicagoland Foreign Investment Group Regional Center will be focused on meeting the needs of Chicago. Each industry that will be placed into the Regional Center program is there either to deal with the needs of the region, or because they will be prosperous in the area. Since each investor that decides to invest in each project, will be required to create at least ten jobs, as the project size grows and expenditures increase, this will bring an additional ten jobs with every investment. As there are new jobs brought into the area, the amount of unemployment will decrease, while population increases due to out of town workers that will need to migrate into the region. The increase in population within the area, will generate a overall greater household income, which will in turn increase household spending. Another factor that will increase household spending is the direct and indirect earnings multiplier which is shown in all the RIMS II tables of **Exhibit 83**. As the earnings of the industries and households increase, so will the household spending. There will also be an increase in the consumption from other industries that will work with the ones that are placed into the proposed Regional Center. For example, a local retail store may need to purchase their products from a manufacturing plant that is part of the Regional Center program. In order to increase the amount of investors into each project, there needs to be the least amount of risk for them to lose any of the capital they brought in. Therefore the types of industries that will be brought to this Regional Center will assure a strong amount of consumption.

Investment

Because the Chicagoland Foreign Investment Group Regional Center projects will be completely funded from foreign investors, we can see that the investment component of the Keynesian formula will increase. Thanks to the regulation of the EB-5 program, which states that each investor must invest at least \$500,000 or \$1,000,000 (depending on the area), the investment level should increase quite substantially and consistently.

Government Expenditures

Since all the investment for this Regional Center's projects will come from foreign investors, there would be no expenditures necessarily coming from the government, however the government may choose to partner with the Regional Center and help fund infrastructure projects that this Regional Center plans to take on. For example, The Illinois Enterprise Zone Program is a program created to stimulate economic growth in economically depressed areas of the state. Through this program, the state government offers state and local tax incentives, regulatory relief, and improved government services. One of the incentives offered by the Illinois Enterprise Zone Program is an investment tax credit of .5 percent. The tax credit would be offered after the state government reviews and approves projects presented by the Chicagoland Foreign Investment Group. Though the .5 percent tax credit government expenditure seems minimal, this draws the attention of many businesses. As more projects gain the approval for the tax credit, this would vastly increase the government expenditures value.

Exports

When creating new businesses in a region, the amount of net exports will also increase. The Agriculture, Food Product manufacturing, and Chemical manufacturing projects are prime examples of increasing the net exports. The Education and Health Care projects may not produce any durable goods, but they are exporting by offering services to other companies and households.

With evidence demonstrating how consumption, investment, and net exports will undoubtedly increase, and the possibility of government expenditures increasing as well, the Keynesian Formula explains how implementing this Regional Center within Chicago will definitely increase the local GDP.

Statistical evidence of Economic Growth

Other than employment, some evidence or assurance of profitability is needed to show economic growth. The projects must have profitability for two reasons: both the region and the foreign investors rely on profitability from the subject Company.

When one business within a region is not creating profit, it affects the regional economy as well. The opportunity cost for the region if the project is not profitable, is significant. The region could implement other potential profitable businesses with the land and resources used for the failing project.

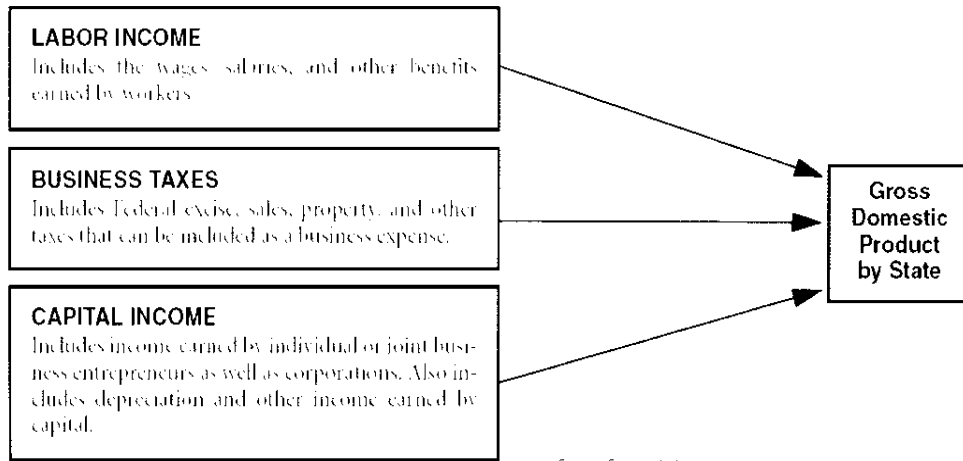
The investors also need some assurance of profitability from the Regional Center projects so they can regain their initial investment. It is part of the proposed Chicagoland Foreign Investment Group Regional Center's due diligence to return the investment made by the foreigner. It is made clear to the investor that their investment is always at risk, but the investor has a choice when deciding which specific project they would like to place their investment into. If the project shows no profitable future, the investor most likely will place their investment into a different project that may have a possibility of a higher future return and less risk on the initial investment they provide.

Reference

GDP (Gross Domestic Product) is the measure of national income and output for the U.S. The Regional Economic Analysis Division of the Bureau of Economic Analysis created a measurement of GDP by state (**Exhibit 77**). The industry classification system used is NAICS, and the current range of years available is 1997-2007. For the purpose of this study, the values from 2007 will be used to show how the industries within the proposed Regional Center have performed recently. The Bureau of Economic Analysis has received a significant amount of their data from the Bureau of Labor Statistics and the U.S. Census Bureau.

Methodology

The value for the GDP by state is calculated by using three different factors; Labor Income, Business Taxes, and Capital Income.



U.S. Bureau of Economic Analysis

The GDP by state value is equal to the sum of all these components.

There are two types of GDP that are calculated, nominal and real. Nominal GDP does not adjust the calculations according to present inflation, whereas Real GDP values are adjusted. The values that will be shown in this study are Real GDP values.

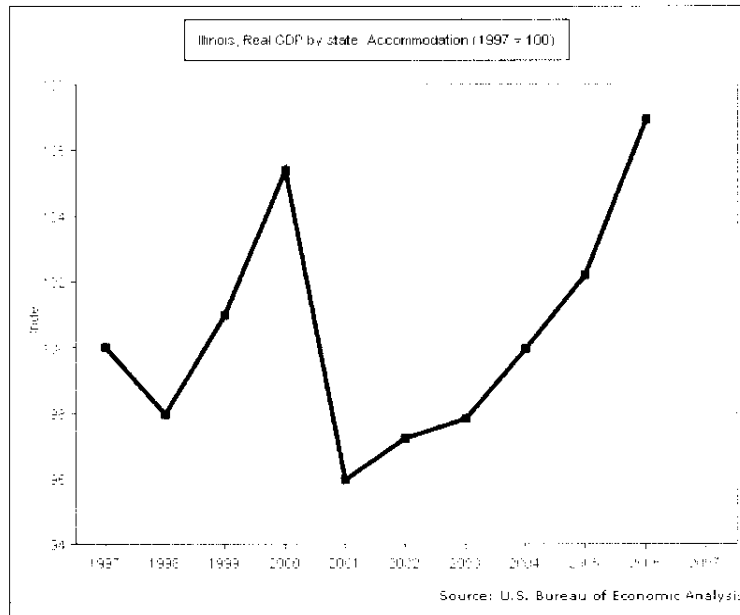
Figure Interpretation

The following figures show the pattern of the GDP index starting from 1997 to 2007. There are some industries where the GDP index is not available for 2007. With the base year being 1997, each graph starts at 100%, and shows the percent increase or decrease in each following year. The table underneath each graph shows the exact Real GDP which is expressed in millions of chained (2000) dollars (**Exhibit 78**). Chained 2000 dollars refers to the dollar value in year 2000. For example, the table in Figure A shows that in 1997 the Real GDP for Accommodations in Illinois is 2778, while the following year is 2722. Since \$2.778 billion dollars is the amount for the base year, the decrease in 1998 is approximately 2%. This is shown on the graph in Figure A.

Results and Conclusion

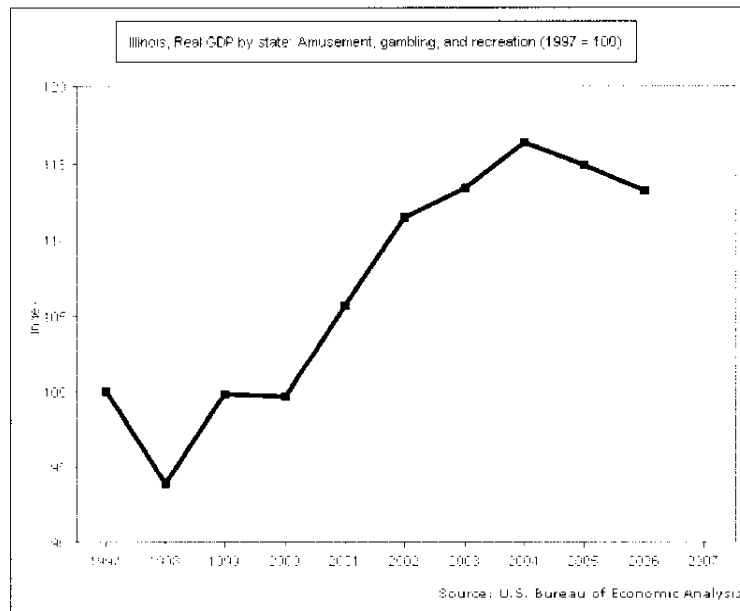
The results show that the industries targeted by the Chicagoland Foreign Investment Group have different Real GDP trends from 1997 to 2007 within Illinois. The majority of industries in

Figures A-J have shown an exceptionally steady increase within the time period. The Accommodation industry, the Agriculture, forestry, fishing and hunting industry, and the Chemical manufacturing industry have shown significant drops in the index, but more importantly a net increase within the past ten years. The Motor Vehicle, Body, Trailer, and Parts manufacturing has increased and decreased within the ten years, but is currently at a 100 percent index. The Food Product manufacturing and Petroleum and Coal Manufacturing have shown a negative trend and an index below 100. The purpose of these unsuccessful industries being placed in the proposed Regional Center is to help regain a higher index. Since most industries show past successes through a net increase in Real GDP index, the Center is confident these industries will stimulate economic growth and benefit the region greatly. There are limitations to the accuracy of these figures, because of the fact that the data covers the state of Illinois, and is not capable of limiting the region to counties or a metropolitan area. These figures are still helpful to prove to the region and the foreign investors that the industries implemented will be productive within the region of Chicago because Illinois statistics are relevant enough to represent the economic trends in the counties within the state.



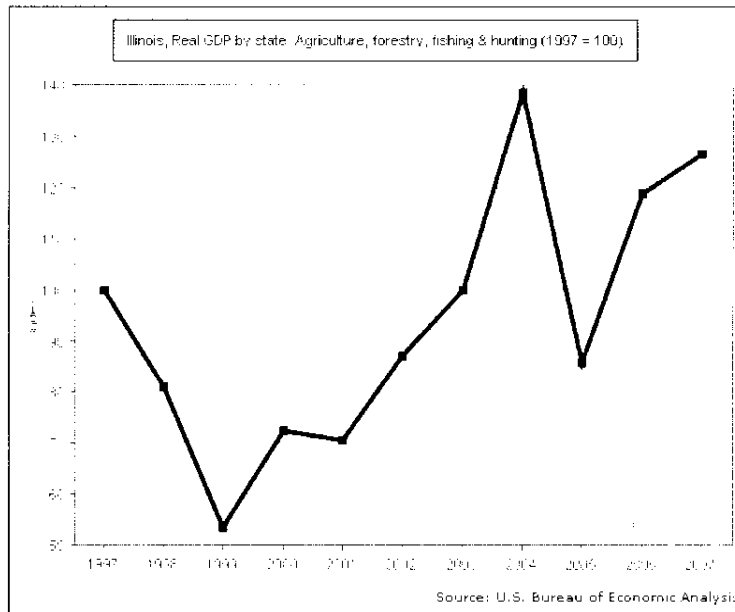
| Year | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Millions of chained 2000 dollars | 2778 | 2722 | 2806 | 2928 | 2666 | 2702 | 2718 | 2777 | 2840 | 2971 | n/a |

Figure A: Accommodation



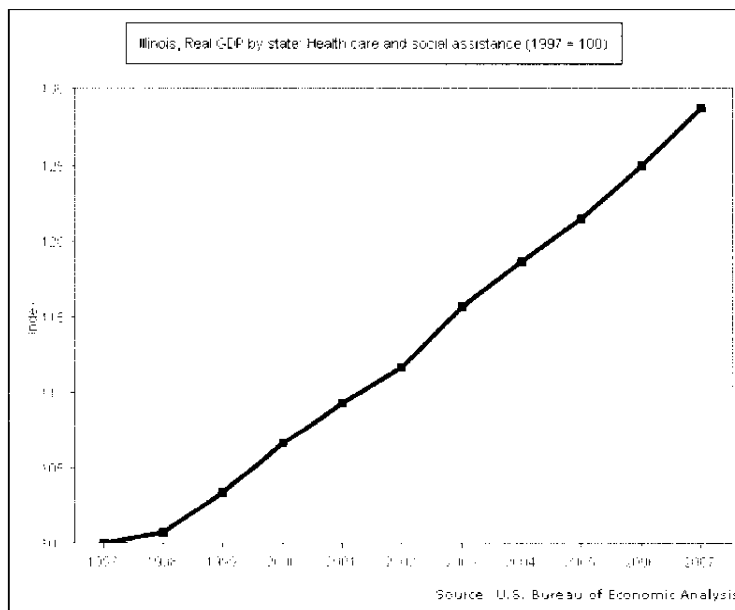
| Year | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Millions of chained 2000 dollars | 2324 | 2182 | 2321 | 2316 | 2457 | 2590 | 2636 | 2704 | 2669 | 2631 | n/a |

Figure B: Amusement, gambling, and recreation



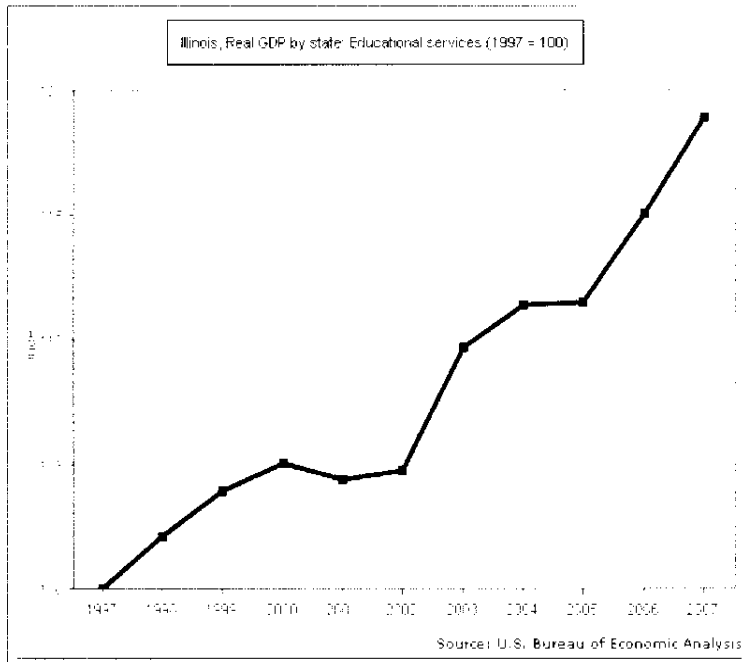
| Year | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Millions of chained 2000 dollars | 2887 | 2343 | 1545 | 2090 | 2038 | 2516 | 2889 | 3999 | 2481 | 3430 | 3655 |

Figure C: Agriculture, forestry, fishing, and hunting



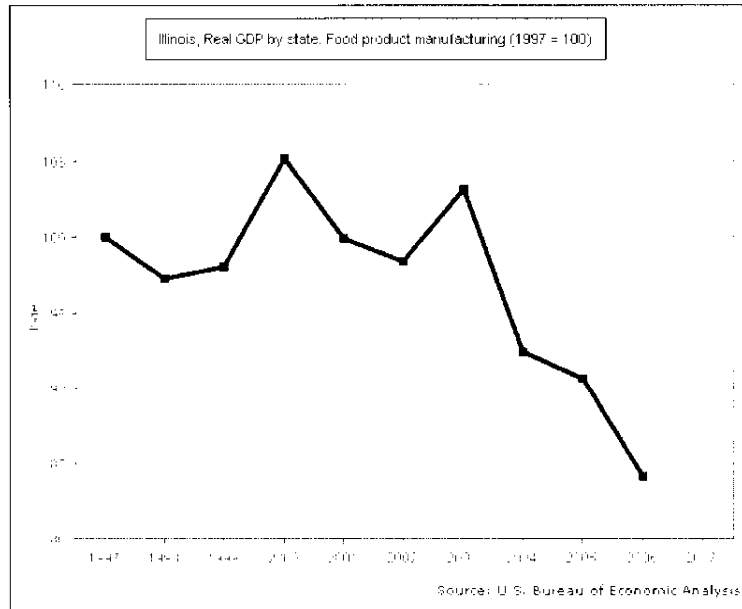
| Year | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Millions of chained 2000 dollars | 25116 | 25303 | 25973 | 26775 | 27461 | 28056 | 29049 | 29811 | 30505 | 31383 | 32331 |

Figure D: Health care and social assistance



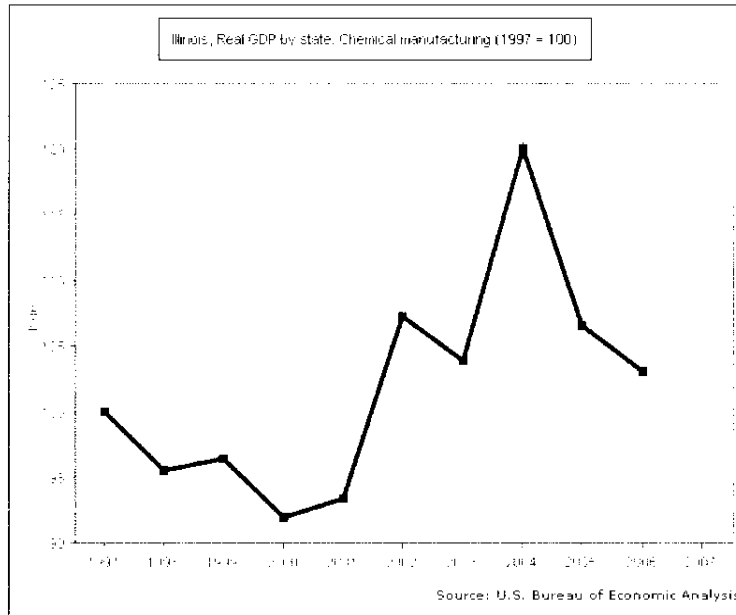
| Year | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Millions of chained 2000 dollars | 3826 | 3907 | 3976 | 4019 | 3995 | 4007 | 4198 | 4262 | 4267 | 4403 | 4550 |

Figure E: Educational Services



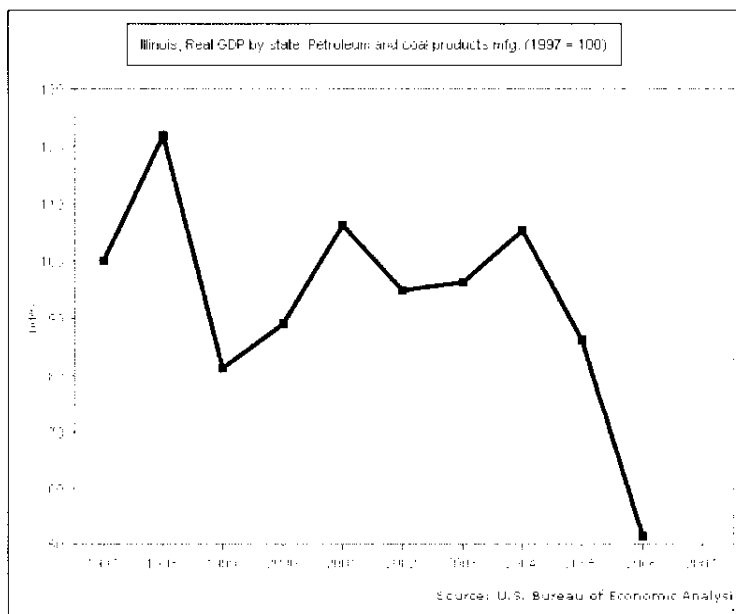
| Year | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Millions of chained 2000 dollars | 8569 | 8338 | 8406 | 9010 | 8563 | 8435 | 8835 | 7920 | 7772 | 7211 | n/a |

Figure F: Food Product manufacturing



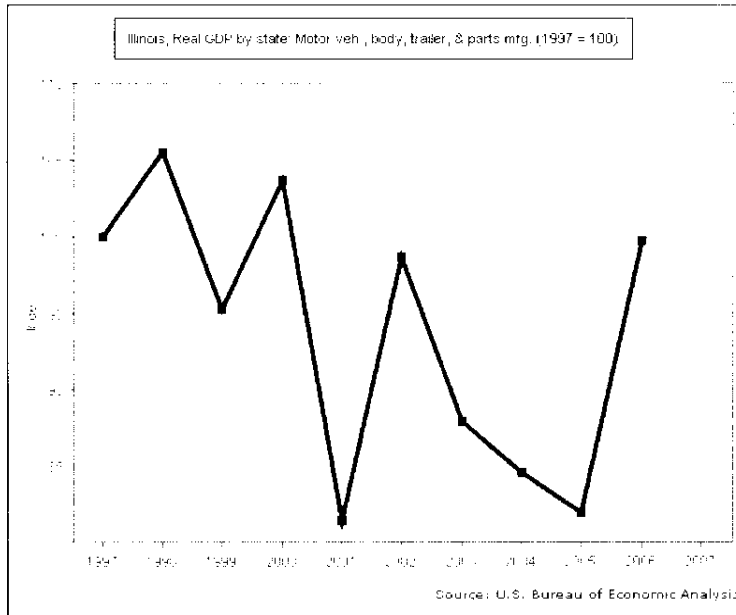
| Year | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Millions of chained 2000 dollars | 7098 | 6783 | 6851 | 6528 | 6633 | 7615 | 7380 | 8522 | 7568 | 7319 | n/a |

Figure G: Chemical manufacturing



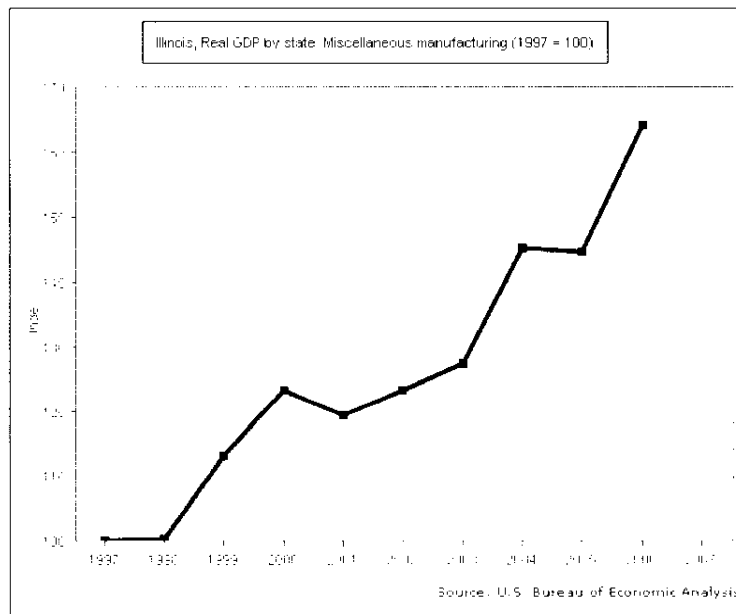
| Year | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Millions of chained 2000 dollars | 1688 | 2059 | 1373 | 1502 | 1795 | 1601 | 1624 | 1778 | 1456 | 870 | n/a |

Figure H: Petroleum and Coal products manufacturing



| Year | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Millions of chained 2000 dollars | 4107 | 4333 | 3914 | 4257 | 3345 | 4054 | 3610 | 3475 | 3365 | 4095 | n/a |

Figure I: Motor Vehicle, body, trailer, and parts manufacturing



| Year | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Millions of chained 2000 dollars | 2357 | 2364 | 2665 | 2911 | 2815 | 2911 | 3007 | 3425 | 3414 | 3871 | n/a |

Figure J: Miscellaneous manufacturing

Statistical Evidence of Economic Growth using RIMS II

What is RIMS II

In order to project the economic effects of placing a proposed Regional Center within the different counties of Illinois, an economic impact analysis must be done. RIMS II (Regional Input-Output Multiplier System) is an input-output model, created by the Bureau of Economic Analysis (BEA), to perform systematic analysis and estimate the economic impacts that are produced by a specific economic event (**Exhibit 79**). In the case of the proposed Regional Center program, RIMS II estimates how bringing in an industry affects a region economically by means of output, earnings, and employment. In essence, RIMS II models a defined area's economy for a year and calculates the economic multiplier effect fashioned by a particular event. An example of an economic multiplier effect can be found in the construction of an apartment building: the construction induces demand for laborers, architects, city planners, construction materials, real estate agents, fuel for machinery, etc. Every dollar spent in the apartment construction industry actually produces spending and jobs in other industries as well. The economic multipliers in the RIMS II model calculate this ripple effect.

Whether being applied to the public or private sector, this model is widely utilized. The U.S. Department of Housing and Urban Development has used RIMS II multipliers to forecast the impacts of various urban redevelopment expenditures. In order to estimate the regional economic effects of military base closings, the U.S. Department of Defense uses RIMS II as well. In the private sector, analysts and consultants heavily use this model to estimate the impact that the development of shopping malls and sport stadiums have on a region.

Validity of RIMS II

The USCIS approves RIMS II as an accurate economic model used for forecasting. Dr. Tim Lynch, Director of the Center for Economic Forecasting and Analysis states, "For the majority of individual industry-specific multipliers, the difference between RIMS II and survey-based multipliers is less than 10 percent. In addition, RIMS II and survey multipliers show statistically similar distributions of affected industries." (**Exhibit 81, pages 5-6**)

Methodology

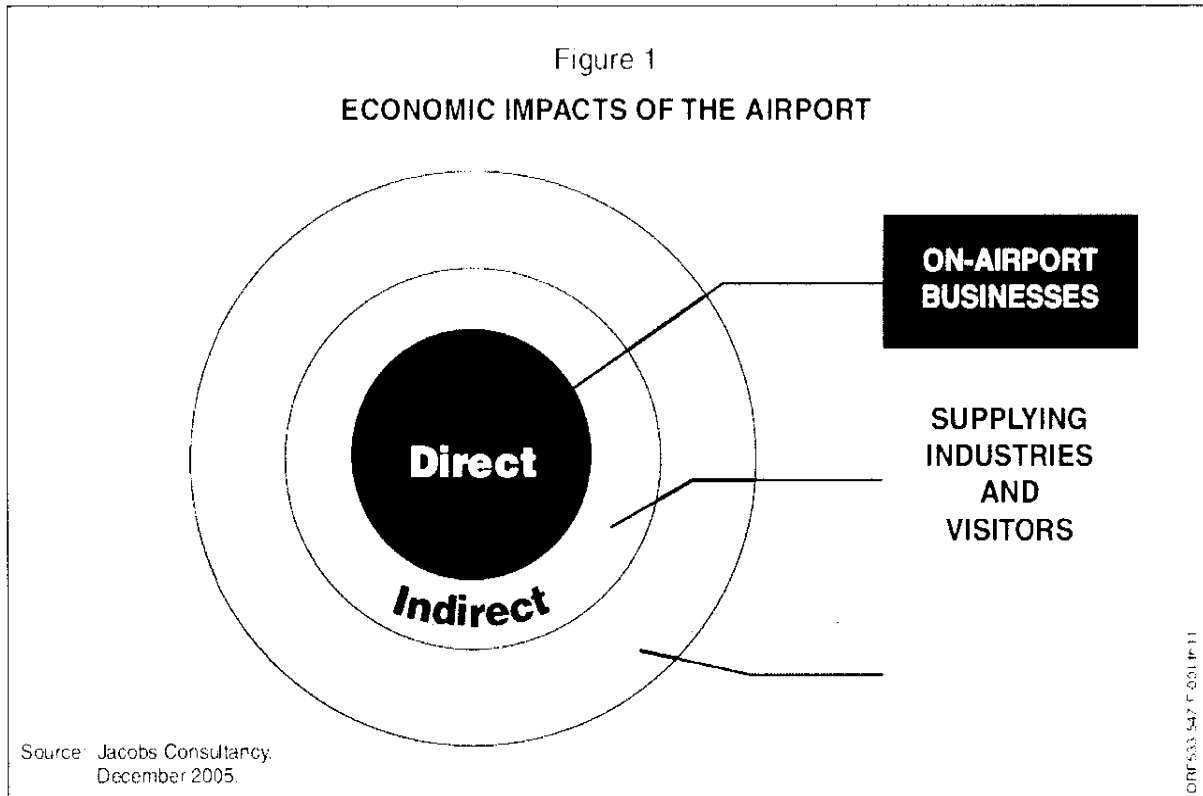
RIMS II divides all the general industries into approximately 500 detailed industry categories, which then get divided again into 60 different aggregate industry categories, and finally into 20 industry groups, which are then used to create an input-output table. **Exhibit 84**, **Exhibit 85**, and **Exhibit 86** successfully show how 500 different industry categories confine into 60 categories, and 60 categories into 20 groups. The RIMS II detailed industry code on the left hand side of the industry category in **Exhibit 84** is within a range of codes next to the industry sectors in **Exhibit 85**. The RIMS II detailed industry code and the RIMS II aggregate industry code can be matched up to the industry groups in **Exhibit 86**. The table shows the dollar flow between the different categories and groups. For example, the table might show that every dollar spent on the construction category would generate \$.12 of economic activity or output in the real estate category of a given region. As of right now, the BEA's national data for the input-output structure is from 2005.

RIMS II also takes all the different counties of the U.S. and divides them up into different regions, which can be one to several counties, depending on the size of the counties. The BEA chose regions that were small enough to provide relevant results for the economic impact but yet large enough to show the complete multiplier effect. For example, a relatively small county most likely receives input from a different county due to lack of its own inputs.

The RIMS II user inputs the codes for the region as well as the industry of interest, and the input-output table produces the result of the economic multiplier effect that the industry of interest has on the other industries, as well as the general population of the region. In order to show the full economic effect creating a business or bringing a business has on a region, RIMS II shows the direct, indirect, and induced effects.

Sample Case Study

An example of a case study that used RIMS II to show every aspect of the economic effect was done by the Jacobs Consulting firm, which explains the direct, indirect, and induced impacts of placing the Norfolk International Airport in the region of Virginia (**Exhibit 80**).



Direct Economic Impact

The airport creates a direct impact on the site itself. Local expenditures, employment, and payroll of all the organizations at the airport (such as airlines, concession stands, transportation providers, and government agencies) are considered direct economic impacts made by the airport.

Indirect Economic impact

The indirect economic impact of the airport is money spent by visitors who come to the region by means of the airport, and spend money in local lodging areas, restaurants, entertainment, retail stores, and other local businesses. This spending has an indirect impact on the economy of the region that the airport resides in.

Induced Economic Impact

The induced economic impact of the airport is the off-airport impact in addition to the combined direct and indirect impacts of an economic activity, where additional income is created by the following rounds of spending, also known as the “multiplier” effect. Induced economic impact

includes the employment and expenses of supplying industries that provide the machinery, materials, or services to help industries that obtain business from on-airport businesses, such as wholesale food distributors, office supply firms, and metal manufacturers. Induced economic impact also includes expenditures by airport employees on goods and services within the area.

The three different categories used to measure the different economic impacts are output (economic activity), earnings, and employment.

Why RIMS II is needed

When projecting the results of developing a Regional Center, it is important to have estimates that are as accurate as possible. RIMS II is needed in order to illustrate how creating this Regional Center will improve the regional economy through productivity, earnings, and employment. Another result that comes from these three factors is a greater demand for business services, construction jobs, utilities, maintenance, and repairs.

Another reason why RIMS II is important is to assure the prospective foreign investor that he/she will meet the USCIS requirements for receiving his permanent residency. If the foreign investor wants to receive his/her permanent residency, it is required for the investor to place his/her investment in a Regional Center project that will create at least ten jobs, direct or indirect, within 2 years. Every project has different areas of needed investment. By using RIMS II, the investor can be shown which area his/her investment will be used, and where the required jobs will be generated, either directly or indirectly.

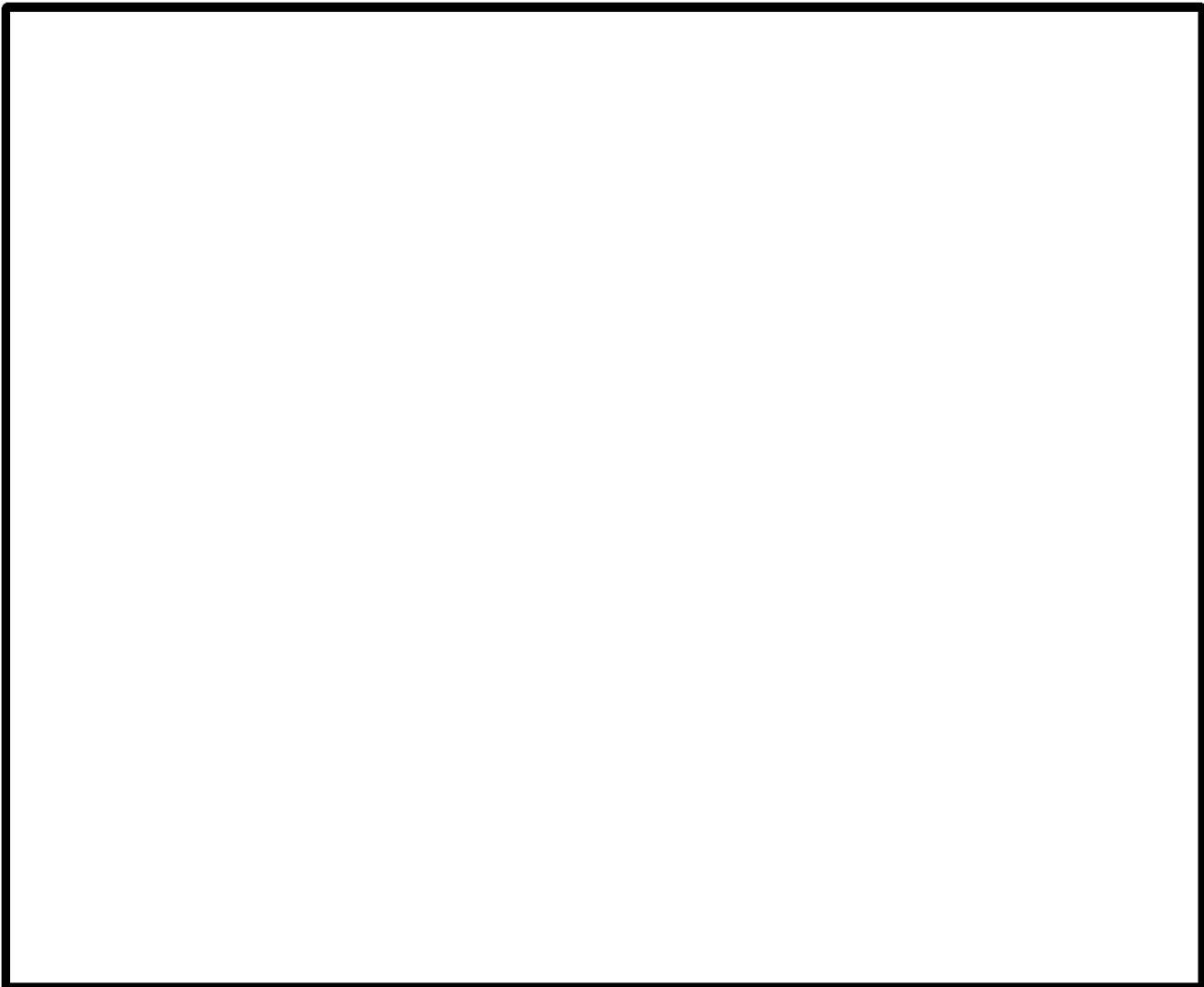
RIMS II defined region

RIMS II requires the user to define the geographic boundaries in order to give accurate multiplier results. The user can set the region by county or several counties put together. For the Chicagoland Area, the defined region includes the Chicago-Naperville-Joliet, IL Metropolitan Division as well as several counties west, in order to show accurately how this Center will improve the local economy. The Illinois counties that are within the Chicago-Naperville-Joliet Metropolitan Division are Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, and Will. The Chicago-Naperville-Joliet, IL Metropolitan Division was designated by the United States

Census Bureau in 2003. According to Economy.com, a metropolitan statistical area is defined as “a county or group of counties that has at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.” A Metropolitan Division classification is a single core with a population of at least 2.5 million within an MSA. In addition to the Chicago Metropolitan Division, the counties of Lake, Kankakee, Boone, Winnebago, Ogle, and Stephenson were added into the proposed Chicagoland region as well. These counties were added for specific industries the proposed Regional Center will target. Manufacturing and Agriculture industries require a lot of land for effective productivity. Unfortunately, metropolitan areas are more expensive for land use than rural areas. For these reasons, these counties that connect to the Chicago Metropolitan Division were included to the Chicagoland region.

How to interpret the RIMS II Total Multiplier Results

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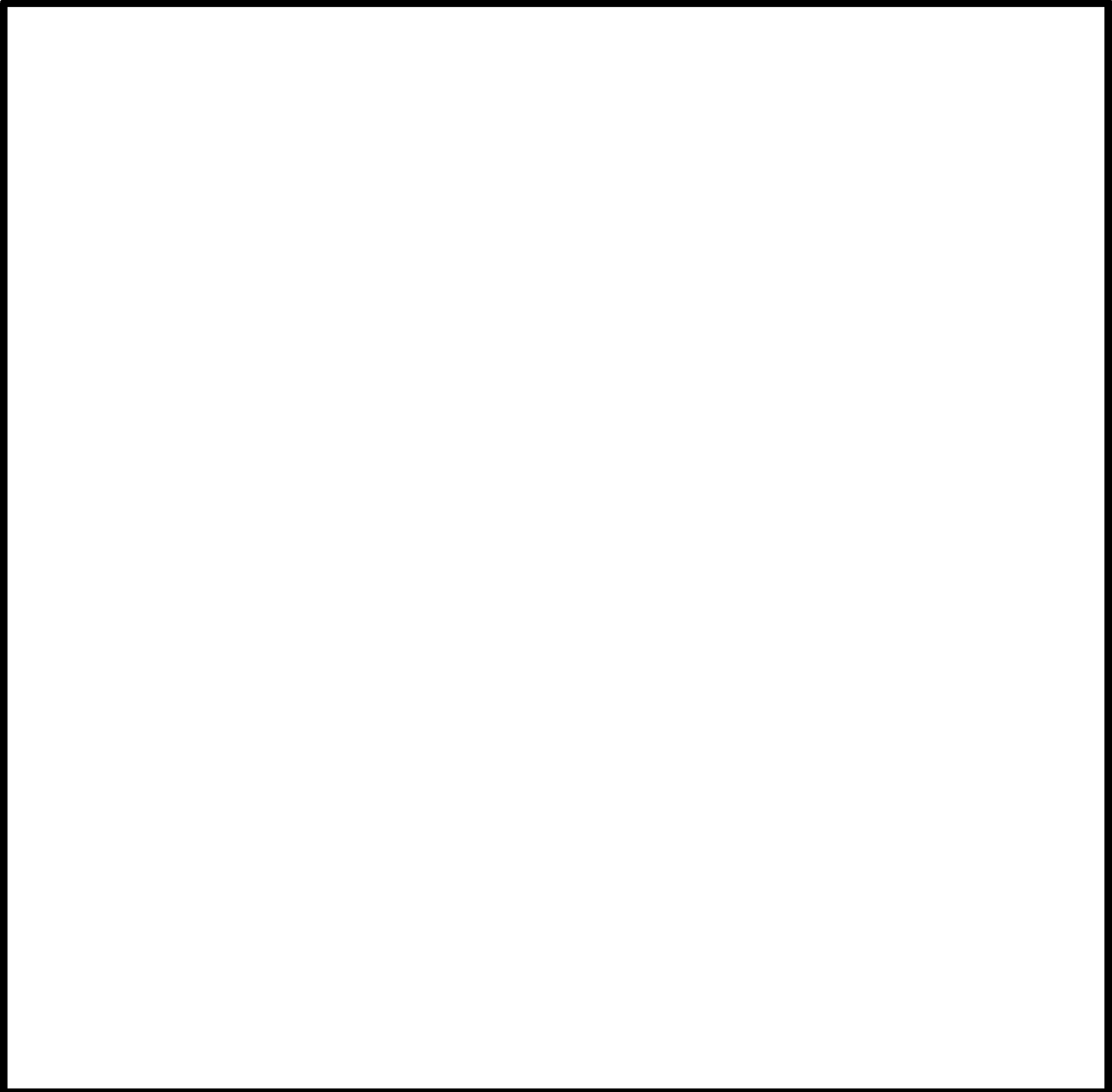


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RIMS II Results and observations

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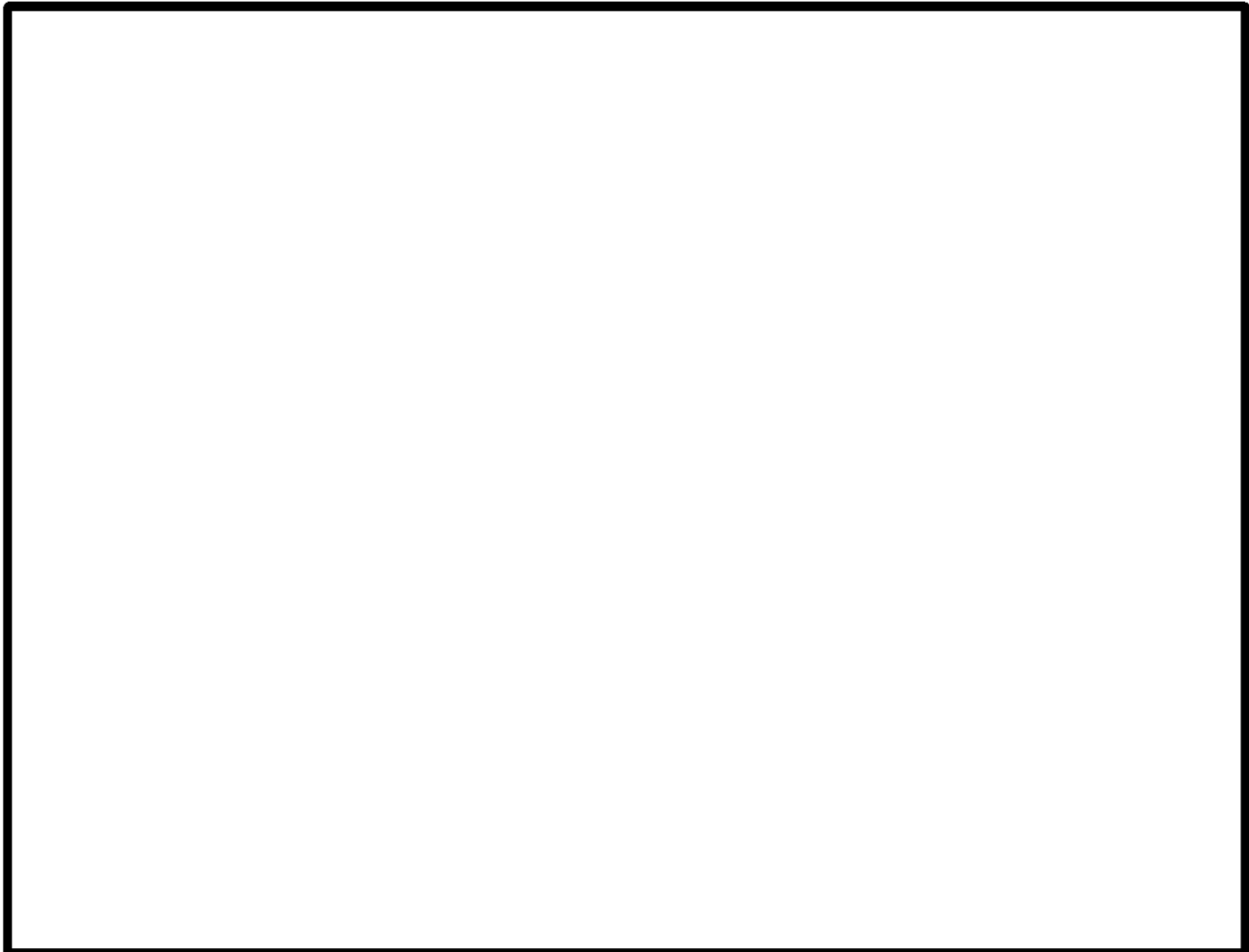
(b)(4)

Selecting
Projects

The following sections discuss the different types of projects the Chicagoland Foreign Investment Group plans to endeavor, the requirements of project applicants, promotional efforts, and the profile of an ideal investor. Project applicants must have a business plan that follows the due diligence checklist, observe adherence to the EB-5 requirements, include an exit strategy and a capital structure. Promotional efforts will be used to reach to the domestic and international regions to seek investors and potential projects. Once there is a pool of prospective investors, the Regional Center will make sure they are all qualified and properly investigate the source of funds.

Diversifying Projects

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Requirements of
Project Applicants

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Promotional
Efforts

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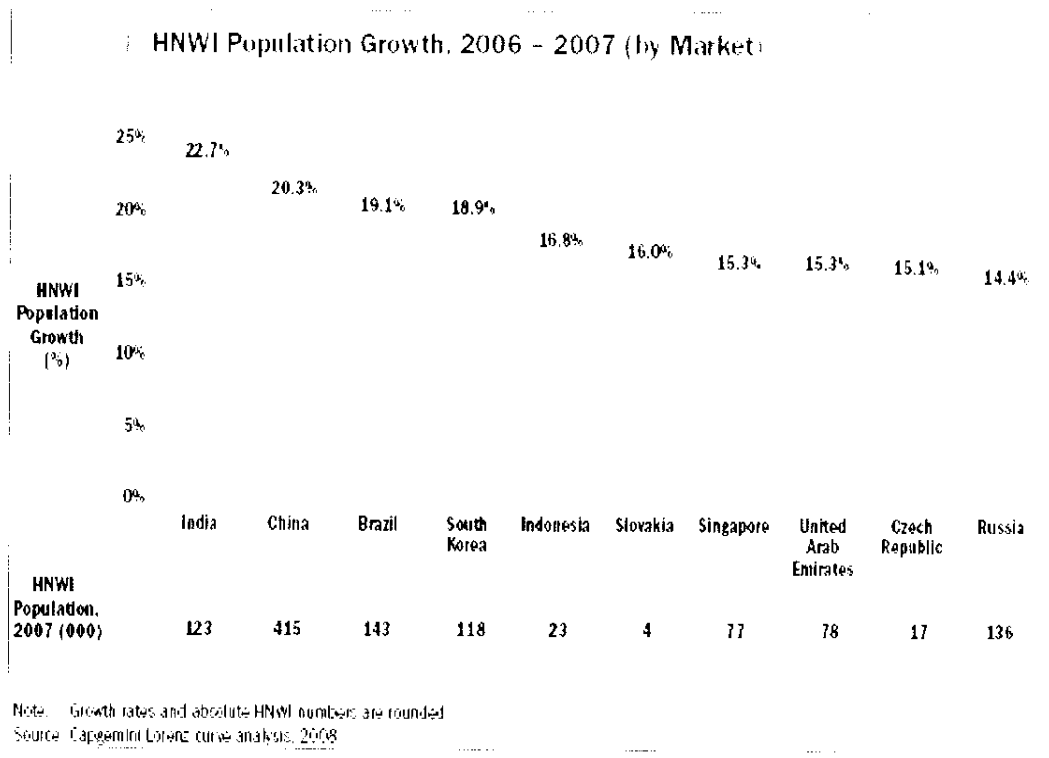
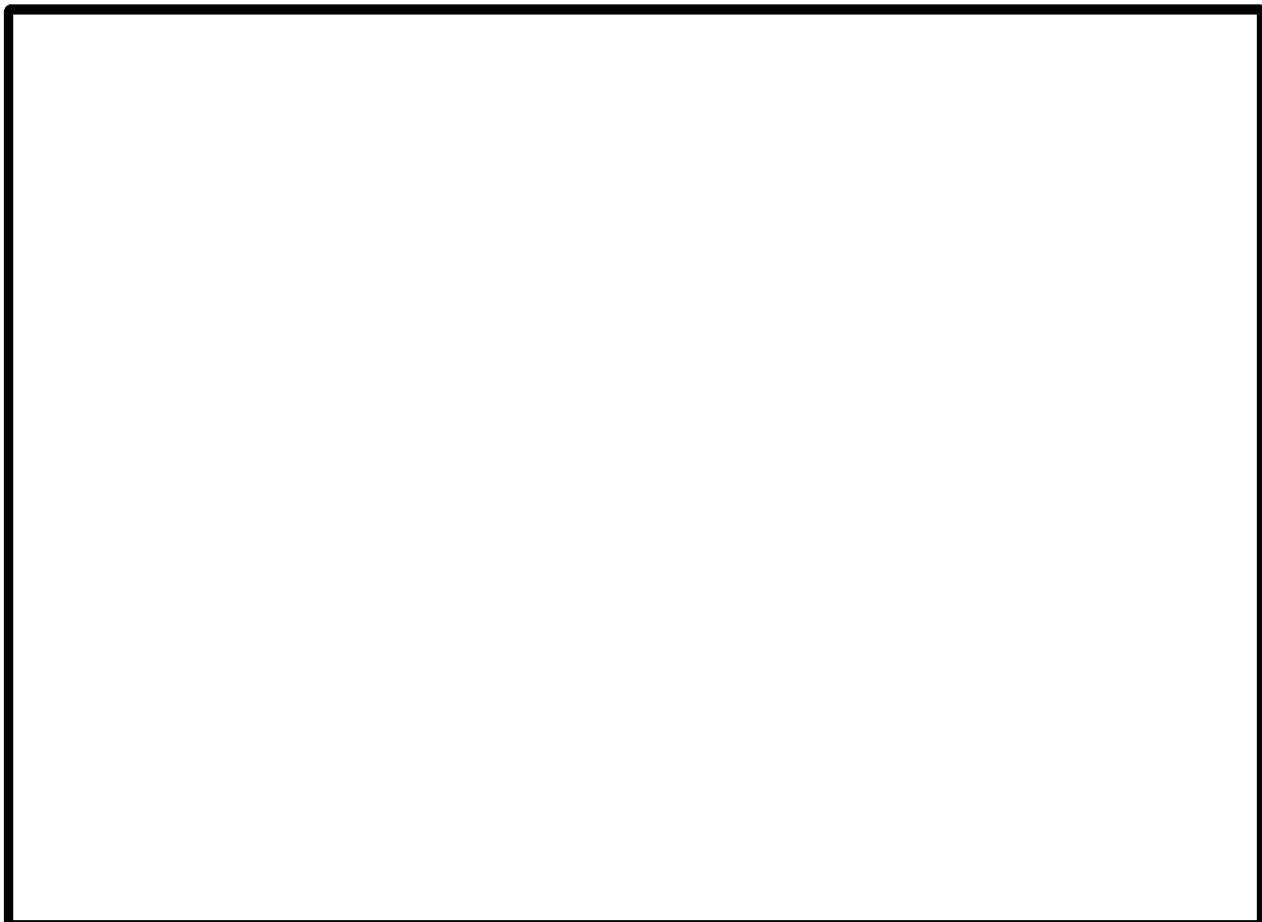


Figure 1. Source: World Wealth Report 2008

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Requirements of
the Investor

(b)(4)

(b)(4)

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Legal Documents

Please see **Exhibits 108-112** for sample draft contract agreements

Exhibit 108: sample escrow agreement between the Investor, the FUND, and a Bank for the [REDACTED] dollar units that are being bought by the investors

(b)(4) **Exhibit 109:** sample escrow agreement between the Regional Center, the Investor, and a Bank for the [REDACTED] dollar consulting fee.

Exhibit 110: sample subscription agreement which outlines the subscription from the investors buying units or shares in the project.

Exhibit 111: sample consulting agreement between the Investor and the Regional Center outlining their interaction with one another.

Exhibit 112 : sample advisory agreement between the Regional Center and the FUND which shows their interactions with one another.

updated 12:11 p.m. EST, Fri November 30, 2007

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Congress close to raising fuel economy standards

STORY HIGHLIGHTS

- Negotiators close to a deal that would raise fleet fuel economy standards
- Bill would raise fleet-wide standard to 35 miles per gallon by 2020
- Large "work trucks" would be exempt from standard

Next Article in Politics »

From Jessica Yellin and Deirdre Walsh
CNN Washington bureau

WASHINGTON (CNN) -- Congress is finalizing a deal that would raise the fuel economy standards for most U.S. cars and trucks for the first time in more than 30 years.

Automakers hope all-electric cars like the Chevy Volt will raise fleet-wide fuel standards. But the bill also contains several significant loopholes that would allow auto companies to get around the new limits.

The centerpiece of the bill is a requirement that would raise the corporate average fuel economy standard, known as CAFE, from 27.5 miles per gallon for cars and 22.2 mpg for trucks to 35 mpg fleet-wide by 2020.

The Senate passed the mandate in June, but the House has not yet voted. Congressional aides familiar with the negotiations said House leaders are hoping to work out final language this week and vote next week.

Large "work trucks" like the Dodge Ram 3500, the Ford F-350 and the Chevrolet Silverado 3500 would be exempt from the new 35 mpg standard, according to sources involved in the negotiations.

Automakers will get credits to count against their fleet-wide average for selling "flex fuel" cars that are able to use **alternative fuels** or gasoline. Although U.S. manufacturers have built millions of flex fuel cars, ethanol is actually used in only about 1.5 percent of them, according to the Union of Concerned Scientists. Most continue to run on gasoline, the group found. Ethanol is not widely available to car owners.

Despite these loopholes, backers of the bill say it brings a significant change that will benefit consumers. Rep. Ed Markey, D-Massachusetts, chairman of the House Select Committee on Global Warming, said in an interview that the higher standard "will be a huge victory. It won't be something, however, that will stop us in the years ahead continuing to look at ways to continue upon that further."

Don't Miss

Automotive dreams in the queue

House Energy and Commerce Chairman John Dingell, D-Michigan, who has been a key negotiator on the compromise bill and defender of auto industry interests, is pushing for some significant changes to the Senate version.

In an interview Wednesday with a Detroit television station, Dingell said he's supportive of the new standard, but stressed "we've got to do it in a way that doesn't destroy our industry or manufacturing."

Dingell would like to include a provision that would build in job protections for U.S. autoworkers, requiring U.S. auto companies to continue to manufacture a certain percentage of their vehicles in the United States.

Dingell also wants to create separate standards for car and truck fleets.

"We have to address the Senate bill to make sure we don't combine light trucks and automobiles in a way that will destroy them," he said.

According to a recent analysis by the Union of Concerned Scientists, a nonprofit environmental group, if the 35 mpg limit was implemented, it would translate into a savings for consumers of \$25 billion at the pump in 2020.

The bill will also include a requirement to increase the production of biofuels like ethanol to 36 billion gallons by 2022. According to the Department of Energy, the United States produced 4 billion gallons of biofuels in 2005.

"Our goal is over the next 10 to 15 years [to] see a revolution that results in a dramatic increase in SUVs and automobiles that can use these new fuels and the number of Americans that can use them," Markey said, "so that we can back out more millions of barrels of oil that come from OPEC every day."

Congressional Republicans point out the proposal will do nothing to lower gas prices in the short term.

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Biofuels and Agriculture

A Factsheet for Farmers

For Sustainable Transportation **Biofuels**



What are biofuels?

Biofuels (short for "biomass fuels") are liquid transportation fuels that substitute for petroleum products such as gasoline or diesel. They include ethanol and biodiesel (a vegetable oil product) made from agricultural crops and residues, forest residues, or other kinds of plant-based "biomass feedstocks".

Ethanol is typically made from plant biomass by pretreatment, fermentation and distillation, in much the same way that beer and liquors are produced. Many vegetable oils, such as soybean oil, as well as animal fats, and recycled cooking greases can be chemically converted to diesel-like fuel called biodiesel. These fuels can be used in conventional engines with little or no modification.

Did you know that Henry Ford expected the first Model T automobile to run on ethanol, and Rudolf Diesel designed his prototype engine to run on peanut oil?

American farmers have a great opportunity, now and in the coming years, to help make the nation more self-sufficient in energy, and to reduce air pollution, including emissions of "greenhouse gases". Advances in technologies for making "biofuels" like ethanol and biodiesel mean that new markets are opening up. These can provide extra farm income, help to revitalize rural communities, and improve the environment at the same time. Corn ethanol has been around since the 1970s, but national production is going up fast and costs are coming down – and now there are new ways to make ethanol from a variety of agricultural raw materials, as well as growing markets for other biofuels like biodiesel.

Raw materials for making biofuels, now and in the future

A range of raw materials are available, some already in use and others which will supplement them in the near-term and longer-term future. For example, fuel ethanol is currently produced from the easily fermented sugars and starches in grain and food processing wastes. Biodiesel is made from oil-seed crops such as soybean and canola.

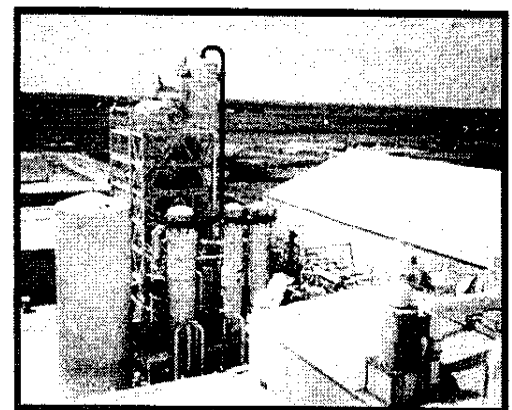
Soon, new technologies will be economically viable for converting plant fiber to ethanol. A portion of the agricultural and forestry residues (stalks, leaves, branches) which are presently burned or left in the field may therefore be harvested for biofuel production. Residues such as corn stover may represent a very large resource – over 100 million tons nationwide. The U.S. Departments of Energy and Agriculture are cooperating on research to determine how much corn stover can be removed sustainably.

New crops may be grown specifically for biofuel production, including native grasses and trees, as well as new high-yielding varieties of oil-seed crops. In time, these energy crops may be planted in place of millions of acres of surplus arable crops, surpassing even corn stover as an energy resource. Switchgrass is a high-yielding perennial grass that grows well over most of the central and eastern United States. Fast-growing trees, which are usually

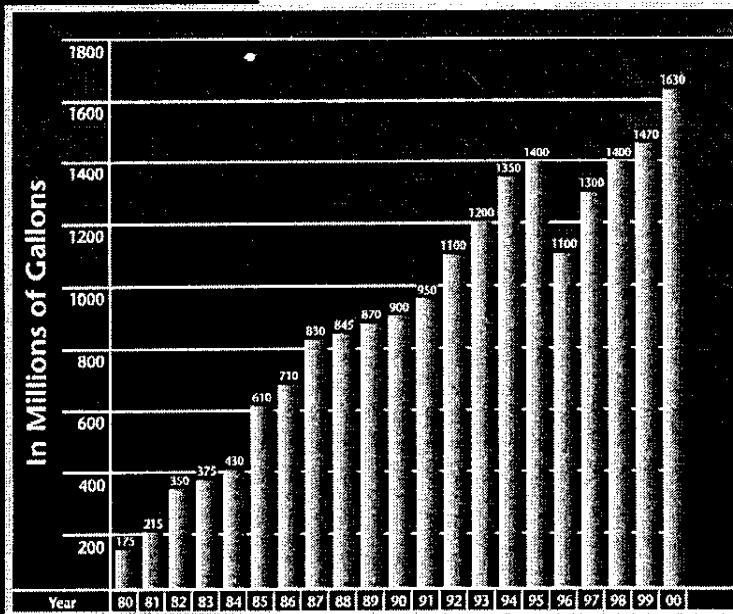
harvested every 3-10 years and can be harvested repeatedly, include poplar and willow in cooler regions, and sycamore and sweetgum in warmer regions.

Current biofuel production and growth opportunities

The ethanol industry currently employs about 200,000 people (directly and indirectly), and saves \$2 billion a year in terms of oil imports. However, America's present trade deficit in crude oil is over \$50 billion, so there is plenty of room for growth. Ethanol's total benefits in terms of farm incomes are greater – about \$4.5 billion. There are over 60 ethanol production plants in operation or under construction,



Ethanol production plant, Nebraska.



Growth in U.S. fuel ethanol production.
 (source: Energy Information Administration/
 Renewable Fuels Association)

with the capacity to produce more than 2 billion gallons (7.6 billion liters) a year. Ethanol plants are found in 20 states, mostly concentrated in the corn-growing region of the Midwest. 22 of these plants are farmer-owned facilities, representing one-quarter of total capacity.

Today, about 12% of US gasoline contains ethanol as a fuel additive, which boosts octane and reduces carbon monoxide and other emissions. Another 25% of US gasoline contains an additive called MTBE which has caused concerns about water pollution. State legislation in California and nine other states to ban MTBE in reformulated gasoline by 2003/2004 is likely to generate a significant new demand for ethanol. USDA has estimated that this would result in an extra \$1 billion in farm cash receipts annually, while ethanol production could more than double within the next 5 years. An estimated one billion gallons of new ethanol production capacity is already on the drawing board, about 35% of this based on non-grain feedstocks such as agricultural and forestry residues. Doubling ethanol production would create a demand for an additional 800 million bushels of corn, or 20-25,000 tons of corn stover, other residues, or switchgrass.

With good planning and sufficient research and development, the first commercial plants producing ethanol from stover could begin operation as early as 2010. However, there are important reasons for farmers to be thinking about collecting stover today. Depending on your own particular conditions, this may require significant changes to your harvesting and tilling practices. Some small-scale markets for stover already exist, e.g. mulch production, so it may be worth while experimenting with an eye to future markets. Farmers are likely to play a key role in making cellulose-to-ethanol technology a success. For obvious reasons, corn stover is already available in the same areas where corn-to-ethanol plants are located, and this may enable the development of more cooperatively-owned ethanol plants.

The biodiesel industry is much smaller, but growing fast. Enabling legislation to promote biodiesel use is advancing rapidly, and more state and federal vehicle fleets (e.g. the U.S. Postal Service) are starting to use this fuel. About 20 million gallons (76 million liters) of biodiesel were actually produced in 2001, but U.S. capacity is already 50 million gallons (190 million liters) per year, and growing.

Biodiesel can now be used in blends of 20% and higher to meet federal and state alternative fuel vehicle fleet requirements, due to legislation under the Energy Policy Act. A number of city bus fleets, such as Cincinnati and St. Louis, are beginning to use biodiesel on a large scale, and legisla-





Environmental Benefits

Biofuels, when blended with conventional fuels, reduce air pollutant emissions such as sulfur, particulates, carbon monoxide and hydrocarbons. Ethanol and biodiesel are also less of a hazard if they spill or leak, since they are rapidly biodegradable in water. Substituting biofuels for one gallon of

gasoline or diesel saves up to 20 pounds of carbon dioxide emissions to the atmosphere, since they are made from carbon "recycled" by plants instead of carbon dug out of the ground in the form of fossil fuels.

Growing perennial energy crops in place of surplus annual crops can reduce soil erosion and compaction, as permanent deep root systems develop and enrich the soil. Perennial crops need less tilling and less agrochemical inputs, so they may help to improve the quality of waterways. Their sturdy root systems and more permanent canopies offer a wider variety of habitats for birds and beneficial insects, compared with annual row crops. Levels of soil carbon may increase under perennial crops, helping to offset some fossil-fuel carbon dioxide emissions. Soil carbon sequestration may even occur under intensively-managed annual crops with limited residue removal, such as the harvest of about half the available corn stover. However, the optimal sustainable level of stover removal will depend on many factors, including erosion control, moisture retention and planned tillage reduction, and will be highly specific to local conditions and topography.

In the future, there may even be financial opportunities for farmers through rewards for good stewardship of the land in terms of "carbon credits". A number of US electricity utilities are already showing an interest in future trading of carbon emissions and offsets.

tion requiring statewide use of a 2% biodiesel blend have been proposed by the legislatures of Minnesota and North Dakota. These two states alone would create a market for 20 million gallons (76 million liters) per year. The ultimate market for biodiesel over the next few years could reach as much as 2 billion gallons (7.6 billion liters) per year, or about 8% of highway diesel consumption.

Overall Economic Benefits

Establishment of major new biofuel industries in rural areas is likely to have substantial economic impacts. Preliminary estimates by Oak Ridge National Laboratory suggest that ethanol production from corn stover alone could result in \$8.9 billion in industrial output and \$3.8 billion in value added, creating about 76,000 permanent jobs. Another study, for switchgrass production, found that total US farm income could increase by \$6 billion. At the local level, a USDA study estimated that a 100 million gallons/year (380 million liters/year) ethanol production facility would create 2,250 local jobs for a single community. The National Biodiesel Board estimates that inclusion of just 1% biodiesel (partly replacing sulfur as a lubricity additive) in all road diesel fuel would generate demand for 300 million gallons (1.1 billion liters) of biodiesel adding more than \$800 million to gross farm incomes.



Conversion factors for biofuels

Great times ahead for biofuels

So next time you hear your neighbors complaining about fuel prices, tell them what U.S. farmers can do! American agriculture can help not only to reduce our dependence on imported oil - a growing domestic biofuels industry will also assist in ironing out the ups and downs of energy costs, and can also contribute to storing carbon in the soil. In a few years your neighbors will probably be using biofuels themselves, or will know someone who does!

For more information:

U.S. Department of Energy's
National Biofuels Program,
<http://www.ott.doe.gov/biofuels> or
Bioenergy Feedstock Development Program
Oak Ridge National Laboratory
bfdp@ornl.gov, <http://bioenergy.ornl.gov>
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- A bushel of soybeans (60 lb or 27 kg) yields about 11 pounds (5 kg) of soybean oil, making 1.5 US gallons (5.7 liters) of biodiesel

- A bushel of corn (56 lb or 25 kg) yields about 2.5 US gallons (9.5 liters) of ethanol

- A ton (2000 lb or 980 kg) of corn stover will yield about 80-90 US gallons (300-340 liters) of ethanol, and a ton of switchgrass will yield in the range 75-100 US gallons (285-380 liters)

America needs farmers.
America needs biofuels.

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It's not a choice between food and fuel—we'll need more of both

By Theresa Schmaishof
July 14, 2008

So now we're being told we have to choose between food and fuel. At least that's what people who should know better would have you believe as they ponder the problems of rising costs for both.

This didn't seem possible when policymakers were putting the finishing touches on a new energy bill just six months ago. Meant to curb our nation's thirst for gasoline through greater efficiency in vehicles and expanded use of ethanol as an alternative fuel, the legislation was shaped by a Democratic-led Congress and enthusiastically embraced by a Republican president. And based on what's happened to fuel prices since then, it would seem such an approach was long overdue.

Yet the forces of status quo are now suggesting we should stop dead in our tracks and restrict the use of ethanol. They do so by pointing to rising food costs and blaming biofuels for the problem. It's one or the other, they say, and farmers are meant to provide food. As someone who works in the agriculture industry, I would strongly suggest we don't have the luxury of such a choice.

The fact is global food demands will double in the next 40 years and world energy demand will grow at least 40 percent in the next 25 years. That's what happens when you add 3 billion people to the planet while also happily experiencing rapid economic growth and higher standards of living in countries once left behind in desolate poverty.

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We could spend a lot of time here refuting the notion that our policies to expand ethanol use are a problem by pointing out that fossil fuel costs are having a far greater impact on food prices than increased corn production, and that production shortfalls in wheat and rice are the real reason behind lower surplus stocks and higher food prices. There's plenty of bad policy driving the food shortage, not the least of which are short-sighted attempts to hoard grain by curbing or eliminating exports. But ethanol-friendly incentives aren't the culprit.

The real threat is to remain caught up in the blame game while actually buying into the misguided notion that farmers are forced to choose between delivering food or fuel. Much more of both will be needed. The critical choices have to do with

how we can provide more food and energy while using fewer resources. And in the spirit of the current campaign season, part of the answer can be framed by modifying a sage piece of political counsel: It's the yield, stupid.

Here's where there's good news. In the last 50 years, through technology breakthroughs and seed improvements, we have doubled yields of corn in the United States from 75 bushels an acre to 150. And we think we can double yield again to 300 bushels an acre in another couple of decades.

We're now feeding twice as many people using 20 percent less acreage, while reducing

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the amount of pesticides used. The elimination of fuel associated with less spraying and plowing is also keeping about 20 billion pounds of carbon tied up in the ground, which is equivalent to taking 4 million automobiles off the road for a year.

Rather than limiting farmers to the false choice of providing either food or fuel, we should instead place our priorities on areas that enable agriculture to do both more productively and with less strain on our environment.

Whether it's improved seed, the use of fertilizers, practices like conservation tillage or the use of biotech crops, when all the rhetoric has faded and people honestly look at the landscape, it's all about increasing yields and doing it in a way that uses less of the world's precious resources.

Theresa Schmalshof and her husband, Gary, raise corn and soybeans on their farm near Adair, Ill. She serves on the board of the National Corn Growers Association.

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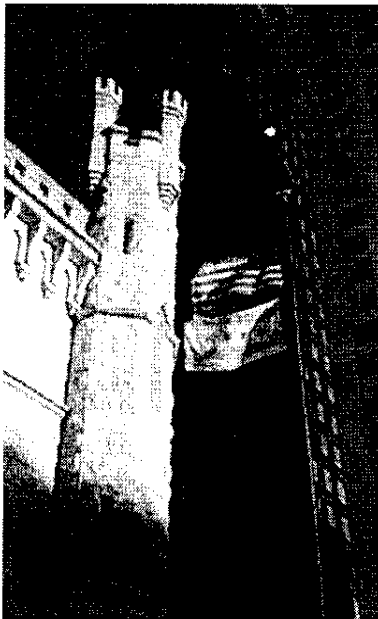
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So why should Chicago want to host the 2016 Olympic Games? There are countless reasons, but let's start with the top 16...

Top 16 reasons why hosting the 2016 Olympic and Paralympic Games would be a great opportunity for Chicago:

1) Unite the world in our city for a celebration of sport

With its pageantry, sport and celebration on a global scale, this will be the biggest event in our city in our lifetime. This is our generation's World's Columbian Exposition or 1933 World's Fair.

2) Celebrate our love of sport

There is no question that Chicagoans are passionate about sport. This event will bring the best in sport to our city. Over 200 countries will be sending their best athletes into our city to perform at the highest levels of competition in our stadiums and in our parks.

3) Share Chicago with the world and raise our international reputation

We will have the opportunity to share Chicago and what makes our hometown so special with the worlds' athletes, guests and over 3.6 billion people who will see our City through the global television broadcast. Newspapers, magazines and television from around the world will create profiles of this beautiful Olympic city. This is our chance to inspire the world - to Stir the Soul™ of the world!

4) Create a global sporting legacy for Chicago

Already a professional sport powerhouse, Chicago will become known as one of the world centers of all sport. New venues will allow us to experience sports, like track and field, swimming and rowing among many others, before and after the games through participation and by hosting events.

5) Act as catalyst for widespread urban revitalization

Situating the temporary stadium Washington Park will help revitalize a beautiful part of the City. The Athletes' Village will create mixed-use community right on the lake front, again acting as a central point for improvement of an entire neighborhood on the South Side. It will also act as a magnet for attracting more people to live in the Loop.

6) Generate economic benefits before the Games

The construction of new venues and infrastructure improvements means new jobs. Being an Olympic host city will attract domestic and international companies to open offices or even possibly move their headquarters here. This wave of new businesses means economic development and new jobs.

7) Generate economic benefits during the games

Over six million incremental tourists from around the world staying in our hotels, eating in our restaurants, taking rides in our cabs. Employers in the service industry will need to hire additional help to service the guests thereby creating new jobs.

8) Generate economic benefits after the Games

Tourists will come to our Olympic City in increasing numbers years after the Games to remember and relive the 2016 spectacle, see the venues, and experience Chicago firsthand.

9) Accelerate planned infrastructure improvements

Hosting the Games will fast track key capital projects, especially transportation related initiatives, to coincide with the Olympiad.

10) Experience world-class athletics and the values of Olympic sport – in our own backyard

This is our chance to see the best athletes in the world compete in our parks and stadiums, demonstrating not only the most amazing level of competition the world has to offer, but also the values that make the Olympic movement singular – fair play, friendship, hope, inspiration, and joy in effort.

11) Capitalize on the educational benefits

Our children will be exposed to the athletes and cultures of the world. This global Olympic Movement is a great educational tool for geography, culture, history etc. The City and Chicago 2016 will create many programs focused on our youth that will enrich our children and broaden their understanding of sport and the world.

12) Enjoy great cultural events

Beyond sport, this event will bring world class singers, actors, dance, theatre, etc. into our city. The Games will be a cultural celebration with events throughout the city - many of them free to the public.

13) Get motivated to get in shape

The Games will be inspiration for Chicagoans to live healthier lives by embracing fitness and wellness activities.

14) Appreciate Chicago's distinctiveness even more

You will learn surprising and amazing things about Chicago and Chicagoans you never knew before that will make you even prouder that you live here.

15) Meet new extraordinary people

By hosting the Games, we will attract broad range of domestic and international visitors to the Windy City who we can learn from and share experiences. Chicago will become the World's second home.

16) Have fun and show your pride

This will be a great time, the streets will be alive, and our people will be a big part of the experience. This will be an incredible source of pride for everyone who lives here. And, more fun than you can imagine!

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Who Will Buy the Condos?

Since 2000, developers have flooded downtown Chicago with more than 20,000 new condos and townhouses—yet at the end of 2007, nearly 8,000 of them sat unsold. Will that glut drag down the local economy even further, or will the lure of city living and an influx of international buyers rescue a failing market?

By Dennis Rodkin



If you were shopping for a Chicago condo over the last few months, the deals were coming fast and furious. At 30 West Erie in River North, developers were offering buyers a free parking space—a year earlier, that handy asset would have cost \$50,000. At the Rotunda, at 2741 North Sheffield Avenue in Lincoln Park, you'd get a \$15,000 "furniture allowance" if you bought by March 31st. At VB1224 Lofts, in the West Loop at 1224 West Van Buren Street, the developers at one point promised a \$35,000 allowance that could be used towards a free parking space, appliances, or other upgrades; at another point, they offered to pick up a year of condo fees.

The escalating incentives tell an obvious story: Chicago's condo boom has stalled—caught in a perfect storm, with a flood of new units landing in a sinking real-estate market. And though the tough economy affects sales of single-family homes, too, the condo market draws some of the most fretful attention. After all, if a subdivision stops selling new homes, the builder doesn't build the next phase. If a family can't sell their home, there may be the choice to stay put. But a

developer putting up a condominium high-rise has a mechanism in motion that doesn't stop so easily.

"Trump can't say, 'I've only got the first 60 stories sold, so I'm not going to build the next 30 stories,'" says Chris Huecksteadt, Chicago market director for Metrostudy, which tracks the statistics of the housing market. "Once they start building them, they're stuck with those units."

And, boy, did they start building. Between 2000 and 2006, some 22,650 new condos and townhouses came on line in the downtown neighborhoods alone, according to Appraisal Research Counselors, the independent analysts of the condo market. In most of those years, buyers seemed insatiably hungry, snapping up most of the units built. In 2005, the downtown market's best year, about 9,000 came on line and 8,000 of them sold. Hints of trouble appeared in 2006 when a surge in new deliveries left about 2,500 condos unsold at the end of the year. That contributed to the logjam that was 2007. The year ended with about 7,700 new and rehabbed condos and townhouses standing unsold (not all were finished or under construction, but all were actively for sale), according to Appraisal Research—and that was in a year when only about 4,300 new units were completed.

The proliferation will continue: Appraisal Research estimates that at least 5,900 units will be completed this year, with another 4,200 due in 2009—more, if all the proposed units get built (which is doubtful, in light of the excessive overhang).

Given that the bottom of the housing market has not been marked, the question is, how long will builders be stuck with what they've built? Or worse, will there be thousands of condos left empty, banks left unpaid, high-rise developers belly-up, neighborhoods black-eyed?

In late winter, signs of a big shakeout started to appear. In the first few days of March alone, two stories in *Crain's Chicago Business* reported that the developer of a proposed 80-story condo tower in the South Loop faced foreclosure on a preconstruction loan, and two top condo developers, Related Midwest and Magellan, were in talks to merge as a result of slow sales on Related's properties. The *Sun-Times* reported that another condo developer may have fled the country after seriously overextending his business credit. And in mid-March, *Crain's* reported that foreclosures had hit 25 percent of the condos in the Sterling, the 50-story tower at 345 North LaSalle Street. Those foreclosures were on individual owners, not developers, but even so, they were another sign of trauma in the condo market.

Is there a condo apocalypse looming? Most likely, no. Huecksteadt and other analysts think the new condos will be bought up—but slowly. "This will work itself out," says Huecksteadt (who is not in the business of selling real estate, so he can't be accused of wishful thinking). "It's going to take a long time to work through the inventory. There's five to six years' worth of condos to get through" in the larger Chicago region. "But it will correct itself."

The fundamentals are still in place, Huecksteadt and others say. The categories of buyers who fueled the boom a few years ago—empty nesters, urban-minded singles, affluent Midwesterners who want a Chicago roost—are still interested in buying. Chicago and its suburbs remain strong job markets and cultural centers. For the most part, the new condos are good properties

appealingly priced. Condo living may even be growing more attractive. Steven Hovany of Strategy Planning Associates, a consultant to developers, points out that the latest generation of adults are "more downtown-prone than other generations; they're not going to run to the suburbs to buy their first home." And the number of nonwhite buyers, many of whom come from cultures where multifamily housing is more typical, is growing fast. Then there are the baby boomers, who are just entering retirement age. "They've just started buying the second homes," says Alan Lcv, the president of the development firm Belgravia Group and president of the Home Builders Association of Greater Chicago.

"There's nothing that has changed about the buyers," says Gail Lissner, a vice president of Appraisal Research. "All these target market groups are all still out there, but they're all more hesitant. They don't have any sense of urgency right now. They'll take longer to decide to purchase."

Ron Shipka Jr. has witnessed the hesitancy at his sales centers. As the chief of The Enterprise Cos., Shipka has built a few thousand townhouses and condos in Chicago since the 1990s, including about 1,500 so far in Central Station, the area immediately south of Grant Park (he's got another 1,100 under construction or planned there). "The process of buying has become certainly less emotional and more diligent, and it takes an awful long time," Shipka says. "At our sales centers, we're getting the same amount of traffic that we have ever gotten, but people come back and come back and come back."

Not only are there numerous choices out there, but no one knows when the price slippage will end. "They want to buy when they're convinced the market is at the rock bottom," Lissner says.

Meanwhile, it looks as if the speculators have pulled back. They're the people and firms who buy early in bulk and plan to sell off their units at later, higher prices. (They differ from investors, who may buy in hopes of reaping a profit but who plan to use the condo along the way.) While no solid figures exist on how much of Chicago's condo crop has been bought up by speculators, Lissner suggests that the peak year for those deals was 2005, when an enormous share of just-announced condos were purchased. Speculators can afford to buy a few years before the building is ready, because they are not looking for housing, just an investment. The proportion of early sales and pre-sales—condos bought when a new project is announced or when the first stages of construction have begun—dropped by almost half between 2005 and 2007, which tells Lissner that many speculators have moved on to some other investment class.

The developers left holding unsold inventory have to decide if they can wait it out. Those with deep pockets probably can. But many have turned to incentives, such as free parking spaces or kitchen upgrades, to sweeten the deal. Of course, there's danger that way, because buyers can smell the desperation. If the developer is offering a free parking space this month, what more will he offer next month? Some developers will turn unsold units into rentals, but that's a tough proposition, too: When the market improves later and they want to sell the apartments, they will be selling used, not new—and they probably won't get the price they targeted while building.

How bad will it get? None of the people I talked to predicted a significant number of bankruptcies. Shipka, for one, says the immediate condo future looks painful but not fatal.

"Developers will leave some profit on the table," he says. "They're not going to have what they hoped for, but they'll have enough [money] to pay the bank." Those who can change course, will. In February, the developers of a planned condo tower at 535 North St. Clair Street in Streeterville announced they wanted to make the building a hotel instead, because of slow sales at a sister condo tower, across the street at 550 North St. Clair.

Some metaluxury buildings, including the Spire and Trump, are aggressively marketing their apartments to a new crowd of potential owners—the sexy "international buyer," the sophisticate from Russia or another European or Asian country who already has several homes and now wants one in Chicago. (For more on the Spire, see *Towering Ambition*, page 106.) Lissner has heard the logic: "The dollar is cheap; they've seen huge appreciation in their own countries; they want to bring their money here." In particular, the Irish are thought to be likely buyers because of the long-running boom in Ireland and, perhaps, because many of their countrymen have landed in Chicago over the past century and a half.

But don't bank on the globetrotters for a wholesale rescue from our condo glut. After all, this is Chicago, not South Beach or Park Avenue. If you were jetting in from Dubai, would you come here or go to Miami?

Lissner thinks the internationals are looking primarily for a payoff and likely don't feel a particular loyalty to Chicago. "If things change, they can walk away from this market in no time," she says. "They're a volatile market segment." And it will probably take more than a free parking space to pull them in.

For the more typical condo shoppers, though, that incentive might do the trick—unless they hold out to see if later on they might get two parking spaces.

Illustration: Michelle Thompson/Agoodson.com

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Hotels a bright spot in Chicago-area construction

By Eddie Baeb, Oct. 29, 2007

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(Crain's) — Hotel construction is booming in the Chicago area, as project starts through the first three quarters almost doubled compared with the same period last year while the larger office and multifamily sectors slowed, according to a report released last week.

The hotel industry was one bright spot in an otherwise bleak landscape.

Nationwide, the dollar volume of construction starts — including single family homes, commercial buildings, public works and utilities — is expected to drop 8% this year to \$626.7 billion. That would be the largest percentage decline since 1990, according to the 2008 Construction Outlook report by McGraw-Hill Construction, a unit of McGraw-Hill Cos.

In the Chicago area, hotel construction starts totaled 1.7 million square feet in the first three quarters, up 86% from the year-ago period.

The biggest decline in that period in the Chicago area came in the multifamily sector, which includes townhomes, condominiums and apartments. Construction starts of those properties fell 34% to 12,872 dwelling units. Office construction also was down, falling 10% to 4.77 million square feet, according to McGraw-Hill.

"Hotel is the hottest product in the market," says Steve Smith, a vice-president with Hoffman Estates-based Leopardo Cos. who heads retail, hospitality, office and industrial construction. "A major part of our business the last 12 months has been hospitality."

Recent trends of the week

Industrial vacancy highest since 1994

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Mr. Smith says Leopardo had little hotel experience several years ago, but made a push into that area to diversify and be better-positioned for the housing slowdown. The company is now working on a renovation of the Millennium Knickerbocker hotel downtown, the Hyatt Woodfield in Schaumburg and the Hilton O'Hare as well as two proposed water parks, in Hoffman Estates and Bridgeview.

Leopardo and other commercial builders here also have benefited from the continued development of retailing, as retail construction starts climbed 12% in the first three quarters to 8.84 million square feet even as the housing market slowed.

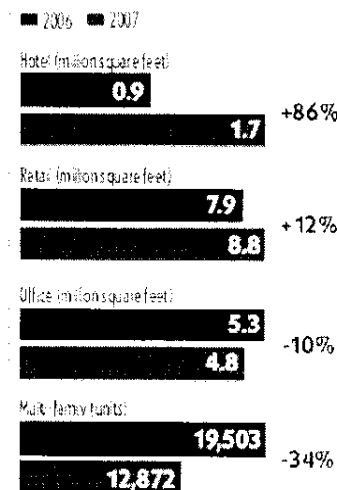
The Chicago trends were pretty much in line with the national picture, says Kim Kennedy, manager of forecasting with McGraw-Hill Construction Research & Analytics in Bedford, Mass. The biggest surprise was the increase in retail construction activity even as the housing market plummeted.

"We expected a pullback in retail construction, and it really hasn't materialized," Ms. Kennedy says. "We're now calling for it to happen in 2008."

McGraw-Hill is predicting construction starts will fall again next year by 2% to \$614.1 billion due to tighter lending standards, continued weakness in the housing sector and slow economic growth.

UPS AND DOWNS

Construction starts of hotels in the Chicago area almost doubled through the first three quarters of the year. Construction of retail stores also rose, while multi-family and office construction declined.

CONSTRUCTION STARTS
January through September

Source: McGraw-Hill Construction

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Chicago Office of Tourism 2006 Statistical Information



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HIGHLIGHTS OF THE UNITED STATES TRAVEL MARKET

- Expenditures by travelers reached \$700 billion in 2006
- In 2006, the U.S. hosted 51 million international visitors, a 4% increase from 2005
 - Both Canada and Mexico contributed significantly to the overall growth in international arrivals in 2006
- The top two countries generating visitors to the U.S., Mexico and Canada, are forecasted to grow by 19 and 15 percent, respectively, from 2006 through 2011.
- Visitors from Europe are expected to generate a 25% growth rate from 2006 to 2011 to reach 12.6 million visitors.
- The People's Republic of China is forecasted to grow 81%, India 66% and Japan 17% over the forecast period to 2011.

HIGHLIGHTS OF THE 2006 ILLINOIS TRAVEL MARKET

- Illinois remained a popular destination for domestic travelers in 2006:
 - Illinois' total number of visitors increased 6.4% to 91 million:
 - 71.8 million domestic leisure visitors.
 - 19.2 million domestic business travelers.
 - Illinois is the 7th most popular U.S. state destination for overseas travelers, with an estimated 1,083,000 visitors in 2006.
 - Travelers in Illinois spent nearly \$28.3 billion on transportation, lodging, food, entertainment, recreation and incidentals during 2006.
 - In 2006, the top markets for international visitors to Illinois were: Canada, United Kingdom, Mexico, Germany and Japan
 - Travel expenditures of international visitors to Illinois reached \$1.72 billion in 2006
 - International travel expenditures generated 20,200 jobs
 - Direct payroll for international travel generated jobs reached \$475 million
 - Tax revenue generated from international travelers (federal, state and local) reached \$333 million

HIGHLIGHTS OF THE 2006 CHICAGO TRAVEL MARKET

- Chicago continued to be a premier travel destination in 2006.
 - Over 44 million people visited, including 32.8 million domestic leisure travelers, a 9% increase from 2005, and a record high for the city. This increase was nearly fifteen times higher than the national percentage change increase in person-stays for the year.
 - Chicago leads all other top destination cities in terms of overall growth of domestic leisure visitation. Chicago shows the greatest single-year percentage point increase of the total U.S. travel market, increasing its share by 13% over the previous year.
 - Chicago was the 8th most popular U.S. city destination for overseas visitors, with an estimated 1,062,000 visitors in 2006.
 - In 2006, travel expenditures by domestic and international visitors totaled \$10.9 billion.

| Chicago and Illinois Domestic Travel Volume, 2000-2006 (millions of visitors, <i>leisure and business</i> combined) | | |
|--|---------|----------|
| Year | Chicago | Illinois |
| 2006 | 44.17 | 91 |
| 2005 | 40.18 | 85.53 |
| 2004 | 37.94 | 76.18 |
| 2003 | 34.49 | 77.85 |
| 2002 | 34.85 | 70.73 |
| 2001 | 33.74 | 69.36 |
| 2000 | 36.95 | 68.87 |

Source for above & below: D.K. Shifflet & Associates, Ltd., 2007

| Top Activities at the Destination | | |
|-----------------------------------|---------|------|
| | Chicago | U.S. |
| Dining | 38% | 29% |
| Sightseeing | 34% | 19% |
| Shopping | 33% | 27% |
| Entertainment | 31% | 23% |
| Night Life | 19% | 7% |
| Museum, Art Exhibit | 18% | 5% |
| Festival, Craft Fair | 8% | 5% |
| Concert, Play, Dance | 11% | 6% |
| Watch Sports | 7% | 5% |
| National or State Parks | 7% | 6% |

CHICAGO'S DOMESTIC LEISURE TRAVEL MARKET

- Travel to Chicago is spread evenly throughout the year. 25% of trips to the city originated in Winter, 23% in Spring, 29% in Summer and 22% in Fall.
- The top reasons for leisure visits to Chicago in 2006 were: visiting friends and relatives (26%), getaway weekends (13%), special events (19%), and general vacations (10%).

| Chicago and Illinois Domestic Leisure Travel Volume, 2000-2006 (millions of visitors) | | |
|--|---------|----------|
| Year | Chicago | Illinois |
| 2006 | 32.8 | 71.8 |
| 2005 | 28.95 | 65.86 |
| 2004 | 26.87 | 58 |
| 2003 | 22.09 | 56.6 |
| 2002 | 22.86 | 50.68 |
| 2001 | 22.12 | 49.95 |
| 2000 | 22.84 | 48.47 |

Source: D.K. Shifflet & Associates, Ltd., 2007

- Chicago was a top regional vacation destination in 2006, with more than 65% of all overnight leisure travel coming from within Illinois or from the surrounding states of Michigan, Indiana, and Wisconsin.

| | |
|-----------|-------|
| Illinois | 32.7% |
| Indiana | 11.7% |
| Wisconsin | 10.5% |
| Michigan | 10.5% |
| Iowa | 3.8% |

| | |
|------------|-----|
| 1-3 nights | 34% |
| 4-7 nights | 9% |
| 8+ nights | 4% |

| | |
|-----------|-----|
| One Adult | 17% |
| Couples | 27% |
| Families | 35% |
| MM/FF | 8% |
| 3+ Adults | 13% |

| | |
|----------------|-----|
| Under \$50K | 31% |
| \$50-\$74,999K | 22% |
| \$75-99,999K | 16% |
| \$100K + | 31% |

For all above tables: Source: D.K. Shifflet & Associates, Ltd., 2007

CHICAGO'S DOMESTIC BUSINESS TRAVEL MARKET

| Year | Chicago | Illinois |
|------|---------|----------|
| 2006 | 11.32 | 19.2 |
| 2005 | 11.23 | 19.66 |
| 2004 | 11.07 | 18.18 |
| 2003 | 12.40 | 21.24 |
| 2002 | 11.99 | 20.05 |
| 2001 | 11.62 | 19.41 |
| 2000 | 14.11 | 21.41 |

Source: D.K. Shifflet & Associates, Ltd., 2007

| | 2006 | 2005 | 2004 | 2003 | 2002 |
|---------------------------------------|------------|------------|------------|------------|------------|
| Total Day-Trip | 4,980,000 | 4,480,000 | 4,490,000 | 4,900,000 | 4,780,000 |
| Total Overnight | 6,290,000 | 6,750,000 | 6,560,000 | 7,470,000 | 7,190,000 |
| Total Group Meetings Travelers | 11,272,006 | 11,232,005 | 11,052,004 | 12,372,003 | 11,972,002 |

Group Meetings include Conventions, Trade Shows, Corporate and other "group-style" meetings.
Source: http://www.choosechicago.com/Document%20Resource%20Gallery/travel_stats_2006.pdf

INTERNATIONAL VISITORS TO CHICAGO

- In 2006, Chicago was ranked the 8th most visited city in the U.S. by overseas travelers with an estimated 1,062,000 overseas visitors.

| Top 10 International Arrivals to Chicago, 2006 |
|--|
| Canada |
| United Kingdom |
| Mexico |
| Germany |
| Japan |
| France |
| South Korea |
| Ireland |
| India |
| Australia |

| Top 10 Overseas Arrivals to Chicago, 2006 |
|---|
| United Kingdom |
| Germany |
| Japan |
| France |
| South Korea |
| Ireland |
| India |
| Australia |
| People's Republic of China |
| Poland |

Source: Office of Travel and Tourism Industries,
International Trade Administration, United States Department of Commerce

ECONOMIC IMPACT OF TRAVELERS TO CHICAGO

- In 2006, travel spending in Chicago, including both U.S. resident and international visitors, registered nearly \$10.9 billion.
 - U.S. resident travelers spent \$9.7 billion in Chicago during 2006.
- Total traveler expenditures directly generated 129,700 jobs within Chicago.
- Domestic and international traveler spending in Chicago directly generated over \$616 million in tax revenue for state and local governments in 2006.
 - The current hotel/motel tax for Chicago is 15.39%.

| Economic Impact of Tourism in Chicago, 2000-2006 | | |
|--|----------------------|-----------------------|
| | Domestic | International |
| 2006 | \$9.7 billion | \$1.16 billion |
| 2005 | \$8.8 billion | \$1.14 billion |
| 2004 | \$8.3 billion | \$1 billion |
| 2003 | \$7.8 billion | \$900 million |
| 2002 | \$7.5 billion | \$1 billion |
| 2001 | \$7.7 billion | \$1 billion |
| 2000 | \$8.5 billion | \$1.3 billion |

Source: CCTB/Travel Industry Association of America
http://www.choosechicago.com/Document%20Resource%20Gallery/travel_stats_2006.pdf

TRANSPORTATION IN CHICAGO

- Getting to and around Chicago is easy because of the variety of quality and affordable modes of transportation that exist.
 - The Chicago Transit Authority (CTA) offers train and bus service in Chicago, and Metra (metropolitan railway) serves Chicago and its suburbs. Taxis, limousines and car services, car rentals, charter buses, and water taxis meet the transportation needs of residents and visitors. The city's two international airports and the Amtrak passenger railroad allow easy access to Chicago from nearly anywhere in the world.
- The majority of visitors to Chicago arrive by car in 2006 – 80% of visitors arrive by automobile, and 14% fly in with the rest using other modes of transport. Similarly, almost 9 in 10 Illinois leisure visitors arrive by auto to their destination and about 7% arrive by air.

| Chicago Airport Activity, 2006 | | |
|--------------------------------|------------|------------|
| | O'Hare | Midway |
| Domestic Flights | 865,889 | 297,076 |
| International Flights | 92,754 | 1,472 |
| Total Flights | 958,643 | 298,548 |
| Average Flights/Day | 2626 | 817 |
| Domestic Passengers | 64,576,289 | 18,680,663 |
| International Passengers | 11,705,923 | 187,725 |
| Total Passengers | 76,282,212 | 18,868,388 |

Source: <http://www.flychicago.com/statistics/airportstatistics.shtm>

ACCOMMODATIONS IN CHICAGO

- After a record year in 2000, the travel and tourism industry experienced a decline in business, as a result of a declining economy and the changing attitudes towards travel after the September 11 terrorist attacks. For the first time in 2006, downtown hotel occupancy rates exceeded pre-9/11 levels.

| Chicago Hotel Occupancy Rates, 1998-2006 (annual averages) | | |
|--|----------|--------------|
| Year | Downtown | Metropolitan |
| 2006 | 75.6%* | 69.4%* |
| 2005 | 72.2% | 64% |
| 2004 | 70.6% | 62% |
| 2003 | 70.0% | 60.6% |
| 2002 | 66.2% | 59.3% |
| 2001 | 66.1% | 62.7% |
| 2000 | 74.7% | 70.4% |
| 1999 | 73.7% | 69.2% |
| 1998 | 72.8% | 69.9% |

Source: Chicago Convention and Tourism Bureau, Smith Travel Research
<http://www.choosechicago.com/media/statistics/Pages/default.aspx>
<http://www.chicagobusiness.com/cgi-bin/news.pl?id=23285>

*2006, Jan-Oct only

| Chicago Hotel Average Daily Room Rates, 1998-2006 (annual averages) | | |
|---|-----------|--------------|
| Year | Downtown | Metropolitan |
| 2006 | \$179.36* | \$121.97* |
| 2005 | \$164.63 | \$107.87 |
| 2004 | \$154.71 | \$102.57 |
| 2003 | \$155.57 | \$102.21 |
| 2002 | \$155.42 | \$103.39 |
| 2001 | \$162.85 | \$107.78 |
| 2000 | \$169.71 | \$118.28 |
| 1999 | \$158.85 | \$111.30 |
| 1998 | \$155.71 | \$107.04 |

Source: Chicago Convention and Tourism Bureau, Smith Travel Research
<http://www.choosechicago.com/media/statistics/Pages/default.aspx>
<http://www.chicagobusiness.com/cgi-bin/news.pl?id=23285>
 *2006, Jan-Oct only

CHICAGO SPORTS

- Chicago is home to several major sports teams, including six major league professional franchises.

| Chicago Sports Attendance, 2006 | | | |
|---------------------------------|---------------------------------|---------------------|------------|
| Team | League | Home Location | Attendance |
| Chicago Bears | National Football League | Soldier Field | 497,786 |
| Chicago Blackhawks | National Hockey League | United Center | 519,809 |
| Chicago Bulls | National Basketball Association | United Center | 912,373 |
| Chicago Cubs | National Baseball League | Wrigley Field | 3,123,215 |
| Chicago White Sox | American Baseball League | U.S. Cellular Field | 2,957,414 |
| Chicago Fire | Major League Soccer | Soldier Field | 297,426 |

Source: Chicago Bears, Chicago Blackhawks, Chicago Bulls, Chicago Cubs, Chicago White Sox, Chicago Fire
http://chicagobusiness.datajoe.com/app/ecom/pub_viewhtml.php?listid=2507&year=2007&htmlkey=maOoZwRQSNzdo

CHICAGO FESTIVALS AND ATTRACTIONS

- Chicago, a year-round destination, is home to a variety of world-renowned festivals and special events. And while the many city-sponsored special events continue to grow in popularity, they remain free of charge to the millions of people each year that come to enjoy.

| Chicago Festival/Event Attendance, 2006 | | |
|--|-----------------------|------------------------|
| Event | Date(s) | Attendance (estimated) |
| Chicago Blues Festival | June 8-11 | 640,000 |
| Chicago Gospel Festival | June 2-4 | 280,000 |
| Taste of Chicago (includes Country Music Festival) | June 30-July 9 | 3,600,000 |
| Chicago Air & Water Show | August 19-20 | 2,000,000 |
| Viva! Chicago Latin Music | August 26-27 | 160,000 |
| Chicago Jazz Festival | August 31-September 3 | 310,000 |
| Celtic Festival Chicago | September 16-17 | 185,000 |

Source: Mayor's Office of Special Events, 2007 & Crain's Chicago Business

| Chicago Attraction Attendance, 2006 | |
|--|------------------------|
| Attraction | Attendance (estimated) |
| Navy Pier | 8,775,000 |
| Lincoln Park Zoo | 3,000,000 |
| Millennium Park | 3,000,000 |
| John G. Shedd Aquarium | 2,076,063 |
| The Art Institute of Chicago | 1,236,274 |
| The Field Museum | 2,130,052 |
| Museum of Science and Industry | 1,375,226 |
| Sears Tower Skydeck | 1,300,000 |
| Chicago Cultural Center | 839,000 |
| Chicago Children's Museum | 766,497 |
| Chicago Symphony Orchestra | 550,000 |
| Adler Planetarium and Astronomy Museum | 400,637 |
| Museum of Contemporary Art | 274,830 |
| Chicago History Museum | 76,948 |
| DuSable Museum of African American History | 149,939 |

Sources: Attractions, Museums in the Park

CHICAGO FUN FACTS

Chicago is home to...

- An estimated 2,896,016 residents
- Over 50 cultural institutions, historical sites and museums
- More than 200 theaters
- Nearly 225 art galleries
- More than 7,300 restaurants
- 77 neighborhoods
- 26 miles of lakefront
- 33 beaches, 15 miles of which are along the lake
- 35 annual parades
- 19 miles of lakefront bicycle paths
- 552 parks covering 7300 acres

Did you know...

- The Art Institute of Chicago holds one of the largest and most extensive collections of Impressionist and Post-Impressionist paintings outside of the Musée d'Orsay in Paris.
- The Adler Planetarium was the first planetarium in the Western Hemisphere.
- Chicago was one of the first and largest municipalities to include public art funding in its requirements for the renovation or construction of municipal buildings, with the passage of the Percentage-for-Arts ordinance in 1978.
- The Chicago Cultural Center is the first free municipal cultural center in the U.S. and home to the world's largest stained glass Tiffany dome.
- The Harold Washington Library Center, with approximately 6.5 million books available, is the world's largest municipal building.
- The John G. Shedd Aquarium's and Oceanarium is the world's largest indoor aquarium.
- The Lincoln Park Zoo, one of only three free major zoos in the country, is the country's oldest public zoo with an estimated annual attendance of three million people.

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July 1, 2008, 8:40 am

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Tomatoes, Salmonella and the 21st-Century Food Chain

Posted by Jacob Goldstein



The life of a 21st-century tomato is complicated — picked in one place, packed in another, shipped off to a third. A tomato might, for example, be grown in Florida, shipped to Mexico, sorted with tomatoes from lots of other places, repackaged and sent off to the U.S. for somebody to eat.

So when people start coming down with salmonella, how do you figure out where the tomatoes are coming from? The answer so far: You don't.

The whole thing reminds us of contamination problems earlier this year with Baxter's heparin. But even that [could be traced back](#), albeit not precisely, to Chinese manufacturers early in the supply chain.

In the case of the tomatoes, [this morning's WSJ reports](#) in a page 1 story, there may never be a clear answer.

"It's important to control expectations, and it's possible that this investigation will not ultimately provide a smoking gun," David Acheson, the FDA's associate commissioner for foods, said at a recent news conference. "That's not that unusual with tomato outbreaks."

Talk Tomatoes: [Grade the FDA's effort](#) to keep food safe.

Photo: AP

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<http://blogs.wsj.com/health/2008/07/01/tomatoes-salmonella-and-the-21st-century-food-chain/trackback/>

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Comments

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If the FDA does not find the source, in this widely publicized and costly outbreak, their credibility is going to be damaged severely.

I know it is complicated, but could they, at least, narrow down the region. Did it come from Florida or Mexico?

James Hubbard, M.D., M.P.H.
www.familydoctor.com

Comment by James Hubbard, M.D., M.P.H - July 1, 2008 at 10:04 am

Why was it assumed that tomatoes were the source of the Salmonella, rather than cilantro or some other ingredient common to pico de gallo, salsa and guacamole?

Comment by L. Ireland - July 1, 2008 at 11:00 am

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Maybe the FDA should require better traceability, or less "sorting together" of produce which makes it impossible to trace where produce is grown, washed or packaged.

Comment by RichL - July 1, 2008 at [11:19 am](#)

The one food common to all who have been infected with this strain of Salmonella is tomatoes, not pico de gallo, salsa or guacamole.

James Hubbard, M.D., M.P.H.
www.familydoctormag.com

Comment by James Hubbard, M.D., M.P.H - July 1, 2008 at [11:24 am](#)

According to numerous sources, health officials in Texas and New Mexico are now trying to determine if peppers, cilantro or other ingredients in pico de gallo, salsa and guacamole might be responsible for the outbreak.

Comment by L. Ireland - July 1, 2008 at [12:14 pm](#)

Its very unlikely any receiver would ship tomatoes from Florida to Mexico. Never heard of anyone having reason to do that in my 20+ years in the industry...I don't understand why the FDA cant find the source. If they have not done so yet, they need to hire people who work in the industry and understand the supply chain process.I don't see the genetic footprint process working here. Find the field/grower before the source is cleaned up or destroyed.

Feel free to contact me anytime.

ls42005@gmail.com

<http://poisonvegetablesunkifyou.blogspot.com/>

Comment by Michael R. Machi - July 1, 2008 at [3:07 pm](#)

The first step with any research is to make sure you've asked the right question. Was it even the tomatoes?

Comment by Sandy - July 2, 2008 at [10:04 am](#)

? Are we now to STOP eating & buying tomatoes ?

Comment by Laura - July 5, 2008 at [7:36 am](#)

is the salmonella on the west coast. where are these people who have contracted it. i live in oregon and dont know is i should be eating tomatoes or not. i normally eat a lot of them. thank you

Comment by mabelle - July 9, 2008 at [10:22 pm](#)

There are lines of investigation that have no tomatoes getting people sick, only chili, so the good doctors statement about tomatoes being the common denominator isn't accurate. tomatoes get front and center attention because in the questionnaire it is the food that most people ate before becoming ill. Since 85% of the people in the southwest eat tomatoes daily it is no wonder they show up the most.

Comment by Jim C - July 14, 2008 at [4:36 pm](#)

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Agricultural and Food Scientists

(PDF)

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Significant Points

About 14 percent of agricultural and food scientists work for Federal, State, or local governments. A bachelor's degree in agricultural science is sufficient for some jobs in product development; a master's or Ph.D. degree is required for research or teaching. Opportunities for agricultural and food scientists are expected to be good over the next decade, particularly for those holding a master's or Ph.D. degree.

Nature of the Work

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The work of agricultural and food scientists plays an important part in maintaining the Nation's food supply by ensuring agricultural productivity and food safety. Agricultural scientists study farm crops and animals and develop ways of improving their quantity and quality. They look for ways to improve crop yield with less labor, control pests and weeds more safely and effectively, and conserve soil and water. They research methods of converting raw agricultural commodities into attractive and healthy food products for consumers. Some agricultural scientists look for ways to use agricultural products for fuels.

In the past two decades, rapid advances in the study of genetics have spurred the growth of biotechnology. Some agricultural and food scientists use biotechnology to manipulate the genetic material of plants and crops, attempting to make these organisms more productive or resistant to disease. Advances in biotechnology have opened up research opportunities in many areas of agricultural and food science, including commercial applications in agriculture, environmental remediation, and the food industry. Interest in the production of biofuels, or fuels manufactured from agricultural derivatives, has also increased. Some agricultural scientists work with biologists and chemists to develop processes for turning crops into energy sources, such as ethanol produced from corn.

Another emerging technology expected to affect agriculture is nanotechnology—a molecular manufacturing technology which promises to revolutionize methods of testing agricultural and food products for contamination or spoilage. Some food scientists are using nanotechnology to develop sensors that can quickly and accurately detect contaminant molecules in food.

Many agricultural scientists work in basic or applied research and development. Basic research seeks to understand the biological and chemical processes by which crops and livestock grow, such as determining the role of a particular gene in plant growth. Applied research uses this knowledge to discover mechanisms to improve the quality, quantity, or safety of agricultural products. Other agricultural scientists manage or administer research and development programs, or manage marketing or production operations in companies that produce food products or agricultural chemicals, supplies, and machinery. Some agricultural scientists are consultants to business firms, private clients, or

government.

Depending on the agricultural or food scientist's area of specialization, the nature of the work performed varies.

Food scientists and technologists usually work in the food processing industry, universities, or the Federal Government to create and improve food products. They use their knowledge of chemistry, physics, engineering, microbiology, biotechnology, and other sciences to develop new or better ways of preserving, processing, packaging, storing, and delivering foods. Some food scientists engage in basic research, discovering new food sources; analyzing food content to determine levels of vitamins, fat, sugar, or protein; or searching for substitutes for harmful or undesirable additives, such as nitrites. Others engage in applied research, finding ways to improve the content of food or to remove harmful additives. They also develop ways to process, preserve, package, or store food according to industry and government regulations. Traditional food processing research into baking, blanching, canning, drying, evaporation, and pasteurization also continues. Other food scientists enforce government regulations, inspecting food processing areas and ensuring that sanitation, safety, quality, and waste management standards are met.

Food technologists generally work in product development, applying the findings from food science research to improve the selection, preservation, processing, packaging, and distribution of food.

Plant scientists study plants, helping producers of food, feed, and fiber crops to feed a growing population and conserve natural resources. *Agronomists* and *crop scientists* not only help increase productivity, but also study ways to improve the nutritional value of crops and the quality of seed, often through biotechnology. Some crop scientists study the breeding, physiology, and management of crops and use genetic engineering to develop crops resistant to pests and drought. Some plant scientists develop new technologies to control or eliminate pests and prevent their spread in ways appropriate to the specific environment. They also conduct research or oversee activities to halt the spread of insect-borne disease.

Soil scientists study the chemical, physical, biological, and mineralogical composition of soils as it relates to plant growth. They also study the responses of various soil types to fertilizers, tillage practices, and crop rotation. Many soil scientists who work for the Federal Government conduct soil surveys, classifying and mapping soils. They provide information and recommendations to farmers and other landowners regarding the best use of land and plants to avoid or correct problems, such as erosion. They may also consult with engineers and other technical personnel working on construction projects about the effects of, and solutions to, soil problems. Because soil science is closely related to environmental science, persons trained in soil science also work to ensure environmental quality and effective land use.

Animal scientists work to develop better, more efficient ways of producing and processing meat, poultry, eggs, and milk. Dairy scientists, poultry scientists, animal breeders, and other scientists in related fields study the genetics, nutrition, reproduction, and growth of domestic farm animals. Some animal scientists inspect and grade livestock food products, purchase livestock, or work in technical sales or marketing. As extension agents or consultants, animal scientists advise agricultural producers on how to upgrade animal housing facilities properly, lower mortality rates, handle waste matter, or increase production of animal products, such as milk or eggs.

Work environment. Agricultural scientists involved in management or basic research tend to work regular hours in offices and laboratories. The work environment for those engaged in applied research or product development varies, depending on specialty and on type of employer. For example, food scientists in private industry may work in test kitchens while investigating new processing techniques. Animal scientists working for Federal, State, or university research stations may spend part of their time at dairies, farrowing houses, feedlots, farm animal facilities, or outdoors conducting research. Soil and crop scientists also spend time outdoors conducting research on farms and agricultural research stations.

Training, Other Qualifications, and Advancement

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Most agricultural and food scientists need at least a master's degree to work in basic or applied research, whereas a bachelor's degree is sufficient for some jobs in applied research or product development, or jobs in other occupations related to agricultural science.

Education and training. Training requirements for agricultural scientists depend on the type of work they perform. A bachelor's degree in agricultural science is sufficient for some jobs in product development or assisting in applied research, but a master's or doctoral degree is generally required for basic research or for jobs directing applied

research. A Ph.D. in agricultural science usually is needed for college teaching and for advancement to senior research positions. Degrees in related sciences such as biology, chemistry, or physics or in related engineering specialties also may qualify people for many agricultural science jobs.

All States have a land-grant college that offers agricultural science degrees. Many other colleges and universities also offer agricultural science degrees or agricultural science courses. However, not every school offers all specialties. A typical undergraduate agricultural science curriculum includes communications, mathematics, economics, business, and physical and life sciences courses, in addition to a wide variety of technical agricultural science courses. For prospective animal scientists, these technical agricultural science courses might include animal breeding, reproductive physiology, nutrition, and meats and muscle biology. Graduate students usually specialize in a subfield of agricultural science, such as animal breeding and genetics, crop science, or horticulture science, depending on their interests. For example, those interested in doing genetic and biotechnological research in the food industry need a strong background in life and physical sciences, such as cell and molecular biology, microbiology, and inorganic and organic chemistry. Undergraduate students, however, need not specialize. In fact, undergraduates who are broadly trained often have greater career flexibility.

Students preparing to be food scientists take courses such as food chemistry, food analysis, food microbiology, food engineering, and food processing operations. Those preparing as soil and plant scientists take courses in plant pathology, soil chemistry, entomology, plant physiology, and biochemistry, among others. Advanced degree programs include classroom and fieldwork, laboratory research, and a thesis or dissertation based on independent research.


Other qualifications. Agricultural and food scientists should be able to work independently or as part of a team and be able to communicate clearly and concisely, both orally and in writing. Most of these scientists also need an understanding of basic business principles, the ability to apply statistical techniques, and the ability to use computers to analyze data and to control biological and chemical processing.

Certification and advancement. Agricultural scientists who have advanced degrees usually begin in research or teaching. With experience, they may advance to jobs as supervisors of research programs or managers of other agriculture-related activities.

The American Society of Agronomy certifies agronomists and crop advisors, and the Soil Science Society of America certifies soil scientists and soil classifiers. To become certified in soil science or soil classification, applicants must have a bachelor's degree in soil science and 5 years of experience or a graduate degree and 3 years experience. Certification in agronomy requires a bachelor's degree in agronomy or a related field and 5 years experience or a graduate degree and 3 years. Crop advising certification requires either 4 years of experience or a bachelor's degree in agriculture and 2 years of experience. To receive any of these certifications, applicants must also pass designated examinations and agree to adhere to a code of ethics. Each certification is maintained through continuing education.

Employment

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Agricultural and food scientists held about 33,000 jobs in 2006. In addition, many people trained in these sciences held faculty positions in colleges and universities. (See the statement on [postsecondary teachers](#) elsewhere in the *Handbook*.)

About 14 percent of agricultural and food scientists work for Federal, State, or local governments. State and local governments employed about 5 percent, while the Federal Government employed another 9 percent in 2006, mostly in the U.S. Department of Agriculture. Educational services accounted for another 18 percent of jobs. Other agricultural and food scientists worked for agricultural service companies, commercial research and development laboratories, seed companies, wholesale distributors, and food products companies. About 5,500 agricultural scientists were self-employed in 2006, mainly as consultants.

Job Outlook

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Job growth among agricultural and food scientists should be about as fast as the average for all occupations. Opportunities are expected to be good over the next decade, particularly for those holding a master's or Ph.D. degree.

Employment change. Employment of agricultural and food scientists is expected to grow 9 percent between 2006

and 2016, about as fast as the average for all occupations. Past agricultural research has created higher yielding crops, crops with better resistance to pests and plant pathogens, and more effective fertilizers and pesticides. Research is still necessary, however, particularly as insects and diseases continue to adapt to pesticides and as soil fertility and water quality continue to need improvement. This creates more jobs for agricultural scientists.

Emerging biotechnologies will play an ever larger role in agricultural research. Scientists will be needed to apply these technologies to the creation of new food products and other advances. Moreover, increasing demand is expected for biofuels and other agricultural products used in industrial processes. Agricultural scientists will be needed to find ways to increase the output of crops used in these products.

Agricultural scientists will also be needed to balance increased agricultural output with protection and preservation of soil, water, and ecosystems. They increasingly encourage the practice of sustainable agriculture by developing and implementing plans to manage pests, crops, soil fertility and erosion, and animal waste in ways that reduce the use of harmful chemicals and do little damage to farms and the natural environment.

Job growth for food scientists and technologists will be driven by the demand for new food products and food safety measures. Food research is expected to increase because of heightened public awareness of diet, health, food safety, and biosecurity—preventing the introduction of infectious agents into herds of animals. Advances in biotechnology and nanotechnology should also spur demand, as food scientists and technologists apply these technologies to testing and monitoring food safety.

Fewer new jobs for agricultural and food scientists are expected in the Federal Government, mostly because of budgetary constraints at the U.S. Department of Agriculture.

Job prospects. Opportunities should be good for agricultural and food scientists with a master's degree, particularly those seeking applied research positions in a laboratory. Master's degree candidates also can seek to become certified crop advisors, helping farmers better manage their crops. Those with a Ph.D. in agricultural and food science will experience the best opportunities, especially in basic research and teaching positions at colleges and universities.


Graduates with a bachelor's degree in agricultural or food science can sometimes work in applied research and product development positions under the guidance of a Ph.D. scientist, but usually only in certain subfields, such as food science and technology. The Federal Government also hires bachelor's degree holders to work as soil scientists.

Most people with bachelor's degrees find work in positions related to agricultural or food science rather than in jobs as agricultural or food scientists. A bachelor's degree in agricultural science is useful for managerial jobs in farm-related or ranch-related businesses, such as farm credit institutions or companies that manufacture or sell feed, fertilizer, seed, and farm equipment. In some cases, people with a bachelor's degree can provide consulting services or work in sales and marketing—promoting high-demand products such as organic foods. Bachelor's degrees also may help people become farmers, ranchers, and agricultural managers; agricultural inspectors; or purchasing agents for agricultural commodity or farm supply companies.

Employment of agricultural and food scientists is relatively stable during periods of economic recession. Layoffs are less likely among agricultural and food scientists than in some other occupations because food is a staple item and its demand fluctuates very little with economic activity.

Projections Data

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Projections data from the National Employment Matrix

| Occupational title | SOC Code | Employment, 2006 | Projected employment, 2016 | Change, 2006-16 | | Detailed statistics |
|--|----------|------------------|----------------------------|-----------------|---------|--|
| | | | | Number | Percent | |
| Agricultural and food scientists | 19-1010 | 33,000 | 36,000 | 3,100 | 9 | PDF zipped XLS |
| Animal scientists | 19-1011 | 5,400 | 5,900 | 500 | 10 | PDF zipped XLS |
| Food scientists and technologists | 19-1012 | 12,000 | 13,000 | 1,200 | 10 | PDF zipped XLS |
| Soil and plant Scientists | 19-1013 | 16,000 | 17,000 | 1,300 | 8 | PDF zipped XLS |

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on [Occupational Information Included in the Handbook](#).

Earnings

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Median annual earnings of food scientists and technologists were \$53,810 in May 2006. The middle 50 percent earned between \$37,740 and \$76,960. The lowest 10 percent earned less than \$29,620, and the highest 10 percent earned more than \$97,350. Median annual earnings of soil and plant scientists were \$56,080 in May 2006. The middle 50 percent earned between \$42,410 and \$72,020. The lowest 10 percent earned less than \$33,650, and the highest 10 percent earned more than \$93,460. In May 2006, median annual earnings of animal scientists were \$47,800.

The average Federal salary in 2007 was \$91,491 in animal science and \$79,051 in agronomy.

According to the National Association of Colleges and Employers, beginning salary offers in 2007 for graduates with a bachelor's degree in animal sciences averaged \$35,035 a year; plant sciences, \$31,291 a year; and in other agricultural sciences, \$37,908 a year.


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THE ABOVE WAGE DATA ARE FROM THE [OCCUPATIONAL EMPLOYMENT STATISTICS \(OES\) SURVEY PROGRAM](#), UNLESS OTHERWISE NOTED. FOR THE LATEST NATIONAL, STATE, AND LOCAL EARNINGS DATA, VISIT THE FOLLOWING PAGES:

- [ANIMAL SCIENTISTS](#)
- [FOOD SCIENTISTS AND TECHNOLOGISTS](#)
- [SOIL AND PLANT SCIENTISTS](#)

Related Occupations


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The work of agricultural scientists is closely related to that of other scientists, including [biological scientists](#), [chemists](#), and [conservation scientists and foresters](#). It also is related to the work of managers of agricultural production, such as [farmers, ranchers, and agricultural managers](#). Certain specialties of agricultural science also are related to other occupations. For example, the work of animal scientists is related to the work of [veterinarians](#).

Sources of Additional Information

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Information on careers in agricultural science is available from:

American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, 677 S. Segoe Rd., Madison, WI 53711-1086. Internet: <http://www.agronomy.org>

Living Science, Purdue University, 1140 Agricultural Administration Bldg., West Lafayette, IN 47907-1140. Internet: <http://www.agriculture.purdue.edu/USDA/careers>

Information on careers in food science and technology is available from:

Institute of Food Technologists, 525 W. Van Buren, Suite 1000, Chicago, IL 60607. Internet: <http://www.ift.org>

Information on getting a job as an agricultural scientist with the Federal Government is available from the Office of Personnel Management through USAJOBS, the Federal Government's official employment information system. This resource for locating and applying for job opportunities can be accessed through the Internet at <http://www.usajobs.opm.gov> or through an interactive voice response telephone system at (703) 724-1850 or TDD

(978) 461-8404. These numbers are not toll free, and charges may result.

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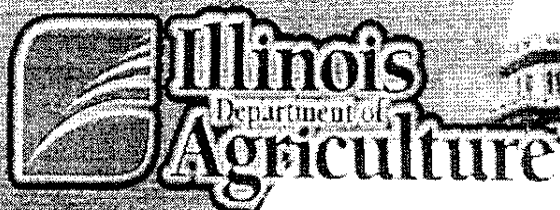
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What agricultural goods are produced in Illinois?

Illinois is a leading producer of soybeans, corn and swine. The state's climate and varied soil types enable farmers to grow and raise many other agricultural commodities, including cattle, wheat, oats, sorghum, hay, sheep, poultry, fruits and vegetables. Illinois also produces several specialty crops, such as buckwheat, horseradish, ostriches, fish and Christmas trees.

What are the characteristics of a typical Illinois farm?

Illinois' 76,000 farms cover more than 28 million acres -- nearly 80 percent of the state's total land area. The large number of farms, coupled with the diversity of commodities produced, makes it difficult to describe a typical operation. However, statistics provide some indication about what it means to farm in Illinois.

The average size of an Illinois farm including hobby farms is 368 acres. Most farm acreage is devoted to grain, mainly corn and soybeans. Nearly 10 percent of Illinois farms have swine. Beef cows are found on about 23 percent of farms, while about 3 percent have dairy cows. Some farms produce specialty crops and livestock, including alfalfa, canola, nursery products, emus and fish. Many farming operations also support recreational activities such as hunting and fishing.

How does agriculture benefit Illinois' economy?

Marketing of Illinois' agricultural commodities generates more than \$9 billion annually. Corn accounts for nearly 40 percent of that total. Marketing of soybeans contributes about one-third, with the combined marketings of livestock, dairy and poultry generating about 23 percent.

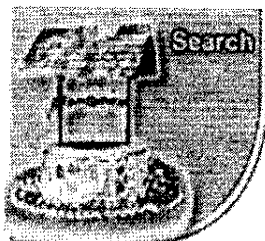
Billions more dollars flow into the state's economy from ag-related industries, such as farm machinery manufacturing, agricultural real estate, and production and sale of value-added food products. Rural Illinois benefits principally from agricultural production, while agricultural processing and manufacturing strengthen urban economies.

How are Illinois' agricultural commodities used?

With more than 950 food manufacturing companies, Illinois is well-equipped to turn the state's crops and livestock into food and industrial products. Food processing is the state's number-one manufacturing activity, adding almost \$13.4 billion annually to the value of Illinois' raw agricultural commodities.

Illinois' agricultural commodities also provide the base for such products as animal feed, ink, paint, adhesives, clothing, soap, wax, cosmetics, medicines, furniture, paper and lumber. Each year, 274 million bushels of Illinois corn are used to produce more ethanol than any other state -- about 678 million gallons. Illinois also markets other renewable fuels, including soybean-based biodiesel.

How does agriculture benefit from the state's geography and climate?



Illinois measures about 400 miles from its northern border to its southernmost tip. Temperatures generally vary by 10 to 12 degrees from one end of the state to the other. Cold, fairly dry winters and warm, humid summers with ample rainfall allow the land to support many kinds of crops and livestock.

Much of Illinois is comprised of fertile flat loess, left behind by glaciers and wind millions of years ago. About 89 percent of the state's cropland is considered prime farmland, ranking the state third nationally in total prime farmland acreage. Prime farmland is important because it provides an environmentally sound base for crop production. The central three-fourths of the state are especially well suited for growing crops, while hilly areas in the northwest and south provide excellent pasture for livestock.

Who farms?

Although Illinois' food and fiber industry employs nearly 1 million people, there are only 76,000 farm operators, down from 164,000 in 1959. During the same time period, the average farm size more than doubled as sophisticated technology made many aspects of the industry less labor-intensive. Illinois farmers are generally more than 50 years old. About 39 percent hold jobs off the farm and consider farming their secondary occupation. Family farms still dominate, though some of these have incorporated.

What are other reasons for Illinois' agricultural success?

Illinois has a competitive edge over many other states due to its central location and superior transportation system. More than 2,000 miles of interstate highway and 34,500 miles of other state highway make trucking of goods fast and efficient. Chicago is home to the largest rail gateway in the nation, connecting eastern and western United States. The state boasts some 1,100 airports, landing areas and heliports, including Chicago's O'Hare International, through which more than 65 million travelers pass annually. Illinois' 1,118 miles of navigable waterways, including the Illinois and Mississippi rivers, make barge traffic an excellent option for shipment of grain to the Gulf of Mexico.

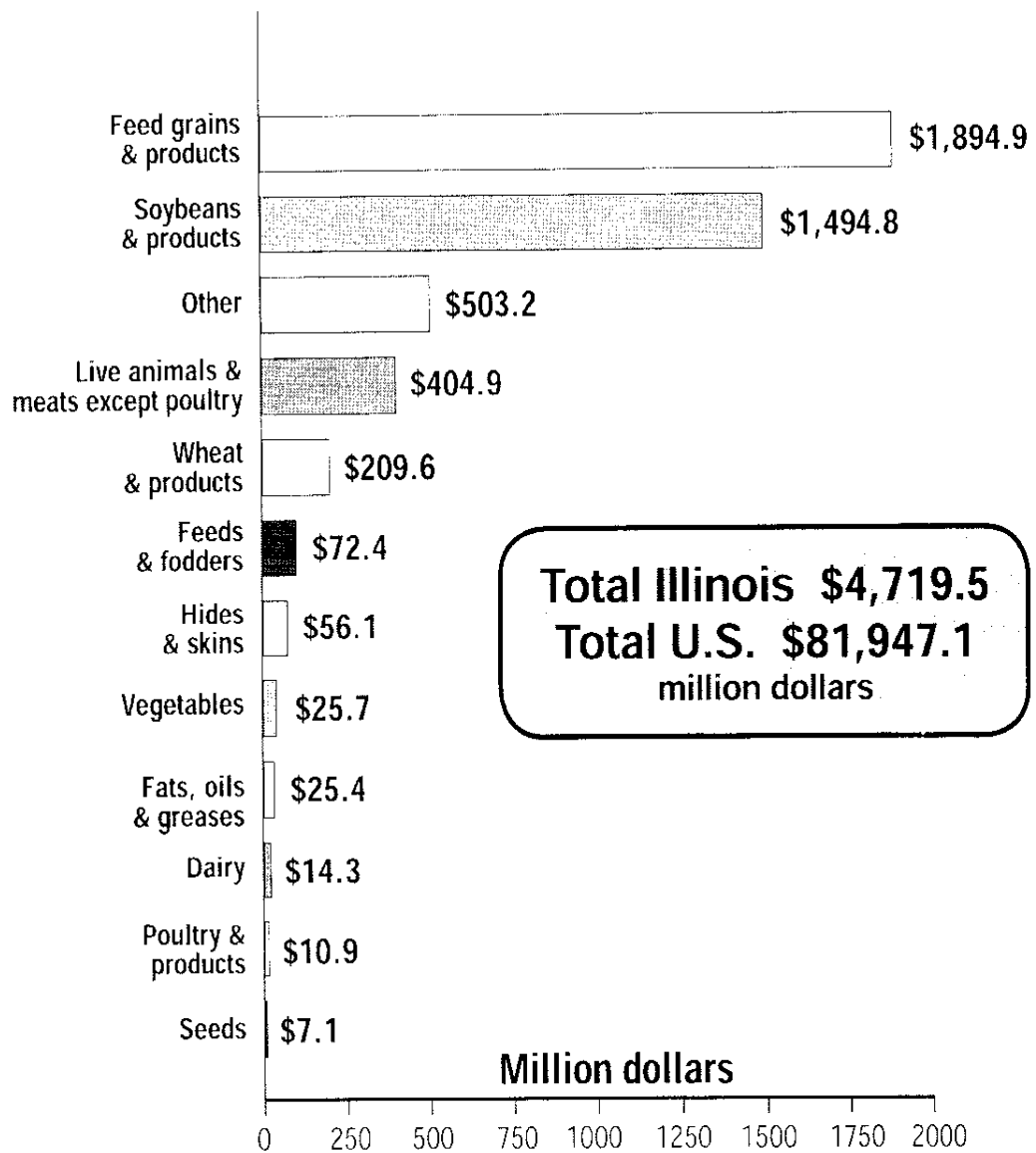
Are many of Illinois' agricultural products exported to other nations?

Illinois ranks second nationally in the export of agricultural commodities with nearly \$4 billion worth of goods shipped to other countries each year. Exports from Illinois account for nearly 7 percent of all U.S. agricultural exports. Illinois is the nation's second leading exporter of both soybeans and feed grains and related products. More than 44 percent of grain produced in Illinois is sold for export. The Illinois Department of Agriculture promotes items produced, processed or packaged in Illinois through international and domestic marketing exhibits, trade missions, industry tours, publications, the Illinois Product Logo program and an electronic database for trade leads. Illinois ranks second in food processing. Most processors are located in the Chicago metropolitan area, which contains one of the largest concentrations of food-related businesses in the world.

Questions or comments:

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Illinois Ag Exports* FY 2007



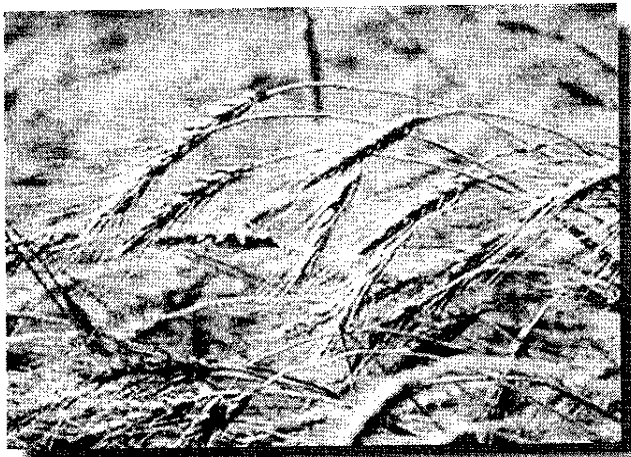
*Goods leaving the State of Illinois

Source: ERS/USDA State Export Data – www.ers.usda.gov/data/stateexports/

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Chicagoland Foreign Investment Group

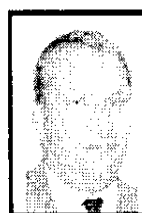
ILLINOIS DEPARTMENT OF AGRICULTURE 2007 ANNUAL REPORT



“To protect, promote and preserve . . .”



Rod Blagojevich
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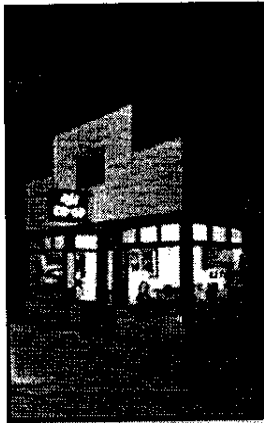
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Introduction

Illinois' food and agriculture industry continues its pace of rapid change.

Advances in technology make it possible for domestic producers to provide our international trading partners some of the safest food and agricultural products in the world. Additionally, because Illinois farmers have access to a strong transportation infrastructure and, thereby, a strong production distribution system, they are uniquely positioned to compete in the global marketplace.

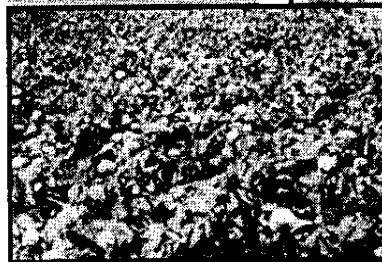
The Illinois Department of Agriculture (IDOA) works with state and national agriculture constituent groups to cultivate markets by bringing buyers right to producers and products. These marketing activities help increase demand for Illinois agricultural products which, in turn, aids in job creation and retention.



In 2007, IDOA continued fulfilling its three-pronged mission 1) to promote the industry to new markets, 2) to ensure that food is safe and 3) to encourage resource conservation and preservation. These activities have helped the department meet the Administration's directive to assist with rural economic stabilization while at the same time giving local residents and companies the tools to find and create new jobs as well as retain existing ones.



This report summarizes ways in which Illinois' citizens are benefiting from the Department of Agriculture's programs and services and highlights the Department's achievements in 2007.



ILLINOIS AGRICULTURE HIGHLIGHTS 2007

Agriculture is vital to the cultural and economic life of Illinoisans. Agricultural product manufacturing and processing contribute significantly to Illinois' economy. Nationally, Illinois is a leader in food processing, corn, soybean and ethanol production, meat packing, dairy manufacturing, feed milling, vegetable processing and other agriculture related endeavors.

Diversity in soil types allows farmers to grow many well known crops and lesser known specialty crops including alfalfa, amaranth, apples, bell peppers, blueberries, broccoli, buckwheat, canola, Christmas trees, clover, cucumbers, field corn, ginseng, grain sorghum, grass seed, herbs, horseradish, mushrooms, nursery products, oats, peaches, popcorn, potatoes, potted plants, pumpkins, rye, seed corn, snap beans, sod, soybeans, strawberries, sweet corn, tomatoes, winter wheat and others.

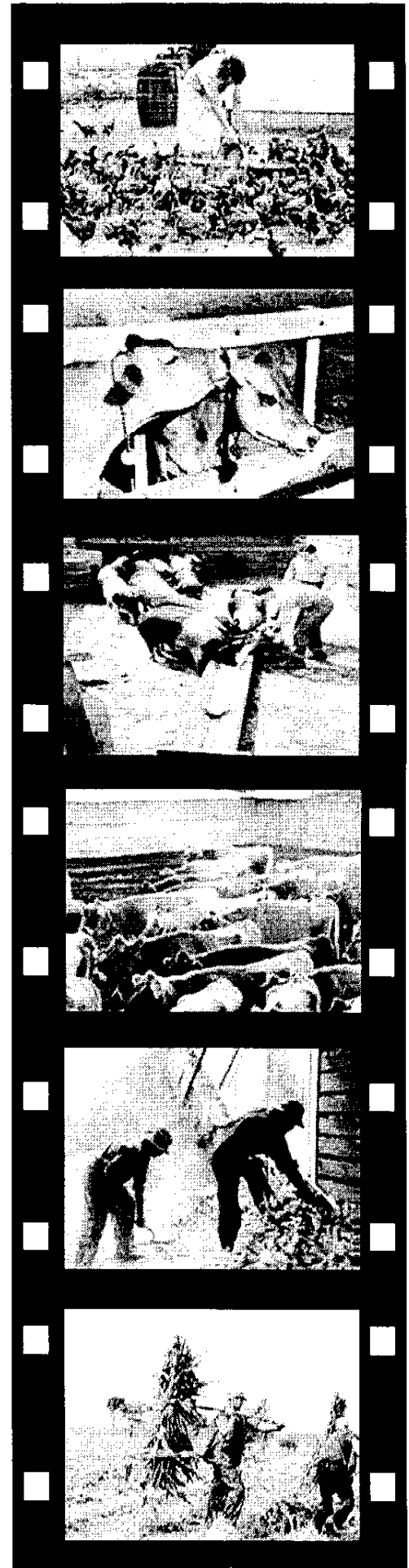
IN 2006, THERE WERE 72,400 FARMS IN ILLINOIS THAT CONTAINED 27.3 MILLION ACRES OF LAND.

In Illinois, livestock is produced using a wide variety of methods, ranging from the raising of one ostrich in a pen to the mass production of thousands of hogs in a total confinement. Agriculture producers in Illinois raise beef cattle, bees, bison, broilers, buffalo, catfish, crayfish, dairy cattle, deer, elk, emus, goats, horses, hybrid striped bass, layers, llamas, mink, minnows, rabbits, sheep, tilapia, turkeys and others.

In 2006, there were 72,400 farms in Illinois that contained 27.3 million acres of land. The average farm in 2006 was 377 acres. The average per acre value of farm real estate as of January 1, 2007, was \$4,330 per acre, compared to \$3,800 per acre on January 1, 2006. The average per acre value of cropland increased 16 percent from \$3,850 to \$4,460 in 2007. Solid corn prices brought on by the demand for ethanol led to increased land values in 2006. Other factors influencing the price of land came from the IRS 1031 Tax-Free Exchange and the fact that farmland returns competed well with stocks, bonds and money markets in 2006.

Illinois ranked second among all states in corn and soybean production in 2006. Production of corn for grain during 2006 totaled 1.82 billion bushels, 6 percent more than produced in 2005. The corn yield averaged 163 bushels per acre, 20 bushels per acre more than in 2005. Soybean production in 2006 totaled 482 million bushels, 10 percent more than in 2005. The soybean yield in 2006 was 48 bushels per acre, 1.5 bushels above 2005. In 2006, Illinois pork producers marketed 1.47 billion pounds of pork, ranking Illinois fifth among all states. Cash receipts from pork sales declined 7 percent from the previous year. Cattle and calf marketings during 2006 totaled 682 million pounds, one percent less than in 2005. Illinois ranked 18th in the United States in marketings of cattle and calves.

Total cash receipts from farm marketings in Illinois for 2006 totaled \$8.64 billion, 2 percent below 2005. Illinois ranked 7th among all states in total cash receipts in 2006. Crop cash receipts in Illinois in 2006



totaled \$6.84 billion, down 2 percent from 2005 and placed Illinois third among all states in total crop cash receipts in 2006. Livestock and livestock products cash receipts in Illinois in 2006 totaled \$1.79 billion, which was down 10 percent from 2005 and placed Illinois 25th among all states in total livestock and livestock products cash receipts.

In 2006, corn accounted for 41.6 percent of the total cash receipts in Illinois and soybeans accounted for 29.1 percent. All other crops combined accounted for 8.5 percent of the total cash receipts in Illinois. Compared to 2005, cash receipts for corn increased 1 percent and cash receipts for soybeans decreased less than one percent. In 2006, hogs accounted for 9.3 percent of the total cash receipts in Illinois while cattle and calves accounted for 6.9 percent and dairy products accounted for 3.2 percent. All other livestock combined accounted for 1.4 percent of the total cash receipts in Illinois in 2006. Compared to 2005, cash receipts for all livestock categories declined.



2007 ILLINOIS ACCOMPLISHMENTS

In an effort to provide Illinois farmers and agribusiness companies with information on various market development activities, IDOA has created new online communications tools. This includes a new page on the Department's website (www.agr.state.il.us) that is devoted to farmers markets.

IDOA has created new online communications tools, including its new website, www.agr.state.il.us. This includes a new page on the website devoted to farmers' markets.

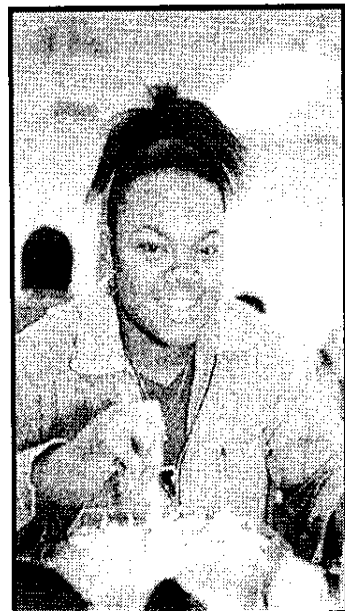
The Department has also worked with the USDA and various local units of government to detect, control, and eradicate the Emerald Ash Borer (EAB), another invasive species that has been discovered in Illinois. Infestations have been discovered in several counties in the northeastern portion of the state, including Kane, DuPage, Cook, and LaSalle counties. Detection surveys and control/eradication strategies are being conducted regularly. Three pieces of legislation were signed in 2007 assisting the department with managing the EAB efforts in Illinois:



PA 95-0183 allows municipalities to revoke EAB-infested ash trees from property not owned by a municipality when owner refuses to remove infested tree;

PA 95-0309 mandates administrative rules regarding the importation of firewood; and

PA 95-0588 that established a revolving loan program through the Illinois Finance Authority (IFA) to assist in replanting of trees in EAB quarantined areas.



Legislation initiated by the Bureau of Agriculture Products Inspection which became law on July 1, 2007 requires fertilizer businesses to keep a record of ammonium nitrate sales.

In 2006 and 2007, the Illinois State Fairgrounds hosted the National High School Rodeo Finals. The event brought more than 1,500 contestants to Springfield in both 2006 and 2007. There were approximately 5,000 people on the grounds for the duration of the event providing a positive impact on city and state revenue.

Through federal cooperative agreements with the United States Department of Agriculture, the IDOA increased Avian Influenza (AI) surveillance efforts. The Department was able to provide reimbursement funding for these and other Low Pathogenic Avian Influenza (LPAI) and High Pathogenic Avian Influenza (HPAI) surveillance activities within the poultry industry throughout Illinois through a Cooperative Agreement with USDA/APHIS/VS.

Animal Health staff continued to enroll livestock premises to the voluntary National

Animal Identification System (NAIS). At the close of fiscal year 2007, there were 7,138 accounts that had been established in Illinois, covering 7,851 individual premises.

In 2007, the **Bureau of Land and Water Resources** distributed nearly \$11 million in funds to Illinois' 98 Soil and Water Conservation Districts (Districts) for programs aimed at reducing soil loss, enhancing agricultural productivity and protecting water quality.

The Department spearheaded changes to the Illinois Diseased Animals Act to allow for quarantines based on suspicion of disease or contamination, which would bolster livestock industry safeguards should a foreign animal disease outbreak occur.

Numerous other **accomplishments related to emergency response and preparedness have been made:** training 35 staff (including some field inspectors) in the Incident Command System (ICS), a nationally recognized system used during all emergency response events; opening a Bio-Security Level 3 (BSL3) laboratory at the animal disease lab in Galesburg (a designation that allows IDOA to safely test for potential zoonotic and foreign animal diseases); revising testing requirements for animals entering Illinois; and the hiring of 10 meat inspectors and 3 consumer safety officers to implement the Governor's initiative to provide further safeguards against BSE.

The Department established the Anhydrous Ammonia Security Grant Program designed to provide funds to help deter the theft of anhydrous, which is a key component in the illegal production of methamphetamine. More than \$600,000 in grants were awarded to 89 companies. Grantees used funding to obtain more than 6,019 locking devices for anhydrous ammonia tanks, five added marking agents (GloTell) to their anhydrous ammonia tanks, 19 installed security cameras, and 24 increased lighting at their anhydrous ammonia storage locations.

The **DuQuoin State Fair** has increased non-fair income from \$33,312 in 2003 to \$568,500--a 360% increase. That equates to an average increase per year of about \$107, 037. The Southern Illinois Tourism Council has estimated the economic impact for the DuQuoin State Fair has increased from between \$8-10,000,000 annually, and non-fair events impact has increased from \$1 million in 2003 to \$8 million in 2007.

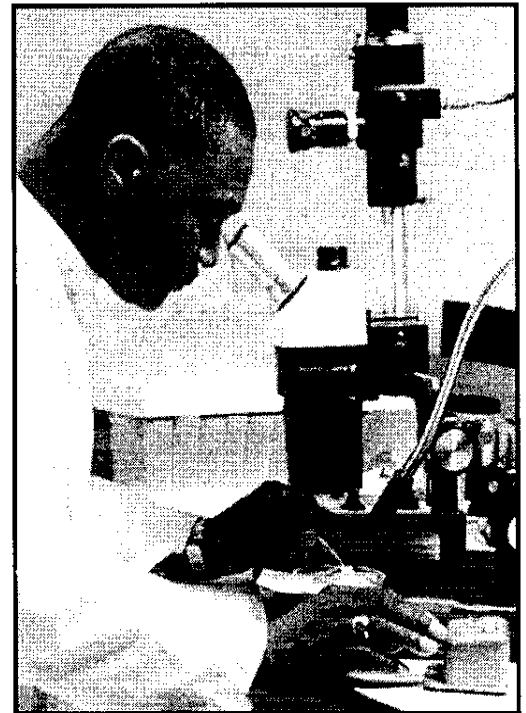
Agency legal staff worked with the Attorney General's Office to defend a statewide ban on horse slaughter for human consumption. The successful litigation resulted in a halt to processing horse meat in Illinois for human consumption.

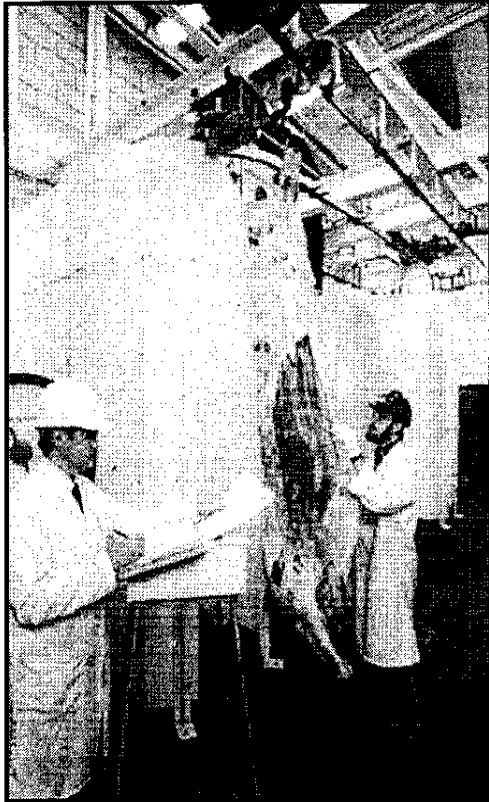


Various agency staff worked closely with the Muslim community to help implement rules for disclosure requirements of Halal food under the Consumer Fraud and Deceptive Business Practices Act.

IDOA Bureau of County Fairs and Horse Racing implemented a **random drug testing program** to protect the integrity of racing at fairs in Illinois.

Beginning in 2005, IDOA funded a project to verify the financial health of grain warehouse licensees. The





model created identifies licensees with potential financial problems and dictates whether greater IDOA scrutiny is warranted. As a result, the number of exams being conducted has increased. To further complement the computer modeling tool, the Bureau of Warehouses funded an actuarial study, which found that the Grain Insurance Fund (GFI) should have a minimum balance of \$10 million at all times to prevent catastrophic losses.

Since 2003, and through the end of the 3rd quarter of 2007, the Illinois Department of Agriculture's Bureau of Marketing & Promotion has participated in 67 domestic and international trade shows, hosted 23 foreign buyers' missions and industry tours, facilitated 22,941 buyer-seller introductions and disseminated 33,790 trade leads to Illinois companies.

The combination of these has resulted in \$132 million in actual sales and \$188 million in projected sales. For small and medium-sized Illinois agribusiness and food processing companies, staff also organized and participated in 620 outreach and educational events reaching 305,725 consumers.

There are currently 56 Agricultural Areas (AA) in 23 counties totaling 121,405 acres. A new law now authorizes counties with populations greater than 600,000 to establish AA's of no greater than 100 acres. All other counties will be authorized to establish a minimum of 350 acres as AAs.

AGRICULTURE PRODUCTS INSPECTION

The Bureau of Agriculture Products Inspection (BAPI) works to protect manufacturers, distributors, producers, consumers and the environment through inspecting, sampling, and analyzing feed, seed and fertilizer products and facilities throughout Illinois. The combination of inspections performed by the bureau ensures that consumers and producers get what they pay for.

BAPI has five key functions:

1) **Truth-in-labeling.** BAPI reviews feed, fertilizer, seed and soil labels for accuracy and truthful labeling. In FY07 3,222 feed labels, 747 fertilizer labels, and 41 soil amendment labels were reviewed.

2) **Seed testing.** BAPI tests seed samples for purity, germination and weed content. In FY07 1,551 official seed samples were collected by state inspectors, a 5-percent increase from FY06. The seed laboratory also analyzes seed samples sent in by customers (service samples). This year the bureau received and analyzed 3,032 service samples. The seed lab also performed a noxious weed survey on 275 wheat samples collected by inspectors.

3. **Fertilizer oversight.** During FY07 a total of 1,623 fertilizer samples were collected and analyzed to make sure the end user was receiving what they paid for. There were 730 firms licensed and 6,793 products registered in the state.

License and registration fees brought in \$96,677 and inspection tonnage fees brought in more than \$1 million. Half of these fees go to general revenue and half to the fertilizer control fund. Out of the fertilizer control fund, the bureau administers the Fertilize Research and Education Council. This council funds fertilizer research projects and education outreach programs. The chemistry lab works with the Illinois





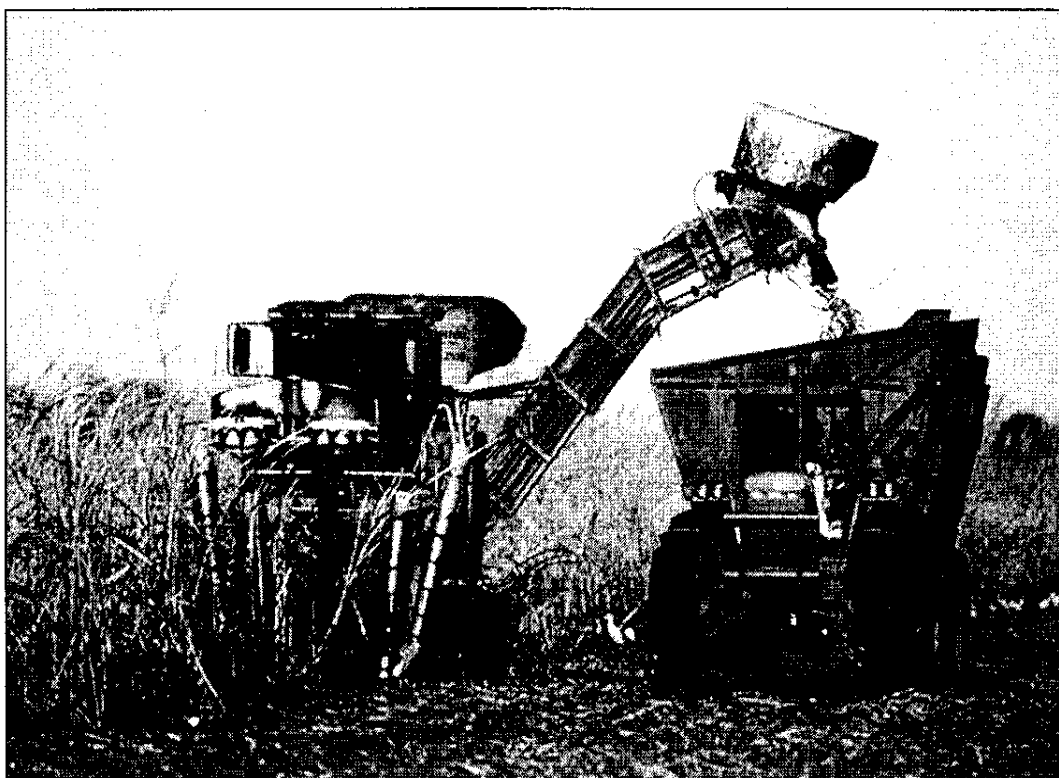
Department of Transportation (IDOT) on the annual Illinois Limestone Program. The lab analyzes 173 limestone samples for coarseness and breakdown ability. The results are reported in the Illinois Voluntary Limestone Producer Information booklet and are important to anyone who uses concrete or road rock, who needs to know the coarseness of the rock, and to ag producers who want to know the release rate of the limestone they apply to corn and soybean fields so they can maintain the proper Ph level.

4) Anhydrous ammonia oversight. The bureau's inspectors conducted 842 inspections of anhydrous ammonia facilities and examined 24,503 nurse tanks in FY07. Inspections are carried out as required by the rules and regulations relating to the handling of anhydrous ammonia and low pressure nitrogen solutions, equipment, containers and storage facilities.

Anhydrous ammonia is the most dangerous material handled by farmers and dealers. Inspectors provide an important consumer protection function by verifying that storage tanks, applicators and nurse-tank wagons are in safe operating condition. Inspectors also confirm that tanks have the proper safety relief valves, excess flow valves and break-away couplings on load out platforms. Inspectors also verify the hoses on the applicators are in good condition. The bureau, in cooperation

with the Illinois Fertilizer and Chemical Association, puts on safety training classes for employees of the anhydrous ammonia facilities in the state. This attendant training is required under the 2003 Anhydrous Ammonia Rules and Regulations. In FY07, 744 attended these training sessions, an increase from 2006 when 515 attended. There have been 3,462 people pass the bureau's safety training class and be certified as a competent attendant since 2003.

5) Feed oversight. The bureau collected and analyzed 3,066 feed samples in FY07. This was an 8.8 percent increase from 2006. These samples are tested for label guarantees to make sure the end user is receiving what they are paying for and to make sure the feed is safe for animal consumption. License fees produced \$31,575, inspection tonnage fees \$654,405, and pet food registration \$517,688. Half of these fees go to general revenue and half to the feed control fund which the bureau



uses to finance its feed program. The bureau performed 246 Good Manufacturing Practice (GMP) and Bovine Spongiform Encephalopathy (BSE) inspections at the state feed mills and rendering facilities. The bureau also performed 13 GMP and 100 BSE inspections at feed mills under contract for the Food and Drug Administration (FDA) in FY07. The bureau also is involved in a cooperative agreement with FDA to perform 200 BSE on-farm inspections



and collect and analyze 500 cattle feed samples to make sure cattle are not being fed ruminant protein in Illinois. The bureau is in its third year of a three year cooperative agreement. The FDA feed mill contract in FY07 brought in \$54,865 and the FDA cooperative agreement brings in \$233,528 per year.

Additional AGPI Duties

Anhydrous Ammonia Security Grant Program

This program was designed to help prevent the theft of anhydrous for use in the “cooking” of methamphetamine. A total of \$1.6 million was appropriated to the program to make grants for this purpose. Eighty-nine companies participated in this program, and \$617,620 was awarded. The grantees obtained 6,019 locking devices for anhydrous ammonia tanks, five companies requested funds for marking agents, nineteen companies installed security cameras, and twenty-four companies increased lighting at their anhydrous ammonia locations.

Illinois Soybean Rust Program

Bureau personnel were instrumental in putting together the Illinois Soybean Rust Program. The program is responsible for detecting if rust is in Illinois or appears to be heading to Illinois and reporting it to proper authorities and alerting soybean producers of proper steps that can be used to control this disease and cause as little damage as possible to the soybean crop. Soybean rust has been detected in Illinois in 2005, 2006, and 2007, fortunately each year the rust arrived too late in the growing season to damage the soybean crop.

Mycotoxin Surveys

API Bureau conducts a mycotoxin survey each year to make sure grain in Illinois does not contain high levels of mycotoxins that could be harmful to animals that the grain is fed. The bureau conducts a wheat survey that tests for vomitoxin in wheat. In FY07, the bureau collected and analyzed 320 wheat samples. In the fall, the bureau inspectors collect, and the Chemistry Lab analyzes corn samples collected throughout the state for aflatoxin and fumonisin. In FY07 (fall 2006), 392 samples were collected and analyzed. Low levels of aflatoxin and moderate levels of fumonisin were found in the corn samples. The results of these surveys are sent to the grain elevators that participated in the survey and to the feed mills in Illinois. It is recommended to the feed mills if high levels of these mycotoxins are found in their area, that grain used as animal feed should be tested for vomitoxin, aflatoxin, and fumonisin.



E85 Trucks

In the last 3 years, the Bureau of API replaced nine out of eleven inspectors' state trucks with E85 trucks. In September of 2007, these trucks used 865 gallons of E85 fuel out of a total use of 1,325 gallons (65%).

Changes in Legislation

The bureau worked with members of the Illinois Legislature to help write the ammonium nitrate bill that became law on July 1, 2007. This bill requires fertilizer businesses to make a record of who they sell ammonium nitrate to. This law was created because ammonium nitrate was used in the first attack on the

World Trade Center and the bombing of the Murrah Federal Building in Oklahoma City.

Fertilizer Research and Education Council

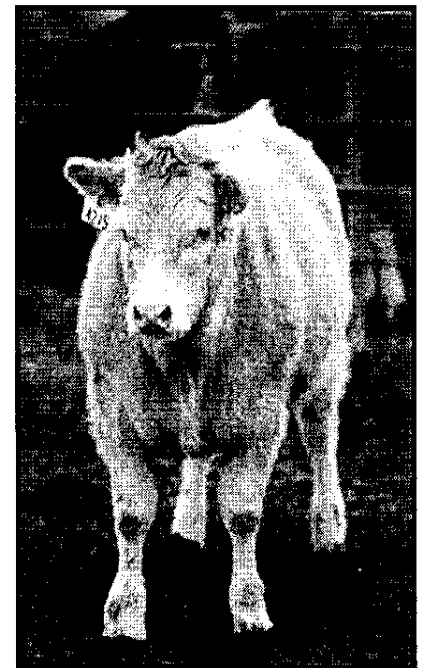
The Fertilizer Research and Education Program was established to provide funds for research or educational projects relating to fertilizer utilization. Since the first approval of projects in 1990, the Department has provided funds in the amount of \$7.9 million for research and education projects concerning fertilizer. A summary of the information and data for each project has been published yearly in the Illinois Fertilizer Conference Proceedings. At the conclusion of each project, the information obtained will be distributed so that utilization of the research findings may be implemented. The program has provided funding for 94 separate projects.



BUREAU OF ANIMAL DISEASE LABORATORY

The Bureau of Animal Disease Laboratory-Centralia and the Bureau of Animal Disease Laboratory Galesburg, via the practicing veterinarian, provide assistance to livestock and/or pet owners experiencing problems relative to animal diseases. They also provide support for various disease control and eradication programs.

Both the Centralia and Galesburg labs are better described as the Illinois Department of Agriculture Animal Health Surveillance - Food and Water Safety Laboratories. In addition to being full service animal diagnostic laboratories accredited by the American Association of Veterinary Laboratory Diagnosticians (AAVLD), the Centralia Laboratory maintains accredited food and water safety departments while the pathology services and the molecular biology departments at Galesburg provide continuous surveillance for disease of zoonotic (transferred from animal-to-human or human-to-animal) importance such as West Nile and avian influenza viruses.



In cooperation with the United States Department of Agriculture, the State-Federal Serology Laboratory is operated in Springfield. The principal activity of this laboratory is the testing of blood and milk for specific disease antibodies. These three laboratories comprise the AAVLD accredited Illinois Department of Agriculture Laboratory System. By statute, the primary purpose of the Diagnostic Laboratories is to monitor the health of both domestic animals and wildlife, and to provide diagnostic and regulatory services to Illinois consumers.

The objective of the laboratories is to be constantly alert for diseases of significance, whether naturally occurring or the result of bioterrorist introduction of a foreign animal disease or poisonous chemicals. The laboratories are the first line of defense against the economic catastrophe that would result from an undetected foreign animal disease such as classical swine fever or foot and mouth disease. They have highly trained and dedicated staff who serve a critical purpose to all residents of Illinois.



Animal Disease Laboratory-Centralia

The Centralia Animal Laboratory (CADL) provides

bacteriological and toxicological food safety testing for the Illinois Department of Agriculture Meat and Poultry Inspection Service. The lab routinely receives samples from the state meat inspectors and processing facilities to monitor for bacteriological and/or chemical contamination.

The food safety department is accredited by the U.S. Department of Agriculture Food Safety Inspection Service (USDA/FSIS) to perform these analyses. The CADL is a member of the Food Emergency Response Network (FERN), linking the laboratory directly to FSIS via the LEXNET, allowing for continual monitoring of the

safety of our nation's food supply by the USDA. The water potability department is accredited by the Illinois Department of Public Health to analyze samples from private and municipal drinking water supplies for harmful bacteria.

The toxicology department is unique in that it provides diagnostic support not only for CADL, but also for the Galesburg Animal Disease Laboratory and, to a limited extent, the University of Illinois Veterinary Diagnostic Laboratory's Toxicology Department. The Centralia laboratory's toxicology department is one of only two laboratories in the United States accredited by FSIS to perform arsenic analysis on food samples.

The laboratory routinely tests samples of chicken tissue to meet export requirements to Russia. The department is also FSIS accredited to analyze food samples for chlorinated hydrocarbons and polychlorinated biphenyls (PCBs). In addition to testing animal samples to confirm disease, the CADL performs thousands of regulatory tests each year to fulfill intrastate, interstate and international export requirements for domestic livestock. The CADL is the only laboratory in Illinois that performs many of the tests required for livestock export.

THE CADL is a member of the USDA's National Animal Health Laboratory Network (NAHLN) providing surveillance for scrapie in sheep and goats and chronic wasting disease in deer and elk. The CADL processes 50 to 100 sheep brain samples per week submitted by the USDA for scrapie analysis. These samples are collected at a slaughter plant near Chicago. The laboratory received \$25 per sample from the USDA to perform this service.

Animal Disease Laboratory-Galesburg

The Galesburg Animal Disease Laboratory (GADL) provides service to various state agencies (Illinois Department of Natural Resources (IDNR), Illinois Department of Public Health (IDPH), Illinois Natural

STATE-FEDERAL SEROLOGY LABORATORY SUMMARY

| | | |
|------------------------------------|-------------------------------|---------------|
| Brucella | Caprine..... | 51 |
| Blood Samples | Equine..... | 0 |
| Bovine | Llama..... | 27 |
| Regular (sale, show, area)..... | Bison..... | 1 |
| Slaughter est. (MCI)..... | Deer..... | 24 |
| Auction market | Ovine..... | 1 |
| Problem herd (BPH) | Elk..... | 1 |
| TOTAL | Misc..... | 0 |
| | TOTAL: 98 | |
| Porcine | Milk Samples (BRTs)..... | 0 |
| Regular..... | BRT Elisa..... | 3,234 |
| Market swine (MST)..... | Equine infectious anemia..... | 52,923 |
| TOTAL..... | | |
| | GRAND TOTAL..... | 84,277 |
| TOTAL Brucella Testing..... | | 31,354 |





Animal Health.

History Survey (INHS)), federal agencies (National Veterinary Services Laboratory (NVSL), National Animal Health Laboratory Network (NAHLN), USDA APHIS Veterinary Services), practicing veterinarians, and livestock owners. Virtually all citizens throughout the state benefit from the activities of the laboratory. The laboratory performs both regulatory (monitoring of diseases specified by law—pseudorabies, brucellosis, foreign animal diseases, etc.) and general diagnostic work for all of these entities. Foreign animal disease diagnosis and surveillance is also an important activity of the laboratory. The laboratory has two trained foreign animal disease diagnosticians and the capability to screen for several important foreign animal diseases. The laboratory now has the ability to test for a number of foreign animal diseases, including avian influenza (matrix protein, hemagglutinins 5 and 7), classical swine fever (hog cholera), foot and mouth disease, and avian Newcastle disease by real-time polymerase chain reaction (RT-PCR) testing. Real-time PCR testing for bovine virus diarrhea (types 1 and 2) and bovine paratuberculosis (Johne's disease) are also now available.

BUREAU OF ANIMAL HEALTH

Animal Health is responsible for programs aimed at control or eradication of swine and bovine brucellosis, bovine tuberculosis, pseudorabies in swine, cattle scabies, equine infectious anemia, equine viral encephalitides, pullo rumtyphoid, *Mycoplasma gallisepticum*, and *Mycoplasma synoviae* in poultry and/or turkeys, and a number of other animal diseases when occurrence of a disease warrants regulatory action. Five licensing and/or registration Acts relating to animal health are administered by personnel in

BOVINE BRUCELLOSIS — There were no new brucellosis infected herds disclosed during the year and Illinois maintained its Brucellosis Free status. Under the joint State-Federal indemnity program, funding is available to pay indemnity for brucellosis. There were no indemnity claims paid during the year.

BRUCELLOSIS RING TEST (BRT) — This test is conducted on samples of milk collected at dairy plants throughout the state. Samples are collected four times per year as one of the requirements for a Class Free state. A total of 2,661 samples were collected during the year.

CERTIFIED BRUCELLOSIS-FREE CATTLE AND GOAT HERDS

There were 12 cattle herds, with a total of 1,311 cattle, certified as brucellosis-free as of June 30. There was one goat herd, with a total of 32 goats, certified as brucellosis-free as of June 30.

TUBERCULOSIS

Illinois maintained its Bovine Tuberculosis Accredited Free State status throughout the year. There was one goat herd with a total of 32 head accredited as tuberculosis-free as of June 30.

JOHNE'S DISEASE

Seven herds are operating under a cooperative vaccination agreement. Certificates of vaccination were filed for 313 calves during the year. A Voluntary Paratuberculosis (Johne's disease) Certification Program is offered to owners of cattle, bison, buffalo, sheep, goats, llamas and members of the cervid family giving them the opportunity to test and certify their herds or flocks based on the probability of the herd or flock being free of Johne's disease. For cattle, the program consists of annual tests alternating between a serum test and a fecal culture test of the entire herd annually. For all other species, an annual complete herd negative fecal culture is required. As of June 30, three elk herds, two goat herds, 19

beef herds and seven dairy herds had been tested and certified under the program. A Risk Management Program for infected cattle, bison, cervid and goat herds is available. The program enables producers to determine the incident rate, if any, of Johne's disease in their herds, and use the herd level as a marketing tool. Enrollment in the program also removes movement restrictions on herds with culture positive animals. As of June 30, 110 cattle herds and three goat herds were enrolled in the program. On June 30, 2007, 113 cattle herds, one bison herd, three deer or elk herds, eight goat herds and one sheep flock were under restriction due to Johne's disease.



CATTLE AND SWINE DISEASE RESEARCH

Funds for cattle and swine disease research projects at the College of Veterinary Medicine, University of Illinois, were again a part of the Department's budget. Cattle disease research received \$16,800, and more than \$35,000 was allocated for swine disease research.

PSEUDORABIES

Illinois retained its Pseudorabies Stage V-Free status. Testing of breeding animals at slaughter continued. Samples were collected from all identified sows and boars slaughtered at state inspected slaughtering facilities and at the Bob Evans plants at Galva, Johnsonville, Momence, and at Pork King, Marengo. Reports on positive animals were also received from Alabama, Arkansas, Iowa, Kansas, Kentucky, Michigan, North Carolina, Ohio, Pennsylvania, Tennessee, and Wisconsin. There was one positive sample out of 72,327 samples reported. Testing was done in the traced back-herd with no positive animals disclosed. Tracing of negative slaughter samples was performed during the year to show that the entire state is being sampled through slaughter surveillance. A total of 32,678 negative samples were traced, primarily from the Illinois slaughter facilities. These samples traced back to 94 out of 102 counties in the state. Statewide, there were no cases of pseudorabies confirmed by laboratory diagnosis in FY07.

SWINE BRUCELLOSIS

Illinois continued as a validated brucellosis-free state. There were 168 validated Brucellosisfree swine herds as of June 30. Identification of slaughter swine continued and 181,796 tags were applied to 163,075 sows, 6,417 boars and 12,304 swine of unknown sex.



REPORTABLE DISEASES

According to the regulations pertaining to the Illinois Diseased Animals Act, all suspect cases of many diseases shall be reported to the Division. No confirmed cases of the following reportable diseases were received during FY07: avian influenza; anthrax; cattle scabies; Mycoplasma gallisepticum; and Mycoplasma synoviae (turkeys). Animal Health continues to participate in the National Animal Health Reporting System, in which the incidence of many diseases is being tracked nationwide.

WEST NILE VIRUS

The first equine case of West Nile virus



was reported in Marion County on August 22, and by the time the threat ended with the killing frost, 21 confirmed cases had been counted in Illinois, in 17 out of 102 counties. The outcome was known in all of the cases – in seven cases (33.3%), the animal either died or was euthanized. None of the animals had been vaccinated.

CHRONIC WASTING DISEASE (CWD)

Two chronic wasting disease (CWD) herd monitoring programs are available for deer and elk herds; the certified and the contained monitored herd programs. Herds are required to submit an annual herd inventory to the Department, submit the brains of any animals that die or are slaughtered for CWD examination and either uniquely identify each animal, or uniquely identify each animal entering or leaving the herd.

Chronic wasting disease is a fatal, neurological disease found in deer and elk. The disease attacks the brains of infected animals, causing them to become emaciated, display abnormal behavior, lose coordination and eventually die. CWD continued to be diagnosed in wild deer in Illinois. A total of 51 native whitetail deer in Boone, De Kalb, Mc Henry, Ogle and Winnebago counties had been diagnosed with CWD during the fiscal year.

HEALTH CERTIFICATES

During FY07, 3,660,699 animals were approved and shipped out of state. This involved 20,872 shipments containing 81,779 cattle, 10,411 horses and mules, 3,524,932 swine, 7,696 sheep and goats, 3,655 dogs, 818 cats, 160 deer, 10 bison, 133 elk, and 31,105 miscellaneous animals.

AVIAN INFLUENZA

Funding assistance from the United States Department of Agriculture was made available to increase the surveillance for avian influenza (AI). The goal of the project was to help ensure that eggs and poultry that are raised for the dressed-bird market, sold in retail markets or restaurants are free of avian influenza. Importance was placed on maintaining consumer confidence in Illinois poultry and poultry products. To enhance the ability to detect high pathogenic avian influenza (HPAI) in the U.S., the voluntary program enabled the Department to pay for necropsies (autopsies) of poultry and appropriate testing for surveillance of Avian Influenza.

Flock owners could submit up to 10 birds per flock every 6 months for necropsy, with no charge if the birds were submitted to the Animal Disease Laboratory in Centralia or Galesburg or the University of Illinois, College of Veterinary Medicine's Diagnostic Laboratory. In addition, the agreement also included blood sampling for AI. The flock owner was reimbursed for the trip charge for a licensed veterinarian to travel to the farm. In addition, \$3 was paid per bird tested, with the blood sample submitted for testing at the Animal Disease Laboratory in Galesburg.

The flock owner could submit up to 30 blood samples per flock every six months. The Department was able to provide reimbursement funding for these and other Low Pathogenic Avian Influenza (LPAI) and High Pathogenic Avian Influenza (HPAI) surveillance activities within the poultry industry throughout Illinois through a Cooperative Agreement with USDA/APHIS/VS. A total of 1,105 birds were tested for avian influenza.

NATIONAL ANIMAL IDENTIFICATION SYSTEM (NAIS)

Animal Health continued to enroll livestock premises and related industries in the voluntary National Animal Identification System (NAIS). The goal of the NAIS is to have the capability to identify all animals and premises that

have had direct contact with a foreign animal disease or a domestic disease of concern within 48 hours after discovery. Identifying premises that allow commingling of animals (production points) is the foundation of the NAIS and must be established before animals can be tracked. As of June 30, 2007, 7,138 accounts had been established in Illinois, covering 7,851 individual premises.

SCRAPIE

There were 45 flocks enrolled in the Voluntary Scrapie Certification Program at the end of the year. There were no source or infected flocks located in the state. Illinois is a "consistent state" under the Scrapie Uniform Methods and Rules.

VETERINARY ACCREDITATION

During the year, 156 veterinarians received their accreditation under the cooperative veterinary accreditation program of the United States and Illinois Departments of Agriculture.

BUREAU OF ANIMAL WELFARE

Animal Welfare is responsible for the administration of program activities relating to the Animal Welfare Act, Humane Care for Animals Act, Dead Animal Disposal Act, Horse Meat Act, Brand Act, Domestic Animals Running at Large Act, Dangerous Animals Act, and an Act to Prohibit the Feeding of Garbage to Swine, other Animals or Poultry. Animal Welfare is also responsible for the general supervision of county animal control programs as required by the Animal Control Act.

ANIMAL WELFARE INVESTIGATIONS

During the fiscal year, the seven animal health and welfare inspectors investigated 538 complaints pertaining to the Animal Welfare Act and 1,141 complaints pertaining to the Humane Care for Animals Act. These inspections resulted in 184 Notices of Violation being written, and 14 cases presented to local State's Attorneys for prosecution. Three impoundments were also issued.

ILLINOIS APPROVED HUMANE INVESTIGATORS

Under the Humane Care for Animals Act, the Department approves of qualified persons to perform investigative activities pertaining to suspected violations of this Act. These individuals must be affiliated with a humane society or governmental agency and must pass a test issued by the Department every other year regarding their qualifications. Qualifications to become an approved humane investigator include knowledge of the provisions of the Act and expertise in the investigation of complaints relating to the care and treatment of animals. At the close of the fiscal year, there were 244 Illinois Approved Humane Investigators.

INSPECTION OF LICENSED FACILITIES

A total of 1676 inspections were performed during the fiscal year for the facilities licensed under the Animal Welfare Act, the Dead Animal Disposal Act, and the Horse Meat Act. Thirteen establishments were refused licensing



LICENSES AND/OR REGISTRATIONS ISSUED BY ANIMAL WELFARE

| | |
|---|------|
| Animal control facilities, animal shelters, catteries, dog dealers kennel operators, pet shop operators, guard dog services, foster homes..... | 2867 |
| Dead Animal Disposal Trucks..... | 578 |
| Class A license (dead animals only)..... | 1 |
| Class B license (parts of bodies of animals, scrap or grease)..... | 14 |
| Class C license (poultry or parts of poultry)..... | 0 |
| Class D license (fish or parts of fish)..... | 0 |
| Class E license (blender)..... | 3 |
| Class F license (docks for collection of carcasses, scrap and grease, etc.)..... | 15 |
| Class G license (animal collection service)..... | 10 |
| Class A and B license (combining two types of operations)..... | 1 |
| Class A and F license (combining two types of operations)..... | 1 |
| Class B and C license (combining two type of operations)..... | 1 |
| Class B and E license (combining two types of operations)..... | 2 |
| Class F and G license (combining two types of operations)..... | 3 |
| Class A, F & G (combining three types of operations)..... | 2 |
| Class A, B, E, & F (combining four types of operations)..... | 1 |
| Class A, B, C, D & E license (combining five types of operations)..... | 1 |
| Class A, B, C, D, E, F & G) license (combining seven types of operations).... | 1 |
| Total..... | 56 |
| Horse Meat Slaughterers, Processors, or Wholesale Distributors | 11 |
| Livestock Brands (registrations issued) Number of brands renewed..... | 65 |
| New brands registered..... | 13 |
| Total Active..... | 438 |

during the year.

HORSE MEAT SLAUGHTER

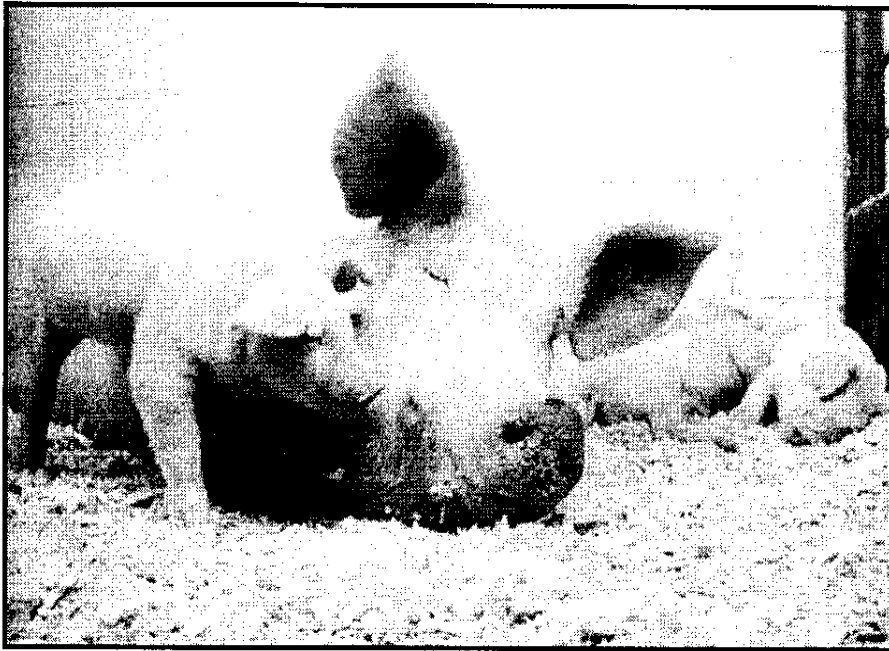
ACT – On May 24, 2007, Governor Rod R. Blagojevich signed legislation that banned the slaughter of horses in Illinois for consumption. The legislation also banned the importing or exporting of horse meat for human consumption.

COUNTY FAIRS AND HORSE RACING

The Bureau of County Fairs and Horse Racing administers and distributes almost \$8.1 million in funds to 104 county fairs, 100 4-H Clubs and 25 vocational agriculture sections (Ag.Ed.).

The program funds are for premium and/or rehabilitation reimbursement. About 400,000 entries at county fairs are eligible for premium reimbursement annually. In addition, approximately 30,000 4-H club members and about 300 high schools benefit from the agricultural education program for premium reimbursement. About 4,400 acres in the state are eligible to receive rehabilitation reimbursement for maintenance and/or construction at county fair sites. The following are all considered eligible projects under the rehabilitation program: equipment purchases and repairs, fuel, racetrack maintenance, casualty and liability insurance (not including personal liability), construction or purchase of permanent facilities and systems stored on fairgrounds, labor, interest on building/construction/real estate loans, building materials and supplies, and





initial "one-time" purchases of computers and accessories.

The Department's horse racing and breeding are known throughout the country. Illinois' standardbred, quarter horse, and thoroughbred breeding and racing programs are among the top incentive programs in the Nation returning more than \$26 million to horse racing participants through horse racing purses and awards. IDOA registers nearly 2,000 foals, 3,500 mares and 300 stallions annually that participate in the Bureau's racing and breeding programs. Illinois-bred races occur at five Illinois pari-mutuel racetracks, two state fairs and 38 county fairs.

One of the best known races is the

World Trotting Derby held at the DuQuoin State Fair and attracting the world's best trotters for an estimated purse of \$550,000. The 2007 World Trotting Derby winner, Donato Hanover, was chosen the 2007 Horse of the Year.

EGG AND EGG PRODUCTS INSPECTIONS

Division inspectors perform inspections and quality grading of eggs and egg products sold in Illinois in accordance to the Illinois Egg and Egg Products Act, ILCS, Ch. 410, Par. 615/1 et seq. The Act requires anyone who grades, packs, sells or barter eggs to be licensed with the Illinois Department of Agriculture. Eggs sold for human consumption must be candled, graded, and refrigerated. Egg cartons must be labeled to identify day of pack, grade, size, name, address, and identification of the packer. Inspectors perform inspections at all points of the distribution channel including packing plants, distribution centers, delivery trucks, grocery stores, schools, hospitals, nursing homes, restaurants and bakeries.



The Department provides assistance to the United States Department of Agriculture (USDA) under a cooperative agreement to perform Federal Shell Egg Surveillance on a quarterly basis as mandated by federal law. Inspectors perform grading service on a fee or resident basis as requested under the USDA voluntary program. Four inspectors have achieved USDA certification as Federal Egg Graders. The Illinois Department of Agriculture cooperates with the Food and Drug Administration, the Food Safety and Inspection Service, and the Illinois Department of Public Health to provide uniform enforcement of temperature requirements for eggs at all locations. Eggs are checked in the display case and storage areas. Eggs must be kept below 45 degrees F. Eggs are weighed, checked for damage, candled for quality. Eggs not meeting Weights and Measures standards are taken off sale.

BUREAU OF ENVIRONMENTAL PROGRAMS

The Bureau of Environmental Programs is responsible for executing several state and federal programs for the protection of our environment.

Pesticide Applicator/Operator Certification and Licensing:

Pursuant to the Illinois Pesticide Act, individuals wishing to

purchase and/or apply restricted use pesticides in Illinois are required to successfully complete appropriate competency examination(s) and receive a license from the Illinois Department of Agriculture. Currently, the Department licenses approximately 17,000 private applicators and 17,000 commercial applicators or operators.



Economic Poison Registrations:

All products offered for sale within the State of Illinois that include a "pesticidal" claim must be registered with the State of Illinois. In 2007, 12,417 products and 1,101 companies were registered with the Department of Agriculture as part of the economic poison program.

Nursery Inspection Program:

Pursuant to the Insect Pest and Plant Disease Act, nursery stock products within the State must be annually inspected to aid in the control of various injurious pests and diseases. The Department's staff annually inspects nursery stock (38,683 acres of nursery stock from 809 nurseries were inspected in 2007) and annually licenses more than 3,500 nursery dealers,

allowing them to sell nursery stock on a commercial basis. The Department's personnel also make inspections and issue phytosanitary certificates (10,326 issued in 2007) to allow the shipment of nursery stock to other states as well as other nations. The Department's efforts relative to the detection and eradication or control of exotic pests are conducted under this program as well. The Department currently works to control the spread of the Gypsy Moth through an annual trapping detection program and limited treatment control program in cooperation with the USDA. The Department has worked cooperatively with local units of government and the USDA in efforts to detect and eradicate the Asian Longhorned Beetle that was found in northeastern Illinois in 1998. Most recently, the Department is working with the USDA and various local units of government to detect, control, and eradicate the Emerald Ash Borer, another invasive species that has been discovered in Illinois. Infestations have been discovered in several counties in the northeastern portion of the state, including Kane, DuPage, Cook, and LaSalle counties. Detection surveys and control/eradication strategies are currently being conducted.

Agrichemical Facility and Lawncare Containment Programs:

Pursuant to the Illinois Pesticide Act and the Lawncare Products Application and Notice Act, the Department reviews applications and issues permits for the design, construction, and operation of containment structures and systems intended to prevent the release of pesticides and fertilizers at retail agrichemical and lawncare facilities across the state. Over 1,400 permitted facilities currently operate within Illinois under this program. In addition, facilities are annually inspected to insure that permitted structures are properly constructed and maintained.

Pesticide Container Recycling Program:

The Department annually cooperates with various segments of the agrichemical industry to operate a plastic pesticide container-recycling program. Single-day collection sites at agrichemical facilities are scheduled near the end of the traditional application season. Pesticide users can bring containers for granulation and shipment to a national contractor that utilizes the plastic for the manufacture of other agrichemical-related products. In addition, the Department has established 4 permanent collection sites that are open throughout the year for the collection and granulation of plastic containers. In 2007, the Department collected and recycled approximately 61,400 small containers and 229 mini-bulk containers at single-day collections through the program.





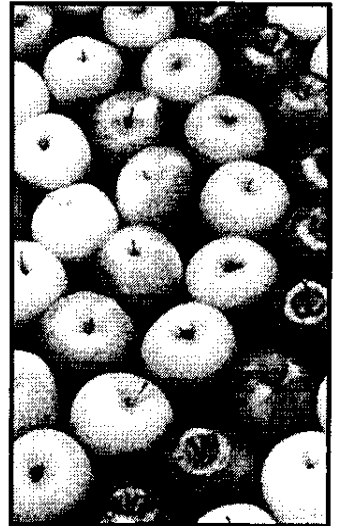
Agrichemical Facilities Response Action Program (AFRAP)

The Department, in cooperation with a governor-appointed board, has developed and implemented a remediation program specifically designed for retail agrichemical facilities. The Department also administers a review and approval program for the land application of pesticide and fertilizer contaminated soil and water resulting from remediation activities at agrichemical facilities or spills during the transport of such products from the agrichemical facility to the site of application.

Livestock Management Facilities Program

The Department administers a certified livestock manager training and testing program pursuant to the Livestock

Management Facilities Act, reviews setback compliance for proposed new facilities, processes lagoon registrations and final certifications, reviews waste management plans, and reviews construction plans for waste handling facilities. In addition, amendments to the Act require that the Department annually inspect anaerobic lagoons that have been registered and certified, as well as conduct informational meetings at the county level for certain proposed facilities. As of the end of 2007, the Department had received and evaluated 1,163 proposed projects including 85 that qualified for a public informational meeting, and conducted 33 such meetings since the inception of the program in 1996.



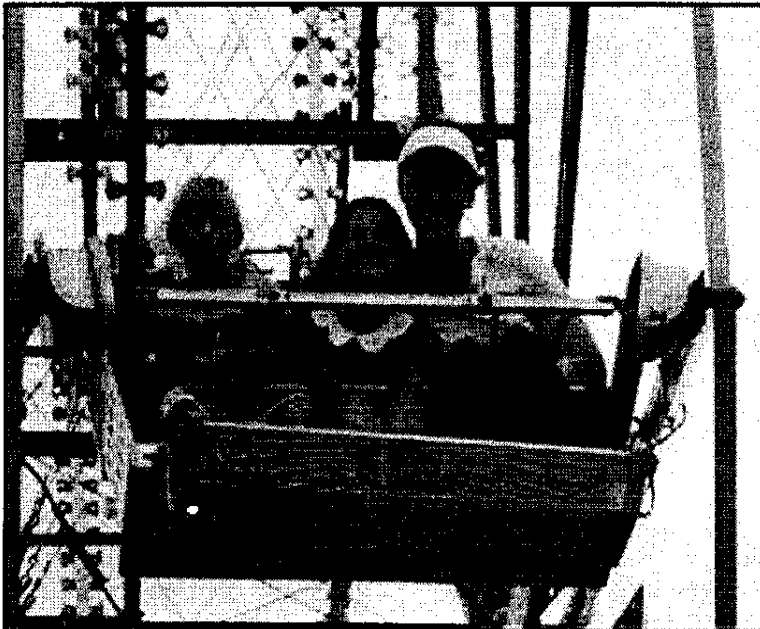
THE BUREAU OF LAND AND WATER RESOURCES

(BLWR) implements the Department's natural resource conservation programs, including the Erosion and Sediment Control Program, the Soil and Water Conservation Districts' Grants-In-Aid Program, the Conservation-2000 Program, the Farmland Protection Program and the Mined Land Reclamation Program.

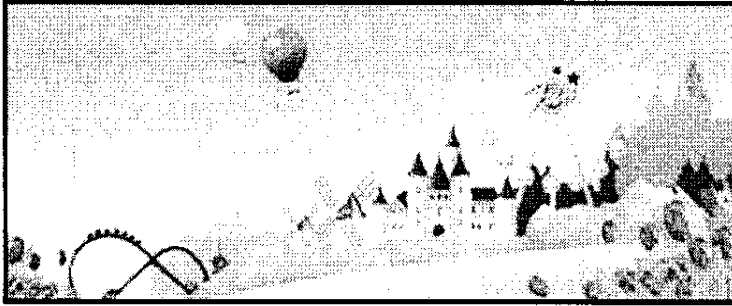
In 2007, the BLWR distributed nearly \$11 million in funds to Illinois' 98 Soil and Water Conservation Districts (Districts) for programs aimed at reducing soil loss, enhancing agricultural productivity and protecting water quality. Districts provide valuable technical assistance to rural and urban landowners/customers on a variety of natural resource issues.

These Districts offer help on any of the following topics: soil conservation, water quality protection, wetlands

management, flood control, soil erosion control at urban construction sites, stream bank stabilization, land use, site suitability and conservation education.



Conservation 2000 (C-2000) is a long-term, state-supported initiative to protect natural resources and enhance outdoor recreational opportunities in Illinois. Several state agencies share responsibility for administering Conservation 2000 funds. The Illinois Department of Agriculture oversees the agriculture resource enhancement portion C-2000, which includes: the sustainable agriculture grant program, the conservation practices costshare program, the stream bank stabilization and restoration program, the water well decommissioning program and the nutrient management program.



The following conservation projects were completed in 2007 under C-2000:

- 1496 Conservation Structures**
- 19 Sustainable Agriculture Projects**
- 108 Water Well Decommissioning Projects**
- 282 Nutrient Management Plans**

The BLWR also administers Illinois' Farmland Protection Program under the auspices of the Illinois Farmland Preservation Act. In accordance

with the Act, when state agency development projects (e.g., highways, airports, facility planning areas, enterprise zones, wildlife habitat acquisition proposals) will lead to the conversion of farmland to non agricultural uses, the sponsoring agency is required to provide written notice to the Department of Agriculture. The Department works with the sponsoring agency to minimize the anticipated farmland conversion impacts that will be generated by the proposed project. In 2007, 316 projects were reviewed for compliance with the Farmland Preservation Act.

Much of the BLWR's effort in 2007 was devoted to working with various utility companies on plans to construct large crude oil and natural gas pipelines across agricultural land. Specifically, the Department worked with these utility companies to ensure that the Department's standards for pipeline construction are followed to protect farming operations and agricultural land from unnecessary damage. Aside from the BLWR working with the utility companies on these projects, the Department also participated in numerous meetings to help acquaint landowners with issues related to pipeline construction. Armed with this information, landowners will be better positioned to negotiate their own easement agreements with the utility companies.

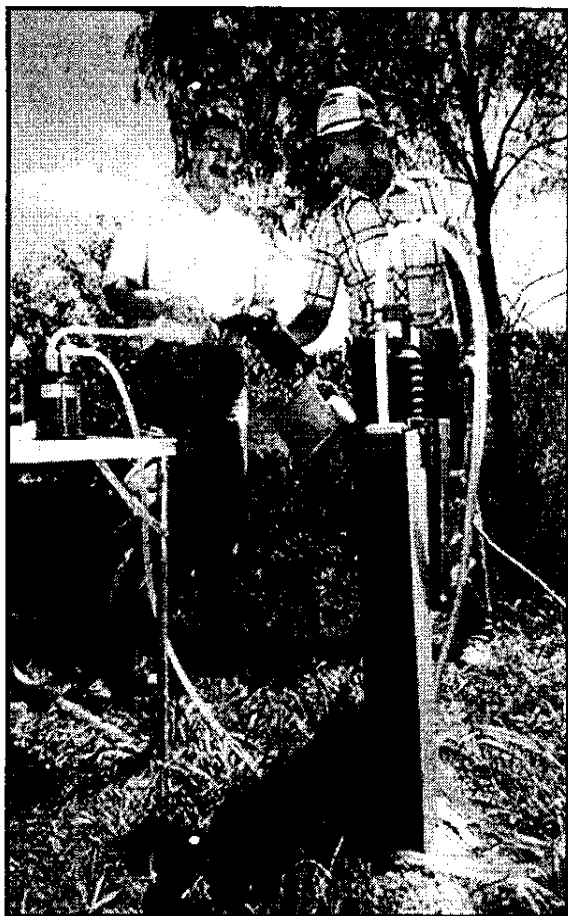
Bureau personnel also provide technical assistance to landowners and local units of government wishing to develop farmland protection programs. Since most projects that convert agricultural land are private sector actions, local farmland protection programs are critical to farmland protection success across Illinois. Specifically, the Department helps on the development of Land Evaluation and Site Assessment Systems (LESA) and Agricultural Areas under the Agricultural Areas Conservation and Protection Act, both of which can help to guide non agricultural development in a manner that protects farmland from needless conversion. As of 2007, there were a total of 37 county LESA Systems and 56 Agricultural Areas in 23 counties throughout Illinois.

As provided by an agreement with the Illinois Department of Natural Resources-Office of Mines and Minerals, the BLWR reviews coal mining permit applications to help facilitate the reclamation of agricultural land affected by coal mining operations. The Department also tests crop yields at reclaimed agricultural land sites to ensure that pre-mining productivity levels have been restored. In 2007, 17 coal mine permit applications were reviewed and 4,025 acres of reclaimed ground were tested for crop yield success.

Education is an important component to all of the Department's programs and the services offered to constituents. When discussing education, it is often assumed it is in regard to educational programs designed for youth. Actually, the Department offers programs to all Illinois citizens.

The Department's Henry White Experimental Farm, near Belleville, offers numerous education opportunities. The farm essentially serves as an outdoor laboratory for sustainable agriculture and the conservation of natural resources in general. The farm has 94 acres containing agricultural crops, wetlands, evergreen and deciduous groves, and restored prairie





and wildlife habitat. Research conducted on the farm involves conservation projects for corn and soybeans, prairie, wetlands and woodlands. Sixty-five of the farm's 94 acres are devoted to the cultivation of crops, mainly corn and soybeans, which demonstrate various sustainable agriculture practices. In addition to providing valuable research information for farmers, the site also hosts an annual field day where specialists explain how practices showcased at the farm benefits the environment. At the September 8, 2007 annual field day, roughly 175 individuals attended the event.

The Department also provides public educational opportunities at Watershed Park, located at the Illinois State Fairgrounds. Watershed Park is an interactive educational exhibit on water quality protection. Featured in the park are numerous exhibit stations where the public learns about water quality issues in a watershed. Watershed Park is open during the Illinois State Fair and by appointment at other times during the year. In 2007, roughly 8,000 individuals visited Watershed Park.

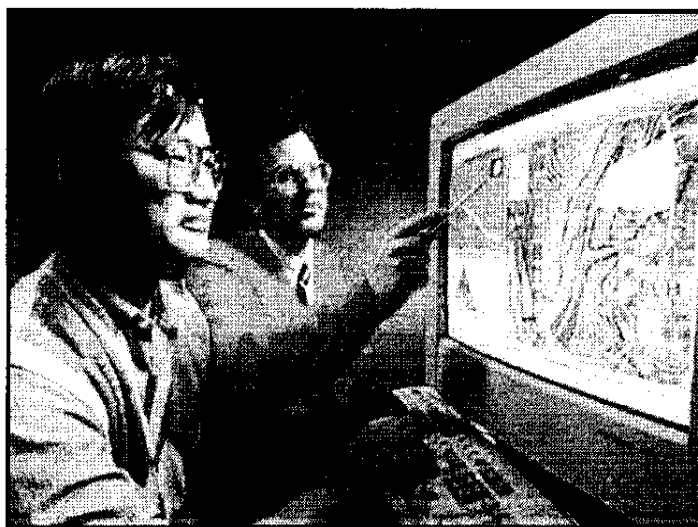
The Bureau of Environmental Programs administers the Illinois Bees and Apiaries Program, designed to assist beekeepers throughout Illinois with the management and protection of honeybee colonies. Under the Illinois Bees and Apiaries Act, the Illinois Department of Agriculture (IDOA) inspects honeybee colonies as a service to the beekeeping industry. The purpose of the inspections is to determine the general health of honeybee colonies and to detect any diseases and pests. Treatment options are offered to the respective beekeeper for combating the diseases and pests. Inspections are provided free of charge. During 2007,

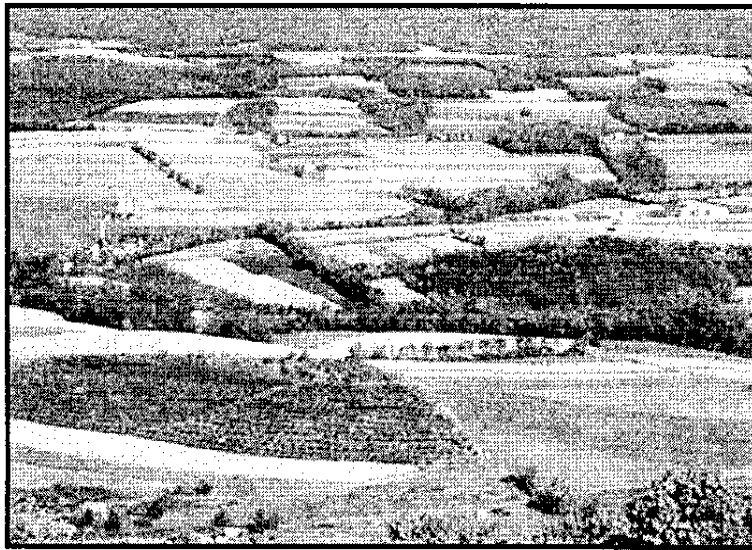
the IDOA inspected 1824 honeybee colonies. The Act also requires beekeepers to register their colonies with the IDOA. Registration is as simple as completing a brief one-page form and mailing it to the IDOA. A registration certificate is provided to beekeepers that register with the IDOA. There is also no charge for registering honeybee colonies with the IDOA.

Colony Collapse Disorder (CCD) is a problem that affected mostly large commercial beekeeping operations in some parts of the United States in 2007. With CCD, most of the adult bees in the colony actually disappear, oftentimes leaving behind the queen, bee brood and large honey stores. With this disorder, there are no signs of the traditional diseases and pests of the honeybee that can cause significant damage to colonies. CCD gained a high level of media attention at the national level during 2007, due to its devastating affects on honeybee colonies and due to the overall importance of honeybees for plant and crop pollination. The cause(s) of CCD is currently unknown and the scientific community is conducting a great deal of research on the problem. There were no confirmed cases of CCD in Illinois in 2007. The IDOA is closely monitoring for CCD symptoms in honeybee colonies as part of all apiary inspections.

MARKETING AND PROMOTIONS

Technological advances, improvements to efficiency and increased competition continue expanding the boundaries impacting Illinois agriculture. Headquartered in Springfield, with trade directors in Mexico City and Hong Kong, Illinois Department of Agriculture Bureau of Marketing & Promotion staff provide daily assistance to Illinois farmers, food processing and agribusiness companies, commodity organizations, foreign buyers looking for new product suppliers, agritourism partners, farmers markets and ag education professionals.





The Bureau has strong working relationships with the U.S. Department of Agriculture's Foreign Agriculture Service (USDA-FAS), Food Export Midwest and the U.S. Livestock Genetics Export (USLGE) organizations which help staff leverage federal dollars to assist Illinois companies with export promotion activities. IDOA also partners with the American Egg Board to promote the egg industry in Illinois through trade shows, informational workshops, advertising, distribution of educational resources and cooking demonstrations. Stakeholders involved in the state's food, feed and fiber industry work closely with Bureau staff to educate consumers about Illinois agriculture's contributions to every day life from food safety measures implemented to safeguard the state's

food supply to the implementation of numerous domestic and international marketing activities to help increase access to new markets for agricultural products produced in Illinois.

In an effort to provide Illinois farmers and food and agribusiness companies with information on various



market development activities, IDOA has created new online communications tools. This includes a new page on the Department's website that is devoted to farmers markets. Over the course of the Marketing and Promotions last year staff has also been involved in the organization of buyers' events for Illinois food companies. Companies are given the opportunity in a unique showcase format to share company information and products with buyers. This format has proven successful as participating companies have reported gaining access to new stores and business opportunities. Marketing staff is also responsible for oversight of the Centennial and Sesquicentennial Farm Programs and the Illinois Product Logo Program.

The Centennial and Sesquicentennial Farm Programs honor generations of farmers that have maintained ownership of farms for 100 and 150 years respectively. More than 8,300 Illinois Farms have been designated as Centennial Farms since the program began in 1972. There is at least one Centennial Farm in each county in Illinois. The Illinois Product Logo Program helps consumers quickly identify Illinois products in their retail establishments whether it is a major grocery store or a local farmers' market. This registered trademark is being used by nearly 500 food and agribusiness companies in Illinois. In addition to domestic marketing activities, the Bureau is actively involved in assisting Illinois food companies, farms and agribusinesses in promoting and selling their products abroad. Industry tours, trade missions, buyers' missions and 22 trade shows are just some of the ways the Bureau accomplishes this. Industry tours are broad-based tours in which the Department brings buyers from around the globe to Illinois

in order to showcase a specific agricultural industry, primarily livestock, dairy, grains, oilseeds, feed ingredients and equipment.

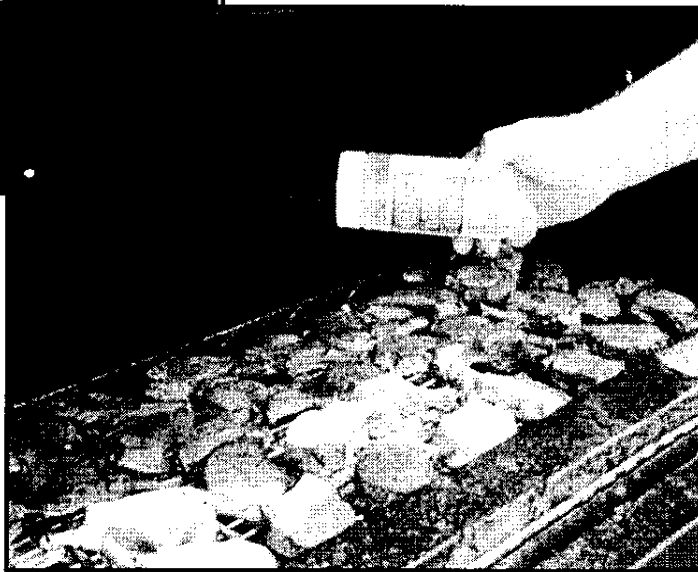
The Department of Agriculture's foreign trade offices recruit buyers. Buyer's Missions are usually smaller groups that are focused on specific products for a specific purchase, i.e. processed or value-added food products, food grade soybeans, breeding swine, cattle, sheep etc. Buyers' missions are sometimes a result of previous industry tours or trade missions,



and are sometimes requested by USDA-FAS personnel or foreign posts.

The Bureau of Marketing & Promotion also organizes and participates in both domestic and international trade shows. Staff recruits Illinois food and agribusiness companies to participate in the Illinois Products Expo, a consumer-focused food show in Springfield, IL, and international food and agribusiness shows in Chicago and around the world.

As a result of staff's efforts to facilitate marketing events both in Illinois and internationally, the Bureau hosted more than forty industry tours, buyers' missions and trade shows; facilitated more than 9,000 buyer-seller introductions; thirty companies were approved to use the Illinois Product logo; and nearly 600 small and medium-sized food and agribusiness companies accessed the Bureau's programs and activities. Nearly 300 farms were certified as Centennial Farms and 88 were certified as Sesquicentennial Farms.



THE BUREAU OF MEAT AND POULTRY INSPECTION

BMPI is responsible for administration of the Meat and Poultry Inspection Act which protects consumers when it comes to ensuring the quality of meat and poultry products and making sure labels are written truthfully. Inspection coverage includes all aspects of intrastate slaughter and processing from antemortem (before death) inspection through slaughter and processing and to the retail level. Inspection personnel

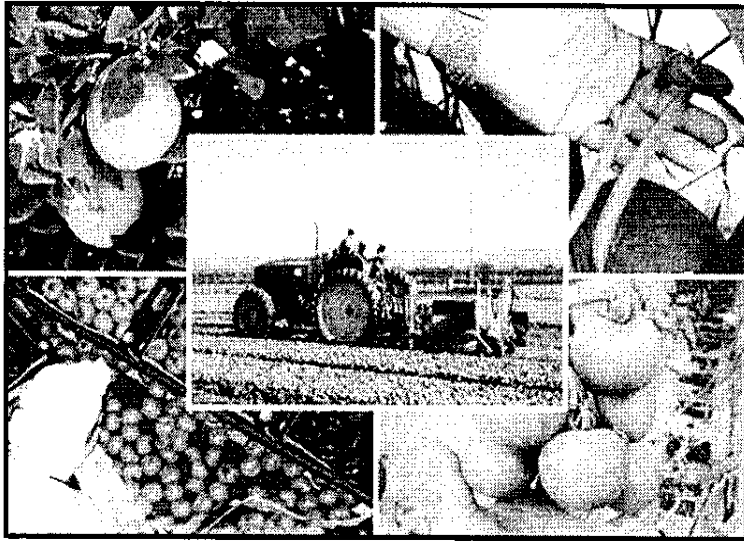
assure each licensed plant complies with Sanitation Performance Standard Operating Procedures (SSOP) and Hazard Analysis Critical Control Points (HACCP). This Bureau provided slaughter and/or processing inspection for 261 establishments and 37 exempt poultry raisers during the fiscal year.

The Meats Chemistry Laboratory in Centralia analyzes meat and poultry samples to determine compliance of the products with the Illinois Meat and Poultry Inspection Act and Regulations. The tests include analyses for the presence of water, fat, antibiotic residues and bacterial contamination. Pathologic exams are also performed on tissues submitted. The Animal Disease Laboratory in Galesburg performs pathologic examinations of formalized tissue sent by IDOA employees and contract veterinarians.

COMPLIANCE PROGRAM

The function of the Compliance Section, as its name implies, involves ensuring compliance with meat and poultry regulations when the meat product leaves the licensed plant. Compliance officers visit warehouses, restaurants, and brokerage firms to inspect meat products used or stored there. They inspect labeling of the products and do follow-up investigations concerning consumer complaints. The compliance section is also in charge of licensing activities for exempt poultry raisers, brokers, and refrigerated warehouses.





In fiscal year 2007 the following was accomplished: 5,899 Reviews 628 Broker Reviews 186 Warning letters and hearings written 110 Seizures resulting in 32,423 pounds of meat product seized, 22,774 pounds destroyed and 1,879 pounds of product released

TRAINING

Training of inspection personnel is carried out on a continuing basis as needed. Training is provided by designated management personnel, by one of three Consumer Safety Officers, or online/CD's provided by USDA/FSIS. Three new meat and poultry inspectors were trained in slaughter and processing in 2007.

BUREAU OF WEIGHTS AND MEASURES

The Bureau of Weights and Measures provides a valuable consumer and commercial protection function by ensuring accurate measurement and delivery of wholesale and retail commodities, monitoring the quality of motor fuel products, and maintain laboratories for metrology standards and grain moisture measurement.

The Bureau's 26 field inspectors are responsible for the annual inspection of more than 127,000 weighing and measuring devices used commercially within the state. Devices that do not meet the specifications and tolerances for the state are rejected and cannot be used until repaired and placed back into service by a registered service company. Retail motor fuel dispensers (gas pumps) account for approximately 94,000 of the devices inspected. Other devices inspected include small scales, livestock scales, vehicle scales, law enforcement scales, LPG meters, moisture meters and fuel meters at petroleum terminals. A device-inspection-fee is charged to support this program.

The Metrology laboratory maintains custody of the Illinois primary standards for Mass and volume. The laboratory is recognized by the United States Department of Commerce's National Institute of Standards and Technology (NIST) by maintaining standards that are traceable to test and calibrates standards used by inspection staff, registered services companies and private industry. The Bureau's Moisture Meter Laboratory prepares grain samples for the inspection of moisture meters.

The Bureau licenses companies who sell, install or repair commercially-used weighing and measuring devices.



Service persons must pass an examination before becoming certified as a registered service technician. There are approximately 1,328 service companies and technicians registered by the Bureau of Weights and Measures. Motor fuel quality is regulated through the analysis of motor fuel samples collected by inspectors. Samples are analyzed to ensure that the product meets the specifications of the American Society for Testing and Materials. Inspectors also ensure that proper labels for octane and ethanol (if present) are posted on the motor fuel dispensers. In addition to annual device inspections, the Bureau also investigates consumer complaints regarding weighing and measuring devices.

SUMMARY OF WORK COMPLETED AT THE MEATS CHEMISTRY LABORATORY

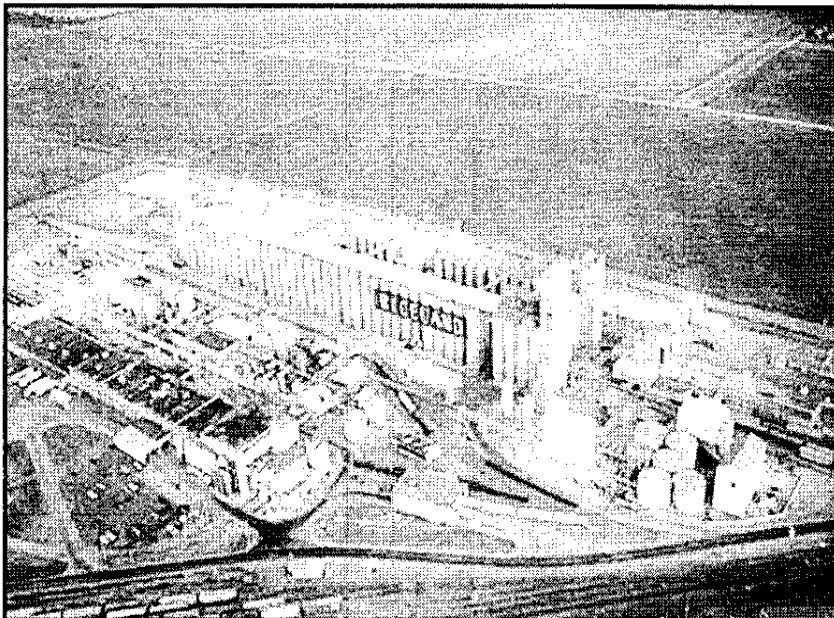
July 1, 2006-June 30, 2007

| Test | Samples | Tests | Number of Violations | Percent Specimens Non-Compliant |
|---|-------------|-------|----------------------|---------------------------------|
| Bacterial inhibitors | 153 | 609 | 0 | |
| Blocks, necropsy multiple tissue | 1 | 3 | 0 | |
| Culture, bact., E. coli | 4 | 13 | 0 | |
| Culture, bact., Listeria | 3 | 28 | 0 | |
| Culture, bact., Salmonella | 7 | 87 | 0 | |
| E. coli quantitative | 2 | 12 | 0 | |
| E. coli 0157:H7 | 275 | 3289 | 0 | |
| Fat | 82 | 82 | 0 | |
| Listeria (M.M.) | 231 | 2772 | 0 | |
| Listeria Mono. Environmental | 214 | 2568 | 0 | |
| Moisture | 12 | 12 | 0 | |
| Nitrite (Q) | 2 | 2 | 0 | |
| Protein | 12 | 12 | 0 | |
| Salmonella (HACCP) | 507 | 6084 | 4 | 0.79% |
| Salmonella (M.M.) | 209 | 2508 | 0 | |
| Salt | 1 | 1 | 0 | |
| Staphylococcus Ent. | 3 | 36 | 0 | |
| Stain H & E | 1 | 7 | 0 | |
| Stain, special histo Masson's trichrome | 1 | 1 | 1 | 100% |
| Trichina | 11 | 33 | 0 | |
| Total | 1731 | | 5 | |

BUREAU OF WAREHOUSES

(BOW) administers both the Illinois Grain Code and the Personal Property Warehouse Act and also manages the Illinois Grain Insurance Fund (GIF).

The Bureau of Warehouses is the licensing and regulatory authority for all grain dealers and state licensed grain warehouses operating in Illinois. The bureau's regulation of the Illinois grain trade provides protection to the industry's direct customers including farmers and bankers. During FY2007, the department paid 237 grain claims against foiled grain dealers and warehouseman in excess of \$16.5 million. IDOA's Bureau of Warehouses also provides protection to all indirect parties that have a beneficial interest in the farmer's ability to receive payment for grain.



The financial security of grain transactions is guaranteed with licensees through the administration of the state's Grain Insurance Fund. Another function of the BOW is to license and regulate personal property warehouses. These storage warehouses include companies storing household goods or business records and commercial distribution warehouses.



The bureau's twenty-three field examiners are responsible for the annual examination of the 349 grain licensees with a combined total of 1,057 locations, which represents the largest grain handling infrastructure in the United States. The 349 companies hold 342 Grain Dealer licenses, 298 State Warehouse license and 24 Federal Warehouse licenses with a storage capacity of 1,176,871 bushels. A licensee that violates any provisions of the Grain Code may be subject to suspension or revocation of their license, and/or a hearing, which may result in the licensee posting collateral if found guilty of the alleged violation.

The bureau also regulates the state's 433 licensed companies that have 639 locations

under the Personal Property Storage Act. The 433 companies are comprised of 383 commercial and 56 governmental fairs.

Besides performing routine examinations, bureau employees are also charged with the responsibility of investigating complaints regarding unlicensed grain dealers and warehouses that store grain and/or warehouses that store personal property.

ILLINOIS AND DUQUOIN STATE FAIRS

The Illinois State Fair is a ten-day event held annually on the Department of Agriculture's 366-acre fairgrounds in Springfield, Illinois. This event has been in existence since 1853 and continues to focus on the State's rich agricultural history. The State Fair has made significant progress under

the Blagojevich administration. The Governor's Sale of Champions – the State's premier livestock event that supports our top young livestock producers -- broke 3 records in 2007. The Grand Champion Steer was sold for a record-high of \$45,000.



The DuQuoin State Fair is held on 750 acres of ground in DuQuoin, Illinois. In 2007, the fairgrounds utilized a newly built multi-purpose facility to help positively impact the Southern Illinois economy and provide a new venue to host local, regional and national events. During 2007, DuQuoin State Fair personnel have worked hard to increase the number of non-fair events held on the grounds in order to increase the revenue generating potential of the grounds. The fair annually holds the World Trotting Derby on the mile track.

The Illinois State Fair has the lowest admission price in the entire nation and the entertainment value is outstanding. Families can enjoy over 16 free entertainment stages, continuous livestock shows and competitions, and a cultural experience in our ethnic village. Grandstand entertainment continues to be a big draw with almost 45,000 people in attendance in 2007. Artists as diverse as country music star Martina McBride, Disney artist Corbin Bleu and American Idol icon Daughtry have performed at the fair. ARCA and USAC races on the last weekend of the fair continue to be a large draw for racing fans throughout the country. Truck and Tractor pulls, located in the Multi-Purpose Arena, are another attraction that draws thousands to the fair



each year. In spite of record breaking heat, attendance at the 2007 Illinois State Fair remained strong with over 700,000 people present for the 10-day fair and preview night.

NON-FAIR EVENTS

The Illinois State Fairgrounds is host to a variety of non-fair events. The fairgrounds is the home of the world's fastest dirt track, more than 150 buildings, a grandstand, four indoor arenas, a covered outdoor arena, and over 1,000 stalls for livestock or horses. Events that take place on the fairgrounds include: festivals, meetings, concerts, weddings, galas, trade shows, car shows, athletic events, and horse and livestock shows. Non-fair event participants have the opportunity to camp on the Illinois State Fairgrounds from April-October. The campground can accommodate up to 301 RV's and approximately 35-40 tents. Campground amenities include water, electricity, limited sewer spots, three comfort stations, and one dump station available to all campers.

In 2006 and 2007, the Illinois State Fairgrounds hosted the National High School Rodeo Finals. The event consisted of ten days including 1,589 contestants in 2006 and 1,577 in 2007. The Illinois Department of Agriculture estimates that each contestant brought with them approximately three family members. There

were approximately 5,000 people on the grounds for the duration of the event. The Illinois State Fairgrounds offered 900 camping spots for 2006 and 2007. The National High School Rodeo Finals also positively impacted revenues for the City of Springfield and the State of Illinois.

SUMMARY

The Illinois Department of Agriculture has maintained a high standard of performance and has streamlined itself as part of the governor's overall plan to make government more efficient and responsive to taxpayers, while at the same time making sure consumers are confident in the safety of the food they eat. All divisions and bureaus have worked collectively to meet the agency's core mission and corresponding objectives, while at the same time reducing total expenditures in an effort to do more with less.

Department of Agriculture staff continues to address the agency's objectives and key initiatives while providing superior services to our constituency. In the last year, IDOA has improved our animal disease surveillance programs by increasing inspections. The Department remains vigilant in protecting the state's agricultural resources while at the same time preserving our natural resources. IDOA continues to maintain a strong working relationship with small to medium food and agribusiness companies. The Department provides various domestic and international marketing opportunities, which help companies interested in accessing new markets for their food and agricultural products. The Department of Agriculture also maintains a close working relationship with several other state agencies in an effort to increase cooperation among state agencies, enhance services and programs provided and eliminate duplication while streamlining state government.

In an effort to further expand the Department's services while at the same time capturing revenue, the Department is searching for and implementing new revenue-generating opportunities for the fairgrounds. The economic impact of attracting new events will not only help make the fairgrounds self-sustaining (a major goal of the administration), but will also provide additional revenue for the city, county and other surrounding areas. IDOA continues to search for new partnerships and revenue-generating opportunities to help promote, preserve and protect Illinois' #1 industry.

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Education Investment in

Illinois

By [Ralph Martin \(/author/ralphmartin\)](#)

Posted in [our Columns \(/our-columns\)](#) on [December 07, 2007 \(/archive/date/year/12/07\)](#) with [2 comments \(/archive/our-columns/education-investment-in-illinois/2\)](#) comments (/comments).

tags: [Education \(/archive/page/education\)](#)

For over 20 years now, advocates have been caterwauling for Illinois to get its act together and reform how it funds schools. Inevitably, these calls for reform include both enhanced funding—statewide—coupled with additional accountability metrics covering everything from school district fiscal practices to teacher induction and mentoring. Just as inevitably, the process stalls and ultimately comes to a crashing halt over the call for enhanced funding—because that would require a tax increase. Not just any increase, but a relatively significant one approaching \$2 billion just for schools.

The magnitude of the tax increase needed to fund education statewide is such that, it begs an obvious question: Would this investment be worth it? If you're willing to strip away all the partisan and ideological rhetoric that generally surrounds school funding reform efforts, and instead consider only facts, the answer to this question is just as obvious: Yes, the investment is not only worth it, but absolutely essential. Here's why. Today in Illinois, educational attainment is the absolute key to economic security. The data on this point is beyond compelling.

Start with employability. If you don't have at least decent academic credentials, chances are you don't have a job. The unemployment rate in Illinois for whites who don't have a high school diploma is almost 10 percent. That unemployment rate drops to 3.5 percent for whites with a college degree. If you're black, the numbers are eye-opening. African Americans in the state who haven't graduated high school have an astronomical unemployment rate of almost 23 percent! But for those blacks who go on to earn a college degree, the unemployment rate drops to just 4.5 percent.

Of course, once you get a job, educational attainment works dramatically to boost wages. There was a time, in America generally and Illinois specifically, when a person could graduate high school and go get a good job. A job that paid enough to put a car or two in the garage and a kid or two through college. That time is most decidedly over. Over the last 26 years, Illinois workers who stopped their education when they got a high school diploma, saw their real, inflation adjusted incomes decline by about nine percent. In fact, from 1980 through 2006, the only workers who experienced any real increase in wages, were those that actually obtained a college degree. Everyone else saw their wages decline.

The importance of education to personal economic security could not be more evident. But the worker's perspective is only one side of the economic coin—the employer's perspective is the other. See, what business is telling policymakers in Illinois is simple, in a global economy, employers have a lot of choices when it comes to making business location and expansion decisions. The high-end businesses, those that pay good wages and provide decent benefits, like manufacturing or information technologies, demand a highly numerate and literate workforce. If a state's public education system isn't up to snuff, high-end businesses will either locate or expand elsewhere. Specifically, in those states or countries that can provide a quality, skilled workforce.

Illinois' ongoing failure to make adequate investments in K-12 education has in fact told business to go elsewhere to find skilled workers. Again, the proof is in the data. As recently as 1990, manufacturing employed more workers than any other sector in Illinois, accounting for a little more than one out of every five workers in the state. But over the last 16 years, the state has lost 26 percent of those jobs—a rate of loss worse than the nation or Midwest.

For more information about Illinois' economy, obtain a copy of the "State of Working Illinois" report, available online at <http://www.stateofworkingillinois.com/edu/sowi/index.html> (<http://www.stateofworkingillinois.com/edu/sowi/index.html>).

And Illinois isn't replacing those good manufacturing jobs with high-end service jobs, like in information technologies. The state's losing those jobs as well. The reality is, most job growth in Illinois is coming in the low-wage service sector. So much so that today the low-end service sector is the state's top employer, accounting for over 30 percent of all workers.

Now, there certainly are multiple reasons for these economic changes. That said, one of the key reasons is a lack of adequate investment in public education. The state has effectively told high-end businesses that Illinois won't fund education to the point where we'll satisfy their demand for skilled workers. Not surprisingly, business has listened.

Ralph Martire is executive director of the Center for Tax and Budget Accountability, a bipartisan fiscal policy think tank, www.ctbaonline.org (<http://www.ctbaonline.org>).

Commentary:

1 (7/23/2008) DK says:

High end business also relocate due to higher taxes in addition to poor public schools.

One needs only to visit Kalifornia to understand that the business boom in its neighboring states of Arizona, Nevada and Utah was being driven in part by businesses fleeing higher taxes in the Golden State.

Nowhere in Mister Martire's latest call for more taxes is there any mention of accountability. Few, if any, public schools in Illinois are doing a good job of demonstrating that they have been good stewards of the tax dollars already entrusted to them. Martire constantly recommends throwing more money to Illinois tax districts and naively assumes that better results will automatically follow. Certain public school districts waste thousands of dollars per pupil and still award diplomas to illiterates.

Literacy does not necessarily result due to higher taxes.

December 7, 2007 at 9:59 a.m.

Bruno Behrend says:

Invest in what??!!

Both Mr, Martire and I live in River Forest.

We laud the barely above standard local schools as top notch, but the former superintendent went from \$146 to 226 in compensation in 5 years. I challenge Mr, Martire to tell me how one dime of that money qualifies as "investing in education."

It doesn't. It is a waste of money on a protected class of bureaucrats who don't connect one neuron in one child's head.

River Forest is not an exception. It is the rule.

Mr. Martire's call for investment in education would be more credible if it was true investment in children. It isn't. It is an investment in bureaucratic bloat and politically protected jobs programs for the least productive sector of American Industry - the "Government-Education complex."

I challenge Mr. Martire to a debate in any venue in Illinois. Let him defend the waste fraud and abuse of the "Education Industry" in a public venue, against some one who can actually do the math behind 15-20 years of spendthrift policies.

For a critique of Mr. Martire's defintion of "investment", try

<http://www.extremewisdom.com/index.php...> (<http://www.extremewisdom.com/inquiry.php?archive/3082>)

Mr. Martire's is living in the state his policies created.

December 7, 2007 at 10:26 p.m.

Comments are closed for this entry

Story location.

Other Stories by this author

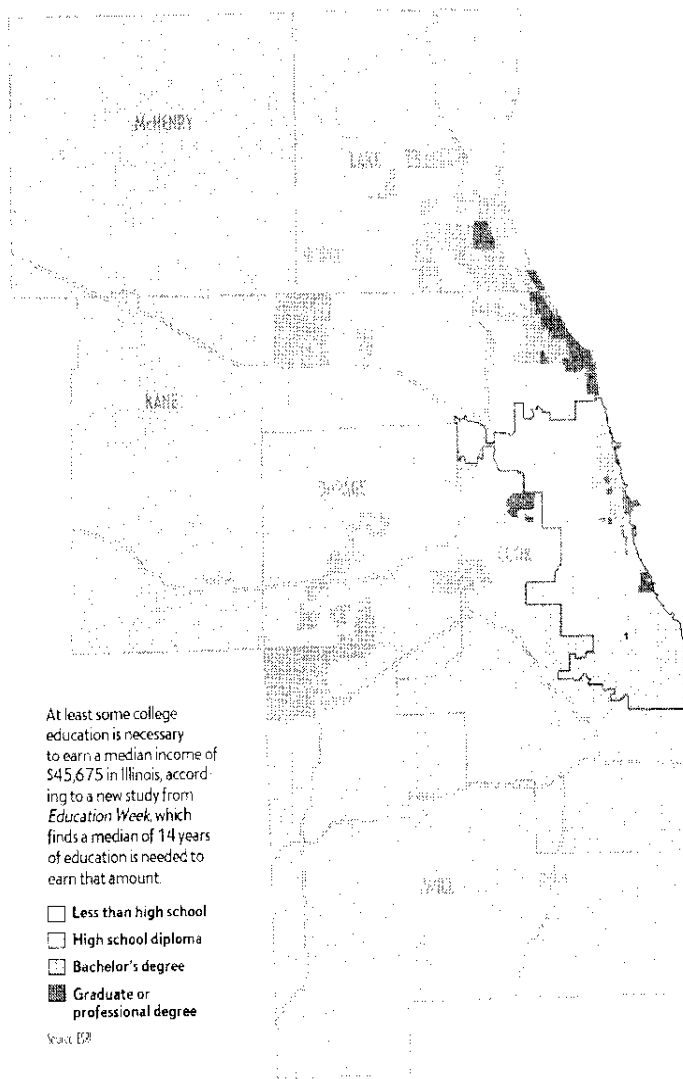
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EDUCATION

Not having a high school diploma means \$260,000 in lost wages over a lifetime. Chicago Public Schools' graduation rate lags that of both the state and the nation.

► DOMINANT EDUCATION LEVEL



17,089

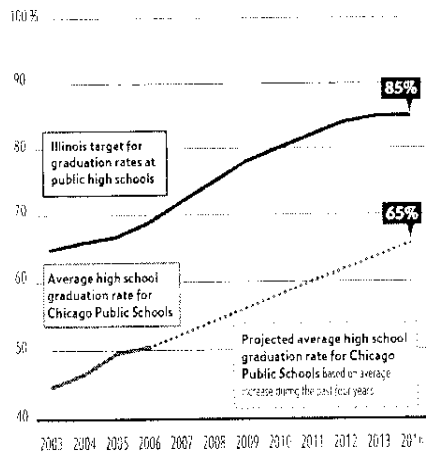
Average debt upon completion of a four-year college degree in Illinois

| AVERAGE DEBT OF GRADUATES IN 2005 | % GRADUATING WITH DEBT | % FEDERAL LOANS IN DEFAULT 2004 |
|--|------------------------|---------------------------------|
| School of the Art Institute | 100% | 4.0% |
| Loyola University Chicago | 100% | 3.3% |
| Illinois Wesleyan University | 100% | 1.2% |
| DePaul University | 100% | 2.6% |
| Northwestern University | 100% | 0.9% |
| Northern Illinois University | 100% | 3.6% |
| Illinois Institute of Technology | 100% | N/A |
| University of Illinois at Chicago | 100% | 2.3% |
| Eastern Illinois University | 100% | 2.0% |
| University of Illinois at Urbana-Champaign | 100% | 1.4% |
| University of Chicago | N/A | 1.3% |

Source: The Project on Student Debt

► HIGH SCHOOL GRADUATION RATES AND OBJECTIVES

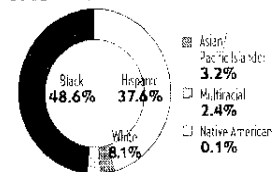
Chicago Public Schools lags by almost 20 percentage points the state's annual targets for graduation rates.



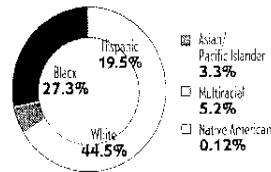
► NOT EQUAL REPRESENTATION

A disproportionate percentage of private school students are white.

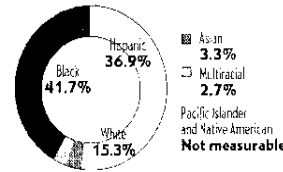
CHICAGO PUBLIC SCHOOLS' STUDENT BODY BY RACE 2003-04



CHICAGO PRIVATE SCHOOLS' STUDENT BODY BY RACE 2003-04



CHICAGO SCHOOL-AGE POPULATION BY RACE 2005

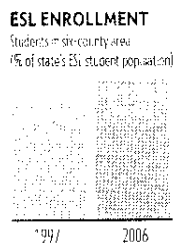


Sources: Chicago Public Schools; U.S. Census Bureau; National Center for Education Statistics

► INGLÉS COMO SEGUNDA LENGUA

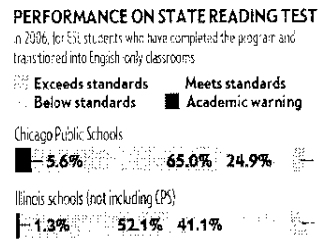
According to the Illinois State Board of Education

Enrollment is up in the six-county area for English-as-a-second-language programs. But in Chicago, once transitioned into English-only classes, former ESL students are underperforming their English-only peers on state reading tests.



TOP 5 LANGUAGES SPOKEN IN PROGRAM
In 2006 (% of state ESL program)

| | | |
|--------------|---------|---------|
| 1. Spanish | 151,016 | (61.0%) |
| 2. Polish | 6,668 | (4.1%) |
| 3. Arabic | 2,724 | (1.7%) |
| 4. Urdu | 2,389 | (1.3%) |
| 5. Cantonese | 1,610 | (1.0%) |



WHO KNEW?

45.2% 2006 drop-out rate for Chicago Public Schools 38.0% of dropouts leave in ninth grade 20.2:1 CPS elementary student-teacher ratio \$9,758 2006 operating expenditure per CPS student

Education

Median incomes rise with educational attainment. Yet only 59% of Chicago Public Schools graduates go to college and of those, just 35% get a degree. Chicago spends less on students and teachers than comparable cities. Do the math.

EDUCATIONAL LEVELS

Percentage of the population over age 25 that completed college*

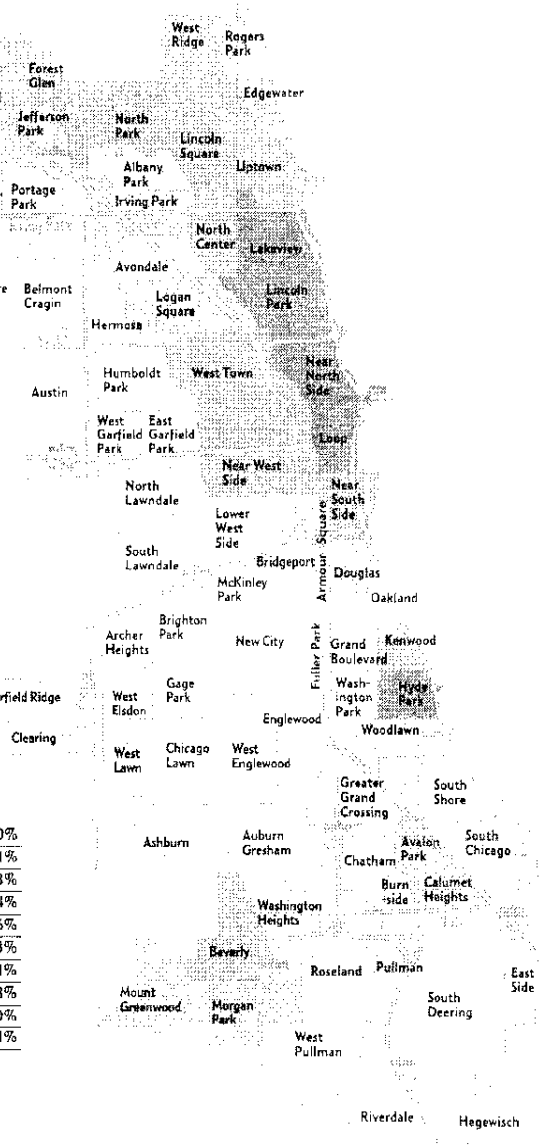
- 2.65% to 10.82%
- 10.83% to 19.05%
- 19.06% to 31.96%
- 31.97% to 49.58%
- 49.59% to 78.03%

Source: Based on data by ESRI data based on 2000 U.S. Census

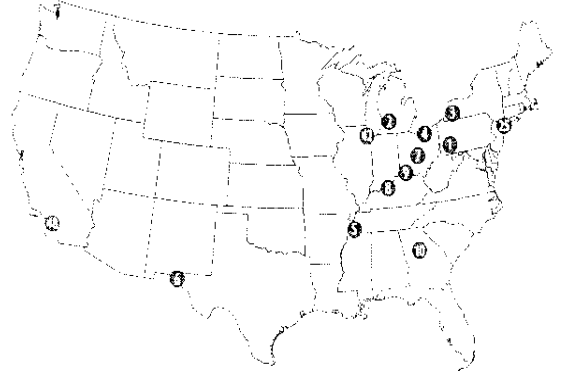
*Excluding associate's degrees

Top suburbs

| | |
|-----------------|--------|
| 1. Kenilworth | 89.40% |
| 2. Winnetka | 84.41% |
| 3. Golf | 82.33% |
| 4. Glenview | 79.74% |
| 5. Brookfield | 76.86% |
| 6. Lake Forest | 73.83% |
| 7. Lake Bluff | 72.91% |
| 8. Wilmette | 72.58% |
| 9. River Forest | 69.70% |
| 10. Hinsdale | 68.61% |



ELEMENTARY TEACHER PAY ADJUSTED FOR COST OF LIVING



Adjusted pay Adjusted rank Unadjusted pay Unadjusted rank

| | |
|-----------------------|----------|
| 1 Pittsburgh | \$55,971 |
| 2 Grand Rapids, Mich. | \$53,943 |
| 3 Buffalo, N.Y. | \$52,683 |
| 4 Cleveland | \$52,265 |
| 5 Memphis, Tenn. | \$50,787 |
| 6 El Paso, Texas | \$50,759 |
| 7 Columbus, Ohio | \$50,381 |
| 8 Louisville, Ky. | \$48,917 |
| 9 Cincinnati | \$48,654 |
| 10 Atlanta | \$47,489 |
| New York | \$47,663 |
| Chicago | \$46,133 |
| Los Angeles | \$45,771 |

Source: National Center for Policy Analysis

NO CHILD LEFT BEHIND

| | 2003-2004 | % schools failed to make adequate yearly progress | % schools designated as needing improvement | Total school districts | % school districts failed to make adequate yearly progress | % school districts designated as needing improvement | Graduation rate |
|---------------|-----------|---|---|------------------------|--|--|-----------------|
| California | 9,207 | 35.4% | 17.4% | 1,039 | 41.0% | 13.7% | 85.1% |
| | 9,395 | 38.9% | 18.6% | 1,035 | 40.3% | 14.6% | NA |
| Illinois | 3,767 | 26.3% | 17.5% | 686 | 37.8% | 27.3% | 86.6% |
| | 3,767 | 26.3% | 19.4% | 879 | 27.0% | 27.3% | 87.0% |
| New York | 4,624 | 32.7% | 10.9% | 730 | NA | 7.7% | 76.0% |
| | 4,499 | 24.7% | 11.4% | 730 | 32.2% | 7.7% | NA |
| United States | 90,237 | 24.7% | 11.4% | 13,959 | 28.5% | 12.8% | 74.9% |
| | 89,493 | 25.6% | 12.9% | 13,878 | 33.7% | 12.4% | NA |

Source: Public Education Network

EDUCATIONAL SPENDING PER STUDENT 2003-2004

| | |
|-------------------------------------|----------|
| New York City School District | \$12,544 |
| Los Angeles Unified School District | \$8,639 |
| Chicago Public Schools | \$8,396 |
| Illinois | |
| United States | \$8,287 |

Source: US Census Bureau

The Economic Impact OF THE Early Care and Education Industry *in Illinois*



A REPORT BY ACTION FOR CHILDREN, CHICAGO METROPOLIS 2020 AND ILLINOIS FACILITIES FUND

The Early Care and Education industry is important to the Illinois economy. In summary, the industry:

- Generates \$2.12 billion every year.
- Employs almost 56,000 people full-time.
- Helps prepare young children to succeed in school and to participate in the workforce as adults.
- Enables parents to work and continue their education.

Investing in Early Care and Education programs yields a *high return.*

This report on the economic impact of Early Care and Education looks at this industry through a new lens — an economic one that considers for the first time the industry's contributions to the Illinois economy. It also re-examines government savings and the workforce impact of Early Care and Education in Illinois.

Over the years, the Early Care and Education industry has changed to meet the growing needs of working families and their children. Regardless of program type or setting — child care, Head Start, family child care, preschool, or prekindergarten, for-profit or nonprofit, public or private, regulated or unregulated — the Early Care and Education industry provides economic benefits to Illinois and its businesses.

The findings in this report highlight the financial significance of the industry as well as the need to ensure access to high quality Early Care and Education for Illinois children. By targeting the Early Care and Education industry for economic and workforce development, the business community, government and industry leaders can capitalize on the high returns to our children and our economy.

Action for Children
Chicago Metropolis 2020
Illinois Facilities Fund

Every dollar invested in quality Early Care and Education saves up to \$17 dollars on government expenditures by reducing costs of remedial education, grade retention and crime.

What is the Early Care and Education industry?

The Early Care and Education industry consists of programs serving children under the age of six.

It includes:

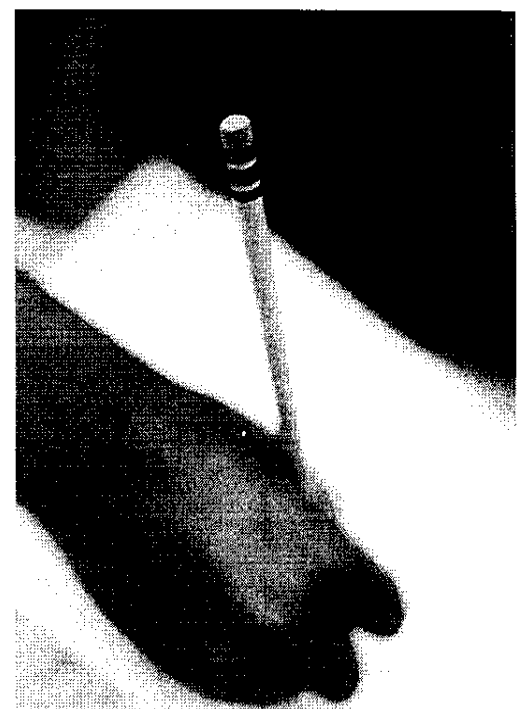
Child care centers

Family child care homes

Head Start

Pre-kindergarten

Preschool





The Early Care and Education industry supports the current workforce.

- One in ten Illinois workers has a child under age six.
- Working parents play a vital role in the economy, earning a total of \$21 billion annually.
- Employer-based child care helps to keep parents working and reduces turnover.

For example, Illinois-based Abbott Laboratories offers its employees on-site early care and education and enjoys a turnover rate that is lower than industry norms.

Early Care and Education helps prepare children for opportunities in the new economy.

Long-term studies of low-income children show that children who participate in Early Care and Education have:

- Greater language development,
- Better mathematical ability, and,
- Fewer behavioral problems in kindergarten.

As adults, these children have:

- Increased high school graduation rates,
- increased higher education attainment; and,
- Higher rates of workforce participation.

Early Care and Education is critical but costly.

- The typical Illinois family will need to pay 25 percent of its income for an infant and pre-schooler's Early Care and Education if they choose care through a center.
- In 2002, annual, full-time, center-based care for an infant cost more than resident undergraduate tuition at the University of Illinois.

“There are significant societal benefits and governmental savings from investing in early care and education. This report contains important new information about the economic benefits of early childhood care and education and provides an additional incentive for Illinois to invest in children from birth to age five.”

State Senator Don Harmon

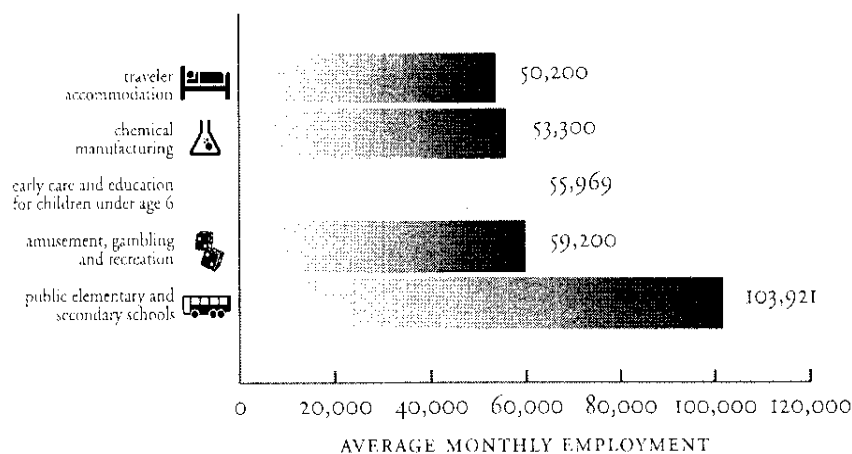
ANNUAL GROSS RECEIPTS BY INDUSTRY IN ILLINOIS³



“The returns to early childhood development programs are especially high when placed next to other spending by governments made in the name of economic development. Yet early childhood development is rarely considered as an economic development measure.”

Art Rolnick, Federal Reserve Bank of Minneapolis

EMPLOYMENT BY INDUSTRY IN ILLINOIS⁴



KEY ACTION STEPS:

BUSINESS

- Support state legislation that expands access to quality Early Care and Education programs and that makes working families eligible for subsidies at higher income levels.
 - Leverage funds through public-private partnerships to build quality Early Care and Education facilities and develop programs that can address the shortage of infant care.
- Provide resource materials to enable more businesses to help support their employees' early care and education needs.
- Develop partnerships and provide resources to help the Early Care and Education industry improve its business skills and practices.
- Nominate Early Care and Education industry representatives and experts to be appointed to the boards of business community organizations involved in economic development and workforce issues.

“In addition to Northern’s Early Childcare Center assisting with recruitment and retention, it helps employees feel good about working for an organization that cares enough about its employees to make the commitment of having an on-site child care center. Those positive feelings translate into improved productivity and better client service.”

Tim Moen, Executive Vice President of Human Resources and Corporate Services, The Northern Trust Company

GOVERNMENT

- Pass state legislation that expands access to quality Early Care and Education programs and that makes working families eligible for subsidies at higher income levels.
 - Integrate Early Care and Education into statewide planning for education, housing, and workforce development.
- Publicly recognize businesses that support their employees' Early Care and Education needs.
 - Analyze how population trends affect the demands for and geographic distribution of Early Care and Education services in Illinois.

EARLY CARE AND EDUCATION INDUSTRY

- Advocate for legislation that expands access to quality Early Care and Education.
- Advocate with the business community for increases in capital and program investments in Early Care and Education.
- Work with government and the economic development community to market Early Care and Education as a vital multi-billion dollar state industry that employs tens of thousands of workers.
- Advance an Early Care and Education industry workforce development agenda within government to improve quality through staff training and development.

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The Economic Impact of the Early Care and Education Industry in Illinois Study was funded by The Joyce Foundation. Additional funds were provided by the W.K. Kellogg Foundation, the Grand Victoria Foundation, the Illinois Department of Human Services, BUILD, and the John D. and Catherine T. MacArthur Foundation. The research was conducted by the National Economic Development and Law Center. For a full copy of the report, visit any of these websites: www.actionforchildren.org, www.chicagometropolis2020.org, www.ifl.org, www.nedic.org

¹ HighScope Perry Preschool Study

² Studies include: The Abecedarian Study at the University of North Carolina at Chapel Hill; HighScope Perry Preschool Study and Chicago Child-Parent Center Study

³ Sources: U.S. Census Bureau's 1997 Economic Census adjusted to 2004 using CPI. Soybeans only were based on Illinois Department of Agriculture's 2002 Cash Receipts Facts adjusted to 2004 using CPI. Spectator sports data includes professional team revenue only.

⁴ Source: DHS 2003 CPS Survey. Early Care and Education employment was calculated in full-time equivalents

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Be Informed



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search

- What is Autism?
- What to Do About It
- How to Grow With It
- Navigating the Spectrum



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What is Autism? An Overview

By Asperger

Autism is a complex neurobiological disorder that typically lasts throughout a person's lifetime. It is part of a group of disorders known as autism spectrum disorders (ASD). Today, 1 in 150 individuals is diagnosed with autism, making it more common than pediatric cancer, diabetes, and AIDS combined. It occurs in all racial, ethnic, and social groups and is four times more likely to strike boys than girls. Autism impairs a person's ability to communicate and relate to others. It is also associated with rigid routines and repetitive behaviors, such as obsessively arranging objects or following very specific routines. Symptoms can range from very mild to quite severe.

Autism was first identified in 1943 by Dr. Leo Kanner of Johns Hopkins Hospital. At the same time, a German scientist, Dr. Hans Asperger, described a milder form of the disorder that is now known as Asperger Syndrome (AS). These two disorders are listed in the DSM IV (Diagnostic and Statistical Manual of Mental Disorders) as two of the five developmental disorders that fall under the autism spectrum disorders. The others are Rett Syndrome, PDD NOS (Pervasive Developmental Disorder), and Childhood Disintegrative Disorder. All of these disorders are characterized by varying degrees of impairment in communication skills and social abilities, and also by repetitive behaviors. For more discussion on the range of diagnoses that comprise autism spectrum disorder, click here.

Autism spectrum disorders can usually be reliably diagnosed by age 3, although new research is pushing back the age of diagnosis to as early as 6 months. Parents are usually the first to notice unusual behaviors in their child or their child's failure to reach appropriate developmental milestones. Some parents describe a child that seemed different from birth, while others describe a child who was developing normally and then lost skills. Pediatricians may initially dismiss signs of autism, thinking a child will "catch up," and may advise parents to "wait and see." New research shows that when parents suspect something is wrong with their child, they are usually correct. If you have concerns about your child's development, don't wait: speak to your pediatrician about getting your child screened for autism.

If your child is diagnosed with autism, early intervention is critical to gain maximum benefit from existing therapies. Although parents may have concerns about labeling a toddler as "autistic," the earlier the diagnosis is made, the earlier interventions can begin. Currently, there are no effective means to prevent autism, no fully effective treatments, and no cure. Research indicates, however, that early intervention in an appropriate educational setting for at least two years during the preschool years can result in significant improvements for many young



New plan may help expand coverage for autism

By Amber Krosel | Daily Herald Staff

Published: 4/16/2008 12:04 AM

SPRINGFIELD -- Illinois families with autistic children may soon be better able to pay the costs of diagnosing and treating the developmental disorder.

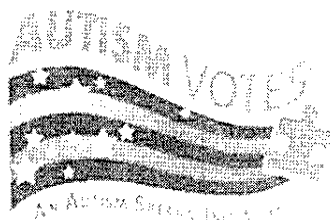
The Illinois Senate approved a plan Tuesday to require insurers to provide extended autism coverage for children up to age 21, with a maximum of \$36,000 per year. There is no current requirement.

"We've ignored this long enough," said state Sen. James DeLeo, a Chicago Democrat sponsoring the plan. "It costs people, working moms and dads, up to \$50,000 a year. They need help."

Despite the coverage cap, the proposal does not limit the amount of visits to an autism care provider. Insurers would also be required to consider autism the same as any other physical illness, charging the same co-payments or deductibles.

The plan could hurt small businesses that might "shoulder the responsibility" to provide such expansive health insurance, said state Sen. Dan Cronin, an Elmhurst Republican who nonetheless voted to move the legislation on to the House for consideration.

The measure passed the Senate 50-0. Four lawmakers, including Sen. Matt Murphy, a Palatine Republican, voted "present" on the issue.



It's time for lawmakers to listen.

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update

Autism Insurance Bill Introduced in Illinois State Legislature

(ILLINOIS - February 21, 2008) Illinois has become the latest state to introduce autism insurance reform legislation. Illinois Senate bill 1900 was introduced this week in committee by Senator James DeLeo, and will include coverage for therapies such as applied behavioral analysis and other evidence-based, medically-necessary treatments. A lobbying day for parents and organizations in support of SB 1900 is planned for April 15th in Springfield, Ill.

Peter DiCianni, the father of a young daughter with autism, Lee Jorwic, the Autism Speaks Chapter Advocacy Chair in Illinois, and the father of an 18 year old son diagnosed with autism, and Christopher Kennedy of Autism Society of Illinois, a long time advocate of autism legislation in Illinois and the father of a daughter with autism, are working to build a coalition of autism organizations in Illinois to help move this bill forward. Watch for updates on what you can do to help pass SB 1900 in Illinois.

[Read the Illinois bill](#)

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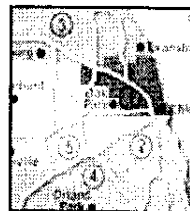
Your search found results in the following categories. Click on a category for the full listing of your results.

- [Activity \(1\)](#)
- [Amusement \(7\)](#)
- [Beach \(32\)](#)
- [Bowling \(31\)](#)
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- [Sites \(9\)](#)
- [Sports \(7\)](#)
- [Theater \(26\)](#)
- [Tour \(21\)](#)
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- [Zoo \(1\)](#)



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Search Results

Here are the results found within the "Amusement" category. If you see a "Details" button below, you may click for more information. Before you plan any visit, make sure to call your destination in advance - all information is subject to change without notice.

Details

Corner Playroom
2121 N. Clybourn, Chicago
(773) 388-2121

Details

Day Frog
233 East Erie Street, Chicago
(312) 642-8400

Details

ESPN Zone
43 E. Ohio St., Chicago
(312) 644-3776

Details

Fantasy Kingdom
1422 N. Kingsbury, Chicago
312/642-KIDS

Details

McDonald's-The Future at Navy Pier
600 E. Grand Ave., Chicago
(312) 832-1640

Details

Navy Pier
600 E. Grand Ave., Chicago
(312) 595-PIER

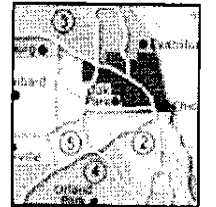
Details

Time Escape at Navy Pier
700 E. Grand Ave. South Arcade, Chicago
(312) 755-9600



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Search Results

Here are the results found within the "Mini Golf" category. If you see a "Details" button below, you may click for more information. Before you plan any visit, make sure to call your destination in advance - all information is subject to change without notice.

Anywhere Mini Golf

3416 N. Southport Ave., Chicago
(773) 763-7833

Bear Run Miniature Golf

6150 N. Caldwell Ave., Chicago
(773) 792-1930

Bubbles Academy

1504 North Fremont, Chicago
(312) 944-7677

City Golf Chicago at Navy Pier

435 E. Illinois St. 3rd Floor, Chicago
(312) 836-5936

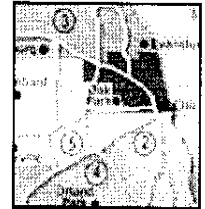
Diversey Minigolf and Driving Range

144 W. Diversey, Chicago
(312) 742-7929



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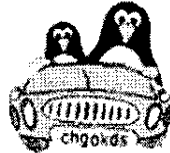
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Search Results

Here are the results found within the "Water" category. If you see a "Details" button below, you may click for more information. Before you plan any visit, make sure to call your destination - all information is subject to change without notice.

Adams Water Playground

1919 N. Seminary Ave., Chicago
(312) 742-7787

Archer Park Water Playground

4901 S. Kilbourn, Chicago
(312) 747-6009

Graver Park Water Playground

1518 W. 102nd Pl., Chicago
(312) 747-6163

Meyering Water Playground

7140 S. King Dr., Chicago
(312) 747-6545

Sherwood Park Water Playground

5701 S. Shields, Chicago
(312) 747-6688

West Chatham Park Water Playground

8223 S. Princeton Ave., Chicago
(312) 747-6998

Williams Water Playground

2710 S. Dearborn, Chicago
(312) 747-7107

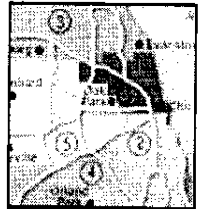
Wilson Park Water Playground

4630 N. Milwaukee Ave., Chicago
(312) 742-7616



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Search Results

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Details

Lincoln Park Zoo
2200 N. Cannon Dr., Chicago
(312) 742-2000

Chicago Family Trip

Read About The Top Spots To See In Chicago! Only at Family.com
www.family.com/travel

Fun Things To Do Chicago

What to do in Chicago? Free Guides. Sign Up For Our Free Newsletter!
www.DailyCandy.com

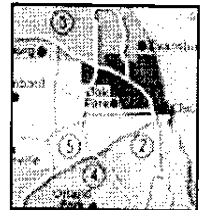
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September



ILLINOIS. MILE AFTER MAGNIFICENT MIL

ILLINOIS TOURISM NI

Illinois Tourism News from the Department of Commerce and Economic Opportunity, Bureau of Tourism

IN THIS ISSUE

Home

From the State Travel Director

Industry Insider

Highlights

- September is Illinois Wine Month! Visit illinoiswine.com for more information on Illinois' growing wine industry and to find out more about wine month events and activities.
- September 9: Fall color updates begin on enjoyillinois.com.
- September 11-18: Illinois Great Rivers Ride. Visit illinoisgreatriverside.com or call 877-477-7007 (ext. 217) for more information on this exciting new event!
- September 27: Fall biannual International Program Update Meeting, Chicago, Ill. Write TMcQuillen@ildceo.net for more information.
- February 22-24, 2006: Illinois Governor's Conference on Tourism in Springfield. More details coming soon!

National News

Chicago's Navy Pier remains a favorite

Ten years after its \$187 million rebirth as an entertainment district, Chicago's Navy Pier, state's most popular tourist destination, is a bustling mix of restaurants, rides and retail stores, attracting nearly 9 million visitors a year. Yet despite the mass of visitors, many in the Chicago area still dismiss Navy Pier as an overpriced strip mall and a tourist trap. But Metropolitan Pier and Exposition Authority, which governs Navy Pier, estimates the attraction generates more than half a billion dollars a year in direct spending on hotels, restaurants and entertainment around Chicago. To draw more young people, officials are considering a water-based hotel and a water park.

Source: *Travel Advance*

Heritage tourism booming

Heritage tourism, the trend of transforming the annual family vacation into a cultural lesson, is the second-fastest-growing market segment of tourism, says Rich Harrill, director of the University of South Carolina's Institute for Tourism Research. Southern states in particular are promoting their historical sites as they ride a wave of black tourism. Since 2004 the Virginia Tourism Corp. has spent more than \$300,000 trying to reach the black market. Tennessee has focused on upping its appeal to African-Americans and on proving more than just the capital of country music. The state's vacation guide mentions everything from galleries to historically black Fisk University in Nashville to the National Civil Rights Museum in Memphis.

Source: *Travel Advance*

Business/leisure travel is up

A recent study commissioned by Deloitte & Touche USA LLP found that more business travelers are extending work trips. More than half (55%) of all business travelers reported taking at least one combined business/leisure trip last year. Seventy percent brought a family member or friend with them, and 54 percent had stayed at least one extra night at the same hotel or resort.

Source: *Travel Advance*

Workers travel less for business

Nearly one-half of U.S. workers are traveling less frequently for business than they did five years ago, according to a survey by Robert Half Management Resources, a unit of Robert Half International Inc. Of 1,000 employees polled, 48 percent said they travel for work less often compared to 2000. During the economic slowdown of the past few years, corporations trimmed travel allowances, and have continued to closely monitor expenses as the economy has improved. Nonetheless, 36 percent of employees polled travel more frequently for business, while the remaining 16 percent saw no change in the level of business travel according to the survey.

Source: *Travel Advance*

Disability travel on the rise

The Open Doors Organization, in cooperation with the Travel Industry Association, recently released the findings of its 2005 research study on travel by the disabled. Over the past five years, more than 21 million adults with disabilities traveled for business and/or pleasure. The study highlights which domestic and international destinations are the most popular among

Statewide News

Illinois Great Rivers Ride shifts into high gear

Photo shoot to highlight Illinois on the silver screen

It's Fall-O-Ween in Illinois

African American farm a success

New scenic byways guide now available

Illinois attracts diverse audiences

IBOT staff member takes off

National News

Chicago's Navy Pier remains a favorite

Heritage tourism booming

Business/leisure travel is up

Workers travel less for business

Disability travel on the rise

U.S. sets new record for travel abroad

travelers with disabilities, and shows that the average number of leisure trips and hotel stays among these travelers is up 50 percent from 2002.

Source: Travel Advance

U.S. sets new record for travel abroad

Some 61.8 million Americans traveled abroad last year, the largest number of U.S. outbound travelers ever, according to figures recently released by the Commerce Department's Office of Travel and Tourism Industries. The figure represented a 10 percent increase in outbound travel over 2003. Spending by U.S. travelers abroad also set a new record in 2004, at \$8 billion, a 14 percent increase over 2003 spending. The top outbound markets were Mexico and Canada. Top overseas markets for U.S. visitors were the U.K., France, Italy, China and Germany.

Source: Travel Advance

For more information, visit www.enjoyillinois.com or call 1-800-2CONNECT.



U.S. Census Bureau

American FactFinder

FACT SHEET

Chicago city, Illinois

2006 American Community Survey

Data Profile Highlights:

NOTE: Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

| Social Characteristics - show more >> | Estimate | Percent | U.S. | Margin of Error |
|---|-----------|---------|---------|-----------------|
| Average household size | 2.65 | (X) | 2.61 | +/-0.02 |
| Average family size | 3.58 | (X) | 3.20 | +/-0.04 |
| Population 25 years and over | 1,771,459 | | | +/-17,414 |
| High school graduate or higher | (X) | 77.0 | 84.1% | (X) |
| Bachelor's degree or higher | (X) | 29.3 | 27.0% | (X) |
| Civilian veterans (civilian population 18 years and over) | 119,411 | 5.8 | 10.4% | +/-4,972 |
| Disability status (population 5 years and over) | 357,289 | 14.2 | 15.1% | +/-8,989 |
| Foreign born | 599,802 | 21.8 | 12.5% | +/-18,070 |
| Male, Now married, except separated (population 15 years and over) | 412,296 | 39.2 | 52.4% | +/-8,877 |
| Female, Now married, except separated (population 15 years and over) | 387,339 | 34.3 | 48.4% | +/-8,022 |
| Speak a language other than English at home (population 5 years and over) | 927,403 | 36.5 | 19.7% | +/-20,917 |
| Household population | 2,691,356 | | | +/-29,160 |
| Group quarters population | (X) | (X) | (X) | (X) |
| Economic Characteristics - show more >> | Estimate | Percent | U.S. | Margin of Error |
| In labor force (population 16 years and over) | 1,386,112 | 64.7 | 65.0% | +/-16,958 |
| Mean travel time to work in minutes (workers 16 years and over) | 33.4 | (X) | 25.0 | +/-0.4 |
| Median household income (in 2006 inflation-adjusted dollars) | 43,223 | (X) | 48,451 | +/-1,036 |
| Median family income (in 2006 inflation-adjusted dollars) | 49,113 | (X) | 58,526 | +/-1,274 |
| Per capita income (in 2006 inflation-adjusted dollars) | 24,219 | (X) | 25,267 | +/-438 |
| Families below poverty level | (X) | 17.2 | 9.8% | (X) |
| Individuals below poverty level | (X) | 21.2 | 13.3% | (X) |
| Housing Characteristics - show more >> | Estimate | Percent | U.S. | Margin of Error |
| Total housing units | 1,175,547 | | | +/-9,142 |
| Occupied housing units | 1,015,685 | 86.4 | 88.4% | +/-9,647 |
| Owner-occupied housing units | 500,638 | 49.3 | 67.3% | +/-8,731 |
| Renter-occupied housing units | 515,047 | 50.7 | 32.7% | +/-9,446 |
| Vacant housing units | 159,862 | 13.6 | 11.6% | +/-6,754 |
| Owner-occupied homes | 500,638 | | | +/-8,731 |
| Median value (dollars) | 277,900 | (X) | 185,200 | +/-4,761 |
| Median of selected monthly owner costs | | | | |
| With a mortgage (dollars) | 1,840 | (X) | 1,402 | +/-21 |
| Not mortgaged (dollars) | 559 | (X) | 399 | +/-10 |
| ACS Demographic Estimates - show more >> | Estimate | Percent | U.S. | Margin of Error |
| Total population | 2,749,283 | | | +/-29,156 |

| | | | | |
|--|-----------|------|-------|-----------|
| Male | 1,343,629 | 48.9 | 49.2% | +/-15,410 |
| Female | 1,405,654 | 51.1 | 50.8% | +/-18,239 |
| Median age (years) | 33.6 | (X) | 36.4 | +/-0.3 |
| Under 5 years | 209,747 | 7.6 | 6.8% | +/-6,760 |
| 18 years and over | 2,070,961 | 75.3 | 75.4% | +/-19,791 |
| 65 years and over | 281,613 | 10.2 | 12.4% | +/-5,996 |
| One race | 2,705,807 | 98.4 | 98.0% | +/-28,552 |
| White | 1,004,760 | 36.5 | 73.9% | +/-20,570 |
| Black or African American | 970,244 | 35.3 | 12.4% | +/-16,700 |
| American Indian and Alaska Native | 5,104 | 0.2 | 0.8% | +/-1,270 |
| Asian | 134,837 | 4.9 | 4.4% | +/-7,687 |
| Native Hawaiian and Other Pacific Islander | 1,296 | 0.0 | 0.1% | +/-851 |
| Some other race | 589,566 | 21.4 | 6.3% | +/-19,879 |
| Two or more races | 43,476 | 1.6 | 2.0% | +/-4,899 |
| Hispanic or Latino (of any race) | 774,042 | 28.2 | 14.8% | +/-16,723 |

Source: U.S. Census Bureau, 2006 American Community Survey


Explanation of Symbols:

**** - The median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.

***** - The estimate is controlled. A statistical test for sampling variability is not appropriate.

'N' - Data for this geographic area cannot be displayed because the number of sample cases is too small.

'(X)' - The value is not applicable or not available.

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U.S. Census Bureau

American FactFinder

FACT SHEET

Chicago city, Illinois

View a Fact Sheet for a **race, ethnic, or ancestry group**

Census 2000 Demographic Profile Highlights:

General Characteristics - show more >>

| | Number | Percent | U.S. | | |
|--|-----------|---------|-------|-----|-------|
| Total population | 2,896,016 | | | map | brief |
| Male | 1,405,107 | 48.5 | 49.1% | map | brief |
| Female | 1,490,909 | 51.5 | 50.9% | map | brief |
| Median age (years) | 31.5 | (X) | 35.3 | map | brief |
| Under 5 years | 218,522 | 7.5 | 6.8% | map | |
| 18 years and over | 2,136,176 | 73.8 | 74.3% | | |
| 65 years and over | 298,803 | 10.3 | 12.4% | map | brief |
| One race | 2,811,579 | 97.1 | 97.6% | | |
| White | 1,215,315 | 42.0 | 75.1% | map | brief |
| Black or African American | 1,065,009 | 36.8 | 12.3% | map | brief |
| American Indian and Alaska Native | 10,290 | 0.4 | 0.9% | map | brief |
| Asian | 125,974 | 4.3 | 3.6% | map | brief |
| Native Hawaiian and Other Pacific Islander | 1,788 | 0.1 | 0.1% | map | brief |
| Some other race | 393,203 | 13.6 | 5.5% | map | |
| Two or more races | 84,437 | 2.9 | 2.4% | map | brief |
| Hispanic or Latino (of any race) | 753,644 | 26.0 | 12.5% | map | brief |
| Household population | 2,836,469 | 97.9 | 97.2% | map | brief |
| Group quarters population | 59,547 | 2.1 | 2.8% | map | |
| Average household size | 2.67 | (X) | 2.59 | map | brief |
| Average family size | 3.50 | (X) | 3.14 | map | |
| Total housing units | 1,152,868 | | | map | |
| Occupied housing units | 1,061,928 | 92.1 | 91.0% | | brief |
| Owner-occupied housing units | 464,865 | 43.8 | 66.2% | map | |
| Renter-occupied housing units | 597,063 | 56.2 | 33.8% | map | brief |
| Vacant housing units | 90,940 | 7.9 | 9.0% | map | |

Social Characteristics - show more >>

| | Number | Percent | U.S. | | |
|---|-----------|---------|-------|-----|-------|
| Population 25 years and over | 1,815,896 | | | | |
| High school graduate or higher | 1,304,122 | 71.8 | 80.4% | map | brief |
| Bachelor's degree or higher | 462,783 | 25.5 | 24.4% | map | |
| Civilian veterans (civilian population 18 years and over) | 156,662 | 7.3 | 12.7% | map | brief |
| Disability status (population 5 years and over) | 604,676 | 22.8 | 19.3% | map | brief |
| Foreign born | 628,903 | 21.7 | 11.1% | map | brief |
| Male, Now married, except separated (population 15 years and over) | 459,488 | 42.7 | 56.7% | | brief |
| Female, Now married, except separated (population 15 years and over) | 440,675 | 37.4 | 52.1% | | brief |
| Speak a language other than English at home (population 5 years and over) | 952,076 | 35.5 | 17.9% | map | brief |

Economic Characteristics - show more >>

| | Number | Percent | U.S. | | |
|---|-----------|---------|--------|-----|-------|
| In labor force (population 16 years and over) | 1,358,054 | 61.3 | 63.9% | | brief |
| Mean travel time to work in minutes (workers 16 years and over) | 35.2 | (X) | 25.5 | map | brief |
| Median household income in 1999 (dollars) | 38,625 | (X) | 41,994 | map | |
| Median family income in 1999 (dollars) | 42,724 | (X) | 50,046 | map | |
| Per capita income in 1999 (dollars) | 20,175 | (X) | 21,587 | map | |
| Families below poverty level | 105,752 | 16.6 | 9.2% | map | brief |
| Individuals below poverty level | 556,791 | 19.6 | 12.4% | map | |


Housing Characteristics - show more >>

Number Percent U.S.

| | | | | | |
|--|---------|-----|---------|-----|-------|
| Single-family owner-occupied homes | 263,925 | | | | brief |
| Median value (dollars) | 132,400 | (X) | 119,600 | map | brief |
| Median of selected monthly owner costs | (X) | (X) | | | brief |
| With a mortgage (dollars) | 1,216 | (X) | 1,088 | map | |
| Not mortgaged (dollars) | 369 | (X) | 295 | | |

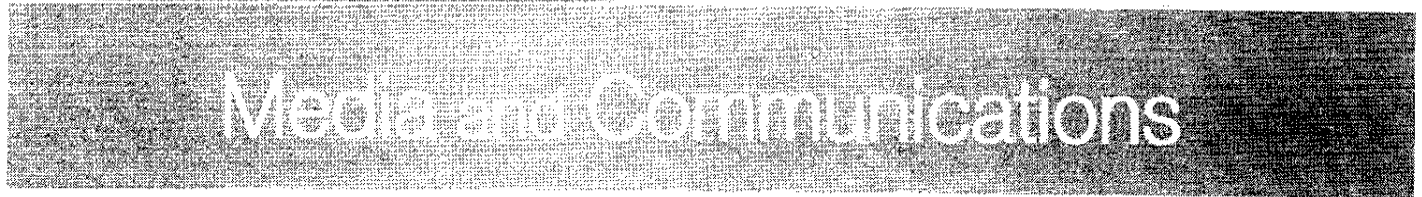
(X) Not applicable.

Source: U.S. Census Bureau, Summary File 1 (SF 1) and Summary File 3 (SF 3)

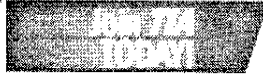
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Contact: Cathy.Keefe@tia.org 202.408.2183

Gas Prices Not Likely To Affect Travel Plans of Most American Travelers

One of Six Plans To Spend Tax Rebate On Travel

Washington, DC -- Six of ten (59%) Americans who are currently planning a trip with their car, truck or SUV this summer will not change their travel plans even with additional increases in the price of gas, according to the closely watched *travelhorizons*[™] survey co-authored by the Travel Industry Association (TIA) and Ypartnership.

One of six (16%) of those expecting a tax rebate as part of the economic stimulus package approved by Congress is planning to spend their rebate on an overnight or day trip for leisure purposes, according to the same nationally representative survey of 2,233 adults conducted during the month of April.

"The data confirm, once again, that vacations are a non-negotiable part of contemporary life, even in challenging economic times," said Peter Yesawich, Ypartnership's Chairman and Chief Executive Officer.

Roger Dow, TIA's President and Chief Executive Officer, said the survey results indicating \$12.1 billion of the tax rebates will be spent on trips underscores travel's importance to the overall economy.

"These survey results prove that travel is a multi-billion dollar shot into the arm of the American economy," said Dow. "It is time for policymakers to do their part by improving America's infrastructure, developing a more efficient and reliable air travel process and passing the Travel Promotion Act."

Among the 41% of respondents who stated their plans would change if gas prices rise further, the greatest percentage would simply drive a shorter distance to their vacation destination. Other expected outcomes include people taking fewer trips and spending less money on other aspects of vacations as revealed below:

- 38% would drive a shorter distance;
- 36% would take fewer trips and/or cancel a trip;
- 30% would spend less on souvenirs and shopping;
- 27% would spend less money on meals/restaurants and/or less on entertainment;
- 23% would spend less on hotels;
- 21% would spend fewer nights away from home;
- 20% would select another vacation destination.

The survey revealed that 74% of households are expecting to receive a tax rebate check as part of the economic stimulus package approved by Congress. Among those planning to use the money to take a trip, just under half (46%) plan to stay in a hotel, motel or bed and breakfast, one out of four (25%) plans to take a trip by air, 11% plan to visit a theme park, 5% plan to stay in a timeshare and 3% plan to take an international trip.

Search TIA - Find it All... Right Here

Click on the "Search" icon on the right side of the page to find the information you need. You can also search for information on the TIA website by clicking on the "Search" icon on the right side of the page.

Among adults not planning to use their tax rebate to take an overnight or day trip, the most frequently mentioned uses include:

- Put in savings account, mutual fund or otherwise invest (29%);
- Spend on home necessities such as food, utility bills, etc. (24%);
- Pay down a credit card balance (23%);
- Pay down debt other than a credit card balance (18%);
- Spend on dining out or other forms of entertainment (6%).

Only 4% indicated they would use the rebate to make a home mortgage payment and/or home or apartment rental payment.

travelhorizons™ is a quarterly survey of U.S. adults co-authored by the Travel Industry Association and Ypartnership. The national survey of 2,233 U.S. adults was conducted during April 2008, and the estimated margin of error is +/-2.05 percent at the 95 percent level of confidence.

For more information on *travelhorizons*™ visit www.tia.org/researchpubs/travel_horizons.html.


The Travel Industry Association is the national, non-profit organization representing all components of the \$740 billion travel industry. TIA's mission is to promote and facilitate increased travel to and within the United States. TIA is proud to be a partner in travel with American Express. For more information, visit www.tia.org.

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Here is the definition I have used over the past ten years or so to describe Telemedicine:

"Telemedicine is the ability to provide interactive healthcare utilizing modern technology and telecommunications." Basically, Telemedicine allows patients to visit with physicians live over video for immediate care or capture video/still images and patient data are stored and sent to physicians for diagnosis and follow-up treatment at a later time. Whether you live in the center of Los Angeles or deep in the Brazilian Amazon, Telemedicine is an invaluable tool in Healthcare.

Here's an example of how Telemedicine works everyday. Say you have a horrible sore throat and visit your healthcare provider (could be a general practice physician, nurse practitioner, or unlicensed health worker in a village depending where you live), who does an examination and is concerned with what he sees. Your provider recommends a referral to an ENT specialist for a follow up diagnosis and treatment plan. Well, instead of traveling to the nearest specialist, which depending where you live could be anywhere from a 45-minute drive or an 18-hour boat ride up the Amazon River, your provider connects you directly to the ENT specialist via Telemedicine.

Here are some of the major benefits of a Telemedicine Consultation:

- The specialist actually hears your medical history and current condition directly from you and your provider instead of the specialist receiving a dictated note in the mail.
- With the use of ENT medical peripherals such as a nasopharyngoscope, your provider can pass this medical peripheral into your nasal passage which will allow your provider and the ENT specialist simultaneous crystal clear video of your throat and vocal cords. The specialist may ask you to cough, pronounce letters, etc. in order to get the best outcome for the diagnosis.
- The specialist can diagnose and recommend treatment immediately.
- Your provider has the opportunity throughout the examination to ask questions and learn from each and every consultation. The continual education of your provider via medical consultations is an immeasurable benefit to all his patients.

Telemedicine Usage Models

Real-Time

This is the most common use in Telemedicine. Like the example above, live video allows the provider, patient and specialist to all communicate together to achieve the best outcome for the patient.

- In or outpatient specialty consultation
- Physician supervision of non-MD clinician
- Generally require higher bandwidths (minimum 256kb)

Store and Forward (asynchronous)

Used when both health providers are not available or not required at the same time. The provider's voice or text dictation on the patient's history, current affliction including pictures and/or video, radiology images, etc., are attached for diagnosis. This record is either emailed or placed on a server for the specialist's access. The specialist then follows up with his diagnosis and treatment plan.

- Teleradiology
- Can be done over low or high bandwidth
- Images scanned, direct capture, or digital camera
- Other specialties consist of dermatology, ophthalmology, pathology

Home Health Telemedicine

When a patient is in the hospital and he is placed under general observation after a surgery or other medical procedure, the hospital is usually losing a valuable bed and the patient would rather not be there as well. Home health allows the remote observation and care of a patient. Home health equipment consists of vital signs capture, video conferencing capabilities, and patient stats can be reviewed and alarms can be set from the hospital nurse's station, depending

on the specific home health device.

- Usually low bandwidth analog Plain Old Telephone System (POTS). Some newer systems do support higher bandwidth capabilities.
- Disease management post-hospital care, assisted living, etc.

Summary of Benefits of Telemedicine:

To Rural Physicians and clinics (spoke sites)

- Receive education from the specialist/provider
- Better health outcome for their patients
- Enhanced community confidence in local healthcare
- Attend continuing medical education courses from their clinic

To Patients

- Loved ones remain in their community with family support
- Cost savings from not having to travel extensively
- Immediate urgent care
- Confidentiality of specialty examination or visit (Because the patient visits the general practice doctor, he can be seen for any specialty care without anyone else knowing)
- Patient education courses (nutrition, oncology, etc.)
- Properly stabilize patient prior to transport
- Early Diagnosis prior to escalated medical episode

To Patient's Community

- Dollars follow the patient
 - Patients that routinely travel to visit doctors in large urban areas tend to purchase their goods and services from those cities. Telemedicine keeps those dollars local.

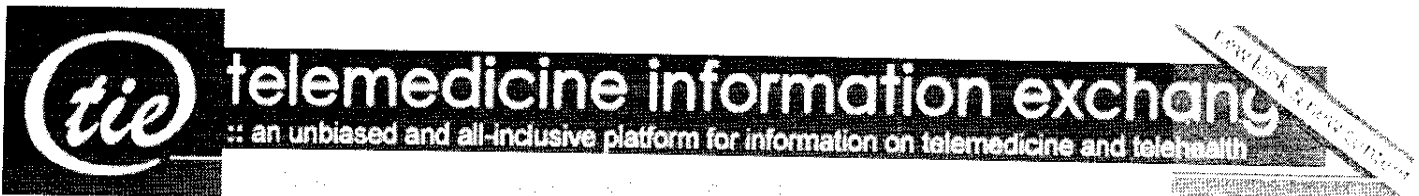
To Telemedicine Providers (hub sites)

- Expand patient outreach
- Major surgical procedures resulting from the initial telemedicine consultation
- Reduction in ER visits
- Promotion of Hospital
- Charge tuition for clinician education courses (CME, CNE, etc.)

There is no generally accepted standard definition of telemedicine. The term is used to describe a wide range of services, including remote patient monitoring, remote diagnosis, and remote patient education.

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Telemedicine 101

Telemedicine Coming of Age

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By Nancy Brown, September 28, 1996
 * Updated on January 13, 2005

Telemedicine has been defined as the use of telecommunications to provide medical information and services (Perednia and Allen 1995). It may be as simple as two health professionals discussing a case over the telephone, or as sophisticated as using satellite technology to broadcast a consultation between providers at facilities in two countries, using videoconferencing equipment or robotic technology. The first is used daily by most health professionals, and the latter is used by the military and some large medical centers. It is the practice of telemedicine somewhere in between those two that will be described in this article.

Types of Technology

Two different kinds of technology make up most of the telemedicine applications in use today. The first, called store and forward, is used for transferring digital images from one location to another. A digital image is taken using a digital camera, ('stored') and then sent ('forwarded') by computer to another location. This is typically used for non-emergent situations, when a diagnosis or consultation may be made in the next 24 - 48 hours and sent back.

The image may be transferred within a building, between two buildings in the same city, or from one location to another anywhere in the world. Teleradiology, the sending of x-rays, CT scans, or MRIs (store-and-forward images) is the most common application of telemedicine in use today. There are hundreds of medical centers, clinics, and individual physicians who use some form of teleradiology. Many radiologists are installing appropriate computer technology in their homes, so they can have images sent directly to them for diagnosis, instead of making an off-hours trip to a hospital or clinic.

Telepathology is another common use of this technology. Images of pathology slides may be sent from one location to another for diagnostic consultation. Dermatology is also a natural for store and forward technology (although practitioners are increasingly using interactive

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technology for dermatological exams). Digital images may be taken of skin conditions, and sent to a dermatologist for diagnosis.

The other widely used technology, two-way interactive television (IATV), is used when a 'face-to-face' consultation is necessary. The patient and sometimes their provider, or more commonly a nurse practitioner or telemedicine coordinator (or any combination of the three), are at the originating site. The specialist is at the referral site, most often at an urban medical center. Videoconferencing equipment at both locations allow a 'real-time' consultation to take place. The technology has decreased in price and complexity over the past five years, and many programs now use desktop videoconferencing systems. There are many configurations of an interactive consultation, but most typically it is from an urban-to-rural location. It means that the patient does not have to travel to an urban area to see a specialist, and in many cases, provides access to specialty care when none has been available previously. Almost all specialties of medicine have been found to be conducive to this kind of consultation, including psychiatry, internal medicine, rehabilitation, cardiology, pediatrics, obstetrics and gynecology and neurology. There are also many peripheral devices which can be attached to computers which can aid in an interactive examination. For instance, an otoscope allows a physician to 'see' inside a patient's ear; a stethoscope allows the consulting physician to hear the patient's heartbeat.

Many health care professionals involved in telemedicine are becoming increasingly creative with available technology. For instance, it's not unusual to use store-and-forward, interactive, audio, and video still images in a variety of combinations and applications. Use of the Web to transfer clinical information and data is also becoming more prevalent. Wireless technology is being used for instance, in ambulances providing mobile telemedicine services.

Programs and Applications

There are many programs world-wide using a variety of technologies to provide healthcare. At the [University of Kansas Telemedicine Program](#), telemedicine technology has been used for several years for oncology, mental health care to patients in rural jails, hospice care, and most recently, to augment school health services by allowing school nurses to consult with physicians.

Several telemedicine programs are being initiated in correctional facilities, where the costs and danger of transporting prisoners to health facilities can be avoided. The University of Texas Medical Branch at Galveston [Center for Telehealth and Distance Education](#) was one of the original programs to begin providing services to inmates, and sees hundreds of patients per month.

[Home health](#) care is another booming area of telemedicine, including Japan, the UK and the US. The [Veterans Affairs Administration](#) has initiated home telehealth as part of its telehealth program. Telemedicine does not have to be a high-cost proposition. Many projects are providing

valuable services to those with no access to health care using low-end technology. The [Memorial University of Newfoundland](#) telemedicine project has been using low-cost store and forward technology to provide quality care to rural areas in under-developed countries for many years.

The military and some university research centers are involved in developing robotics equipment for [telesurgery applications](#). A surgeon in one location can remotely control a robotics arm for surgery in another location. The military has developed this technology particularly for battlefield use, and some U.S. academic medical centers and research organizations are also testing and using the technology.

Advantages of Telemedicine

Providing healthcare services via telemedicine offers many advantages. It can make specialty care more accessible to underserved rural and urban populations. Video consultations from a rural clinic to a specialist can alleviate prohibitive travel and associated costs for patients. Videoconferencing also opens up new possibilities for continuing education or training for isolated or rural health practitioners, who may not be able to leave a rural practice to take part in professional meetings or educational opportunities. While studies have yet to confirm this, it appears that the use of telemedicine can also cut costs of medical care for those in rural areas.

Barriers to Telemedicine

There are still several barriers to the practice of telemedicine. Many states will not allow out-of-state physicians to practice unless licensed in their state. The [Centers for Medicare and Medicaid \(CMS\)](#) still has several restrictions for Medicare telemedicine reimbursement. Many private insurers also will not reimburse, although some states, such as California and Kentucky, have legislated that they must reimburse the same as for face-to-face consultations. Other programs, such as Eastern Montana and Inland Health in Washington, have negotiated with payers for telemedicine reimbursement. Fear of malpractice suits is another consideration for physicians, as is acceptance of the technology and lack of 'hands-on' interaction with patients, although most patient satisfaction studies to date find patients on the whole satisfied with long distance care. ([Gustke et al 2000](#))

Many potential telemedicine projects have been hampered by the lack of appropriate telecommunications technology. Regular telephone lines do not supply adequate bandwidth for most telemedical applications. Many rural areas still do not have cable wiring or other kinds of high bandwidth telecommunications access required for more sophisticated uses, so those who could most benefit from telemedicine may not have access to it.

Many current telemedicine projects side-step these and other problems by obtaining federal funds. However, in the past three to four years, federal funding has become less available for telemedicine. In 2005, the

Technology Opportunity Program (TOP) will not receive funds for telemedicine/telehealth, and the Office for the Advancement of Telehealth (OAT) will not be able to fund any new programs. Some legislation and grant appropriations passed in response to 9/11 include the use of telehealth, but no direct funding has been made available. Some private corporations and telecommunications companies are stepping in to fill the void, however, pressure on the appropriate government and legislative agencies is needed before more funding will become available.

Technology manufacturers and telecommunications companies are vying with each other to produce the low-cost equipment and bandwidth needed. Many states are creating networks which link education, government, business and healthcare. Distance education is commonplace and most educational institutions and many companies allay travel costs for meetings by using video.

Telemedicine or Telehealth?

The term 'telehealth' was originally used to describe administrative or educational functions related to telemedicine. Now that physicians use email to communicate with patients, and drug prescriptions and other health services are being offered on the Web, 'telehealth' is generally used as an umbrella term to describe all the possible variations of healthcare services using telecommunications. The term 'telemedicine' more appropriately describes the direct provision of clinical care via telecommunications--diagnosing, treating or following up with a patient at a distance. However, stay tuned. The terminology used to describe healthcare services at a distance will likely change as fast as the technology used to perform it.

Conclusion

It's not too much of a stretch of the imagination to realize that telemedicine will soon be just another way to see a health professional, just as seeing friends and family while talking to them on the phone is becoming commonplace. Farther down the road, it has been theorized that we each could have a 'Personal Diagnosis System' as part of our home entertainment centers. This system would monitor our daily health status and automatically notify a health professional if we become ill. (Kurtz 1994)

Fifteen or twenty years ago we had no idea we would rely heavily on faxes, answering machines and e-mail, tools which are now low-tech and taken for granted. In early 2005, telemedicine still has not reached its potential. However, information about telemedicine continually increases, there are many programs in operation since 1994, and telemedicine technology is usually included in hospital remodels or new hospitals. In the mid-90's Ronald C. Merrell, from Yale University School of Medicine said, "The innovations we will encounter as we step beyond feasibility are dazzling in their potential." (Merrell 1995) In 2005, the potential of telemedicine, telehealth and e-health is still left to our imaginations.

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Revisions

May 3, 2003: checked links (N.B.)

January 13, 2005: checked links; made edits (N.B.)

About the author: Nancy Brown M.L.S., was the Research Librarian for the Telemedicine Research Center, in Portland, Oregon. She was also the Project Manager for Telemedicine Information Exchange (TIE). She has demonstrated the TIE at national and international meetings and has published several articles and a book chapter on the provision of Web-based information on telemedicine, as well as a compilation of telemedicine literature for the Medical Library Association.

Page last updated on Sunday, July 12, 2009

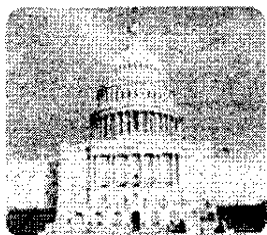
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National legislative activities -- Medicare

Medicare physician payment reform



We are happy to report that the Senate passed H.R. 6331, the "Medicare Improvements for Patients and Providers Act of 2008," by a veto-proof majority of 69-30 on July 9, 2008. Eighteen Republican Senators joined Senate Democrats to make this a truly bipartisan process. See how your senators voted [here](#). Please [thank those senators](#) that voted to stop the Medicare physician payment cuts.

This legislation replaces the 10.6% payment cut that went into effect on July 1 with a 0.5% update extension through December 31, 2008. For calendar year 2009, the update will be 1.1%. Other important provisions such as extending the GPCI floor on physician work were also included.

This 18-month reprieve will also provide time for Congress to work with physicians on developing a long-term solution to a payment system that all agree is fatally flawed.

The bill must now be signed into law by President Bush, who has signaled on more than one occasion that he intends to veto it. However, given the fact that the payment cuts have already occurred and that the bill passed both chambers with the two-third majority needed to override a veto, there is some reason to question next steps by the White House. We will keep you apprised as we learn more.

See the [AMA Physician Payment Action Kit](#) for more information, including highlights of H.R. 6331

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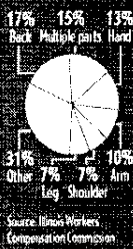
JOB

A breakdown of the regional workforce and a gauge of which employees bring home the most bacon.

QUICK HITS

ON-THE-JOB INJURIES

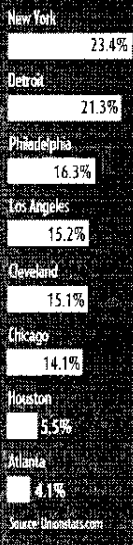
Illinois workers suffered more back injuries than any other type in 2006.



STATE OF THE UNIONS

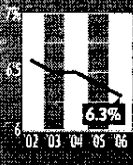
Chicago has a smaller union workforce than several major markets.

PERCENT OF EMPLOYEES IN UNIONS IN 2007



WORLDWIDE WORKFORCE

The unemployment rate globally was 6.3% in 2006, vs. 5.3% in Chicago. East Asia had the lowest rate, 3.6%, and the Middle East the highest, 12.1%.



SEE MORE CHICAGO BUSINESS.COM

Get descriptions of the jobs listed in the wage and salary survey at ChicagoBusiness.com/marketfacts.

WHERE THE JOBS ARE

A county-by-county breakdown of employment in 2007.

EMPLOYMENT BY SECTOR

Cook
Private sector: 2,194,338 | State and local gov't: 270,751 | Federal gov't: 61,440

DuPage
Private sector: 538,626 | State and local gov't: 45,535 | Federal gov't: 5,414

Kane
Private sector: 177,607 | State and local gov't: 27,865 | Federal gov't: 1,778

Lake
Private sector: 283,271 | State and local gov't: 55,329 | Federal gov't: 5,299

McHenry
Private sector: 85,523 | State and local gov't: 13,886 | Federal gov't: 577

Will
Private sector: 154,665 | State and local gov't: 29,949 | Federal gov't: 1,058

Private-sector jobs
Products: 327,349
Services: 1,866,989

Products: 89,910
Services: 468,716

Products: 42,240
Services: 130,367

Products: 58,393
Services: 214,878

Products: 28,075
Services: 57,448

Products: 35,430
Services: 119,535

Top five private-sector employers: Retail trade; manufacturing; health care and social assistance; accommodation and food services; construction

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2008 CHICAGO WAGE AND SALARY SURVEY

Management Assn. of Illinois' annual survey of how much workers in the Chicago area make

Legend: Biggest increase in category Biggest decrease in category

% change from '07

2008

EXECUTIVES

| | | |
|--------------------------------------|-----------|-------|
| Advertising/promotion manager | \$87,871 | ▼3.8 |
| Chief engineering/research executive | \$156,021 | ▲1.0 |
| Chief executive officer | \$331,357 | ▼6.6 |
| Chief financial/accounting executive | \$176,693 | ▲8.2 |
| Chief human resources executive | \$120,513 | ▲1.4 |
| Chief information officer | \$126,675 | ▼18.7 |
| Chief international executive | \$173,318 | ▼19.7 |
| Chief manufacturing executive | \$169,125 | ▲19.2 |
| Chief operating officer | \$240,512 | ▼10.9 |
| Chief sales/marketing executive | \$177,230 | ▼8.0 |
| Chief staff/legal counsel | \$242,506 | ▼10.6 |
| Compensation/benefits head | \$123,313 | ▼8.2 |
| Controller | \$115,338 | ▲5.4 |
| Director of materials | \$105,686 | ▲3.8 |
| General sales manager | \$123,744 | ▲4.3 |
| Industrial engineering head | \$96,094 | ▲12.4 |
| Manufacturing manager/plant manager | \$103,997 | ▼7.4 |
| Quality control head | \$97,783 | ▲6.8 |

SALARIED WORKERS

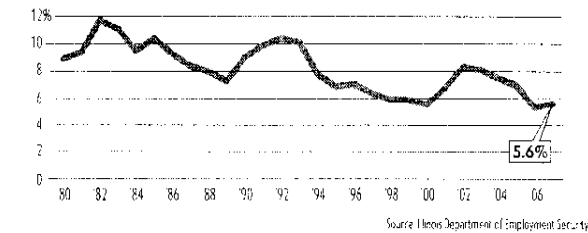
| | | |
|-------------------------------------|----------|-------|
| Accounting | | |
| Accountant | \$51,247 | ▲3.4 |
| Bookkeeper | \$40,348 | ▲0.8 |
| Clerk, accounting (general) | \$35,218 | ▼2.4 |
| Accountant, cost | \$55,708 | ▼3.3 |
| Clerk, payroll | \$36,881 | ▲2.2 |
| Accounting manager | \$84,611 | ▲4.4 |
| Senior accountant | \$63,990 | ▲5.8 |
| Credit manager | \$69,890 | ▲4.4 |
| Order and billing supervisor | \$63,123 | ▲19.2 |
| Financial analyst | \$71,807 | ▲3.6 |
| Payroll supervisor | \$58,794 | ▲6.8 |
| Grant and collection representative | \$39,846 | ▲2.6 |
| Cost accounting manager | \$83,067 | ▲1.1 |
| Payroll administrator | \$45,496 | ▲4.1 |
| Credit clerk | \$30,479 | ▼2.6 |

HOURLY WAGE EARNERS

| | | |
|---|---------|-------|
| Assembler | \$19.22 | ▼1.4 |
| Janitorial cleaner | \$7.27 | ▼3.0 |
| Truck/delivery driver | \$17.74 | ▲14.6 |
| Maintenance electrician | \$25.15 | ▼3.3 |
| Electrician, production | \$25.04 | ▲2.2 |
| Gender centerless | \$16.05 | ▼1.5 |
| Grinder, universal | \$21.79 | ▲6.6 |
| Security guard | \$13.81 | ▲6.4 |
| Lead material handler | \$17.26 | ▼6.1 |
| Material handler | \$15.72 | ▲3.8 |
| Maintenance helper | \$12.80 | ▲6.6 |
| Production helper | \$12.70 | ▲0.1 |
| Inspector/tester | \$17.31 | ▲9.7 |
| Loader, assembly group | \$17.58 | ▼0.6 |
| Loader, inspection group | \$22.74 | ▲6.6 |
| General machinist | \$19.16 | ▲4.3 |
| Maintenance machinist | \$24.95 | ▲2.8 |
| Model maker | \$23.64 | ▲6.0 |
| Maker, tool, die and gauge | \$26.47 | ▲1.7 |
| Automotive mechanic | \$22.74 | ▼1.4 |
| Chucking machine operator | \$17.87 | ▲7.1 |
| Greaser operator | \$11.28 | ▲1.2 |
| Drill press operator | \$14.67 | ▼0.2 |
| Router operator | \$16.64 | ▼2.7 |
| Operator, fabricating machine (sheet metal) | \$14.80 | ▲15.8 |
| Lathe operator | \$19.30 | ▲9.1 |
| Machine tool operator | \$18.52 | ▲14.4 |
| Multimachine operator | \$15.10 | ▼9.9 |
| Milling machine operator | \$15.67 | ▼3.5 |
| Press brake operator | \$17.85 | ▲4.4 |
| Punch press operator | \$17.09 | ▲2.4 |
| Screw machine operator | \$19.10 | ▲5.5 |
| Packer | \$11.26 | ▲6.6 |
| Production painter | \$16.17 | ▼0.3 |
| Plater | \$23.55 | ▼8.1 |
| Chemical processor | \$19.16 | ▼25.0 |
| Lead punch press | \$26.36 | ▼9.3 |
| Storekeeper | \$14.24 | ▲4.1 |
| Tester/analyzer | \$18.09 | ▼7.2 |
| Tool crib attendant | \$17.87 | ▲7.1 |
| Combination welder | \$17.85 | ▲2.6 |
| Machine welder | \$16.52 | ▼5.8 |
| Electrical/electronic wiper | \$16.36 | ▼10.3 |
| Maintenance worker | \$22.04 | ▲2.6 |
| Machine filler | \$13.24 | ▼14.6 |
| Machining center operator | \$18.74 | ▲0.8 |
| SQC technician | \$14.73 | ▲1.0 |
| Lead machining center | \$21.95 | ▼0.2 |
| Automated assembly machine operator | \$14.39 | ▲11.0 |
| Slat operator | \$16.52 | ▼0.2 |
| Packer | \$10.87 | ▼9.2 |
| Shoper/receiver | \$15.30 | ▼0.6 |

CHICAGO'S UNEMPLOYMENT RATE

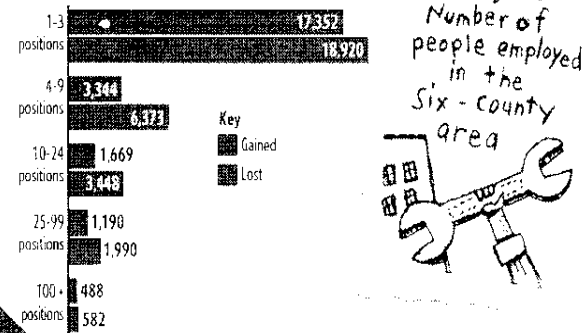
After four years of decline, the city's unemployment rate ticked up in 2007.



WINNERS AND LOSERS

Nearly 80% of Chicago companies did not add or decrease their employee headcounts from 2006 to 2007.

NUMBER OF COMPANIES BY JOBS GAINED OR LOST



3,861,262
Number of people employed in the six-county area

Source: Ernst & Young

Job descriptions

To accompany the 2008 Chicago wage and salary survey

EXECUTIVES

Advertising/sales promotion manager: Responsible for overall management, direction and coordination of the organization's advertising, promotion, and publicity programs. May be responsible for planning and directing exhibits, conventions or trade shows.

Chief engineering/research executive: Coordinates all engineering activities of the organization. Develops and recommends policies and programs for engineering of existing products or new products. May direct engineering research for organization. Establishes budgetary and performance controls, maintains records on engineering, coordinates with other activities of the organization, such as marketing and manufacturing. Provides technical assistance to other functions within the organization, as requested. Typical position titles include: Vice President of Engineering, Vice President of Engineering/Research, Director of Engineering, Chief Engineer, etc.

Chief executive officer: Determines the basic objectives of the organizational unit, formulates plans and policies and allocates resources for the achievement of these objectives. Interprets and applies policies established by the owners of the enterprise or their representatives (Bd. of Directors, Trustees, etc.). Organizes the unit and determines allocation of duties and authorities to subordinates. Exercises controls to see that objectives are achieved in accordance with basic organization policy. Fully accountable for the results of the activity of the organizational unit. Typical position titles include: Chairman of the Board, President, Vice President, General Manager, Executive Director, etc. This is usually a single incumbent position.

Chief financial/accounting executive: Responsible for the entire range of financial activity in the organizational unit, including both the treasury and accounting functions. Formulates and recommends policies on banking, receipt and disbursement of funds, extension of credit, fiscal and accounting matters. Responsible for development of standard accounting, analysis and reporting procedures and for exercise of overall financial control. Typical position titles include: Financial Vice President, Treasurer, Controller, Secretary-Treasurer, Director of Finance, etc.

Chief human resources executive: Responsible for the entire range of personnel administration and employee relations activity in the organizational unit. Develops recommendations, and implements policies and programs in such areas as recruitment and employment, organizational planning, training, wage, salary, and benefits administration, labor relations, communications, and safety. Provides guidance and technical assistance in these areas to other staff and operating functions of the organization. Typical position titles include: Vice President-Human Resources, Vice President-Personnel, Director of Employee Relations, Industrial Relations Manager, Personnel Director, etc.

Chief information officer: Responsible for directing the information systems activities within the organizational unit. Establishes policies for maintaining current program effectiveness. Develops recommendations regarding new hardware and software. Establishes budgetary and performance controls. Maintains documentation on current systems. Provides technical assistance to other functions in the organization as requested. Typical Position Titles include: Vice President of Data Processing, Vice President, Management Information Services, Director, Management Information Services.

Chief international executive: Responsibilities include the successful operation and growth of foreign units (such as sales and operating), development of the international market, advise Chief Executive Officer of growth opportunities and trends of foreign markets with current or new products.

Chief manufacturing executive: Responsible for planning, controlling, and coordinating the entire range of manufacturing activities of the organization. Responsible for all related manufacturing activities such as production functions, manufacturing or process engineering, plant and facility engineers, industrial engineering, production scheduling, inventory control, quality control. Typical position titles include: Vice President of Manufacturing, Vice President of Production, Vice President of Operations, Production Manager, Plant Superintendent, etc.

Chief operating officer: Directs and coordinates the activities of the line and staff components of the organizational unit toward the achievement of established objectives. Is accountable for the full range of operations of the organizational unit, providing operational guidance and analyzing and appraising the effectiveness of all operations. Acts as Chief Executive in the absence of the Chief Executive Officer. Typical position titles include: President, Executive Vice President, General Manager, Senior Vice President, etc. This position reports to Chief Executive Officer, if your Chief Operating Officer is also your CEO, please report position under CEO only.

Chief sales/marketing executive: Responsible for the entire range of marketing planning and development, sales promotion and sales activities of the organizational unit. Formulates, recommends, and implements policies and programs in the areas of sales, pricing, market and product or service acceptance research, and related activities. May also have responsibility for customer relations or advertising. Typical position titles might include: Marketing Vice President, Vice President of Sales, Director of Marketing, Sales Director, etc.

Chief staff legal counsel: Responsible for maintaining the official records, legal affairs and documents of the Corporation and to supervise all legal matters such as interpretation of governmental regulations, review and interpret corporate contracts, etc.

Compensation/benefits head: Responsible for developing, implementing, maintaining programs and procedures for compensation of employees. May also be responsible for organization pension. At lower organizational levels, responsibilities may be limited primarily to the administration and maintenance of established systems. Usually reports to Chief Employee Relations Executive.

Controller: Responsible for all accounting activities, including budget, financial forecasting, statistical reports, audits, tax activities, etc., and usually reports to the Chief Financial/Accounting Executive.

Director of materials: Responsible for overall material procurement (purchasing), scheduling of material flow in the production process and the control of the inventory of raw, in-process, and finished goods and/or materials. May direct receiving, stores, traffic, and shipping operations.

General sales manager: Responsible for field sales and the staff to achieve profitable sales volume. Generally provides direction, counsel, and guidance for plans in marketing, advertising, sales promotion, sales training, etc. and reports to the Chief Sales-Marketing Executive.

Industrial engineering head: Responsible for methods, layout, process flow and equipment or tooling requirements for the production and/or processing operations. Conducts methods and improvement studies, evaluates work and equipment performance and prepares facilities and capital investment plans, forecasts and budgets. Supervises work measurement studies and the establishment of time standards.

Manufacturing manager/plant manager: At the Plant level, responsible for machining, fabricating, welding, assembling or for the processing operations required in the production of the finished product, goods or services of the organizational unit. Reports to the Chief Manufacturing Executive and may also be responsible for plant personnel, quality, production and inventory control, etc.

Quality control head: Responsible for planning, developing, and implementing techniques, processes, and procedures for controlling and maintaining the desired level of quality for all goods and services supplied by the organizational unit. Responsible for reviewing product design, coordinating with manufacturing, manufacturing engineering, suppliers and customers to resolve quality problems. May direct inspection services.

SALARIED WORKERS

Accountant: Compute and prepare reports and analyses as requested by organization personnel.

Accounting clerk (general): Perform bookkeeping duties and routine work in following varied standardized accounting procedures and practices.

Accounting manager: General responsibility for supervising the accounting functions of the organization.

Administrative assistant (secretary): Perform secretarial duties for president and/or other key company executives, where duties require extensive knowledge of company organization policies and procedures. Prepare a wide variety of correspondence.

Application engineer: Provide field engineering support, involving advising on and discussing complex customer requirements and application of standard company products and designs.

Benefits assistant: Coordinate administrative details of employee benefit programs following standard or accepted practices.

Bookkeeper: Perform diversified duties in maintaining accounting records.

Buyer: Place purchase orders for a variety of commodities, materials, and supplies.

Chemist: Perform laboratory chemical analyses on a wide range of materials and finished company products.

Cost accountant: Prepare cost ledger and special monthly reports on costs.

Cost accounting manager: Plan, direct, and provide supervision to cost accounting activities.

Credit and collection representative: Review accounts received from the accounting department or credit manager and determine appropriate credit limits. Assist with and check credit ratings.

Credit manager: Manage credit and collection activities of the organization.

Customer service representative: Respond to customer inquiries regarding product selection, placement of orders for standard products and services, requests for prices and quotations, and complaints.

Customer service supervisor: Supervise the activities of Customer Service Representatives engaged in processing customer orders and providing related service support.

Data entry operator: Operate a computer keyboard terminal to input alphabetic and numeric data from user department source documents.

Desktop publishing designer: Design unique, original materials based on aesthetic trends.

District sales manager: Supervise sales personnel in designated territories.

Drafter: Prepare a wide variety of drawings according to assignment.

Employment interviewer: Assist in interviewing applicants for employment, checking references, determining qualifications, previous experience, and training in relation to specifications of existing or potential job openings.

Environmental engineer: Respond to various state environmental agency inquiries about hazardous waste materials and environmental conditions at site locations.

Executive assistant: Administer special programs and project development functions for key executive management.

Facility engineering manager (maintenance): Responsible for grounds, buildings, and building equipment.

Field service manager: Supervise the activities of Field Service Representatives engaged in performing maintenance and repair of a full range of company products.

Financial analyst: Analyze financial data, prepare reports, and make recommendations for top management.

General clerk: Perform prescribed routine duties requiring the use of various forms and procedures, such as data entry or generate standard reports.

Human resources assistant: Organize and maintain records, and file government reports as scheduled; interview, verify qualifications and references for hiring.

Human resources generalist: Supervise personnel activities including safety and first aid, wage administration, personnel records, and employee counseling.

Human resources manager: General responsibility for all plant and office personnel activities, such as employment, training, wage and salary administration, safety and working conditions, employee counseling, and personnel records.

Information services manager: Direct and supervise a department engaged in developing, maintaining, and modifying system software, application programs, and operating computer hardware to automate processes and generate business reports in a large organization.

Inside sales representative: Interpret customer requirements from written or verbal inquiries and advise customers of advantageous changes to their order.

Internal auditor: Responsible for internal audits which provide verification of company operational and internal control procedures.

Laboratory technician: Perform a wide variety of difficult and critical laboratory tests on complex and involved prototypes, competitor products, and spot testing of manufactured products or components.

Mail clerk: Perform a variety of routine activities in the mail room.

Manufacturing engineer: Develop manufacturing methods and processes for complex projects and product lines.

Market research analyst: Develop methods, conduct market surveys, compile data, and prepare various market and product sales evaluation reports to assist area sales management in determining new market potential, sales penetration, and new product potential.

Marketing analyst: Assist in preparation and execution of marketing plans, including developing new business opportunities, competitive analyses, and business forecasts.

Marketing manager: Direct the organization's marketing programs.

Materials manager: Manage the processing and issuing of orders for the manufacture of parts and products.

Network systems administrator: Install, upgrade and monitor microcomputer network hardware, operating systems, communications protocols and software applications.

Network technician: Monitor microcomputer network to ensure proper operation.

Office helper: Follow simple procedures or instructions.

Order and billing supervisor: Plan, assign, and direct work of clerks engaged in the preparation of invoices for goods and services provided.

Outside sales representative: Promote, sell, and secure new business, including important and major accounts.

Payroll administrator: Make a variety of computations on employee overtime, shift premium, and various payroll deductions, following standard procedures, to prepare payroll.

Payroll clerk: Make a variety of computations on employee overtime, shift premium, and various payroll deductions, following standard procedures.

Payroll supervisor: Supervise the payroll department with responsibility for all levels of payroll and time keeping.

Product engineering manager (project or development): General responsibility for research and development work, problem resolution, designs, and the establishment of specifications and standards for company products.

Product manager (brand): Manage the sales promotional activities and profit margins of company product lines, including marketing research studies and new product development activities.

Production control manager: Supervise the planning, scheduling, and expediting of all orders through manufacturing.

Production expeditor: Follow progress of orders through plant, in accordance with production schedules.

Production planner: Analyze forecasts to determine required inventory levels.

Programmer-analyst: Analyze activities to determine applicability to internal software and hardware systems.

Programmer: Develop and modify internal computer programs, involving organization activities and complex business problems.

Purchasing agent: Obtain quotations, and prepare and place purchase orders on group or groups of commodities, materials, supplies, and equipment, including special and unusual items.

Purchasing manager: General responsibility for supervising seldom over 10 people and for all purchasing of material, equipment, and supplies for the organization, including major contracts and capital equipment.

Quality assurance engineer: Assume responsibility for complex projects in the development and implementation of methods and programs to ensure that various company product lines meet specifications and standards.

Quality assurance engineer: Investigate, establish, and implement requirements for inspection and testing methods, techniques, equipment and facilities.

Quality assurance technician: Perform a wide variety of difficult and critical quality control evaluation tests.

Quality process manager: Manage, plan, develop, coordinate, and evaluate a quality process.

Receptionist: Operate multiple line telephone console or PBX switchboard and act as Receptionist.

Regional sales manager: Supervise district sales management and sales personnel in designated territories.

Research and development engineer: Original research or development work, problem resolution, and design of new models and mechanisms for a wide variety of special and unusual equipment.

Senior accountant: Oversee clerical activities in connection with orders, customer billings, debits, or credits.

Service technician: Perform repair and service assignments involving highly technical and complex products.

Shift supervisor: Direct and coordinate activities of several departments, through subordinate supervisors, with full accountability for results in terms of costs, methods, quality and quantity of production, operations, and personnel.

Shipping clerk: Prepare bills of lading or receipts for products, parts, and materials for shipments and route, following standard procedures or customer instructions.

Software engineer (programmer): Develop and test software system products in conjunction with hardware to determine operation and performance of overall system.

Software engineer supervisor: Direct research and software development projects of a complex nature.

Supervisor (class C): Supervises up to 25 persons in a department that operates or works on a limited variety of equipment, produces standardized products, subassemblies, or tools, typically includes assembly, chemical processing, machining (operation only), finishing, sheet metal.

Supervisor (class D): Supervises over 25 persons in a department that performs simple standardized work, performs manual work or work involving very simple equipment, typically includes material handling, assembly, service.

Training coordinator: Organize, coordinate and conduct assigned training programs.

Webmaster: Direct activities for maintaining, modifying and monitoring Internet publications of the organization.

HOURLY WAGE EARNERS

Arc welder: Perform ordinary hand welding operations in all positions for mechanical strength and high pressure on a wide variety of assemblies and products.

Assembler: Plan and perform a wide variety of difficult fitting, assembly, floor erection and alignment of large and complicated units with a large number of parts to exacting customer tolerances, alignment and operating requirements.

Centerless grinder: Make exacting setups and perform through form step and taper grinding on a variety of parts requiring accurate dimensions and concentricity.

Chemical processor: Operate a wide variety of chemical processing equipment involved in preparing solid chemical compounds for experimental or research purposes.

Coil winder (electrical or electronic): Wind coils of various sizes, making ordinary setups of ordinary complexity on universal and solenoid winding machines or lathes with attachment.

Combination welder: Operate arc or gas welding equipment together with atmospheric control equipment for ordinary hand welding operations in all positions to meet specifications for mechanical strength and high pressures on diversified assemblies and products composed of alloys.

Degreaser operator: Operate degreasing basket, conveyor or tank type of equipment to remove oil, grease and other surface foreign matter from a wide variety of sheet metal or machined parts, castings and assemblies.

Die casting machine operator: Operate die casting equipment to produce a variety of castings, following established methods and procedures.

Drill press operator: Change over and adjust drill press, involving leveling and blocking.

Electrical or electronic wirer: Install, connect and solder a variety of wiring conduit and fittings on electrical or electronic units or products.

Extruder operator: Set up and operate extruder line, using materials in pellets or sheets to produce thermoplastic sheets meeting specifications, dimensions and specified weight. Install or change dies, screens, line up takeoffs, slitter, trim scrap collector or grinder, sheet winder and pellet grinder and adjust dies, speed and temperature for sheet uniformity and quality.

Fabricating machine operator (sheet metal): Change over, adjust and operate a variety of sheet metal working machines, following prescribed operation sequence and using furnished tools.

General machinist: Set up and perform a normal range of operations on various types of machine tools to close tolerances, requiring care in tools setting and machining methods.

Grinder (universal): Make exacting and sometimes difficult setups, and operate equipment to external, internal and surface grind a wide variety of parts having shoulders, steps, tapers, contours or recesses, with close relationship of dimensions and surfaces.

Janitorial cleaner: Clean assigned areas, including some with delicate equipment or apparatus.

Lathe operator (engine): Perform a range of operations such as turning, boring, counterboring, facing, recessing and multiple and tape thread cutting on a variety of custom and standard parts, to close tolerances.

Lead assembly group: Lead a group of assemblers performing simple assembly of subassemblies or products of a less complex nature.

Lead inspection group: Act as group leader or setter responsible in a group of seldom over 10 persons.

Lead machining center (CNC): As a setter and group lead, plan job setups, review process sheet and call up program to determine tools required to perform a wide variety of very close tolerance drilling, tapping and milling operations.

Lead material handler: Lead a group of up to 25 persons unloading, loading moving and storing a variety of products.

Lead punch press: As a setter and group leader, responsible for group performing a broad range of complicated work on presses of any capacity, involving the use of progressive, subpress, combination, lamination, complex forming and deep drawing dies.

Machine filler: Fill cans, drums and pails of various sizes by operating filling machine.

Machine tool operator: Set up and operate a broad range of machine tools.

Machining center operator (CNC): Plan highly complicated job setups, override program settings as related to tool feeds and speeds.

Maintenance electrician: In accordance with standard practice, install, repair, wire and maintain a variety of electrical and electronic equipment and controls related to production and building equipment, including motors, relays, circuit breakers, machine and process controls and circuits, alarm and communication systems.

Maintenance helper: Perform routine duties to assist trades people and technicians in the performance of their duties.

Maintenance machinist: Install, maintain, repair or rebuild a wide variety of large and complicated machine tools and special purpose machine and plant equipment.

Maintenance worker: Plan procedures, install and repair all production and building equipment and related operations involved in repairing buildings and maintaining grounds, power and light circuits and electrical and electronic controls.

Material handler: Unload and load trucks with incoming and outgoing materials and move materials to storage areas and between departments, using hand truck.

Model maker: Design and construct a wide variety of product models, complicated equipment, apparatus or mechanisms.

Multi-machine operator (machining): Perform a broad range of machining operations such as milling, profiling, drilling, bench or turret lathe operations, boring and surface grinding on a wide variety of large, expensive castings and parts, where setups, tooling, speeds and feeds are usually provided by others.

Packer: Plan, prepare and pack large and heavy products or fragile apparatus for shipment.

Plater: Plate a variety of parts or products, following prescribed procedures.

Press brake operator: Perform a wide variety of press brake operations, usually on heavy steel plate, stainless steel or aluminum.

Production electrician: Plan, lay out and install a variety of complicated electrical equipment controls and wiring on a wide variety of standard and non-standard products.

Production painter: Mix a variety of standard coating materials to proper consistency. Powder coat parts.

Punch press operator: Perform blanking, piercing, forming and drawing operations on a variety of parts.

Screw machine operator (automatic): Set up and perform a normal range of operations on single or multiple spindle automatics, following standard methods and procedures.

Security guard: Check buildings, equipment and materials for leaks, fires, unauthorized individuals and other conditions.

Sheet metal worker: Construct large sheet metal units and products to customer specifications.

Shipper-receiver: Count, weigh and check a wide variety of incoming and outgoing materials and supplies, select shipping method, routing and carrier.

Slitter operator: Changeover and operate slitting machine to cut sheet metal into strips of specified length.

SPC technician: Select random sample parts from production operations on a scheduled basis to perform statistical process control (SPC) procedures.

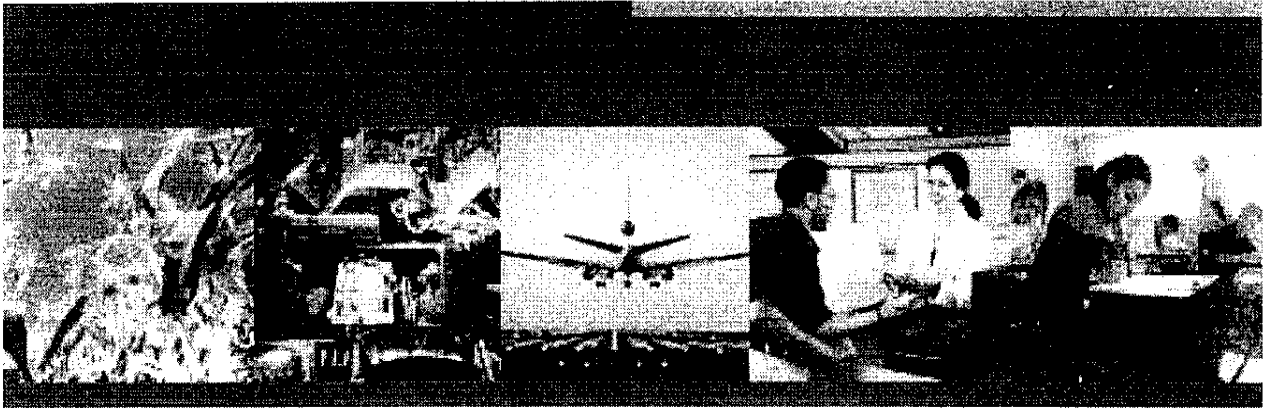
Storekeeper: Check incoming material and supplies and report shortages or damaged materials for small stock room.

Tester/analyst: Perform mechanical, electrical, electronic or hydraulic and performance tests on a variety of complicated products or apparatus and special products, following general procedures and methods.

Tool crib attendant: Responsible in general for small tool crib.

Tool, die and gauge maker: Plan, construct, alter and repair a wide variety of tools, dies, jigs, fixtures and gauges to very close tolerances.

Truck/delivery driver: Make pickups and deliveries within city and suburban areas, and assist in shipping and receiving area.

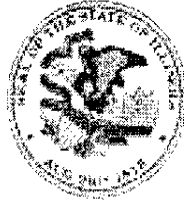


opportunity remains

Northern Stateline Region

Rod R. Blagojevich, *Governor*

STATE OF ILLINOIS



OFFICE OF THE GOVERNOR
SPRINGFIELD 62706

ROD R. BLAGOJEVICH
GOVERNOR

October 15, 2003

Dear Rock River Valley friends:

One of the most challenging things I'll do during my time as Governor is create jobs in Illinois. It is also one of my biggest priorities.

It is my plan to take the most aggressive, ambitious, direct approach we possibly can to create jobs and spur growth; to help people get a job and keep a job. We also believe there is no one-size-fits-all approach to economic development. That's why we've divided the state up into 10 economic development regions – finding areas with common economic strengths and needs, and developed a plan for each of them.

Following is our new approach for growth in the Rock River Valley. This comprehensive plan is the product of outreach over the past several months to the region with local legislators, civic and business leaders – all of whom want to see the region prosper. It includes a plan to Achieve Manufacturing Excellence, Grow Entrepreneurship, Strengthen Education and Workforce Preparedness, Maximize Access to Capital, Expand Infrastructure and Connectivity and Foster Energy Independence.

This region, known as the Northern Stateline region - which includes Boone, Ogle, Stephenson and Winnebago counties – has many strengths, like manufacturing and technology which we will help to promote and develop in order to stimulate and create new growth and new jobs.

Over the past nine months, we've made some progress towards creating new jobs. We paved the way for the expansion of O'Hare Airport. We created a new \$300 million fund to fuel the creation of clean coal power plants. We extended the ethanol tax credit and created incentives to encourage the production and use of biodiesel fuels. We developed incentives to lure the film industry back to Illinois. And we opened six entrepreneurship centers across the state to provide much needed grants and know-how to local businesses.

Now we will take that energy to your community - and be proactive about economic development. That plan starts today.

Sincerely,

A handwritten signature in black ink that reads "Rod R. Blagojevich".

Rod R. Blagojevich
Governor

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EXECUTIVE SUMMARY

Opportunity Returns is Governor Blagojevich's comprehensive plan for restoring economic opportunity to Illinois – an approach that can bring jobs and growth back to our communities. This is a new approach to economic development in Illinois. It shifts the state's focus from a centralized approach to a regional one – recognizing that local communities understand their needs best.

Ten regional plans will be developed that tailor to the unique strengths and needs of each of the regions. This plan outlines economic and workforce goals for the Northern Stateline region, which consists of Boone, Ogle, Stephenson and Winnebago counties.

The Governor's Office and the Department of Commerce and Economic Opportunity (DCEO) reviewed local strategic plans and met with regional leaders to discuss local needs and priorities. *Opportunity Returns* is the result of extensive community input, through a series of economic summits, business roundtables, regional focus group sessions and individual conversations.

This plan represents the beginning of ongoing communication between the state and regional communities. The state is targeting specific projects that people in the region have identified as priorities.

Opportunity Returns has the following objectives:

- Attract new investments
- Upgrade the skills of Illinois workers
- Create desirable, well-paying jobs
- Help existing Illinois businesses thrive
- Foster an innovative, attractive business climate
- Maximize international trade and investment opportunities
- Build infrastructure to improve transportation of goods and people
- Promote the growth of *multiple* industries to develop a more stable economy

The Foundation

Extensive studies of economic and labor force data were conducted in order to shape the region's economic and workforce development strategy.

Northern Stateline is home to 420,000 residents and has seen its population increase 11.2% between 1990 and 2000, exceeding the statewide average of 8.6%.

Unemployment in the region has historically been relatively high, and employment did not rebound during the boom years of the 1990s as quickly as in other Illinois regions.

Small businesses, defined as employers with fewer than 100 employees, account for 96.9% of local businesses.

Manufacturing is key to the region. It is the region's largest sector with more than 48,000 employees, and three of the region's top ten employers are manufacturers: Hamilton-Sundstrand, Daimler Chrysler and Honeywell.

The Focus

Six goals have been specifically tailored to the economic and workforce development needs of the Northern State/line region:

1. Support Manufacturing Excellence

- Enhance New Technology Investment
- Open New Markets
- Reduce the Cost of Doing Business
- Provide Business Intelligence
- Promote Innovation

2. Assist Entrepreneurs and Small Business

- Promote Innovation and Technology
- Develop the Entrepreneurship Center
- Create the Illinois Opportunity Fund
- Expand "Buy Illinois"

3. Strengthen Education and Workforce Preparedness

- Expand Access to College Degree Programs
- Build Science and Technology Programs in Illinois Schools
- Develop the "21st Century Jobs" Training Initiative
- Provide Critical Skills Training

4. Maximize Access to Capital: *Capital for Tomorrow*

- Expand Community Revolving Loan Funds
- Create Lines of Credit
- Enhance Partnerships with Community Development Financial Institutions

5. Expand Infrastructure and Connectivity

- Improve the Transportation Infrastructure
- Support the Rockford Regional Airport
- Expand Telecommunications Access
- Renew Community Infrastructure

6. Increase Energy Independence

- Promote Ethanol Production
- Create the Small Business Smart Energy Program
- Support Cow Power

INTRODUCTION

"I was raised to believe that in life, nothing was ever given to you. All you can expect is an opportunity and a chance."

*Rod R. Blagojevich
August 12, 2001*

Opportunity Returns is Governor Blagojevich's plan for restoring economic opportunity to the State of Illinois. Recognizing that the Illinois economy is actually a collection of regional economies – with distinct identities, opportunities and challenges – *Opportunity Returns* will define and deliver state services on a regional basis. This is an effort among more than twenty state agencies with input from business, labor and public sector leaders from the region. The plan represents the first time multiple state agencies have come together to grow the economy. *Opportunity Returns* is a significant change in the state's approach to economic development. The plan designates ten economic development regions based on concentrations of employment, commuting patterns and other economic relationships.

By focusing on each of the state's ten economic regions, the state will be able to closely track economic conditions and trends, rapidly respond to opportunities and challenges, and customize regional development initiatives with greater precision.

In an effort to continually be informed of regional needs and priorities, the Governor has created a regional strikeforce team, which will include a Regional Director and regional account managers. This team will work directly with communities to retain existing companies and to attract new jobs and capital. The local presence will help the state stay abreast of local economic trends and use that information to retain existing businesses.

The key to *Opportunity Returns'* success in the Northern Stateline region is a partnership between state and regional leaders. The Department of Commerce and Economic Opportunity (DCEO) will be the lead agency for the state, and more than twenty other state agencies are committed to a coordinated approach to promote and support economic development in the state's regions. *Opportunity Returns* charges all state agencies to make economic development a top priority.

State agencies will work with the Northern Stateline team to pursue specific projects in the region. Each agency will designate one senior staff member to serve as its Economic Development Liaison to participate in interagency project meetings and rapidly respond to opportunities and challenges as they arise. The plan will be implemented in partnership with local elected officials, chambers of commerce, planning commissions, tourism and convention bureaus, transportation agencies and business and labor leaders.

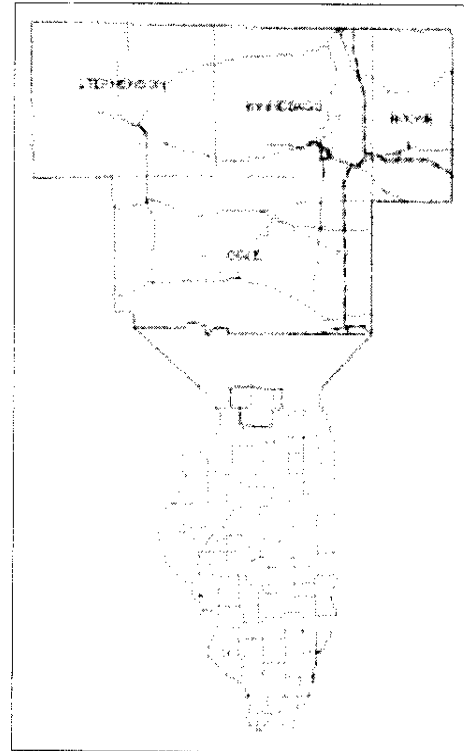
Opportunity Returns is only the first step toward coordinating the vast resources of the state and effectively using them to increase the region's economic health. The community leaders in the region will also help ensure that the plan remains aligned with the changing needs of Northern Stateline's economy. The regional team will issue an annual plan, discussing accomplishments to date and their focus for the future.

THE NORTHERN STATELINE REGION¹

The Northern Stateline region consists of Boone, Ogle, Stephenson and Winnebago Counties. Three of the region's four counties border Wisconsin on the north, and the region borders the fast-growing Chicago metropolitan area to the east, making this region one of the most dependent on its neighbors, vying for migrating businesses, working hard to retain existing businesses, focusing on transportation interconnectivity, and leveraging interstate trade. In addition, the Northern Stateline region has formed a regional, economic development partnership with Rock County, Wisconsin.

Winnebago County is home to the third largest city in Illinois, Rockford, and is a historic manufacturing center. Manufacturing remains the region's primary industry, just as it was in the 1800s. Local products include precision cutting tools, fasteners, aerospace components, machine parts and automobiles. The region was hit hard during the 1980s recession, recovering somewhat since that time, but yet it has not grown as quickly as the state overall in recent years.

In the past two years, Winnebago and Stephenson Counties have lost several major employers and have also experienced layoffs. However, the region is positioning itself as a prime transportation corridor that will benefit from a new multi-modal rail facility in Ogle County, as well as the existing Rockford Regional Airport. The region boasts an excellent telecommunications infrastructure, especially in Rockford, which is home to Rock Valley College, Rockford College and Saint Anthony College of Nursing.



Freeport, the Stephenson County seat with a population of approximately 26,500, is located approximately 25 miles west of Rockford on Highway 20. Belvidere, a community of nearly 21,000 people in Boone County, is now home to a major Daimler Chrysler auto assembly facility.

Demographics

According to the 2000 Census, the four-county Northern Stateline region has 420,200 residents, which is 3.4% of Illinois' population and 10.4% of the population of the state excluding the Northeastern Illinois region.² Winnebago County is the largest and most urbanized county in the region with nearly 280,000 residents.

¹ Some information regarding individual counties is taken from Online Highways at <http://www.ohw.com>.

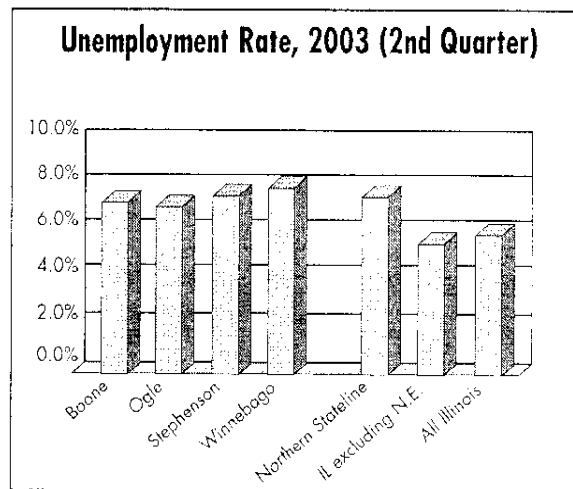
² The Northeast Region consists of Cook, DeKalb, DuPage, Grundy, Lake, Kane, Kankakee, Kendall, McHenry and Will Counties.

The population of the region increased by 11.2% between 1990 and 2000, exceeding both the Illinois (8.6%) and the area excluding the Northeastern region (3.0%) averages. This growth is largely attributable to outward migration from the Chicago area. Age distribution in Northern StateLine is similar to the state as a whole.

Educational attainment is similar to the overall profile of the rest of the state, excluding the Northeastern region. Approximately 81.9% of all residents over 25 years old have at least a high school diploma, up from 72.4% in 1990. Winnebago County has a high proportion of highly educated residents: 19.4% of Winnebago County residents have at least a bachelor's degree and 6.6% have a graduate degree.

Labor Force and Employment³

The unemployment rate in the Northern StateLine region during the second quarter of 2003 was 7.9%, higher than the Illinois average of 6.2% and the remaining area of the state excluding the Northeastern region average of 5.8%. Unemployment in the region has historically been relatively high, and employment did not rebound during the boom years of the 1990s as quickly as in other Illinois regions. Winnebago County, which is home to two-thirds of the region's labor force, has the highest unemployment rate in the region at 8.3%.⁴ Unemployment rates in the other three counties are also higher than the state average, ranging from 6.9% to 7.4%.



³ Source for unemployment statistics: Illinois Department of Employment Security

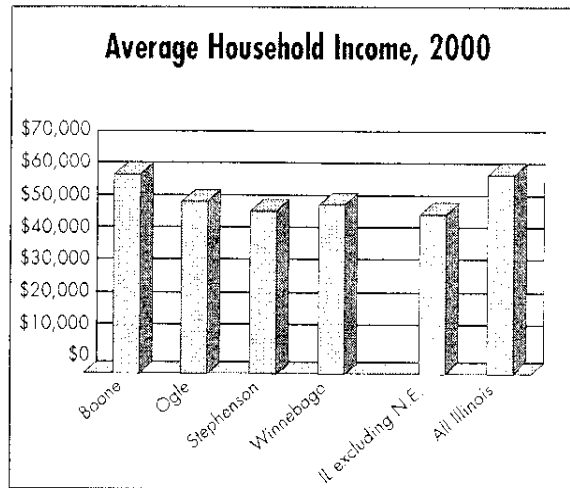
⁴ The labor force includes people who are employed and people who are actively looking for employment. It excludes people such as full-time students, retirees, those who choose not to work for family reasons, and "discouraged" workers who would like to work but have given up on finding a job.

Income and Wages⁵

The Northern Stateline average household income is higher than the average of the remainder of the state, excluding the Northeastern region. All counties are above the average, with Boone County having the highest average income at \$61,600.

Per capita income in the region is higher than the per capita income for the remainder of the state, excluding the Northeastern region.

The median annual wage in the Northern Stateline region is higher than the median wage in the remainder of the state, excluding the Northeastern region. Within the region, all counties are also above the state average, and two counties, Boone and Stephenson, are above the statewide median wage.



Number of Businesses

According to the U.S. Census Bureau, the Northern Stateline region was home to approximately 9,900 business establishments in 2001 (the most recent year for which this data is available). Winnebago County's 7,030 establishments accounted for 71.1% of the region total, followed by Stephenson County (11.4%), Ogle County (10.2%), and Boone County (7.3%). The number of business establishments in the region grew by approximately 0.9% in 2002.⁶

Small businesses, defined as establishments with fewer than 100 employees, account for 96.9% of all regional business establishments, close to the statewide average of 97.2% and the average of 97.7% for the remainder of the state excluding the Northeastern region.

⁵ Sources for Income and Wage statistics: U.S. Census Bureau and Illinois Department of Employment Security

⁶ The absolute number of business establishments is based on an analysis of County Business Patterns (U.S. Census Bureau), while the change during 2002 is based on an analysis of IDES' ES2002 Database

Major Industries

Manufacturing is key to the Northern Stateline economy; it is the region's largest sector with more than 48,000 employees.⁷ Manufacturing is the leading employer in all counties in the region and accounts for approximately a quarter of all employment. Transportation, equipment (including aircraft and automotive parts manufacturing), machinery, and fabricated metal products are particularly prominent sub-sectors that combine high employment levels and "location quotients," meaning that these sectors' share of the regional economy substantially exceeds their share of the statewide economy.

Other industry sectors with at least 10,000 employees regionally include: Health Care and Social Assistance (26,400); Retail Trade (20,300); Educational Services (14,600); Accommodation and Food Services (13,200); Administrative Support, Waste Management, and Remediation Services (13,200); and Construction (10,100). Other sectors in the top ten include Finance and Insurance, Wholesale Trade, and Transportation and Warehousing.

Winnebago County accounts for more than 90% of the regional employment in the Administrative Support, Waste Management, and Remediation Services sector, which comprises business support services such as document preparation, security, collection and waste disposal. Health Care and Social Assistance is another industry with a disproportionate presence in Winnebago County, with nearly 85% of regional employment occurring in the county.

Boone County has a significant Construction sector. This sector has nearly 2,000 workers in the county, ranking second to manufacturing. The Construction sector is larger than Retail Trade (1,500 employees) and Education Services (1,100), the only remaining sectors with at least 1,000 employees.

As elsewhere in the region, manufacturing is prominent in Ogle County, with 65 establishments employing approximately 5,900 people. Educational Services, ranked fourth regionally, is a distant second in the county (1,700 employees). Retail Trade is third (1,600 employees), followed by Wholesale Trade, and Health Care and Social Assistance (1,200 each).

The top four sectors in Stephenson County mirror those of the region. Manufacturing is the leading employer with 5,600 employees. Health Care and Social Assistance is a distant second with 2,500 employees, followed by Retail Trade and Educational Services (1,900 each). Finance and Insurance ranks fifth with 1,500 workers, compared to ranking eighth regionally. Other sectors with at least 1,000 employees countywide include Accommodation and Food Services, and Construction (1,300 each).

Largest Employers

Most of the region's largest employers are located in Winnebago County, and the six largest employers are located in the city of Rockford. The Rockford School District is the largest single employer in the region (this is not unusual, as schools are among the top employers in nearly every community). Three of the next four largest employers are health care facilities: Rockford Memorial Hospital, Swedish American Hospital, and Saint Anthony Medical Center. An additional health care company, the Freeport Health Network, is 10th.

⁷The source of sector and company-specific employment data is the Illinois Department of Employment Security's ES202 database, based on companies' unemployment insurance filings for the fourth quarter of 2002. Employers are allocated to 21, 2-digit NAICS (North American Industrial Classification System) codes for this analysis. See www.census.gov/eped/naics02/naicod02.htm for a description of the NAICS system.

Manufacturing employers ranking in the top ten largest employers in the region are Hamilton-Sundstrand, Daimler Chrysler and Honeywell. Hamilton-Sundstrand is an aerospace and industrial products company with operations in Rockford. Daimler Chrysler operates an auto assembly plant in Belvidere, and Honeywell produces switches, sensors and components in Freeport.

OPPORTUNITY RETURNS IN NORTHERN STATELINE

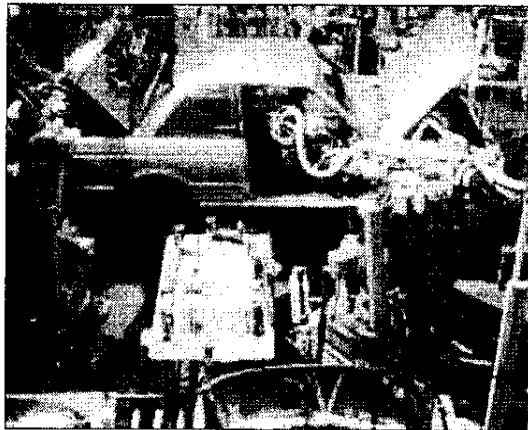
Governor Blagojevich's *Opportunity Returns* plan for the Northern Stateline region consists of six primary goals, each with specific projects, programs or strategies. The goals are to:

1. Support Manufacturing Excellence
2. Assist Entrepreneurs and Small Business
3. Strengthen Education and Workforce Preparedness
4. Maximize Access to Capital: *Capital for Tomorrow*
5. Expand Infrastructure and Connectivity
6. Increase Energy Independence

Support Manufacturing Excellence

Manufacturing is the backbone of the Northern Stateline region's economy and a continual source of pride throughout the region, with 1,395 manufacturing companies in the four-county area. This sector is starting to show positive signs of economic recovery from the recent downturn, due in part to the region's inherent advantages coupled with aggressive economic development efforts led by local development organizations. Under *Opportunity Returns*, efforts will be made to rejuvenate the Northern Stateline economy, particularly the manufacturing sector.

Opportunity Returns will include targeted strategies to attract new investments and develop new domestic and international trade opportunities. The overarching goal will be to promote Northern Stateline's competitive advantages.



- *Enhance New Technology Investment*
- *Open New Markets*
- *Reduce the Cost of Doing Business*
- *Provide Business Intelligence*
- *Promote Innovation*

Action Items:

Enhance New Technology Investment

Manufacturing Modernization. Too often, manufacturers have been forced to put off making expensive improvements because the cost of capital is too high. Governor Blagojevich has created a revolving loan fund to assist manufacturing companies in retooling and upgrading their equipment. The fund will enable manufacturers in the Northern Stateline region, and throughout the state, to modernize their production capabilities and remain competitive. This new program will enable manufacturers to access the funds at their local bank to make necessary improvements, substantially reducing the cost of capital. In addition, manufacturers will be able to access funds for energy efficiency upgrades through the Governor's Manufacturing Energy Efficiency program.

Open New Markets

Regional leaders have made it clear that more Illinois trade exports and greater foreign direct investment is needed in the Northern Stateline region. The Illinois Trade Office (ITO) in DCEO will develop new approaches aimed at taking advantage of the many opportunities of the international marketplace.

Foreign Direct Investment. In an effort to capitalize on the presence of foreign offices and Illinois' status as a world-class, strategic location, the ITO will develop a Reverse Trade Mission Representative Introduction Program. This program will bring the 25 Chicago-based, foreign trade representatives to the Northern Stateline region. DCEO regional staff and ITO staff will work to develop relationships between local manufacturers and foreign trade representatives to promote the region as a great place for foreign direct investment and provide the strategic link needed to increase exports from the region.

New Sector-Specific, Foreign Trade Missions. The state will lead new, sector-specific trade missions for industries throughout Illinois. The regional strikeforce will work with manufacturers to understand what facet of foreign trade is most important to them, where they want to market their products, and where they hope to expand the export of their product internationally. Regional account managers will work with these companies to provide the technical assistance necessary to open global markets to the Northern Stateline region.

Expanded Role of Foreign Trade Zone at the Rockford Regional Airport. Expanding the Rockford Regional Airport and increasing international import and export opportunities are both key priorities in the region. The Airport is currently ranked as the twenty-third largest cargo airport in the nation when measured by landed weight. The Foreign Trade Zone (FTZ) associated with the Airport generally has been under-utilized. The ITO will work directly with Northern Stateline's FTZ, linking it to trade experts in Illinois' foreign offices, as well as the international business community of Illinois. By locating in the FTZ, a manufacturer can reduce its costs through the delayed payment of taxes and duties on goods being shipped into the region from foreign destinations. The local FTZ will also be marketed to foreign countries through the new Reverse Trade Mission Representative Introduction Program to serve as an incentive for foreign direct investment in the region.

Reduce the Cost of Doing Business

Governor's Manufacturing Energy Efficiency Program. The Governor's Manufacturing Energy Efficiency Program will assist manufacturers in the face of rising energy and operating costs. This program will help businesses conduct industrial energy performance reviews, identifying areas for improvement and cost savings. This effort, connected with the Manufacturing Modernization Program, will help businesses lower their energy costs and will add dollars to the bottom line as companies are dealing with ever-increasing energy costs.

Provide Business Intelligence

Competing successfully means understanding how Illinois compares in areas such as cost, relative to our immediate neighbors and other major industrial states. It also means promoting Illinois' competitive advantage. Regional leaders stressed the importance of assessing the competitive position of conducting business in Illinois, including costs of labor, transportation, energy, and taxes.

Winning the "Consolidation Game." Providing training and information for the region's plant managers and local officials was identified by regional leaders as an important need to assist in their efforts to win the "Consolidation Game." The purpose of this effort, to be led by the Regional Director for the Northern Stateline region, will be to target improvements and resources before consolidation decisions have been made. This will help strengthen the position of the Illinois facility in situations where it is pitted against out-of-state facilities in a consolidation battle.

In response to this regional need, the Regional Director and account managers will work with local economic development agencies to identify, on an ongoing basis, firms that are vulnerable to downsizing or consolidation. Regional directors will also identify the appropriate contacts (such as plant managers) within these firms to receive information about state programs and initiatives.

Working directly with plant managers, the state will help them build a case for Illinois as the most appropriate location for consolidated operations.

Promote Innovation

Rockford Applied Manufacturing Research and Technology Center. The Northern Stateline regional leaders discussed the importance of the \$3.6 million dollars of federal funding for an Applied Manufacturing Research and Technology Center in Rockford. In response, Governor Blagojevich will actively support efforts to secure federal funding for the project, and provide state matching funds of up to \$1.6 million to expand the research and technology center to include a technology commercialization entrepreneurial development center.

This project would mean high-quality jobs and access to new domestic and international markets. The focus of the research at the facility will be future combat systems for the Department of Defense, a project for which The Boeing Company is the prime contractor. Additional research will explore micro-manufacturing technologies for tabletop machines and precision parts, which are used in many high-tech and defense applications.

Assist Entrepreneurs and Small Business

During his State of the State Address, Governor Blagojevich announced the creation of an Entrepreneurship Center at Rock Valley College in Rockford. The Governor recognizes the Northern State line region's desire to capture homegrown opportunities and convert them into market successes. Addressing this need, the state will assist the region in building the facilities, in financing, and expertise demanded by today's entrepreneurs.



- *Promote Innovation and Technology*
- *Develop the Entrepreneurship Center*
- *Create the Illinois Opportunity Fund*
- *Expand "Buy Illinois"*

Action Items:

Promote Innovation and Technology

Innovation Challenge Grant Program. The leaders of the Northern State line region identified the need to leverage or "match" available federal technology development funds to provide much needed capital for the growth of technology firms in the region. In response to this need, Governor Blagojevich is launching the new Innovation Challenge Grant Program to help commercialize new technologies that can be used by the manufacturing sector, biotech companies and agri-business.

The SBIR (Small Business Innovation Research) and STTR (Small Business Technology Transfer) programs are competitively awarded federal grants. They are designed to stimulate technological innovation and provide growth opportunities for small businesses. Through the Innovation Challenge Grant Program, the state will match, and as a result, help businesses secure additional federal dollars.

Develop the Entrepreneurship Center

Rock River Valley Entrepreneurship Center. Technology research and commercialization activities are key to economic expansion in Illinois. The Northern State line region has a unique opportunity to take advantage of technology-driven economic development due to the presence of several tech-intensive industry clusters: advanced manufacturing; transportation technology; electronics; and nanotechnology. The state of Illinois is already responding to this priority. In August 2003, Governor Blagojevich launched a new Entrepreneurship Center in partnership with Rock Valley College and Northern Illinois University. The Rock River Valley Entrepreneurship Center

(RRVEC) will serve as the umbrella organization to coordinate all available small business services and programs, as well as to provide targeted, accelerated services to companies with high growth potential. It will act as a regional hub for coordinating entrepreneurship development activity, building on the infrastructure of the Small Business Development Center Network (SBDC), the New Uses Information and Entrepreneur Development Center (NUEDC), and the proposed manufacturing research center in Rockford.

Create the Illinois Opportunity Fund

Illinois Opportunity Fund. As with many other regions of the state, Northern Stateline leaders identified lack of venture capital as an important issue for the state to address. The Illinois Opportunity Fund (IOF), a \$200 million fund of funds, has been designed as a tool to help bridge gaps in access to equity and venture capital throughout Illinois. Although the IOF was not authorized during the spring legislative session, the Governor's Office and DCEO will pursue passage of this critical legislation. The IOF will provide access to venture capital for rural regions and other areas typically under-served by conventional venture capital sources. Other key conceptual elements and goals of the IOF include:

- Investing in sectors considered to be strategic industries for the state of Illinois
- Maintaining a consistent private sector culture of focusing on rate of return in the investing process
- Creating state credit enhancements that limit risk of the private investors in the Fund
- Improving the infrastructure through which capital is delivered throughout the state
- Facilitating and enhancing the flow of venture capital into the state of Illinois

The IOF is based on a successful model piloted in Oklahoma and subsequently implemented in several states, including Iowa. The Rock River Valley Entrepreneurship Center (RRVEC) will serve as the initial point of contact for entrepreneurs seeking investments from the IOF. In addition, the RRVEC will sponsor events where entrepreneurs can present their business plans to IOF representatives, or other groups of investors, including angel investor networks and venture capital organizations.

Expand "Buy Illinois"

"Buy Illinois." Each year, Illinois businesses and government agencies spend billions of dollars on goods and services. Even a small shift in buying habits to target more in-state buying would boost the Illinois economy by hundreds of millions of dollars, resulting in the direct and indirect creation of jobs and the generation of additional tax revenues for schools, roads, police and fire protection, health care and other public services.

In response to stakeholder concerns in the Northern Stateline region, the Governor will expand the state's "Buy Illinois" efforts to increase opportunities for Illinois small and medium-sized businesses, including minority and female-owned and disabled-owned businesses, to sell their products and services to government agencies.

One major component of the new "Buy Illinois" initiative will be a series of trade fairs and workshops to be offered in the Northern Stateline region. The Governor has directed key state

agencies to educate Illinois businesses on the steps needed to access government contracts. Examples include:

- Illinois Department of Central Management Services (CMS) procurement training seminars. CMS, the state agency responsible for the majority of the state's annual \$14.1 billion in procurement, will hold special state procurement workshops. These workshops will provide assistance to entrepreneurs who hope to access the state's procurement process, allowing more companies to gain access to the tremendous buying power of the state.
- Illinois Department of Transportation (IDOT) vendor fairs. The IDOT will host "IDOT Marketplace" in Rockford, which will allow companies and small businesses in the Northern Stateline region to understand the opportunities available to become suppliers, contractors and subcontractors. IDOT will lead a team of state agencies, including DCEO, the Illinois Toll Highway Authority and CMS, to network with local businesses.
- Illinois Capital Development Board (CDB) architect training sessions. CDB will initiate a new training program for architects in the Northern Stateline region. The purpose of this program will be to educate CDB project architects on the preferred use and availability of Illinois products. Architects will be asked to specify Illinois products in their bids, particularly for specialty items and equipment, whenever possible. In this way, the state can proactively increase the use of Illinois goods on state-funded construction projects and keep the associated economic benefits of these purchases within the state and its regions.
- Illinois Department of Commerce and Economic Opportunity (DCEO) and other partner agencies will work with the local Procurement Technical Assistance Center (PTAC) at Rock Valley College to improve understanding of the federal and state procurement processes among businesses in the Northern Stateline region. The PTACs provide one-on-one counseling, technical information, marketing assistance and training to existing Illinois businesses that are interested in selling their products and/or services to local, state, or federal government agencies.

Strengthen Education and Workforce Preparedness

As Northern Stateline's economic base becomes more advanced and technologically driven, so too must its workforce. The foundation of any successful economic development plan is hard-working people. The region seeks to better prepare its citizens for the types of quality jobs necessary for an advancing economy.

Governor Blagojevich's regional economic development plan addresses this priority with major initiatives that address both the short-term and long-term needs for skilled workers in the region, especially in the manufacturing sector.



- *Expand Access to College Degree Programs*
- *Build Science and Technology Programs in Illinois Schools*
- *Develop the "21st Century Jobs" Training Initiative*
- *Provide Critical Skills Training*

Action Items:

Expand Access to College Degree Programs

NIU Baccalaureate Programs in Rockford. The final report of the Regional Vision for Community Excellence stated that it is a priority for the area to, "Improve access to and develop new market-driven programs for (public and private) baccalaureate degrees, engineering degrees, and graduate degrees..."Expanding baccalaureate degrees in the Northern Stateline region remains a top priority as mentioned during recent group discussions.

Governor Blagojevich will work cooperatively with the Illinois Board of Higher Education (ISBE) and business and industry, educational leaders and public officials in the region to expand access to higher education, in particular four-year college degree programs critical to the economic development of the region

Governor Blagojevich's first priority in improving access to higher education in the region will be to support the expansion of Northern Illinois University (NIU) four-year degree programs in business, engineering, engineering technology, and computer science. The expansion will happen in two phases: first, the expansion of business programs, and second, the expansion of engineering and computer science programs.

Build Science and Technology Programs in Illinois Schools

Building Science and Technology Skills in Middle and High Schools. DCEO and ISBE are working cooperatively with business and industry to establish a new program for career and technical education in Illinois high schools to expand career development opportunities. This new program focuses on helping students advance in the areas of science and technology. It will strengthen academic requirements for participating students and expand partnerships with business and industry to improve students' preparation for science and technology careers.

The first steps toward achieving this objective in the Northern Stateline region is to establish a program at the high school level that prepares students to enter post-secondary degree programs in engineering and engineering technology. ISBE will work with two Northern Stateline high schools to implement a nationally-recognized, pre-engineering program called "Project Lead The Way."

Develop the "21st Century Jobs" Training Initiative

Employer Training Investment Program. Through the "21st Century Jobs" Training Initiative, the state is creating a new generation of employer-focused, customized training programs that are designed to address the needs of large, medium and small-sized manufacturers. The most important part of this initiative will be the Employer Training Investment Program (ETIP).

ETIP will help keep Illinois' workers up to speed with new technologies and business practices. This training, in turn, will also help businesses increase productivity, reduce costs, improve quality and boost competitiveness. ETIP grants can reimburse Illinois companies for up to 50 percent of the cost of training their employees. The program may involve large companies (250 or more full-time employees) or small to mid-sized companies (less than 250 employees). ETIP projects may also involve individual employers or multi-company projects that allow companies with common employee training needs to join together in meeting these common needs and applying for training funds.

This initiative – particularly the newly-created small to mid-sized company component of ETIP – will offer assistance to address the training needs necessary to retain and expand manufacturing companies in the Northern Stateline region, especially businesses that supply larger companies. This program will be utilized, in particular, with regard to the regionally identified need for employee-training among automotive and aircraft assemblers and parts manufacturers.

Provide Critical Skills Training

Responding to Industry Skill Shortages. The Governor's Critical Skills Shortage Initiative increases training dollars to the region to help existing firms fill skills shortage gaps. DCEO will work with the Local Workforce Investment Boards (LWIBs), in partnership with business and labor leaders, to respond to critical skill shortages in key industry sectors within the region. Funding will then be made available to tailor training programs for identified critical skill occupation shortages within the regional plan.

Maximize Access to Capital: Capital for Tomorrow

Access to capital is a significant impediment to growth potential. In response to this concern, Governor Blagojevich has embarked upon several additional, new initiatives that will increase the amount of capital available to stimulate growth and development of small businesses.

There are three components to the "Capital for Tomorrow" program. They are: (1) *Expand Community Revolving Loan Funds*; (2) *Create Lines of Credit*; and (3) *Enhance Partnerships with Community Development Financial Institutions*.



- *Expand Community Revolving Loan Funds*
- *Create Lines of Credit*
- *Enhance Partnerships with Community Development Financial Institutions*

Action Items:

Expand Community Revolving Loan Funds

Revolving Loan Funds. Several years ago, the state provided funds to local governments to establish community revolving loan funds. Historically, the funds have been highly restricted. Governor Blagojevich is changing the guidelines to allow communities to use the funds to meet the needs of business. For example, communities will be able to use the revolving loan funds to make quasi-equity investments in local businesses.

Without significant changes in state guidelines, \$3.8 million in the Northern Stateline Revolving Loan Fund will continue to be under-utilized. The new "*Capital for Tomorrow*" program will allow local funds to maximize their business financing capabilities.

Create Lines of Credit

Lines of Credit. Businesses often need to draw on lines of credit to service new customers and expand their operations. Many small businesses have expressed a need for a low interest line of credit to make them competitive when bidding on large contracts and pursuing new markets.

To address this need, DCEO will expand its Participation Loan Program and also permit the use of community revolving loan funds as lines of credit to small businesses in the region. Because they often experience significant variance in earnings, growth, seasonality and operating cash flows, a line of credit arrangement is more efficient and less costly for the small business. Businesses have more flexibility to grow and expand at a lower cost using lines of credit.

Enhance Partnerships with Community Development Financial Institutions

Community Development Financial Institutions (CDFIs). CDFIs are an increasing source of capital to small businesses. Over 18% of all CDFI loans are made to small businesses on a nationwide basis. DCEO will open its small business lending programs to the 36 federally-certified Illinois CDFIs. This will provide businesses increased access to loans with lower interest rates.

Expand Infrastructure and Connectivity

In the Information Age, the Northern Stateline region's ability to transport data, goods, power and people is paramount. To capture new investment and support existing business growth, the region needs efficient, cost-effective and accessible telecommunications, transportation and public utility infrastructure. Under *Opportunity Returns*, Governor Blagojevich will help the Northern Stateline region improve this critical infrastructure to better position the region for present and future needs.



- *Improve the Transportation Infrastructure*
- *Support the Rockford Regional Airport*
- *Expand Telecommunications Access*
- *Renew Community Infrastructure*

Action Items:

Improve the Transportation Infrastructure

US 20. Regional focus group participants placed a high priority on the widening of US Route 20, as did the Regional Vision for Community Excellence final report. On June 25, 2003, Governor Blagojevich announced that IDOT would undertake a \$20 million effort to widen U.S. Route 20 (Glacier Shadow Pass) in northwestern Illinois to four lanes from Freeport to Galena. Funding for design and final land acquisition for the US Route 20-Freeport Bypass will be provided in 2004, and funding for construction of the bypass will be provided in 2005, depending on the progress of Phase 1 initiatives. This will complete the northern bypass around the town of Freeport, an extremely high infrastructure priority for this area of the Northern Stateline region. Currently, traffic backs up regularly on US 20 in this area. The completion of the bypass will open up additional opportunities for development.

IL 173 Interchange Project. The widening of IL 173 (IL 173 – I-90 to IL 251) will create a new interchange that allows access to Loves Park, Machesney Park and Rock Cut State Park. In addition, IDOT will widen the road to four-lanes and will connect two major state routes. Funding for design and land acquisition will be provided in 2004. With the interchange and widening of IL 173, it will also be necessary to reconstruct the existing intersection at IL 251 to accommodate traffic generated as a result of new commercial development.

Illinois Route 2 (North and South Main Streets). A widened section for the main route in downtown Rockford on North and South Main Streets of Illinois Route 2 is a key economic development priority for the region in order to open up access to freight and manufacturing development. Design and land acquisition funding will be made available by IDOT in late 2004.

Global III Intermodal Facility. Union Pacific's new Global III Intermodal Facility in Rochelle is a state-of-the-art terminal, designed to serve as a critical interchange hub and loading/unloading terminal for rail intermodal shipments moving through the Northern Stateline region. This new facility, with the ability to expedite the operations of over 25 trains and 3,000 containers daily, provides the capacity for expansion to keep pace with the projected growth of the robust intermodal market for years to come.

Because of the Global III Intermodal Facility, the Northern Stateline region, as well as all of Northern Illinois, stands to experience enormous growth as industries locate warehouse and distribution facilities nearby. The facility offers multiple advantages, including direct interstate highway routes (Interstates 39 & 88) with easy access to major east-west and north-south markets. To take full advantage of the untapped potential of the Global III Intermodal Facility, the state will fund an economic impact analysis to better understand the potential of a transportation and logistics hub connecting the Rockford Regional Airport and Interstates 39 and 88. DCEO will also work with regional economic development organizations to devise a marketing strategy centered on the intermodal facility. Finally, IDOT will examine highway improvement needs leading directly to the intermodal facility to maximize its growth potential.

Cherry Valley Tolls. Stakeholders in the Northern Stateline region expressed concern over the slowing of traffic due to the Cherry Valley Tolls. Governor Blagojevich has directed the Illinois Toll Highway Authority to work to remove the Cherry Valley Tolls and identify a source of the revenue elsewhere.

Support the Rockford Regional Airport

Regional Airport Marketing. Regional leaders identified the need to develop the Rockford Regional Airport as a freight and passenger transit hub, as well as a center of regional economic activity.

Marketing is a vital component to building and maintaining an airport's client base. The state will provide marketing assistance grants to communities to market their airport's services to potential new customers and to existing customers who may not fully utilize regional airports for their transportation needs. DCEO's regional partners will provide matching funds for these grants, allowing the Department to target resources to as many regional airports as possible.

Expand Telecommunications Access

The Northern Stateline region identified a need to expand access to broadband services, as well as a need to continue to improve telecommunication infrastructure overall in the region. Broadband technologies, which encompass all evolving high-speed digital technologies that provide consumers with integrated access to voice, high-speed data, video-on-demand, and interactive delivery services, are a fundamental component of the communications revolution. According to the Federal Communications Commission (FCC), fully evolved broadband will virtually eliminate geographic distance as an obstacle to acquiring information and dramatically reduce the time it takes to access information. Locally, recognizing that broadband availability is important to attracting, expanding and retaining business firms, a 20-member task force has been established to gather information and inventory high-speed technologies in the area.

Broadband Task Force. In keeping with his promise to improve high-speed internet infrastructure, Governor Blagojevich has directed DCEO to initiate two significant projects in partnership with the Illinois Commerce Commission (ICC) and the Illinois Century Network (ICN) to expand the state's understanding of the market forces in this industry and eventually expand the diffusion

of broadband services and infrastructure in the Northern Stateline region. First, the Governor will convene a statewide task force to examine the issues surrounding broadband capabilities, identifying gaps in service and pinpointing the barriers to its expansion in the region. This group will be charged with making recommendations and to take actions that would eliminate those barriers. The task force will also review the findings and recommendations of the local broadband task force in the Northern Stateline region. Second, the task force will investigate the possibility of utilizing the ICN as an option to expand the diffusion of broadband services and infrastructure to the region.

In conjunction with the work of the broadband task force, DCEO will work with IDOT and the Illinois Toll Highway Authority to identify impediments and explore ways to install broadband fiber optic lines.

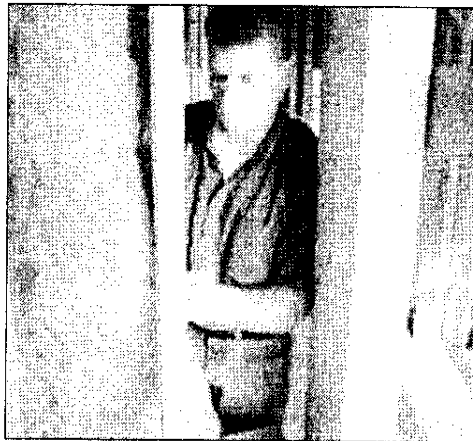
Renew Community Infrastructure

Community Infrastructure Assistance. DCEO, through the Community Development Assistance Program (CDAP), in partnership with the Illinois Environmental Protection Agency (IEPA) and the US Department of Agriculture's Rural Development office, will work with local governments in the Northern Stateline region to identify needs and provide assistance in applying for funding for housing rehabilitation, sewer and water, and other economic development projects that will lead to creating and retaining jobs in the community and address community infrastructure needs.

Community Development Assistance Program. Governor Blagojevich has authorized a \$750,000 grant from CDAP to the city of South Beloit to extend a sanitary sewer to Pacific Bearing Corporation. As a result of the project, the city of South Beloit will benefit, as Pacific Bearing Corporation will retain 116 employees. If the project had not been funded, the company would have relocated to Wisconsin.

Increase Energy Independence

The Northern Stateline region has significant natural resources that can lead to greater energy independence. The region's strong agricultural base offers many opportunities for economic growth, particularly in the areas of alternative fuels. Governor Blagojevich will continue to pursue renewable energy production throughout the state.



- Promote Ethanol Production
- Create the Small Business Smart Energy Program
- Support Cow Power

Action Items: *Opportunity Returns* will continue to work with the state to identify and address the needs of the Northern StateLine region.

Promote Ethanol Production

New Ethanol Production Facilities. Governor Blagojevich signed HB46 on June 11, 2003, establishing the new and innovative Renewable Fuels Development Program. This program will support new biofuels production facilities of 30 million gallons or more of capacity. The Renewable Fuels Development Program received an authorization of \$15 million for FY04. DCEO will work directly with project developers, investors, IEPA, and IDOT to develop new ethanol production facilities in the Northern StateLine region. DCEO will coordinate activities with IEPA to expedite the permitting process for construction and operations.

Create the Small Business Smart Energy Program

Small Business Smart Energy Program. In order to help small businesses with escalating energy costs, the state has created the Illinois Small Business Smart Energy Program. The program will help businesses be more efficient, which will lower their energy costs. The program will fund energy audits for small business, identifying ways for them to save on their energy costs. The program will also provide training for building architects, designers and construction contractors on how to use more energy efficient technologies in new construction.

Support Cow Power

Cow Power Initiative. The state is launching an initiative to fund Anaerobic Digesters (ADs), which generate electricity from livestock wastes (using a microbial process to accelerate the decomposition of the waste and capture and utilize the methane gas produced by the process). Digesters also eliminate odor problems associated with livestock. As such, digesters can help the livestock industry be a good neighbor. The livestock industry, a major grain consumer, is very beneficial to Illinois' agricultural economy. Illinois corn farmers will also benefit from this initiative.

Conclusion *Opportunity Returns* will continue to work with the state to identify and address the needs of the Northern StateLine region.

The Northern StateLine region has world-class assets, such as transportation infrastructure, a skilled workforce, access to global markets, and a high quality of life. *Opportunity Returns* is a proactive effort to build on these strengths. It is the beginning of an ongoing process to build a new partnership between the state and local leaders that will result in a better, stronger economy for all of Illinois. We cannot afford to wait for the national economy to rebound. It is up to the state and its regions to build a better future for Illinois.

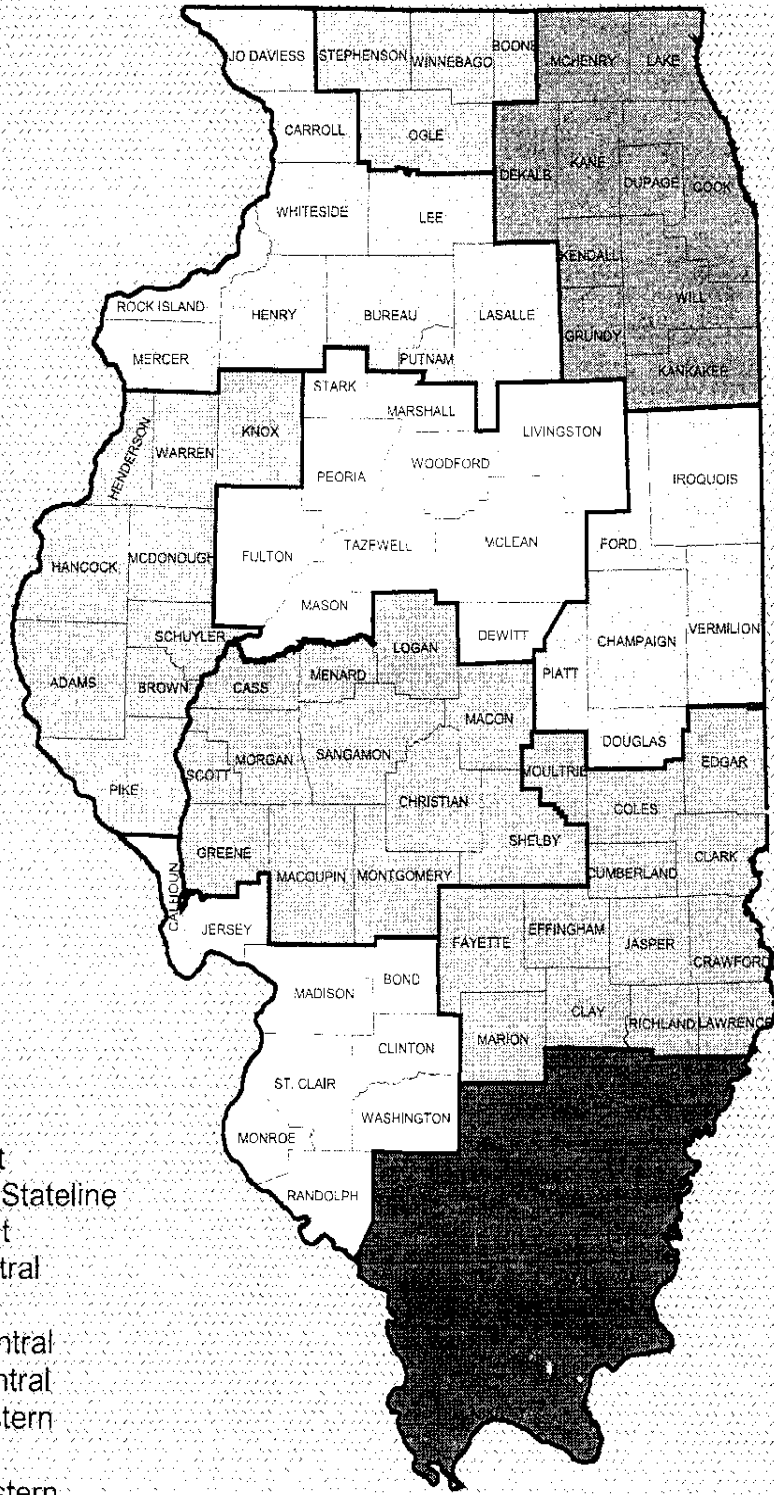
Themes, Initiatives and Partners











| 1. Support Manufacturing Excellence | | |
|---|--|---|
| <i>Enhance New Technology Investment</i> | Manufacturing Modernization | DCEO |
| <i>Open New Markets</i> | Foreign Direct Investment; Sector-Specific Trade Missions; Expanded Role of Foreign Trade Zone at Northwest Chicagoland Regional Airport at Rockford | DCEO, IDOA |
| <i>Reduce the Cost of Doing Business</i> | Manufacturers Energy Efficiency Program | DCEO |
| <i>Provide Business Intelligence</i> | Winning the Consolidation Game | DCEO; other state agencies; local partners |
| <i>Promote Innovation</i> | Rockford Applied Manufacturing Research and Technology Center | DCEO; US Department of Defense; Small Business Administration; U of I; NIU; Rock Valley College |
| 2. Assist Entrepreneurs and Small Business | | |
| <i>Promote Innovation and Technology</i> | Innovation Challenge Grant Program | DCEO; Small Business Administration; NIU |
| <i>Develop the Entrepreneurship Center</i> | Rock River Valley Entrepreneurship Center | DCEO; Rock Valley College; NIU |
| <i>Create the Illinois Opportunity Fund</i> | Illinois Opportunity Fund is a venture capital fund of funds | DCEO; Rock Valley College; NIU |
| <i>Expand "Buy Illinois"</i> | "Buy Illinois" Program; enhanced procurement assistance, vendor and architect training seminars | DCEO; CMS; IDOT; CDB |

| 3. Strengthen Education and Workforce Preparedness | | |
|---|--|---|
| <i>Expand Access to College Degree Programs</i> | NIU Baccalaureate Programs in Rockford | IBHE; Northern Illinois University; Rock Valley College |
| <i>Build Science and Technology Programs in Illinois Schools</i> | Building Science and Technology Skills in middle and high schools, expanding technical education and career development programs | Governor's Office; ISBE; Local School Districts; DCEO |
| <i>Develop the "21st Century Jobs" Training Initiative</i> | Employer Training Investment Program; training cost reimbursements to employers | DCEO |
| <i>Provide Critical Skills Training</i> | Promoting Critical Skills Shortages initiative | DCEO; IBHE; ICCB; ISBE; IDES; IDHS; LWIBs |
| 4. Maximize Access to Capital: Capital for Tomorrow | | |
| <i>Expand Community Revolving Loan Funds</i> | Allow currently underutilized local funds to maximize business finance capabilities | Community Revolving Loan Funds; DCEO |
| <i>Create Lines of Credit</i> | Expanded uses of Participation Loan Program | DCEO |
| <i>Enhance Partnerships with Community Development Financial Institutions</i> | DCEO opens small business lending programs to CDFIs | DCEO |
| 5. Expand Infrastructure and Connectivity | | |
| <i>Improve the Transportation Infrastructure</i> | I73 Bypass Project; US Highway 20; Global III Intermodal Facility; Cherry Valley Tolls | IDOT; DCEO; Illinois Toll Highway Authority |
| <i>Support the Rockford Regional Airport</i> | Regional Airport Marketing | DCEO; IDOT |
| <i>Expand Telecommunications Access</i> | Telecommunications Infrastructure improvements to expand access to broadband | DCEO; Illinois Commerce Commission; Illinois Century Network; IDOT; Illinois Toll Highway Authority |

| | | |
|---|--|------------------------|
| <i>Renew Community Infrastructure</i> | Community Development Assistance Program | DCEO |
| 6. Increase Energy Independence | | |
| <i>Promote Ethanol Production</i> | Support new ethanol plants through Renewable Fuels Development Program | DCEO; IEPA; IDOT; IDOA |
| <i>Create the Small Business Smart Energy Program</i> | Integrated energy efficiency program to assist small businesses | DCEO |
| <i>Support Cow Power</i> | Pilot program using anaerobic digesters to generate electricity | DCEO; USDA; IDOA |

Governor's Economic Development Regions



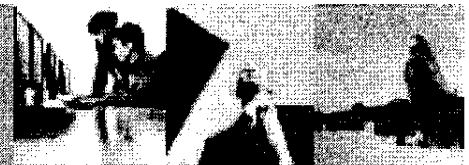
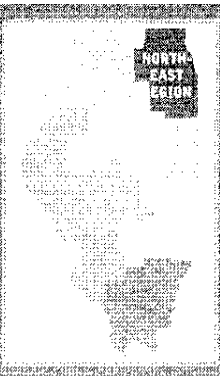
- Regions
-  Northeast
 -  Northern Stateline
 -  Northwest
 -  East Central
 -  Central
 -  North Central
 -  West Central
 -  Southeastern
 -  Southern
 -  Southwestern





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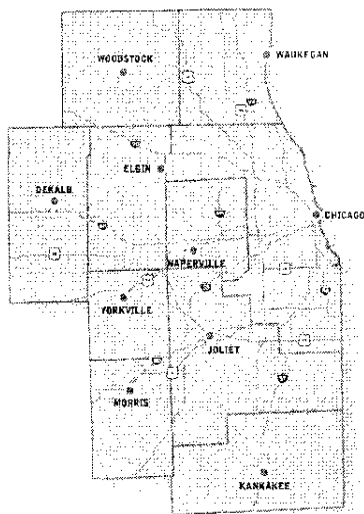
A look at Illinois' Northeast Region



ILLINOIS
OPPORTUNITY IS OUR BUSINESS

Illinois is a state rich in opportunity. Whether you are looking to build a business, find a job or conduct innovative research, Illinois' regional diversity offers something for everyone. The Illinois business climate—which features world-class universities, skyscrapers, family farms and ethanol plants, cutting-edge biotech research, small businesses and powerhouse manufacturers—is advanced and diverse. Whatever your business or your plans for the future, Illinois can provide the tools necessary to help you achieve your goals.

> NORTHEAST REGIONAL MAP



Northeast Illinois is a global leader in business achievement, with 30 Fortune 500 companies, 13 Fortune Global companies and 10 Financial Times Global 500 companies locating their headquarters here.

Site Selection Magazine ranked the Chicagoland area the top metro region for new and expanded corporate facilities in 2005. Recent Northeast headquarter moves and business expansions include: United Airlines, Mittal Steel, Pabst Brewing Company, Takeda, Astellas Pharma, Target, OfficeMax, and Levy Home Entertainment.

The Northeast regions' powerful economy and unequalled access to North American, and global markets via road, rail, air and navigable waterways, has helped make it the third largest container hub in the world.

The ten-county **Northeast Region** of Illinois is one of the state's ten Economic Development Regions established as part of Governor Blagojevich's *Opportunity Returns* economic development strategy. The program identifies common economic strengths and needs in each region, and then targets the specific state programs and services that will best promote the region's growth.

The Northeast Region's largest area of employment comes from the professional and business services sector with 680,000 workers. Government is the second-largest employer, followed by education and health care services, which are forecast for continued growth, and the manufacturing industry rounding out the top four with more than 450,000 employees.

The Northeast Region has much to offer new and expanding businesses, including an unmatched transportation infrastructure and a highly-skilled workforce. Chicago's airports handle more than 3,300 daily flights and are within a four-hour flight to the majority of major North American destinations. Fifty percent of North American industry is within one day's truck delivery, and 50 percent of U.S. container rail freight passes through rail yards in the Chicago metropolitan area.

The Northeast region possesses a highly-skilled, diversified labor pool, which leads the nation in productivity. The region also boasts first rate educational institutions, which are providing future workers the skills and knowledge necessary for the 21st century workplace.

STATE OF ILLINOIS BUSINESS PORTAL
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REGIONAL STRENGTHS



KEY INDUSTRIES

- > The Northeast regional economy is healthy, diverse, and vibrant, with a wide range of successful industries.
- > About two-thirds of the state's manufacturers are located in the Northeastern Region, with about 12,000 manufacturing facilities. Top manufacturing sectors by employment are fabricated metal products, food manufacturing and machinery.
- > Northeastern Illinois is a hub for transportation and logistics companies, with 3,000 public warehousing facilities, readily available sites or buildings, and a wide array of terminals, freight forwarders and transportation companies.
- > The Northeast Region is also a leader in the financial services industry, with the strength and diversity to provide the capital resources necessary for industrial and commercial development. Chicago is also home to many of the world's leading stock exchanges, including, the Chicago Board of Trade, the Mercantile Exchange, and the Board of Options.



WORLD BUSINESS HUB

- > Northeast Illinois has an exceptional business climate, with growing domestic and international companies flocking here because of the region's central location and because their growth depends on access to a highly-skilled workforce, minimal transportation and distribution costs, cutting-edge technology, flexible research and development support, and abundant and reliable energy sources.
- > Led by the Northeast Region, Illinois currently ranks fifth in the nation in attracting foreign direct investment, according to the Organization for International Investment, which has created nearly 236,000 Illinois jobs.
- > Chicago hosts 26 different ethnic groups with a population greater than 25,000 and speaks more than 100 languages. There are more than 60 foreign consulates, 100 trade associations and foreign chambers of commerce and a large concentration of foreign banks.



TOURISM/CONVENTIONS

- > Tourism is a fundamental component in the economic engine of the Northeast regional economy.
- > With a skyline of architectural treasures complemented by 29 miles of lakefront, world-class museums and culture that includes the nation's top symphony orchestra, Chicago and its surrounding areas have tremendous natural and cultural resources attracting visitors from all around the globe.
- > In addition, conventions, trade shows and meetings generate billions in direct spending, create and support tens of thousands of jobs and further promote the Northeast Region and the state.
- > Northeastern tourist attractions include Navy Pier, the annual Taste of Chicago festival, an array of professional sports teams and exciting restaurants and nightlife.



METROPOLITAN POLICY PROGRAM

Bearing the Brunt: Manufacturing Job Loss in the Great Lakes Region, 1995–2005

Howard Wial and Alec Friedhoff

“The Great Lakes states account for a disproportionately large share of recent U.S. manufacturing job losses.”



Findings

Analysis of manufacturing employment and production in seven Great Lakes states and their metropolitan areas from 1995 through 2005 finds that:

- **More than one-third of the nation's loss of manufacturing jobs between 2000 and 2005 occurred in seven Great Lakes states: Illinois, Indiana, Michigan, New York, Ohio, Pennsylvania, and Wisconsin.** Between 1995 and 2005, the United States lost more than 3 million manufacturing jobs. Nearly all of this job loss occurred during the last five years, and 37.5 percent of the loss occurred in the seven Great Lakes states. Michigan lost the most manufacturing jobs between 2000 and 2005 (nearly 218,000), followed by Ohio, Illinois, and Pennsylvania.
- **Despite these job losses, manufacturing remains a major driver of the nation's economy and the economy of the Great Lakes region.** Because productivity was higher in manufacturing than in other sectors of the economy, in 2004, manufacturing accounted for a higher share of gross state product than its share of employment, both nationwide and in six of the seven states in the Great Lakes manufacturing belt. In addition, productivity in the manufacturing sector increased by 38 percent between 1997 and 2004, a much higher increase than the 24.4 percent growth in productivity for all non-farm businesses during that same time period.
- **Manufacturing job losses were pervasive in Great Lakes metropolitan areas.** All but one of the 25 largest manufacturing-dependent metropolitan areas in the Great Lakes region lost manufacturing jobs during the last decade (1995–2005), often at a faster rate than the United States as a whole. Chicago and Detroit lost the most manufacturing jobs in the last five years (over 100,000 jobs each), while Canton, OH, and Flint, MI, lost the greatest shares of manufacturing employment.
- **The metropolitan areas in which manufacturing employment peaked between 1995 and 1997 tended to experience more severe manufacturing job losses between 1995 and 2005 than those in which manufacturing peaked later.** The 13 metropolitan areas where manufacturing employment peaked between 1995 and 1997 saw an average 26.8 percent decline in manufacturing employment between 1995 and 2005. In the other 11 metropolitan areas where manufacturing employment peaked later, between 1998 and 2000, the average metropolitan area lost 18.9 percent of its manufacturing jobs during the decade.
- **Manufacturing job losses were a major reason for slow overall job growth, and sometimes overall job losses, in Great Lakes metropolitan areas.** Furthermore, employment gains in high-wage advanced service industries, which occurred in all but one of the 25 metropolitan areas studied, were not large enough to offset the loss of manufacturing jobs in most areas.

Although not all manufacturing jobs can or should be saved, a combination of trade, health care, and economic and workforce development policies can help to retain and expand employment in high-productivity manufacturing in the United States.

B

Introduction

More than 47,000 workers at General Motors and auto parts supplier Delphi Corp. recently accepted early retirement offers or buyouts to leave their jobs. When those workers depart by the end of 2006, the two companies will have reduced their combined hourly workforces in the United States by about one-third. Job cuts in U.S. manufacturing, however, extend well beyond the auto industry and the state of Michigan and are having a profound effect on local economies throughout the Great Lakes region.

This report examines recent trends in manufacturing employment in seven states of the Great Lakes manufacturing belt and in the 25 largest manufacturing-dependent metropolitan areas in those states. Trends are compared with information on manufacturing output and on employment in the advanced service sector, consisting of the information, financial activities, and professional and business services industries. As with manufacturing, these industries both pay higher-than-average wages and generate export income for their home regions.² Because of their relatively high wages and exportability, and because, unlike manufacturing, they have added jobs during the past decade, the advanced services sector has the potential to be a foundation for high-wage regional economic development.

Methodology

Geographic Coverage

This report covers seven states of the Great Lakes manufacturing belt: Illinois, Indiana, Michigan, New York, Ohio, Pennsylvania, and Wisconsin. These states composed the heart of U.S. manufacturing for most of the last century, still account for nearly

Table 1. Top 25 Manufacturing-Dependent Metropolitan Areas in the Great Lakes, 2005

| Metropolitan Area | Percentage of Total Jobs in Manufacturing | Metropolitan Area | Percentage of Total Jobs in Manufacturing |
|-------------------|---|-------------------|---|
| York, PA | 21.7% | Dayton, OH | 14.3% |
| Evansville, IN | 19.3% | Cleveland, OH | 14.0% |
| Lancaster, PA | 18.9% | Flint, MI | 14.0% |
| Grand Rapids, MI | 18.8% | Detroit, MI | 13.9% |
| Reading, PA | 18.6% | Davenport, IA | 13.6% |
| Canton, OH | 17.7% | Allentown, PA | 13.5% |
| Fort Wayne, IN | 17.2% | Seranton, PA | 13.4% |
| Peoria, IL | 16.7% | Cincinnati, OH | 11.9% |
| Youngstown, OH | 16.7% | Buffalo, NY | 11.7% |
| Milwaukee, WI | 16.0% | Indianapolis, IN | 11.4% |
| Toledo, OH | 15.5% | Chicago, IL | 11.1% |
| Rochester, NY | 14.9% | Ann Arbor, MI | 10.7% |
| Akron, OH | 14.6% | United States | 10.7% |

Notes: The manufacturing percentage for the United States includes the entire nation, both metropolitan and nonmetropolitan.

Ann Arbor's manufacturing job percentage is above the national average but rounds to the national average at one decimal point.

Source: Authors' analysis of Current Employment Statistics data from the Bureau of Labor Statistics.

one-third of all U.S. manufacturing jobs, and make up the only region of the United States in which nearly all large metropolitan areas (those with populations of at least one million) are manufacturing-dependent.

The report focuses on the 25 largest metropolitan statistical areas (measured by the 2000 population) in the seven selected states. A metropolitan area is counted as being within the seven-state region if the majority of its employment is within one or more of the seven states.³ Manufacturing-dependent metropolitan areas are defined as those in which manufacturing's share of total metropolitan employment exceeded manufacturing's share of total U.S. employment in 2005 (10.7 percent), as measured by the Bureau of Labor Statistics (BLS) Current Employment Statistics program. Table 1 shows the selected metropolitan areas and the percentage of

jobs in each area that were manufacturing jobs in 2005.⁴

Time Period

The report covers the decade 1995–2005. The year 2005 is the most recent year for which a full year of employment data is available. The year 1995 is a suitable starting point for this analysis because it represents a roughly similar point in the business cycle to the year 2005. Changes in employment during the entire 1995–2005 period, therefore, are likely to result from long-term economic shifts rather than from the ups and downs of the business cycle.

The report frequently provides detailed employment information for two subperiods: 1995–2000 and 2000–2005. In each of the seven Great Lakes states covered in this report, total employment, measured as an annual average, reached its pre-

recession peak in 2000. (In contrast, total employment in the United States peaked most recently in 2001, the year in which the latest recession occurred.) In the seven Great Lakes states, the 1995–2000 subperiod roughly corresponds to the end of the pre-recession employment upswing. The 2000–2005 includes the employment downturn and subsequent recovery.

Consistent data on economic output are unavailable for the entire period of 1995–2005. The most recent data are for 2004. Output data for years prior to 1997 use a different industry classification system from the one currently in use and are not comparable to more recent data. Therefore, the output data presented in this report cover only the years 1997 through 2004.

Data Sources

Employment data are from the BLS Current Employment Statistics program, the standard source for the most up-to-date employment data. Other available data sources do not provide employment data for all of 2005. The data are derived from a monthly survey of 400,000 business establishments nationwide. They include only payroll employment in nonagricultural industries. Agricultural workers, the self-employed, unpaid family or volunteer workers, private household workers, and members of the armed forces are excluded.

All employment data in this report are annual averages of seasonally unadjusted data. Although monthly employment data are available from the Current Employment Statistics program, these data are not seasonally adjusted for metropolitan areas. Seasonally unadjusted data sometimes exhibit large monthly swings, obscuring longer-term trends. Annual averages of seasonally unadjusted data avoid this problem.

The report measures manufacturing output and total economic output at the state level using the Bureau of

Economic Analysis's (BEA) data on gross state product. Gross state product is the state-level analogue of gross domestic product. However, because there are minor differences between gross domestic product and gross state product for the entire United States, the report uses gross state product as its national-level measure of output when comparing output between individual states and the United States as a whole. BEA does not report measures of economic output for metropolitan areas.

Findings

A. More than one-third of the nation's loss of manufacturing jobs between 2000 and 2005 occurred in seven Great Lakes states: Illinois, Indiana, Michigan, New York, Ohio, Pennsylvania, and Wisconsin.

The Great Lakes states accounted for a disproportionately large share of all U.S. manufacturing job losses. Between 2000 and 2005, the United States lost more than 3 million manufacturing jobs. Michigan alone lost nearly 218,000 (Table 2). Together, the seven Great Lakes states included in this report lost more than 1.1 million manufacturing jobs, or 37.5 per-

cent of all U.S. manufacturing jobs lost. The seven states' combined share of U.S. manufacturing jobs lost between 2000 and 2005 (37.5 percent) exceeded their combined share of U.S. manufacturing jobs in 2000 (32.8 percent).

All seven Great Lakes states included in this report, as well as the United States as a whole, experienced severe manufacturing job loss during both the 1995–2005 and 2000–2005 periods (Figure 1). Nearly all the 1995–2005 losses occurred between 2000 and 2005. Between 2000 and 2005, the nation as a whole lost 17.6 percent of its manufacturing job base. During that period, all the Great Lakes states except Indiana (13.9 percent manufacturing job loss) and Wisconsin (14.7 percent loss) lost larger percentages of their manufacturing jobs than the entire nation. Michigan lost the greatest percentage of manufacturing jobs (24.3 percent), followed by New York (22.7 percent). Illinois, Ohio, and Pennsylvania lost 20 to 21 percent of their manufacturing jobs.

Manufacturing job losses were much more severe between 2000 and 2005 than between 1995 and 2000. From 1995 through 2000, Indiana, Michigan, Wisconsin, and the entire United States gained manufacturing

Table 2. Manufacturing Employment Change in the United States and Great Lakes States, 2000–2005

| State | Change in Number of Manufacturing Jobs | Percentage Change in Manufacturing Jobs |
|---------------|--|---|
| Michigan | -217,900 | -24.3% |
| Ohio | -207,600 | -20.3% |
| Illinois | -181,400 | -20.8% |
| Pennsylvania | -180,500 | -20.9% |
| New York | -170,700 | -22.7% |
| Indiana | -92,300 | -13.9% |
| Wisconsin | -87,600 | -14.7% |
| United States | -3,031,000 | -17.6% |

Source: Authors' analysis of BLS Current Employment Statistics data.

B

jobs, while the other Great Lakes states lost between 1.6 percent (Ohio) and 7.3 percent (New York) of their manufacturing jobs (Figure 1).⁵ Each of the states that lost manufacturing jobs from 1995 through 2000 lost a smaller share of its manufacturing jobs during that five-year period than in the subsequent five-year period.

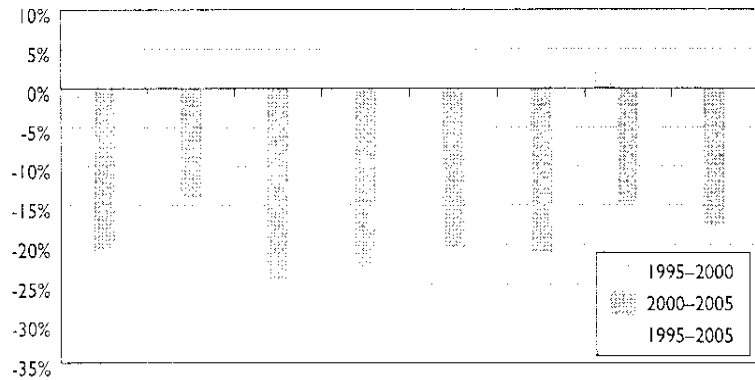
B. Despite these job losses, manufacturing remains a major driver of the nation's economy and the economy of the Great Lakes region.

Despite the loss of jobs, manufacturing remains a major driver of the economy. For instance, in 2004, manufacturing jobs accounted for a larger share of total gross state product than of total employment nationwide. This was also true in six of the seven states that make up the Great Lakes manufacturing belt, the exception being New York (Figure 2). Moreover, many jobs in other sectors of the economy depend directly or indirectly on manufacturing. Without manufacturing, the economies and populations of the Great Lakes states would be much smaller.

In addition, although manufacturing employment has fallen, inflation-adjusted gross state product in manufacturing has risen (Figure 3).

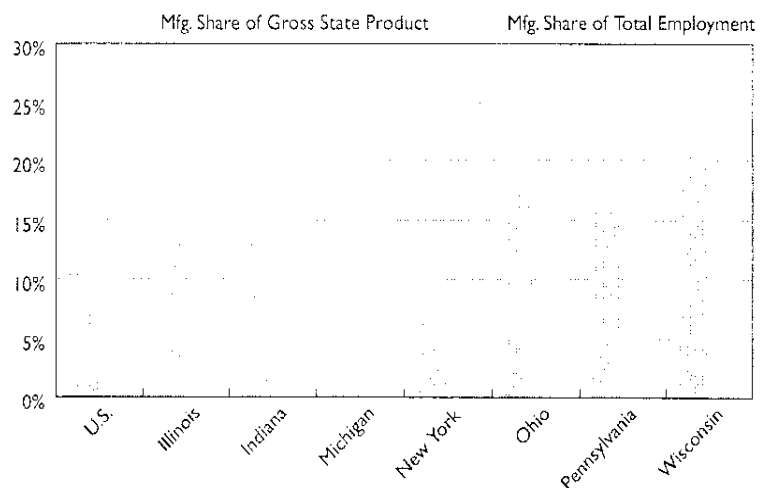
These divergences between manufacturing employment and manufacturing output indicate that manufacturing makes a crucial contribution to productivity. Manufacturing's higher share of output than of employment means that manufacturing is more productive than the rest of the economy. The combination of manufacturing output growth and manufacturing job losses occurred because productivity improved more rapidly in manufacturing than in the rest of the economy. Data from the BLS show that manufacturing productivity grew by 38.1 percent between 1997 and 2004, while the productivity of all non-farm business

Figure 1. Percentage Change in Manufacturing Employment in the United States and Great Lakes States, 1995–2005



Source: Authors' analysis of BLS Current Employment Statistics data.

Figure 2. Manufacturing's Share of Employment and Gross State Product (GSP) in the United States and Great Lakes States, 2004



Sources: Authors' analysis of BLS Current Employment Statistics (employment) and Bureau of Economic Analysis (gross state product) data.

grew by 24.4 percent. Thus, manufacturing is a major driver of overall productivity growth.

C. Manufacturing job losses were pervasive in Great Lakes metropolitan areas.

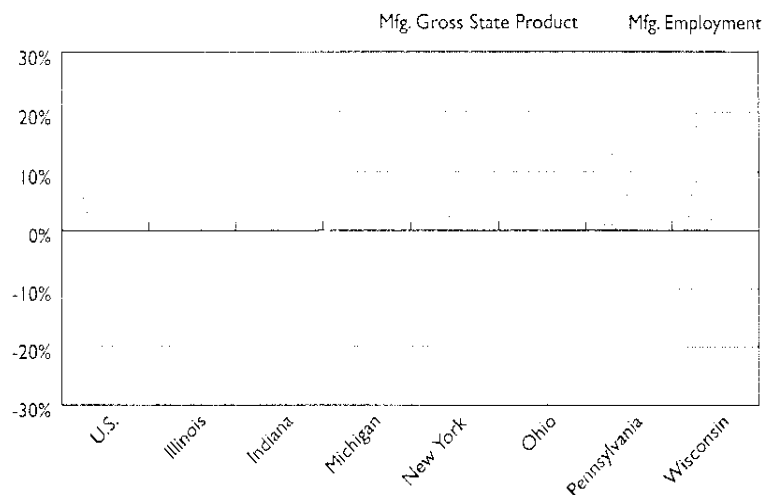
The importance of manufacturing to the U.S. economy, and to the economies of the Great Lakes states in particular, makes manufacturing job losses a major cause for concern. In manufacturing-dependent Great Lakes metropolitan areas, these losses have had an even greater impact on local economies, both because those economies are highly dependent on manufacturing and because, in most cases, manufacturing job losses have been more severe than in the United States as a whole.

Of the 25 metropolitan areas examined in this report, only Peoria, IL, gained manufacturing jobs from 1995 to 2005, and even Peoria suffered manufacturing job losses after 2000. Eighteen of the metropolitan areas (Akron, OH; Allentown, PA; Ann Arbor, MI; Buffalo, NY; Canton, OH; Chicago, IL; Cleveland, OH; Dayton, OH; Detroit, MI; Flint, MI; Fort Wayne, IN; Lancaster, PA; Milwaukee, WI; Reading, PA; Rochester, NY; Scranton, PA; York, PA; and Youngstown, OH) lost a higher percentage of their manufacturing jobs from 1995 to 2005 than did the entire United States.⁶

Five metropolitan areas (Ann Arbor, MI; Canton, OH; Flint, MI; Rochester, NY; and Youngstown, OH) had declines in manufacturing employment that exceeded 30 percent from 1995 through 2005. The Flint, MI, region was the hardest hit, losing more than one-half (55 percent) of its manufacturing jobs over the course of the decade.

Nearly all the metropolitan areas included in this report followed the national and regional pattern of accelerated manufacturing job loss after 2000. Davenport, IA; Dayton, OH;

Figure 3. Percent Change in Manufacturing Employment and Inflation-Adjusted Gross State Product in the United States and Great Lakes States, 1997–2004



Note: Gross state product changes are based on gross state product in chained 2000 dollars. Sources: Authors' analysis of BLS Current Employment Statistics (employment) and Bureau of Economic Analysis (gross state product) data.

Table 3. Top Ten Manufacturing-Dependent Great Lakes Metropolitan Areas with the Largest Absolute Declines in Manufacturing Employment, 2000–2005

| Metropolitan Area | Change in Employment, 2000-2005 |
|-------------------|---------------------------------|
| Chicago, IL | -141,300 |
| Detroit, MI | -103,300 |
| Cleveland, OH | -47,300 |
| Milwaukee, WI | -30,600 |
| Rochester, NY | -26,300 |
| Cincinnati, OH | -24,400 |
| Dayton, OH | -21,600 |
| Buffalo, NY | -19,600 |
| Grand Rapids, MI | -16,300 |
| Canton, OH | -14,100 |

Source: Authors' analysis of BLS Current Employment Statistics data.

Detroit, MI; Evansville, IN; Grand Rapids, MI; Milwaukee, WI; Peoria, IL; and Toledo, OH, gained manufacturing jobs from 1995 to 2000 and

then lost them from 2000 to 2005. Cincinnati, OH had no change in the number of manufacturing jobs between 1995 and 2000 but lost man-

Table 4. Top Ten Manufacturing-Dependent Great Lakes Metropolitan Areas with the Largest Percentage Declines in Manufacturing Employment, 2000–2005

| Metropolitan Area | Percent Change in Employment, 2000-2005 |
|-------------------|---|
| Canton, OH | -31.1% |
| Flint, MI | -29.5% |
| Ann Arbor, MI | -28.1% |
| Dayton, OH | -27.0% |
| Detroit, MI | -26.6% |
| Rochester, NY | -25.6% |
| Reading, PA | -24.6% |
| Cleveland, OH | -24.0% |
| Buffalo, NY | -23.4% |
| Scranton, PA | -23.2% |

Source: Authors' analysis of BLS Current Employment Statistics data.

ufacturing jobs from 2000 to 2005. Akron, OH; Allentown, PA; Ann Arbor, MI; Buffalo, NY; Canton, OH; Chicago, IL; Cleveland, OH; Fort Wayne, IN; Indianapolis, IN; Lancaster, PA; Reading, PA; Rochester, NY; Scranton, PA; York, PA; and Youngstown, OH lost manufacturing jobs during both five-year periods but their absolute and percentage losses were greater from 2000 to 2005 than from 1995 to 2000. Only Flint, MI, lost more manufacturing jobs, and a greater percentage of its manufacturing jobs, from 1995 to 2000 than from 2000 to 2005.

Tables 3 and 4, respectively, show the 10 Great Lakes metropolitan areas with the largest absolute and percentage losses of manufacturing jobs between 2000 and 2005. Six metropolitan areas (Buffalo, NY; Canton, OH; Cleveland, OH; Dayton, OH; Detroit, MI; and Rochester, NY) were among the ten regions with the largest manufacturing job losses in both absolute and percentage terms.

Appendix A summarizes the absolute and percentage changes in manufacturing employment for all 25 metropolitan areas during the entire decade 1995–2005 and each of the two five-year subperiods.

D. The metropolitan areas in which manufacturing employment peaked between 1995 and 1997 tended to experience more severe manufacturing job losses between 1995 and 2005 than those in which manufacturing peaked later.

There were two distinct patterns of manufacturing job loss from 1995 to 2005 among the 24 metropolitan areas that lost manufacturing jobs during the decade. In 13 metropolitan areas, divided almost evenly between the Midwest and the eastern Great Lakes states (New York and Pennsylvania), manufacturing employment peaked most recently between 1995 and 1997 and fell almost continuously thereafter.⁷ These areas are suffering long-term, structural declines in manufacturing employment.

In 11 metropolitan areas, however—all in the Midwest—manufacturing employment peaked most recently in 1998, 1999, or 2000.⁸ These places experienced manufacturing job patterns in the late 1990s that more closely resembled (and in some cases were more favorable than) the national average. In these places, although manufacturing never recovered from the 2001 recession, it was healthier in most of these regions prior

to the recession than it was in places where manufacturing employment peaked earlier. This may reflect a combination of cyclical and structural influences.

Metropolitan areas that reached their manufacturing employment peak earlier tended to lose larger percentages of their manufacturing jobs over the decade than those in which manufacturing peaked later. The average region whose manufacturing employment peak occurred between 1995 and 1997 lost 26.8 percent of its manufacturing jobs from 1995 through 2005. In contrast, the average region whose manufacturing peak occurred between 1998 and 2000 lost 18.9 percent of its manufacturing jobs over the same period.

It is likely that the differences in manufacturing industry composition among metropolitan areas are responsible for the different patterns of job loss. Although the BLS does not provide the industry detail needed, understanding the problems of particular manufacturing industries at the local level will be necessary to craft local strategies to regain manufacturing jobs.

E. Manufacturing job losses were a major reason for slow overall job growth, and sometimes overall job losses, in Great Lakes metropolitan areas.

The 25 metropolitan areas generally had total job growth that was at best sluggish during the last decade. (See Appendix B for detailed results for each metropolitan area.) Dayton, OH; Flint, MI; and Youngstown, OH had fewer jobs in 2005 than in 1995. Fifteen of the areas studied lost jobs since 2000, even though they had higher total employment in 2005 than in 1995.⁹ Only Indianapolis, IN; Lancaster, PA; and Allentown, PA had 1995–2005 total job growth rates that exceeded the national average. Only those three metropolitan areas plus

Akron, OH; York, PA; and Cincinnati, OH added jobs faster than the nation in the last five years.

Manufacturing job losses were a major reason for the poor overall job performance in most of the 25 metropolitan areas. Manufacturing accounted for 190.2 percent of all jobs lost in Dayton, OH from 1995 to 2005, 131.2 percent of all jobs lost in Flint, MI and 397.9 percent of all jobs lost in Youngstown, OH. Manufacturing job losses exceeded total job losses in those regions because some industries other than manufacturing gained jobs. For example, Youngstown, OH, lost 18,700 manufacturing jobs but only 4,700 total jobs between 1995 and 2005. The region gained 14,000 jobs in nonmanufacturing industries (including 600 in advanced services) during that time period; these gains are the reason why manufacturing job losses were larger than total job losses.

Manufacturing accounted for between 62.3 and 875.0 percent of all jobs lost from 2000 through 2005 in the 18 metropolitan areas that lost jobs during that period. In general, metropolitan areas with larger percentage declines in manufacturing employment from 1995 through 2005 had larger percentage declines in total employment over the same period.¹⁶

Although metropolitan areas that had larger percentage increases in advanced service employment during the decade generally had larger percentage increases in total employment, advanced services did not compensate for the loss of manufacturing jobs in most of the areas studied.¹⁷ All the metropolitan areas except Fort Wayne, IN, gained advanced service jobs from 1995 through 2005, and seven of them (Akron, OH; Allentown, PA; Cincinnati, OH; Davenport, IA; Grand Rapids, MI; Indianapolis, IN; and Lancaster, PA) gained those jobs at a rate that exceeded the national average. In only five metropolitan areas, however (Cincinnati, OH; Davenport, IA; Evansville, IN;

Table 5. Changes in Manufacturing and Advanced Services Employment in 25 Manufacturing-Dependent Great Lakes Metropolitan Areas, 1995–2005

| Metropolitan Area | Manufacturing Employment Change (number of jobs) | Advanced Service Employment Change (number of jobs) | Sum of Manufacturing and Advanced Service Employment Changes |
|-------------------|--|---|--|
| Indianapolis, IN | -11,500 | 46,000 | 34,500 |
| Cincinnati, OH | -24,400 | 55,000 | 30,600 |
| Peoria, IL | 3,200 | 5,000 | 8,200 |
| Grand Rapids, MI | -11,600 | 19,200 | 7,600 |
| Davenport, IA | -2,600 | 8,700 | 6,100 |
| Evansville, IN | -200 | 3,500 | 3,300 |
| Buffalo, NY | -21,600 | 20,900 | -700 |
| Akron, OH | -14,400 | 13,500 | -900 |
| Allentown, PA | -17,000 | 15,800 | -1,200 |
| Lancaster, PA | -12,200 | 10,600 | -1,600 |
| Ann Arbor, MI | -9,500 | 5,900 | -3,600 |
| Scranton, PA | -11,300 | 7,100 | -4,200 |
| Toledo, OH | -9,900 | 3,500 | -6,400 |
| Reading, PA | -11,500 | 5,000 | -6,500 |
| York, PA | -9,000 | 2,300 | -6,700 |
| Canton, OH | -15,000 | 4,400 | -10,600 |
| Fort Wayne, IN | -9,700 | -900 | -10,600 |
| Dayton, OH | -21,300 | 9,400 | -11,900 |
| Milwaukee, WI | -29,700 | 16,000 | -13,700 |
| Youngstown, OH | -18,700 | 600 | -18,100 |
| Flint, MI | -26,500 | 3,700 | -22,800 |
| Rochester, NY | -37,400 | 11,900 | -25,500 |
| Cleveland, OH | -52,700 | 20,500 | -32,200 |
| Chicago, IL | -177,000 | 138,400 | -38,600 |
| Detroit, MI | -87,700 | 31,500 | -56,200 |

Source: Authors' analysis of BLS Current Employment Statistics data.

Grand Rapids, MI; and Indianapolis, IN), did the gains in advanced service employment exceed the losses in manufacturing employment.

Table 5 shows the changes in manufacturing and advanced service employment in each metropolitan area between 1995 and 2005, along with the sum of these two changes. For metropolitan areas that both lost manufacturing jobs and gained advanced service jobs (all 25 metropolitan areas shown except for Peoria, IL, which gained manufacturing jobs, and Fort Wayne, IN, which lost advanced service jobs), the sum of the two changes

is the amount by which the gain in the number of advanced service jobs exceeded the number of manufacturing jobs lost. The table lists metropolitan areas in order of this sum. In most of the regions shown, this sum is a negative number, indicating that gains in advanced service jobs did not make up for losses of manufacturing jobs.

B

Public Policy Can Help Retain and Expand Manufacturing Jobs

Manufacturing is critical to American productivity and its growth and hence to the American standard of living. The manufacturing-dependent metropolitan areas of the Great Lakes region, in particular, must retain and modernize their manufacturing bases if they are to remain economically viable. Advanced service industries, which in principle could have substituted for manufacturing as drivers of regional prosperity, have not generated enough jobs to offset recent manufacturing job losses in most of the Great Lakes region's manufacturing-dependent metropolitan areas.

It is often argued, however, that there is nothing that public policy can or should do to reverse the loss of manufacturing jobs. Without giving up the benefits of free trade, how can the federal or state governments enable Canton, OH, to compete with Canton, China, in manufacturing? Is not the cost advantage of low-wage countries simply too great for American producers to overcome?

There are some U.S. manufacturers whose productivity does not and is not likely to overcome the labor cost advantage of low-wage countries. Others, however, can be cost-competitive with producers in the lowest-wage countries, and many others could become competitive with productivity increases of 7 to 10 percent per year over a three- to five-year period.¹² The manufacturing jobs in these firms are the ones that should be retained and expanded. With a combination of trade, health care, and economic and workforce development policies, they can be.

Trade policy is the responsibility of the federal government. Meaningful, enforceable labor and environmental standards in international trade agreements would correct market failures

that currently give many low-wage countries an artificial cost advantage over the United States. U.S. government pressure on countries such as China, which keeps its currency artificially low, would also reduce the artificial cost advantages those countries enjoy. Thus far, the federal government has failed to act meaningfully on either of these issues.

Some form of universal health care coverage would help to reduce the compensation costs of U.S. manufacturers who provide health insurance for their workers and retirees. In the absence of federal action, states can and should act to spread the cost of health care financing widely among their residents and businesses, rather than rely on employers to foot the bill for their workers.

Economic and workforce development policies at both the federal and state levels can play a major role in helping U.S. manufacturers upgrade their production processes and in helping workers gain the skills they need to work more productively within those processes. Federal funding of the Manufacturing Extension Partnership program, which helps small and medium-sized manufacturers become more productive, should be increased (not reduced, as the current administration has repeatedly proposed). So should federal funding of workforce development programs that help incumbent workers acquire new skills.

States, which partially fund the Manufacturing Extension Partnership program, should expand their efforts to help manufacturers adopt cutting-edge technologies, reorganize work to increase productivity, and move into less price-competitive product markets. The following are examples of desirable state policies:

- Some states, such as Pennsylvania, fund "early warning" systems that identify manufacturing plants at risk of closing and intervene to help them remain competitive; other states should do so as well.

These initiatives could be funded by redirecting economic development spending away from expensive efforts to recruit new firms from out of state.

- States should condition all economic development assistance they provide to firms on firms' agreement to participate in performance benchmarking and upgrading-assistance programs.
- To the extent that Great Lakes states continue to provide financial incentives to lure manufacturers to relocate, they should provide those incentives only to firms that buy a substantial portion of their components and raw materials from within the region. Such within-region sourcing will benefit local economies in those states more than will sourcing without regard to location.
- States should help manufacturers form consortia dedicated to product and process upgrading, modernization, and associated worker training. Such consortia already exist in the Milwaukee area and northeast Ohio and in a growing number of advanced manufacturing industry clusters in Pennsylvania.¹³

Finally, federal and state policies must help manufacturing-dependent regions replace those manufacturing jobs that cannot be retained. Such policies could help those regions diversify their industrial bases (e.g., by building on existing technologies, skills, or other regional assets), expand employment in existing high-wage service-sector firms, and foster the growth of small, locally based firms.

**Appendix A. Absolute and Percent Changes in Manufacturing Employment
in the 25 Metropolitan Areas, 1995–2005, 1995–2000, and 2000–2005**

| Metropolitan Area | Percentage Change: 1995–2005 | Percentage Change: 1995–2000 | Percentage Change: 2000–2005 | Absolute Change: 1995–2005 | Absolute Change: 1995–2000 | Absolute Change: 2000–2005 |
|-------------------------------------|------------------------------------|------------------------------------|------------------------------------|----------------------------------|----------------------------------|----------------------------------|
| ILLINOIS | | | | | | |
| Chicago-Naperville-Joliet, IL-IN-WI | -26.3% | -5.3% | -22.2% | -177,000 | -35,700 | -141,300 |
| Davenport-Moline-Rock Island, IA-IL | -9.3% | 5.3% | -13.9% | -2,600 | 1,500 | -4,100 |
| Peoria, IL | 11.9% | 28.4% | -12.8% | 3,200 | 7,600 | -4,400 |
| INDIANA | | | | | | |
| Evansville, IN-KY | -0.6% | 6.3% | -6.5% | -200 | 2,200 | -2,400 |
| Fort Wayne, IN | -20.9% | -4.3% | -17.3% | -9,700 | -2,000 | -7,700 |
| Indianapolis-Carmel, IN | -10.2% | -0.2% | -10.1% | -11,500 | -200 | -11,300 |
| MICHIGAN | | | | | | |
| Ann Arbor, MI | -30.4% | -3.2% | -28.1% | -9,500 | -1,000 | -8,500 |
| Detroit-Warren-Livonia, MI | -23.5% | 4.2% | -26.6% | -87,700 | 15,600 | -103,300 |
| Flint, MI | -55.0% | -36.1% | -29.5% | -26,500 | -17,400 | -9,100 |
| Grand Rapids-Wyoming, MI | -13.6% | 5.5% | -18.1% | -11,600 | 4,700 | -16,300 |
| NEW YORK | | | | | | |
| Buffalo-Niagara Falls, NY | -25.2% | -2.3% | -23.4% | -21,600 | -2,000 | -19,600 |
| Rochester, NY | -32.9% | -9.8% | -25.6% | -37,400 | -11,100 | -26,300 |
| OHIO | | | | | | |
| Akron, OH | -22.6% | -2.5% | -20.6% | -14,400 | -1,600 | -12,800 |
| Canton-Massillon, OH | -32.4% | -1.9% | -31.1% | -15,000 | -900 | -14,100 |
| Cincinnati-Middletown, OH-KY-IN | -16.5% | 0.0% | -16.5% | -24,400 | 0 | -24,400 |
| Cleveland-Elyria-Mentor, OH | -26.1% | -2.7% | -24.0% | -52,700 | -5,400 | -47,300 |
| Dayton, OH | -26.7% | 0.4% | -27.0% | -21,300 | 300 | -21,600 |
| Toledo, OH | -16.2% | 2.3% | -18.1% | -9,900 | 1,400 | -11,300 |
| Youngstown-Warren-Boardman, OH-PA | -31.4% | -10.9% | -23.0% | -18,700 | -6,500 | -12,200 |
| PENNSYLVANIA | | | | | | |
| Allentown-Bethlehem-Easton, PA-NJ | -27.3% | -5.8% | -22.8% | -17,000 | -3,600 | -13,400 |
| Lancaster, PA | -21.5% | -0.9% | -20.8% | -12,200 | -500 | -11,700 |
| Reading, PA | -26.9% | -3.0% | -24.6% | -11,500 | -1,300 | -10,200 |
| Scranton-Wilkes-Barre, PA | -24.5% | -1.7% | -23.2% | -11,300 | -800 | -10,500 |
| York-Hanover, PA | -19.0% | -3.4% | -16.2% | -9,000 | -1,600 | -7,400 |
| WISCONSIN | | | | | | |
| Milwaukee-Waukesha-West Allis, WI | -18.2% | 0.6% | -18.6% | -29,700 | 900 | -30,600 |

Source: Authors' analysis of Bureau of Labor Statistics (BLS) Current Employment Statistics data.

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Appendix B. Employment Trends in the 25 Metropolitan Areas, 1995–2005

(For additional informational graphics on these metros go to <http://www.brookings.edu/metro/mci.htm>)

Akron, OH

Metropolitan Akron posted modest job gains prior to the recession, losses in 2001 and 2002, and gains in each subsequent year. The region added 19,700 jobs (a 6.3 percent increase) from 1995 through 2000, and gained 6,900 jobs (a 2.1 percent increase) from 2000 through 2005. During the entire decade, total employment increased by 8.6 percent (an addition of 26,600 jobs), well short of the national growth rate.

Manufacturing employment declined slightly prior to the 2001 recession, dropped dramatically in 2001 and 2002, and then remained relatively flat. The region lost 1,600 manufacturing jobs (a 2.5 percent decline) from 1995 through 2000, and an additional 12,800 (a 20.6 percent decline) from 2000 through 2005. During the entire decade, manufacturing employment declined by 22.6 percent (a loss of 14,400 jobs), significantly worse than the national rate decline.

Advanced service employment increased from 1995 through 2005, but job gains in this sector were not enough to offset job losses in manufacturing. Employment in advanced services increased by 13,500 jobs (25.7 percent) over the decade. From 1995 through 2000, employment in advanced services increased by 4,700 jobs (9.0 percent); and from 2000 through 2005, the region added 8,800 advanced service jobs (an increase of 15.4 percent).

Allentown, PA

Metropolitan Allentown gained jobs at a healthy rate prior to the 2001 recession, lost a modest number from 2001

through 2002, but has rebounded in recent years. From 1995 through 2000, the region added 32,200 jobs (an increase of 11.1 percent). From 2000 through 2005, total employment increased by 12,900 jobs (4.0 percent). Its relatively strong performance in the second half of the decade contributed to a 15.5 percent growth rate (45,100 jobs added) over the entire 1995–2005 period, surpassing the national growth rate as well as the growth rates of most of the other 25 metropolitan areas.

Manufacturing employment has declined almost continuously since 1995, although most of the decline occurred between 2000 and 2003. The region lost 3,600 manufacturing jobs from 1995 through 2000 (a decline of 5.8 percent) and 13,400 manufacturing jobs (a 22.8 percent decline) from 2000 through 2005. In total, manufacturing employment declined by 27.3 percent (17,000 jobs) over the entire decade, nearly 10 percentage points greater than the national rate of decline.

Employment in advanced services increased almost continuously from 1995 through 2004, although these gains did not make up for the loss of manufacturing jobs through 2004.¹⁴ Advanced service employment rose by 12,800 jobs (27.4 percent) from 1995 through 2004. From 1995 through 2000, the region gained 9,900 advanced service jobs (an increase of 21.2 percent); and from 2000 through 2004, it added an additional 2,900 advanced service jobs (a 5.1 percent increase).

Ann Arbor, MI

Metropolitan Ann Arbor gained jobs continuously until its employment peak in 2001. The region gained 19,900 jobs (an increase of 11.0 percent) from 1995 through 2000 and gained a modest 1,900 jobs (0.9 percent) from 2000 through 2005. During the entire period 1995–2005, total employment in the metropolitan

area increased by 12.0 percent (21,800 jobs), just short of the national growth rate.

Manufacturing employment declined from 1995 through 1997, increased until its peak in 1999 and fell substantially thereafter. The region lost 1,000 manufacturing jobs (a decline of 3.2 percent) from 1995 through 2000 and 8,500 more (a 28.1 percent decline) from 2000 through 2005. The result over both periods was a decline in manufacturing employment of 30.4 percent, much greater than the national rate of manufacturing job loss and among the highest manufacturing job loss rates of the 25 metropolitan areas studied in this report.

Advanced services gained a modest number of jobs from 1995 through 2005, although this gain was not enough to make up for the loss of manufacturing jobs. Employment in this sector increased by 5,900 jobs (18.9 percent) between 1995 and 2005. During the first half of the decade, the region added advanced service jobs at a rate higher than the national average. From 1995 through 2000, the region added 8,600 jobs (an increase of 27.6 percent), but from 2000 through 2005, it lost 2,700 advanced service jobs (a decline of 6.8 percent).

Buffalo, NY

Metropolitan Buffalo added jobs at a relatively slow rate prior to the 2001 recession, reached its jobs peak in 2000, and lost jobs in most of the following years. The region gained 18,900 jobs (a 3.5 percent increase) from 1995 through 2000, and lost 11,600 jobs (a 2.1 percent decline) from 2000 through 2005. During the 1995–2005 period, employment grew more slowly than the national average, increasing by just 1.4 percent (7,300 jobs).

Manufacturing employment has fallen every year since 1995. The region lost 2,000 manufacturing jobs

(a decline of 2.3 percent) from 1995 through 2000. It lost an additional 19,600 manufacturing jobs from 2000 through 2005 (a 23.4 percent loss). In total, the metropolitan area lost 21,600 manufacturing jobs (a 25.2 percent loss) over the entire decade. Manufacturing accounted for more than the total of all jobs lost since 2000.

The advanced service sector added jobs steadily throughout the decade, nearly making up for job losses in manufacturing. From 1995 through 2005, the region added 20,900 advanced service jobs. Employment in the sector rose faster in the first half of the decade than the second. From 1995 through 2000, the sector grew by 12,600 jobs (14.2 percent). From 2000 through 2005, it grew by 8,300 jobs (8.2 percent).

Canton, OH

Metropolitan Canton had modest job gains before the 2001 recession and job losses during most of the following years. The region gained 12,200 jobs (a 7.0 percent increase) from 1995 through 2000. It lost most of those jobs during and after the recession, save for a small upturn in total employment in 2005. Total employment fell by 10,600 jobs (5.7 percent) from 2000 through 2005. During the entire period 1995–2005, the region gained just 1,600 jobs (a 0.9 percent growth rate).

Manufacturing employment grew modestly from 1995 through 1998, declined from 1999 through 1998 and declined 2005. The region lost 900 manufacturing jobs (a 1.9 percent loss) from 1995 through 2000 and lost an additional 14,100 manufacturing jobs (31.1 percent) from 2000 through 2005. The result was a 32.4 percent decline in manufacturing employment loss from 1995 through 2005 (a loss of 15,000 jobs). Manufacturing accounted for more than the total of all jobs lost since 2000.

Although the Canton region gained advanced service jobs between 1995

and 2005, the gains did not make up for job losses in manufacturing. Advanced service employment rose by 4,400 jobs (20.9 percent) during the decade. Job growth in this sector was more rapid before the recession than after. From 1995 through 2000, advanced services grew by 4,100 jobs (19.4 percent). From 2000 through 2005, 300 jobs were added (1.2 percent growth).

Chicago, IL

Total employment in metropolitan Chicago grew moderately before the 2001 recession, declined from 2000 through 2003, and rose again in 2004 and 2005. The region gained 346,000 jobs (an 8.2 percent increase) from 1995 through 2000. Despite recent gains, total employment fell by 109,900 (2.4 percent) from 2000 through 2005. Over the entire period 1995–2005, the region gained 236,100 jobs (5.6 percent), well below the national average growth rate.

Manufacturing employment declined almost continuously since 1995, with the largest annual losses occurring in 2001 and 2002. The region lost 35,700 manufacturing jobs (a decline of 5.3 percent) from 1995 through 2000 and another 141,300 (22.2 percent) from 2000 through 2005. The result was a loss of 177,000 manufacturing jobs (a 26.3 percent decline) over the entire decade, the largest total loss of all regions included in this analysis. Manufacturing accounted for more than the total of all jobs lost since 2000.

Employment in the advanced service sector rose during the decade but was unable to offset the loss of manufacturing jobs. The region gained 138,400 advanced service jobs from 1995 through 2005, adding jobs during the first half of the decade, and losing them in the second. From 1995 through 2000, advanced services grew by 179,300 jobs (18.2 percent). From 2000 through 2005, they declined by 40,900 jobs (3.5 percent).

"There are some U.S. manufacturers whose productivity does not and is not likely to overcome the labor cost advantage of low-wage countries."

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"Federal and state policies must help manufacturing-dependent regions replace those manufacturing jobs that cannot be retained."

Cincinnati, OH

Metropolitan Cincinnati posted healthy employment gains prior to the 2001 recession, lost jobs from 2000 through 2002, and has added jobs in each subsequent year. The region gained 97,500 jobs (a 10.6 percent increase) from 1995 through 2000, and an additional 17,900 (1.8 percent) from 2000 through 2005. During the entire 1995–2005 period, the metropolitan area added 115,400 jobs (12.5 percent, or just short of the national growth rate).

Overall, manufacturing employment was unchanged from 1995 through 2000. The region experienced its greatest manufacturing job losses in 2001 and 2002. These contributed to a total loss of 24,400 manufacturing jobs (a 16.5 percent decline) from 2000 through 2005. Accordingly, manufacturing employment for the entire decade declined by 16.5 percent, slightly better than the national rate.

Advanced service employment increased every year from 1995 through 2005, easily making up for the job losses in manufacturing. The sector added 55,000 jobs from 1995 through 2005. Job growth in the sector was more rapid during the first half of the decade than it was in the second. From 1995 through 2000, advanced services grew by 39,800 jobs (22.3 percent). From 2000 through 2005, they grew by 15,200 (7.0 percent)

Cleveland, OH

The Cleveland region had moderate job gains prior to the recession, peak employment in 2000, and job losses every year thereafter. The region gained 75,000 jobs (an increase of 7.1 percent) from 1995 through 2000. During and immediately after the 2001 recession, total employment dropped precipitously, and by 2005 the number of jobs in the metropolitan area was below its 1996 level. From 2000 through 2005, the region lost 65,200 jobs (a 5.7 percent decline). During the entire decade, job gains

amounted to just a 0.9 percent increase (a total of 9,800 jobs).

Manufacturing employment declined every year since 1995, with its greatest losses occurring during and immediately after the recession (2001–2002). The region lost 5,400 manufacturing jobs (2.7 percent) from 1995 through 2000, a small number of jobs relative to the 47,300 it lost (a 24 percent decline) from 2000 through 2005. This accounted for 72.5 percent of all jobs lost since 2000. During the entire decade, manufacturing employment fell by 52,700 (26.1 percent).

Employment in advanced services increased moderately from 1995 through 2005, but job gains in this sector did not make up for job losses in manufacturing. Advanced service employment rose by 20,500 jobs (9.6 percent) over the decade, reaching its peak in 2000. From 1995 through 2000, the sector grew by 31,900 jobs (14.9 percent). From 2000 through 2005, it lost 11,400 jobs (4.6 percent).

Davenport, IA

Total employment in metropolitan Davenport grew moderately prior to the 2001 recession, reached a peak in 1999, and has not yet recovered to that level. From 1995 through 2000, the region added 15,200 jobs (an increase of 8.8 percent). Despite gains in 2004 and 2005, the metropolitan area lost 1,200 jobs from 2000 through 2005. During the entire period 1995–2005, total employment increased by 8.1 percent (14,000 jobs), only a modest increase relative to the national average.

Manufacturing employment grew from 1995 through 1998, declined through 2003, and has partially rebounded since 2003. From 1995 through 2000, the region gained 1,500 manufacturing jobs (a 5.3 percent increase), but it lost 4,100 manufacturing jobs (a decline of 13.9 percent) from 2000 through 2005. The result was a loss of 2,600 manufacturing jobs

(a 9.3 percent decline) over the entire decade, relatively less severe than the national experience. Manufacturing accounted for more than the total of all jobs lost since 2000, although it did gain 1,300 manufacturing jobs from 2003 through 2005.

The region saw healthy job gains in its advanced service sector over the course of the decade, making up for job losses in manufacturing. Employment in the sector rose by 8,700 jobs (31.1 percent) from 1995 through 2005. From 1995 through 2000, advanced services grew by 4,400 jobs (15.7 percent), and from 2000 through 2005, it grew by 4,300 jobs (13.3 percent).

Dayton, OH

The Dayton region posted slight job gains prior to the recession, and declined at a brisk pace over the remaining period. The region gained 14,700 jobs from 1995 through 2000 (3.5 percent), but by 2003 the number of jobs in the region had fallen below its 1995 level. Total employment fell by 25,900 jobs (5.9 percent) between 2000 and 2005, resulting in a loss of 11,200 jobs (a 2.7 percent decline) over the entire decade.

Manufacturing employment remained basically unchanged from 1995 through 2000 (with some variation during the intervening years), adding just 300 jobs (an increase of 0.4 percent) during the period. Sharp declines during and shortly after the recession contributed to a loss of 21,600 manufacturing jobs (a decline of 27.0 percent) from 2000 through 2005. During the entire decade, manufacturing employment declined by 21,300 (a 26.7 percent loss and a much faster rate of decline than the national average). Losses in the sector accounted for 83.4 percent of all jobs lost in the region since 2000.

Employment in advanced services increased during the decade, but not enough to make up for the loss of manufacturing jobs. From 1995 through

2005, advanced service employment rose by 9,400 jobs (12.9 percent). The sector gained 7,000 jobs (an increase of 9.6 percent) from 1995 through 2000. It reached its peak in 2001 and declined slightly in several subsequent years. Overall, employment in the sector increased by 2,400 (3.0 percent) from 2000 through 2005.

Detroit, MI

After moderate gains prior to the 2001 recession, total employment in metropolitan Detroit declined substantially between 2000 and 2002, and continued downward thereafter. From 1995 through 2000, the region added 169,000 jobs (an increase of 8.3 percent). However, nearly all those gains were erased between 2000 and 2005 as the metropolitan area lost 165,700 jobs (7.5 percent) during this period. During the entire decade, total employment increased by only 0.2 percent (an addition of 3,300 jobs).

Manufacturing employment in the region grew by 15,600 jobs from 1995 through 2000 (an increase of 4.2 percent). However, sharp declines in 2001 and 2002 left manufacturing employment levels below their pre-recession low, with additional losses in each subsequent year. The region lost 103,300 manufacturing jobs from 2000 through 2005 (a decline of 26.6 percent). During the entire decade, manufacturing employment declined by 87,700 jobs (a decline of 23.5 percent), well above the national rate of decline. Manufacturing accounted for 62.3 percent of all jobs lost in the region since 2000.

The Detroit region saw moderate employment gains in its advanced service sector from 1995 through 2005, although these gains were not sufficient to offset the job losses in manufacturing. Advanced service employment rose by 31,500 (6.4 percent) from 1995 through 2005. This sector gained jobs prior to the recession but lost jobs almost continuously thereafter. From 1995 through 2000,

advanced services grew by 69,300 (14.0 percent). From 2000 through 2005, the sector lost 37,800 jobs (6.7 percent).

Evansville, IN

Metropolitan Evansville saw moderate job gains prior to the 2001 recession. Employment during the decade peaked in 2002. From 1995 through 2000, the region added 14,200 jobs (an increase of 8.6 percent). From 2000 through 2005, it lost 700 jobs (a decline of 0.4 percent), although the region posted a small gain in 2005. During the entire decade (1995–2005), total employment increased by 8.2 percent (13,500 jobs), well below the national average growth rate.

Metropolitan Evansville reported almost the same number of manufacturing jobs in 2005 as in 1995. The region gained 2,200 manufacturing jobs (a 6.3 percent increase) from 1995 through 2000, but lost 2,400 (a 6.5 percent decline) from 2000 through 2005. The result was a net loss of 200 manufacturing jobs (a 0.6 percent decline) over the entire decade, much smaller than the nationwide percentage loss of manufacturing jobs.

Employment in advanced services increased moderately from 1995 through 2005, easily offsetting the small decline in manufacturing employment. The sector gained 3,500 jobs (15.2 percent) over the decade, although it lost jobs from 2001 through 2004. From 1995 through 2000, advanced services grew by 5,100 jobs (22.1 percent). From 2000 through 2005, the sector lost 1,600 jobs (5.7 percent).

Flint, MI

Metropolitan Flint has been losing jobs since its peak employment in 1997. The region lost 11,500 jobs (6.6 percent) from 1995 through 2000, and another 8,700 jobs (5.3 percent) from 2000 through 2005. During the entire

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period 1995–2005, the region lost 20,200 jobs (a decline of 11.5 percent).

The decline in manufacturing has been even more dramatic. Since 1995, job losses have been large and persistent. The region lost 17,400 manufacturing jobs (a 36.1 percent decline) from 1995 through 2000, and an additional 9,100 (a 29.5 percent decline) from 2000 through 2005. In total, the region lost 26,500 manufacturing jobs during the decade, a decline of 55.0 percent, far exceeding the rate of decline in all the other metros in this analysis. Manufacturing accounted for more than the total of all jobs lost since 2000.

Employment in advanced services increased by 3,700 jobs (18.4 percent) from 1995 through 2005, not nearly enough to offset the losses in manufacturing. From 1995 through 2000, the region added 4,200 advanced service jobs, while it lost 500 in the subsequent period from 2000 through 2005.

Fort Wayne, IN

Total employment in metropolitan Fort Wayne climbed at a moderate rate prior to the 2001 recession, posting most of its gains in the two-year period from 1996 through 1998. The region gained 11,300 jobs (an increase of 5.5 percent) from 1995 through 2000. After declining in 2001 and 2002, total employment has grown each year, although not by enough to make up for earlier losses. From 2000 through 2005, the region lost 3,700 jobs (a decline of 1.7 percent). During the entire period 1995–2005, total employment increased by 3.7 percent (7,600 jobs), only a minor increase relative to the national average job growth rate.

Manufacturing employment changed very little from 1995 through 1998, declined from 1998 through 2004, then grew again in 2005. The region lost 2,000 manufacturing jobs (a 4.3 percent decline) from 1995 through 2000 and an additional 7,700 jobs (a 17.3 percent decline) from

2000 through 2005. During the entire decade, the region lost 9,700 jobs (a 20.9 percent decline), a greater rate of loss than the national average. Manufacturing accounted for more than the total of all jobs lost since 2000. However, the region did gain 700 manufacturing jobs in 2005.

Advanced service employment peaked in 1998 and has fallen every year since. During the entire decade, the advanced service sector lost 900 jobs (a decline of 2.4 percent), although from 1995 through 2000, employment in the sector increased by 3,100 jobs (8.4 percent). From 2000 through 2005, the sector lost 4,000 jobs (a 10.0 percent decline).

Grand Rapids, MI

Metropolitan Grand Rapids saw strong job gains prior to the 2001 recession; however, declines during and after the recession put an end to its impressive job growth. From 1995 through 2000, the region added 53,400 jobs (an increase of 15.2 percent), although it lost 11,900 jobs (a decline of 2.9 percent) from 2000 through 2005. During the entire decade, total employment increased by 11.8 percent (41,500)—just short of the national average growth rate.

Manufacturing employment increased from 1995 through 1998, declined substantially from 1999 through 2003, and experienced small declines in 2004 and 2005. The region gained 4,700 manufacturing jobs (an increase of 5.5 percent) from 1995 through 2000, but lost 16,300 (an 18.1 percent decline) from 2000 through 2005. The result for the entire decade was a loss of 11,600 manufacturing jobs (a decline of 13.6 percent), less severe than the national decline. Manufacturing accounted for more than the total of all jobs lost since 2000.

Employment in advanced services increased dramatically prior to the recession, declined subsequently, but still made up for the loss in manufac-

turing over the entire decade. From 1995 through 2005, advanced service employment rose by 19,200 jobs (30.8 percent). From 1995 through 2000, advanced services employment grew by an impressive 20,200 jobs (32.4 percent). From 2000 through 2005, it decreased by 1,000 jobs (1.2 percent).

Indianapolis, IN

Metropolitan Indianapolis had healthy job growth from 1995 through 2005, gaining jobs in every year except 2002. From 1995 through 2000, the region added 94,900 jobs (an increase of 12.5 percent). From 2000 through 2005, it added another 34,300 jobs (an increase of 4.0 percent). Consequently, total employment increased by 129,200 jobs (17.0 percent) from 1995 through 2005, outpacing the national average growth rate. The Indianapolis area had the highest total job growth rate of any of the 25 metropolitan areas analyzed in this report.

Manufacturing employment declined slightly from 1995 through 2000, posting a loss of 200 jobs (a 0.2 percent decline). From 2000 through 2005, the region lost 11,300 manufacturing jobs (a 10.1 percent decline). During the entire decade, the region lost 11,500 manufacturing jobs, or a 10.2 percent decline, which was lower than the national rate of decline.

The Indianapolis region gained advanced service jobs almost continuously from 1995 through 2005, with job gains in this sector making up for losses in manufacturing. During the entire decade, the region added 46,000 advanced service jobs. Most of these gains occurred prior to the 2001 recession, as the region added 35,100 (an increase of 22.9 percent) advanced service jobs from 1995 through 2000. From 2000 through 2005, it added another 10,900 (5.8 percent).

Lancaster, PA

Total employment in metropolitan Lancaster increased every year from 1995 through 2005, resulting in a rate of job growth well above the national average. The region gained 23,300 jobs (an increase of 11.5 percent) from 1995 through 2000 and another 9,200 jobs (a 4.1 percent increase) from 2000 through 2005. During the entire period 1995–2005, total employment in the region increased by 16.0 percent (32,500 jobs).

Manufacturing employment fell slightly prior to the recession and more rapidly thereafter. From 1995 through 2000, the region lost just 500 manufacturing jobs (a decline of 0.9 percent), but from 2000 through 2005, it lost 11,700 (a decline of 20.8 percent). The result was a decline of 12,200 manufacturing jobs (21.5 percent), outpacing the national rate.

Employment in advanced services increased every year from 1995 through 2005, although these gains were not large enough to offset the job losses in manufacturing. Advanced service employment rose by 10,600 jobs (41.6 percent—the largest percentage gain of all metros analyzed) during the decade. From 1995 through 2000, advanced services grew by 7,100 jobs (27.8 percent). From 2000 through 2005, the sector grew by 3,500 jobs (10.7 percent).

Milwaukee, WI

Total employment in metropolitan Milwaukee grew at a moderate rate prior to the 2001 recession, declined during and after, and has not yet recovered to its pre-recession peak. The region gained 63,900 jobs (an increase of 7.9 percent) from 1995 through 2000 and lost 32,500 jobs (a decline of 3.7 percent) from 2000 through 2005. During the entire period 1995–2005, total employment in the region grew by 3.9 percent (an increase of 31,400 jobs), nearly 10 percentage points slower than the national growth rate.

Manufacturing employment had modest gains in 1997 and 1998, but has declined every year since. From 1995 through 2000, the region added 900 manufacturing jobs (an increase of 0.6 percent), while from 2000 through 2005 it lost 30,600 manufacturing jobs (a decline of 18.6 percent). During the entire decade, manufacturing employment fell by 18.2 percent (29,700 jobs), higher than the national rate, but better than those of most of the other 24 metropolitan areas. Manufacturing accounted for 94.2 percent of all jobs lost in the region since 2000.

From 1995 through 2005, employment in advanced services increased by 16,000 jobs (9.6 percent), but the gains in this sector were not enough to make up for job losses in manufacturing. The region added 23,100 advanced service jobs from 1995 through 2000, and lost 7,100 such jobs between 2000 and 2005.

Peoria, IL

Metropolitan Peoria saw moderate job gains preceding its recent employment peak in 2000. After several years of job losses during and after the 2001 recession, the region began adding jobs again in 2004 and was nearly back to its former peak level by 2005. From 1995 through 2000, total employment in the metropolitan area grew by 16,600 jobs (10.2 percent). From 2000 through 2005, the region lost 800 jobs (a decline of 0.4 percent). During the entire 1995–2005 period, total employment increased by 9.7 percent (15,800 jobs), well short of the national growth rate.

The Peoria region was the only one of the 25 metropolitan areas that gained manufacturing jobs between 1995 and 2005. It gained 7,600 manufacturing jobs (an incredible 28.4 percent increase) from 1995 through 2000, with most of those gains occurring in 1996. From 2000 through 2005, the region lost 4,400 manufacturing jobs (a 12.8 percent decline), although it did gain 3,200 manufac-

"A combination of trade, health care, and economic and workforce development policies can help to retain and expand employment in high productivity manufacturing in the United States."

B

turing jobs from 2003 through 2005. This late surge equaled the gain over the entire decade, as manufacturing employment increased by 11.9 percent from 1995 through 2005.

Advanced service employment increased by 5,000 jobs (19.8 percent) from 1995 through 2005. Job growth in this sector was more rapid during the first half of the decade than during the second half. From 1995 through 2000, advanced services grew by 2,800 jobs (11.1 percent). From 2000 through 2005, it grew by 2,200 jobs (7.9 percent).

Reading, PA

Overall, total employment in metropolitan Reading increased moderately from 1995 through 2000, with the region gaining 13,000 jobs (an 8.2 percent increase). It, however, lost 2,900 jobs from 2000 through 2005. The result was a 6.4 percent increase in total employment (a gain of 10,100 jobs) over the entire decade, much slower than the national growth rate.

Manufacturing employment declined almost continuously from 1995 through 2005, experiencing its most significant losses from 2000 through 2003. The region lost 1,300 manufacturing jobs (a 3.0 percent decline) from 1995 through 2000, and an additional 10,200 jobs (24.6 percent) from 2000 through 2005. The result was a decline in manufacturing employment of 26.9 percent (11,500 jobs) over the entire decade, significantly worse than the national average. Manufacturing accounted for more than the total of all jobs lost since 2000.

The region gained 5,000 advanced service jobs from 1995 through 2005 (a 20.8 percent increase), although these gains were not large enough to make up for job losses in manufacturing. Almost all of the job growth in the sector occurred prior to the recession. From 1995 through 2000, advanced services grew by 4,900 jobs (20.4 per-

cent). From 2000 through 2005, it grew by only 100 jobs (0.3 percent)

Rochester, NY

Total employment in metropolitan Rochester increased moderately prior to the 2001 recession. However, an overall job loss from 2000 through 2003 combined with sluggish growth in recent years has left total employment below its 1998 level. From 1995 through 2000, the region gained 28,500 jobs (an increase of 5.7 percent). From 2000 through 2005, it lost 17,700 jobs (a 3.3 percent decline), with most of the decline occurring in 2002. Overall, total employment increased by just 2.2 percent (10,800 jobs) over the entire decade.

Manufacturing employment in the region has declined rapidly, falling each year since its peak in 1997. The region lost 11,100 manufacturing jobs (a 9.8 percent decline) from 1995 through 2000 and lost an additional 26,300 manufacturing jobs (a 25.6 percent decline) from 2000 through 2005. The sector accounted for more than the total of all jobs lost since 2000. During the entire decade, manufacturing employment declined by 32.9 percent (37,400 jobs), the second largest percentage decline of all metropolitan areas analyzed.

Employment in advanced services increased during the decade, but not enough to offset job losses in manufacturing. From 1995 through 2000, advanced service employment increased by 13,900 jobs (a 17.3 percent increase). From 2000 through 2005, however, employment in the sector declined by 2,000 jobs (2.1 percent). In total, the region gained 11,900 advanced service jobs (a 14.8 percent increase) from 1995 through 2005.

Scranton, PA

Metropolitan Scranton had modest job gains prior to the recession, losses in 2001 and 2002, and gains in each sub-

sequent year. The region added 15,400 jobs (an increase of 6.3 percent) from 1995 through 2000. From 2000 through 2005, it lost 1,200 jobs (a decline of 0.5 percent). During the entire 1995–2005 period, total employment in the region increased by 5.8 percent, well shy of the national growth rate.

Manufacturing employment fell almost continuously from 1995 through 2005. The region lost 800 manufacturing jobs from 1995 through 2000 (a 1.7 percent decline), and from 2000 through 2005, it lost 10,500 more manufacturing jobs (a decline of 23.2 percent). The result for the decade was a decline in manufacturing employment of 24.5 percent (a loss of 11,300 jobs), significantly higher than the national rate of decline. Manufacturing accounted for more than the total of all jobs lost since 2000.

Employment in advanced services increased over the course of the decade but not enough to compensate for job losses in manufacturing. Advanced service employment rose by 7,500 jobs (20.7 percent) from 1995 through 2000 and fell by 400 jobs (0.9 percent) from 2000 through 2005. The result was a 19.6 percent increase in advanced service employment (a gain of 7,100 jobs) over the entire decade.

Toledo, OH

Total employment in metropolitan Toledo increased steadily until its peak in 2000. Sharp declines during and after the 2001 recession left total employment below its 1997 level. The region gained 24,300 jobs (an increase of 7.5 percent) from 1995 through 2000, but from 2000 through 2005 total employment fell by 16,300 jobs (4.7 percent). Consequently, over the entire 1995–2005 period, total employment in the region increased by only 2.5 percent (8,000 jobs).

Manufacturing employment grew

modestly prior to the recession, increasing by 1,400 jobs (2.3 percent) from 1995 through 2000. The region lost a small number of manufacturing jobs in 2000. More substantial manufacturing job losses began occurring in 2001. Losses occurred in every year since, although the rate of decline has slowed in recent years. From 2000 through 2005, the region lost 11,300 manufacturing jobs (a decline of 18.1 percent). Overall, manufacturing employment declined by 16.2 percent (9,900 jobs) from 1995 through 2005. Manufacturing accounted for 69.3 percent of all job losses in the region since 2000.

In total, the region had only modest job gains in its advanced service sector during the decade. Employment in this sector increased by 3,500 jobs (7.3 percent) from 1995 through 2005, offsetting roughly one-third of the job losses in manufacturing. The sector gained 6,800 jobs (a 14.2 percent increase) from 1995 through 2000. From 2000 through 2005, it lost 3,300 advanced service jobs (a 6.0 percent decline).

York, PA

Metropolitan York gained 12,700 jobs (an increase of 7.9 percent) from 1995 through 2000. During and immediately after the 2001 recession, employment in the region declined, but growth in 2004 and 2005 resulted in a net gain of 4,100 jobs (an increase of 2.4 percent) from 2000 through 2005. During the entire decade, total employment in the region increased by 10.5 percent, below the national rate, but better than most other metros analyzed.

Manufacturing employment fell almost continuously from 1995 through 2005. Most of these losses occurred between 2000 and 2003. The region lost 1,600 manufacturing jobs (a 3.4 percent decline) from 1995 through 2000 and an additional 7,400 (a 16.2 percent decline) from 2000

through 2005. The result was a 19.0 percent decline in manufacturing jobs (a total loss of 9,000) over the decade, a rate more severe than the national average.

From 1995 through 2005, the region gained advanced service jobs in every year except 2001 and 2002 (although the declines in these years were relatively large). Overall, job gains in this sector did not make up for job losses in manufacturing. Advanced service employment increased by 2,300 jobs (10.9 percent) from 1995 through 2005. From 1995 through 2000, the sector grew by 3,000 jobs (14.2 percent), and from 2000 through 2005, it declined by 700 jobs (2.9 percent).

Youngstown, OH

The Youngstown region gained a small number of jobs prior to the 2001 recession, but a dramatic decline in 2001 left total employment at the lowest point since 1995. From 1995 through 2000, total employment increased by 7,000 jobs (an increase of 2.8 percent), while it fell by 11,700 jobs (a decline of 4.6 percent) between 2000 and 2005. Consequently, total employment over the entire 1995–2005 period was down 1.9 percent (a loss of 4,700 jobs).

Employment in manufacturing declined in each year since 1995. The region lost 6,500 manufacturing jobs (a decline of 10.9 percent) from 1995 through 2000, and another 12,200 (a 23.0 percent decline) from 2000 through 2005. The result was a loss of 18,700 manufacturing jobs over the entire decade, producing a rate of job loss (31.4 percent) well above the national average. Manufacturing accounted for more than the total of all jobs lost since 2000.

Employment in advanced services remained relatively flat from 1995 through 2005, growing by just 600 jobs during the decade (an increase of 1.8 percent). The region gained 1,300

advanced service jobs (an increase of 4.0 percent) from 1995 through 2000 and lost 700 jobs (a decline of 2.1 percent) from 2000 through 2005.

Endnotes

1. The analysis uses Bureau of Labor Statistics and Bureau of Economic Analysis data.
2. Many of the services these industries produce—such as Internet services, securities brokerage, and legal services—are consumed by people who live outside the region in which the services are produced, either because the services can be performed remotely or because consumers often travel to the producers' locations.
3. Thus, the Davenport, IA, metropolitan area is included in the Great Lakes region because the majority of its employment is in Illinois. Other included metropolitan areas that straddle the region's boundary are Cincinnati, OH and Evansville, IN.
4. For convenience, this report refers to metropolitan areas by the name of the first city that appears in the full title of the metropolitan area. Appendix A lists the included metropolitan areas by their full titles.
5. Manufacturing employment in the United States rose each year from 1995 through 1998 and then fell each year from 1999 through 2005. The Great Lakes states generally exhibited similar patterns of manufacturing job change, gaining manufacturing jobs for part or all of the late 1990s and losing them in every subsequent year. The states' peak years of manufacturing employment occurred in 1997, 1998, or 1999. Ohio lost manufacturing jobs in 1997 and gained them again in 1998. Wisconsin gained manufacturing jobs in 2005.
6. A similar group of 19 metropolitan areas (Akron, OH; Allentown, PA; Ann Arbor, MI; Buffalo, NY; Canton, OH; Chicago, IL; Cleveland, OH; Dayton, OH; Detroit, MI; Flint, MI; Grand Rapids, MI; Lancaster, PA; Milwaukee, WI; Reading, PA; Rochester, NY; Scranton, PA; Toledo, OH; and Youngstown, OH) lost a larger percentage of manufacturing jobs from 2000 to 2005 than the national average.
7. These 13 were Akron, OH; Allentown, PA; Buffalo, NY; Chicago, IL; Cleveland, OH; Flint, MI; Indianapolis, IN; Lancaster, PA; Reading, PA; Rochester, NY; Scranton, PA; York, PA; and Youngstown, OH.
8. These 11 were Ann Arbor, MI; Canton, OH; Cincinnati, OH; Davenport, IA; Dayton, OH; Detroit, MI; Evansville, IN; Fort Wayne, IN; Grand Rapids, MI; Milwaukee, WI; and Toledo, OH.
9. These 15 were Buffalo, NY; Canton, OH; Chicago, IL; Cleveland, OH; Davenport, IA; Detroit, MI; Evansville, IN; Fort Wayne, IN; Grand Rapids, MI; Milwaukee, WI; Peoria, IL; Reading, PA; Rochester, NY; Scranton, PA; and Toledo, OH.
10. The correlation coefficient between the 1995–2005 percentage changes in manufacturing employment and total employment for all 25 metropolitan areas is .57, and is statistically significant at the .01 level.
11. The correlation coefficient between the 1995–2005 percentage changes in advanced service employment and total employment for all 25 metropolitan areas is .62, and is statistically significant at the .01 level.
12. Authors' estimates based on Michigan Manufacturing Technology Center analyses.
13. The final three state economic development policy recommendations made here are explained in more detail in Dan Luria, Matt Vidal, and Howard Wial, "Full-Utilization Learning Lean in Component Manufacturing: A New Industrial Model for Mature Regions, and Labor's Stake in Its Success." Sloan Industry Studies Working Paper WP-2006-03, Alfred P. Sloan Foundation, 2005.
14. Because of a data limitation for advanced services employment for the Allentown, PA, region in 2005, the text presents data for this sector from 1995 through 2004. Manufacturing employment in metropolitan Allentown fell by 16,700 jobs (26.8 percent) from 1995 through 2004.

Acknowledgments

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To inform debate about metropolitan economic development, the Brookings Institution has launched a series of analyses designed to promote understanding of the economic transformation underway in the nation's metropolitan areas. The Metropolitan Economy Initiative provides practical research and policy advice that state and local leaders can use to maximize their communities' economic potential and achieve prosperity.

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ILLINOIS SPOTLIGHT

From Site Selection magazine, March 2007

Eye on Innovation

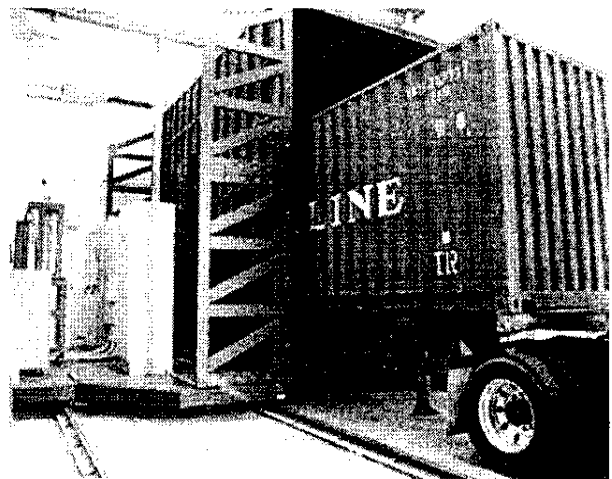
Security and energy push R&D and manufacturing projects in Illinois.

A Chicago area firm specializing in advanced cargo and transportation security testing is poised for dramatic growth if its technology is chosen for a key government security program. **Bio-Imaging Research (BIR)**, based in the Chicago suburb of Lincolnshire, is a specialist in the development of security and X-ray equipment for non-destructive testing. It is one of three firms developing a prototype Cargo Advanced Automated Radiography System (CAARS) that would be installed at ports and border crossings to scan cargo entering the U.S.

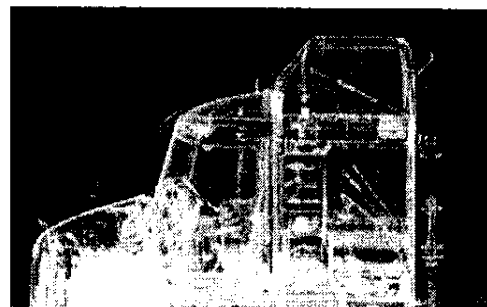
BIR is working with L-3 Communications on a contract valued at up to \$450 million. CAARS requirements include the automatic detection of heavily shielded nuclear material that is perceived to be the biggest threat to the U.S. Two other companies also have prototype contracts, and the three are expected to share 2008 production contracts that will eventually total more than \$1.3 billion.

"That's a big piece of what we expect for our future business," says Bio-Imaging Research's chairman, president and CEO John Moore. "Right now we are building that prototype with production scheduled for 2008." Moore adds that his company is evaluating several sites in Illinois for a possible testing facility.

Bio-Imaging is one of many Illinois companies specializing in security-related R&D to receive a state Innovative Product Grant. Another is **Advanced Diamond Technologies (ADT)**, a spin-off from Argonne National Laboratory. ADT, headquartered in Champaign with facilities at Argonne, is developing a form of



Bio-Imaging Research of Lincolnshire, Ill., has developed the Intelli-X system for inspecting cargo and vehicles. The Department of Homeland Security is currently testing the product at the Laredo, Texas, border crossing.



by **JOHN W. McCURRY**
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ultrananocrystalline diamond, known as UNCD, as a platform material for biomedical, telecommunication and energy-related applications. The \$140,000 IPG grant allows ADT to create 10 new jobs and begin mass production and commercialization of nanoprobes made from UNCD for biomolecular imaging and biomanufacturing of sensors to detect weaponized pathogens such as anthrax.

Jack Lavin, director of the Illinois Dept. of Commerce and Economic Opportunity, says homeland security is one of the technology sectors targeted by the state. Illinois is providing grants of up to \$150,000 to companies, and is working with universities and community colleges to develop security curricula.

A cluster of companies in the homeland security business is developing in the Northeast part of Illinois, Lavin says. The state's role as a strong transportation center is driving much of the growth, as firms are working to make rail, air and highway transportation more secure.

Energy Industry On Front Burner

One of the most active sectors in the state is energy. Projects are percolating on many fronts, including a major announcement by **BP** that the University of Illinois, Urbana-Champaign will be one of the partners in a \$500-million research program that will explore how bioscience can be used to increase energy production and reduce the impact of energy consumption on the environment. The University of California Berkeley and the Lawrence Berkeley National Laboratory are the other partners in the Energy Biosciences Institute (EBI).

As part of the EBI, 340 acres (138 hectares) of farmland at the Urbana campus will be devoted to the study and production of feedstock for biofuels production. Researchers will explore the potential of using corn crop residues, switchgrass, miscanthus (a hybrid grass that can grow as tall as 13 ft. [4 m.]), and other plants as fuel sources.

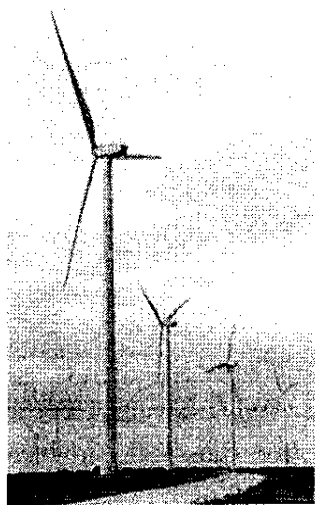
"This will place us at the forefront of farm bioenergy production," says Stephen P. Long, a crop sciences professor who will lead the initiative at the University of Illinois.

Not all of the wind in Illinois is in Chicago. One of the world's largest wind farms is taking shape in McLean County, in the state's center. **Horizon Wind Energy** is building a 198-megawatt wind project, the first phase of a planned 400-megawatt wind farm, which when complete will be one of the largest land-based wind farms in the world and will employ up to 40. Horizon plans to spend \$700 million on the project, which it expects to complete by the end of 2007. The facility will produce enough energy with its 240 wind turbines to meet the annual needs of about 120,000 homes.



Stephen P. Long, a crop sciences professor, will lead the BP Energy Biosciences Institute initiative at the University of Illinois.

Wind turbines need towers to support them, and that's the business of Trinity Structural Towers, a wholly owned subsidiary of Fort Worth-based **Trinity Industries**, which also has subsidiaries active in the railcar, barge and construction sectors. The company plans a \$15-million investment to renovate a company-owned industrial facility in Clinton in north-central Illinois. Trinity expects to create 140 jobs. Trinity re-entered the wind business in 2004 and also has wind tower plants in Fort Worth.



Trinity Structural Towers, part of Texas-based Trinity Industries, will build wind turbine towers at the former railcar manufacturing facility of a fellow Trinity subsidiary in Clinton, in north-central Illinois.

"We already had an idle railcar facility in Clinton that we had not used in a few years," says James Perry, vice president and treasurer of Trinity Structural Towers and of Trinity Industries. "While the modifications are substantial to convert it to wind tower manufacturing, we felt it made sense to use an existing facility, and that's what we've done in other areas as well."

Perry says the facility, which will serve the Midwest market, will be operational by mid-2007. The wind tower business is strong and has grown rapidly, he says, and will likely continue in that direction with the extension of federal tax credits through the end of 2008.

Biofuel development is also burgeoning in the state with several projects afoot. **Biofuels Company of America** will produce 45 million gallons of biodiesel at a facility it is building in Danville adjacent to an existing soybean crushing plant. The project is a joint venture between Biofuels Company of America and **Bunge North America**, which owns the soybean processing plant and will supply the oil.

The energy sector expansion comes as the state moves forward with Gov. Rod Blagojevich's energy independence plan that includes initiatives to boost ethanol production and invest in clean coal technology. The plan includes incentives to build up to 20 new ethanol plants and five new biodiesel plants.

Chicagoland Collects More Headquarters

Pabst Brewing Co. joined the crew of Chicago headquarters in 2006.

Miller actually does the brewing of Pabst Blue Ribbon and the company's other brands, a move made after Pabst moved its headquarters from its longtime Milwaukee home to San Antonio in 1996. Pabst's new headquarters is in the Chicago suburb of Woodridge, home to most of the company's executives. The state gave Pabst nearly \$1 million in an Opportunity Returns grant for the move.

Today, all of Pabst's current 37 active brands are brewed by other companies. The new Chicago headquarters is home to about 40 executives handling marketing, sales, HR and accounting. The company will maintain customer service operations in San Antonio, says Pabst President and CEO Kevin Kotecki. Pabst selected Chicago after also considering Minneapolis, Denver and Milwaukee.

"Chicago has a very broad and deep labor pool and we have great access to talent here, which is an important factor for us," Kotecki says. "Chicago is one of the easiest cities to travel in and out of with its two airports. We're 15 minutes from Midway and 25 minutes from O'Hare."

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Manufacturing in Illinois

Illinois is one of the nation's manufacturing leaders, boasting annual value added productivity by manufacturing of over \$105 billion in 2005. About three-quarters of the state's manufacturers are located in the Northeastern Opportunity Return Region, with 40 percent of Illinois' approximately 16,100 manufacturing plants located in Cook County.

Chemical manufacturing, with an annual value added by manufacturing of \$17 billion, is the leading industry in the state. Food manufacturing is second with value added of \$14.5 billion. Machinery manufacturing is third with an annual value added of \$12.2 billion.

The next largest manufacturing industries in Illinois are fabricated metal products (\$11.0 billion), plastics and rubber products (\$6.9 billion), transportation equipment (\$6.4 billion), and computer and electronic products (\$5.9 billion).

In 2006, 35 Illinois-based manufacturers were included in Industry Week's list of the Top 500 US Manufacturers.

The \$71 billion gross output of the 16,100 manufacturers operating in Illinois represents 13.2 percent of the Illinois Gross State Product.

PRODUCTIVITY IN MANUFACTURING – 2005

Value-Added in Largest Industrial States

| Rank | State | Production Worker Hours (Millions) | Value Added (Millions) | Value Added Per Production Worker Hour |
|------|-----------------|------------------------------------|------------------------|--|
| | United States | 19,069.64 | 2,204,094.96 | 115.58 |
| 1 | California | 1,809.76 | 217,546.03 | 120.21 |
| 2 | Texas | 1,120.38 | 172,960.16 | 154.38 |
| 3 | Ohio | 1,174.54 | 124,986.17 | 106.41 |
| 4 | Illinois | 963.16 | 105,324.87 | 109.35 |
| 5 | Pennsylvania | 945.00 | 104,858.32 | 110.96 |
| 6 | North Carolina | 820.01 | 101,268.43 | 123.50 |
| 7 | Michigan | 943.30 | 92,335.53 | 97.89 |
| 8 | Indiana | 835.08 | 90,120.46 | 107.92 |
| 9 | New York | 727.18 | 87,756.13 | 120.68 |
| 10 | Louisiana | 216.15 | 69,910.56 | 323.44 |

Source: U.S. Department of Commerce, ANNUAL SURVEY OF MANUFACTURES, 2005

Updated: September 2007

2006 ILLINOIS BASED INDUSTRY WEEK US 500

| IL Rank | US Rank | Company | Primary Industry | City | Revenue (\$ mil-lions) | Total Equity (\$mil-lions) |
|---------|---------|----------------------------------|--|--------------|------------------------|----------------------------|
| | 13 | | Aerospace And De-fense | Chicago | 61,532 | 4739 |
| 1 | | Boeing Co. | | | | |
| 2 | 28 | Kraft Foods Inc. | Food | Northfield | 34,356 | 28,555 |
| | 21 | | Communications Equipment | Schaumburg | 42,879 | 17,142 |
| 3 | | Motorola Inc. | | | | |
| 4 | 22 | Caterpillar Inc. | Machinery | Peoria | 41,517 | 6,859 |
| 5 | 45 | Deere & Co. | Machinery | Moline | 22,147 | 7,491 |
| 6 | 43 | Abbott Laboratories | Pharmaceuticals | Abbott Park | 22,476 | 14,054 |
| 7 | 63 | Sara Lee Corp. | Food | Chicago | 15,944 | 2,449 |
| 8 | 112 | OfficeMax Inc. | Paper | Itasca | 8,965 | 1,985 |
| | 73 | | Fabricated Metal Products | Glenview | 14,055 | 9,017 |
| 9 | | Illinois Tool Works Inc. | | Warrenville | 9,724 | 531 |
| 10 | 104 | Navistar International Corp. | Motor Vehicles | | | 6,272 |
| | 101 | | Medical Instruments And Equipment | Deerfield | 10,378 | |
| 11 | | Baxter International Inc. | | Chicago | 7,157 | 1,807 |
| 12 | 138 | Smurfit-Stone Container Corp. | Paper | Lincolnshire | 8,769 | 4,728 |
| 13 | 114 | Fortune Brands Inc. | Miscellaneous | | 9,316 | 4,124 |
| | 107 | | Publishing And Printing | Chicago | | |
| 14 | | R.R. Donnelley & Sons Co. | | | 5,517 | 4,319 |
| | 171 | | Publishing And Printing | Chicago | | |
| 15 | | Tribune Co. | | Lake Forest | 5,665 | 1,871 |
| 16 | 165 | Brunswick Corp. | Miscellaneous | | 5,810 | 1,534 |
| | 160 | | Stone, Clay, Glass And Concrete Products | Chicago | | |
| 17 | | USG Corp. | | Lake Forest | 4,685 | 221 |
| 18 | 191 | Tenneco Automotive Inc. | Motor Vehicle Parts | Chicago | 4,686 | 2,388 |
| 19 | 190 | Wm. Wrigley Jr. Co. | Food | Chicago | 4,585 | 1,875 |
| 20 | 194 | BorgWarner Inc. | Motor Vehicle Parts | Lake Forest | 2,917 | 853 |
| 21 | 266 | Pactiv Corp. | Plastics | Chicago | 5,908 | 648 |
| 22 | 156 | Ryerson Tull Inc. | Primary Metals | Melrose Park | 3,772 | 1,758 |
| 23 | 217 | Alberto-Culver Co. | Chemicals | Chicago | 3,790 | 886 |
| 24 | 216 | FMC Technologies Inc. | Machinery | Westchester | 2,621 | 1,374 |
| 25 | 290 | Corn Products International Inc. | Food | | 2,861 | 2,280 |
| | 272 | | Computers And Other Electronic Products | Lisle | | |
| 26 | | Molex Inc. | | | 5,305 | |
| | 176 | | | Lake Forest | | 3,530 |
| 27 | | Mosaic Co.* | Chemicals | | 2,146 | 691 |
| 28 | 327 | Packaging Corp. of America | Paper | Orland Park | 1,839 | 1,507 |
| 29 | 332 | Andrew Corp. | Primary Metals | Deerfield | 1,739 | 809 |
| 30 | 384 | Dade Behring Holdings Inc. | Chemicals | Lincolnshire | 1,739 | 465 |
| 31 | 385 | Sauer-Danfoss Inc. | Machinery | Crystal Lake | 1,601 | 946 |
| 32 | 411 | AptarGroup Inc. | Plastics | | 2,041 | 2,938 |
| | 341 | | Communications Equipment | Naperville | | |
| 33 | | Tellabs Inc. | | Oak Brook | 1,211 | 386 |
| 34 | 485 | Federal Signal Corp. | Motor Vehicle Parts | Chicago | 1,589 | 383 |
| 35 | 415 | Metal Management Inc. | Primary Metals | | | |

Source: Industry Week Leadership in Manufacturing

Global Access from Illinois

Illinois has long been aware of the significance of international trade. The Illinois Office of Trade and Investment within the Illinois Department of Commerce and Economic Opportunity was established in 1965 to assist Illinois companies in locating distribution channels for their products in foreign markets. Illinois was among the first states to operate an international trade office when it opened a facility in Brussels, Belgium in 1968.

Today, the state has expanded its breadth and depth in the promotion of international trade and the responsibility of attracting foreign direct investment. The OTI provides Illinois companies with a variety of export programs and services through a multi-level infrastructure comprising:

- **Local Assistance** -- Six International Trade Centers and two NAFTA Opportunity Centers are located in five areas throughout the state and provide expert individualized assistance for small and medium-sized Illinois firms looking to succeed in exporting.
- **State Assistance** -- The OTI's Chicago Headquarters is the center for Illinois export assistance efforts, and identifies and participates in international trade events throughout the world with small/medium-sized Illinois firms.
- **International Assistance** -- Foreign Offices represent the OTI world presence in nine strategic regions throughout the world: Brussels, Tokyo, Hong Kong, Mexico City, Warsaw, Toronto, Johannesburg, Shanghai and Jerusalem.

These levels are integral to fulfilling the OTI mission to create Illinois jobs through increased Illinois exports and foreign direct investment.

International markets play a critical role in the Illinois economy. International powerhouses such as Caterpillar Inc., Deere & Company, Archer Daniels Midland, Motorola, Abbott Labs and Boeing, are headquartered

in Illinois, helping to make Illinois the sixth largest exporting state in the nation. Exports of manufactured goods and agricultural products from Illinois in 2006 were more than \$42.08 billion. Nearly 448,400 Illinois jobs are linked to exports.

Illinois ranks #1 in the Midwest as a destination for foreign investment. The state has attracted over 4,669 foreign establishments that employ more than 310,000 Illinoisans.

Illinois advantages include O'Hare International Airport, the world's busiest, which is served by all of the major international carriers. Thirteen port districts are located in the state, offering companies direct links to the Atlantic Ocean and the Gulf of Mexico. Foreign trade zones, which offer low-cost production and warehousing facilities for imported and export-bound products, are located at the Illinois International Port District in Chicago, the Tri-City Regional Port District in Granite City, and in Peoria, Rockford, the Quad Cities, Lawrenceville, and Decatur.

More than 170 export managing/trading companies and 125 international freight forwarders and custom house brokers maintain offices in Illinois. Over 70 nations maintain consulates in the state and over 30 international banks have established branches or representative offices in Chicago.

Illinois hosted over 1.5 million international visitors in 2005 that spent nearly \$1.7 billion. The top international markets were Canada, UK, Mexico, Germany and Japan.

Updated: March 2007

Global Access from Illinois

Foreign Consulates in Illinois

| | | | | |
|------------------------|--------------------|-----------|-----------------------|-----------------|
| Argentina | Croatia | Haiti | Luxemburg | Singapore |
| Australia | Cyprus | Honduras | Mexico | Slovak Republic |
| Austria | Czech Republic | Hungary | Mongolia | South Africa |
| Barbados | Denmark | Iceland | Nepal | Spain |
| Belgium | Dominican Republic | India | New Zealand | Sri Lanka |
| Belize | Ecuador | Indonesia | Norway | Sweden |
| Bolivia | Egypt | Ireland | Pakistan | Switzerland |
| Bosnia and Herzegovina | El Salvador | Israel | Peru | Tanzania |
| Brazil | Estonia | Italy | Philippines | Thailand |
| Bulgaria | Finland | Jamaica | Poland | The Netherlands |
| Canada | France | Japan | Portugal | Turkey |
| Chile | Germany | Jordan | Romania | Ukraine |
| China | Greece | Korea | Rwanda | United Kingdom |
| Columbia | Grenada | Liberia | Sao Tome & Principe | Uruguay |
| Costa Rica | Guatemala | Lithuania | Serbia and Montenegro | Venezuela |

Top Exporting States

| Rank | State | 2006 Exports (Billions) |
|------|--------------|----------------------------|
| | U.S. | 1,037.1 |
| 1 | Texas | 150.9 |
| 2 | California | 127.7 |
| 3 | New York | 57.4 |
| 4 | Washington | 53.1 |
| 5 | Illinois | 42.1 |
| 6 | Michigan | 40.4 |
| 7 | Florida | 38.5 |
| 8 | Ohio | 37.8 |
| 9 | New Jersey | 27.0 |
| 10 | Pennsylvania | 26.3 |

Top Illinois Exports

| Rank | Industry | 2006 Exports (Millions) |
|------|-------------------------------------|----------------------------|
| | All Industries | 42,084.6 |
| 1 | Machinery, except electrical | 11,793.7 |
| 2 | Chemicals | 5,832.5 |
| 3 | Computer and electronic products | 5,439.6 |
| 4 | Transportation equipment | 4,713.5 |
| 5 | Electrical equipment | 2,859.8 |
| 6 | Food and kindred products | 1,935.6 |
| 7 | Fabricated metal products | 1,650.9 |
| 8 | Miscellaneous manufactured products | 1,580.4 |
| 9 | Primary Metals | 1,084.7 |
| 10 | Plastics and Rubber Products | 1,075.9 |

Source: WISER

Updated: March 2007

Global Access from Illinois

FOREIGN TRADE OFFICES

State of Illinois Africa Office

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Email: illinois@icon.co.za

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Brose North America Inc.

Following is a brief description of the 12 suppliers occupying the campus:

Chicago Assembly today unveiled its flexible manufacturing system, producing three distinct models on one vehicle platform, the 2005 Ford Five Hundred, Ford Freestyle and Mercury Montego. The plant is capable of building eight models on two platforms.

The project also resulted in significant environmental improvements with the restoration of 6.5 acres of wetlands. A part of Wolf Creek, located between Wolf Lake and the Calumet River, was reconstructed through the site. Swales and native grasses were planted to manage stormwater runoff. The industrial site was redeveloped under the City of Chicago Brownfield Initiative.

Chicago Assembly unveiled its flexible manufacturing system, producing three distinct models on one vehicle platform, the 2005 Ford Five Hundred, Ford Freestyle and Mercury Montego. The plant is capable of building eight models on two platforms.

The park also allows for easy cross-tier supplier relationships. For example, S-Y Systems ships main-body wire harnesses directly to the plant. At the same time, it delivers wire harnesses to Lear, Visteon and Brose for use in their components that go into the new models. These cross-tier relationships add value and create synergistic opportunities between suppliers.

On-site supplier manufacturing is a key component of flexible manufacturing. Ford and its suppliers invested \$250 million in the development of the campus.

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Our supplier campus is not a typical sequencing center in which suppliers receive large shipments and sequence parts for just-in-time delivery to the assembly line," Brown said. "Components are being manufactured here, and that gives us tremendous quality control."

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Located one-half mile from the assembly plant, the suppliers provide 60 percent of the plant's inventory with just-in-time deliveries. This results in freight-related savings of \$50 for each vehicle the plant builds. Reduced inventory and transportation costs flow through to Ford and ultimately to Ford's customers.

Suppliers share four multi-tenant buildings with 1.5 million square feet of manufacturing and office space on a 155-acre site. They employ approximately 1,400 people. The suppliers are Brose North America Inc., Decoma International Inc., Facil LLC, Flex-N-Gate, Lear Corp., Plastech Engineered Products Inc., Summit Polymers Inc., S-Y Systems Technologies America LLC, TDS Automotive, Tower Automotive Inc., Visteon Corp. and ZF Lemforder Corp.

"When we talk about 'bull's-eye sourcing,' this is exactly what we mean," said Tony Brown, vice president, Ford Global Purchasing. "At the Chicago Manufacturing Campus, suppliers are working in tandem with our flexible manufacturing processes at the nearby Chicago Assembly Plant."

CHICAGO, Aug. 10, 2004 - Ford Motor Company and 12 automotive suppliers officially opened the Chicago Manufacturing Campus today, the industry's largest supplier park in size and scope in the United States.

- Twelve suppliers produce parts at the Chicago Manufacturing Campus, representing the industry's largest supplier park in the United States.
- The suppliers are Brose North America Inc., Decoma International Inc., Facil LLC, Flex-N-Gate, Lear Corp., Plastech Engineered Products Inc., Summit Polymers Inc., S-Y Systems Technologies America LLC, TDS Automotive, Tower Automotive Inc., Visteon Corp. and ZF Lemforder Corp.

CHICAGO MANUFACTURING CAMPUS OPENS WITH SUPPLIERS MANUFACTURING JUST-IN-TIME INVENTORY

Featured Stories
Press Releases

The screenshot shows the top portion of the Ford Motor Company website. At the top, there is a navigation menu with the following items: "Vehicles & Services", "Heritage", "Innovation", "Good Works", and "Company". Below the menu is a large, high-contrast image of a Ford building with the Ford logo in the upper right corner. The text "Ford Motor Company" is visible in the background of the image.

Brose North America, headquartered in Auburn Hills, Mich. and Coburg, Germany, will produce door systems, window regulators and latches in its 62,000-square-foot facility at the campus. Brose has 7,500 employees in 30 locations worldwide. The Chicago facility employs 130.

Decoma International Inc.

Decoma, based in Concord, Ontario, designs, engineers and manufactures automotive exterior components and systems, including bumpers, front and rear-end modules, plastic body panels, roof modules, exterior trim components, sealing and greenhouse systems and lighting components for cars and light trucks. It has about 15,000 employees in 49 locations worldwide.

Facil LLC

Facil is a fastener service provider. Based in Auburn Hills, Mi., its 22,500-square-foot Chicago facility employs 15. It has 200 employees in the United States and Europe.

Flex-N-Gate Corp.

Urban, Ill.-based Flex-N-Gate is a supplier of large structural steel stamped automotive components and systems such as bumpers, engine mounts, grilles, hinges, instrument panels, pedal systems and running boards.

Lear Corp.

Headquartered in Southfield, Mich., Lear is making headers for the three vehicles at the Chicago Assembly Plant. Its facility at the campus is 53,760 square feet and employs 70. Lear has 110,000 employees in 280 facilities in 34 countries. It manufactures automotive interiors in six segments: seating, doors, instrument panels, overhead systems, electronics and electrical, flooring and acoustics.

Plastech Engineered Products Inc.

Dearborn, Mich.-based Plastech has 14 employees at its 188,960-square-foot facility. It makes interior trim for the Ford Freestyle and Ford Five Hundred. Plastech has 6,000 employees worldwide and manufactures injection molded and blow molded plastic components with interior, exterior and under-hood applications.

Summit Polymers Inc.

Summit Polymers Inc. supplies consoles to the vehicles at the Chicago Assembly Plant. The Portage, Mich.-based company has 2,300 employees.

S-Y Systems Technologies America LLC

Headquartered in Dearborn, Mich., S-Y Systems engineers and designs electronic and electrical distribution systems for the Ford Freestyle, Ford Five Hundred and the Mercury Montego. Its Chicago facility is 38,400 square feet. S-Y Systems has 450 employees worldwide.

TDS Automotive

TDS Automotive is a specialized provider of value-added logistics services. The company, based in London, Ontario, provides complex material handling and material integration solutions, including transforming a number of parts into modules, and assembling vehicle kits that demand complicated packing. With over 5,000 employees TDS operates in multiple locations throughout North America. South America, Europe and Asia. Its 200,000-square-foot facility in Chicago employs 80.

Tower Automotive

Based in Novi, Mich., Tower Automotive produces rear floor pan assemblies, front engine cradle assemblies, front apron assemblies, front rail inner assemblies, body shell assemblies and closure reinforcements at its 420,000-square-foot facility at the campus. The assemblies are used on all three models at the Chicago Assembly Plant. At full production, the plant will employ more than 400 employees. Tower Automotive is a global designer and producer of structural components and assemblies.

Visteon Corp.

Dearborn, Mich.-based Visteon is supplying cockpit module assemblies, bolster integrated cooling module assemblies, fuel tank assemblies and climate aux assemblies to the three vehicles produced at the Chicago Assembly Plant. Its 215,000-square-foot plant at the campus employs 270. Visteon has 72,000 employees in 25 countries.

ZF Lemforder Corp.

ZF Friedrichshafen AG is a worldwide supplier of driveline and chassis technology. Its 134,000 square-foot Chicago facility employs 50 to provide front and rear axle systems to the Ford Five Hundred, Ford Freestyle and Mercury Montego. Headquartered in Friedrichshafen, Germany, it is

among the 15 largest automotive suppliers in the world. The company has a total workforce of 53,500 at 19 locations in 25 countries. ZF operates a large manufacturing network in North America, combined with global research and development capabilities, to provide advanced technology to the region. The ZF Group North American Operations Technical Center is located in Northville, Michigan. ZF Lemforder Corp is the Car Chassis Technology Division of ZF.

The Ford Parts Depot also is in the campus.

More Press Releases on Manufacturing

[ZF Group North American Operations Technical Center](#)
 (July 09, 2008)

[Ford's New Platform Provides a New Level of Performance](#)
 (June 20, 2008)

[Ford's New Platform Provides a New Level of Performance](#)
 (June 18, 2008)

[Ford's New Platform Provides a New Level of Performance](#)
 (June 16, 2008)

[Ford's New Platform Provides a New Level of Performance](#)
 (June 12, 2008)

[Ford's New Platform Provides a New Level of Performance](#)

Building Freight's Future

JERRY W. SZATAN

Chicago's freight and distribution sector continues to grow, but future vitality depends on addressing infrastructure challenges.

Wal-Mart built two bulk distribution centers totaling 3.4 million square feet (315,870 sq m) at CenterPoint Intermodal Center, located next to the Burlington Northern Santa Fe Railway's Chicago Logistics Park in Elwood, Illinois.

CHICAGO IS THE NATION'S busiest rail hub; an estimated 50 percent of U.S. rail freight passes through the city's rail yards via 500 freight trains daily, according to World Business Chicago (WBC), an economic development organization. The area is the only place where six Class 1 North American railroads interchange traffic and is also one of the world's largest intermodal container handlers. National rail traffic set a record for carloads in 2006, up 1.2 percent over 2005, but intermodal freight grew by 5 percent that year, setting a fifth consecutive yearly record, according to the Washington, D.C.-based American Association of Railroads (AAR). Both rail shipping and distribution center growth are being fueled by offshore manufacturing expansion. International container traffic was up 75 percent in 2006, according to the Calverton, Maryland-based Intermodal Association of North America.

More than 500 million square feet (46.4 million sq m) of warehouse/distribution space exists in the Chicago area, accounting for almost 48 percent of all available industrial real estate there, according to WBC, and another 175 million square feet (1.625 million sq m) is under construction. Air freight distribution clusters around O'Hare International Airport. The I-55 distribution corridor in fast-growing Will County continues to boom. Large regional distribution centers are being built in communities located 50 to 100 miles (80.5 to

161 km) from downtown. Infill development serves those needing closer access to downtown or a more central location for Chicago market operations. In 2002-2003, two new outlying rail intermodal facilities were focal points for investment. [See "On Track," June 2003, page 65.]

The Burlington Northern Santa Fe Railway (BNSF) opened its 715-acre (289.5-ha) Logistics Park Chicago in Elwood, near Joliet, and the intersection of I-55 and I-80 about 50 miles (80.5 km) southwest of Chicago in 2002, offering direct rail and truck access, specialized automotive facilities, and intermodal facilities capable of over 1 million lifts yearly. Chicago area-based CenterPoint Properties developed Logistics Park and the adjacent 1,100-acre (445.3-ha) CenterPoint Intermodal Center, which has attracted 1 million-plus-square-foot (92,903-plus-sq-m) distribution centers for Georgia Pacific (which consolidated facilities from the Chicago area and Wisconsin) and DSC Logistics and two (1.6 million- and 1.8 million-square-foot/148,644- and 167,225-sq-m) Wal-Mart bulk distribution centers and other smaller users.

In 2003, Union Pacific (UP) completed its 1,200-acre (485.8-ha) Global III intermodal facility in Rochelle, Illinois, with capacity to handle more than 3,000 containers per day. The community lies at the intersection of I-39 and I-88, about 90 miles (145 km) west of Chicago and 25 miles (40 km) from United Parcel Service's second-largest airport hub and one of its three national heavy freight hubs at the Rockford International Airport. The BNSF and UP main lines intersect in Rochelle and a city-owned short line railroad connects certain industrial areas to both, offering rail users the opportunity to negotiate rates and service. The community sees opportunity in using containers that arrived holding manufactured consumer goods to export grain, including dried distillers' grain, a livestock feed that is a by-product of nearby ethanol production.

National and local industrial park developers are active with distribution-oriented parks, and major companies have built regional megadistribution centers in the region, some attracted by proximity to the intermodal center. Recent projects include Lowe's 1.2 million-square-foot (111,483-sq-m) center that opened in March in Rockford (about 90 miles [145 km]

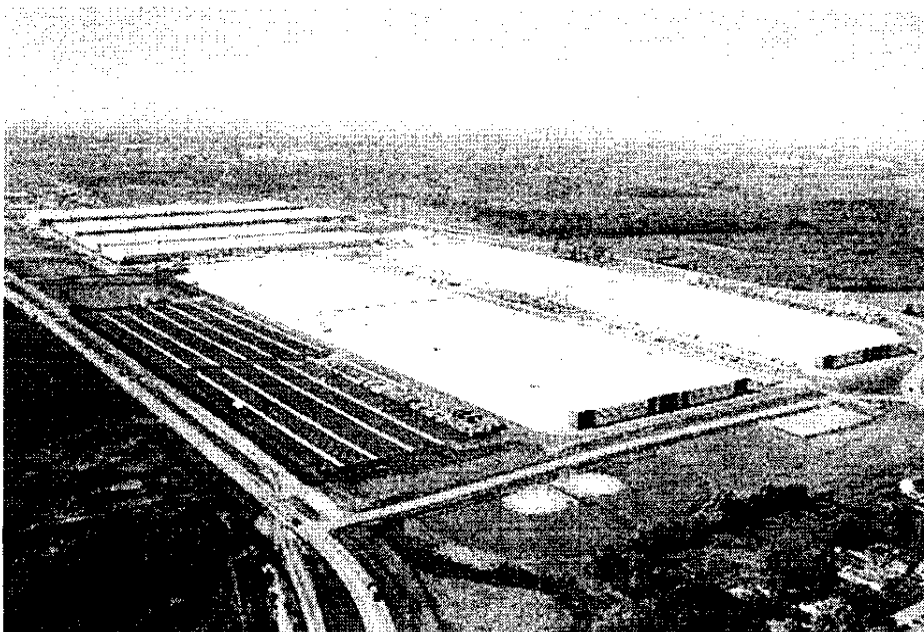
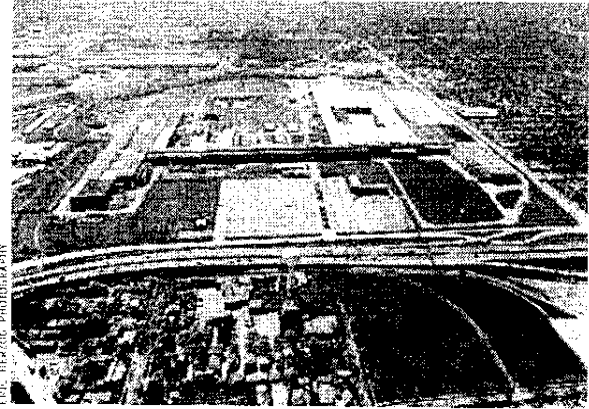
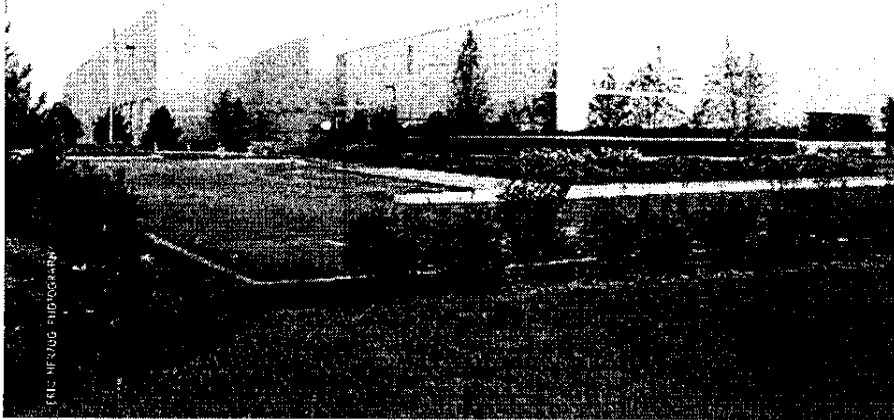


PHOTO: JEFFREY W. SZATAN



CenterPoint Properties demolished a shuttered aluminum mill (above) on a 242-acre (98-ha) infill site in McCook, outside Chicago, to develop a beverage company plant (left).

northwest of Chicago), Target's 1.5 million-square-foot (139,354-sq-m) center in DeKalb in 2006, Wal-Mart's 1.2 million-square-foot (111,483-sq-m) center in Sterling (120 miles [193 km] west of Chicago) in 2006, expanding this year, and a second 1 million-square-foot (92,903-sq-m) center in nearby Princeton, and PetSmart's 1 million-square-foot (92,903-sq-m) center in Ottawa along I-80 in 2005.

The large centers often are retailers where industry consolidation has produced survivors with increased market share, many growing rapidly, who frequently find it more efficient to operate one huge facility rather than two smaller ones. A single large center can hold inventory for many stores, reducing individual in-store and overall company inventory. Sites, typically measuring well over 100 acres (40.5 ha), are larger to accommodate expansion needs and parking for large numbers of trailers. Seeking big sites and low land costs and trying to avoid traffic congestion, companies locate these facilities in outlying areas. Proximity to intermodal centers offers reduced local transportation (drayage) costs and faster deliveries.

Declining supplies of large tracts of relatively close-in land and rising prices have led to new development in areas that have been overlooked until recently, including south along I-57, west along I-80 in Grundy County, and in northwest Indiana.

Infill projects typically involve redevelopment of well-located but functionally obsolete facilities in industrial areas in the city and suburbs. In McCook, about five miles (8 km) west of Midway Airport near the intersection of I-55

and I-294, CenterPoint demolished a shuttered 3.5 million-square-foot (325,160-sq-m) aluminum plant and plans 3 million square feet (278,709 sq m) of new facilities on the 242-acre (98-ha) site. McCook Business Center II currently houses food and beverage distributors, a cold storage facility, and other light manufacturing and distribution. The adjacent McCook Business Center I has 1.5 million square feet (139,354 sq m) of new space on a 155-acre (62.7-ha) site that once held a 1.7 million-square-foot (157,935-sq-m) General Motors locomotive plant. Denver-based ProLogis, which has a significant suburban presence, entered the city of Chicago in 2006 by purchasing from Union Pacific Corporation for \$23 million a 48.5-acre (19.6-ha) shuttered intermodal rail yard about five miles (8 km) southwest of the Loop along I-55. Plans are to build 800,000 square feet (74,327 sq m) of industrial and distribution facilities.

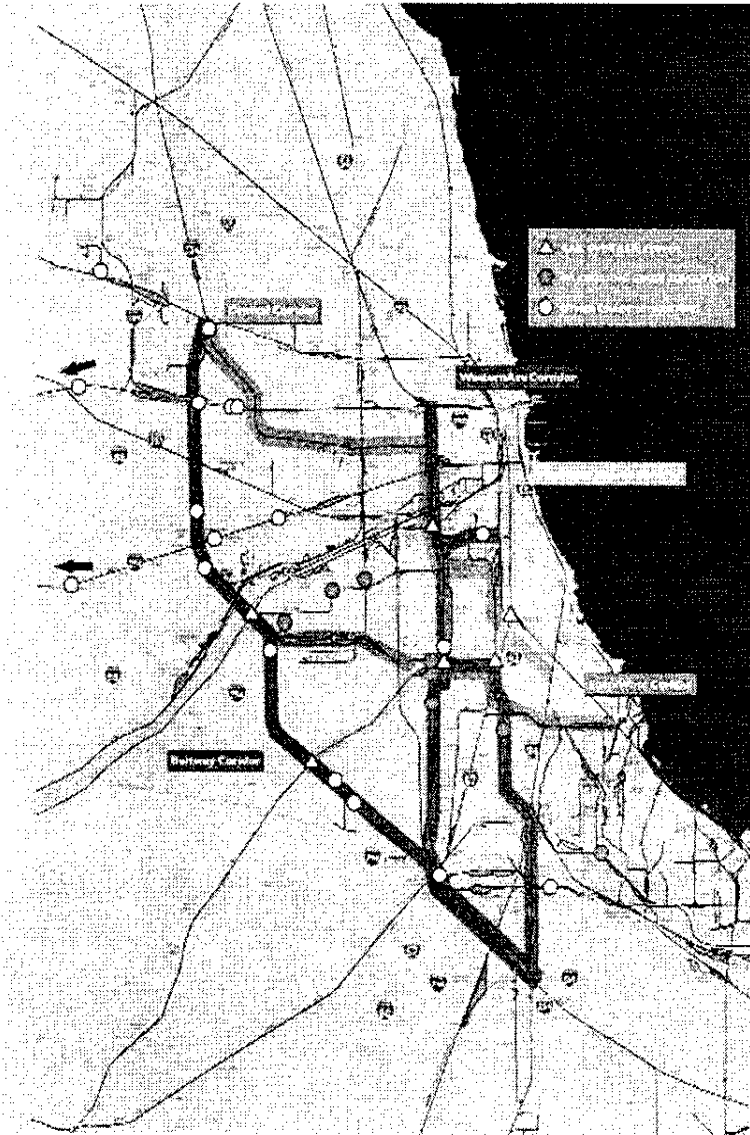
Industrial buildings, including warehouses, in Cook County (which includes Chicago) face higher property taxes than in other Illinois counties resulting from Cook County's practice, unique among counties in that state, of assessing commercial and industrial property at a higher percentage of market value than other property types. The result can be effective tax rates that are double those of neighboring counties. Companies have addressed this by applying for a "6B" tax abatement halving assessment levels for new commercial and industrial investment for ten years, renewable for another ten years, and then phasing out. This past November, the Cook County

Board created a new classification, Class 8, providing permanent renewability for reduced assessment for new investment in areas needing economic revitalization, contingent upon municipal and county approval. The county board certified several townships in southern Cook County eligible, though projects still need municipal approval.

Chicago's current 37,500 freight rail cars daily are expected to increase to 67,000 daily within 20 years on tracks shared by 700 commuter trains each week and Amtrak. Many trains cross now-busy roads at grade level, slowing trains and inconveniencing motorists. Congestion and slow travel times getting rail and truck freight across Chicago, already a major issue, are growing concerns.

Chicago Metropolis 2020, a nonprofit civic/business organization promoting long-term planning, regional cooperation, and smart investment in the Chicago region, issued *The Metropolis Freight Plan: Delivering the Goods* in December 2004, which explores the region's freight rail system and options to prevent gridlock and keep the sector vital. Recommendations include the following:

- ▷ Developing barrier-free tolling technology and a system of user fees and variable pricing on the most congested highways to provide economic incentives for truckers and other drivers to use those highways in nonpeak periods, reducing rush-hour congestion.
- ▷ Designating and protecting freight centers in the suburbs to ensure that public and private industrial development investments are targeted to those corridors that can most effi-



Six Class 1 railroads, the city of Chicago, and the state of Illinois partnered on CREATE, a plan to coordinate investment to speed rail and road traffic in five regional corridors.

ciently support new industrial development and minimize freight trips.

▷ Preserving land for future rail corridors and intermodal terminals to enhance rail-to-truck freight transfer and delivery efficiency and maximize rail's ability to carry freight and reduce highway congestion.

▷ Directing highway spending to eliminate gaps—up to 12 miles (19.3 km) in some areas—in the region's state-designated truck route network to reduce delays and prevent unnecessary travel by heavy trucks.

▷ Creating county organizations to coordinate better planning of truck routes.

▷ Organizing a regional policy board to coordinate transportation and land use planning.

Progress has been made on some recommendations, says Jim LaBelle, deputy director of Metropolis 2020, and leader for policy development in freight, land use, and transportation. In 2006, the Chicago Metropolitan Agency for Planning combined the Chicago Area Transportation Study, the region's transportation planning agency, and the Northeastern Illinois Planning Commission, the land use planning agency, into a single body. Next steps may include financing power to encourage public/private cooperation on developments of regional impact. The region has "put a toe in the water on variable pricing for roads" in which trucks pay \$1 per toll more during peak hours, says LaBelle, who believes that variable pricing

will become more widespread. Other recommendations, such as preserving land for freight use, have to overcome hurdles of forging agreement among multiple jurisdictions.

A key recommendation is to complete the \$1.5 billion Chicago Region Environmental and Transportation Efficiency program (CREATE), originally envisioned in 2003 as a ten-year agreement among the region's six Class 1 railroads, the city of Chicago, Metra (commuter rail), and the state of Illinois to eliminate rail bottlenecks by coordinated upgrading of public and private infrastructure. The program encompasses 78 projects including highway-rail grade separations, rail flyovers, railroad infrastructure (switches, track, signals) projects, and viaduct improvements along five rail corridors in five counties in Illinois and one in

Indiana. The AAR calls it a "first of its kind" partnership.

Anticipated benefits include increased rail speed, lessening delays to shippers and making rail more attractive; decreased delays for motorists and rail passengers; reduced highway needs and new construction costs and highway user costs nationally; and improved air quality regionally and nationally.

This past September, CREATE received \$100 million from federal SAFETEA-LU (Safe, Accountable, Flexible, and Efficient Transportation Act: A Legacy for Users) funds, to which the railroads will add \$100 million, the state of Illinois is anticipated to add \$100 million by issuing bonds, and the city of Chicago will contribute \$30 million, for a total of \$330 million over the next three years. This will fund 31 projects that will be completed or under construction by 2009. LaBelle notes that CREATE funding has not moved as quickly as proponents had hoped and that the next opportunity for federal funds likely will be in 2009. Projects chosen for initial funding were those that the partners agreed promised the largest benefits in terms of safety, efficiency, and congestion relief, says N. Marcia Jimenez, CREATE project director for the Chicago Department of Transportation.

Jimenez emphasizes that the Chicago area rail operations have national impacts and infrastructure improvements will lead to national benefits. Sixty-five percent or more of the freight from the ports of Long Beach, Seattle-Tacoma, and New Jersey eventually moves through Chicago. Congestion in Chicago is felt up and down the line; for example, one of the key benefits of CREATE is better air quality nationally as more efficient trains attract shippers and reduce truck traffic. The AAR, citing continued traffic growth, says expansion of rail capacity is a key issue nationally this year. As mentioned earlier, Chicago is the country's freight capital and the key hub in the national system. CREATE, says Jimenez, is a beginning to build capacity and efficiency regionally—an effort whose economic and environmental benefits will also be felt nationally. **UL**

JERRY W. SZATAN is a Chicago-based consultant and writer on corporate site selection and community economic and real estate development.



COVER STORY June 19, 2008, 3:00PM EST

Can the U.S. Bring Jobs Back from China?

Pricey oil is dulling the mainland's edge in manufacturing. But American industry may not be ready to seize the opportunity

by Peter Engard

Christina Lampe-Onnerud has a long-lasting, fast-charging battery for notebook computers that she believes will revolutionize the industry. Her company, Boston-Power, would like to make the batteries in the U.S., which she says is feasible despite high American wages.

But Lampe-Onnerud has had trouble finding anyone in the U.S. even to make a prototype, let alone manufacture the battery in bulk. China, by contrast, is home to more than 200 battery manufacturers. On visits to the mainland, Lampe-Onnerud toured dozens of factories with ample staff and laboratories, and none wanted the millions of dollars up front that one contract manufacturer in the U.S. had demanded. She recalls a negotiating session last year that started at 9 a.m. and ended with a midnight dinner. Despite parting with 30 unresolved questions, "at 9:00 the next morning, the entire management team was there with pressed white shirts and a PowerPoint presentation addressing every issue," she says. "That's how badly they wanted the business." In six months, Boston-Power was ramping up production in a 400-worker factory in Shenzhen.

This would seem to be a good time for an American manufacturing renaissance. The economics of global trade are starting to tilt back in favor of the U.S. to a degree unseen in a generation. Since 2002 the dollar has plunged by 30% against major world currencies and is falling against the yuan. Wages in China are rising 10% to 15% a year. And spiking oil prices are driving up shipping rates. The cost of sending a 40-foot container from Shanghai to San Diego has soared by 150%, to \$5,500, since 2000. If oil hits \$200 a barrel, that could reach \$10,000, projects Toronto financial-services firm CIBC World Markets.

But as the experience of Boston-Power and countless companies like it shows, the map of global commerce can't be redrawn overnight. American factories and supplier networks in many industries have withered in the era of globalization, so it will take lots of time and capital before the U.S. can become a big player again. In electronics, for instance, there has been a mass migration of component makers to China in the past decade. Ditto for suppliers to Midwest heavy-equipment makers and North Carolina's furniture industry.

The bulk of goods made in China—clothing, toys, small appliances, and the like—probably won't be coming back, because they require abundant cheap labor. If anything, their manufacture will go to other low-wage nations in Asia or Latin America. And in industries from machinery to motorbikes, China's productivity gains nearly offset rising wages and fuel prices.

In areas where the U.S. is at the forefront of innovation—renewable energy, nano materials, solid-state lighting—the U.S. must compete with Asian and European nations willing to lavish entrepreneurs with start-up capital, cash grants, and cheap loans. Similar help may be needed to persuade U.S. companies to build capacity.

EATING INTO "THE CHINA PRICE"

The global industrial landscape certainly appears to be in the early stages of a realignment. The euro's breathtaking rise against the dollar has spurred European makers of cars, steel, aircraft, and more to shift production to the U.S. Now the soaring cost of fuel is making it pricier to send goods across the Pacific. Consider Japan's steel industry, which depends on imported iron ore and coal to create high-end metal for Japanese automakers in the U.S. In 2003 it cost \$15 to ship a ton of iron ore costing \$30 from Brazil to Japan. By last fall, while the ore had jumped to \$80 per ton, shipping costs had risen to \$90. Shipping of raw materials now accounts for 13% of the price of rolled steel used in car bodies, estimates CLSA Asia-Pacific Markets. The finished steel must then be sent to factories in the U.S., pumping up the price even further.

Rising costs are starting to eat into what American managers fearfully call the China Price, the once-formidable 40% to 50% cost advantage enjoyed by Chinese manufacturers—and demanded by customers. "Fuel prices just shot up so fast that everyone was caught flat-footed," says Allen J. Delattre, who heads Accenture's (NYSE:ACN) global supply chain practice. "Now logistics costs are an overarching priority." Richard Sinkin, a San Diego consultant who scouts manufacturing sites in the U.S., Mexico, and China for multinationals, also senses a major strategic shift. "A lot of clients who were thinking about going to China are now saying, Not at these prices," says Sinkin. "The high cost of fuel is going to radically transform the way people look at the geography of their manufacturing."

Examples of production shifts abound. Chinese steel exports to America are down 20% in the past year, notes CIBC, while U.S. steel output has jumped 10% despite the slowdown in construction. Big electronics manufacturers are expanding assembly of high-end telecommunications, computer, and medical equipment in Mexico and some parts of the U.S. for greater proximity to corporate buyers. Tesla Motors, which has just begun production of its \$109,000, electric-powered sports car, transferred assembly of battery packs from Thailand to a plant next to its San Carlos (Calif.) headquarters. Thailand's low factory wages were more than offset by the costs of shipping thousand-pound battery packs across the Pacific. "We were seeing tens of millions of dollars of value sitting on the water for months," says Darryl Siry, Tesla's vice-president for marketing. "It was one of those things that became obvious all of a sudden, and you said, Why are we doing this?"

Look behind these examples, though, and obstacles to a broad manufacturing migration become clear. Iron castings maker Donsco, on the banks of the Susquehanna River in eastern Pennsylvania, illustrates the dilemma. In recent years, Donsco has laid off hundreds of workers as customers shifted production of gear boxes, oil rig parts, and much more to Chinese competitors. Now, Donsco says it's flooded with order inquiries from U.S.-based clients. "All of a sudden our customers are saying, Whoops, it's cheaper to buy in our backyard," says Donsco Chairman Art Mann Sr. While Donsco managed to keep its doors open, many of its U.S. rivals shut down, so there's now a shortage of capacity.

STAYING PUT, FOR NOW

Despite growing demand, Mann says Donsco will be "real cautious" about spending the \$30 million and two years needed to build a new foundry. The impact of this reluctance is being felt in Belen, N.M., where CEMCO, a maker of rock-crushing and farming equipment, is looking to cut costs and logistical headaches. The company today imports many metal parts from Asia but would prefer to buy domestically because of rising shipping rates and the weak dollar. "American foundries now can compete head-to-head on cost, but there aren't many foundries, welders, machinists, and quality-control engineers," says James B. Turk, CEMCO's chief financial officer. "What we had 10 years ago is gone." Where did all the capacity go? Mainly to China, where modern foundries are proliferating.

The furniture industry has undergone a similar transformation. Hundreds of factories have shut their doors across the

U.S. South, while giant plants churning out beds, armoires, and coffee tables have sprung up in industrial estates that sprawl for miles and miles outside Chinese cities such as Dongguan, just north of Hong Kong. It's true that wages are up, the Chinese plants import much of their wood from North America, and bulky bed frames and mattresses consume a lot of space in shipping containers. Yet Stylution Group's 1,600-worker complex in Dongguan isn't going anywhere. Stylution churns out 1 million mattresses and 300,000 bedroom sets every year, exporting about half of them. "It's not easy to pick up and move," says Stylution's marketing manager, Frank Masiello. Besides, he says, most of the supply base has gone to China, down to the paint and tiniest screws, and the mainland market is growing fast. "High Point [N.C.] used to be the center," Masiello says. "But over the last eight years, pretty much everything moved here."

The same goes for lighting fixtures, household appliances, and more. An overwhelming majority of many of these products are made in China. And while some companies are shifting production to Vietnam or Indonesia, those countries don't have enough skilled workers to match Chinese quality and efficiency. If global shipping costs continue to rise, some businesses could eventually move their factories back to the U.S., but that process will take years. "In the short term, China is irreplaceable," says Xu Dongsheng, deputy secretary general of the China Household Electrical Appliances Assn.

How has China been able to keep its edge in the face of soaring costs? One factor that's widely overlooked is rising productivity. For the past decade, U.S. manufacturing productivity growth has averaged 4.8%. That's impressive for an industrialized nation, and bodes well for U.S. industry when the economy recovers. But productivity at medium and large Chinese manufacturers—the backbone of country's export boom—has averaged nearly 19% over the same period, says Bart van Ark, chief economist at the Conference Board, a business research group.

While American manufacturers have been tightening their belts, producers in China have been plowing money into bigger and more advanced facilities that are ahead of their U.S. counterparts. Douglas Bartlett, chairman of Bartlett Manufacturing, a Cary (Ill.) maker of high-end circuit boards used in defense and medical systems, doesn't see a big reversal in store. A decade ago the U.S. accounted for one-third of global circuit-board output. Today that's down to 10%, with China making 80%. Chinese boards are still 40% to 50% cheaper than the ones Bartlett makes in the U.S., in part because producers there have superior technology. "When factories went to China, so did the R&D," says Bartlett, who also heads the U.S. Business & Industry Council, a lobbying group for manufacturers. "I can't envision a scenario in which the price gap will drop significantly anytime soon."

Some analysts contend the China Price edge against the U.S. will remain for at least a decade. While the U.S. has become a "midprice" alternative to Western Europe thanks to the plunge in the dollar, says Boston Consulting Group senior partner Harold L. Sirkin, its cost structure in relation to China has changed only marginally. Sirkin points to industrial compressors, which are used to power equipment such as office air-conditioning systems. Three years ago it cost 38% less to make a 1.5-ton compressor in a factory in China than in an American plant. The big driver was Chinese wages and benefits, which were 65% below those in the U.S. Even accounting for rising labor costs in China, the strengthening yuan, and higher shipping rates, Sirkin estimates Chinese-made compressors are still about 30% cheaper. While that puts Mexico within striking distance as a rival site, "this is not enough of a change to bring this production home to America," Sirkin says, "and there is likely no factory and equipment left to come back to."

Expecting the U.S. to recapture industries that have already gone to China may not be realistic. But the new cost equation likely will influence many decisions about where to locate production in the future. America remains the world's biggest manufacturer, after all, because it's still the largest market for everything from drugs and packaged foods to high-end medical equipment. The U.S. may have as good a chance as anyone of being a strong player in nascent industries, whether next-generation wind turbines, medical devices with nano-scale sensors, or electric cars.

The challenge will be to persuade reluctant venture capitalists and corporations to invest again in modern U.S. production facilities.

What would be required, for instance, for the U.S. to re-emerge as a player in batteries? It is an industry, after all, on the cusp of radical technological change that could spur development of future eco-friendly vehicles, cell phones, and home appliances. Boston-Power's Lampe-Onnerud has suggestions, but America may not be ready for them. Washington could lend up to \$50 million in seed capital to promising startups, for example, and state governments could build industrial parks with low-cost facilities and services that rival those found in China. "If we got state and federal support," she says, "we would team up with others in a heartbeat and grow an industry."

LINKS

Clearer Sailing

Cargo ships may soon have an incentive to burn lower-sulfur fuel when sailing off the California coast. Port operators will reimburse shippers the price difference between so-called bunker fuel, a viscous distillate used by big vessels, and a more expensive but cleaner-burning alternative, the *Los Angeles Times* wrote on Mar. 19. The measure, expected to go into effect by July 1, would cut sulfur-oxide air pollution in the L.A. basin by 11%.

With Dexter Roberts in Dongguan, Geri Smith and Adrienne Bard in Mexico City, Peter Coy and Jacob Stokes in New York, and Ian Rowley in Tokyo

Washburn is an international senior writer for BusinessWeek

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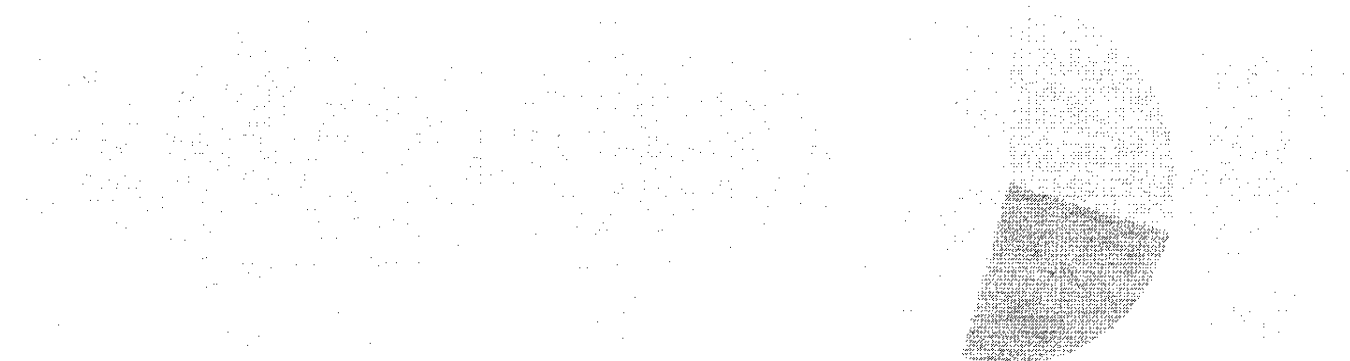


WHERE KNOWLEDGE IS POWER

IBISWorld Industry Report

Change last 12 months

Prescription Drug Wholesaling in the US: 42221



The industry is highly competitive, with a few large players dominating the market. The market is characterized by a high degree of consolidation, with a few large players accounting for a significant portion of the total sales. The industry is also characterized by a high degree of volatility, with sales fluctuating significantly from year to year. The industry is expected to continue to grow, driven by the increasing demand for prescription drugs and the growing number of pharmaceutical companies entering the market.

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Industry Definition

This industry comprises establishments primarily engaged in wholesaling biological and medical products; botanical drugs and herbs; and pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions. Participants supply to hospitals and private medical practices, department stores, supermarkets and mass merchandisers, cosmetics retailers and retail pharmacies. Products include medical and pharmaceutical products, medical supplies, veterinary supplies, first-aid supplies, and personal care goods.

ACTIVITIES (PRODUCTS AND SERVICES)

The primary activities of this industry are:

- Antibiotics wholesaling
- Antiseptics wholesaling
- Bandages wholesaling
- Beauty preparations wholesaling
- Beauty supplies wholesaling
- Biological and allied products wholesaling
- Blades, razor, wholesaling
- Botanicals wholesaling
- Colognes wholesaling
- Cosmetics wholesaling
- Dentifrices wholesaling
- Deodorants, personal, wholesaling
- Diagnostic reagents wholesaling
- Diagnostics, in-vitro and in-vivo, wholesaling
- Endocrine substances wholesaling
- First-aid supplies wholesaling
- Gauze wholesaling
- Hair preparations (except professional) wholesaling
- Medical sundries, rubber, wholesaling
- Nonprescription drugs wholesaling
- Perfumes wholesaling
- Plasmas, blood, wholesaling
- Prescription drugs wholesaling
- Radioactive pharmaceutical isotopes wholesaling
- Razors (except electric) wholesaling
- Rubber goods, medical, wholesaling
- Salts, bath, wholesaling
- Shaving preparations wholesaling
- Toilet preparations wholesaling
- Toilet soaps wholesaling
- Toothbrushes (except electric) wholesaling
- Vaccines wholesaling
- Veterinarians' medicines wholesaling

- Vitamins wholesaling

The major products and services in this industry are:

- Prescription drugs
- Nonprescription pharmaceuticals
- Cosmetics and beauty supplies
- Vitamins and nutritional supplements
- Health aids and first aid supplies
- Perfumes
- Medical, hospital and surgical supplies

SIMILAR INDUSTRIES

Industry: ≡ 42145 - Medical Supplies Wholesaling in the US

Description: Establishments primarily engaged in wholesaling surgical, dental, and hospital equipment.

DEMAND & SUPPLY INDUSTRIES

- ≡ 32541 - Pharmaceutical & Medicine Manufacturing in the US
- ≡ 32561 - Soap & Cleaning Compound Manufacturing in the US
- ≡ 32562 - Cosmetic & Beauty Products Manufacturing in the US
- ≡ 33911a - Medical Instrument & Supply Manufacturing in the US
- ≡ 33911b - Ophthalmic Lens Manufacturing in the US
- ≡ 44512 - Convenience Stores in the US
- ≡ 44611 - Pharmacies & Drug Stores in the US
- ≡ 44612 - Beauty, Cosmetics & Fragrance Stores in the US
- ≡ 44619 - Health Stores in the US
- ≡ 45211 - Department Stores in the US
- ≡ 62111a - Medical Doctors in the US
- ≡ 62111b - Specialist Medical Doctors in the US
- ≡ 62211 - Hospitals in the US

Key Statistics

INFLATION ADJUSTED (CONSTANT) PRICES

| | 2004 | 2005 | 2006 | 2007 | 2008 | |
|--------------------------|----------|----------|----------|----------|----------|---------|
| Industry Revenue | *492,200 | *521,000 | *552,000 | *579,500 | *605,500 | \$Mil |
| Industry Gross Product | *67,400 | *70,000 | *72,500 | *75,000 | *77,250 | \$Mil |
| Number of Establishments | *11,242 | *10,927 | *10,850 | *10,790 | *10,750 | Units |
| Number of Enterprises | *9,848 | *9,513 | *9,480 | *9,450 | *9,425 | Units |
| Employment | *271,900 | *265,000 | *270,500 | *275,000 | *279,000 | Units |
| Exports | -- | -- | -- | -- | -- | |
| Imports | -- | -- | -- | -- | -- | |
| Total Wages | *19,200 | *19,600 | *20,200 | *20,700 | *21,200 | \$Mil |
| Domestic Demand | NC | NC | NC | NC | NC | \$Mil |
| Prescriptions filled | *3,275 | *3,383 | *3,495 | *3,610 | n/a | Million |

REAL GROWTH

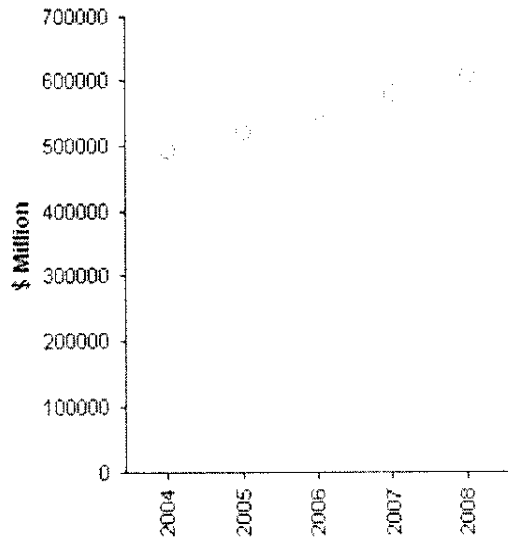
| | 2004 | 2005 | 2006 | 2007 | 2008 | |
|--------------------------|-------|-------|-------|-------|-------|---|
| Industry Revenue | *5.7 | *5.9 | *6.0 | *5.0 | *4.5 | % |
| Industry Gross Product | *3.4 | *3.9 | *3.6 | *3.4 | *3.0 | % |
| Number of Establishments | *-0.2 | *-2.8 | *-0.7 | *-0.6 | *-0.4 | % |
| Number of Enterprises | *-0.4 | *-3.4 | *-0.3 | *-0.3 | *-0.3 | % |
| Employment | *6.5 | *-2.5 | *2.1 | *1.7 | *1.5 | % |
| Exports | NC | NC | NC | NC | NC | % |
| Imports | NC | NC | NC | NC | NC | % |
| Total Wages | *6.1 | *2.1 | *3.1 | *2.5 | *2.4 | % |
| Domestic Demand | NC | NC | NC | NC | NC | % |

RATIO TABLE

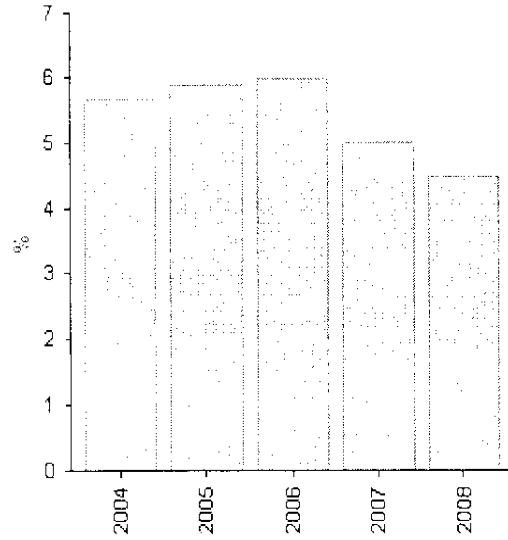
| | 2004 | 2005 | 2006 | 2007 | 2008 | |
|-------------------------------------|-------|-------|-------|-------|-------|-------|
| Imports share of Domestic Demand | NC | NC | NC | NC | NC | % |
| Exports Share of Revenue | NC | NC | NC | NC | NC | % |
| Average Revenue per Employee | *1.81 | *1.97 | *2.04 | *2.11 | *2.17 | \$Mil |
| Wages and Salaries Share of Revenue | *3.9 | *3.76 | *3.66 | *3.57 | *3.5 | % |

GRAPHS

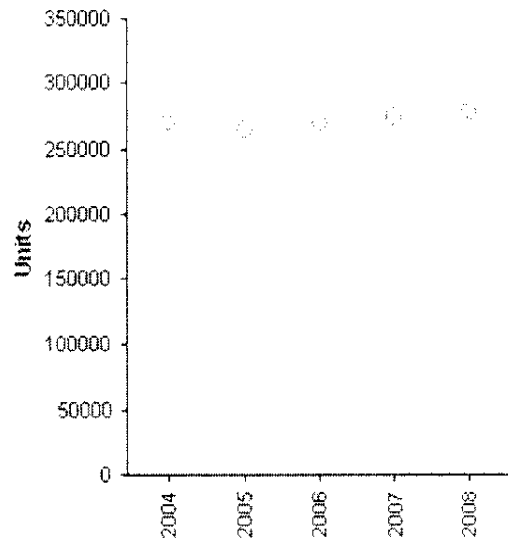
Revenue



Revenue Growth Rate



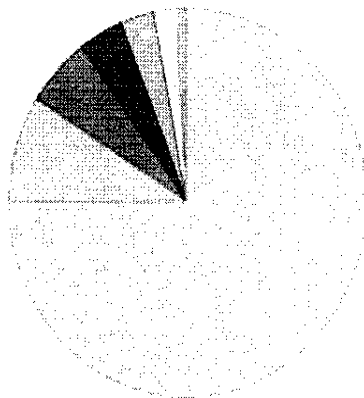
Employment



Note: Unless specified, an asterisk (*) associated with a number in a table indicates an IBISWorld estimate and references to dollars are to US dollars.

Segmentation

PRODUCTS AND SERVICE SEGMENTATION



| Product/Services | Share |
|---|-------|
| Prescription drugs | 75.0% |
| Nonprescription pharmaceuticals | 9.0% |
| Cosmetics and beauty supplies | 6.0% |
| Vitamins and nutritional supplements | 4.0% |
| Health aids and first aid supplies | 3.0% |
| Perfumes | 2.0% |
| Medical, hospital and surgical supplies | 1.0% |

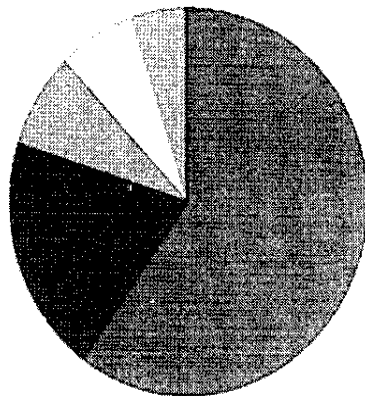
- Pharmaceutical and medical products account for the largest share of industry revenue, amounting to approximately 85% of Drugs and Druggists' Sundries Wholesale sales.
- In the pharmaceutical and medical product segment, IBISWorld estimates that prescription drugs account for 75% of revenue, non prescription pharmaceuticals generate 6% of revenue, and vitamins and nutritional supplements 4%.
- Medical and first-aid supplies account for 1% of revenue. This proportion remains relatively consistent as the demand for these goods is not sensitive to changes in economic conditions. Medical, hospital and surgical goods include surgical and medical products, orthopedic and prosthetic appliances and supplies.
- In contrast, cosmetics, beauty supplies and perfumes which are thought to account for roughly 8% of revenues tend to be more sensitive to fluctuations in economic conditions and thus their relative importance will change in line with changes in discretionary consumer expenditure patterns.
- IBISWorld believes that product varieties with different features are associated with different levels of technological sophistication, different suppliers and different distribution channels within the industry. These factors account for the large number of distribution channels and product varieties.
- Products sold through this wholesale industry have performance differences. Performance differences include such aspects as prescription, tablet versus oral forms as well as other features that are related to technology (R&D) and design.

National Health Expenditure by Object

| | Billion Dollars 2000 | Billion Dollars 2002 | Billion Dollars 2004 | Billion Dollars 2006p |
|--------------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| Health services and supplies | 1261.4 | 1496.3 | 1738.9 | 1987.7 |
| Personal health care expenses | 1135.3 | 1340.2 | 1551.3 | 1769.2 |
| Prescription drugs | 121.5 | 162.4 | 189.7 | 213.7 |
| Other nondurable medical goods | 30.8 | 31.7 | 32.8 | 36.3 |

Source: US Census

MAJOR MARKET SEGMENTS



| Market Segment | Share |
|---|-------|
| Retail Pharmacies | 60.0% |
| Supermarkets and Mass Merchandisers | 20.0% |
| Department Stores | 8.0% |
| Hospitals and Private Medical Practices | 7.0% |
| Cosmetic Retailers | 5.0% |

- Roughly 80% of all human use ethical pharmaceutical products produced by upstream manufacturers are currently distributed via wholesalers.
- Wholesalers then distribute the relevant products to various downstream health care users including hospitals, clinics, HMOs, retail pharmacies etc as well as to the likes of chain stores and mail order companies. According to data produced by IMS Health, retail channels (including pharmacies and other stores involved in the dispensation of prescription products) accounted for 56% of all dispensed prescription sales in terms of dollar sales in 2006, compared with 15% for mail-order pharmacies, 10% for non-federal hospitals, 11% for clinics, 5% for long-term care pharmacies and 1% each for home health care institutions, federal facilities and staff-model HMOs.
- However in some instances, manufacturers may bypass the wholesaler and deal directly with downstream end users including pharmacies, health food chain stores, mail order companies etc.
- On a total product basis, retail pharmacies still constitute by far the largest market segment. In recent years pharmacies and drug stores have been increasing the range of front of store products they stock. These establishments have also been increasing their range of pharmaceuticals and over-the-counter medicines in an attempt to increase market share.
- Supermarkets account for 20% of market demand. Supermarkets and mass merchandisers are also serviced by a variety of industry participants including pharmaceutical wholesalers who stock over-the-counter (OTC) products, as well as by those who supply detergents, soaps, cosmetics and toiletries products.
- Over the current performance period, pharmaceutical wholesalers have lost an increasing proportion of OTC pharmaceuticals, medical supplies (e.g. bandaids, bandages), cosmetics and toiletry sales to external competitors and to the distribution operations of supermarkets, mass merchandisers and health and beauty chains.
- At the consumer level, seniors are the dominant users of medical care. They make up about 13% of the population, but they account for more than 35% of all health care expenditures, 34% of all prescriptions dispensed, and 42% of prescription drug expenditures.

Average annual expenditure per consumer unit

| | Dollars Drugs and medical | Percentage as a percent of total health care costs |
|-----------------------|---------------------------------|--|
| Under 25 | 160 | 25 |
| 25 to 34 | 364 | 18.6 |
| 35 to 44 | 402 | 20.3 |
| 45 to 54 | 602 | 23.6 |
| 55 to 64 | 788 | 26.2 |
| 65 to 74 | 1032 | 28.8 |
| 75 years and older | 1207 | 33.7 |

Source: US Census

INDUSTRY CONCENTRATION

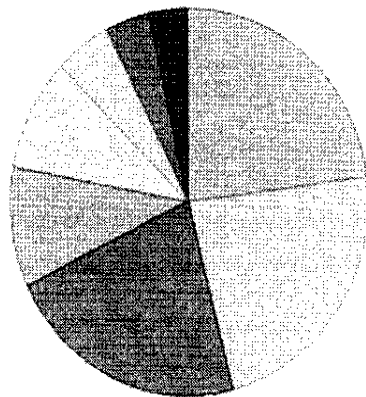
Concentration in this industry is low

The Drugs and Druggists' Sundries Wholesalers Industry is deemed to have a low level of concentration with the top four participants accounting for just under 40% of industry revenues.

GEOGRAPHIC SPREAD

Year: 2008

Establishment location spread by region



| Region | Percentage |
|-----------------|------------|
| Mid East | 23.0 |
| South East | 23.0 |
| Far West | 22.0 |
| Great Lakes | 10.0 |
| South West | 9.5 |
| Plains | 5.0 |
| Rocky Mountains | 4.0 |
| New England | 3.5 |

- Geographic analysis, by region, shows that business activity is concentrated in the South East region (23% of establishment numbers in 2005), the Mid East (23% of establishments), and the Far West (22% of establishments)

regions of the US. Geographic analysis, by state, shows that California (1,321 establishments in 2005), Texas (517 establishments), New Jersey (585 establishments), and Florida (745 establishments) account for a greater number of establishments, employment, and sales receipts in the industry. These same proportions are expected to hold today

- About 12% of all Americans live in California, which ranked first in population among the 50 states in 2002 with an estimated total of 35 million, an increase of 3.7% since 2000. California replaced New York as the decennial census leader in 1970, with a total of 19,971,069 residents, and has lengthened its lead ever since. Between 1990 and 2000, California's population grew by 13.8%. The population is projected to reach 49 million by 2025. Los Angeles is the second most populous city in the US.
- Demand for products is supported by the fact that Medi-Cal is a statewide program (California) that pays for the medical care of persons who otherwise could not afford it. California has also been a leader in developing new forms of health care, including the health maintenance organization (HMO), which provides preventive care, diagnosis, and treatment for which the patient pays a fixed annual premium. Federal government grants to cover the Medicare and Medicaid services in 2001 totaled \$13.9 billion. A large portion of California's population, 19.5%, remained uninsured in 2002.
- The industry, when compared to population share by region, has an above average concentration in the Mid East and South East regions. This may be due to wholesalers maintaining a close proximity to key markets as it is these regions that have relatively high concentrations of people over 55 years over age which is a key market for downstream industries such as pharmacies and drug stores.

Average annual expenditures per consumer per unit for health care, by region of residence

| | Dollars Total health care | Percentage Health insurance | Percentage Medical services | Percentage Drugs and medical |
|-----------|------------------------------|--------------------------------|--------------------------------|---------------------------------|
| Northeast | 2084 | 50.1 | 26.4 | 23.4 |
| Midwest | 2292 | 49.1 | 24.9 | 26.0 |
| South | 2194 | 49.5 | 24.1 | 26.3 |
| West | 2129 | 45.3 | 40.6 | 23.5 |

Source: US Census

Note: Region of residence in table above does not correspond to IBISWorld regional segmentation.

- Participants in the Drugs and Druggists' Sundries Wholesaling industry locate themselves in areas well supported by infrastructure and close to downstream markets for convenience. Other factors affecting location include proximity to medical supply and pharmaceutical manufacturers, which themselves are thought to be concentrated in the Mid East and South East regions.

At the retail level:

- IBISWorld estimates that industry activity in the Pharmacies and Drug Stores Industry is concentrated in the South East and Mid East regions, with each accounting for 28% and 20% of total 2007 establishment numbers, respectively.
- According to IBISWorld analysis at the retail level, California alone accounts for 10% of industry establishments, primarily as a result of a higher than average population in this state (compared to other US states).
- Other states such as Pennsylvania (6% of establishments), and Florida (5%) also hold a high percentage share. Note that Florida has the highest percentage of 65+ population, with the elderly accounting for 18% of the states population.

- It is this population demographic (65+ age group) that accounts for a significant proportion of drug store customers, especially those purchasing prescription and non-prescription drugs as they become more frail and susceptible to medical conditions.

Market Characteristics

MARKET SIZE

- The Drugs and Druggists' Sundries Wholesalers industry in the US derives most of its revenue from distributing pharmaceuticals to retail pharmacies, as well as to other retailers such as supermarkets, mass merchandisers and department stores. The aging population has been an important factor driving long term growth in the industry, with the elderly generally requiring more medical care and drugs. In 2007 it was anticipated that roughly 3,610 million prescriptions would be filled in the downstream retail drug sector, up from 3,495 million in 2006.
- In 2008, the industry is expected to generate revenues of \$605 billion, up 4.5% from the previous year.
- In the same year the industry is expected to contribute \$77 billion to GDP (gross domestic product). This figure represents around 2% of the overall wholesale sector's value added.
- At 2008 year end, the industry is expected to consist of 10,750 establishments. These firms are expected to employ around 279,000 staff, and pay approximately \$21 billion in wages and salaries. Nearly half of all firms operating in this industry generate revenues between \$1 million and \$5 million per year. These firms also account for the majority of employment in the industry (roughly 65%). Following a considerable spate of consolidation, the industry is currently dominated by three major players, AmerisourceBergen, Cardinal Health and McKesson.

LINKAGES

Demand Linkages

≡ 44512 - Convenience Stores in the US

Supermarkets and convenience stores demand products supplied by Drugs and Druggist Sundry Wholesalers.

≡ 44611 - Pharmacies & Drug Stores in the US

Retailers such as these sell a wide range of medications, medicinal supplies, cosmetics, and toiletry products.

≡ 44612 - Beauty, Cosmetics & Fragrance Stores in the US

Retailers such as these sell a wide range of cosmetics, hair preparations and toiletry products.

≡ 44619 - Health Stores in the US

Retailers such as these sell a wide range of vitamin supplements, as well as natural cosmetic and toiletry products.

≡ 45211 - Department Stores in the US

Industry participants supply a variety of products to department stores including cosmetics, perfumes, soaps and toiletries products.

≡ 62111a - Medical Doctors in the US

Demand medical products from this industry.

≡ 62111b - Specialist Medical Doctors in the US

Demand medical products from this industry.

≡ 62211 - Hospitals in the US

Hospitals demand medical supplies as well as endocrine substances and blood plasma from this industry.

Supply Linkages

.....

≡ 32541 - Pharmaceutical & Medicine Manufacturing in the US

Participants in this industry supply pharmaceutical products to this industry.

≡ 32561 - Soap & Cleaning Compound Manufacturing in the US

Participants in this industry supply soaps and toothpastes to this industry

≡ 32562 - Cosmetic & Beauty Products Manufacturing in the US

Participants in this industry supply perfumes, cosmetics, hair preparations, face and body creams, and shaving preparations to this industry.

≡ 33911a - Medical Instrument & Supply Manufacturing in the US

Participants in this industry supply first-aid and other medical products to this industry.

≡ 33911b - Ophthalmic Lens Manufacturing in the US

Participants in this industry supply first-aid and other medical products to this industry.

DEMAND DETERMINANTS

Demand is directly related to expenditure patterns in the Health Care and Social Assistance sector. Industries in the sector include: Physicians, Dentists, Optometrists, Mental Health and Substance Abuse Centers, Medical and Diagnostic Laboratories, Ambulance Services, General and Surgical Hospitals, Nursing and Residential Care facilities. For example doctors and specialists operating in these industries prescribe drugs and diagnostic tests; surgeons and other specialists select procedures, prostheses and devices while hospitals purchase diagnostic and surgical equipment.

Thus factors affecting demand for the above industries include:

- The aging American population and the trend towards more consumer-oriented health care products and devices is increasing the demand for the medical equipment and supply industry to develop technologies and products that enable patients to take a more active role in their own health care.
- With conditions such as heart disease, cancer, AIDS, and hepatitis on the increase, the demand for specialized instrumentation and consumables has increased. This demand is derived from the health of population and the methods employed by medical professionals to treat disease, illness and injury.
- Changes in domestic and international regulations such as more vigorous compliance and enforcement activities carried out by government agencies may delay or prevent the approval of certain products thereby impacting sales at the wholesale level.
- Government programs in the US such as Medicare and Medicaid, private healthcare insurance and managed care plans have attempted to control costs by limiting the amount of reimbursement they will pay for a particular procedure or treatment. Effectively this has led to an increased level of price sensitivity among customers for medical equipment and supplies.
- Product development by manufacturers as well as their marketing practices may also influence demand. Manufacturers are spending ever increasing sums on developing and marketing new products in an attempt to increase demand and product scope in an otherwise mature and saturated marketplace.

DOMESTIC AND INTERNATIONAL MARKETS

Domestic and International Markets Exports

Exports in this industry are low

Exports in this industry are steady

Domestic and International Markets Imports

Imports in this industry are low

Imports in this industry are steady

Domestic and International Markets Analysis

- The US Drugs and Druggists' Sundries Wholesalers Industry is oriented towards the domestic market.
- Indeed IBISWorld estimates that less than 5% of sales revenue in the Drug and Druggist' Sundries Wholesaling industry is generated from export sales.
- However of note is the fact that many of the products distributed by this industry are sourced from overseas suppliers although international trade in the Drugs and Druggists' Sundries Wholesaling is accounted for under the relevant upstream NAICS manufacturing classes: 32541 - Pharmaceutical and Medicine Manufacturing; 33911 - Medical Equipment and Supply Manufacturing; 32561 - Soap and Cleaning Compound Manufacturing; and 32562 - Toilet Preparation Manufacturing.

BASIS OF COMPETITION

Competition in this industry is high

Competition in this industry is increasing

The Drugs and Druggists' Sundries Wholesaling Industry is characterized by a high level of competition.

Competition within this industry is primarily based upon:

- Service range - This can include a range of value added services, such as the provision of buying, marketing, management and training and merchandising services to downstream drug stores and other retail outlets.
- Product mix - This includes the ratio of prescription products to over-the-counter products and other medicinal items relevant to this class, as well as the ratio of generic to branded products. For example existing and established companies that offer a wide range of quality or branded products gain greater market presence and product acceptance.
- Price - Price competition is particularly fierce within the over-the-counter (OTC) pharmaceuticals segment and related medical areas as supermarkets actively expand this area of their business. Price competition is also growing in the face of scheduling status changes as an increasing number of products are now being granted unscheduled status and as such can now be sold without a prescription and/or outside of pharmacies.
- Relationships with drug stores and other downstream retail outlets -

Other variables impacting on competition levels within the industry are outlined below:

- Pharmaceutical wholesale distribution operations tend to have narrow profit margins so an industry participant's earnings depend significantly on its ability to distribute a large volume and variety of products efficiently and to provide quality support services to external customers.
- Product demand in the industry is sensitive to changes in price (elastic price demand). The lower than average profit margins are indicative of an industry that operates on the basis of high volumes and lower margins.
- Competition is also function of product life cycle. Products in the introduction phase compete mainly on the basis of performance. As products begin to advance in the life cycle, and substitute products come into existence, the basis of competition begins to shift to price, and brand loyalty.

According to Cardinal Health, there are three national wholesale distributors operating within the pharmaceutical supply chain (Cardinal Health, McKesson Corporation and AmerisourceBergen Corporation) as well as a number of smaller regional wholesale distributors, direct selling manufacturers, specialty distributors and third party logistics companies and self-warehousing chains. These participants compete on the basis of a value proposition which includes pricing, breadth of product lines, service offerings and support services. According to the company, a participant's earnings will depend on its ability to: compete effectively on the basis of price; distribute a large volume and variety of products; provide quality support services; maintain low cost sourcing arrangements with generic pharmaceutical manufacturers and effectively manage inventory and other working capital items.

LIFE CYCLE

Life Cycle Stage

The life cycle stage is mature

Life Cycle Reasons

- Increasing market size, due to the aging population.
- Growth in value added ahead of general economic growth.
- New product releases.

Life Cycle Analysis

The Drugs and Druggists' Sundries Wholesalers industry is deemed to be mature, as indicated by the following factors:

- Industry value added. Over the five years to 2008, industry value added is expected to grow at an average annual rate of 3%, in line with that of the general economy.
- Enterprises. The number of enterprises in the industry is expected to fall by 5% overall in the five years to 2008 in line with the consolidation process within the industry.
- Products. Within the pharmaceutical product segment, new drugs are being introduced onto the market, especially those dealing with conditions such as heart disease and depression. However other product segments such as cosmetics and toiletries are more mature with the market nearing saturation despite constant efforts by manufacturers to reintroduce or reinvent products.
- Technology. The main technological developments in this industry over the current period have been electronic ordering systems. Electronic ordering systems allow products to be ordered over the Internet and allow customers to customize their orders more easily.
- Markets. Given the ageing US population, the market size for this industry has been increasing and is forecast to continue expanding at a strong rate over the period to 2013.

Industry Conditions

BARRIERS TO ENTRY

Barriers to entry in this industry are medium
These barriers are steady

- The existence of several established operators with significant market strength is a key barrier;
- The costs involved in establishing a warehouse and distribution network can also act as a barrier to entry;
- Established relationships with both upstream manufacturers and downstream customers can act as a formidable barrier.
- As with most wholesale industries, potential new entrants require capital investment in buildings and other structures as well as IT systems to establish a warehouse and distribution system and to survive alongside large and existing participants that have efficient systems in place.
- The existence of well established vertically integrated operators who also operate at the manufacturing and/or retail level of the supply chain can act as a significant entry barrier. For example Cardinal Health Inc, which is one of the largest US pharmaceutical distributors also operates the Medicine Shoppe International retail pharmacy franchise and it is also involved in the manufacture of medical and surgical products.
- Some firms in the industry, particularly established firms, are in a better position to escalate their advertising outlays when new entrants enter the industry. As a result, advertising while increasing unit costs for established firms can also raise barriers for new entrants.
- In most segments, customers are much more aware of the brand name of key components. To a certain extent, this gives manufacturers greater bargaining power in selling to firms that target more experienced buyers.
- In the majority of instances, wholesale operators in this industry are required to obtain licenses and accreditation from state and federal agencies. For example, licenses are required to operate as a wholesaler in the state of California.

TAXATION

| Goods | Tax Rate | Tax Type |
|-------|----------|----------|
| Sales | 0 - 7% | Excise |

The Drugs and Druggists' Sundries wholesaling industry is subject to sales tax.

- Sales tax varies according to each American state. There is no national sales tax.
- This industry bears various levels of sales tax in different states of America.
- In general, the sales and use tax is applicable to the majority of products purchased within the Drugs and Druggists' Sundries Wholesaling industry.
- Prescription and non prescription drugs are exempt from any taxes around the nation, except in the state of Illinois, which carries a 1% tax.

Given that the sales and use tax vary from state to state, the following is an example of the rate in some states:

Rate variations

- There is no sales tax imposed on goods sold in the states of Alaska, Delaware, Montana, New Hampshire and Oregon.
- Colorado has the lowest state sales tax rate at 2.9%. Whilst Rhode Island carries the highest state sales tax at 7.0%.
- Local jurisdictions in each state impose local sales and use taxes.

- The general range of local rates for certain cities within states range from 0% to 9.5%.
- For example, New York has a state sales tax of 4.0%, however cities in the state of New York may carry a sales tax rate ranging from 4.5% to 8.5%.

INDUSTRY ASSISTANCE

The level of Industry Assistance is low

The trend of Industry Assistance is steady

There are no specific tariffs for this industry

- Tariffs do not apply to this industry. Instead they are accounted for at the manufacturing level.
- However participants do receive some assistance via industry bodies, providing them with industry exposure opportunities, such as trade shows and conferences, and allowing players to develop links with suppliers and customers.

REGULATION AND DEREGULATION

The level of Regulation is medium

The trend of Regulation is steady

Regulations relevant to the wholesaling industry are generally covered by each American state. In California, the state with the largest representation of drug and druggist wholesalers, the following applies to manufacturers and wholesalers (effective January 1, 2006):

Firms operating with California (summary)

(a) A person may not act as a wholesaler of any dangerous drug or dangerous device unless he or she has obtained a license from the board (Board of Pharmacy).

(b) Upon approval by the board and the payment of the required fee, the board shall issue a license to the applicant.

(c) A separate license shall be required for each place of business owned or operated by a wholesaler. Each license shall be renewed annually and shall not be transferable.

(d) The board shall not issue or renew a wholesaler license until the wholesaler identifies a designated representative-in-charge and notifies the board in writing of the identity and license number of that designated representative. The designated representative-in-charge shall be responsible for the wholesaler's compliance with state and federal laws governing wholesalers. A wholesaler shall identify and notify the board of a new designated representative-in-charge within 30 days of the date that the prior designated representative-in-charge ceases to be the designated representative-in-charge. A pharmacist may be identified as the designated representative-in-charge.

(e) A drug manufacturer licensed by the Food and Drug Administration or licensed pursuant to Section 111615 of the Health and Safety Code that only distributes dangerous drugs and dangerous devices of its own manufacture is exempt from this section and Section 4161.

(f) The board may issue a temporary license, upon conditions and for periods of time as the board determines to be in the public interest. A temporary license fee shall be fixed by the board at an amount not to exceed the annual fee for renewal of a license to conduct business as a wholesaler.

Firms operating outside of California (summary)

(a) A person located outside this state that ships, mails, or delivers dangerous drugs or dangerous devices into this state shall be considered a nonresident wholesaler.

(b) A nonresident wholesaler shall be licensed by the board prior to shipping, mailing, or delivering dangerous drugs or dangerous devices to a site located in this state.

(c) A separate license shall be required for each place of business owned or operated by a nonresident wholesaler from or through which dangerous drugs or dangerous devices are shipped, mailed, or delivered to a site located in this state.

(d) A nonresident wholesaler shall maintain records of dangerous drugs and dangerous devices sold, traded, or transferred to persons in this state, so that the records are in a readily retrievable form.

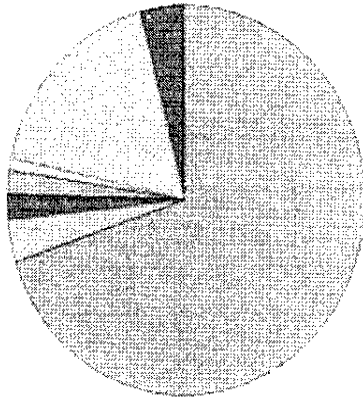
(e) A nonresident wholesaler shall at all times maintain a valid, unexpired license, permit, or registration to conduct the business of the wholesaler in compliance with the laws of the state in which it is a resident. An application for a nonresident wholesaler license in this state shall include a license verification from the licensing authority in the applicant's state of residence.

(f) The board may not issue or renew a nonresident wholesaler license until the nonresident wholesaler identifies a designated representative-in-charge and notifies the board in writing of the identity and license number of the designated representative-in-charge.

(g) The designated representative-in-charge shall be responsible for the nonresident wholesaler's compliance with state and federal laws governing wholesalers. A nonresident wholesaler shall identify and notify the board of a new designated representative-in-charge within 30 days of the date that the prior designated representative-in-charge ceases to be the designated representative-in-charge.

COST STRUCTURE

Year: 2008



| Item | Cost % |
|--------------|--------|
| Purchases | 70.0%* |
| Wages | 3.5%* |
| Advertising | 2.0%* |
| Rent | 2.0%* |
| Depreciation | 1.0%* |
| Other | 17.5%* |
| Profit | 4.0%* |

Cost of materials

- IBISWorld estimates that as is typical of the wholesaling industry, purchases are the largest expense for the Drugs and Druggists Wholesaling Industry. IBISWorld estimates that purchases will account for approximately 70% of industry revenue in 2008.
- Note that purchase costs have increased in recent years in line with new product introductions and the increased consumer use of medications. However this trend has been partially offset by the increased demand for generic products that are relatively cheap compared with brand name pharmaceuticals.
- The larger vertically and horizontally integrated businesses enjoy lower purchasing costs and are better able to move their stock of inventory from areas of weak market and product demand to areas with higher market and product demand.
- Generally, suppliers operate in a more concentrated industry environment which infers that they have greater bargaining power, and are able to achieve cooperative price that puts firms in this industry (because they are less concentrated and more fragmented) at a competitive disadvantage.

Inventory

- Working capital requirements are significant in the Drug and Druggists Wholesaling Industry. Working capital is debtors plus inventory less creditors. Working capital represents money that is tied up in inventory or that customers still owe to the company.
- IBISWorld estimates that inventory (30%) and accounts receivable (35%) account for 65% of total assets. Industry data provided by the Risk Management Association of America indicate that, on average, firms turnover stock every 1.5 months.
- Firms can lower their cost structure as a result of the superior scale of firms (greater spread of fixed costs), from having lower factor costs (for example, the integration of manufacturers and distributors), and from superior product capabilities (product scope).

Labor costs

- The relatively high level of wage expenses reflects the labor intensive nature of the industry. Although skilled sales representatives are required to sell industry products, an increase in the cost of labor will not significantly affect the industry's bottom line.

- Note that wage and salary costs fluctuate with sales revenue and employment levels. The majority of wage and salary costs are incurred in the sales and sales support areas. More than 50% of employees are engaged in sales support. In comparison roughly 30% of employees are sales people.
- Some factors of production, such as managerial expertise and skilled labor are relatively expensive in this industry, but because of the possibility of increased efficiency with such inputs, they can lead to a decrease in the average cost of production and selling.

Other

- Other expenses include general office expenses as well as advertising and promotional costs.
- Advertising expense amounts to 1% of net sales revenue. Most participants incur minimal marketing expenses, instead relying heavily on existing arrangements with suppliers and customers to sell and distribute products. Advertising expenses are higher at the retail level.

Depreciation

- Given the small amounts of capital expenditure, depreciation expense for the industry accounts for a small proportion of revenue. Cash generated from operations and selected borrowings provide the major sources of funds for the growth of the industry.

Profitability

- According to Cardinal Health, a participant's earnings will depend on its ability to: compete effectively on the basis of price; distribute a large volume and variety of products; provide quality support services; maintain low cost sourcing arrangements with generic pharmaceutical manufacturers and effectively manage inventory and other working capital items. It also makes the point that the five primary factors influencing the gross margin for pharmaceutical products are customer discounts, manufacturer cash discounts, distribution service agreement fees, pharmaceutical price appreciation and manufacturer rebates and incentives.
- In 2006 pre-tax profit margins for the larger players operating within the pharmaceutical product segment were a meager 1.2% for AmerisourceBergen and 1.5% for both Cardinal Health and McKesson.

CAPITAL AND LABOR INTENSITY

The level of Capital Intensity is medium

- The level of capital intensity for the Drugs and Druggists' Sundries Wholesaling industry is medium.
- This reflects the increasing reliance on automated systems including pick-pack-dispatch systems which enable the provision of daily delivery services.
- The capital intensity of the Drugs and Druggists' Sundries Wholesale Industry is determined by the ratio of labor costs (wages) to capital (depreciation). IBISWorld estimates that labor expenses are approximately 3.5% of industry revenue while capital expenditures are 1%. This gives a labor to capital ration of 3.5:1, meaning that for every dollar invested in capital, \$3.50 is spent on labor. IBISWorld classifies this as a medium level of capital intensity.
- Wholesalers are increasingly dependent on the provision of superior service as a means of distinguishing themselves from manufacturers or large retail giants such as the supermarkets. Such developments are likely to continue to reduce the level of labor intensity in the industry over the outlook period.

Capital

Capital intensity is a measure of the amount of capital used in the production of goods and services. It is calculated as the ratio of capital expenditures to total revenue. A high capital intensity indicates that a large amount of capital is used in the production process, while a low capital intensity indicates that a small amount of capital is used.

- An analysis of industry participants indicates that, as a percentage of net revenue, major players within the industry spend approximately 1% to 2% on property, plant and equipment each financial year.
- In terms of capital expenditure firms across the industry maintain their financial condition and their ability to generate adequate amounts of cash while continuing to make significant investments in inventory, warehouse facilities, delivery equipment and computers to better meet the needs of their customers.
- Capital expenditure includes expenditure on warehousing and logistics, and computerized inventory systems. Often service and product quality sets firms apart, neither of which have a high capital component. Businesses capital expansion aims are related to economies of scale: lower cost of products from volume purchasing, new product lines, and financial, administrative and technical support.
- On an industry wide basis IBISWorld estimates that net fixed assets account for roughly 10% of net assets. With the upgrading of fixed assets in the past five years, the value of fixed assets (and therefore capital expenditures) has increased from 9% of total assets to 10% (not an overly significant increase).

Labor

- Around half of the staff in the industry are engaged in various sales support functions (office, clerical, warehousing and customer service). Sales staff account for a further 30% of employment and have relatively higher wage levels. The industry is reliant on a large number of people with skills in marketing, selling, packaging, as well as those people involved in the actual distribution of the products.

TECHNOLOGY AND SYSTEMS

The level of Technology Change is medium

- The businesses in this industry continue to evolve, and the most successful firms have added a broader range of services to manufacturers and end-users. This evolution has resulted from changing trends in the wholesale sector as well as among end-users.
- Within the wholesaling industry, the major types of capital improvement have also converged upon the introduction and/or upgrading of communications technology. Some of this technology includes: online services which allow customers to search inventory lists, check pricing, and place and print-out orders, and be billed using their email.
- Developments in information technology systems have offered the possibility for firms to revolutionize procurement by changing ordering procedures and facilitating better supply chain management practice (to both suppliers and customer markets).
- IBISWorld believes that the main technological developments have been electronic ordering systems. Electronic ordering systems allow ophthalmic products to be ordered over the Internet and allow customers to customize their ordering.
- The Internet has a significant impact on the cost efficiency of the wholesale distribution process, by providing an alternative method for wholesalers to provide services to customers. However this technology can also be used by manufacturers to bypass the wholesale function.
- It is important for players to keep up to date with any changes in products sold by this industry. Although the level of technological change in products offered by this industry is medium to low wholesalers must be made aware of any new launches or product developments in order to provide current customers with state of the art products and win new business.
- The growing acceptance and use of the Internet, as well as other electronic commerce systems, in recent years has, and will continue to have, far-reaching implications for the Drugs and Druggists' Sundries wholesaling industry. In fact, it is expected that information technology will continue to redefine the relationship between distributor, retailer

and customer in the immediate future. Many of the major players in this industry have employed electronic ordering systems for Internet use.

- Electronic ordering systems such as Supply Management On-Line, allow drugs and druggists' sundries products to be ordered over the Internet. Programs such as Optipak, are developed for wholesalers to allow customers to customize their ordering of supplies.
- By ordering over the Internet orders can be stored automatically in the company computer system reducing manual entering errors, speeding the ordering process and providing a more efficient system.
- Other effects of the Internet on industry performance include the sale of pharmacy items such as OTC drugs and prescription medications via the Internet. This phenomenon is already widespread in the USA and is expected to continue over the coming years.
- There have also been significant technological developments in the wholesaling industry in general, including the computerized automation of inventory control, which are of relevance to this industry. These allow inventory to be stored on a national or international basis, requiring fewer regional distribution centers and allowing more efficient distribution.

INDUSTRY VOLATILITY

The level of volatility is low

- This low level of volatility tends to reflect the essential nature of many of the products carried by the industry.
- Public health, and therefore industry demand, is not sensitive to short term changes in the economic environment.
- However, some items of a discretionary nature, such as fragrances and cosmetics, will be affected by changes in economic activity.

GLOBALIZATION

The level of Globalization is medium

The trend of Globalization is increasing

- The US Drugs and Druggists' Sundries Wholesalers Industry is deemed to have a medium level of globalization in line with the increasingly global nature of the overall pharmaceutical industry.
- At the manufacturing level, the international pharmaceutical product manufacturing industry is one of the world's largest manufacturing industries and is characterized by a broad geographical distribution of final production and marketing operations, high levels of foreign penetration in national markets and extensive intra-firm trade. A number of factors help to explain the highly globalized nature of the industry including minimal technical barriers in final drug formulation; the need to meet variations in the evaluation process and government regulations for admission of drugs onto the local market; and the highly segmented nature of individual markets as a result of national health and price regulations.
- In recent years, the trend towards globalization has become more pronounced throughout the entire pharmaceutical supply chain, including at the distribution level.
- Within the US Drugs and Druggists' Sundries Wholesalers Industry, a number of participants (including the likes of Cardinal Health and McKesson Corporation) have operations overseas and it is expected that participants in this industry will continue to expand their global operations in the future.
- Aiding this development will be the growth of online/Internet sales as consumers throughout the world seek out better value purchases. The move by upstream manufacturers to outsource their manufacturing operations to contract manufacturing organizations (CMOs) located in lower cost Asian countries (including India and China) will also aid this development as a greater degree of domestic demand is then met by imported product.

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Key Factors

KEY SENSITIVITIES

The key sensitivities affecting the performance of the Prescription Drug Wholesaling industry include:

Average Age of Population

Description: The age distribution of the population.

Due to improved medical treatment, Americans are living longer on average. The aging population increases the demand for products from this industry such as prescription and non-prescription medications.

Health - Number of Hospital Visits

The number of visits to doctors affects the number of prescriptions written and therefore increases the demand for products supplied by this industry.

Per Capita Disposable Income

Description: The level of and/or movements in real per capita disposable income.

The higher the level of disposable income, the greater the capacity to pay for higher price medical treatment and non-essential items such as fragrances and cosmetics.

Private Health Insurance Membership

Description: The number of Americans covered by private health insurance.

Increases in private health insurance memberships allows for more access to medical care and therefore increases the number of doctor visits and number of prescriptions. As a result, demand for drugs and druggists sundries supplies tends to increase.

KEY SUCCESS FACTORS

The key success factors in the Prescription Drug Wholesaling industry are:

- **Guaranteed supply of key inputs**
Access to, or contracts with, reliable manufacturers or importers.
- **Having an extensive distribution/collection network**
Efficient warehouse & distribution systems.
- **Having contacts within key markets**
Established links with a number of customers. It is preferable that wholesalers deal with a variety of customers and do not have one or two which account for the majority of their business.
- **Provision of superior after sales service**
Exceptional customer service to retain key clientele.

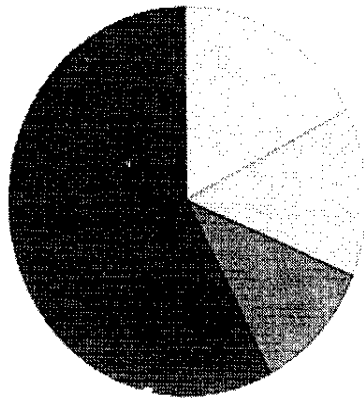
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- Having a good technical knowledge of the product
Staff-knowledgeable staff are required to liaise with clients and provide sound product advice.
- Ability to control stock on hand
Stock control - computerized stock controls allow for up-to-date monitoring and analysis of inventory. They can be of use to service clients by advising them of stock levels and expected delivery schedules.
- Production of goods currently favored by the market
Value for money - the products stocked should be perceived as offering value for money (unless the operator has an exclusive up market positioning).

Key Competitors

MAJOR PLAYERS

Market Share



Major Player

Market Share Range

McKesson Corporation

17.5% (2007)

Cardinal Health, Incorporated

14.0% (2007)

AmeriSource Bergen Corporation

11.0% (2007)

Other

57.5% (2007)

PLAYER PERFORMANCE

McKesson Corporation

Market Share: 17.5%

Background

The largest pharmaceuticals distributor within the US, McKesson Corporation is involved in the distribution of pharmaceuticals, beauty and health care products and medical supplies to retail and institutional pharmacies and to alternate health care sites (including doctors' offices, surgery centers and long term care facilities) within the US and Canada. During 2007 it operated three segments; Pharmaceutical Solutions (95% of revenues for the year ended March 2007); Medical-Surgical Solutions (3%) and Provider Technologies (2%) although this has since been consolidated into just two segments: McKesson Distribution Solutions (which combines Pharmaceutical Solutions and Medical-Surgical Solutions) and McKesson Technology Solutions (its previous Provider Technologies segment). In the year ended March 2007 McKesson generated revenues of \$92.98 billion, up from \$36.7 billion in the year ended March 2000. Of this, its US operations accounted for 93%. Employee numbers as at March 2007 stood at 31,800 up from 21,000 in 2000.

Of interest to this report is its Distribution Solutions segment which is involved in the distribution of ethical and proprietary drugs, medical-surgical supplies and equipment and health and beauty care products throughout North America. The segment is also involved in the provision of specialty pharmaceutical solutions for biotech and pharmaceutical manufacturers, the sale of pharmacy software and the provision of consulting, outsourcing and other services. It also includes a 49% interest in Nadro, S.A. de CV, the leading pharmaceutical distributor in Mexico and a 39% interest in Parata Systems, LLC which sells automated pharmaceutical dispensing systems to retail pharmacies. Businesses within this segment include McKesson U.S. Pharmaceutical, McKesson Canada, McKesson Health Solutions, McKesson Pharmacy Systems, McKesson Medication Management and McKesson Specialty Distribution

Included within this segment is McKesson's US Pharmaceutical Distribution operations which supplies pharmaceuticals and other healthcare related products to more than 40,000 customers in three primary customer segments: national and regional retail chains (including drug/food combinations, mail order pharmacies and mass merchandisers), institutional healthcare providers (including hospitals, health systems, clinics and other acute-care facilities and long term care

providers), and retail independent pharmacies. This operation serves over 30,000 locations through a network of 30 distribution centers, as well as a master distribution center, a strategic redistribution center and a repackaging facility, serving in all states of the US.

Also of interest is its Medical-Surgical Solutions segment which provides medical-surgical supply distribution, equipment, logistics and other services to healthcare providers including physicians' offices, surgery centers, extended care facilities etc as well as alternate-site healthcare facilities through a network of 29 distribution centers within the US

In the year ended March 2007 its Pharmaceutical Solutions segment had generated revenues of \$88.7 billion, compared with \$83.4 billion in 2006 and \$75.9 billion in 2005. In comparison its Medical-Solutions segment had generated revenues of \$2.4 billion, \$2.0 billion and \$1.8 billion respectively for the years in question. Of note is the fact that a significant portion of its revenue growth has been with a limited number of large customers; in 2007 sales to its ten largest customers (including pharmacy benefits manager Caremark RX, Inc and Walmart) accounted for just over half of its total consolidated revenues.

Financial Performance

Financial summary for McKesson Corporation for the year ended March

| | Million Dollars Revenue | Percent Growth Revenue | Million Dollars Net Income | Percentage Income | Units Employment |
|------|----------------------------|---------------------------|-------------------------------|----------------------|---------------------|
| 2000 | 36734.2 | N/C | 723.7 | N/C | 21000 |
| 2001 | 42010.0 | 14.4% | -48.3 | N/C | 23000 |
| 2002 | 50006.0 | 19.0% | 418.6 | N/C | 24000 |
| 2003 | 57120.0 | 14.2% | 555.4 | 32.7% | 24500 |
| 2004 | 69506.1 | 21.7% | 646.5 | 16.4% | 24600 |
| 2005 | 80514.6 | 15.8% | -156.7 | N/C | 25200 |
| 2006 | 88050.0 | 9.4% | 751.0 | N/C | 26400 |
| 2007 | 92937.0 | 5.6% | 913.0 | | 31800 |

Source: Annual Report

2007

In the year ended March 2007, revenues amounted to \$93.0 billion, up 7% on the previous year. This growth was predominantly derived from its Pharmaceutical Solutions segment (which accounted for 95% of consolidated revenues) which benefited from market growth rates (which in turn reflect growing drug utilization and price increases) as well as the earlier acquisition of D&K Healthcare Resources Inc in the second quarter of 2006. Within its US pharmaceutical distribution operations, direct distribution and service revenues were higher relative to the previous year despite the loss of a large customer as were sales to customer warehouses primarily as a result of new and expanded agreements with customers. In 2007 sales to customers warehouses accounted for 35% of sales compared with 29% for direct sales to institutions, 23% for direct sales to retail chains and 13% for direct sales to independents.

2006

For the year ended March 30, 2006, McKesson achieved 9.4% revenue growth, to \$88.05 billion. The Pharmaceuticals Solutions segment accounted for 95% of this revenue. Growth was attributable to existing customer sales growth and the acquisition of D&K Healthcare Resources, Inc. Net income increase from a loss the previous year, to \$751 million. Chain

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Case 1: Drug Wholesaling in the US

stores accounted for 22% of sales, up from 20% to the previous year. Institutions accounted for 32% of sales, declining by 2% as a share of total sales. The remaining 12% of sales were to independent retailers. The Department of Veterans Affairs was signed on as a key new client. Overall, strong performance was due to increasing drug utilization and price gains, partly offset by increased demand for low-priced generic drugs.

2005

For the 12 months ended March 2005, McKesson Corporation reported sales revenue of \$80.51 billion, this was an increase of 15.8% from the previous corresponding period. Driving sales revenue during the year was a 9% increase in revenues from the Pharmaceutical Solutions business as well as a 7.8% increase in sales revenue from the Medical-Surgical Solutions business. US Healthcare pharmaceutical direct distribution and services revenues increased during the period due to new pharmaceutical distribution agreements, the acquisition of D&K Healthcare Resources, expanded agreements with existing customers and continued, although slowed market growth among existing customers. There was a net loss of \$156.7 million due to Securities Litigation charges and competitive price pressures.

2004

Revenues increased 21.6% to \$69.5 billion in 2004 and 14.2% to \$57.1 billion in 2003 primarily reflecting revenue growth in the Pharmaceutical Solutions segment which is attributable to market growth rates as well as new customers and/or expanded business with existing customers. From 2000 to 2004 McKesson's revenues grew on average by 13.6% per year. The growth in the pharmaceuticals segment has impacted on gross profits with this business having a lesser margin than other operations due in part to competitive pricing pressures in the market. Net income increased 16.4% to \$646.5 million in 2004 and 32.7% to \$555.4 million in 2003.

In April 2004 McKesson Corporation acquired all of the issued and outstanding shares of Moore Medical Corp (MMC) for \$12 per share in cash or approximately \$40 million in aggregate. MMC is an Internet-enabled, multi-channel marketer and distributor of medical-surgical and pharmaceutical products to non-hospital provider settings. In addition, in the second quarter of 2003, McKesson acquired the outstanding stock of A.L.I. for an aggregate cash purchase price of \$347.0 million. A.L.I. provides digital medical imaging solutions which are designed to streamline access to diagnostic information, automate clinical workflow and eliminate the need for film purchase and storage.

Cardinal Health, Incorporated

Market Share: 14.0%

Background

The second largest player within the industry, Cardinal Health is a leading distributor of pharmaceuticals, surgical and hospital supplies. Indeed the company claims to distribute approximately one third of all pharmaceutical products distributed within the US. The company's customers include hospitals, clinics, other medical offices and retailers. According to the company, its depth and breadth of products is unique within the industry and as such provides it with a competitive advantage. As at June 2007, the company had 28,800 employees within the US with a further 14,700 employed outside of the US.

Cardinal Health operates four business segments: Healthcare Supply Chain Services - Pharmaceutical; Healthcare Supply Chain Services - Medical; Clinical Technologies and Services and Medical Products Manufacturing. These four segments then align with two major sectors; Healthcare Supply Chain Services which is focused on the company's foundational logistics and distribution capabilities and Clinical and Medical Products. In 2005 Cardinal had reorganized its business which saw it combine its three distribution lines (pharmaceutical, medical products and nuclear pharmacy services) into one division in order to streamline its logistical operations.

Of interest to this report is the first sector and in particular its Healthcare Supply Chain Services - Pharmaceuticals segment under which it distributes a broad line of branded and generic pharmaceutical products, OTC healthcare products and consumer products. Operating as a full service wholesale distributor, the segment also provides a number of customer support services including online procurement, fulfillment and information via cardinal.com, computerized order entry and order confirmation systems, generic sourcing programs, product movement, inventory and management reports and consultation on store operations and merchandising. In addition, the segment operates a pharmaceutical repackaging and distribution for chain and independent drug store customers. Customers serviced include chain and independent drug stores, pharmacy departments of supermarkets and mass merchandisers, hospitals and alternate care providers including mail order pharmacies. Key customers include the likes of CVS Corporation and Walgreen Co with these two customers accounting for roughly 21% of fiscal 2007 revenues. In the same year its top five customers accounted for half of all revenues. In comparison its top five suppliers accounted for approximately 20% of company revenues. Support services are also provided to branded pharmaceutical manufacturers and can include inventory management services, data/reporting services, new product launch support and contract and chargeback administration services.

Of note is the fact that the segment differentiates between bulk and non bulk customers with the former including customers' centralized warehouse operations and customers' mail order businesses while non bulk customers include retail stores, pharmacies, hospitals and alternate care sites. Bulk customers are thought to generate significantly lower segment profits as a percentage of revenue although non bulk customers require more complex servicing.

During fiscal 2005 and fiscal 2006 Cardinal implemented a new fee-for-service arrangement system which relies on written distribution service agreements. Relative to previous business models, the new system is less dependent on manufacturers pricing practices and is more reflective of the level of service provided.

Cardinal Health operates manufacturing and distribution facilities in 45 US states and Puerto Rico; it also has manufacturing facilities outside the United States. These include manufacturing businesses in Argentina, Australia, Brazil, Canada, the Dominican Republic, France, Germany, Italy, Japan, Malaysia, Malta, Mexico, the Netherlands, Thailand, and the UK. With regards to its Healthcare Supply Chain Services - Pharmaceutical segment it has 25 pharmaceutical distribution facilities and three specialty distribution facilities within the US as well as 172 nuclear pharmacy laboratory, manufacturing and distribution facilities.

Acquisitions

Much of the growth enjoyed by Cardinal Health over the past two decades can be attributed to its acquisitive path; since 1980 it has made more than 50 acquisitions. Purchases made in the 1990s include Ohio Valley-Clarksburg (1990, the Mid-Atlantic), Chapman Drug Co. (1991, Tennessee), PRN Services (1993, Michigan), Solomons Co. (1993, Georgia), Humiston-Keeling (1994, Illinois), and Behrens (1994, Texas). In 1994 it acquired the number six drug wholesaler Whitmire distribution which served to propel Cardinal into the number three slot. In the following year it made its biggest purchase yet (\$348 million in stock), that of Medicine Shoppe International, the country's largest franchisor of independent retail pharmacies. Attempts to acquire rival Bergen Brunswig in 1998 were blocked by the Federal Trade Commission

Since 2003 it has made a number of further acquisitions including The Intercare Group, Plc (the UK) for \$570 million in 2003, ALARIS Medical Systems, Inc for \$2,080 million, Medicap and Snowden Pencer Holdings, Inc in 2004, Geodax Technology, Inc in fiscal 2005 and ParMed Pharmaceutical, Inc and Denver Biomedical, Inc in fiscal 2006. Fiscal 2007 saw the purchase of medical equipment manufacturer Viasys Healthcare Inc, data miner MedMined, Care Fusion and SpecialtyScripts LLC.

At the same time it has made a number of divestments including the international and non core domestic businesses of Syncor International Corporation and a significant portion of its specialty distribution business (which had been involved in the trading of excess inventories on the secondary drug market). In fiscal 2007 it sold its Pharmaceutical Technologies and Services business to the Blackstone Group for \$3.3 billion as well as its healthcare marketing services business and its UK based intercare pharmaceutical distribution business.

Financial Performance

Cardinal Health, financial summary

| Year ended June | Million Dollars Revenue | Percent Growth Revenue | Million Dollars Net Income | Percent Growth Net Income | Units Employment |
|-----------------|-------------------------|------------------------|----------------------------|---------------------------|------------------|
| 2000 | 29870.6 | N/C | 679.7 | N/C | 42200 |
| 2001 | 47947.6 | 60.5% | 857.4 | 26.1% | 48900 |
| 2002 | 51135.7 | 6.6% | 1056.2 | 23.2% | 50000 |
| 2003 | 56737.0 | 11.0% | 1405.8 | 33.1% | 50000 |
| 2004 | 65053.5 | 14.7% | 1474.5 | 4.9% | 55000 |
| 2005 | 74910.7 | 15.2% | 1050.7 | -28.7% | 55000 |
| 2006 | 81363.6 | 8.6% | 1000.1 | -4.8% | 55000 |
| 2007 | 86852.0 | 6.7% | 1931.1 | 93.1% | N/A |

Source: IBISWorld Enterprise Data Base

2007

In the year ended June 2007, the company generated revenues of \$86.9 billion, up 9% on fiscal 2006 results with growth coming from all four reportable segments. However operating earnings were 26% lower relative to the previous year in the face of special items (\$772 million) relating to litigation settlement reserves and in-process R&D expenses. Revenues earned from its Healthcare Supply Chain Services - Pharmaceutical segment totaled \$76,573 million, up 9% on the previous year with much of the growth (\$4 billion) coming from its bulk customers with a number of existing customers electing to purchase a greater volume of product from the company as opposed to the manufacturer. Pharmaceutical price appreciation (6.3%) also attributed to the increase as did acquisitions undertaken during the year. During the year, this particular segment accounted for 86% of total segment revenue. Segment profits were 14% higher at \$1,300 million, reflecting revenue growth, increased generic pharmaceutical margin, increased distribution service agreement fees and pharmaceutical price appreciation which was then partially offset by increased customer discounts and increased SG&A expenses.

2006

In the financial year ending June 2006, Cardinal Health posted revenue of \$81,363.6 million, an 8.6% increase from the previous year. However, net income fell 4.8%, to \$1,000.1 million. The distribution segment led growth and accounted for 81% of total revenue. The fall in net income was attributable to falling sales margins resulting from intense competitive pressure. This was partly offset by improved earnings from sales of generic pharmaceuticals. During the year, transition to a fee-for-service business model for general pharmaceuticals was completed. Under the new model, Cardinal Health is compensated for the provision of data relating to sales and distribution trends to manufactures that assist them with market and demand forecasting. In addition, the company receives fee-based compensation for distributing services, and is therefore less dependent on manufacturer's pricing practices.

2005

For the year ending June 2005, Cardinal Health achieved revenue growth of 15.2% with revenues amounting to \$74,910.7 million. Driving revenue growth between the two periods was a 9% increase in sales in the Pharmaceutical Distribution and Provider Services business and a 7% increase in revenue from the Medical Products and Services business. The Pharmaceutical Distribution and Provider Services segment's revenue growth resulted from stronger sales to retail chain customers. Operating earnings the period were adversely impacted by: increased incentive compensation expense; incremental selling, general and administrative expenses associated with the One Cardinal Health initiative designed to streamline the company's operations and develop new capabilities in shared services, which were expected to lower costs across the company in the future; and increased legal expenses.

2004

In the pharmaceutical distribution business, revenue growth of 14.7% in fiscal 2004 was a result of strong sales to existing customers, sales to new customers and price increases across the product group. This segment also benefited from (1) additional contracts, (2) price increases averaging 6%, and (3) an extra business day in the financial year. These revenue gains were offset by continued reduction in business with Kmart Holding Corporation. In addition to the comments above, annualized pharmaceutical price increases of approximately 5% contributed to revenue growth in this segment during calendar 2004. However, the rate of product price increases was lower than the rate experienced over the prior fiscal year.

2003

In 2003, Cardinal Health reported consolidated sales revenue of \$56.737 billion, an increase of 10.9% or \$5.602 billion from the previous corresponding period. Operating in this industry as the pharmaceutical distribution business, revenue growth of 10% in fiscal 2003 was a result of strong sales to customers within the segment's core Pharmaceutical Distribution business, some of which were generated from the addition of new contracts, and pharmaceutical price increases averaging approximately 5%. The most significant growth was in the alternate site and chain pharmacy businesses. The chain pharmacy growth rate would have been stronger had it not experienced a reduction in business with Kmart.

AmeriSource Bergen Corporation

Market Share: 11.0%

Background

The third largest player within the industry, AmerisourceBergen distributes pharmaceuticals and health care products throughout the US and Canada, as well as operates a number of packaging facilities. The company, initially known as Alco Health went public as AmeriSource Health in 1995 and subsequently bought competitor Bergen Bruswig in 2001. The company serves a variety of clients which include hospitals, managed care facilities, drugstores, nursing homes, clinics, supermarkets, and mass merchandisers across the US. In the year ended September 2007 it generated revenues of \$66 billion, up from \$16 billion in 2001. Employee numbers as at year end September 2007 numbered 13,200, compared with 13,700 in 2001.

The Company's operating segments have been aggregated into two reportable segments: Pharmaceutical Distribution (91% of fiscal 2007 sales) and Other (which includes its PharMerica operations). The former segment includes the operations of AmerisourceBergen Drug Corporation (ABDC), AmerisourceBergen Specialty Group (ABSG) and the AmerisourceBergen Packaging Group (ABPG).

- The first of these (ABDC) includes the company's full service wholesale pharmaceutical distribution facilities and other healthcare related businesses in both the US and in Canada. According to the company, ABDC "distributes a comprehensive offering of brand name and generic pharmaceuticals, over-the-counter healthcare products, home

Cardinal Health, Inc. 2007 Annual Report
Cardinal Health, Inc. 2007 Annual Report

healthcare supplies and equipment, and related services to a wide variety of healthcare providers, including acute care hospitals and health systems, independent and chain retail pharmacies, mail order pharmacies, medical clinics, alternate site facilities and other customers. ABDC also provides pharmacy management, consulting services and scalable automated pharmacy dispensing equipment, medication and supply dispensing cabinets, and supply management software to a variety of retail and institutional healthcare providers".

- ABSC in comparison is involved in the provision of distribution of specialty pharmaceutical products (including vaccines, other injectibles, plasma and other blood products) and other value added services to physicians, clinics, patients and other providers in the oncology, nephrology, plasma and vaccines sectors, as well as an array of services for manufacturers. This business also provides commercialization services, third party logistics, reimbursement consulting services, physician education consulting and other services to biotech and other pharmaceutical manufacturers. In 2007 the specialty pharmaceuticals business generated operating revenues in the order of \$12 billion with the company believing that it commands a significant presence within this rapidly growing part of the pharmaceutical supply chain. It also believes that the business possesses a well developed platform for growth.
- ABPG comprises American Health Packaging (whose operations are closely aligned with those of ABDC), Anderson Packaging (a leading provider of contract packaging services for pharmaceutical manufacturers) and Brecon Pharmaceutical Ltd which operates in the UK.

In the year ended September 2007 its Pharmaceutical Distribution segment generated revenues of \$60,935 million compared with \$55,907 million in 2006 and \$49,319 million in 2005.

In fiscal 2007, the company's largest customer (Medco Health Solutions, Inc) accounted for 14% of total company revenues, 8% of operating revenue and 90% of bulk deliveries to customer warehouses, with its second largest customer accounting for a further 8% of operating revenues. Its top ten customers for the year accounted for just over one third of operating revenue.

In recent years AmeriSourceBergen has sought to increase its operating efficiencies. To this end it initiated its Optimiz program in fiscal 2001 which has seen it reduce its distribution network within the US from 51 facilities to 26 as of September 2007; 31 facilities were closed during this period with six facilities closed in fiscal 2005 and fiscal 2006 with a further two closed in fiscal 2007 while six new facilities were opened. It also outsourced a considerable portion of its information technology activities. At the same time it implemented new warehouse automation technology as well as adopted "best practices" in its warehousing activities.

Strategy

The company's business strategy solely revolves around the pharmaceutical supply chain and the provision of value added distribution and service solutions to various healthcare providers including pharmacies, health systems and physicians and pharmaceutical manufacturers. It believes that it is well positioned in size and market breadth to continue to grow its distribution business. It also believes that it has one of the lowest cost operating structures in pharmaceutical distribution among its major competitors. Of note is its focus on generic pharmaceuticals in line with their rapid growth within the US market and in recent years it has sought to enhance its position within the generic marketplace. At the same time it has also sought to expand its product/service offering within the general pharmaceutical supply channel. Also of note is its use of acquisitions in order to supplement its organic growth and boost its strategic growth plans.

Acquisitions

In recent years the company has made a number of acquisitions, expanding into areas including inventory management technology, drugstore pharmaceutical supplies, and disease-management services for pharmacies. In 1997 AmeriSource

made its largest purchase of Walker Drug for \$140 million, adding 1,500 drugstores in the Southeast to its customer list. Also, during the year, the company signed a five-year deal to become the exclusive pharmaceutical supplier to Sutter Health, a not-for-profit organization. During 1999 the company acquired pharmaceutical distributor C.D. Smith Healthcare and in 2000 the company initiated an online health products marketplace called NewHealthExchange.com, with McKesson, Cardinal Health, Fisher Scientific and Owens & Minor. In 2002 the company bought a maker of automated pharmacy dispensing equipment, AutoMed Technologies. In fiscal 2006 it acquired three businesses (Trent Drugs Wholesale Ltd, Asenda Pharmaceutical Supplies Ltd and Rep-Pharm Inc) to expand its distribution and service businesses into Canada with these acquisitions making it the second largest pharmaceutical distributor within the Canadian market. It also acquired Access MD Inc to complement the distribution services offered by AmerisourceBergen Canada Corporation. 2006 also saw the purchase of Health Advocates, Inc, a leading provider of Medicare set-aside cost containment services to insurance payors operating within the workers' compensation industry, as well as of ICG of America, inc, a specialty pharmacy and infusion services business specializing in the blood derivative intravenous immunoglobulin in line with its strategy of building its specialty pharmaceutical services to manufacturers.

2007 saw the purchase of Xcenda LLC with the purchase intended to enhance its consulting business within its existing pharmaceutical and specialty services businesses. Its latest acquisition made in October 2007 was that of Bellico Health, a privately held New York distributor of branded and generic pharmaceuticals. Generating revenues of \$2.1 billion in its fiscal year ended June 2007 the business was acquired for \$181 million in cash and will expand AmerisourceBergen's presence in the Metro New York community pharmacy market. The year also saw the sale of its Long Term Care business which had previously been included within the Other business segment. Prior to its sale, Long Term Care had been a leading national dispense of pharmaceutical products and services to patients in long term care and alternate site settings.

Financial Summary

AmerisourceBergen Corporation, financial summary

| Year ending September | Million Dollars Revenue | Percent Growth Revenue | Million Dollars Net Income | Percent Growth Net income | Units Employment |
|-----------------------|-------------------------|------------------------|----------------------------|---------------------------|------------------|
| 2002 | 45234.8 | N/C | 344.9 | N/C | 13700 |
| 2003 | 49657.3 | 9.8% | 441.2 | 27.9% | 14800 |
| 2004 | 53179.0 | 7.1% | 468.4 | 6.2% | 14100 |
| 2005 | 54577.3 | 2.6% | 264.6 | -43.5% | 13400 |
| 2006 | 61203.1 | 12.1% | 467.7 | 76.8% | 14700 |
| 2007 | 66074.3 | 8.0% | 469.2 | 0.3% | N/A |

Source: IBISWorld Enterprise Data Base

2007

In the year ended September 2007, AmerisourceBergen generated revenues of \$66,074 million up 8% on the previous year. This was predominantly attributable to increases in revenues for both its ABDC and AMSG operating segments with the former reporting a 6% increase in operating revenues while AMSG recorded a 23% increase in operating revenues. Overall Pharmaceutical Distribution operating revenues totaled \$60.9 billion, up 9% on the previous year. During the year 62% of segment revenues came from sales to institutional customers following strong growth in its specialty pharmaceutical business compared with 38% for sales to retail customers. Operating income for the segment was 14%

higher at \$733 million reflecting improved operating expense margins. Revenues derived from bulk deliveries totaled \$4.4 billion, down 3% on the previous year.

2006

For the year ended September 2006, the company achieved revenue growth of 12.1%, to \$61,203 million. Net income increased by 51.4% to \$467.7 million. Contributing to a major portion of industry revenue, the Pharmaceutical Distribution business generated \$55,907 million in revenue, 90% of the total, while the PharMerica business accounted for 3%, at \$1,668.3 million. During the year, two new drug distribution centers began operation in Kansas City, MO, and Bethlehem, PA. The establishment of these centers, into which the company began investing in 2001, contributed to the increase in capacity and lower costs. The company also made three acquisition of drug distribution business in Canada, making AmerisourceBergen the second largest player in that country.

2005

For the fiscal year ended September 2005 AmerisourceBergen reported operating revenue of \$54.577 billion, an increase of 2.6% from the previous financial year. While consolidated sales revenue increased by 2.7%, financial reports indicate that sales revenue in the Pharmaceutical Distribution business increased by 2.5% or \$1.206 billion to \$49.319 billion. AmerisourceBergen reported that the Pharmaceutical Distribution business' growth largely reflected US pharmaceutical industry conditions, including increases in prescription drug utilization and higher pharmaceutical prices offset by the increased use of lower priced generics. The revenue in the Pharmaceutical Distribution business has also been affected by industry competition and changes in customer mix.

2004

For the fiscal year ended September 2004 AmerisourceBergen reported operating revenue of \$53.179 billion, an increase of 7.1% from the previous financial year. Operating within this industry the Pharmaceutical Distribution business reported operating revenue of \$48.2 billion for the fiscal year ended September 30, 2004 reflecting an increase of 8% from \$44.7 billion the previous fiscal year. AmerisourceBergen's change in accounting for customer sales returns had the effect of reducing operating revenue growth by 1% for the fiscal year. During the fiscal year, 59% of operating revenue was from sales to institutional customers and 41% was from sales to retail customers; this compares to a customer mix in the prior fiscal year of 57% institutional and 43% retail.

2003

For the 2003 financial year AmerisourceBergen reported sales revenue of \$49.657 billion. Financial reports indicate that in 2003 revenue grew by 9.8% from the previous year, primarily as a result of increased operating revenue in the Pharmaceutical Distribution segment. Growth in this segment alone reached 13% during 2003; of this 56% of operating revenue was from sales to institutional customers and 44% was from retail customers, (in comparison to the customer mix in the prior fiscal year of 53% institutional and 47% retail). Between 2002 and 2003 sales to institutional customers increased as a result of the conversion of bulk delivery and other direct business.

OTHER PLAYERS

Kinray Inc. (Market Share 2007: 0.7-1.0%)

Kinray is the US's largest privately-held distributor of pharmaceutical, generic and health & beauty care products with annual revenues in excess of \$4 billion. Operating as a full line, full service wholesale distributor within a niche market, Kinray distributes drugs, health and beauty products, medical equipment, vitamins and herbals, and diabetes-care products as well as 800 private label pharmacy products under the Preferred Plus Pharmacy brand. In recent years it has tended to focus on higher margin generic drugs and private label home health care products. The company services over 3,000 independent pharmacies in eight states (New York, New Jersey, Connecticut, Pennsylvania, Rhode Island,

Massachusetts & Delaware). Operating out of one 400,000 sq ft facility, employee numbers currently total 1,000, up from 400 in 2000. The company was first founded in 1944.

Claiming to be the fourth largest wholesaler in the country, Kinray generated revenues of \$4,400 million in the year ended December 2006, up from \$1,710 million in 2001. The company claims that it has enjoyed "unparalleled" growth in recent years with a growth rate of 25% per year for the past five years. For 2007 it was listed as number 67 in Forbes Magazine's top privately held companies in America. Its recent financial performance is shown in the table below.

Recent Financial Performance of Kinray for the year ended December

| | Million Dollars Revenue | Percent Growth | Persons Employment | Percent Growth |
|------|----------------------------|----------------|-----------------------|----------------|
| 2000 | 1710 | N/C | 400 | N/C |
| 2001 | 2000 | 17.0% | 600 | 50.0% |
| 2002 | 2500 | 25.0% | 800 | 33.3% |
| 2003 | 2910 | 16.4% | 700 | -12.5% |
| 2004 | 3510 | 20.6% | 1000 | 42.9% |
| 2005 | 4000 | 14.0% | 800 | -20.0% |
| 2006 | 4400 | 10.0% | 1000 | 25.0% |

Source: hoovers.com

Quality King Distributors Inc. (Market Share 2007: 0.7-1.3%)

A privately owned company, Quality King distributes groceries and hair, health, and beauty care products to pharmacy and grocery chains throughout the US. The company's QK Healthcare subsidiary is involved in the distribution of pharmaceuticals. Quality King Distributors' business practice is to buy US name-brand products that have been exported to overseas markets, then re-import them and reintroduce them to the US market below market price. Annual revenues are thought to exceed \$2 billion. As at October 2006, it had 850 employees, down from 1,400 in 2002.

Bellco Health Corp. (Market Share 2007: 0.2-0.4%)

Bellco Health Corp. distributes drugs primarily to pharmacies and retailers in the US. The company distributes various name-brand and generic pharmaceutical products, as well as over-the-counter drugs and sundries. The company has a medical distribution division which sells professional products to specialty clinics and physicians. Having generated revenues of \$1.5 billion in 2005, it was acquired by AmerisourceBergen in 2007.

Industry Performance

CURRENT PERFORMANCE

Over the five year period to 2008, the US Drugs and Druggists' Sundries Wholesalers Industry enjoyed moderate growth, fueled by rising demand levels. By year end 2008 revenue levels are expected to reach \$605,500 million, up from an estimated \$465,700 million (in constant 2006 prices) in 2003, representing an average increase of 5.4% per annum. Over the same period, growth in industry value added is expected to average 3.4% with value added expected to be worth \$77,250 million by year end 2008. Note however that value added as a proportion of revenues tended to fall over the period in question as a result of declining profit margins arising from increasing competition levels. By year end 2008, employment levels are expected to be in the order of 279,000, compared with an estimated 255,280 in 2003, representing an overall increase of 9%.

Year-on-Year Analysis

In 2003, the industry is estimated to have generated sales of \$466 billion, representing an increase of 8.1% compared to 2002. The year saw private consumption expenditure levels on prescription drugs increase by 11% relative to the previous year although growth in private consumption expenditure on sales of non-prescription drugs was considerably slower at 2%. The year also saw a decline in the amount of federal funding provided to operators in customer industries. During the year Allou Healthcare, Inc. (formerly Allou Health & Beauty Care, Inc) file an involuntary petition for protection under Chapter 11 of the United States Bankruptcy Code.

Real growth rates were then a more moderate 5.8% and 5.9% in 2004 and 2005 respectively as growth rates in private consumption expenditure levels on prescription drugs dropped to 9% and 5% respectively. Note that in 2005 there was a substantial increase in the price of prescription drugs although this was then partially offset by a fall in the price of over-the-counter drugs and other goods sold in the industry as a direct result of the growth of generic products. For example, AmerisourceBergen reported that an increase in prescription drug utilization and higher pharmaceutical prices was offset in part, by the increased use of lower priced generics. Across the industry, these types of competitive issues impacted on industry competition and affected the industry's profitability as changes in customer mix to lower priced generic products impacted the margins generated within the industry.

For 2006, IBISWorld estimated that industry revenue increased by 6.0%. Stronger growth in revenue was aided by a boost in sales volumes arising from the January 2006 launch of the new Medicare Part D outpatient prescription drug plan (part of the Medicare Prescription Drug Improvement and Modernization Act of 2003); indeed according to IMS Health, the program expanded the market by nearly 1% in 2006 with the total number of dispensed prescription volumes increasing by nearly 5%. During the year, the number two player in the industry, Cardinal Health, increased its industry share by switching to a fee-for-service business model for the distribution of generic pharmaceuticals, whereby it generates addition income for data provided to manufacturers on the sales patterns of their products.

In 2007, the Drugs and Druggists' Sundries Wholesaler industry was expected to have generated sales of \$579 billion, an increase of 4.9% from the previous year. Personal consumption expenditure on both prescription and non-prescription drugs was expected to rise, along with the size of the aging population. Once again the performance of the industry was also influenced by volume and drug pricing trends associated with the Medicare Part D programs (with further growth of 1-2% expected in volume). However, industry growth was restrained by relatively slow growth in disposable income (2.0%) and the continued growth in availability and demand for low priced generic drugs.

In 2008 the industry will have to contend with a leveling off of growth arising from the Medicare Part D program which will in turn contribute to a slowdown in growth in retail pharmaceutical dollar sales. Higher generic sales as a number of key products come off patent will also have a bearing on industry performance over the year.

Domestic Demand

The Drugs and Druggist Sundries Wholesalers industry is involved in the distribution of a range of products including medical and pharmaceutical products (including prescription and over the counter drugs), medical and first aid supplies as well as personal care goods.

The demand for such industry products is determined by a number of factors including:

- The age structure of the population - the older the population, all other things equal, the higher the level of demand for pharmaceuticals. As the elderly generally require greater levels of medical attention than younger people, a key driver of prescription drugs is the age of the population, particularly the over 55 age group. According to the US Census, more than 76 million Americans are currently aged 50 and older (while the number of Americans 65 and older is expected to more than double by 2030). Older patients generally have more complicated conditions, more chronic conditions, and more treatment involving multiple medications (prescription drugs).
- General levels of disease rates;
- Utilization/usage rates -
- Government policies on health - these affect factors such as doctors' prescribing habits and the price of pharmaceutical products. Government expenditure on health related areas is also an important variable. Advances in medical technology - this can be a positive or a negative factor affecting demand depending on the development (e.g. a new drug that fights a disease would increase sales, but a new medical procedure which eliminates that disease would cause a drop in demand for pharmaceuticals);
- Economic conditions - the demand for non-essential drugs and for some personal care goods is partly determined by the level of household disposable income.

In recent years there has been a steady rate of growth in the number of pharmaceutical products consumed within the US, reflecting in part the following variables:

- Increasing life expectancies and an aging population which has served to increase the demand for drugs, particularly for degenerative diseases such as cardiovascular, cardiopulmonary, cancers and arthritis;
- The development of new and more sophisticated diagnostic processes and drugs, including the new biotech drugs;
- Increasing standards of health care and changes in practitioner's prescribing habits; In addition a trend toward less restrictive health insurance products may have had the effect of increasing spending on physicians' services. Also, private sector payers continued to adopt disease management programs which tend to support demand for physician services and a range of related products and services (including prescription and non prescription drugs)
- The emergence of new viruses such as HIV and the resurgence of infections and other viruses; and,
- Greater emphasis on prevention and a healthy lifestyle resulting in increasing demand for an expanding range of OTC pharmaceuticals and other health related products.

In view of the above, one good indication of the level of domestic demand within the industry is given by private consumption expenditure levels on both drug preparations and sundries and on toilet articles and preparations. These are shown in the table below. According to data supplied by the Bureau of Economic Analysis, personal consumption expenditures (PCE) devoted to prescription drugs were expected to have increased at an average annual rate of around 15% in the five years to December 2007. In comparison, PCE on non-prescription drugs will increase by 5% per annum.

As such private consumption expenditure on drug preparations and sundries have had a strong influence on revenue growth over the current performance period.

Personal Consumption Levels, 2002 to 2006

| | Million Dollars | Percent Growth | Million Dollars | Percent Growth |
|------|-----------------|----------------|-----------------|----------------|
| 2002 | 54402 | N/C | 213117 | N/C |
| 2003 | 55972 | 2.9% | 233643 | 9.6% |
| 2004 | 58275 | 4.1% | 251362 | 7.6% |
| 2005 | 61097 | 4.8% | 265213 | 5.5% |
| 2006 | 63804 | 4.4% | 285979 | 7.8% |

Source: Beer Institute

The table below showing pharmaceutical sales via various downstream retail outlets also gives a good indication of changes in domestic demand over the performance period.

Pharmaceutical Sales via all retail channels, 2002 to 2006

| | Billion Dollars | | Billion Dollars | | Billion Dollars | |
|---------------------------|-----------------|---------------|-----------------|--------------|-----------------|--|
| | 2002 | Percent Total | 2004 | 2006 | Percent Total | |
| Drug stores (chain) | 75.9 | 41.5% | 90.4 | 102.8 | 41.2% | |
| Drug stores (independent) | 35.4 | 19.4% | 40.4 | 43.5 | 17.4% | |
| Mass merchandisers | 18.1 | 9.9% | 21.5 | 24.3 | 9.7% | |
| Supermarkets | 23.1 | 12.6% | 26.9 | 28.8 | 11.5% | |
| Mail Order | 30.2 | 16.5% | 40.8 | 50.4 | 20.2% | |
| TOTAL | 182.7 | | 220 | 249.8 | | |

Source: National Association of Chain Drug Stores

Pharmaceutical Expenditure

Recent years have seen a continued rise in the total national health expenditure bill for the US. In the late 1990s and at the start of this decade, pharmaceutical expenditure also tended to rise, the result in part of the following variables:

- Increased usage of pharmaceuticals in line with changing doctor's prescribing patterns and increased consumer acceptance;
- Changes in the mix of pharmaceuticals and medicinal products used, aided in part by a steady increase of new, innovative products and product formulations;
- Price increases.

As an example of these rising pharmaceutical costs, pharmaceutical expenditure as a proportion of total health expenditure for the US increased from 8.5% in 1994 to 12.3% in 2004.

However in more recent years growth rates in pharmaceutical expenditure have been more restrained as managed care organizations along with various government agencies have sought to curb their escalating health care expenditure levels. Of particular importance has been the cost-containment strategies employed by MCOs or managed care organizations (including health maintenance organizations, medical insurance programs, hospital/physician alliances, preferred provider organizations etc), many of which have merged into even larger entities. With a significant proportion of the US population

participating in some form of managed care program, the downward pricing pressures exerted by MCOs (who have significant purchasing power) has had a substantial impact on the revenues earned by various industry participants. A number of the cost containment strategies employed by MCOs have focused on the use of co-payments and generic substitution (i.e. a brand-name drug is replaced with a cheaper generic copy).

In 2005 prescription drug costs increased by 5.8%, down from a growth rate of 8.6% in the previous year. A significant deceleration in Medicaid drug spending and a lower number of new product introductions combined with an increasing reliance on tiered co-payment benefit plans and usage of generic drugs helps explain this apparent slowdown. In 2005 prescription medicines accounted for 10% of the total US health care bill. In 2006 however prescription drug sales increased by 8% according to IMS Health data, boosted by the Medicare Part D prescription benefit along with the increased utilization of generics within new therapy classes and the launch of new targeted drugs. It is interesting to note that in 2006 the average brand name prescription price was \$111.02 (up 9% on the previous year) while the average generic price was \$32.23 (up 8%) giving an average prescription price of \$68.26 compared with \$64.86 in 2005. However of this cost wholesalers received just \$2.04 or 3%.

Regulatory Backdrop

Of initial concern to the industry given its pricing pressure ramifications was the Medicare Prescription Drug Improvement and Modernization Act of 2003 which was enacted in December 2003. The Act provided for a voluntary discount card for Medicare beneficiaries from June 2004 onwards and added prescription drug coverage to Medicare from 2006 onwards. While these developments may result in increased usage of pharmaceuticals, there may also be increased pricing pressures for lower prices in view of the stronger purchasing power of private sector providers. As at year end 2004, Medicare discount cards accounted for just over 1% of retail prescriptions filled. Discounts were thought to have been in the order of 20% for branded drugs and 33% for generic drugs. By year end 2006 prescriptions dispensed through the Medicare Part D program accounted for 17% of retail prescriptions. By year end 2007 this proportion was higher again at 20%.

Also of note is the Deficit Reduction Act of 2005 which included provisions changing the prescription drug reimbursement formula for generic pharmaceuticals under Medicaid to one based on the lowest average manufacturers' price in an attempt to reduce the costs of the Medicaid program. With the final rules released by the Centers for Medicare and Medicaid Services in July 2007, major changes to the reimbursement formula are expected to become effective in the second and third quarters of fiscal 2008.

Regulations have also been introduced in a number of states seeking to monitor the pharmaceutical distribution system in view of safety concerns with regards to counterfeit, adulterated or mislabeled pharmaceuticals. For example regulations requiring pedigree tracking and/or chain of custody tracking in certain circumstances became effective on December 1, 2006 under the federal Prescription Drug Marketing Act, although these regulations have already been challenged in a case brought by secondary distributors. However such regulations should they be enforced will add to the regulatory burden and costs associated with the distribution of pharmaceuticals.

Product Mix

The product portfolio of a number of industry participants underwent some fundamental changes over the performance period in line with the changing industry backdrop. The continued introduction of new (and more expensive) drugs initiated a number of changes, as did the continued rise in the use of generic products. Recent years have also seen industry participants expand their product portfolio to include both the newly emerging range of biotech drugs in line with

technological advancements as well as a growing range of complimentary or alternative medicines in view of the growing focus by an increasing number of US consumers on a more holistic approach to their general health and well being.

Moves by manufacturers to either bypass the traditional wholesaler or to seek greater control over the amount of product available in the supply chain also prompted changes in both the product mix and in the business model pursued; prior to this a number of industry participants had engaged in secondary trading although in several situations accusations of wrongdoing had arisen forcing many to moderate/cease this particular practice.

Generics

The performance period saw further growth in the relative importance of generic products as key innovator products began to lose patent protection. According to data produced by PhRMA, generic products accounted for 47% of the pharmaceutical market in 2000, up from 44% in 1997, 33% in 1990 and up from just 17% in 1984. Generic drugs are now thought to command roughly 58% of the market (by volume) though note that recent IMS Health data puts the proportion at a relatively lower 34% by drug volume and 7% by dollar sales. One of the main factors contributing to this increased importance of generics revolves around practices by MCOs which favor generic substitution. What is more interesting is the fact that according to IMS data, generic sales (in dollar) terms rose by 27% and by a further 25% alone in 2002 and 2003, twice the rate of branded sales, though they too also experienced relatively slower growth rates during 2004 (an estimated 10%). According to IMSHealth prescription volumes of unbranded generics increased by 13% in 2006 while sales of unbranded generics grew by 22%. According to Cardinal Health, branded pharmaceuticals with industry wide sales volumes of \$22 billion came off patent protection in fiscal 2007 with a similar level expected to come off patent protection during fiscal 2008.

Such developments have a significant impact upon the operations of industry participants since generic pharmaceuticals are offered at considerably lower prices than branded pharmaceuticals.

HISTORICAL PERFORMANCE

On a historical basis, the main factors influencing Drugs and Druggists' Sundries Wholesalers industry performance have been the health and age of the population; advances in pharmaceutical preparations; new cosmetic and toiletry product developments; and changes in economic conditions.

The demand for more sophisticated health-care items attributed to most of industry growth during the period. Advances in pharmacological technology have allowed for the development of new and sophisticated medications, which are then demanded by consumers. The demand for products at the retail level ultimately impacts demand at the wholesale level.

In addition, many new products were developed in response to increasing consumer awareness of the importance of skin care. Products such as moisturizers with added sunscreen and foundation tints became very popular. These new products boosted industry revenue at the wholesale level.

IBISWorld estimates that the Drugs and Druggists' Sundries Wholesale Industry grew by 1% per annum in constant prices over the five-year period to 1998, with industry revenue reaching \$240,600 million in 1998.

IBISWorld estimates that during the 1993 to 1998 period, the total number of enterprises in the Drugs and Druggists' Sundries Wholesale Industry increased by 0.8% per annum. To remain competitive, industry participants offered price discounts and focused on stocking new and improved drug formulations as well as product innovations in the cosmetic and toiletry segment.

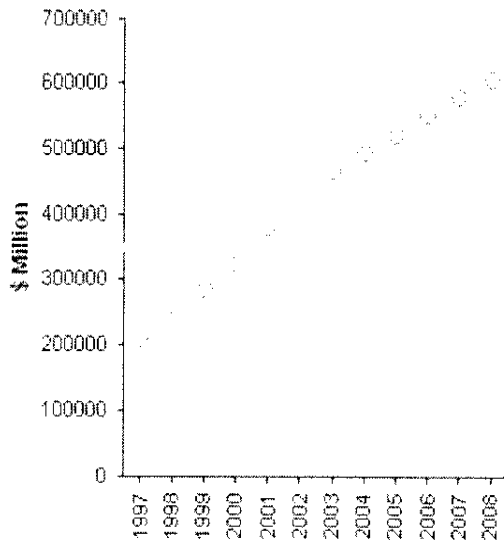
IBISWorld estimates that employment for the industry grew by approximately 1.7% per annum between 1993 and 1998. The average wages and earnings paid per person also increased over the 1993 to 1998 period, growing by 4.7% per annum.

The industry then enjoyed a strong period of growth with revenues rising from an estimated \$286,000 million in 1999 to \$430,800 million in 2002. This saw a corresponding rise in both industry value added and employment levels.

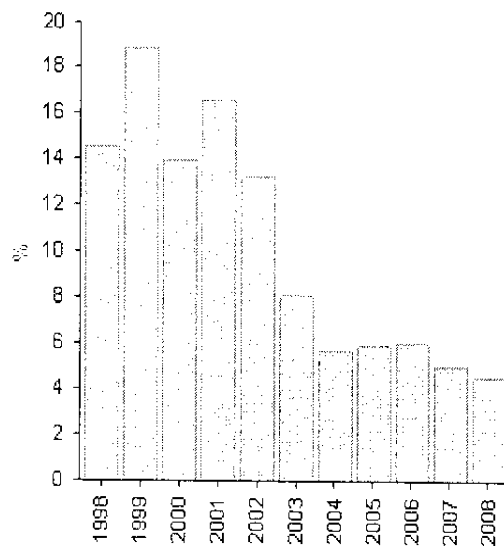
Revenue (constant prices)

| | Revenue \$ Million | Growth % |
|------|--------------------|----------|
| 1997 | 210,000.0 | N/A |
| 1998 | 240,600.0 | 14.6 |
| 1999 | 286,000.0 | 18.9 |
| 2000 | 326,000.0 | 14.0 |
| 2001 | 380,200.0 | 16.6 |
| 2002 | 430,800.0 | 13.3 |
| 2003 | 465,700.0 | 8.1 |
| 2004 | 492,200.0 | 5.7 |
| 2005 | 521,000.0 | 5.9 |
| 2006 | 552,000.0 | 6.0 |
| 2007 | 579,500.0 | 5.0 |
| 2008 | 605,500.0 | 4.5 |

Revenue



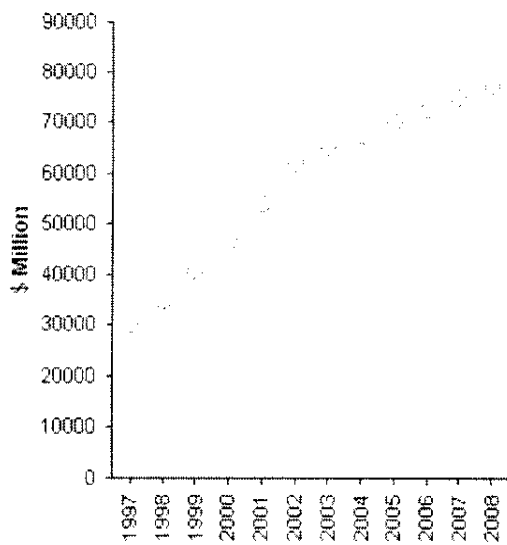
Revenue Growth Rate



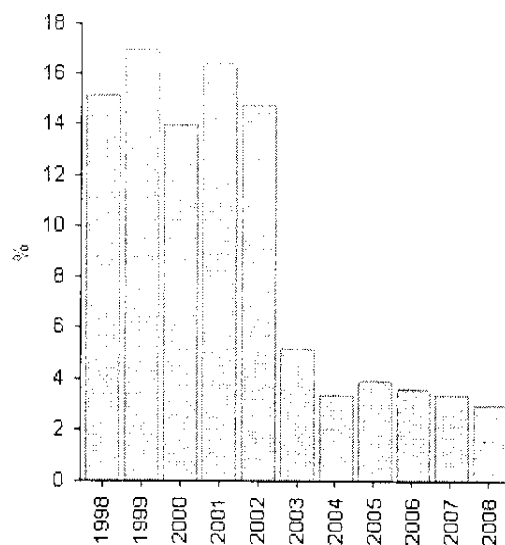
Gross Product (constant prices)

| | Gross Product \$ Million | Growth % |
|------|--------------------------|----------|
| 1997 | 30,200.0 | N/A |
| 1998 | 34,800.0 | 15.2 |
| 1999 | 40,700.0 | 17.0 |
| 2000 | 46,400.0 | 14.0 |
| 2001 | 54,000.0 | 16.4 |
| 2002 | 62,000.0 | 14.8 |
| 2003 | 65,200.0 | 5.2 |
| 2004 | 67,400.0 | 3.4 |
| 2005 | 70,000.0 | 3.9 |
| 2006 | 72,500.0 | 3.6 |
| 2007 | 75,000.0 | 3.4 |
| 2008 | 77,250.0 | 3.0 |

Gross Product



Gross Product Growth Rate

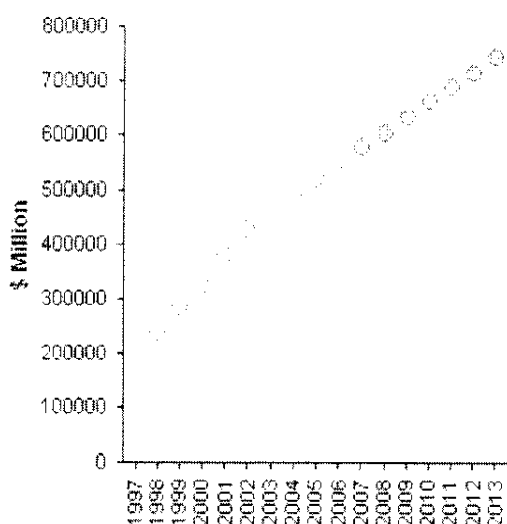


Outlook

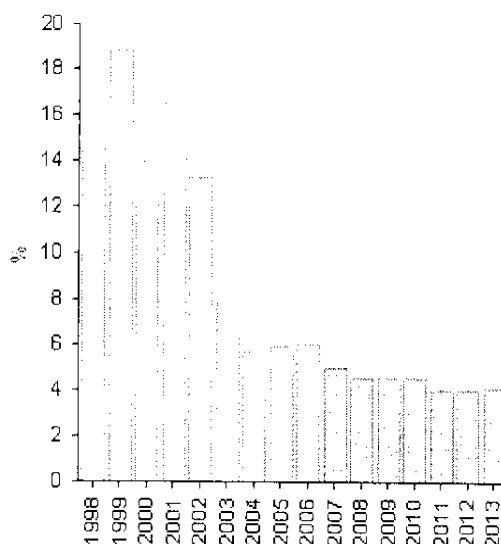
Revenue (constant prices)

| | Revenue \$ Million | Growth % |
|------|--------------------|----------|
| 2007 | 579,500.0 | 5.0 |
| 2008 | 605,500.0 | 4.5 |
| 2009 | 633,000.0 | 4.5 |
| 2010 | 661,500.0 | 4.5 |
| 2011 | 688,000.0 | 4.0 |
| 2012 | 715,500.0 | 4.0 |
| 2013 | 745,000.0 | 4.1 |

Revenue



Revenue Growth Rate



Over the outlook period, the US Drugs and Druggists' Sundries Wholesalers Industry is expected to enjoy moderate growth with industry revenues forecast to increase from an estimated \$605,500 million in 2008 to \$745,000 million in 2013, representing an average growth rate of 4.2% per annum. Over the same period, growth in industry value added will average 3.0% per annum to reach \$89,500 million by 2013.

An aging population, increased patient access to prescription drugs due to the Medicare Part D program, changing community attitudes to health care and continued product development and innovation (including the "lifestyle" drug phenomena, the growth of personalized drugs as well as biotechnology innovations) are expected to underlie the continued growth of the industry, as is direct to consumer advertising and growth in the private health insurance sector. The development of new products in various therapeutic areas will also fuel growth including oncology, Alzheimer's disease and hypertension. At the same time the industry will have to contend with the effects of patent expirations on blockbuster drugs, increasing competition from generics as a result of therapeutic substitution, increasing safety and regulatory issues, and growing price pressures from managed care organizations and the likes.

As in the previous performance period, the industry will have to continue to evolve over the outlook period in order to adapt to its changing environment. Most businesses within this wholesale industry will continue to face rising costs and lower returns. In this environment, IBISWorld forecasts that competitive success will come from economies of scale, and firms' ability to access leading pharmaceutical and healthcare brands. While growing price competition will pressure margins, cost reduction strategies and the strength in the over-the-counter segment of the market will offset this. In the short term, competition is likely to intensify as businesses focus on cost and service as a means to differentiate themselves from one another.

A number of key variables expected to influence the performance of the US Drugs and Druggists' Sundries Wholesalers Industry in the immediate to medium term future are briefly outlined below:

Prescription drug expenditure levels and related policies:

According to the Center for Medicare and Medicaid Services, total US health expenditures is projected to grow at an average annual rate of 7.3% over the outlook period and as recent years, expenditure on prescription drugs is anticipated to continue its upward trend to reach almost 15% of the total national health bill by 2011. While to the benefit of pharmaceutical wholesalers, this anticipated drug expenditure increase will also have flow-on effects for health care policies adopted by state governments, managed health care plan providers etc. Indeed the continued implementation of new cost containment policies are expected to increasingly impact up on the industry, thereby offsetting some of the anticipated volume growth. It is interesting to note that even the health insurance strategies (which also contain a cost containment element) of some of the nation's largest employers (such as Wal-Mart) may impact on the industry.

Also to impact on the industry will be the Deficit Reduction Act (DRA) of 2005 which was signed in February 2006 and which is expected to lead to fundamental changes to Medicaid's drug rebate program. According to the Congressional Budget Office, the DRA will reduce federal Medicaid spending by \$11.5 billion over the five year period to 2010 and by \$43 billion over the next ten years. Also of note is the fact that the act included provisions changing the prescription drug reimbursement formula for generic pharmaceuticals under Medicaid to one based on the lowest average manufacturers' price. With the final rules released by the Centers for Medicare and Medicaid Services in July 2007, major changes to the reimbursement formula are expected to become effective in the second and third quarters of fiscal 2008.

As in the past personal consumption expenditure levels on drugs etc is expected to remain of key importance. Over the five years to 2012, personal consumption expenditure on drugs and sundries products is projected to grow at over 10% per annum. By product segment, the Bureau of Economic Analysis suggests that in the past five years, ten years, and twenty years, growth in personal consumption expenditures (PCE) devoted to prescription drugs has accelerated. By 2010 the number of prescriptions dispensed is expected to exceed the four billion mark, up from 3.4 billion in 2006.

Generics:

In the immediate future, a number of key innovator drugs are expected to lose their patent protection which will have a number of implications for the industry; over the next five years patents for roughly 150 products with combined annual sales of \$60 billion are expected to expire with dramatic consequences for the profile of the industry. In 2008 \$12 billion worth of products are expected to lose patent protection.

This growth will also be boosted in part by Government/managed care institutions' policies designed to change prescription patterns in favor of the bio-equivalent, cheaper, generic drugs. For example, the enactment of the Medicare Prescription Drug Improvement and Modernization Act of 2003 has increased drug benefits for Medicare recipients which in turn translates into a growing reliance on low cost generic drugs; generics are already thought to account for nearly

70% of all scripts filled under the scheme. Recent changes to the Hatch-Waxman legislation (which grant six months exclusivity to the first generic company to win a court challenge of a brand's patent) will also serve to promote the growth of generics.

Growth in importance of non-prescription products:

The continued trend towards switching products from prescription to OTC (over the counter) status will be another important driver influencing the profile of this industry over the outlook period. While the US market is currently thought to lag its Canadian and European counterparts with regards to its acceptance of Rx-to-OTC switches, it is interesting to note that the FDA has recently announced that it hopes to increase the number of switches by 50% over the next few years. Another factor influencing the product segment profile of this industry will be the growth in the relative importance of herbal/botanical or complementary medicines which in turn will create a number of new niche segments. As the acceptance of such products continues to increase, this product segment is also expected to grow in relative importance. Moves by retailers to sell their own 'private-label' OTC products (thought to possess high retail margins) will also fuel the growth of this product segment. Any moves to introduce a "behind the counter" status will also serve to change the profile of the industry; of note is that the FDA held a public meeting in mid November 2007 to discuss the feasibility of establishing a third class of drugs which would cover the likes of cholesterol-lowering statins, oral birth control pills and some higher-dosage pain medications.

Aging Population:

Much has already been made of the potential impact of America's aging population, particularly as its baby boomers begin to "grey". The senior age cohort (those 65 and over) already account for roughly 13% of the nation's population but 34% of its health expenditure bill. As the baby boomers reach their 70s and 80s, their importance as a demographic cohort will continue to increase; by 2030 "seniors" are expected to account for roughly 20% of the US population. Over the five years to 2012, the number of people in the 55 and over age cohort is forecast grow at an average annual rate of 2.6%, compared to forecast annual grow in the total population of around 1%. Over the years, better medical technology has meant that people have lived longer, with the current life expectancy being 77 years. This compares to a figure of only 73.5 years, a quarter of a century ago. This will have a number of implications on the demand for pharmaceutical products as a whole; note that the 65 plus age cohort utilizes healthcare services at around four times the rate of the remainder of the population in the US. As this age cohort continues to expand, it will tend to increase revenue over the outlook period. Lifestyle trends and the subsequent development of lifestyle diseases (obesity, depression, ulcers etc) will also serve to dictate drug development and consumption patterns. It is also interesting to note that a number of the larger pharmaceutical companies have recently launched drug discount cards for low-income seniors with their Together Rx scheme, with others expected to follow suit (for example Pfizer's Living Share Card program).

Other factors, which will also help to gradually change the profile of the industry over the outlook period, include sustained developments in technology, including the increasing use of the Internet and e-commerce (particularly for the dissemination of information on major branded pharmaceuticals, as well as for e-marketing), as well as continued falls in exclusivity times combined with an increased roll out of second and third generation products as a result of technological advancements. Heightened regulatory control over the entire pharmaceutical supply chain, whether it be with regards to drug safety, allowable marketing /advertising practices or with regards to tracking requirements in an attempt to quell the rising threat of counterfeit and/or illegal drugs will also impact on the industry.

Combined, these variables will serve to slowly influence the development of the US Drugs and Druggists Sundries Industry in the short to medium term.

**Chicago Metropolitan Statistical Division
Shift-Share Analysis
2001 – 2006**

Promising industries with high national and local growth rates, that don't meet LQ threshold – possible **new** growth focus (vs. building on existing clusters)?

| Industry | Location Quotient | National Industry Δ | Local Industry Δ | 2006 Employment |
|--|-------------------|----------------------------|-------------------------|-----------------|
| Wholesale electronic markets/agents/brokers | 1.07 | +34% | +31% | 24,158 |
| Drugs & druggists' sundries – wholesale | 1.06 | +6% | +4% | 5,994 |
| Foundries | 1.02 | +17% | +35% | 3,743 |
| Nonferrous metal production/processing | 1.00 | +22% | +67% | 1,532 |
| Land subdivision | .97 | 16% | 14% | 2,573 |
| Architectural/structural metals mfg. | .91 | 4% | 16% | 8,859 |
| Wireless telecom carries (excl. satellite) | .90 | 5% | 37% | 4,549 |
| Waste collection | .90 | 34% | 21% | 2,941 |
| <i>Other textile product mills⁽¹⁾</i> | .76 | 1% | 125% | 1,957 |
| Remediation & other waste mgmt. svcs. | .66 | 15% | 23% | 2,079 |
| Apparel, piece goods, & notions – wholesale ⁽²⁾ | .66 | 4% | 6% | 2,988 |
| Cement/concrete product mfg. | .62 | 12% | 4% | 4,768 |
| <i>Facilities support services⁽³⁾</i> | .57 | 24% | 1785% | 2,066 |
| Iron/steel mills & ferroalloy mfg. | .54 | 30% | 4% | 1,334 |
| Pharmaceutical/medicine mfg. | .28 | 30% | 41% | 2,455 |

(1) Textile bags, awnings, tents, and related products

(2) Piece goods, fabrics, knitting yarns (except industrial), thread and other notions, and/or hair accessories

(3) Typically a combination of services such as janitorial; maintenance; trash disposal; guard and security; mail routing; reception; laundry; and related services.

Process – Chicago Area Shift-Share Analysis

1. ID'ed four-digit SIC codes for industries in the following sectors (total of 223):
 - a. Utilities
 - b. Construction
 - c. Manufacturing
 - d. Wholesale Trade
 - e. Transportation & Warehousing
 - f. Information
 - g. Finance & Insurance
 - h. Real Estate & Rental & Leasing
 - i. Professional, Scientific, & Professional Services
 - j. Management of Companies & Enterprises (essentially holding companies)
 - k. Administrative & Support & Waste Management & Remediation Services
 - l. Arts, Entertainment, & Recreation
 - m. Accommodation & Food Service
 - n. Other Services (Excl. Public Administration)
2. Downloaded historical annual nominal Gross Regional Product (GRP) data for the Chicago-Naperville-Joliet, IL Metropolitan Statistical Division (MSD) from Economy.com.
 - a. inflation-adjusted [historic] GRP data to 2006 dollars using BLS's online Inflation Calculator [can adjust to 2007 or 2008 dollars if desired, but same relationships will hold].
3. Calculated 2006 location quotients (LQs) for all 4-digit industries relative to the U.S.
 - a. All industries meeting 1.20 LQ threshold (count = 73, or 33%) move on to Shift-Share (S-S) analysis.
 - b. For Chicago MSD, where total GRP is 3.0% of U.S. GRP, 1.20 LQ is equivalent to 3.6% of national industry product.
4. For 73 industries meeting LQ threshold, conducted S-S for 2001 to 2006
 - a. 2001 was trough of last recession, per National Bureau of Economic Research (NBER)
 - b. 2006 is most recent available year-end data (2007 estimate will be finalized in early March – currently still considered a "forecast" by Economy.com)
5. By sector (or combination thereof), scatter plotted:
 - a. National industry growth in excess of average national growth (x axis)
 - b. Local industry growth in excess of national average and national industry growth (y axis)

[Print](#)

Breaking News on Food & Beverage Development - North America

Previous page : [Emerging nutraceutical markets](#)

Emerging nutraceutical markets

By Lorraine Heller

5/9/2008- **In the last article in a series on the global nutraceuticals market, Nutralngredients-USA.com examines some of the emerging markets around the world, including Brazil, India, Africa and the Middle East, and Turkey.**

Pooled from Euromonitor, Datamonitor, Mintel and Nutrition Business Journal, the data was gathered by Capsugel's global business development manager for dietary supplements Peter Zambetti.

Zambetti, who is also in the International Alliance of Dietary/Food Supplement Association's (IADSA) global market affairs department, was addressing attendees at the recent Supply Side East trade show in Secaucus, New Jersey.

Brazil

According to Zambetti, Brazil is "a very difficult market to get into".

"The regulations there are difficult, most products are treated as drugs. There are tremendous opportunities but a lot of hurdles - if you want to get in there, it'll be years, not months," he told industry members.

The overall nutraceuticals market in Brazil was worth around \$881m in 2006, said Zambetti. The Latin American market as a whole made up about 3.1 percent of global nutraceutical sales.

In terms of product preferences in the Brazilian market, multivitamins was far ahead any other product, recording sales of around \$250m. Vitamin C was the second most popular product, with sales of over \$100m,

Tonics, child specific products and calcium all pass the \$50m barrier, while other products below \$50m included vitamin B, Gingko Biloba and Vitamin E.

India

According to Zambetti, India present a "huge market opportunity". The market shot forward with a 38 percent increase, he said.

The biggest selling product in the nutraceuticals category in 2006 were minerals, which recorded sales of almost \$120m.

Vitamins were close behind, with sales of almost \$100m. Protein powder came third, with sales of around \$90m.

Fourth in line was Chyawanprash, which contains 48 different ingredients and which hit the \$60m mark.

Multivitamins sold almost \$60m, and glucose powder was next at just over \$40m. Ginseng saw sales of around \$30m, vitamin B and calcium sold around \$20 each, while the vitamin C market was worth just over \$10m.

Africa and the Middle East

Multivitamins were the biggest selling product in these two regions, with combined sales of almost \$300m in 2006.

Vitamin B saw sales of almost \$150m, and vitamin C sold almost \$75m. Calcium and child specific products stood at the \$50m mark, with other products below \$50m including minerals, vitamin E, tonics and fish oils.

Turkey

The nutraceuticals market in Turkey is thought to be worth around \$200m - a small but fast growing market, which grew from almost nothing ten years ago.

Multivitamins were again the largest product category, with sales of just over \$70m in 2006. These were followed by calcium, with sales over \$40m, and minerals, which sold just over \$10m.

Other products under the \$10m mark were child specific products, B vitamins, tonics, vitamins C, D and E, and fish oils.

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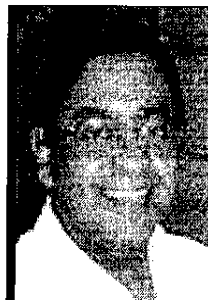
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Agglomeration Economies: The Spark That Ignites a City?

BY SATYAJIT CHATTERJEE

In industrially developed countries, employment is heavily concentrated in cities. A concentration of workers and businesses in one location — what economists call **agglomeration economies** — lowers production costs. In fact, most economists believe that in the absence of agglomeration economies, the spatial distribution of employment would be much more even. In this article, Satyajit Chatterjee discusses his research, which questions this belief. He finds that while agglomeration economies are an important factor, they're *not* the most important one. The combined effects of factors unrelated to agglomeration economies, such as the availability of natural resources and local economic policies, appear to account for the bulk of the spatial concentration of U.S. employment.

The bulk of an industrially developed country's economic activity takes place in cities. Typically, these cities make up a relatively small portion of the country's overall territory. For instance, 83 percent of total



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employment in the U.S. is located in metropolitan areas, and these areas account for 24 percent of the total land area of the country.

Why is employment so heavily concentrated in selected areas of the country? Economists think that spatial concentration of employment (or, more generally, economic activity) develops for two very different reasons. The first reason — and one that comes most readily to mind — is that a location attracts people and businesses because of the presence of some valuable natural resource. Petroleum, coal, lumber, minerals, and proximity to a

navigable river or to the coast are all examples of valuable natural resources. Because such resources are not available everywhere, people and businesses end up flocking to resource-rich areas.

However, the natural resource reason does not explain the full extent of the remarkable spatial concentration we see in reality. For instance, access to a deep harbor was no doubt important for the emergence of Philadelphia as a colonial city, but can it be the main reason for Philadelphia's subsequent evolution into one of America's pre-eminent metropolitan areas? Studies of urban evolution suggest a second reason for spatial concentration: A concentration of workers and businesses in one location lowers production costs because proximity permits workers and businesses to save on the costs of transporting goods and people. Economists refer to this cost advantage as economies of spatial concentration, or *agglomeration economies*, for short.

Agglomeration economies can be a powerful force for attracting large numbers of people to a given location. They can cause a location with some small advantage in terms of natural resources to become a place with a large concentration of diverse businesses and households. While the natural resource initially attracts businesses and households to the location, this original group then becomes the factor that attracts other businesses and households to that location. As the location grows in size, business costs fall and the location's attractiveness as a potential spot for other businesses and households rises, and more people and businesses move in.

Although rising congestion eventually chokes off the inflow of people, agglomeration economies can be the spark that ignites the development of a city.

Economists generally believe that agglomeration economies are the primary factor that leads to the large clusters of people and jobs we see in the real world. In other words, most economists believe that in the absence of agglomeration economies, the spatial distribution of employment would be much more even.

In this article I discuss my research, which tried to determine if this belief is, in fact, accurate. My research indicates that while agglomeration economies are an important contributor to the spatial concentration of employment, they're *not* the most important factor. Contrary to expectations, factors other than agglomeration economies appear to account for the bulk of spatial concentration. It's not clear exactly what these other factors are, but they could be differences in the availability of natural resources across metropolitan areas, differences in economic policies across cities and states, or some other advantage of spatial concentration distinct from agglomeration economies. Whatever the case, my research suggests that agglomeration economies are probably just one of several important factors affecting spatial concentration of employment.

THE FACT OF SPATIAL CONCENTRATION

To determine the contribution of agglomeration economies to spatial concentration, we need a measure of the extent of spatial concentration in U.S. employment. An effective way to do this is by using a Lorenz curve, a graphical tool originally developed to show the extent to which income is unevenly distributed across

people.¹ But Lorenz curves can also be used to show how unevenly employment is distributed across space.

To construct a Lorenz curve of spatial concentration, I first ranked metropolitan areas and rural counties in the continental United States by their employment density, the densest areas being ranked first. Using this ranking, I then calculated the percentage of employment accounted for by the first, or top, 1 percent of the total continental land area, then the

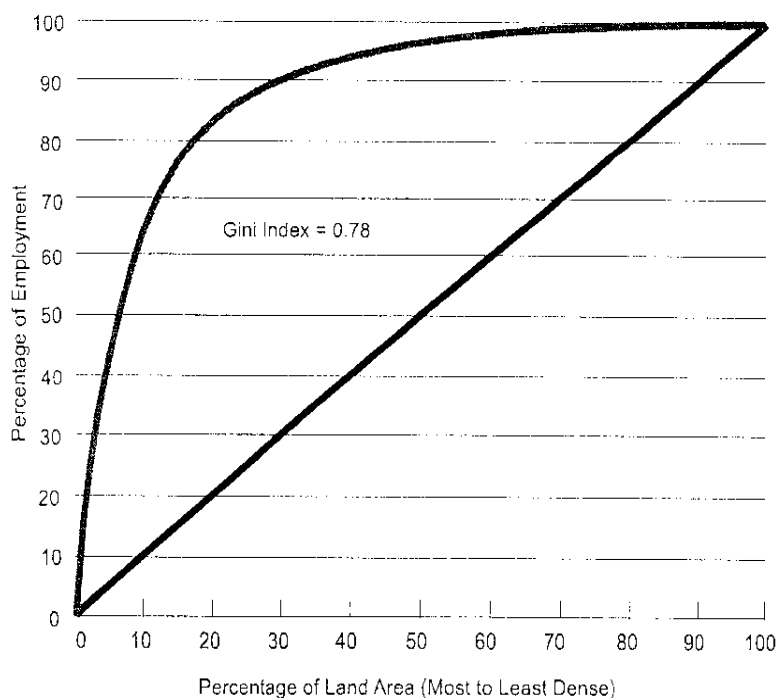
top 2 percent, and so on. The Lorenz curve is simply a graph that plots these calculations (Figure 1). If employment were uniformly distributed over the continental landmass, this graph would coincide with the 45-degree line shown in the figure. That is, the top 1 percent of the continental land area would account for 1 percent of employment, the top 2 percent of the area would account for 2 percent of employment, and so on. But if employment is not uniformly distributed, the graph will be bowed above the 45-degree line — as, in fact, it is.

As Figure 1 indicates, the top 1 percent of total continental land area accounts for about 15 percent of employment, the top 2 percent accounts for about 25 percent, and so on. Indeed, by the time we include the top 20 percent of the continental land area, we can account for more than 80 percent of total employment. Clearly,

¹ The statistician Max O. Lorenz (1880-1962) developed the Lorenz curve. The curve is probably the tool most used to analyze income and other distributions. Remarkably, Lorenz came up with the idea of the curve in his undergraduate thesis at the University of Iowa, circa 1894, at the age of 14! He went on to have a distinguished career, becoming the chief statistician of the Interstate Commerce Commission in Washington, D.C.

FIGURE 1

Spatial Concentration of U.S. Employment, 1999



U.S. employment is very unevenly distributed over space.

The Lorenz curve is an effective visual representation of the degree of spatial concentration of employment. It also provides the basis for the Gini index, a well-known index of concentration. The Gini index is a number between zero and one, and it is a measure of the difference between the Lorenz curve and the 45-degree line. It is computed by dividing the area between the Lorenz curve and the 45-degree line by the total triangular area above the 45-degree line. When employment is uniformly distributed, the Lorenz curve coincides with the 45-degree line, and the Gini index is zero. The more unevenly employment is distributed, the more bowed the Lorenz curve and the larger the area between the curve and the 45-degree line. Thus, the Gini index is higher for a more uneven distribution of employment and lower for a more even one. In Figure 1, the value of the Gini index is 0.78, which means the area between the 45-degree line and the bowed line represents close to 80 percent of the total area above the 45-degree line. This is the measure of spatial concentration I used in my research.

NATURE AND MAGNITUDE OF AGGLOMERATION ECONOMIES

As mentioned earlier, agglomeration economies arise because proximity permits workers and businesses to save on the costs of transporting goods and people. In this section I'll highlight one way in which this happens, then discuss what economists know about the magnitude of agglomeration economies in the U.S.

One reason agglomeration economies arise is that a large concentration of workers allows a business to deal more effectively with fluctuations in the volume of sales. Consider a business whose future demand can be

either high or low, with equal probability. When demand is high, the business needs four workers; when demand is low, it needs only two. The business has to hire workers *before* it knows how large demand will be. Suppose the business chooses to hire three workers. If demand turns out to be low, workers work at two-thirds capacity, and all demand is met. If demand turns out to be high, all workers work at full capacity, but one-quarter of demand is not met. So there is a 50 percent chance that every worker works at less than full capacity.

Agglomeration economies arise because proximity permits workers and businesses to save on the costs of transporting goods and people.

Now imagine that another enterprise in the same line of business moves into the area and this enterprise faces a similar uncertainty with respect to demand. However — and this is the key assumption — the level of the new firm's demand is independent of the level of the first firm's demand. This may happen if the firms have different sets of customers and serve different markets. This means that the combinations of demand across the two firms can take one of four possibilities, all with equal probability: (high, high), (high, low), (low, high), and (low, low). Now, when the two businesses have different levels of demand (which happens with probability one-half), the firm with low demand has an incentive to rent out its one excess worker to the firm with high demand. This is feasible because both firms are in the same location and the cost of moving workers between firms is presumably low. If the two firms shifted workers between them in this way, the only time any worker would work at less than full

capacity is when demand at *both* firms is low, which happens with probability one-quarter.

The movement of workers between businesses in the same location does happen in reality, although it takes the guise of contract workers selling their services to businesses on a temporary basis. For instance, we might have a situation where both businesses hire two permanent employees, and each business has the option to hire additional contract employees in the event the level of demand is high. In this arrangement, there are

four permanent workers and two contract workers. The permanent workers always work at full capacity while contract workers have a 75 percent chance of working at full capacity or a 25 percent chance they won't work at all. Contract workers take on the risk of unemployment, but if the two firms use some of their cost savings to pay contract workers more than full-time employees, contract workers might feel compensated for the risk.

To summarize, physical proximity makes it possible for firms to share workers and so allows businesses to take advantage of the fact that the combined demand of several firms is more stable than the demand of a single firm. This stability permits a group of businesses to better utilize workers than a single business. The improved utilization of workers lowers business costs and provides a reason for firms and workers to cluster together.

Let's turn now to a description of the strategies economists have used to estimate the magnitude of ag-

glomeration economies that stem from better utilization of workers. The most direct way to do this is to measure changes in the utilization of workers due to spatial concentration. However, because it's not easy to directly measure how hard employees work, economists have used more indirect methods. Let's look at two of these methods along with the estimates of agglomeration economies obtained using each one.

The first method uses information on labor hours and equipment purchased (also called capital) and goods (output) sold by different industries in different metropolitan areas. For any given industry, labor and capital purchased will have a higher utilization rate in metro areas with a large concentration of workers and firms. Thus, for any given industry and for any given amounts of labor and capital, more output will be produced in a large metro area than in a small one. The estimate we get from this method suggests that agglomeration economies make businesses in metro areas with more than 2 million people 8 percent more productive than businesses in metro areas with less than 2 million people.²

The second method uses information on hourly wages businesses pay to workers. Businesses that use workers more effectively face lower costs and so make higher profits. Given that, a business would be motivated to locate in a large metro area rather than a small one. But when businesses do so, they compete with one another and end up paying more for each worker they hire. In other words, in a competitive environment, higher worker

productivity will result in higher wages being paid to workers in large metro areas. By measuring the wages paid to similarly skilled workers in metro areas of varying sizes, we can estimate how much more productive workers are due to agglomeration effects. Studies that follow this approach have found that as a metro area doubles in size, the productivity of its workers rises 3 percent.³

AGGLOMERATION ECONOMIES' CONTRIBUTION TO SPATIAL CONCENTRATION

Given these estimates of the magnitude of agglomeration economies, the question is: How important are these agglomeration effects for the spatial concentration of employment? Answering this question involved two steps.

First, I constructed an economic model of local employment that can exactly reproduce the Lorenz curve in Figure 1, which gives the distribution of workers across metropolitan areas and rural counties in 1999. Second, I constructed a new Lorenz curve for a model economy that's identical to the one in the first step except that in this model, there are no agglomeration economies. If the Lorenz curve for this new model economy turns out to be close to the 45-degree line, I can reasonably conclude that agglomeration effects account for the bowed shape of the Lorenz curve in Figure 1. More generally, any difference between the Lorenz curve in Figure 1 and the Lorenz curve predicted by the model with no agglomeration effects can be attributed to the

effects of agglomeration economies. In particular, the difference between the Gini indexes for the two Lorenz curves is a measure of the contribution of agglomeration effects to the spatial concentration of U.S. employment.

Description of the Model

Economy. Briefly, the macroeconomic model in the first step has the following features.⁴ There is a given set of locations, corresponding to the 275 metropolitan areas and 2,248 rural counties in the continental U.S.⁵ Each location can produce two types of goods. One type, which I call *traded goods*, can be shipped without cost to other locations; the second type, which I call *local goods*, cannot be shipped at all. A household living in a given location derives benefit (or what economists call utility) from the consumption of the traded good and from consumption of the local good produced in that location. (The household cannot consume the local good of other locations because local goods cannot be shipped.)

Locations differ in terms of natural resources. In my model, the natural resources available to a location affect the productivity of labor and capital employed in the production of the traded good in that area. It may also affect how much enjoyment a household gets from living there. A location that has high productivity due to the presence of some natural

² Reported in David Segal's article.

³ This estimate is the median value of agglomeration economies across manufacturing industries reported in Leo Sveikauskas's article.

⁴ With some modifications, this is the same model I have used in previous research. The details of the model are in my article with Gerald Carlino.

⁵ The 275 metropolitan areas consist of 258 primary metropolitan areas and 17 consolidated metro areas. A consolidated metropolitan area is a group of neighboring primary metro areas between which there is a significant amount of commuting.

resources will attract firms making the traded good; an area that's pleasant to live in because it has some other natural amenity will attract households.

As a location with some natural advantage attracts businesses and households, it gains employment. The rise in employment generates agglomeration economies and lowers business costs. This serves to make the location more attractive to businesses, and more businesses move in and create jobs. However, the people who move in to take these jobs make the location increasingly congested, and this congestion causes the price of the local good to rise. The rising price of the local good reduces the purchasing power of the wages workers receive in that location and limits the inflow of workers. The migration of workers between locations will make the wage (adjusted for amenities) equal across all metro areas, and every person seeking work will be employed in some location.

In this model, the distribution of employment across locations reflects the availability of natural resources in each area, the magnitude of agglomeration economies, and the magnitude of congestion costs. The magnitude of the agglomeration effects in the model is consistent with the evidence on agglomeration effects noted in the previous section. Also, the magnitude of congestion costs is consistent with the evidence on congestion costs that researchers have found for U.S. metro areas.

Finally, the model's parameters use values that determine the effects of natural resources on employment, so that the employment density in each metro area and rural county in the model exactly matches the employment density of that metro area or rural county in reality. This final step makes it possible for the model to exactly reproduce the Lorenz curve shown in Figure 1.

What Does the Model Say About the Role of Agglomeration Economies in Spatial Concentration?

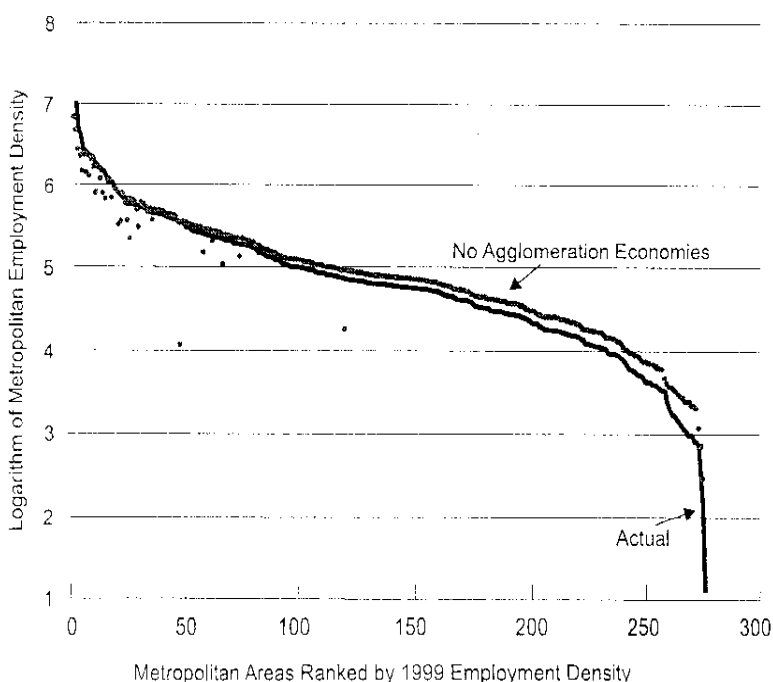
Using this model I can investigate the role of agglomeration economies in the spatial concentration of U.S. employment. As noted earlier, my strategy for doing this is to examine what happens to the spatial distribution of employment in my model when I eliminate the reduction in production costs due to agglomeration economies while keeping all other aspects of the model unchanged. The solid black line in Figure 2 plots actual employment densities for metro areas in 1999; the dotted line plots what happens to employment densities in these metro areas when agglomeration effects are removed. As the figure shows, a relatively small set of high-density locations become less dense and a large set of relatively low-density locations become denser.

The first set includes large metro areas, which benefit the most from agglomeration economies. These metro areas shed employment because they can no longer productively employ as many workers. Workers from these metro areas end up moving to smaller metro areas (and also to rural counties not shown in the figure), and consequently, these areas become denser.

The table lists the top 20 metro areas for which agglomeration economies seem most important. As one would expect, big cities like New York, Los Angeles, Chicago, and Atlanta are on the list. Los Angeles appears to be the city that benefits most from agglomeration economies in that almost 80 percent of its jobs would disappear if agglomeration economies were absent; Phoenix-Mesa is another area that appears to owe a lot of its employment to agglomeration econo-

FIGURE 2

Metropolitan Employment Densities With And Without Agglomeration Economies



mies. Philadelphia also makes the list and appears to owe 20 percent of its jobs to agglomeration economies.

Clearly, agglomeration economies appear to be very important for the development of specific cities, especially Los Angeles and Phoenix-Mesa. But how important is it generally? Figure 3 helps to answer this question. It compares the Lorenz curve when agglomeration effects are removed from the model constructed in step 1 with the Lorenz curve from Figure 1. The new Lorenz curve is less bowed, indicating that in the absence of agglomeration economies, employment is more evenly distributed. The Gini index declines about 16.5 percent, from 0.78 to 0.65.

The most striking feature of the new Lorenz curve is that it's still pretty far from the 45-degree line. Even in this world without agglomeration economies (but which is otherwise similar to the U.S. in important respects), there is considerable spatial concentration of employment. In other words, although the contribution of agglomeration economies is substantial, it's not as large as we might have expected. Recall that most economists consider agglomeration economies the most important reason for spatial concentration. But my model predicts that the U.S. would continue to be spatially concentrated, that is, have very dense areas, even if agglomeration economies were completely absent. Apparently, agglomeration economies are generally not needed to spark the development of cities!⁶

What, Then, Are the Other Determinants of Spatial Concentration? If agglomeration economies are not the key contributor to spatial concentration, what is? Taken at face value, my model suggests that it's the uneven distribution of natural resources that accounts for the bulk of spatial concentration. Indeed, some

researchers have suggested that access to a navigable river or coast is, in fact, a key determinant of spatial concentration in the U.S.⁷ Nevertheless, it's not accurate to say that any concentration left unexplained by agglomeration economies must result from the effects

⁶ It's possible that economists may have mismeasured the magnitude of agglomeration economies and congestion costs, thus affecting the values built into my model. However, when I varied the model's magnitude of agglomeration economies and congestion costs within plausible ranges (while ensuring that the model exactly reproduced the Lorenz curve in Figure 1), the drop in spatial concentration from elimination of agglomeration economies rarely exceeded 50 percent. Therefore, even with generous allowances for mismeasurement, agglomeration economies do not appear to account for the bulk of spatial concentration.

⁷ See the article by Jordan Rappaport and Jeffrey Sachs.

of natural resources. There are other factors, besides geography, that might affect spatial concentration and that are not captured in my simple model.

One potentially important factor is city- or state-specific economic policies. If an area happens to be located in a state with pro-business laws and regulations, it will have an advantage in terms of job creation relative to other areas.⁸ Another factor could be the cost savings from transporting goods from one region to another.⁹ For instance,

⁸ The article by Thomas Holmes presents evidence that state policies affect the location of industry.

⁹ The cost savings from shipping goods within metro areas are captured in the estimates of agglomeration economies used in my model.

TABLE

| Metropolitan Areas | Percentage of Employment Due to Agglomeration Economies |
|---|---|
| Los Angeles-Riverside-Orange County | 79 |
| Phoenix-Mesa | 48 |
| Dallas-Fort Worth | 32 |
| Washington-Baltimore | 29 |
| Houston-Galveston-Brazoria | 28 |
| Denver-Boulder-Greeley | 27 |
| Seattle-Tacoma-Bremerton | 25 |
| Detroit-Ann Arbor-Flint | 23 |
| San Francisco-Oakland-San Jose | 23 |
| Atlanta | 22 |
| Boston-Worcester-Lawrence-Lowell-Brockton | 22 |
| Minneapolis-St. Paul | 22 |
| St. Louis | 22 |
| Chicago-Gary-Kenosha | 20 |
| Philadelphia-Wilmington-Atlantic City | 20 |
| New York-Northern New Jersey-Long Island | 19 |
| Portland-Salem | 18 |
| San Diego | 13 |
| Cleveland-Akron | 12 |
| Pittsburgh | 11 |

part of Philadelphia's attraction as a business location is its proximity to two other large metro areas: Washington, D.C. and New York City. Philadelphia's proximity to these two places means that businesses in Philadelphia can ship goods relatively cheaply to two other large metro areas, thus giving them relatively cheap access to a very large customer base.¹⁰ A third factor could be that some benefits of spatial concentration go beyond reducing the costs of producing goods and services. It's well known, for instance, that most inventive activities take place in cities. Just as spatial concentration can reduce the costs of producing goods and services, it may also reduce the costs of producing new knowledge through better utilization of knowledge workers.¹¹

SUMMARY

Economists have generally pointed to agglomeration economies as the principal reason a country's employment tends to get concentrated in a relatively small number of geographic areas. Agglomeration economies refer to the reduction in business costs that results from a concentration of businesses and workers in the same geographic area. This reduction in business costs provides incentives for workers and firms to cluster together, despite the costs associated with increased congestion. Several empirical studies have found evidence of significant agglomeration economies in U.S. metro areas.

However, the mere existence of agglomeration economies does not

settle the question of whether these effects are the primary cause of the spatial concentration of employment. To settle that point, we need to deter-

Just as spatial concentration can reduce the costs of producing goods and services, it may also reduce the costs of producing new knowledge through better utilization of knowledge workers.

mine if agglomeration economies, as measured, are powerful enough to give rise to the degree of spatial concentration we see in the real world. This

article highlighted research that seeks to make this determination. Contrary to expectations, I found that the bulk of the spatial concentration of employment results from factors other than agglomeration economies.


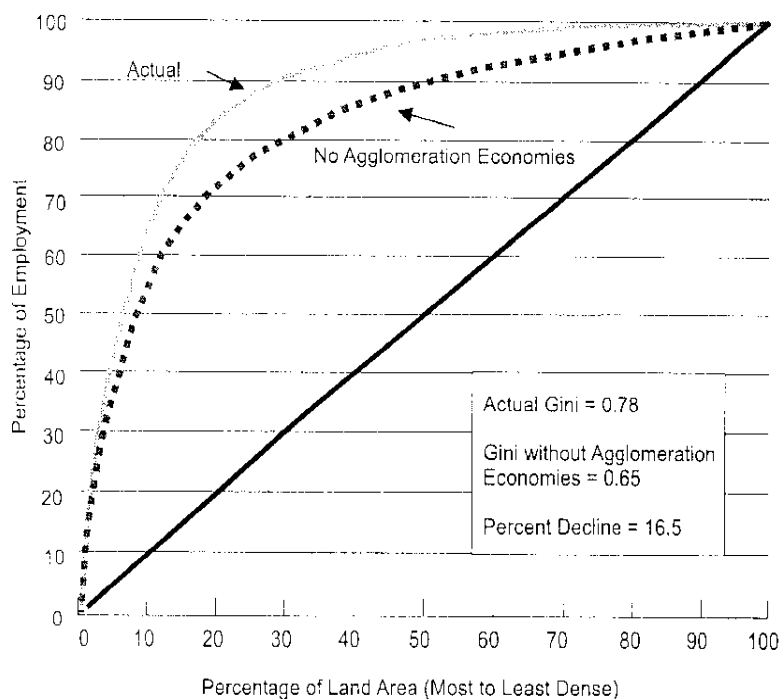
The flip side of my finding is that some set of other factors accounts for the bulk of spatial concentration. Although my research cannot shed light on the contribution of these other factors, it's possible to hazard a guess (based on the work that other economists have done) as to what these other factors might be: natural resources, state and local economic policies, proximity to other metro areas, and spatial concentration's benefits in creating new knowledge. Whatever the case is, my research suggests that agglomeration economies are one of several important factors, but not the principal factor, affecting spatial concentration of employment. 

FIGURE 3

Lorenz Curves With and Without Agglomeration Economies



¹⁰ See the article by Gordon Hanson; for evidence in favor of this point.

¹¹ The article by Adam Jaffe, Manuel Trajtenberg, and Rebecca Henderson and my article with Gerald Carlino present evidence that proximity may help in the communication of new knowledge.

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Biography of **John Maynard Keynes (1883-1946)**

So influential was John Maynard Keynes that an entire school of modern thought bears his name.

Many of his ideas were revolutionary; almost all are controversial. Keynesian economics serves as a sort of yardstick that can define virtually all economists who came after Keynes.

Keynes was born in Cambridge and attended King's College, Cambridge, where he earned his degree in mathematics in 1905. He remained there for another year to study under [Alfred Marshall](#) and [Arthur Pigou](#), whose scholarship on the quantity theory of money led to Keynes's *Tract on Monetary Reform* many years later. After leaving Cambridge, Keynes took a position with the civil service in Britain. While there, he collected the material for his first book in economics, *Indian Currency and Finance*, in which he described the workings of India's monetary system. He returned to Cambridge in 1908 as a lecturer, then took a leave of absence to work for the British Treasury. He worked his way up quickly through the bureaucracy and, by 1919, was the Treasury's principal representative at the peace conference at Versailles. He resigned because he thought the Treaty of Versailles was overly burdensome to the Germans.

Upon resigning, he returned to Cambridge to resume teaching. Keynes was a prominent journalist and speaker, and one of the famous Bloomsbury Group of literary greats, which included Virginia Woolf and Bertrand Russell. At the 1944 Bretton Woods Conference, where the International Monetary Fund was established, Keynes was one of the architects of the postwar system of fixed exchange rates. In 1925 he married the Russian ballet dancer Lydia Lopokova. He was made a lord in 1942. Keynes died on April 21, 1946, survived by his father, John Neville Keynes, also a renowned economist in his day.

Keynes became a celebrity before becoming one of the most respected economists of the century. What gained

Selected Works

See also:

- [Keynesian Economics](#)
- [New Keynesian Economics](#)
- [Monetarism](#)
- [John Hicks](#)
- [Bertil Ohlin](#)
- [Robert Solow](#)

him his celebrity status was his eloquent book *The Economic Consequences of the Peace*. Keynes wrote it to object to the punitive reparations payments imposed on Germany by the Allied countries after World War I. The amounts demanded by the Allies were so large, he wrote, that a Germany that tried to pay them would stay perpetually poor and, therefore, politically unstable. We now know that Keynes was right. Besides its excellent economic analysis of reparations, Keynes's book contained an insightful analysis of the Council of Four (Clemenceau of France, Prime Minister Lloyd George of Britain, President Woodrow Wilson of the United States, and Vittorio Orlando of Italy).

Keynes wrote: "The Council of Four paid no attention to these issues [which included making Germany and Austro-Hungary into good neighbors], being preoccupied with others,—Clemenceau to crush the economic life of his enemy, Lloyd George to do a deal and bring home something which would pass muster for a week, the President to do nothing that was not just and right." (Ch. 6, par. VI.2)

In the twenties Keynes was a believer in the quantity theory of money (today called monetarism). His writings on the topic were essentially built upon the principles he had learned from his mentors, Marshall and Pigou. In 1923 he wrote *Tract on Monetary Reform*, and later he published *Treatise on Money*, both on monetary policy. His major policy view was that the way to stabilize the economy was to stabilize the price level, and that to do that the government's central bank must lower interest rates when prices tend to rise and raise them when prices tend to fall.

Keynes's ideas took a dramatic change, however, as unemployment in Britain dragged on during the interwar period, reaching levels as high as 20 percent. Keynes investigated other causes of Britain's economic woes, and *The General Theory of Employment, Interest and Money* was the result.

Keynes's *General Theory* revolutionized the way economists think about economics. It was path breaking in several ways. The two most important are, first, that it introduced the notion of aggregate demand as the sum of consumption, investment, and government spending. Second, it showed (or purported to show) that full employment could be maintained only with the help of government spending. Economists still argue about what Keynes thought caused high unemployment. Some think that Keynes attributed unemployment to wages that take a long time to fall. But Keynes actually wanted wages not to fall, and advocated in the *General Theory* that wages be kept stable. A general cut in wages, he argued, would decrease income, consumption, and aggregate demand.

This would offset any benefits to output that the lower price of labor might have contributed.

Why shouldn't government, thought Keynes, fill the shoes of business by investing in public works and hiring the unemployed? General Theory advocated deficit spending during economic downturns to maintain full employment. Keynes's conclusion initially met with opposition. At the time, balanced budgets were standard practice with the government. But the idea soon took hold and the United States government put people back to work on public works projects. Of course, once policymakers had taken deficit spending to heart, they could not let it go.

Contrary to some of his critics' assertions, Keynes was a relatively strong advocate of free markets. It was Keynes, not Adam Smith, who said "there is no objection to be raised against the classical analysis of the manner in which private self-interest will determine what in particular is produced, in what proportions the factors of production will be combined to produce it, and how the value of the final product will be distributed between them." Keynes believed that once full employment was achieved by fiscal policy measures, the market mechanism could then operate freely. "Thus," continued Keynes, "apart from the necessity of central controls to bring about an adjustment between the propensity to consume and the inducement to invest, there is no more reason to socialize economic life than there was before."

Little of Keynes's original work survives in modern economic theory. Instead, his ideas have been endlessly revised, expanded, and critiqued. Keynesian economics today, while having its roots in *The General Theory*, is chiefly the product of work by subsequent economists including John Hicks, James Tobin, Paul Samuelson, Alan Blinder, Robert Solow, William Nordhaus, Charles Schultze, Robert Heller, and Arthur Okun. The study of econometrics was created, in large part, to empirically explain Keynes's macroeconomic models. Yet the fact that Keynes is the wellspring for so many outstanding economists is testament to the magnitude and influence of his ideas.

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The cuneiform inscription in the logo is the earliest-known written appearance of the word "freedom" (amagi), or "liberty." It is taken from a clay document written about 2300 B.C. in the Sumerian city-state of Lagash.

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**Seminar on Industrial Modernization:
Policy, Practice and Evaluation
Term Paper for PUBP 8100A
Professors: Philip Shapira & Jan Youtie**

**EXPLOITING LOCALIZATION ECONOMIES IN MATURE
INDUSTRIES: THE CASE OF METALWORKING IN SPRINGFIELD, MA**

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EXPLOITING LOCALIZATION ECONOMIES IN MATURE INDUSTRIES: THE CASE OF METALWORKING IN SPRINGFIELD, MA

SECTION ONE -- INTRODUCTION

The critical role of technology in economic growth is a widely accepted notion -- business and government leaders strongly consider greater and swifter technological innovation as the central ingredient in achieving economic prosperity. Technology is the impetus behind the proliferation of products and processes, and technological innovation permits entrepreneurs to seize advantages over competitors, and promotes the prosperity of one region over another. While technological innovation contributes to economic progress, one must understand that this change is actually a process of *learning* by people, and by organizations and regions. Technological innovation has many roots -- however, over the past several decades, research in innovation has illuminated its *multi-actor nature*, and particularly *the importance of structural and institutional factors* and of the *relational aspects* of the innovative process. While it is true that individual firm competence is the basis of innovative performance, firms operate within “**systems of innovation**” which intermesh their activities with those of other firms and organizations. Further, the process of innovation is *often non-systematic*, and occurs both within and across firms and industries through some impetus intrinsic to the firm or through linkages with other economic actors in the process. Finally, the role of innovation varies by industry type and age and by geographic region, and is influenced by structural and institutional factors, by culture [social or business] and by public policy. *It follows that if the innovation process is expanded and made more efficient, the probability of economic prosperity would be correspondingly higher.*

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For the purposes of this paper, industries are broadly classified as “**emerging**” or “**mature.**” Technological innovation in each type of industry may be different. There is a wealth of research on technological innovation in “emerging” industries, but somewhat less emphasis seems to be placed on “mature” industries. In spatial location decisions, firms take into account the benefits of *concentration* and of *urbanization*, because both produce positive externalities that can potentially translate into higher firm productivity. These benefits can broadly be termed “**agglomeration economies**” and may be found in cities and areas with high concentrations of similar firms. In older cities and in mature industries the benefits of agglomeration seem to be lower than in the case of emerging industries. This paper seeks to explore the link between agglomeration economies in mature industries and technological innovation through the medium of a case study on machine shops in the Springfield area of the Commonwealth of Massachusetts. Accordingly, after this introduction, *section two* introduces the concept of agglomeration economies. *Section three* describes the background of the metal working industry in the Springfield area and the problems faced by firms in this industry group. *Section four* briefly discusses problem solving attempts, in particular the Machine Action Project. *Section five* attempts to generalize the case to problems faced by mature industries. *Section six* concludes the paper, describing an expanded role for public policy in “retapping” the already existing potential for agglomeration in the context of these mature industries

SECTION TWO -- AGGLOMERATION ECONOMIES

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In the context of economic productivity, it is often seen that the level of productivity is often higher in large cities than in areas of lower population density because of agglomeration economies, which arise when firms locate near one another. The spatial proximity of these firms is an important factor in their productivity owing to positive externalities. A simple example should make the point clear -- if several competing firms require some common semi-processed input which is prohibitively expensive for them to individually acquire, proximal locations would enable a single supplier to efficiently supply the required input to all these firms. Their proximity is extremely advantageous, even though they are competitors!

Ceteris paribus, firms' production costs are lower in large cities because these areas offer a variety of specialized business services. As new firms enter the city [or start up in the city], and the size of the city increases, production costs for other firms in the city are also lowered because more specialized labor markets are created and specialization allows for more efficient operation. However, continued urbanization and increased agglomeration are also accompanied by other diseconomies such as congestion, pollution and crime that eventually offset further agglomeration economies. In the long run, as these diseconomies rise, growth slows down. The traditional view suggested that though the link between agglomeration economies and congestion diseconomies leads to differences in the level of productivity across places, the growth rate of productivity would be the same across places. This traditional view has been sharply questioned through the link between productivity growth and increased education. Within cities with strong agglomeration economies, the higher density of population and employment promotes educational externalities that sustain

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productivity growth at a rate greater than other areas. This modern view focuses on the *development of human capital* -- people's stock of knowledge and production skills. Increased education or training enables people to receive higher wages and to consume more goods and services over time. Firms are willing to pay more. Education or training leads to greater output, and the education may strengthen the worker's ability to learn while doing. Further, as individuals accumulate knowledge and experience, they also contribute to the productivity of others with whom they are in contact through "**knowledge spillovers.**" This phenomenon of knowledge spillover is especially strong in agglomeration economies where communication between individuals and firms is widespread.

In general, two types of knowledge spillovers occur in regions where there is intense communication between individuals and firms, which are deemed important for city growth. The first depends on the concentration of firms in the same or similar industry groups [*localization economies*] and the other depends on the diversity of firms in a given city and the general urban conditions [*urbanization economies*]. This paper focuses largely on localization economies. An oft-repeated example of localization economies can be found in the Silicon Valley area, where many semi-conductor firms have located their research and development facilities because firm concentration provides a nurturing environment where new products and production technologies can be developed. Edward Glaeser et al demonstrate how the semiconductor firms learn from one another because "people talk and gossip, products can be reverse engineered, and employees move between firms."¹ Urbanization economies suggest that industrial variety is more important than specialization for a city, since an exchange of ideas in more diversified settings occurs, which encourages technological innovation.

¹ Glaeser, Edward, Hedi Kallal, Jos, Scheinkman and Andrei Shleifer, "Growth in Cities," in *Journal of Political Economy*, 100 [1992], pp. 1126-1152.

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Studies have been conducted on these spillover effects, and empirical evidence has been found that suggests that a higher average level of human capital in metropolitan areas has external effects that lead to greater productivity.² There is not enough evidence however to suggest that this is a permanent phenomenon.

SECTION THREE -- CASE STUDY: METAL WORKING IN SPRINGFIELD, MA

Springfield is located in the Pioneer Valley in Western Massachusetts and is the third largest city in the state, with a population of about 157,000. Springfield had its origins as a manufacturing town -- the first US Armory was established here in 1794, specializing in manufacturing firearms and fabricated metal products. The manufacturing tradition extended to modern times.

The metalworking industry suffered a sharp decline in the early 1980s owing to a large decline in the domestic consumption of machine tools and precision machinery. The metal working industry has had strong ties with the defense industry and is feeling the pressure of budget cuts. In response to historically volatile demand, the usual firm response was to accumulate a backlog of orders -- when demand picked up again, foreign firms were able to fill these orders more quickly. The industry is under tremendous pressure from foreign competition and firms have trouble competing due to their internal cost structures. Foreign firms, especially Japanese firms captured the lead in both product

² Rauch, James, "Productivity Gains from Geographic Concentration of Human Capital: Evidence from Cities," in *Journal of Urban Economics* 34 [1993], pp. 380-400.

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and process technologies. While the industry does not lag behind foreign competitors in terms of technology today, it is certainly behind in the application of the technology.

Other manufacturing in the region have downsized, streamlined or disappeared throughout the 1980s. State and local policymakers were of the opinion that the metalworking sector was decimated, and economic revitalization required a transition away from traditional manufacturing towards service-based industries. However, in the Springfield area, there were a large and complex network of small closely-held metalworking firms, mostly subcontractors with narrow product lines, producing parts for other manufacturers in the region. Traditionally, in the US, the industry has not been characterized by significant firm concentration. According to the Commerce Department, in 1977, the four largest metal cutting machine tool establishments were responsible for 22% of industry shipments. In 1981, 15 companies accounted for about 70% of the machine tools industry shipment, while the other 30% came from the remaining SMEs in the industry. *The concentration and the networking of firms within this industry in the Springfield area was and is an inherent advantage.* With large scale layoffs in other manufacturing in the region in the 1980s, significant damage was experienced by the SMEs in the metal working industry in the Springfield area.

Machine tool and metal working sales in general have traditionally been sensitive to changes in the business cycle, with extreme cyclicity of its income, profits and cash flow.³ This sales pattern forced the industry into adopting a strategy of "buffering" business cycles by accumulating order backlogs from boom times. In the past, this enhanced interfirm linkages, as firms in the area

³ Year-to-year swings in machine tool orders of +75% to -50% have occurred -- American Machinist, August 1982, pp. 51, National Machine Tool Builders' Association.

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subcontracted each other in order to handle increased demand. However, this pattern and the subsequent strategy prevented even large metalworking firms from having the capital investment, R&D, and overseas sales structure found in other manufacturing firms of similar size. Further, this tended to increase turnaround time between periods of increased demand, whereas foreign firms recovered much faster. This cyclical nature also had an effect on employment patterns within the industry -- even though wages tend to be higher than other manufacturing sectors, sharp fluctuations have been observed. During lean times, this increased layoffs, and reduced interfirm linkages, both in terms of subcontracting and the transfer of personnel between firms. Successive periods of lean demand eliminated many SMEs and promoted fierce competition among the remaining firms, further reducing interfirm linkages and trust across the industry. This has been responsible for fragmentation and poor long term industry management. Altogether, this has resulted in a conservative management style and the inability of the industry to attract and retain the brightest engineering, managerial and technical talent. In terms of profitability also, sharp fluctuations are observed between peak and lean times.

Managers and owners of SMEs in the Springfield area [and in the US in general] have also been criticized for taking a short-term perspective on their markets. Few companies have invested in R&D, drawing on outside sources for new technology and new product design.⁴ Capital investments have also been somewhat limited -- firms tended to stretch out orders over time and accumulate a backlog, rather than invest in increased capacity to accommodate cyclical changes in demand. Productivity also had been decreasing in the 1980s, in part because of skilled worker retention during

⁴ for instance, from the manufacturers of computers and controllers, industrial system designers and Defense contractors, rather than from internal R&D.

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periods of lean demand, and in part, because of the lower levels of R&D and capital investment, which increase productivity in technology-intensive industries. Marketing strategies have also concentrated on the short term, and on few buyers with little customer-based variation. The market has changed over the last decade, and competition is more global in nature.

In terms of technology, automation of a machine tool's function by computer numeric control [CNC] has been available to US manufacturers for over three decades. In 1982, about 36% of the machine tools purchased in the US were operated by CNC machines. Heavy international competition has promoted success among firms that have lowered their production costs, and most of these were foreign firms. Increased automation, flexible and integrated manufacturing⁵ are being increasingly emphasized. Although there is substantial evidence that the US is at least as technology advanced in metalworking as Japan in flexible and automated technology, the chief difference between the two countries lies in the application of the technology. Additionally, in the Springfield area, few investments were made in automated technology, and machines used in metalworking were relatively old, when compared with competitors, resulting in lowered productivity. Annual productivity growth [output per man hour] declined from 1973 to 1981, and has been relatively stagnant since. In 1978, 40% of US production machinery in the metalworking industry in use was over 20 years old, while the comparable figure for Japan was estimated at 18% [US Department of Commerce].

SECTION FOUR -- REVERSING THE TREND: POLICY RESPONSES IN THE SPRINGFIELD REGION

⁵ integrated manufacturing -- traditional machine tools are used as parts of larger manufacturing systems incorporating the products of non-machine tool manufacturers, such as computers.

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The situation is more optimistic today and the area has a “thriving and competitive agglomeration of over 350 small metalworking firms, many of which are at the forefront of technological and organizational innovation.”⁶ Flynn and Farrant claim that an important part of the explanation lies in a series of *social* and *political* interventions over the last ten years that altered the downward trends faced by the metalworking industry in the Springfield area. The process was catalyzed by the Machine Action Project and the work is being continued today by a local chapter of the National Tooling and Machine Association. Essentially, the programs accelerated *interfirm learning* among firms that created an awareness of common problems faced by the industry, which could be addressed through “*group strategies*.” The program also resulted in an enduring *public-private partnership* that could tailor economic development programs to suit industry needs, and more broadly, the needs of the Springfield region.

The authors argue that the program represents a successful case of the “**bootstrapping**” approach in which new social and industrial structures, organizations and services emerge through a *dynamic process of engagement and mutual adjustment*. In other words, even though the perspective of a small metalworking firm is decidedly partisan, the learning inspired by the bootstrap approach altered the firms’ outlook. Firms negotiate amongst themselves and with public institutions, and adopt programs, policies and strategies, both on the individual and group levels to their mutual benefit. The programs used industry-based research to define pervading industry problems, and emphasized strategies formulated through industry participation. The program also reinforced the need for a

⁶ Farrant, Robert and Erin Flynn, *Seizing Agglomeration’s Potential: The Greater Springfield Massachusetts Metalworking Sector in Transition, 1986-1996*, forthcoming *Regional Studies*, 1997.

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“genuine” public-private partnership and for *flexible* state funding. Unlike most other manufacturing modernization and industrial extension programs throughout the country, which typically work with short-term goals involving technical or organizational problems at the individual firm level, the Machine Action Project demonstrates that “a collective approach of working with and not for industry provides the greatest potential for maintaining and expanding competitive small firms in an economy characterized by constant change.” Working at the individual firm level does provide quantifiable benefits, but does little to promote industrial learning; strengthening linkages between and among firms stimulates innovation both at the technological as well as organizational level. On the other hand, solving common industry problems, such as the dearth of skilled employees, the need for new products or processes, etc. would help in the construction of “social” or “human” capital that is necessary for changing the dynamics of industrial structure in a regional economy.

The original intent of the MAP was to ease the transition away from metalworking in the Springfield region toward modern service-based industries. However, the initial data revealed the existence of a *concentration* of numerous small metalworking firms in a complex *network* within the Springfield region. Rather than retrench the extant labor of the industry, the MAP decided to nurture the remaining metalworking firms that provided machine parts and tools for the machine tool, aerospace, defense and electronics industries. Transitioning workers in the metalworking industry to other service industries would consume time and resources -- instead, regional economic development could be promoted by tapping the localization economies already embodied in the concentration of metalworking firms within the region. In order to “seize agglomeration’s potential,” specific tasks were accomplished.

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A project board of directors was created, consisting of firm owners, local public officials, local banking representatives and members of the educational, academic and press communities. *Research* was conducted on an industry-wide basis, and revealed that more than 30% of private sector employment in many cities in the region was in metalworking, and more importantly, firms *interacted* in a coherent manner. The research also revealed that workers in small firms had more breadth and depth of skill than others in large firms who were more frequently laid off. Further, the research revealed that there was *a shortage of skilled labor* in the region! The board then employed appropriate training and retention strategies, apprenticeship programs and improved the existing curricula in technical schools and colleges in the region to correct the imbalance in supply of skilled metal workers.

Research also revealed that utilization of high technology was *not effective* because of the short supply of repair personnel and trained computer programmers. In response, the MAP established a *training consortium* of local industry, educational and quasi-public institutions to design a curriculum for the installation and repair of computer-controlled machinery. Other *partnerships* were established with Resource Centers and educational institutions to train programmers and provide technical assistance for the effective utilization of high-tech machinery.

Defense cutbacks were also eroding once dependable markets, because subcontracting from prime contractors was reducing in both size and number. *Workshops* and *seminars* were held to improve

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marketing of products, and to widen product lines for firms without resorting to large capital investments.

The MAP strategy evolved from thorough research of the local industrial base, and of *the problems faced by the industry interpreted by both experts and firm owners*. The research was not purely academic, and was *oriented strongly towards action*, by which several areas of potential employment growth [especially in SMEs] were identified within the mature industry.⁷ Further, by acting as a catalyst between local industry, state agencies and academic institutions, the MAP was able to construct specific programs to increase the supply of skilled labor within the region, that were sensitive and responsive to industry needs.

The work initiated by the MAP was extended by the local chapter of the National Machine Tools Association [henceforth NMTA] to improve both technical and organizational skills, focusing on the need for a "continuous and coordinated upgrading of skills to allow employers to utilize existing technology to remain competitive." *Interfirm learning, managerial skills upgrading and shop modernization projects* were strongly emphasized. In addition, *apprentice programs* combining academic and professional learning and *intensive intermediate and advanced machining courses* were set up to increase the skilled labor pool. The NMTA strategy was founded on the notion that public spending would be more effective if the content and delivery of programs were *designed by industry*, and extended the broker role formerly played by the MAP. Their programs were also

⁷ Fitzgerald, J. and A. McGregor, "Labor Community Initiatives in Worker Training in the United States and the United Kingdom," in *Economic Development Quarterly* 7 [1993] pp. 172-182.

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designed based on dynamic industry-based and action-oriented research, utilizing the combined resources of the *public-private* partnerships in the region.

Specifically, management seminars were held to teach employees, managers and owners about quality assurance and management techniques increasingly demanded by customers. Owners and managers were invited to *share* their efforts in improving shop operations and management techniques. While acknowledging the fact that fierce competition exists in declining industries, the profusion of firms in the region, the relatively long ownership reigns on firms, the existing networking connections between firms and the previous work done by the MAP helped in bringing the firms together. These meetings provided an opportunity for owners to speak openly about individual and industry problems, and to improve their operational skills. The apprenticeship program students rotate through several shops over a four year period learning all aspects of the metalworking industry, thereby improving the potential for innovation through the employment, exchange, and transfer of apprentices/employees. At the individual firm level, the NMTA aided in facilitating concrete changes in technology, layout, organization and management, including partial funding. The research-based activities also allowed both the MAP and the NMTA to experiment with *flexible funding*. The organizations were also strongly backed both by industry and local government, and hence demonstrated success in continuous improvement both at the firm level and at the program administration level.

SECTION FIVE -- LESSONS FROM THE CASE STUDY

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The case clearly demonstrates the potential for planned public policy intervention. The role of public policy will be elaborated in the conclusion. However, there are certain general characteristics faced by firms in mature or declining industries such as metalworking, which must be identified before any sort of intervention can be planned.

As was seen from the description of the metalworking firms in the Springfield area, mature industry markets are characterized by *slowing demand*, generating head-to-head competition for market share. Customers tend to become more discerning, and drive harder bargains on repeat purchases. Greater emphasis needs to be placed on costs and service, but firms have a problem of “topping out” in increasing production capacity. *Capital investment thus tends to be lower*. Product innovation and new end-use applications are often harder to come by. Other related industries slow down too, and firms with few large customers face severe problems. Machinery and technology used tends to be *dated*, and *average productivity remains stagnant* or actually declines, while *international competition increases*. Profitability in general is reduced. The slower rate of market growth causes competitive pressures to intensify, causing elimination of weaker competitors. With stagnant productivity and lowered profit potential, skilled labor begins to migrate out of the industry, creating a shortfall. *Technological advances occur exogenously*, causing entry of new types of firms, new forms of demand by end-users and changes to the traditional industry form and structure. Additionally, newer firms outside the region and in foreign locations are quicker to invest in and adopt the new technology or management practices, and therefore lower their production costs relative to the firms of the mature industry within the region. In effect, *firms in the mature industry are not as responsive to changes in technology, particularly in application*. Further, since they are

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steadily forced into a position of disadvantage, they hesitate to invest in capital needs or in R&D, which determines the exogenous origin of new technology. The slowing demand, stagnant productivity and lowered profits generates intense competition, and reduces the overall level of trust, cooperation and linkages between firms and consequently, product innovation is harder to achieve. In order to compete strongly, firms have to quickly adapt to new and changing markets, technologies and management techniques. Individual firms may have to prune their product lines, and emphasize cost reduction techniques. They may have to strongly pursue process innovation and different marketing styles to increase sales. Finally, they may also have to purchase weaker firms at bargain prices to accommodate fluctuating demand and/or expand internationally. Most weaker firms are eliminated because of over-reliance on few large customers, or emphasis on the short-term rather than long-term competitive positions and failing to aggressively pursue cost reductions. Stronger firms are those that respond to the technological or market stimulus, exploit growth segments or “niches” within the industry and pursue product differentiation strategies.

The metalworking industry in the Springfield area had an inherent advantage owing to the concentrated network of firms. Rather than transitioning the industry out of the Springfield area, public policy analysts determined that the potential of using the existing agglomeration economies would be more fruitful. Note that most studies conclude that concentration of similar firms in a region is neither a necessary nor sufficient condition for successful collaboration or innovation. However, *the probability of innovation and diffusion of knowledge is much higher in areas with known agglomeration economies*. Innovative milieus tend to locate in or near highly urbanized areas, and concentrated networks of similar firms can potentially contribute strongly to enhancing

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innovation. While this is a general observation, agglomeration economies work differently in mature industries. In mature and declining industries, firms engage in intense competition marked by fierce privacy, and it is difficult to foster cooperation or linkages between and among firms in such environments. Low profitability, reduced supply of skilled labor and stagnant productivity reduce investment in technology and R&D. Therefore, without a catalyst, technology is neither born nor diffused!

SECTION SIX -- CONCLUSION: THE ROLE FOR PUBLIC POLICY

The role of public policy is almost self-evident here and from the case. The problems of the metalworking sector and indeed of most mature industries are best addressed by an industry-wide effort. Public policy should be based on a thorough *action-oriented research* of the industrial base, highlighting present problems and future trends. *Research should originate in the industrial sector* or be conducted *at least in partnership with the industry*. Industry-based research could then be used to tailor programs for local needs. The benefits of all existing advantages in the region including those of agglomeration should be analyzed in order to determine the potential for transforming the industry and/or fostering growth in niche areas within the industry.

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Policy should also be aimed at fostering the *development of local cooperative networks among firms, users and suppliers* in the region. In fact, this is crucial, because these networks can provide a package of services beyond the capacity of most SMEs. *Creating these networks in areas with high concentrations of SMEs would probably be easier than in areas where such localization economies do not exist.* These networks could prove invaluable in the diffusion of technologies and in the transfer of innovative techniques across firms to their mutual benefit.

Since mature industry firms are also characterized by reduced supply of skilled labor, policy efforts must be directed at redressing labor problems. Investments and programs for the training and education of skilled labor including the potential to operate, maintain and innovate new machinery/technology. Apprenticeship programs such as the one in Springfield have clear benefits in that they provide skilled labor and foster innovative potential through the exchange of employees across firms.

Mature and declining industry firms are usually not in a position to invest in new technology or in R&D. This causes stagnation in productivity and losses in market share as customers are captured by other firms with better technology outside the region. Public funding can be used effectively here by *increasing investment in applied research and transferable industry skills and towards improving production and management processes.* Concentrated networks of SMEs lend themselves easier to the effective use of public funds, especially if technological needs are defined in partnership with the industry. Such a concentrated network of firms could collectively invest [in partnership with the state or local government] in technological infrastructure, that they could share to their mutual benefit. In

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addition to the direct benefits, this would promote interfirm learning, cooperation and trust, leading to greater potential for innovation and diffusion. Effectively, technology flows can shape the traditional mature industry, which must then be in a position to transform itself into a more dynamic, technologically receptive and integrated industry. Experiences in other countries such as Japan and Germany suggest that technologically innovative SMEs can competently compete with larger firms if given reasonable access to R&D, funds and credit.

Finally, firms in mature industries usually do not have the time nor resources to investigate other domestic and international markets. Macro-oriented research in technology and marketing in the industry would identify weaknesses in production chains and new potential customer bases. In combination with streamlined export licensing, the global presence of these industries could be ensured.

In summary, successful tapping of the potential of localization economies in mature industries is not the result of a single program. It arises out of a dynamic and disciplined process between firms, industry associations, educational and research institutions and public agencies, characterized by research, sharing of knowledge, experimentation, negotiation, mutual partisan adjustment and reflection. Public policy programs can effectively serve in broker roles to catalyze the process, and ultimately lead to industry-driven initiatives and programs administered by and for the member firms. In other words, tapping the potential of localization economies in mature industries requires the development of social capital in order to develop a coordinated program capable of transforming the stagnant industry into a technologically more dynamic, innovative and competitive industry. The

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development of social capital often requires a jump start that partnerships between industry, financial and research institutions and local government can provide.

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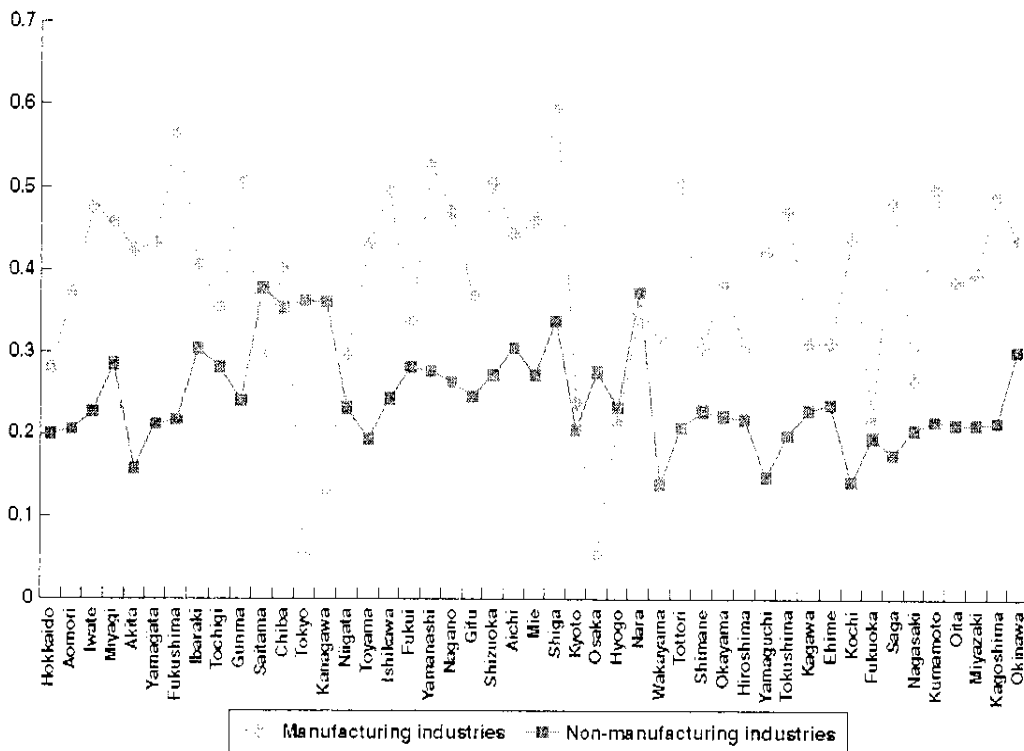
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Growth contribution of localization economies (%: 1980-2001)

The Empirical Research of Industrial Agglomeration Effects on the Regional Economic Growth

— The analysis of manufacturing industries and non-manufacturing industries in the 47 prefectures for 1980-2001 —

1. Changes in Regional Economies and the Solitary Journey of the Capital Region
2. Effects and Impact of Industrial Agglomeration on Economic Growth
3. How to Compete with the Capital Region?

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Changes in Regional Economies and the Solitary Journey of the Capital Region

From the post-war period of high economic growth until the beginning of the 1980s Japan aimed for economic growth and reduction of regional disparities based on the "Comprehensive National Development Plan" which advocates "balanced development of the nation". However, as globalization of economic activity and the "hollowing out" of industry have progressed since the latter half of the 1980s, the industrial competitive advantage of regions can potentially create the economic disparities between large metropolitan areas, such as the capital region, and other local regions.

In recent years, increasing attention has been paid to industrial agglomerations as a stimulus to regional economic activity, and each region is making efforts to promote industrial agglomeration based on programs such as the "Industrial Cluster Project" of the Ministry of Economy, Trade and Industry and the "Knowledge Cluster Initiative" of the Ministry of Education, Culture, Sports, Science and Technology. However, the effects of industrial agglomeration on regional economic growth have not yet been fully clarified. The Central Research Institute of Electric Power Industry, utilizing the CRIEPI Regional Economic Database, verified the effects of industrial agglomeration on manufacturing and non-manufacturing industries in Japanese prefectures for 1980-2001.

Hollowing-out of the manufacturing industries

In Japan, the exodus of factories abroad has progressed, and the hollowing-out of domestic manufacturing has proceeded. The number of establishments and shipments of manufactured goods have decreased since the late 1980's (see Fig. 1). Accordingly, foreign direct investment and the ratio of overseas production have increased in the manufacturing industries, and the hollowing-out of domestic manufacturing, which was the core of regional economies, advanced during the 1980's and the 1990's (see Fig. 2).

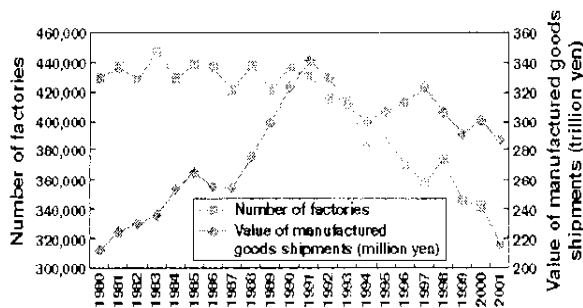


Fig.1 Changes in the number of factories and value of manufactured goods shipments

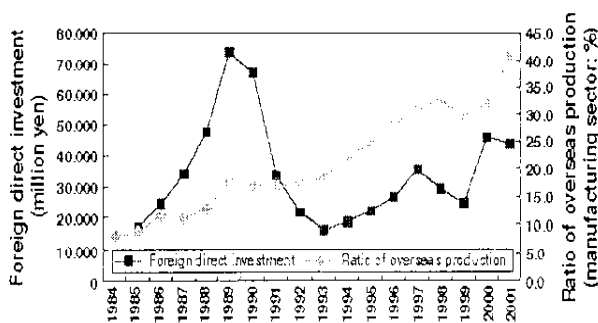


Fig.2 Changes in overseas production and overseas investment

Economic activity concentrated in the capital region

The employment share of the service sector, which is included in non-manufacturing industries, has increased (see Fig. 3). The concentration of economic activity in the capital region is particularly significant. The capital region has nearly 30% of the total population vs. 10% of the total habitable area. The production share in this region also exceeds 30% (see Table). Total revenues in the service sector have the increasing returns to the population (Reference: CRIEPI "An empirical analysis of the regional productivity disparities in the service industry"). Therefore, it is necessary that local regions improve productivity to achieve economic growth.

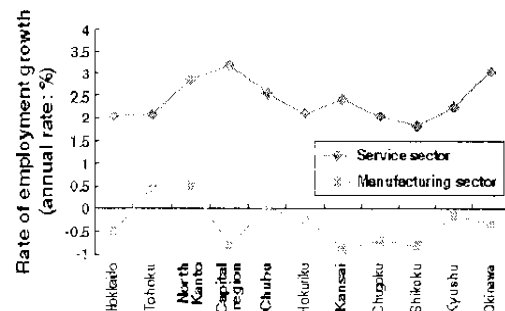


Fig.3 Service sector which has grown nationwide vs. slumping manufacturing sector

Table. Economic activity concentrated in the capital region (2001)

| | Population (% of total) | Habitable area (% of total) | Value of production (% of total) |
|----------------|-------------------------|-----------------------------|----------------------------------|
| Hokkaido | 4.5 | 18.0 | 4.1 |
| Tohoku | 9.8 | 20.4 | 8.6 |
| North Kanto | 6.3 | 8.4 | 6.0 |
| Capital region | 26.2 | 7.3 | 30.7 |
| Chubu | 13.4 | 10.9 | 14.5 |
| Hokuriku | 2.5 | 3.5 | 2.5 |
| Kansai | 16.3 | 7.0 | 16.0 |
| Chugoku | 6.1 | 6.9 | 5.8 |
| Shikoku | 3.3 | 4.0 | 2.7 |
| Kyushu | 10.7 | 12.6 | 8.6 |
| Okinawa | 1.1 | 1.0 | 0.7 |

How to Compete with the Capital Region?

Creating and promoting competitive industries

Due to the decrease in population—which will accelerate in the future—it is difficult for the Japanese economy to achieve long term sustainable growth. Moreover, the inflow of population to the capital region, which decreased in the mid 1990s, is showing signs of accelerating again (see Fig. 7). Once the location choice of the service sector (non-manufacturing industries) increases in favor of the capital region, that concentration can potentially expand regional disparities by localization economies.

Local regions cannot compete with the Capital region in economic scale. In order to promote economic growth, it is important to create new products and services through product innovation and to enhance industrial competitiveness. Collaborations with industries and universities are expected to strengthen the agglomeration effects in local regions.

Inter-regional networks with foreign countries have become more important

It is also important that local regions form networks with production sites in other countries. For instance, it may be advantageous for the Kyushu region to strengthen linkages with not only other regions within Japan but also other Asian countries in its geographic proximity. It is necessary to investigate the effects of networks on regional economic growth.

Furthermore, the previous research clarifies that industrial agglomerations play a role as incubators of new businesses (reference: CRIEPI “Determinants of regional disparities in starting-up firms in Japan cross-section data evidence”). In order to achieve regional economic growth, it is essential that local governments continue to promote the formation of local clusters in the long term.

● Brief Note



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Due to the decrease in population, it is difficult for the national economy to achieve long term sustainable growth. In addition, regional disparities are likely to expand based on differences in industrial competitiveness. In order to realize the sustainable growth of regional economies, productivity of the overall economy needs to be improved by promoting the formation of industrial agglomerations. I have clarified the changes in regional economic structure based on an economic theory, and I aim to provide some policy implications that can contribute the development of regional economies.

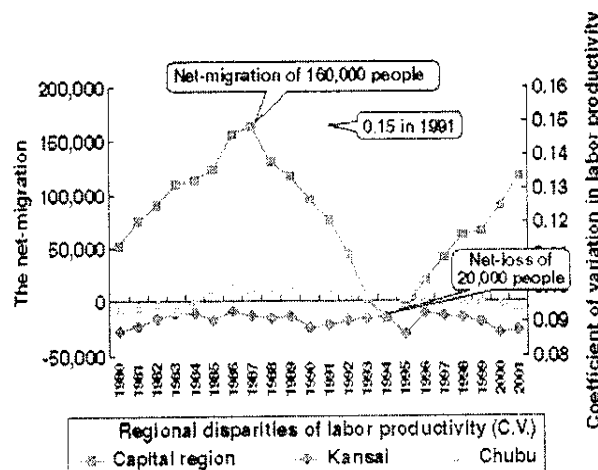


Fig.7 Report on Internal Migration in Japan



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Goods-producing

Natural resources and mining

NAICS 1133--Logging

Sector 21--Mining

Construction

Sector 23--Construction

Manufacturing

Sectors 31, 32, 33--Manufacturing

Durable goods (NAICS 321, 327, 331, 332, 333, 334, 335, 336, 337, 339)

Nondurable goods (NAICS 311, 312, 313, 314, 315, 316, 322, 323, 324, 325, 326)

Service-providing

Trade, transportation, and utilities

Sector 42--Wholesale trade

Sectors 44, 45--Retail trade

Sectors 48, 49--Transportation and warehousing

Sector 22--Utilities

Information

Sector 51--Information

Financial activities

Sector 52--Finance and insurance

Sector 53--Real estate and rental and leasing

Professional and business services

Sector 54--Professional, scientific, and technical services

Sector 55--Management of companies and enterprises

Sector 56--Administrative and waste services

Education and health services

Sector 61--Educational services

Sector 62--Health care and social assistance

Leisure and hospitality

Sector 71--Arts, entertainment, and recreation

Sector 72--Accommodations and food services

Other services

Sector 81--Other services


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What Drives Profits ? An inquiry into the profit paradox

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ABSTRACT

This paper investigates the relationship between the different types of income and their uses in the case of the United States, from 1954 to 2004. The methodology employed is that of an unrestricted error-correction model which is widely viewed as an advanced, non-partisan, econometric technique. The introduction of the paper stresses the importance of studying profits in a large-scale model, where a lot of variables underlie complex economic relationships. The first part of the paper presents the a-theoretical framework of error-correction models and describes the main properties of the estimated system. Our study focuses on the place and determinants of corporate profits and provides an illustration of Parguez[2002]'s "Profit Paradox". Doing so, we introduce different concepts of causality and provide a dynamic causal chain that drives profits, both in the short run and the long run. This causal chain is treated both qualitatively (which variable precedes profits) and quantitatively (weight of the impact of a change in the profits' predictors). Part two provides a more theoretical approach to our results. We, in particular, show the coherence of our individual results and provide a restatement of such findings through the behavior of profits since the eighties. Our main findings are :

- (1) Profits cannot be said autonomous, i.e. profits are very much more 'caused' (or determined) variables than 'causing' (or determining) variables.
- (2) *In the short run*, profits do always depend upon *demand variables*, especially upon consumption, indebtedness and government spending ;
- (3) *In the longer run*, profits are again found to be dependent variables, but the factors determining profits behavior are more *income-variables*, especially rents.
- (4) 'Discipline' policies are doomed to fail until the desirable goal of balancing the budget is understood as a *means rather than a natural outcome* of a demand-driven growth.

INTRODUCTION

The motivation of the present paper is an attempt to inquire a possible explanation of the rather ubiquitous support of the business community in favor of 'discipline' macroeconomic policies. 'Discipline policies' are the fashionable economic doctrine of economic policy ever since the seventies and early eighties in the United States. Such policies postulate that the State, by a perfectly coherent use of fiscal and monetary policies, should impose an adjustment of the economy towards a 'natural' growth path fitting all requirements of neoclassical economics (perfect neutrality of demand and money, ergodicity, perfectly flexible labor markets, etc...). Such an adjustment is being operated

- through a balanced budget target (a surplus being the desirable in the long run), achieved by a restrictive fiscal policy leading to a squeeze of the State's outlays, and
- through monetary policy, which targets zero inflation through the restriction of indebtedness.

Such a disciplinary package should generate the required growth of profits that sustains the growth of investment, which in turn increases the competitiveness of the domestic economy in the world market. Such discipline also constrains consumption, by permanently favoring thriftiness-led saving reflected into increased profits (whatever the mechanism). Herein lies the official explanation of the endorsement of this agenda by some non-neoclassical economists, especially those of strong neo-marxist pedigree.

Is this rather widespread adherence to disciplinary equilibrium 'for the sake of equilibrium' rooted into objective characteristics of modern capitalism? Or is it a purely ideological vision contradicting the very facts? Those questions are at the core of what has been deemed the profit paradox. It requires to address two related questions:

- (1) what are the objective determinants of profits, and which are most important?
- (2) assuming profits are demand-led, would a policy-implied growth of aggregate demand engineer a fall in the share of profits below some required level? Equivalently, are expansionist policies evil because they restrain profits?

The rest of the paper addresses those two major issues and is organized as follows. Part one presents the econometric framework which is, to the contrary of many papers, not based upon an *a priori* model embodying any specific theory. Our approach makes use of empirical data modeled in an error-correction framework which is widely viewed as a non-partisan econometric/statistical technique. We in turn discuss the choice of variables that ought to be included in the model and check the properties of the data (I.2), briefly present the econometric technique and properties before proceeding to the estimation (I.3), and finally discuss the various concepts of causality among variables and the weight of the causal chain (I.4). The second part of the paper sums up our findings and provides an illustration of their relevance to the recent (80s onwards) American experience.

- PART ONE - Modeling the evolution of profits

1. THE EVOLUTION OF PROFITS AND CHARACTERIZATION OF RELATED VARIABLES

A good starting point for stating the profit paradox is first to look at the data. National accounts distinguish eight different income categories in Table 1.12 of the NIPAs, which are given below with magnitudes as of 2004Q3 in billions of current Dollars. Appendix 1 presents the comprehensive (yet simply put) definitions of those aggregates used in the NIPAs.

employee compensation (W, \$6,657),
proprietors' income (PI, \$903),
rental income (R, \$153),
corporate income (Π , \$1,118),
net interest (NI, \$546),
taxes on production and imports (less subsidies)(T_{YMS} , \$805),
business current transfer payments (BTr, \$76) and
surplus of government enterprises (\$6).

Total : National income (\$10,264)

A category of income deserving particular attention is that of the proprietor's income. It consists of all income originating from unincorporated sole proprietorships and partnerships businesses. It is the historical third biggest income category of the American economy, ranging between 6% and 13% of national income, only slightly lower than corporate profits. The main problem is that this proprietor's income, as commonly known, itself consists of the other categories of income and that there is no clear way to separate out the various components. As a rough practical rule, we follow Johnson[1958]'s idea and treat one third of proprietors' income as profits, and two thirds as compensation.

As a good starting point, we derive the functional distribution of income of the United States, from 1954 to 2004. We distinguish the three usual shares of income : the share of wages, the share of profits and the share of rents. Those shares are computed as share in the national income (thus leaving the consumption of fixed capital aside) which is here taken net of taxes on production and imports, net of business transfer payments and net of the balance of government enterprises. Every type of income should be understood as before tax. For practical purposes, we aggregate rental income and net interest in one generic category of 'rents'. We thus end up with three shares of income, adding up to 100% :

Share of Wages = (compensation of employees + 2/3 of proprietors' income) / (net national income)

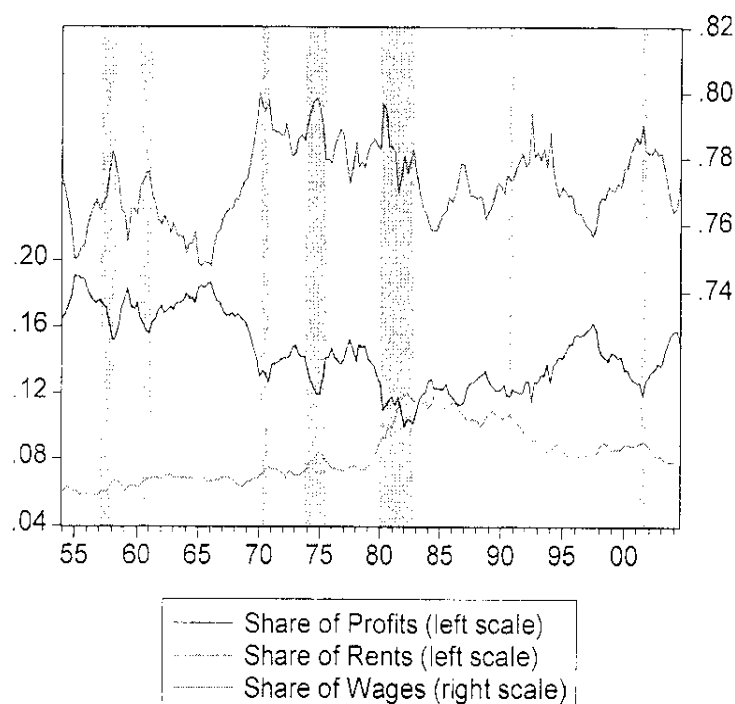
Share of Profits = (corporate profits + 1/3 of proprietor's income) / (net national income)

Share of Rents = (rents + net interest) / (net national income)

Graph 1 plots those three shares of income from 1954 to 2004. Dark-grey areas indicate recessions, while light-grey areas indicate below-average unemployment rate (below 5.5% to 6%). One of the main conclusions drawn from graph 1 is that the functional share, such defined, are very volatile. The share of wages soared from 74.7% in 1966 to 80.0% in 1970 (a 7% increase), the profit share fell from 18.6% in 1966 to 10.0 in 1982 (a 45% drop), and the rental share jumped from 7.3% in late 1978 to 10.0% in late 1980 (a 37% jump). When

unemployment is low and during recessions, the wage share increases and the profit share decreases, so both shares tend to exhibit opposite movements, at least in the short run. Yet the picture is not complete without rental income, which tends to be unrelated to the state of labor market, but which seemingly increases during recessions. Another interesting feature about the rent share is its stable, continuing slow growth from 1954 to 1979, its huge increase under the Volcker monetarist experiment, and its slow decrease from 1982 to 1996 (yet rents are still higher today than in 1978). Finally, there seems to be a break in the evolution of the functional shares in 2001, but it is too early to infer about whether it will persist or not.

Graph 1 – Shares of wages, profits and rents
(shares of before tax incomes in net national product)



Notes : light-grey areas indicate below-average unemployment rate, and dark-grey areas indicate recessions.
 Data from Table 1.12 of the 2004 revision of the National Income and Product Accounts (NIPAs).

Concentrating upon profits, the share of that type of income has broadly followed three distinct phases : stability until 1966, decrease from 1966 until 1983, and increase thereafter. Since those phases last for about 10, 15 and 20 years, there seems to be *persistence* in the profit share movements beyond the above-mentioned short-run volatility. This finding casts doubts about the global stability of the functional income distribution of the United States. More than this, it pushes the curious economic researcher to address the question of what drives profits.

1.1 THE CHOICE OF THE VARIABLES

In order to answer this question, the first step is to decide of a framework. Profits are indeed one variable among a lot of other macroeconomic aggregates, and it is vital step to choose a global framework in which profits evolve. We assume that an accurate picture of profits can be seen through the textbook double identity

$$\sum \text{all incomes} \equiv Y \equiv C + I + G + X - M \quad [1]$$

where Y stands for GDP or national income, and C, I, G, X and M referring to private consumption and investment, public expenditures, exports and imports. The left hand side of that double identity refers to the income-decomposition of the national income, whereas the right hand side refers to the demand-decomposition of the same aggregate. This double identity is therefore the one linking the different types of income to the various kinds of demands in the economy as a whole. What is at the core of the Profit Paradox is the study of the place and role of profits in such a framework, and the relationships between variables. The interesting feature of such a departing point is that profits appear as one component of a very large system relating income and spending.

Now equation [1] is not very deep unless measured, both quantitatively and qualitatively. In the real world of national accounting, the variables on the right hand side of [1] do not bring any measurement problems¹, and we already mentioned the eight left hand side variables. Yet the NIPAs provide two additional variables that enter the picture of those identities, which are here to link the right hand side to the left hand side : *consumption of fixed capital (private and public, CFC, \$1.497)*, and *net income receipts from the rest of the world (IncRoW, \$+38)*. We thus end up with equation [2], which consists –of the respectable number- of fourteen variables :

$$W + PI + R + \Pi + NI + T_{\text{VMS}} + BTr \equiv C + I + G + X - M - CFC - IncRoW \quad [2]$$

where the *surplus of government enterprises* has been merged with the taxes on production and imports. Equation [2] features a lot of variables and is thus a picture of the economy's real complexity –and interrelatedness. In the rest of the paper we will take equation [2], an accounting identity, as representative of a real-world economic system which, among other variables, features profits upon which we will concentrate.

1.2 DATA SOURCES AND PROPERTIES

The data used here is that provided by the National and Income Product Accounts (NIPAs) as published by the Bureau of Economic Analysis, Department of Commerce. The dataset consists of 203 quarterly observations per variable and ranges from 1954:1 to 2004:4². The data is in nominal terms since this is the only unit of measurement provided in the national accounts for measuring the various types of income.

¹ National income or GDP are easily found in the NIPAs according to different measures, whether it be in real or nominal or index form, see especially Tables 1.5.5 and 1.12 of the NIPAs. A problem arises regarding the nature of *identity* of [1], since the data provided by the NIPAs on the different types of income do not sum up to the sum of the right hand side variables. This is probably to be explained by the fact that the income source of data are the tax declarations and are not known to be accurately reported. The magnitude of the discrepancy between the two decompositions of GDP varies quite a lot, *between -100 to +100 billions of current Dollars each quarter*, which is a surprising figure since the BEA already includes adjustments to counterbalance this problem. Yet while worth noting, this discrepancy is almost nothing in an eleven trillion Dollar economy and we will leave this question aside.

² All variables are available on a quarterly basis from the NIPAs since 1947:1. Yet the beginning of the sample is characterized by specific economic conditions, namely the Treasury-Fed Accord, the price control experience and the Korean war. Those events surely affected prices, interest rates and money in general. Since those variables are not explicitly present in the model (they are underlying forces behind the dynamics of the fourteen variables, nonetheless), it would be a bad choice to begin estimation during that early specific time. We thus start our analysis during more stable times, after 1954.

Before presenting the econometric tool utilized here, some important preliminary remarks need to be made regarding the properties of the data. First all fourteen variables are linearized by logarithmic transformation because linearity is very desirable property in an estimation procedure that will approximate economic relationships by linear relationships.

Second, the order of integration of each and every individual variable has important implications for the theoretical economist and the applied economist. For the purpose of the present study, only two orders of integrations are useful to recall :

- a series integrated of order zero or $I(0)$ is termed a stationary variable. This property is equivalent of saying that the variable roughly follows a cyclical path through time around a (fixed) deterministic component, that is the series oscillates around a linear trend, a non-zero constant, or zero. Should a variable feature this property, one can *accurately* forecast its future value to always be around the deterministic component.
- A series integrated of order one or $I(1)$ is non-stationary because it does not revert around any fixed deterministic component. In that case present and past behaviors of a series are dominated by stochastic fluctuations or random shocks, which make future values difficult or even impossible to forecast because the variance of the forecast error increases with the time of the forecast. Please note that $I(1)$ variables become $I(0)$ variables once differenced ; in other words the levels of a series are non-stationary but its growth rate is reasonably constant over time. Indeed Nelson & Plosser[1982] find that most macroeconomic aggregates fall into the $I(1)$ category.

The classic way to infer the order of integration is testing for unit root(s). Results presented in Table 1 indicate that none of the series are stationary, except for corporate profits when a time trend is included. Please note that stationarity around a trend is only slightly rejected for all series. No series evolves around a mean or a (fixed, predetermined) trend, except for corporate profits that significantly reverts around such a trend. This implies that, except for profits, shocks or deviations from a path may persist through time, thus creating a new path.

We are left with series that mimic a non-ergodic world, where forecasting can be made but will be more or less wrong because shocks accumulate in an non-orderly way. Profits on the other hand, are found to revert around a trend, thus future profits can be forecasted to be significantly in the range of the future value of the trend, more or less some cyclical adjustment. In this framework, time does not influence profits because we reasonably know what future profits will be. For all other variables, time creates uncertainty so that future values of the variables cannot reasonably be accurately forecast from past values.

On the other hand, once the series are differenced, unit root test results of Table 1 indicate that all series become stationary to a high level of significance. Thus all variables in logs are non-stationary in levels (except for profits around a trend), but their growth rates stationary or $I(1)$, and the origin of this non-stationarity in levels comes from a more or less significant trend.

Table 1 – Unit root tests on series in logs and differenced logs, 1954:1–2004:3

| Variable and determ. Comp. | ADF test (1) | | DFGLS test (2) | | KPSS test (3) | |
|-------------------------------|--------------|-----------------------|----------------|---------------------|---------------|----------|
| | log | | log | | log | |
| <i>W</i> | 0.99 | 0.00*** | -0.70 | -4.11*** | 0.305 | 0.357 |
| C | 0.62 | 0.00*** | 0.71 | -3.98*** | 1.794 | 0.456** |
| <i>PI</i> | 0.24 | 0.00*** | -1.23 | -12.38*** | 0.275 | 0.076*** |
| C | 0.99 | 0.00*** | 4.88 | -9.63*** | 0.793 | 0.215*** |
| <i>R</i> | 0.74 | 0.00*** | -1.44 | -13.80*** | 0.359 | 0.075*** |
| C | 0.96 | 0.00*** | 1.99 | -14.54*** | 1.620 | 0.165*** |
| <i>PI</i> | 0.02** | 0.00*** | -3.42** | -3.33** | 0.115** | 0.021*** |
| C | 0.88 | 0.00*** | 3.26 | -4.01*** | 1.794 | 0.021*** |
| <i>NI</i> | 0.99 | 0.00*** | 0.09 | -7.51*** | 0.389 | 0.190** |
| C | 0.07* | 0.00*** | 1.13 | -5.72*** | 1.728 | 0.906 |
| <i>T_{IMS}</i> | 0.97 | 0.00*** | -1.00 | -5.83*** | 0.288 | 0.252 |
| C | 0.73 | 0.00*** | 0.82 | -0.214 ^a | 1.799 | 0.349** |
| <i>BTr</i> | 0.55 | 0.00*** | -2.28 | -5.48*** | 0.210** | 0.057*** |
| C | 0.68 | 0.00*** | 1.86 | -4.85*** | 1.786 | 0.146*** |
| <i>CFC</i> | 0.80 | 0.14 | -1.61 | -2.02** | 0.250 | 0.270 |
| C | 0.86 | 0.04** | 0.89 | -2.91*** | 1.790 | 0.291** |
| <i>IncRoW</i> | 0.83 | 0.00*** | -1.25 | -7.98*** | 0.338 | 0.034*** |
| C | 0.53 | 0.00*** | 1.14 | -4.37*** | 1.610 | 0.135*** |
| <i>C</i> | 0.74 | 0.64 ^a *** | -1.96 | -3.72*** | 0.250 | 0.416 |
| C | 0.80 | 0.32 ^a *** | -0.50 | -1.45 | 1.798 | 0.440** |
| <i>I</i> | 0.41 | 0.00*** | -2.39 | -8.21*** | 0.262 | 0.042*** |
| C | 0.80 | 0.00*** | 2.71 | -0.54 | 1.785 | 0.072*** |
| <i>G</i> | 0.86 | 0.00*** | -1.33 | -4.09*** | 0.302 | 0.264 |
| C | 0.87 | 0.00*** | 1.40 | -3.23*** | 1.792 | 0.281*** |
| <i>X</i> | 0.80 | 0.00*** | -1.79 | -5.94*** | 0.251 | 0.092*** |
| C | 0.71 | 0.00*** | 2.18 | -5.55*** | 1.784 | 0.180*** |
| <i>M</i> | 0.91 | 0.00*** | -1.13 | -3.58*** | 0.265 | 0.178** |
| C | 0.91 | 0.00*** | 4.29 | -3.53*** | 1.785 | 0.189*** |

(1) ADF test has been run with Hannan-Quinn information criterion to select the lag length. The value reported is the significance level of the AR(1) t-statistic (with MacKinnon[1996] critical values). Initial assumption is that the series contains a unit root and a low (<5%, etc...) value reported indicates the impossibility to reject stationarity ;

(2) DFGLS test is the detrended DF test as provided by Elliott Rotherberg and Stock[1996], used here in conjunction with the Hannan-Quinn information criterion. The values reported here are the detrended residuals' unit root t-statistics, to be compared with the critical values tabulated by the authors of -3.46, -2.93, -2.64 (in a model including a time trend) and -2.58, -1.94, -1.61 (in the case of a model including a constant only) at the 1%, 5% and 10% significance levels. Initial assumption is the same as in the ADF test

(3) KPSS test is performed with Newey-West bandwidth selection and a Bartlett kernel. Critical values at the 1%, 5% and 10% levels are 0.216, 0.146 and 0.119 in a model including a trend and 0.739, 0.463 and 0.347 if no trend is included. Initial assumption is that the series contains no unit root and therefore that is level- or trend-stationary in the case of a lower-than-critical-value KPSS statistic.

^a : test uses an improbably low or high lag length. Results with other information criteria indicate stationarity at the 1% level

*, **, and *** indicate stationarity at the 10%, 5% and 1% levels, respectively.

Table 2 – Descriptive statistics of select log-differenced series, 1954:1-2004:3

| | Mean | Median | Std. Dev. | Skewness | Kurtosis | Jarque-Bera | Probability |
|-----------|-------|--------|-----------|----------|----------|-------------|-------------|
| <i>W</i> | 1,70% | 1,71% | 0,009 | -0,22 | 3,31 | 2,37 | 0,31 |
| <i>PI</i> | 1,52% | 1,41% | 0,026 | 0,28 | 7,03 | 140,29 | 0,00 |
| <i>R</i> | 1,22% | 0,72% | 0,062 | 1,28 | 9,25 | 385,75 | 0,00 |
| Π | 1,72% | 1,56% | 0,053 | -0,13 | 3,75 | 5,25 | 0,07 |
| <i>NI</i> | 2,31% | 2,16% | 0,032 | 0,03 | 4,61 | 21,98 | 0,00 |
| <i>C</i> | 1,76% | 1,68% | 0,008 | 0,30 | 3,03 | 3,13 | 0,21 |
| <i>I</i> | 1,78% | 2,03% | 0,047 | -0,48 | 4,44 | 25,33 | 0,00 |
| <i>G</i> | 1,57% | 1,49% | 0,013 | -0,11 | 3,27 | 1,02 | 0,60 |
| <i>X</i> | 2,15% | 2,17% | 0,042 | 0,31 | 5,54 | 57,88 | 0,00 |
| <i>M</i> | 2,34% | 2,44% | 0,039 | 0,26 | 5,47 | 53,93 | 0,00 |

Though less fundamental, another interesting property of the data is its statistical properties, summed up in Table 2 above for the major types of income and outlays.

The first three columns presents the mean (or average growth rate per quarter, not at annual rate), the median and the standard deviation of all variables. Trade variables and net interest are the three series who present the highest average growth rate as well as the highest medians and belong to the highest standard deviations group. They are volatile and rapidly growing variables over the sample. Investment and profits are a little less fast-paced variables, but a little more unstable. Consumption and compensation are as fast paced as investment and profits, but are much more stable variables. Finally government spending is rather slow and steady, while rents are the slowest changing variable but the most volatile of all (especially after 1978).

Skewness measures the asymmetry of the distribution of the series around their respective means, with value zero representing perfect symmetry. None of the series can be said symmetric except for the income category of net interest. Wages, corporate profits and investment especially report negative skewness, indicating that the series has a long left tail, indicative of below-mean persistence. The opposite is true for rents, who exhibit a strong, positive skewness.

Kurtosis measures the peakedness or flatness of the distribution of a series, with value 3 as identical to the normal distribution (what one would expect 'in the long run' by the law of large numbers). Except for wages, profits and government spending, kurtosis exceed that value which is a common problem in econometrics known as 'excess kurtosis', indicating excessive peakedness in the data. Rents, again, show a distinctive result of an exceptionally high kurtosis.

Finally, the Jarque-Bera statistic combines the skewness and kurtosis statistics and is associated with a probability of a normal distribution. Except for government spending, wages, consumption and, to a lesser degree, corporate profits, none of the series appear to be distributed according to the normal distribution.

All in all, the statistical properties of the data point towards a lack of normality of the series (except for government spending), which is again a common problem in econometric analysis. But what also stems out of this purely statistical analysis is that rental income is exceptionally non-normal, due as much to very bad skewness as horribly bad kurtosis. Assuredly, a relatively high number of past values of the variables will be necessary in order to fulfill the prerequisite of normal errors for estimation.

2. INTRODUCING A DYNAMIC FRAMEWORK

Equation [2] is disappointing on several respects because it is just an accounting identity. It merely states that the fourteen variables are related to each other and it does not allow us to go much further. Even more annoying is its static nature : by how much would, say, profits increase following a rise in consumption ? Would profits increase of the same amount, or would that rise also mean higher wages ? By how much ? And, above all, what do profits depend upon ? Evidently in equation [2], all variables depend on each other to varying degrees, and that makes dynamic analysis a desirable way to investigate the present case³.

One appropriate econometric tool to handle this kind of dynamic model is the vector autoregressive model or VAR. This class of models takes each variable and links it to all the (past values of the) variables, including its own. By stacking every such-defined variable in a coherent model, VAR models thus form simultaneous equation systems where 'every single thing is allowed to depend upon everything else'. VAR models thus do not embody *a priori* knowledge about whether a (dependent or endogenous) variable is caused or if it is a (independent or exogenous) variable that causes other variables. The fact that past values are included in the system also allows for lagged, dynamic effects to materialize and be taken into account. On the other hand, widely recognized problem pertaining to VAR models is yet their lack of theoretical underpinnings, the fact that the estimation results are somewhat sensitive to the parameters involved, and the high number of coefficients to be estimated. Our purpose for the time being is to estimate an unrestricted VAR model, where every variable may depend on everything else ; we thus use Sims'[1980] general, a-theoretical, framework. Such a typical VAR model would be, in the simple case of a of two variables x and y :

$$VAR(p) : \begin{cases} x_t = a_{11}x_{t-1} + a_{12}x_{t-2} + \dots + a_{1p}x_{t-p} + b_{11}y_{t-1} + b_{12}y_{t-2} + \dots + b_{1p}y_{t-p} + \varepsilon_{1t} \\ y_t = a_{21}x_{t-1} + a_{22}x_{t-2} + \dots + a_{2p}x_{t-p} + b_{21}y_{t-1} + b_{22}y_{t-2} + \dots + b_{2p}y_{t-p} + \varepsilon_{2t} \end{cases} \quad [3]$$

where x_t, y_t are stationary variables. But since our variables are not stationary variables but variables integrated of order one, the VAR model could be a bad choice.

Following Granger[1983, 1987] representation theorem, equation [3] is only correct in the cointegrated case, that is where variables are not individually stationary but there exists a linear combination which is stationary. More intuitively, equation [3] is only valid if there exists one or several common trends among the fourteen variables. Cointegration can be tested for in the VEC through Johansen's Trace and Maximum Eigenvalue tests.

What we are going to estimate is not a VAR model itself, but a model based on it, called a vector error-correction model or VEC. VARs are too demanding regarding the stationarity of the data in the present case. Besides that, differencing the series in order to make them stationary would result in a huge cost of loosing all the relevant 'common trend' information about the links between variables. The derived error-correction model is a transformation of the previous VAR, following the works of Granger[1987] and Johansen[1988, 1991] :

³ The importance of our approach becomes clearer after that being said. Since all variables are more or less interrelated, it would be a bad choice to analyse equation [2] after taking out a few variables here and there. It is indeed very tempting to reduce the number of variables to analyze, but that would immediately translate into a lower form of analysis because potentially important variables are missing. Suppressing the consumption of fixed capital would result in the hypothesis that it equally affects all other variables, and leaving aside proprietor's income because they are a too-difficult category of income to handle would result in a loss of information. All in all, we are left with all an irreducible identity which forms the basis of national accounting.

$$VEC(k): \quad \Delta X_t = \underbrace{\alpha.\beta'.X_{t-1}}_{\text{long-run}} + \underbrace{\sum_{i=1}^{k-1} \Gamma.\Delta X_{t-i}}_{\text{short-run}} + \underbrace{\mu_0 + \mu_1.t}_{\text{deterministic component}} + \underbrace{\Phi D_t}_{\text{exogenous regressors}} + \underbrace{\varepsilon_t}_{\text{gaussian errors}} \quad [4]$$

This representation [4] involves four different parts : a long-run, cointegration part $\alpha.\beta'.X_{t-1}$, a short-run part $\sum_{i=1}^{k-1} \Gamma.\Delta X_{t-i}$, a deterministic component $\mu_0 = \alpha.\beta_0 + \gamma_0$ (as a constant) and $\mu_1 = \alpha.\beta_1 + \gamma_1$ (as a trend), and possibly a set of exogenous regressors D_t . We will postpone in-depth discussion to Appendix 2, where the interested reader will find a presentation of the different parameters involved as well as related issues. For the time being, we outline the main features of VEC models in the present case :

- VECs are based upon the cointegrated VAR model, that is a model that contains variables which are cointegrated ;
- are simultaneous equations models. They mimic *systems* and are particularly suitable to the present case because it is highly possible that variables interact on each other ; please note that this is an assumption that could be alleviated by forcing (i.e. restricting) some coefficients to be zero ;
- VECs include past values of every variable, thus allowing for lagged effects ;
- VECs do not assume any nature of the series (explained/dependant/endogenous or explanatory/independent/exogenous) ;
- VECs do not suppose all variables are stationary, and rely upon non stationary variables featuring cointegration. Thus we do not suppose that the system will return to a pre-programmed steady state : should a shock occur, this may have permanent effects ;
- VECs feature a timely dichotomy between short-run and long-run influences.
- Causality can be assessed through various measures and tests ;
- The evolution of the system can be seen through the simulation of an (unexpected) shock on a variable, and then tracing out the evolution of the impacted variable through time.

Those remarks being made, we then proceed to the estimation of this fourteen variable model.

3. ESTIMATION OF THE PARAMETERS

The statistical groundwork being discussed, three steps are being followed to estimate the system in full. Those are (1) the choice of the number of past values to include in the model (choice of k), (2) a discussion about the type of deterministic component relevant in this system, and (3) the estimation of the number of cointegrating relationships.

3.1. CHOICE OF THE LAG LENGTH

How far back is the information contained in the data relevant ? Information criterion can help us set a value to k according to the precision of fit (FPE), the significance of an extra lag (LR sequential test), or maximal information content with a penalizing factor for extra lags (AIC, BIC, HQ...). The basic idea is to include as many past values of the series as possible ; yet including too many irrelevant past values would decrease the explanatory power of our system. Besides that, Johansen's multivariate cointegration technique relies upon a rather tough requirement : Gaussian errors (normally, independently and identically

distributed). This specific requirement makes information criteria not very useful since they tend to underestimate the value of k that whitens the errors (Lütkepohl[1995]).

We have estimated the VAR in (log) levels of the form [3], adding one lag at each step and checked for the Gaussian errors requirements. Multivariate normality has been checked with a Breush-Godfrey[1978] test with the Doornik-Hansen[1994] method. This did not help us choose a lag length since all values of k provided normal errors (because of our big sample size of 203 observations). The independence of the errors has been tested for by an autocorrelation LM test up to 12 lags. It turned out that no serial autocorrelation was present when $k=2$ or 7 (or possibly 4) lags were used. The remaining assumption to fulfill is that of no heteroscedasticity. This has been checked with a White test with no cross terms for our three candidates $k=2,4$ and 7. It turned out that some homoscedasticity is still present when two lags are used, and that a four or seven lag specification is a better choice. Since the absence of autocorrelation is stronger in the case of seven lags, we chose a seven lag specification that matches all the Gaussian errors requirements of Johansen's method.

3.2. DETERMINISTIC COMPONENT AND THE TESTS OF THE NUMBER OF COINTEGRATING RELATIONSHIPS

The next step is that of the test of the presence of common trends among the variables. This is done through the Johansen's cointegration tests, but those in turn rely upon the specification of a deterministic component among five possible choices (see Appendix 2).

Applying the method presented in Appendix 2, we found that case five yielded thirteen cointegrating relationships, but that this specification gave rise to non significant quadratic trend coefficients. We thus rejected the quadratic trend in the data, and carried on with the estimation of case four. Cointegration tests yield eleven cointegrating relationships at the 10% significance level according to the maximum eigenvalue test (Johansen's preferred test). That specification features linear trends in the cointegrating relationships, which all simultaneously turned out to be significant.

We are thus left with a fully-estimated VEC model with seven lags, a deterministic specification of case 4, and eleven cointegrating relationships. As this model contains a lot of variables and lags, it will not be reproduced fully here. Only specific parts of it will be referred to when needed. For example, we can say at this stage that the model explains (R^2) between 60% and 80% of the variance of the growth rates of all variables. This is a very good fit, but those figures drop to the 20%-60% range when degrees of liberty are being accounted for (\bar{R}^2 adjusts for the number of variables in the system, which is high in this case). The better-fitted variables are the consumption of fixed capital and the compensation of employees, while the least-fitted variables are imports, exports, rents and net interest. Those results are understandable since both CFC and W are heavily stable in time, whereas the least-fitted variables heavily depend upon the Dollar exchange rate and the interest rate, which are variables not included in the present analysis.

4. THE DYNAMICS OF THE MODEL

We now turn to the reason why we used this type of model, that is we address the issue of the dynamics between variables. Those can be assessed through two interrelated questions, that qualitative of causality and that quantitative of the weight of shocks. To illustrate the profit paradox, we will now concentrate upon the profit equation of the model, and leave aside

all the other thirteen variables for a while. We thus concentrate on the following corporate profits equation of the model :

$$\Delta \log \Pi = \sum_{i=1}^{11} \alpha_i ECT_{t-i} + \sum_{j=1}^7 \Gamma_{1j} \Delta \log W_{t-j} + \sum_{l=1}^7 \Gamma_{2l} \Delta \log PI_{t-l} + \dots$$

$$+ \dots + \sum_{z=1}^7 \Gamma_{3z} \Delta \log M_{t-z} + Const. + \varepsilon_{1t} \quad [5]$$

which states that the growth rate of corporate profits is explained by all the growth rates of the fourteen variables (including past values of the profits rate of growth), plus eleven ‘error-correction terms or ECTs’ deviations from the ‘steady-state’/‘common trends’/‘cointegrating relationships’. Please remember all other thirteen variables are similarly –and simultaneously– determined elsewhere in the model. For the time being, equation [5] contains $14 \cdot 7 + 11 = 109$ estimated coefficients, representing the influence of $14 + 11 = 25$ distinct variables.

4.1. ‘SHORT RUN’ GRANGER CAUSALITY

In a simultaneous equation model of the VEC type, a common concept of causality is that of Granger[1969]. Taking as example equation [5] above, it states that imports M are causing profits if all the Γ_{3z} ’s are jointly significant. Equivalently, if those coefficients turn out estimated as non-significant or zero, then imports do not exert any influence over profits, and imports could therefore be taken out of the model without any loss of information. Please note the particular definition of causality that Granger causality implies : if a variable is significantly non-neutral in the explanation of another variable, then it is Granger causing. It means that Granger causality is a sort of precedence or predictability test : if a variable significantly helps predict the variance of another variable, then it is Granger-causing. Granger’s causality test is a significance-level test, and does not provide any weight of the impact of the causal chain. Moreover, because of the particular definition of the Granger causality, two variables can be found causing each other (“feedback”). Also note the temporal causality nature of Granger’s test, since it makes use of past values of a variable to explain the present value of another variable. Finally, since Granger causality tests significance levels of variables that are required to be stationary and thus differenced, Granger causality runs from multiple (lagged) differenced series to a single differenced series. Granger causality test results are therefore better understood as a ‘short-run’ precedence test.

Ultimately, Granger causality tests results in a statistic (distributed as chi-square) and a significance level. A low (<5% or 10%, etc...) significance level results in the rejection of the basic hypothesis that the independent variable does not Granger-cause the dependant variable, thus that is a significant causality between the variables.

At this stage, two Granger causality are of particular interest : (1) Granger causality on the profit equation [5] will allow us to discriminate between variables that help better predict the movements of profits and variables that do not, and (2) Granger causality on the whole 14-variable estimated system, which will allow us to detect which variable is system-wide the most highly caused, and which is the least significantly caused.

(1) which variables improve the forecast of the profits’ rate of growth ?

In order to answer this question, we concentrate upon the influences of all the demand variables and leave aside the income variables (whose influence is presented in table 4 and

detailed further in part 5). The results of the Granger causality are provided in Table 3 below, which features both the chi-square statistic and its associated probability.

Table 3 – Granger causality tests on the rate of growth of profits

| Chi-square statistic | probability |
|----------------------|-------------|
| 19.46 | 0.04 |
| 11.06 | 0.13 |
| 12.58 | 0.08 |
| 29.64 | 0.00 |
| 19.23 | 0.00 |

Results are the following : the rate of growth of profits is better predicted by (all variables in rates of growth) exports in the first position, then imports and consumption *ex-aequo*. The following variables do explain the rate of growth of profits, but quite loosely : government spending moves in line with (and before) profits, and investment is the variable that is the worst predictor of all demand variables (though not very bad in an absolute way)⁴.

(2) which variable is the most/least highly caused ?

This question can be assessed by similar Granger causality tests performed on all the equations of the estimated system. We summarize the results in the following Table 4, where each cell represents the probability of a Granger causality running from a row-variable to the every remaining column-variable. Bolded figures indicate significant Granger causality up to the 15% level ; absence of bolding translate into the rejection of such a causality. The ‘all’ row summarizes the influence (probability) of all variables jointly, and presents the associated chi-square statistic. The last row also features a chi-square (increasing) ordering, with [1] indicating the lowest caused variable and [14] referring to the highly caused variable. Broadly speaking, three groups of variables appear according to their level of causality ; below is a brief outline of remarkable results :

Mostly exogenous/independent/autonomous variables (low ranking) :

[1, 2, 3] : Net interest NI, exports X, imports M and rents R appears the least explained variables. Not surprisingly, they turned out the least explained variables according to precision of fit as measured by the R². Again, this is explainable by the fact that those variables are highly sensitive to monetary conditions, which are absent of this model.

[3 *ex aequo*] Compensation of employees W and consumption C. This ranking is somewhat surprising, since one would think of compensation as being firstly determined by production and thus investment. To the contrary, we find that investment is a very poor predictor of compensation ; exports and net interest are the only two highly significant predictors of compensation. The same applies to consumption, who is not significantly caused by compensation, nor is it determined by any type of income. Assuredly, indebtedness plays a major hidden role in here. Only trade variables and government spending appear to be good predictors of consumption in this model.

⁴ Among the income variables, corporate profits do appear Granger-caused by taxes on production and imports (T_{YMS}) and rents (R) and proprietor’s income (PI), but do not appear to be better predicted by net interest NI. Compensation is in between, being a somewhat ‘elastic’ predictor of profits. This could imply that other household revenues are at play, especially indebtedness.

Partly endogenous, partly exogenous variables (middle ranking) :

[7] government spending G and government receipts in the form of taxes on production and imports T_{YMS} appear to be in the middle of the Granger-causality range covered by all variables. This is understandable with reference to the fact that government tax collection is sensitive to the state of the economy (thus to the other variables), and that government spending is more endogenous than previously thought (maybe because of self-imposed budget constraints).

Mostly endogenous/dependent/non-autonomous variables (high ranking)

[10, 11, 14] : Proprietor's income, investment and corporate profits. This ranking is interesting because it is an indication of the fact that those variables are the less autonomous of all fourteen (we already described profits in depth above). Yet the same applies to proprietor's income, which is found to heavily depend on demand variables (except on government spending), as well as compensation and profits (which are two subcategories of proprietor's income). Investment on the other hand, is not better predicted by any demand variable, only highly by compensation, proprietor's income, net interest and rents. Consumption in particular, is not a good predictor of investment at all. What seems to drive investment is on one hand labor income (compensation and proprietor's income), and more surprisingly rental income (rents and net interest) on the other hand. Investment thus appears more linked to income than spending patterns ; equivalently investment can be deemed exogenous *with respect to demand*, which indeed is a surprising result. Interestingly enough, investment seems to be non-related to profits and taxes on production and imports.

Another interesting result stemming out of Table 4 are the significance levels when all variables are included (last row). Except for exports and net interest, all *p-values* are below the 10% level which is an indication of good Granger predictability. Thus all variables are good predictor of all variables, except for the two exceptions mentioned. This reinforces the pertinence of our unrestricted approach, where 'everything may explain everything'.

Finally, Granger causality is not the only type of causality that takes place in the error-correction model. Indeed, our model features several 'common trend' equations associated with deviations from those 'steady-states'. This means that those deviations can also be thought of channels of causality. In other words, a VEC features a 'direct' causal chain assessable through usual Granger causality, and an 'indirect' causal chain through which variables adjust towards or away the 'steady-states'. This latter type of causality can be assessed through the inspection of the significance levels of the adjustment coefficients ($\hat{\alpha}_i$), as shown in Appendix 2. It turned out that taking those significance levels into account did not alter the above rankings and conclusions.

Table 4 – System-wide Granger causality tests

| | explained/dependent variable | | | | | | | | | | | | | |
|------------------|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|
| | C | I | G | X | M | CFC | IncRoW | W | PI | II | NI | T _{YMS} | R | BTr |
| C | --- | 0,61 | 0,27 | 0,39 | 0,03 | 0,75 | 0,24 | 0,83 | 0,05 | 0,04 | 0,39 | 1,00 | 0,72 | 0,35 |
| I | 0,38 | --- | 0,32 | 0,31 | 0,49 | 0,02 | 0,16 | 0,95 | 0,00 | 0,13 | 0,26 | 0,93 | 0,59 | 0,28 |
| G | 0,11 | 0,58 | --- | 0,84 | 0,81 | 0,75 | 0,36 | 0,83 | 0,34 | 0,08 | 0,83 | 0,88 | 0,36 | 0,69 |
| X | 0,03 | 0,24 | 0,89 | --- | 0,22 | 0,30 | 0,09 | 0,07 | 0,02 | 0,00 | 0,87 | 0,47 | 0,19 | 0,75 |
| M | 0,03 | 0,20 | 0,57 | 0,60 | --- | 0,15 | 0,13 | 0,35 | 0,01 | 0,00 | 0,99 | 0,08 | 0,48 | 0,83 |
| CFC | 0,73 | 0,28 | 0,01 | 0,93 | 0,92 | --- | 0,67 | 0,46 | 0,40 | 0,03 | 0,12 | 0,76 | 0,38 | 0,28 |
| IncRoW | 0,57 | 0,92 | 0,48 | 0,56 | 0,80 | 0,00 | --- | 0,28 | 0,22 | 0,02 | 0,78 | 0,92 | 0,03 | 0,30 |
| W | 0,89 | 0,10 | 0,14 | 0,05 | 0,54 | 0,05 | 0,03 | --- | 0,01 | 0,16 | 0,55 | 0,59 | 0,04 | 0,01 |
| PI | 0,48 | 0,00 | 0,71 | 0,75 | 0,47 | 0,26 | 0,49 | 0,16 | --- | 0,00 | 0,47 | 0,13 | 0,06 | 0,48 |
| II | 0,66 | 0,52 | 0,91 | 0,92 | 0,58 | 0,12 | 0,43 | 0,99 | 0,00 | --- | 0,82 | 0,52 | 0,77 | 0,73 |
| NI | 0,21 | 0,03 | 0,04 | 0,69 | 0,75 | 0,06 | 0,58 | 0,00 | 0,67 | 0,45 | --- | 0,12 | 0,94 | 0,14 |
| T _{YMS} | 0,47 | 0,48 | 0,28 | 0,34 | 0,94 | 0,25 | 0,04 | 0,27 | 0,20 | 0,03 | 0,28 | --- | 0,15 | 0,63 |
| R | 0,67 | 0,03 | 0,70 | 0,60 | 0,61 | 0,19 | 0,62 | 0,18 | 0,61 | 0,04 | 0,93 | 0,73 | --- | 0,08 |
| BTr | 0,25 | 0,92 | 0,63 | 0,08 | 0,99 | 0,01 | 0,01 | 0,24 | 0,03 | 0,84 | 0,17 | 0,16 | 0,10 | --- |
| ALL | 0,05 | 0,00 | 0,01 | 0,29 | 0,11 | 0,00 | 0,00 | 0,08 | 0,00 | 0,00 | 0,85 | 0,01 | 0,08 | 0,01 |
| (chi-sq.) | (113,58) | (144,93) | (123,60) | (97,84) | (107,65) | (169,37) | (141,17) | (110,53) | (132,63) | (175,81) | (77,26) | (125,64) | (110,51) | (125,33) |
| [ordering] | [3] | [11] | [7] | [2] | [3] | [13] | [11] | [3] | [10] | [14] | [1] | [7] | [3] | [7] |

Note : figures represent Granger-causality probabilities. Low values, like the one put into bold letters, indicate significant causality from a row-variable to a column variable. Last row presents the results when all variables are included in the explanation of variable Y, say, except for Y itself.

4.2. FEVD : PERSISTENCE, 'LONG RUN' CAUSALITY

As previously noted, Granger causality is a 'short-run' type of causality because it runs from lagged *differenced* variables to present *differenced* variables. Besides that, Granger causality is only based on (fixed) significance levels and does not embody any of the dynamics featured in the model. Another interesting way to assess causality in the present model would thus be tracking in time the persistence of the 'short-run' Granger causal chain. Forecast error variance decomposition, or FEVD can help us determine the evolution of causality through time. Yet just as Granger causality, FEVD requires the researcher to understand fully what particular definition of causality it describes.

The idea behind FEVD is to simulate a shock on the fully-estimated system, realize a forecast of every variable up to some chosen horizon, and then decompose the forecast error in components attributable to each and every variable of the system, at each time horizon. This means that a single variable will have its forecast error variance decomposed into all the variables of the system, including its own. In the end, FEVD results in 100% of a variable X being decomposed into fourteen variable influences. Results are therefore interpretable along 'at a h quarter horizon, variable Y is the variable whose change ('innovation') explains the most variable X 's forecast'. Trivially, a variable X that is optimally forecast by *its own* innovations does not depend on other variables, thus X is the most exogenous variable of the system, and thus is the variable that drives the system. In the end, what's of particular interest is, as for the Granger causality, the answer to two questions : (1) '*what are the profits fluctuations due to ?*' and (2) '*what's the most autonomous/driving variable of the whole system ?*'

Before proceeding to FEVD, a cautionary note is required. Since FEVD is obtained after a (one time) shock is simulated, results of FEVD are dependent upon the order the variables shock the system. In other words, the results would be different should a fluctuation of, say, profit occur first, than should an increase in consumption occur first. The idea to overcome this problem is to use the Granger-ordering found above, since variable ranked [1] is the most independent variable, and thus most likely to evolve than the more dependent variable ranked at number [14].

(1) what are the profits fluctuations attributable to ?

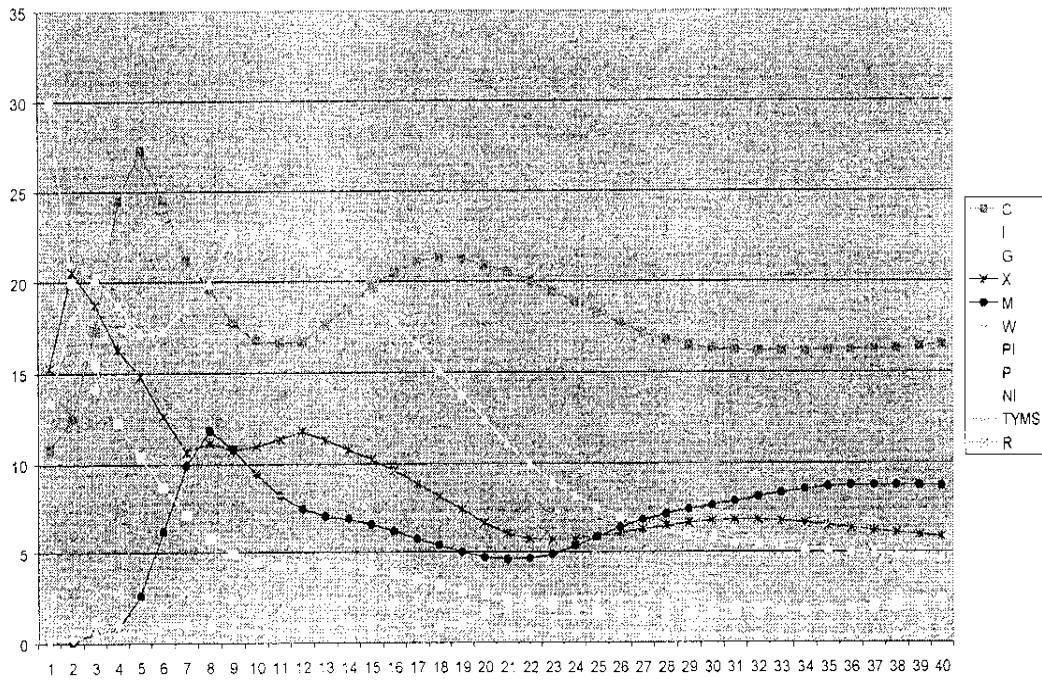
In order to obtain results that are robust to different orderings, we use two different orderings for the FEVD on the profit equation : ordering A is the one derived from Granger causality *system-wide* ([1] through [14] ordering above), and ordering B is derived from Granger causality tests *on the profit equation alone*. Please note that the two orderings make sense, and that the findings should be interpreted as a consensus between the two approaches. We then shock the system according to those two orderings and realize forecasts up to ten years, or 40 quarters. Results are provided on the following two graphs 2A & 2B.

Graph 2A represents the FEVD applied to the profit equation with ordering A. Broadly two results appear :

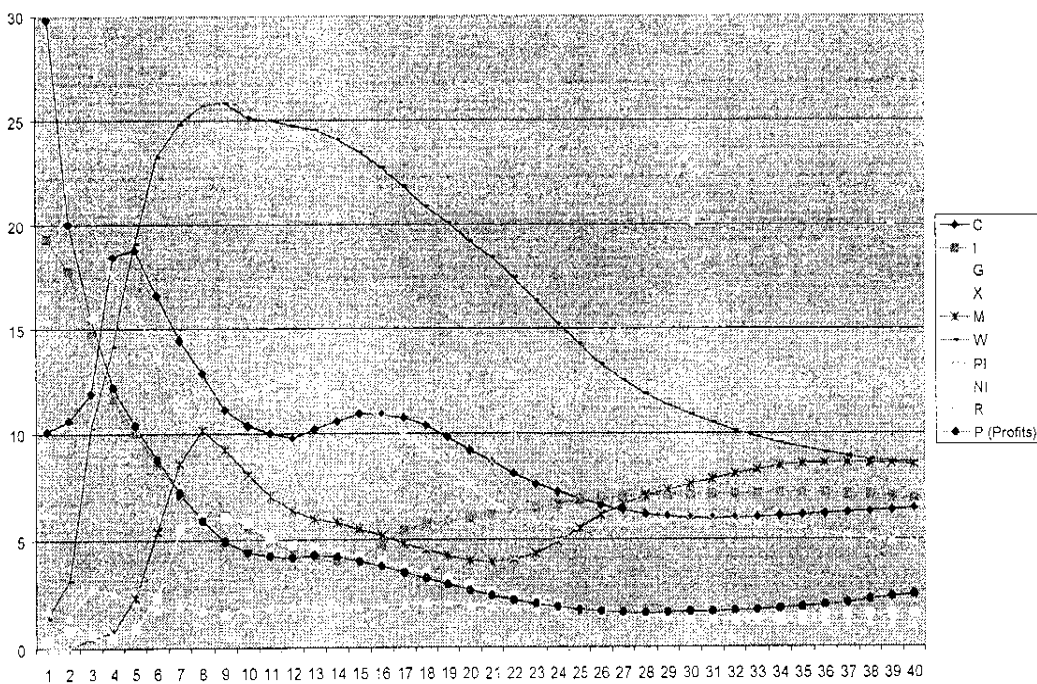
- in the short run (4-5 years after the initial simulated shock) :
The variance of profits is essentially due to (changes in) consumption, investment, exports and compensation. Past profit values do not explain much of the variance of present profit values, except maybe for a year.
- in the longer run (more than five years) :
The variance of profits is essentially due to rents and consumption. The other important variables are then compensation and trade. Of particular interest is that investment effect

on profits (yellow line) that decreases quite quickly, which is understandable in the following way : you need constant investment spending to get profits.

Graph 2A – profit FEVD based on *system-wide* Granger ordering



Graph 2B – profit FEVD based on the *profit equation's* Granger ordering



Graph 2B represents the FEVD applied to the profit equation with ordering B⁵. Broadly two results appear :

- in the short run (before six years after the shock), one variable stands out by far as a major determinant of the variance of profits : compensation. Other meaningful variables are the trade variables, investment and consumption
- in the longer run, the same variables are at work. Trade, investment and consumption are as powerful in explaining the variance of profits, but the influence of compensation has faded a lot and has been replaced by rents. Ten years (=40 quarters) after the initial shock took place, 20% of the (forecast error) variance of profits is explained by the evolution of rents.

When results from graphs 2A and 2B are taken together, it stands out that compensation, consumption, investment and trade are the main driving variables behind profits in the short run. Nonetheless over the longer run, it appears that an additional variable plays a considerable role in the determination of profits : rents. All in all, it seems that profits are mostly driven by demand spending in the short run, through compensation/consumption which is consistent with our previous Granger causality findings. But the results also show that in the longer run, functional income distribution comes into play. After a 5-6 years period, there seems to be a *trade-off* since changes in rents show up as the major force determining profits.

(2) what's the most autonomous/driving variable of the system ?

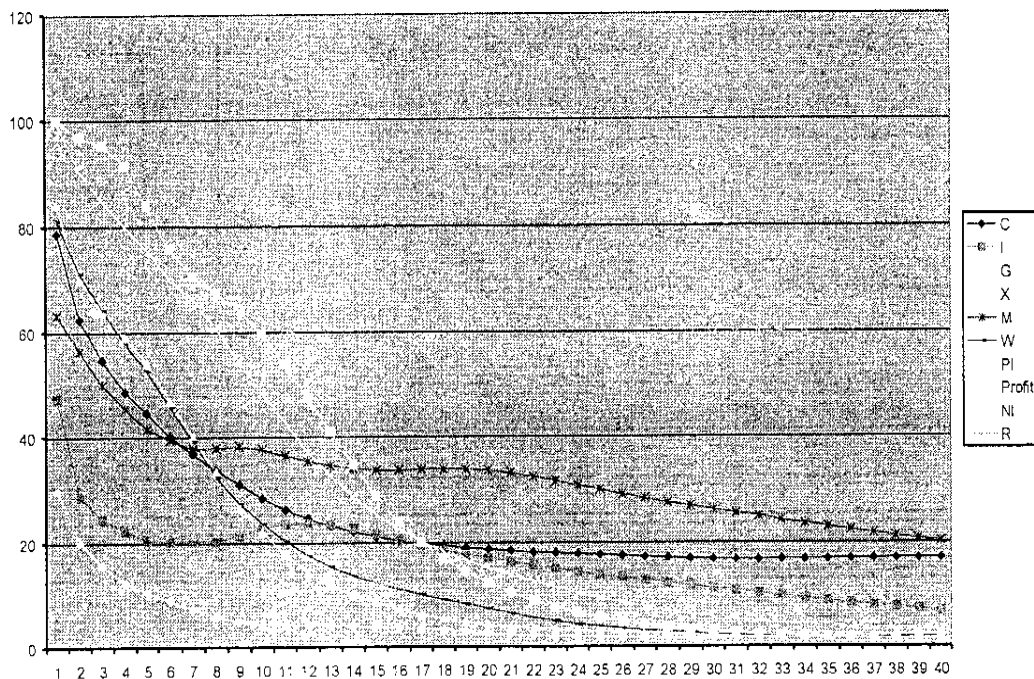
We so far used FEVD to assess the driving variables of profits alone. Yet this is not the only variable/equation in a highly interrelated system. One can also use FEVD to determine which variable is the most exogenous of the system, and build another ranking from the most endogenous variable to the most autonomous. This can be seen through a FEVD of all variables one after another, then capture each variable auto-explanation level. Such a measure is a degree of exogeneity measure, since a variable that depends the most on itself does not depend on other variables and is thus the most autonomous of the system. Graph 3 traces such an auto-explanation 'exogeneity' measure when a one-time shock is simulated at time $t=1$. Values are computed up to the ten years horizon, and the shock underlying ordering is the one most likely to occur, that derived from Granger causality from [1] to [14].

If one simulates a shock at time $t=1$, all variables react to it and interact between them. What is striking about Graph 3 is that there does not seem to be a dichotomy between short run and long run results. Broadly speaking, variables that are the most exogenous in the short run are still the most independent at a longer horizon (the only exception being net interest, being among the most exogenous in the run and among the least exogenous in the long run). Besides that, all variables appear to be quite exogenous in the short run (with the exception of profits and investment), and this degree of exogeneity decreases through time, as all variables interact on one another. In the long run, all variables become somewhat endogenous, quite to the same degree. Yet one variable clearly stands out : rents, again. Even after a ten year horizon after the one-time shock, rents still explain about 60% of itself, thus only 40% is explained by the remaining 13 variables. Rental income is by far the most exogenous variable of the system, ever since a four-year horizon.

⁵ We checked that the results do not depend upon the place of profits in the initial set of shocks (Graph 1B is when profits are ordered last).

Graph 3 – system-wide FEVD

(percentage of variable Z explained by its own innovations)



Rents have a particular place in this model : ‘short-run’ Granger causality results give rents a very endogenous role in the short run, and at the same time FEVD results indicate that rents are very exogenous in the longer run. This paradox can be better understood by saying that rental income is an ‘adjustment variable’ in the short run, but that it does not fluctuate too much in the long run. Thus rents receives the role of the adjusting variable in the short run, at the same time as rents are a major driving force of the system in the long run.

4.3. IMPULSE/RESPONSE FUNCTIONS AND THE WEIGHT OF SHOCKS

We so far discussed Granger causality which is a qualitative measure of causality, and FEVD which is a quantitative measure of the forecast error variance decomposition. Yet we did not infer about the signs and magnitude of the shocks on the profit equation ; this can be done through the computation of impulse/response functions or IRFs.

The idea behind IRFs is again to simulate a one-time shock on the system. Because of the amount of variables of the system, we will concentrate upon the profit equation again to illustrate the profit paradox. IRFs consists in keeping track of a ‘response’ variable, here corporate profits, when a shock is simulated on all the variables of the system, including the response variable itself. IRFs thus provide dynamic multipliers, i.e. the sign and magnitude of the evolution of profits conditional on an increase in each variable of the system.

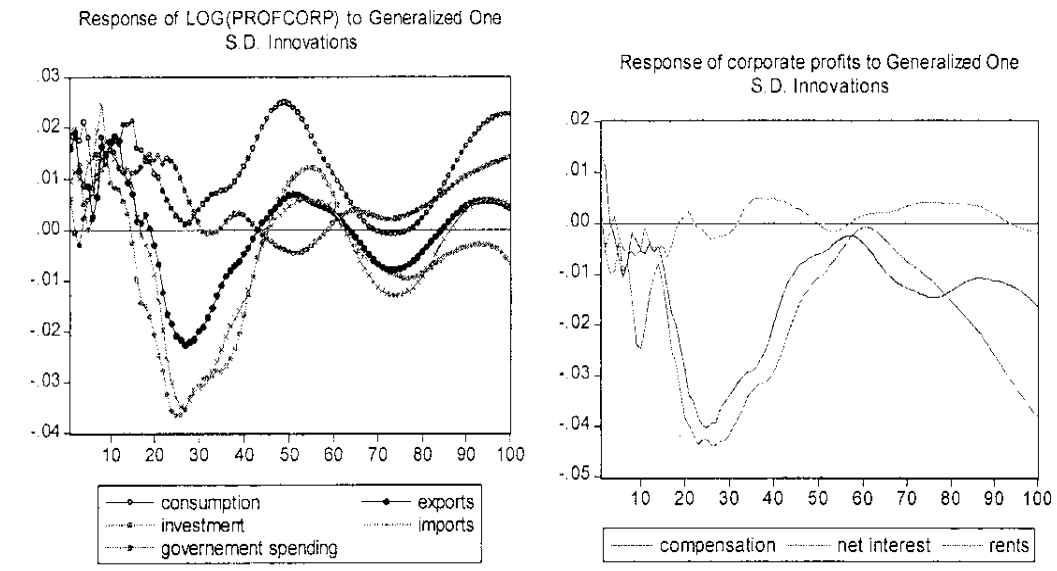
Since a shock has to be simulated, one may think of the same shortcomings of FEVD for example, whose results depend upon the ordering of variables in the shock. A good news is that a recent econometric technique, called generalized impulses (Pesaran & Shin[1998]) provides results that are ordering-independent. Yet a bad news is that IRFs are based upon a

single one-time shock, not a series of shocks. Thus IRF results are some kind of a ‘thought of experiment’ whose results have to be understood as *ceteris paribus* or ‘in the absence of no other shock’.

We simulate a one-time shock on the system by increasing every variable by an arbitrary amount (a unit standard deviation of the variable), and then keep track of the evolution of corporate profits as time increases. Please note that any IRF value represents a ‘spot’ value, and that in order to assess the overall effect of a shock at horizon h , one has to accumulate all the dynamic multipliers before quarter h . Graph 4 presents such results, but due to the number of variables in the system, results are only provided for variables which have proved so far to be interesting :

Graph 4 – IRFs on the profit equation

(demand variables on the left panel, income variables on the right panel)



Note : The observed oscillations of the IRFs are purely due to complex roots in the system and are therefore purely due to the parameters involved.

From the IRF stem out the following results :

- consumption and government spending are the only two variables that positively affect profits.
- Exports and imports exert a relatively neutral effect on profits. The effect of imports on profits is slightly lower than the effect of exports, and both effects are negative,
- Investment is neutral to slightly negative on profits.
- Interest is neutral on profits
- Compensation and especially rents are major drags to profits.

- PART TWO -

The profit paradox holds

Part one brought about the proof of the profit paradox without relying on a theory-biased framework. The absolute generality of the tested equation lies in their pure nature of identity. Denying equation [5] would deny equations [1] and [2] and therefore both the very existence of profits and national accounting itself. The estimated equation [5] cannot be deemed 'keynesian', 'post-keynesian' or whatever. Any other definition of profits, be it rooted into the neoclassical production function or into some neo-ricardian relationship, applying some exogenous share of profit to a given aggregate income, is an a priori ideological one.

5. 'DISCIPLINE' POLICIES DO NOT RAISE PROFITS ; THEY SQUEEZE THEM !

5.1. THE CRUCIAL ROLE OF CONSUMPTION

Contrary to the dominant conventional wisdom, consumption plays a crucial role in explaining the growth of profits. For the whole period, both in the short term and the long term, its positive impact is much more important than the impact of investment for two reasons :

- first consumption is strongly exogenous (autonomous) while investment is strongly endogenous, like profits. This contradicts the conventional view of an investment driven economy
- second it is true that investment has some positive impact but it fades out very quickly

Consumption being a driving factor of profits, advocating a squeeze of consumption to increase saving is fully contradicting the profit motive. What proves our analysis is that an advanced capitalist economy like the United States is never short of saving while it can be short of consumption, so saving out for thriftiness may be squeezed. Herein lies the objective proof of the inexistence of the so-called natural (potential) growth path which by postulate enshrines the supreme law of thriftiness. All our variables (and therefore the growth rate) are defined relative to their steady-state paths but none is following the neoclassical (or wicksellian) eternal path targeted by disciplinary policies.

On the other side, our results display the existence of a long run negative relationship between employee compensation and profits. How can we reconcile those apparently contradicting outcomes but by relying on the increased reliance of consumption financed through indebtedness ? Desired growth of consumption is the leading animal spirit of the system, being so strong that effective growth consumption been more and more independent of the growth of compensation. Such an empirical result sheds light on fundamental characteristics of an advanced capitalist economy :

- Conventional consumption functions, whatever their nature, no more hold
- Wage-earners debt is in the long run substituted for corporate debt as one major source of profits
- Any policy hindering wage-earners growth of indebtedness hinders the growth of profits. Inversely, encouraging the growth of wage-earners debt for consumption purposes translates into profit growth.

Herein is the straightforward proof that monetary policy targeting very low and stable interest rates is directly fitting the profits target, which explains the United State's monetary policy since the nineties. Inversely, pursuing a monetary policy of interest rates high enough

to squeeze consumption for the sake of zero inflation is directly an anti-profit policy. The present study brings about a proof of interest rates as long as they are the outcome of monetary policy. Interest rates have an impact through consumption and housing, contradicting the conventional view of an investment-driven impact.

5.2. THE POSITIVE IMPACT OF PUBLIC EXPENDITURES

Our findings prove that the growth of public expenditures does not have a negative impact on aggregate profits neither in the short run nor the long run. It could be enough to dismiss the claim for fiscal policies targeting a squeeze of public outlays. Since it is straightforward that taxes cannot raise profits, it is true that targeting a zero deficit (or a surplus) cannot lead to a growth of profits. From our results, it is also fully impossible to deduce an inverse relationship between the growth of investment and the growth of public expenditures. Herein lies the last resort proof of the inexistence of any kind of crowding-out effect.

There is more because public expenditures do have a positive impact on the growth of profits. This effect is weaker than consumption's effect because public expenditures is merely a short run factor of the growth of profits. A possible explanation of that finding is that public expenditures are partly endogenous, and indeed may become more and more endogenous through time like tax collection. Changes in government spending are found to respond to changes in several other variables, which explains why it is not a fully exogenous, thus driving variable. Such an increased endogeneity could also reflect self-imposed constraints for the sake of attaining a mythical long run stable path, as discussed above. In any case, public expenditures do have a much more positive impact on profits than investment has. This alone should be enough to sustain the profit paradox hidden into policies of restraint: such policies themselves contribute to the drain of profits.

Our answer to the first question asked in the introduction : 'what are the factual determinants of profits, and what are the most important ?' can be summed up as follows :

- Pursuing both fiscal policy of squeeze and monetary policy of squeeze leads to a collapse of profits
- Pursuing a fiscal policy of restraint hinders the profits motive as long as it is not matched by a strong growth of indebtedness-financed consumption allowed for by a fully expansionist monetary policy. This case appears to have been the one relevant to the explanation of the clintonomics of the second half of the nineties.
- The most efficient case for the profit motive is to pursue simultaneously an expansionist fiscal policy and an expansionist monetary policy. This being true of course, up until some satisfying low-unemployment equilibrium is found.

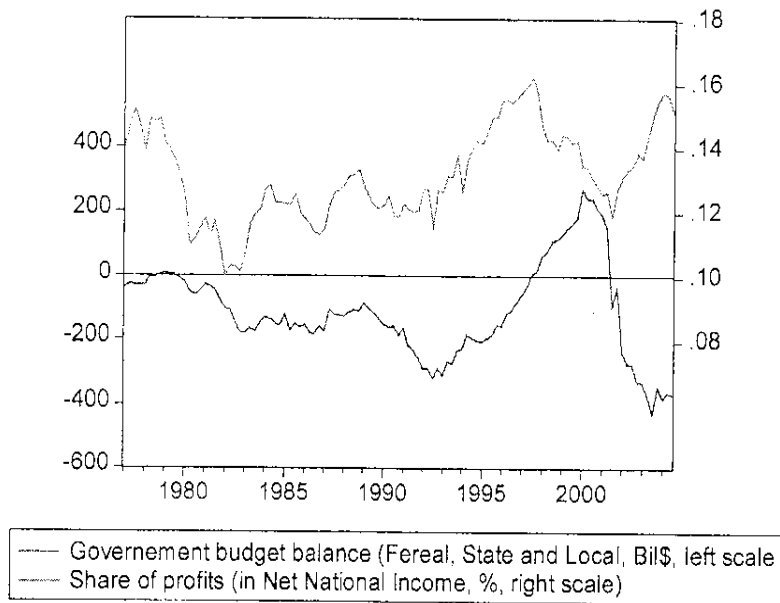
5.3. IS THERE A SHARE OF PROFIT MOTIVE SUPPORTING THE PARADOX ?

This section addresses the second question raised in the introduction, namely 'would a policy-implied growth of aggregate demand engineer a fall in the share of profits below some required level ?' To answer this question, we first provide the factual data of the government deficit and the share of profits (as defined in section 1.1 above), drawn together on graph 5.

As mentioned earlier there seems to be some degree of persistence in the behavior of the distributed shares. As for the profit share, we mentioned earlier that it remained roughly unchanged until 1966 and decreased until 1982. In this section we are most interested in the behavior of the share of profits since that time, that is a rise from about 10% in 1982 to about

15% in 2004 (a 50% increase). An interesting pattern emerging from graph 5 is that government balance and aggregate profits exhibit a strong, positive correlation through time.

Graph 5 – Share of profits and government budget balance, 1977-2004



Note : Share of profits is gross of corporate income taxes as defined in section I.1 above. Government balance data encompasses the federal, state and local levels and is provided by the Federal Reserve Board Flow of Funds, Table F.106.C.

A decrease in government budget balance (1978-82, 1989-92) is associated with a decrease in the share of profits, and a reduction of government's deficit is associated with a rise in the share of profits (1992-97). Yet this is not always the case : the share of profits is falling as soon as the deficit transformed into huge surpluses and historically low unemployment (1997-2001). Thus full-employment and surpluses are a drag to the share of profits. From 2001 to 2004, the pattern observed in our previous econometric analysis emerges again.

Please remember from Table 4 our finding that government spending Granger-causes profits, but the contrary is not true, and that demand-variables influence profit the most. Thus apart from short-run movements, what we observe on the previous graph is fully in line with our previous econometric findings. For example the 1977-90 period clearly shows that recurrent and even greater deficits allow the restoration in the share of profits. This is even better seen from 1997 to 2001 when surpluses lead to a fall in the share of profits, and from 2001 to 2004 when the return to deficits turns into a restoration of the share of profits.

This could be enough to prove that expansionist policies did not impose a drop in the share of profits, but instead that government spending and deficit significantly influence positively the share of profits. Therefore expansionist policies do not contradict a share of profits motive (SOPM) if it exists at all.

How can we interpret the observed rise in the share of profits since the eighties ? Such a rise originates from either a profits' growth higher than other incomes', or from a lower growth of other incomes relative to profits' growth. What other type of income had to be adjusted to account for the rise of profits ? From graphs 1 and 4, we see that the wage share did not vary by much from the early 1980s, but that the rent share (possibly including interest)

varied a lot. This finding is in line with our finding that net interest (in the short run) and rents (in the longer run) are two types of income which significantly drive profits (see graphs 2A and 2B of section 4.2). The formidable increase in the rental share observed on graph 1 in 1978-1982 significantly reduced (graph 4) the share of profits (graph 5). Thus rental income, being the most exogenous variable of our system at least in the long run, is inversely related to profits. When the share of rental income (rents plus interest) began to decrease since 1982, profits began to rise. Please note that the change in rental income affects primarily profits, since the wage share remains roughly constant. All our results thus lead to exhibit some sort of trade-off between more profits or more rents. The lowering of interest rates since the early 80s thus translated into more profits *because* rental income was on the decline.

In addition to rental income, we already mentioned the effect of aggregate compensation on profits. Our findings point out a negative relationship from compensation to profits. But since the 80s-onwards period is better characterized (1) by increased household indebtedness and (2) moderate wage increases, both effects have jointly contributed to the rise of profits and the profit share. This finding, again, perfectly fits our previous emphasis on non-income-financed growth of consumption in the generation of profits.

Conclusion : The profit paradox holds because profits are demand-driven. 'Discipline should be a result rather than a means.

Profits are far from autonomous ; (short-run) Granger causality tests results in their endogeneity, and ('long run') FEVD concludes in their high degree of endogeneity as well. Even if they are a significant variable of the system, *profits are better understood as the result of the behavior of all other variables in the system*. There might be some degree of autonomy in the very short run, as illustrated by the system-wide FEVD, but *in the short run profits are also very well predicted by demand-variables, especially consumption, trade and government spending*. This short-run autonomy of profits can be explained by the willingness of executive boards to maintain some value for profits ; since it does not prevail in the long run, this may be called inertia, or 'short-run share of profit motive'.

Over the long run nonetheless, our results conclude in the direction of the fact that no inertia or 'share of profit motive' prevails. Of particular interest is that in the long run, profits seem mostly affected by another type of income : rents. Thus *the demand-driven profits observed in the short-run turn into a 'distribution conflict' over the longer run*.

Yet our study draws other conclusions too concerning profits. Three variables stem out in the present study of the behavior of profits. The first two are consumption and government spending, which have proved to be effective (Granger sense) predictor of profits in the short run and the long run, and they are positively related to profits (IRF sense). The third important variable are trade variables, since both exports and imports have proved effective predictors of profits, but the magnitude of the influence is not very large. All in all, demand variables are always very important in explaining the behavior of profits.

One final note should be made about the place of investment in this study. Just like profits, investment turned out very much influenced by the remaining variables, and is thus far to be autonomous. Investment has not proved to be an excellent predictor of profits, except maybe in the short run (conflicting results concerning the role of investment emerge from graphs 1A and 1B). Among short run investment determinants, one may mention only income-variables all predicting well investment *with the notable exception of profits*. Those findings about investment, alone, should be subject of future research.

In the meantime, a general conclusion emerges from all the tools used in this study. 'Discipline' policies are doomed to fail as long as the desirable goal of a balanced budget is understood with reference to supply factors only. Introducing demand factors in the analysis, we conclude, shows that *balancing the budget should be the result, not the means*, towards prosperity.

Appendix 1 – NIPA definitions

The ‘guide to the NIPAs’ available on the BEA’s website presents NIPA definitions of the different aggregates used in this study. It reads as follows :

C : Personal Consumption Expenditures (PCE) are goods and services purchased by U.S. residents. PCE consists mainly of purchases of new goods and of services by individuals from private business. In addition, PCE includes purchases of new goods and of services by nonprofit institutions (including compensation of employees), net purchases of used goods by individuals and nonprofit institutions, and purchases abroad of goods and services by U.S. residents. PCE also includes purchases of certain goods and services provided by general government and government enterprises, such as tuition payments for higher education, charges for medical care, and charges for water and other sanitary services. Finally, PCE includes imputed purchases that keep PCE invariant to changes in the way that certain activities are carried out—for example, whether housing is rented or owned, whether financial services are explicitly charged, or whether employees are paid in cash or in kind.

I : Gross Private Domestic Investment (GPDI) consists of *fixed investment* and *change in private inventories*. Fixed investment consists of both *nonresidential* fixed investment and *residential* fixed investment. It is measured without a deduction for CFC and includes replacements and additions to the capital stock. It covers all investment in fixed assets by private businesses and by nonprofit institutions in the United States, regardless of whether the fixed asset is owned by U.S. residents. (Purchases of the same types of equipment, software, and structures by government agencies are included in government gross investment.) It excludes investment by U.S. residents in other countries.

Nonresidential fixed investment consists of both *structures* and *equipment and software*.

Nonresidential structures consists of new construction (including own-account production), improvements to existing structures, expenditures on new nonresidential mobile structures, brokers’ commissions on sales of structures, and net purchases of used structures by private business and by nonprofit institutions from government agencies. New construction includes hotels and motels and mining exploration, shafts, and wells. Nonresidential structures also include equipment considered to be an integral part of a structure, such as plumbing, heating, and electrical systems. *Equipment and software* consists of purchases by private business and by nonprofit institutions on capital account of new machinery, equipment, furniture, vehicles, and computer software; dealers’ margins on sales of used equipment to business and to nonprofit institutions; and net purchases of used equipment from government agencies, from persons, and from the rest of the world. Own-account production of computer software is also included. For equipment that is purchased for both business and personal use (for example, motor vehicles), the personal-use portion is included in PCE.

Residential fixed investment consists of all private residential structures and of residential equipment that is owned by landlords and rented to tenants. Residential structures consists of new construction of permanent-site single-family and multifamily units, improvements (additions, alterations, and major structural replacements) to housing units, expenditures on manufactured homes, brokers’ commissions on the sale of residential property, and net purchases of used structures from government agencies.

Residential structures include some types of equipment that are built into the structure, such as eating and air-conditioning equipment.

Change in private inventories is the change in the physical volume of inventories owned by private business, valued in average prices of the period. It differs from the change in the book value of inventories reported by most business; the difference is the *inventory valuation adjustment*.

X_{net} : Net Exports of Goods and Services. is *exports* less *imports* of goods and services. Income receipts and payments and transfer payments to the rest of the world (net) are excluded.

G : Government consumption expenditures and gross investment, the measure of government-sector final demand, consists of two major components: *Current consumption expenditures* by general government, and *gross investment* by both general government and government enterprises.

Consumption expenditures consists of compensation of general government employees (except own-account investment), consumption of general government fixed capital, and net current purchases from business and from the rest of the world. Consumption expenditures also include changes in inventories and net purchases of used goods. Current receipts for certain goods and services provided by general government agencies—primarily tuition payments for higher education and charges for medical care—are defined as government sales, which are treated as deductions from government consumption expenditures. Gross investment consists of purchases of new structures and of equipment and software by both general government and government enterprises, net purchases of used structures and equipment, and own-account production of structures and of software. Government consumption expenditures and gross investment does not include current transactions of government enterprises, transfer payments, interest paid or received by government, subsidies, or transactions in financial assets and nonproduced assets such as land.

W : Compensation of employees is the income accruing to employees as remuneration for their work. It is the sum of wage and salary accruals and of supplements to wages and salaries.

Wage and salary accruals consists of the monetary remuneration of employees, including the compensation of corporate officers; commissions, tips, and bonuses; voluntary employee contributions to certain deferred compensation plans, such as 401(k) plans; employee gains from exercising nonqualified stock options; and receipts in kind that represent income. Wage and salary accruals consist of *disbursements* and *wage accruals less disbursements*. Disbursements is wages and salaries as just defined except that retroactive wage payments are recorded when paid rather than when earned. Accruals less disbursements is the difference between wages earned, or accrued, and wages paid, or disbursed. In the NIPA's, wages accrued is the measure used for national income, and wages disbursed is the measure used for personal income.

Supplements to wages and salaries consist of employer contributions for social insurance and of other labor income. *Employer contributions for social insurance* consists of employer payments under the following Federal Government and State and local government programs: Old-age, survivors, and disability insurance (social security); hospital insurance; unemployment insurance; railroad retirement; pension benefit guaranty; veterans life insurance; publicly administered workers' compensation; military medical insurance; and temporary disability insurance. *Other labor income* consists of employer payments (including payments in kind) to private pension and profit-sharing plans, publicly administered government employee retirement plans, private group health and life insurance plans, privately administered workers' compensation plans, supplemental unemployment benefit plans, and several minor categories of employee compensation (including judicial fees to jurors and witnesses, compensation of prison inmates, and marriage fees to justices of the peace).

PI : Proprietors' income (with inventory valuation and capital consumption adjustments) is the current production income (including income in kind) of sole proprietorships and partnerships and of tax-exempt cooperatives. The imputed net rental income of owner-occupants of farm dwellings is included; the imputed net rental income of owner-occupants of nonfarm dwellings is included in rental income of persons. Proprietors' income excludes dividends and monetary interest received by nonfinancial business and rental income received by persons not primarily engaged in the real estate business; these incomes are included in dividends, net interest, and rental income of persons.

R : Rental income of persons (with capital consumption adjustment) is the net current-production income of persons (except those primarily engaged in the real estate business) from the rental of real property, the imputed net rental income of owner-occupants of nonfarm dwellings, and the royalties received by persons from patents, copyrights, and rights to natural resources.

Π : Corporate profits (with inventory valuation and capital consumption adjustments) is the net current production income of organizations treated as corporations in the NIPAs. These organizations consist of all entities required to file Federal corporate tax returns, including mutual financial institutions and cooperatives subject to Federal income tax, private non-insured pension funds, nonprofit institutions that primarily serve business, Federal Reserve banks, and federally sponsored credit agencies. With several differences, this income is measured as receipts less expenses as defined

in Federal tax law. Among these differences are the following: Receipts exclude capital gains and dividends received, expenses exclude depletion and capital losses and losses resulting from bad debts, inventory withdrawals are valued at replacement cost, and depreciation is on a consistent accounting basis and is valued at replacement cost using depreciation profiles based on empirical evidence on used-asset prices that generally suggest a geometric pattern of price declines. Because national income is defined as the income of U.S. residents, its profits component includes income earned abroad by U.S. corporations and excludes income earned in the United States by the rest of the world.

Profits before tax is the income of organizations treated as corporations in the NIPA's except that it reflects the inventory-accounting and depreciation accounting practices used for Federal income tax returns. It consists of profits tax liability, dividends, and undistributed corporate profits.

Profits tax liability is the sum of Federal, State, and local government income taxes on all income subject to taxes; this income includes capital gains and other income excluded from profits before tax. The taxes are measured on an accrual basis, net of applicable tax credits.

Profits after tax is profits before tax less profits tax liability. It consists of dividends and undistributed corporate profits.

Dividends is payments in cash or other assets, excluding the corporations' own stock, that are made by corporations located in the United States and abroad to stockholders who are U.S. residents. The payments are measured net of dividends received by U.S. corporations. Dividends paid to State and local governments are included. *Undistributed profits* is corporate profits after tax less dividends.

Inventory valuation adjustment (IVA) is the difference between the cost of inventory withdrawals valued at acquisition cost and the cost of inventory withdrawals valued at replacement cost. The IVA is needed because inventories as reported by business are often charged to cost of sales (that is, withdrawn) at their acquisition (historical) cost rather than at their replacement cost (the concept underlying the NIPAs). As prices change, businesses that value inventory withdrawals at acquisition cost may realize profits or losses. Inventory profits, a capital-gains-like element in business income (corporate profits and nonfarm proprietors' income), result from an increase in inventory prices, and inventory losses, a capital-loss-like element, result from a decrease in inventory prices. In the NIPAs, inventory profits or losses are shown as adjustments to business income; that is, they are shown as the IVA with the sign reversed. No adjustment is needed to farm proprietors' income because farm inventories are measured on a current-market-cost basis.

NI : Net interest is the interest paid by private business less the interest received by private business, plus the interest received from the rest of the world less the interest paid to the rest of the world. Interest payments on mortgage and home improvement loans and on home equity loans are included in interest paid by business because home ownership is treated as a business in the NIPA's. Interest received by private non-insured pension plans is recorded as being directly received by persons in personal income (see below). In addition to monetary interest, net interest includes imputed interest, which is paid by corporate financial business. For regulated investment companies, imputed interest is measured as operating expenses. For depository institutions and life insurance carriers, imputed interest is measured as the difference between the property income received on depositors' or policyholders' funds and the amount of property income paid out explicitly. The imputed interest paid by life insurance carriers attributes their investment income to persons in the period it is earned. The imputed interest payments by financial intermediaries (other than life insurance carriers) to persons, governments, and to the rest of the world have imputed service charges as counterentries in GDP and in income payments to the rest of the world; these charges are included in PCE, in government consumption expenditures and gross investment, and in exports of goods and services, respectively.

BTr : Business transfer payments consists of payments to persons and to the rest of the world by private business for which no current services are performed. Business transfer payments to persons consist primarily of liability payments for personal injury and of corporate gifts to nonprofit institutions. Business transfer payments to the rest of the world consists of nonresident taxes—that is, taxes paid by domestic corporations to foreign governments.

T_{YMS} : Taxes on production and imports consists of (1) tax liabilities that are chargeable to business

expense in the calculation of profit-type incomes and (2) certain other business liabilities to general government agencies that are treated like taxes. Indirect business taxes includes taxes on sales, property, and production. Employer contributions for social insurance are not included. Taxes on corporate incomes are also not included; these taxes cannot be calculated until profits are known, and in that sense, they are not a business expense. Nontaxes includes regulatory and inspection fees, special assessments, fines and forfeitures, rents and royalties, and donations. Nontaxes generally excludes business purchases from general government agencies of goods and services that are similar to those provided by the private sector. Government current receipts from the sales of such products are netted against government consumption expenditures.

GES : Subsidies less current surplus of government enterprises is the monetary grants paid by government agencies to private business and to government enterprises at another level of government. The *current surplus of government enterprises* is their current operating revenue and subsidies received from other levels of government less their current expenses. In the calculation of their current surplus, no deduction is made for net interest paid. The current surplus of government enterprises is not counted as a profit type income, and therefore, it is not counted as a factor charge. Subsidies and current surplus are shown as a combined entry because deficits incurred by some government enterprises may result from selling goods to business at below-market prices in lieu of giving them subsidies.

CFC : Consumption of fixed capital is the charge for the using up of private and government fixed capital located in the United States. It is defined as the decline in the value of the stock of assets due to wear and tear, obsolescence, accidental damage, and aging. For most types of assets, estimates of CFC are based on geometric depreciation patterns; empirical studies on the prices of used equipment and structures in resale markets have concluded that a geometric pattern of depreciation is appropriate for most types of assets. For general government and for nonprofit institutions that primarily serve individuals, CFC is recorded in government consumption expenditures and in PCE, respectively, as a partial measure of the value of the current services of the fixed assets owned and used by these entities. *Private capital consumption allowances* consists of tax-return-based depreciation charges for corporations and nonfarm proprietorships and of historical-cost depreciation (calculated by BEA, using a geometric pattern of price declines) for farm proprietorships, rental income of persons, and nonprofit institutions. *Private capital consumption adjustment* is the difference between private capital consumption allowances and private CFC.

IncRoW : Income receipts from the rest of the world consists of receipts by U.S. residents of foreign interest and dividends, of reinvested earnings of foreign affiliates of U.S. corporations, and of compensation paid to U.S. residents by foreigners. *Income payments to the rest of the world* consists of payments to foreign residents of U.S. interest and dividends, of reinvested earnings of U.S. affiliates of foreign corporations, and of compensation paid to foreigners by U.S. residents.

Appendix 2 – Further comments on VECs.

Let us first recall the general representation of a VEC model containing $X_t=(x_{1t}, \dots, x_{nt})$ I(1) variables indexed in time :

$$\text{VEC}(k) : \quad \Delta X_t = \underbrace{\alpha \beta' X_{t-1}}_{\text{long-run}} + \underbrace{\sum_{i=1}^{k-1} \Gamma_i \Delta X_{t-i}}_{\text{short-run}} + \underbrace{\mu_0 + \mu_1 t}_{\text{deterministic component}} + \underbrace{\Phi D_t}_{\text{exogenous regressors}} + \underbrace{\varepsilon_t}_{\text{Gaussian errors}}$$

where k is the number of past values of each (differenced) variable used to explain the dependant variable, α is a $r \times n$ matrix of coefficient loadings to the cointegrating relations (r being the rank of matrix Π), β' contains $r \times n$ the ‘long-run’ or ‘steady-state’ coefficients, Γ is the ‘short-run’ or ‘differences’ coefficient matrix, D_t is a set of exogenous variables (not discussed here) and ε_t is a set of Gaussian errors.

The rest of this appendix provides an intuitive interpretation of the cointegrating relationships as well as the two tests measuring their number, presents and discusses the adjustment loadings, and introduces the five cases types of deterministic component.

First, $\beta' x_{t-1}$ are (is) the cointegrating relation(s), that is the relationship(s) that links all variables. Those cointegrating relationships are also called common trends, since they are interpretable as the common forces that bound *all* variables at the same time. This is (these are) cointegrating relationships in the sense that some linear combinations of the series, which are I(1), become I(0), thus fulfilling the stationarity requirements of efficient estimation. The coefficients of such stationary linear combinations are piled into the β' matrix.

Yet the number of such cointegrating relationships remains to be estimated, i.e. we do not know how many different forces drive all the variables. Johansen provides two tests, the trace test and the maximum eigenvalue test, to test for the number of cointegrating relationships. This number is therefore the number of relationships that bound variables. Please note that the asymptotic critical values of those tests crucially depend (1) on whether or not a set of exogenous regressors is present (D_t) and (2) on the deterministic specification of the cointegrating relationships the researcher chooses (μ_0, μ_1 , see below). Note also that there may not be any significant cointegration between the variables.

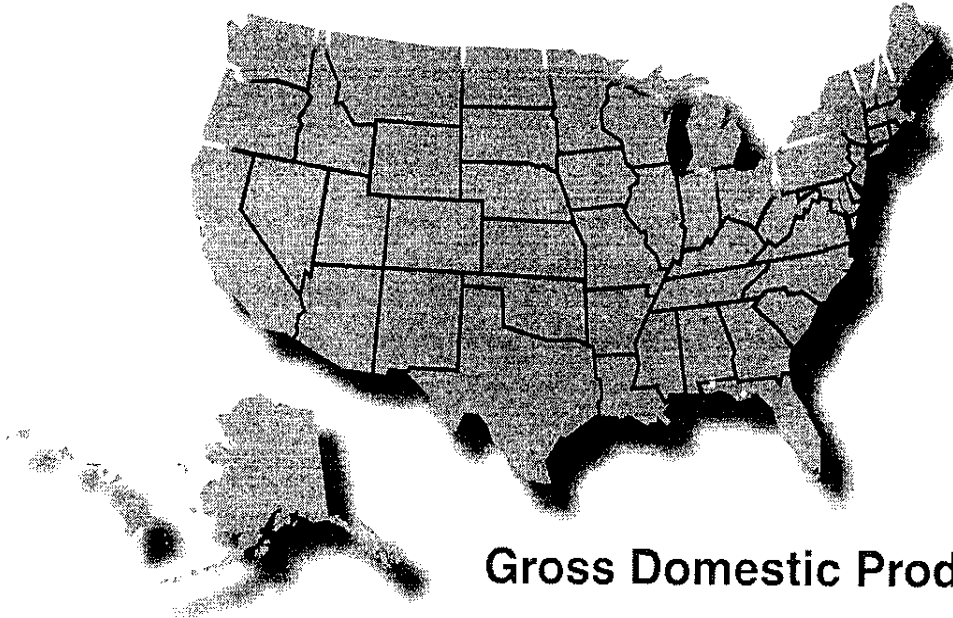
Second, once those cointegrating relationships or ‘long-run’, ‘steady-state’ relationships are estimated, they enter the error-correction part of the model. Those relationships are stationary around the deterministic part of the model and there exists deviations from the trend/constant (see more below). Such deviations are interpreted as errors, which explain every variable of the system. For example, let us think of a system composed of only two variables, say GDP and consumption. Since there are only two variables, there can be at most one cointegrating relationship. Since the share of consumption in GDP is roughly stable, one can think of a common force, or cointegrating relationship, which drive *both* variables. In practice such a cointegrating relationship exists and *roughly* represents the share of consumption of GDP through time, scaled to revert around a trend or a constant. Johansen proves that there exists a representation in which those deviations from the ‘steady-state’ explain every variable in the system. Doing so, we explain both variables as a function of the share of consumption in GDP ; intuitively, if at some point in time we are below the ‘steady-state’ or ‘long-run’ value of the share of consumption in GDP, one of the two variables will have to move in such a way as to restore the ‘long-run’ value of that ratio. For example, in a time characterized by a below-average consumption-GDP ratio, consumption is likely to

increase to restore the long-run value of that ratio. The magnitude of this adjustment of the variables is captured in the α coefficients, which are termed ‘adjustment coefficients’ after Johansen. Please note that those adjustment coefficients need not be all individually or jointly significant ; a system may come out estimated with non-error-correcting variables, or with variables that error-correct in the wrong direction (variables push the process further away equilibrium each time a maladjustment occurs).

Third, as mentioned above the deterministic component of the model is an important choice because it has clear implications for estimation. In the general model above, we specify the deterministic components as $\mu_0 := \alpha\beta_0 + \gamma_0$ and $\mu_1 := \alpha\beta_1 + \gamma_1$. Five cases arise from there on, ranging from a significant quadratic trend in the data to no trend and no constant in the data.

- Case 5 :** no restriction on μ_0, μ_1 implies that there is a quadratic trend in the data, or equivalently that the growth rates follow a timely trend.
- Case 4 :** $\gamma_1 = 0$ implies that there is a linear trend in the data, and this trend does not cancel out in the cointegrating relationships. Thus the cointegrating relationships contain a significant trend, but the rest of the model (the error-correction part) does not contain any trend and features a constant only. This case appears to be a good one, albeit needs to be tested for, since (1) our variables appear to broadly follow a trend (see unit root tests), and (2) this case is particularly suitable for trend-stationary variables as corporate profits is (see unit root tests again).
- Case 3 :** $\mu_1 = 0$ implies that there is a linear trend in the data and it does cancel out in the cointegrating relationship. This case may be the one of choice if the trending series feature a trend that cancels out in the cointegrating relationship. In that case the constant is unrestricted and may belong either to the cointegration space or to the error-correction part of the model.
- Case 2 :** $\mu_1 = 0, \gamma_0 = 0$ but $\beta_0 \neq 0$ implies that there are no linear trends in the data, and the constant is restricted to lie in the cointegration space. This case may be good if the trends we observed earlier on were spurious trends.
- Case 1 :** $\mu_1 = 0, \mu_0 = 0$ implies that there is no deterministic component in the data. This would imply that the cointegrating relationship has zero mean, which is a bad choice since the data does not start from zero in 1954:1.

Please note that Johansen’s classic five cases are all nested into one another, case four being a restricted version of case five, etc... The appropriate method is therefore to start with an assumption of case five, test for the presence of a quadratic trend in the data (*via* a LM test), and if rejected, carry on the analysis with case four. Such a method avoids the annoying pitfall of VECs which states that ‘the deterministic component is an assumption of the researcher’.



Gross Domestic Product (GDP) by State

The Bureau of Economic Analysis prepares annual estimates of GDP by state for all states and the District of Columbia.¹ GDP by state is the state counterpart of the nation's GDP, the Bureau's featured and most comprehensive measure of U.S. economic activity. An industry estimate of GDP by state, or its "value added," is calculated as the sum of incomes earned by labor and capital and the costs incurred in the production of goods and services. The Bureau prepares GDP-by-state estimates in millions of current and chained dollars for 81 North American Industry Classification System (NAICS) industries (table 1), beginning with 1997. (BEA also prepares GDP-by-state estimates for 75 Standard Industrial Classification (SIC)-based industries for 1963–97.) For each industry, current-dollar GDP by state is composed of three components: Compensation of employees, taxes on production and imports less subsidies, and gross operating surplus.

BEA releases advance total and aggregate NAICS industry GDP-by-state estimates in both current and chained dollars six months after the end of the year and two months after the advance release of annual GDP by industry for the United States. Advance estimates are largely extrapolations of previous GDP-by-state estimates using earnings by state and industry. Revisions to total and aggregate industry-level GDP by state estimates, and new disaggregate-level NAICS industry data are prepared each year, based on more complete source data. The Bureau also prepares regular analyses of the GDP-by-state estimates that accompany the release of new estimates.

1. These estimates were formerly known as Gross State Product or GSP.

Uses of GDP by state

The GDP-by-state estimates are used widely by both public and private sectors for various administrative purposes or for studying economic trends in states and regions. For example:

- Federal government agencies use the estimates as a basis for allocating funds and determining matching grants to states. They also use the estimates in econometric models, such as those used to project energy and water uses by state.
- State governments use the estimates in econometric models to project tax revenues and the need for public services.
- Academic researchers use the estimates for applied economic research.
- Businesses, trade associations, and labor organizations use the estimates for market research.

Availability

BEA disseminates the GDP-by-state estimates in free, interactively accessible files in our Web site at www.bea.gov. BEA also publishes these estimates and their analyses in the Bureau's monthly journal — the SURVEY OF CURRENT BUSINESS. Some of the latest SURVEY articles include:

- "Gross Domestic Product by State: Advance Estimates for 2006 and Revised Estimates for 2003–2005," in the July 2007 issue.
- "Comprehensive Revision of Gross State Product: Accelerated Estimates for 2003 and Revised Estimates for 1977–2002," by Gerard P. Aman, George K. Downey, and Sharon D. Panek in the January 2005 issue.

• SURVEY articles for recent years are available on our Web site at www.bea.gov.

For more information

Call the GDP-by-state staff at 202-606-5340 or e-mail gdpbystate@bea.gov

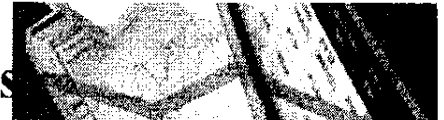
Table 1. Industries for Which GDP-by-State Estimates Are Available

| | 1997 NAICS code | | 1997 NAICS code |
|---|------------------------|---|----------------------|
| Private industries | | Information | 51 |
| Agriculture, forestry, fishing, and hunting | 11 | Publishing including software | 511 |
| Crop and animal production | 111-112 | Motion picture and sound recording industries | 512 |
| Forestry, fishing, and related activities | 113-115 | Broadcasting and telecommunications | 513 |
| | | Information and data processing services | 514 |
| Mining | 21 | Finance and insurance | 52 |
| Oil and gas extraction | 211 | Federal Reserve banks, credit intermediation and related services | 521-522 |
| Mining, except oil and gas | 212 | Securities, commodity contracts, investments | 523 |
| Support activities for mining | 213 | Insurance carriers and related activities | 524 |
| | | Funds, trusts, and other financial vehicles | 525 |
| Utilities | 22 | Real estate, rental, and leasing | 53 |
| Construction | 23 | Real estate | 531 |
| Manufacturing | 31-33 | Rental and leasing services and lessors of intangible assets | 532-533 |
| Durable goods | | Professional and technical services | 54 |
| Wood product manufacturing | 321 | Legal services | 5411 |
| Nonmetallic mineral product manufacturing | 327 | Computer systems design and related services | 5415 |
| Primary metal manufacturing | 331 | Other professional, scientific and technical services | 5412-5414, 5416-5419 |
| Fabricated metal product manufacturing | 332 | Management of companies and enterprises | 55 |
| Machinery manufacturing | 333 | Administrative and waste services | 56 |
| Computer and electronic product manufacturing | 334 | Administrative and support services | 561 |
| Electrical equipment and appliance manufacturing | 335 | Waste management and remediation services | 562 |
| Motor vehicle, body, trailer, and parts manufacturing | 3361-3363 | Educational services | 61 |
| Other transportation equipment manufacturing | 3364, 3365, 3366, 3369 | Health care and social assistance | 62 |
| Furniture and related product manufacturing | 337 | Ambulatory health care services | 621 |
| Miscellaneous manufacturing | 339 | Hospitals and nursing and residential care facilities | 622-623 |
| | | Social assistance | 624 |
| Nondurable goods | | Arts, entertainment, and recreation | 71 |
| Food product manufacturing | 311-312 | Performing arts, museums, and related activities | 711-712 |
| Textile and textile product mills | 313-314 | Amusements, gambling, and recreation | 713 |
| Apparel manufacturing | 315-316 | Accommodation and food services | 72 |
| Paper manufacturing | 322 | Accommodation | 721 |
| Printing and related support activities | 323 | Food services and drinking places | 722 |
| Petroleum and coal products manufacturing | 324 | Other services, except government | 81 |
| Chemical manufacturing | 325 | Government | 92 |
| Plastics and rubber products manufacturing | 326 | Federal civilian | |
| Wholesale trade | 42 | Federal military | |
| Retail trade | 44-45 | State and local | |
| Transportation and warehousing, excluding Postal Service | 48-49 | | |
| Air transportation | 481 | | |
| Rail transportation | 482 | | |
| Water transportation | 483 | | |
| Truck transportation | 484 | | |
| Transit and ground passenger transportation | 485 | | |
| Pipeline transportation | 486 | | |
| Other transportation and support activities | 487, 488, 492 | | |
| Warehousing and storage | 493 | | |

Source: Executive Office of the President, Office of Management and Budget, North American Industry Classification System Manual 1997 (Washington, DC: U.S. Government Printing Office, 1997).



Bureau of Economic Analysis Regional Economic Accounts



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Real GDP by state (millions of chained 2000 dollars)

The real estimates of gross domestic product (GDP) by state are measured in chained (2000) dollars. Real GDP by state is an inflation-adjusted measure of each state's gross product that is based on national prices for the goods and services produced within the state.

Last updated: Friday, December 29, 2006

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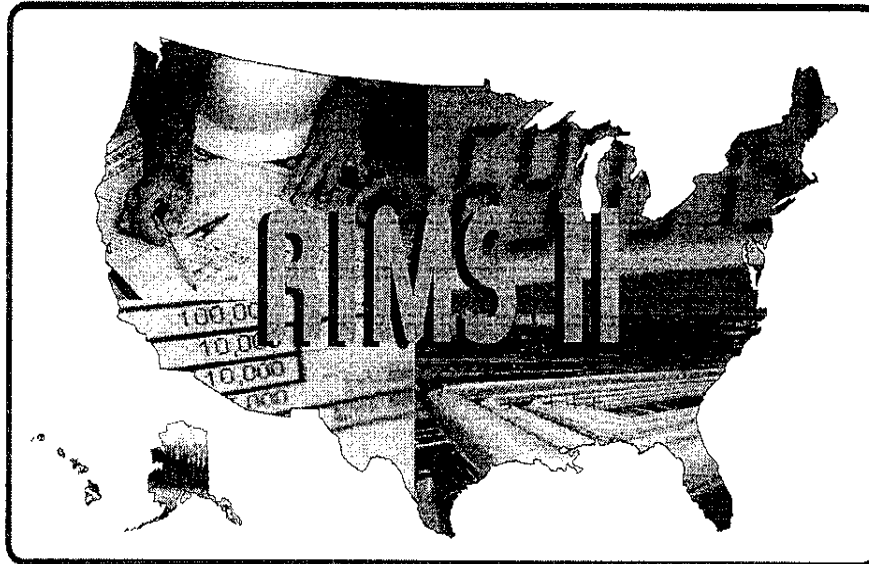
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Regional Economic Multipliers

The Bureau of Economic Analysis (BEA) prepares economic multipliers for states and local area economies. The multipliers are produced by the BEA's Regional Input-Output Modeling System (RIMS II) using state and local area personal income data and national input-output accounts data. RIMS multipliers can be used not only to estimate industry-wide impacts but also the impacts on each of the 20 industry sectors in RIMS II (table 1).

RIMS multipliers are used to study how one industry's production affects the production of other industries in an economy. They are used to estimate how much additional production is created for every initial increase in production and how many additional jobs are created for every new job that is created.

Uses of the regional economic multipliers

The regional economic multipliers are widely used by both the public and private sectors to study economic impacts. For example:

- Federal Government agencies use the regional economic multipliers to study the local impact of government regulation on specific industries and to assess the local economic impacts of Federal actions such as military base closings.
- State and local governments use the multipliers to estimate the regional economic impacts of government policies and projects and of events, such as firms locating within their state, or to assess the impacts of tourism.
- Businesses and private consultants use the multipliers to estimate the economic impacts of a wide range of projects,

such as building a new sports facility or expanding an airport; of natural disasters, such as Hurricane Katrina; or of special events, such as national political conventions.

Information required from users

To effectively use the RIMS II multipliers for impact analyses, users must provide geographically and industrially detailed information on the initial changes in output, earnings, or employment that are associated with a project or special event under study. To provide this information, the user must answer five questions about the project or event:

- What is the affected region?
- Which industries are initially affected?
- Is there more than one phase of the project or program?
- What are the initial changes in output, earnings, or employment?
- Should the initial changes be separated into production costs, transportation costs, and trade margins?

Availability

Multipliers can be ordered from the BEA Web site. A fee is charged to cover the cost of preparing multipliers. Detailed information on RIMS II is available on our Web site at <www.bea.gov>.

For more information

Call the Regional Input-Output Modeling System (RIMS) staff at 202-606-5343, or e-mail <rimsread@bea.gov>.

Table 1. RIMS II Industry Aggregations

| Number | RIMS industries | Input-Output industries included in aggregation |
|--------|---|---|
| 1 | Agriculture, forestry, fishing, and hunting..... | 1111A0-115000 |
| 2 | Mining..... | 211000-21311A |
| 3 | Utilities*..... | 2211A0-221300 |
| 4 | Construction..... | 230000 |
| 5 | Manufacturing..... | 311111-33999A |
| 6 | Wholesale trade..... | 420000 |
| 7 | Retail trade..... | 4A0000 |
| 8 | Transportation and warehousing..... | 481000-493000 |
| 9 | Information..... | 511110-514200 |
| 10 | Finance and insurance..... | 52A000-525000 |
| 11 | Real estate and rental and leasing..... | 531000-533000 |
| 12 | Professional, scientific, and technical services..... | 541100-5419A0 |
| 13 | Management of companies and enterprises..... | 550000 |
| 14 | Administrative and waste management services..... | 561300-562000 |
| 15 | Educational services..... | 611100-611B00 |
| 16 | Health care and social assistance..... | 621A00-624A00 |
| 17 | Arts, entertainment, and recreation..... | 711100-713A00 |
| 18 | Accommodation and food services..... | 7211A0-722000 |
| 19 | Other services*..... | 8111A0-813B00, S00A00 |
| 20 | Households..... | H00000 |

* Includes Federal Government enterprises.

JACOBS CONSULTANCY

in association with

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ARRIVALS
TERMINAL

FINAL REPORT

ECONOMIC IMPACT STUDY—2004 Norfolk International Airport

Prepared for

Norfolk Airport Authority
Norfolk, Virginia

October 2007



Final Report

**Economic Impact Study—2004
Norfolk International Airport**

Prepared for

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ECONOMIC IMPACT STUDY

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ECONOMIC IMPACT STUDY

1 INTRODUCTION

In 2005, Jacobs Consultancy* assessed the economic impacts that Norfolk International Airport (the Airport) had on the Airport Service Region and the Commonwealth of Virginia in 2004.

As part of the economic impact study, Jacobs Consultancy did the following:

- Conducted surveys of on-Airport organizations to update and validate employment and expenditure data for the Airport.
- Completed an inventory of off-Airport economic benefits of air travel, such as tourism-related expenditures.
- Developed an input/output model to define the relationship among Airport activity, employment and expenditures, and economic contribution. Two versions of the Regional Input-Output Modeling System (RIMS II) developed by the U.S. Department of Commerce were used in this subtask—one for the Commonwealth of Virginia and another for Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area (MSA) (the Airport Service Region).
- Estimated the economic impact of the Airport on the Airport Service Region and on the Commonwealth of Virginia, based on data collected in the surveys, the inventory of off-Airport economic benefits, and the RIMS II modeling.

2 METHODOLOGY

The methodology used to evaluate the current economic impact of the Airport involved (1) gathering primary data on the direct economic impact of on-Airport organizations, (2) supplementing these primary data with applicable data from prior Airport economic impact studies and related data gathering efforts, (3) using tourism and visitor information for the Airport Service Region to estimate the indirect economic impact, and (4) using models and other statistical techniques to estimate the induced economic impacts of on-Airport activity.

The data sources used in this evaluation were: (1) on-Airport data collected via surveys of on-Airport organizations conducted by Cordell & Crumley Communications Strategists, (2) off-Airport data collected via surveys of Hampton Roads Area

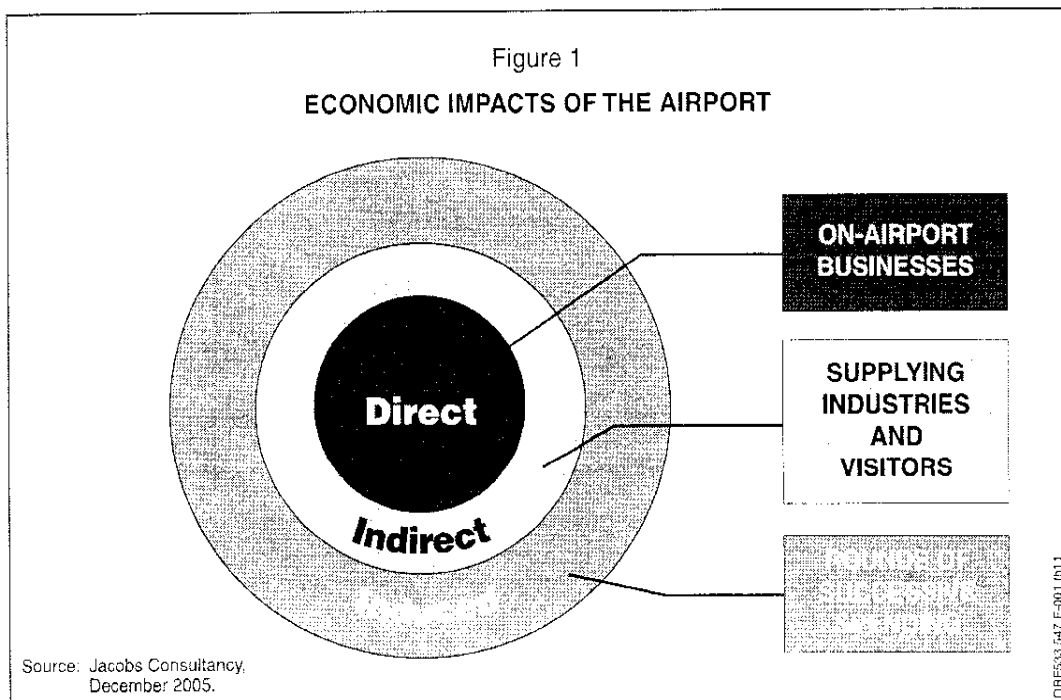
* When Jacobs Consultancy performed the Economic Impact Study in late 2005, the firm was known as Leigh Fisher Associates.

businesses conducted by Cordell & Crumley Communications Strategists, (3) relevant regional, state, and national economic indicators, (4) surveys of Airport passengers conducted by Bonney & Company published in February 2004, (5) the results of economic impact studies for the Airport prepared by the Airport Technology and Planning Group for 1992 and 1997, and (6) where required, inputs from other reports prepared for Norfolk Airport Authority (the Authority) by Jacobs Consultancy.

Whenever possible, calendar year data was used in this study. However, for many of the data sources listed, information was captured for a single point in time and not easily attributed to a specific twelve-month period. For example, the number of employees obtained from the survey of on-Airport organizations conducted by Cordell & Crumley Communications Strategists represents how many people each organization employed when they responded to the survey.

2.1 Definition of Terms

The total economic impact of the Airport is the sum of related direct, indirect, and induced impacts. Figure 1 illustrates the relationship among the direct, indirect, and induced economic impacts of the Airport.



- **Direct Economic Impact.** The direct economic impact of the Airport is the impact generated on-site, including the employment, payroll, and local expenditures of all organizations located at the Airport—airlines, terminal concessionaires, general aviation businesses, ground transportation providers, government agencies such as the Federal Aviation Administra-

tion (FAA), and other organizations. These organizations have a direct and quantifiable impact on the economy of the region served by the Airport.

- ***Indirect Economic Impact.*** The indirect economic impact of the Airport is the impact of visitors coming to the area via the Airport, including employment, payroll, and local expenditures in the area but outside the Airport. Visitors to the area spend money locally on lodging, food and beverages, entertainment, retail, and other items; such spending has an indirect but quantifiable impact on the economy of the region and state served by the Airport.
- ***Induced Economic Impact.*** The induced economic impact of the Airport is the off-Airport impact above and beyond the combined direct and indirect impacts of an economic activity, where additional income is created by successive rounds of spending known as the “multiplier” effect. Induced economic impact includes the employment and expenditures of (1) supplying industries that provide the services, materials, or machinery to support industries that derive business from on-Airport businesses, such as wholesale food distributors, office supply firms, and jet fuel suppliers and (2) expenditures by airport employees on goods and services within the area.

The direct, indirect, induced, and total economic impacts of the Airport are measured in terms of total economic impact, expenditures, payroll, and employment.

- ***Total economic impact dollars.*** The value of output measured in dollars. Total economic impact (expenditures and payroll) was assumed to equal output. This assumption is equivalent to assuming zero profits (revenues = expenses), and ensures conservative results.
- ***Expenditure.*** Total dollars spent on goods and services.
- ***Payroll.*** Total wages or salaries.
- ***Employment.*** The number of jobs.

The results of this study are intended to be estimates of economic impact, stated in terms of expenditures, payroll, and employment related to operations at the Airport. They should not be interpreted as benefits of Airport operations in the sense that such expenditures, payroll, or employment would not occur if the Airport were not in existence; they simply represent dollar flows and jobs in the economy related to activity at the Airport.

In general, the economic impacts presented in this report correspond to the long-term demand for aviation services in the region, regardless of the fluctuations in economic activity that may occur as a result of the entry or exit of specific organizations at the Airport.

2.2 Assessment of Direct Economic Impact

The direct economic impact of the Airport is the impact generated on-site at the Airport, and includes the employment, payroll, and local expenditures of all enterprises located at the Airport—airlines, terminal concessionaires, general aviation businesses, ground transportation providers, government agencies, and other businesses. These enterprises have a direct and quantifiable impact on the economy of the region.

On-Airport Business Survey. A survey form entitled “2004 Airport Tenant Survey” (reprinted here as Figure 2) was used to obtain employment and expenditure data for analysis of direct on-Airport economic impacts. Airport staff provided guidance on the survey content and design.

The survey form was designed to elicit information on employment and associated wage data; expenditures on services and supplies, capital improvements, and local taxes; and other expenditures contributing to the Airport’s economic impact.

The names and addresses of the on-Airport organizations to be surveyed were compiled with the assistance of Authority staff. Survey forms were faxed to the organizations listed in Table 1 in October 2004.

During November and December 2004, telephone calls were made to organizations that had not yet responded. Additional follow-up calls were made until a major portion of the organizations had responded and Jacobs Consultancy and Cordell & Crumley jointly determined that no more responses would be received.

Survey Responses. Table 2 summarizes the response rate for the on-Airport organizations surveyed, by type of organization. Of the 53 on-Airport organizations surveyed, 30 completed the survey form, for an overall response rate of 56.6%. Those 30 on-Airport organizations represent approximately 74.9% of the employment at the Airport and 90% of the employers with over 50 employees. Figure 3 shows the survey response rate in terms of number of surveys and employment represented. The overall response rate is better than the 33% to 35% average response rate for a survey of this type. The employment, payroll, and total economic impact estimates provided in this report, therefore, reflect an above-average sample size.

Partial Responses and Nonresponses. The economic impact of organizations that either did not respond to the survey or provided only partial information was estimated using survey information obtained from similar responding organizations.



NORFOLK INTERNATIONAL AIRPORT

2004 Airport Tenant Survey

Airports are significant contributors to the economy of the regions they serve, specifically in terms of employment, non-wage expenditures and local taxes. The Norfolk Airport Authority is conducting this confidential survey of on-Airport and Airport-related businesses to determine how great an economic contribution Norfolk International Airport makes to the region. Your assistance in providing the information requested below is appreciated. If you have any questions, please contact Cordell & Crumley at 757-460-4183.

Firm or Agency Information

1. Name: _____

Phone: _____ Fax: _____

Form completed by: _____

Employment Information for 2004

2. Number of employees at Norfolk International Airport: _____

3. Number of employees in the Hampton Roads Region supporting operations at Norfolk International Airport: _____

Expenditure Information for 2004

4. How much does your firm (or agency) anticipate it will spend locally supporting operations at Norfolk International Airport in 2004 for:

- a. Gross payroll? \$ _____
- b. Other expenditures including services, materials, supplies, equipment and capital improvements? \$ _____
- c. Local taxes (property/school/special district)? \$ _____
- d. Total \$ _____

5. Do you plan to expand your operation at Norfolk International Airport in the next 5 years? If so, please describe your plans.

Please fax this confidential survey to Cordell & Crumley at 757-460-8023.

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Table 1

ON-AIRPORT ORGANIZATIONS SURVEYEDNorfolk International Airport
Fall/Winter 2004

| Passenger airlines | Rental car companies |
|--|--|
| American Eagle | Avis Rent A Car |
| Continental Airlines | Budget Rent-A-Car Corporation |
| Delta Air Lines | Dollar Rent A Car Systems (a) |
| Delta Global Services (United Express) | Enterprise Rent-A-Car Company |
| Independence Air | The Hertz Corporation |
| Northwest Airlines | National Car Rental System |
| Piedmont Airlines (US Airways Express) | Thrifty Rent-A-Car System (a) |
| Southwest Airlines | |
| US Airways | |
| | Fixed base operators |
| | Piedmont Hawthorne Aviation |
| Cargo airlines | Government agencies |
| Airborne Express/DHL | Airport mail facility |
| Beamon & Lassiter Air Freight | Customs & Border Protection |
| FedEx | Federal Aviation Administration |
| Hipage Company | Norfolk Airport Authority |
| Majestic Terminal Services | Transportation Security Administration |
| Quantem Aviation Services | |
| Superior Air Freight | |
| Terminal sales/concessionaires | Other entities |
| Anton Airfood of Norfolk | Armed Services YMCA |
| Airport Barber Shop – Shoeshine | BB&T |
| Hudson News Group | CI Travel |
| Gourmet Group | Court One Corporation |
| | Huntleigh Corporation |
| | International Protection |
| | Navy Family Services Center |
| Ground transportation operators | |
| Ascom Transport Systems | |
| Ace Cab/Andy's Cab | |
| Black & White Cabs | |
| Carey VIP & Celebrity Limousines | |
| City Wide Cabs | |
| Duke's Cab Company | |
| East Side Cab Company | |
| Eden Cab Company | |
| Lewis/Waterside Taxi Company | |
| LPR (Airport Express) | |
| Norfolk Checker Taxi | |
| Oceanside Executive Transportation | |
| Southside Cab Company | |

(a) Owned and operated by Dollar Thrifty Group Operations (DTG Operations).

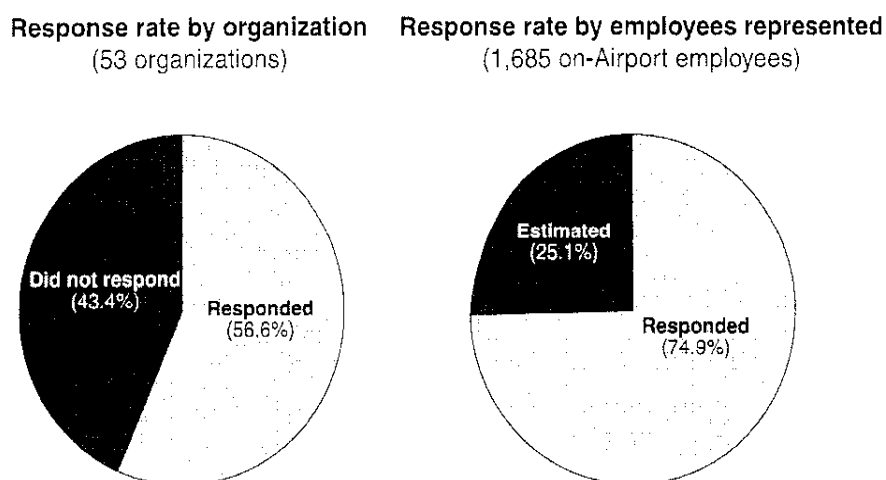
Source: Cordell & Crumley Communications Strategists, fall/winter 2004.

Table 2
ON-AIRPORT SURVEY RESPONSES, BY INDUSTRY TYPE

| | Total surveyed | Number of survey responses | Response rate (percent) |
|-----------------------------------|----------------|----------------------------|-------------------------|
| Passenger airlines | 9 | 5 | 55.6% |
| Cargo airlines | 7 | 6 | 85.7 |
| Concessionaires/terminal services | 4 | 3 | 75.0 |
| Rental car companies | 7 | 3 | 42.9 |
| Ground transportation operators | 13 | 4 | 30.8 |
| Fixed base operators | 1 | 1 | 100.0 |
| Government agencies | 5 | 4 | 80.0 |
| Other businesses | 7 | 4 | 57.1 |
| Total/average | 53 | 30 | 56.6% |

Source: Cordell & Crumley Communications Strategists, surveys of on-Airport organizations, fall/winter 2004.

Figure 3
ON-AIRPORT SURVEY RESPONSE RATES FOR ORGANIZATIONS AND EMPLOYEES REPRESENTED



Source: Jacobs Consultancy, January 2005, based on surveys of on-Airport organizations, November 2004.

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For those airlines that did not respond to the survey, employment and expenditures were estimated on the basis of the responses by similar responding airlines and the nonresponding airline's passenger numbers. The average number of employees per passenger for the responding airlines was used to estimate the number of employees for the nonresponding airlines. Similarly, the average expenditures (payroll, services, materials and supplies, capital, and others) per passenger for nonresponding passenger airlines were estimated using data from the responding airlines and financial data submitted to the U.S. Department of Transportation (U.S. DOT) by major airlines. The U.S. DOT data were used to account for varying cost structures and labor agreements among airlines.

Employment and expenditures for the nonresponding passenger terminal concessionaires were estimated on the basis of gross revenue data provided by the Authority. The average number of employees per revenue dollar for the responding concessionaires was used to estimate the number of employees for the nonresponding terminal concessionaires. The average expenditure per employee for the responding concessionaires was used to estimate expenditures for the nonresponding concessionaires.

The employees and expenditures of other on-Airport businesses that have revenue-based contracts at the Airport but did not respond to the survey were estimated on the basis of gross revenue data in a manner similar to that used to estimate the employees and expenditures of nonresponding concessionaires.

2.3 Assessment of Indirect Economic Impact

The spending of air passenger visitors in the Airport Service Region composes the indirect economic impact. This spending includes any goods or services purchased by air passenger visitors while in the Airport Service Region, excluding money spent at the Airport. Visitor spending is used by local businesses toward payroll and local expenditures and generates jobs in the Airport Service Region. A survey of enplaning passengers conducted by Bonney & Company in 2004 was used to quantify spending of air passenger visitors.

The total amount spent by air passenger visitors is derived from the number of enplaning passengers, the percentage of visitors (in relation to residents) using the Airport, and the average expenditure per visitor per trip, as follows:

$$\text{Air visitor spending in 2004} = \text{number of enplaned passengers in 2004} \times \text{percent visitors} \times \text{average amount spent per visitor per trip.}$$

Out-of-state travelers were asked to estimate their total amount spent on various items, including lodging, food and beverages, retail stores, rental cars, and other items. Indirect impact excludes spending made by air passenger visitors while at the Airport. This spending, such as rental cars, are already included as part of the

on-Airport tenant survey and are therefore part of direct economic impact. Spending by residents of the Hampton Roads Area using the Airport is not included in indirect spending because it would have been spent locally regardless.

2.4 Assessment of Induced Economic Impact

Induced economic impact is generated by the labor, services, materials, and other items purchased by the companies and employees of on-Airport businesses and visitor industries that provide the direct and indirect economic impacts of the Airport. An airline produces a direct impact; an oil company that sells fuel to the airline produces an induced impact. The goods and services purchased by households as a result of the employment and wages paid to industries with direct Airport-related economic impact are also considered induced impacts. Household spending (personal consumption) by both airline and oil company employees also produces an induced economic impact.

Hampton Roads Area Business Survey. A survey form entitled “2004 Hampton Roads Area Business Survey” (reprinted here as Figure 4) was used to qualitatively assess the impact of the Airport on the Hampton Roads region. The survey was used to validate the results of the Regional Input-Output Analysis described in the following sections. Authority staff provided guidance on the survey content and design.

A total of 52 businesses was surveyed and 13 responded (25.0% response rate). The responding businesses are frequent users of the Airport and all considered access to an airport important to their business. All companies considered business travel important and 85% considered air freight important to their business. All respondents used the Airport more than competing airports in the region, and 62% of respondents have one or more employees that travel for business almost daily. Air cargo services provided at the Airport, such as air freight or air mail, are used by 46% of respondents almost daily. Approximately 40% of the companies responding use both passenger air travel services and cargo air services almost daily.

The average annual gross revenues in the Hampton Roads Area for companies that responded were \$199 million. Responding companies employed, on average 1,120 employees per company. The average annual payroll to local employees was approximately \$80 million, corresponding to an average annual payroll of \$53,340 per employee.

As shown on Figure 4, company representatives were asked to rate the Airport in terms of ease of use, concessions and services, road access, and destinations served:

- 92% rated the ease of use of the Airport as good or better, with 46% rating it very good or excellent
- 83% rated the concessions and services provided at the Airport as good or better, with 50% rating them very good or excellent
- 85% rated access to the Airport as good or better, with 62% rating it very good or excellent
- 92% rated the number of destinations served at the Airport as good or better, with 54% rating it very good or excellent

Illustrating the importance of road access to users of the Airport, all of the respondents that rated ease of use as very good or excellent also rated getting to and from the Airport as very good or excellent. Similarly, respondents that rated ease of getting to and from the Airport as bad or poor, rated ease of use as good or poor. While all but one of the responding companies were within 15 miles of the Airport, companies that use Interstate 64 and the Hampton Roads Bridge Tunnel to reach the Airport tended to rate road access as bad or poor.

2.5 Induced Economic Impacts Modeling Methodology

The Hampton Roads Area Business Survey provided qualitative input from the companies in the region and confirmed that the Airport was important to many of their day-to-day operations. Input-output modeling quantifies the induced effects of the direct and indirect economic impact of the Airport on the Airport Service Region's economy.

RIMS II, which was used for this study, is based on a national input-output model created and maintained by the U.S. Department of Commerce, Bureau of Economic Analysis. The model was adjusted for the specific regions and designed to account for the differences between the economies of these regions and the nation as a whole. Two versions of the regional input-output model were used in this analysis: one for the entire Commonwealth of Virginia and another for the Airport Service Region, consisting of Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area (MSA). In some cases, coefficients in the model were adjusted to account for the Airport-specific nature of certain on-Airport businesses. The coefficients in the model express the change in expenditures, payroll, or employment generated by a unit change in the direct and indirect economic impacts.



NORFOLK INTERNATIONAL AIRPORT

2004 Hampton Roads Area Business Survey

- 1. Zip code of business location: _____
- 2. Type of business: _____
- 3. Number of local employees (number of full-time equivalent employees): _____
- 4. Total annual payroll to local employees: _____
- 5. Estimated annual gross revenues (in the Hampton Roads Area): _____

6. Please rate the following:

| | Not important | | Somewhat important | | Very important |
|---|---------------|---|--------------------|---|----------------|
| How important is it for your business to have access to an airport? | 1 | 2 | 3 | 4 | 5 |
| How important is business travel to your business? | 1 | 2 | 3 | 4 | 5 |
| How important are air mail and freight services to your business? | 1 | 2 | 3 | 4 | 5 |

7. Please rate Norfolk International Airport on the following:

| | Poor | | Good | | Excellent |
|---------------------------------|------|---|------|---|-----------|
| Ease of use | 1 | 2 | 3 | 4 | 5 |
| Concessions and services | 1 | 2 | 3 | 4 | 5 |
| Getting to and from the airport | 1 | 2 | 3 | 4 | 5 |
| Destinations served | 1 | 2 | 3 | 4 | 5 |

8. How frequently do one or more employees from your company travel for business?

- Once per year
- Several times per year
- Once per month
- Every 2 weeks
- Once per week
- Almost daily
- Never

9. How frequently does your company use air cargo services such as air freight or air mail?

- Once per year
- Several times per year
- Once per month
- Every 2 weeks
- Once per week
- Almost daily
- Never

10. Please estimate the percentage of visitors to your business arriving via Norfolk International Airport: _____

11. Which airport do you and your colleagues use most? Norfolk Newport News Richmond

Please provide any general comments you have about Norfolk International Airport.

Optional Information

Name of company: _____

Name of respondent: _____

Address: _____

Phone: _____

Please fax this confidential survey to Cordell & Crumley at 757-460-8023.

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2.5 Distribution of Economic Impact by Community

The direct economic impact generated by the Airport was allocated to the surrounding communities based on on-Airport employees' residence. For security purposes, a majority of on-Airport employees receive identification badges. Summary information was obtained from these records to indicate the distribution of the community of residence for on-Airport employees. These data were used to allocate on-Airport employment, payroll, and total direct economic impact to the communities in the Airport Service Region. Induced economic impact associated with on-Airport tenants was assumed to mirror the distribution of direct economic impacts.

The indirect economic impact generated by the Airport was allocated to the surrounding communities based on the destination of visitors to the Airport Service Region using the Airport. The Booney & Company survey provided a distribution of where air passenger visitors would stay in the Airport Service Region. These data were used to allocate the indirect economic impact to the communities in the Airport Service Region. Induced economic impact associated with air passenger visitors was assumed to mirror the distribution of indirect economic impacts.

3 ECONOMIC IMPACT OF THE AIRPORT

This section presents the impact of the Airport on the economy of the Airport Service Region and the Commonwealth of Virginia in 2004, determined using the methodology outlined in the previous section. The economic impact of the Airport is presented in terms of the direct, indirect, and induced impact of Airport activity on the overall economy of these areas.

3.1 Direct Economic Impact

Direct economic impact is defined as the employment, payroll, and local expenditures of all organizations located at the Airport directly dependent on aviation, including passenger airlines, cargo airlines, fixed base operators, passenger terminal concessionaires, government agencies, rental car companies, and other aviation support businesses.

Employment. Figure 5 and Table 3 present summaries of on-Airport employment and payroll by industry and show on-Airport tenant expenditures by industry. The data reported represent a combination of data furnished by survey respondents and estimates to account for nonresponses. As shown on Figure 5 and in Table 3, 1,685 people were employed by on-Airport organizations in 2004.

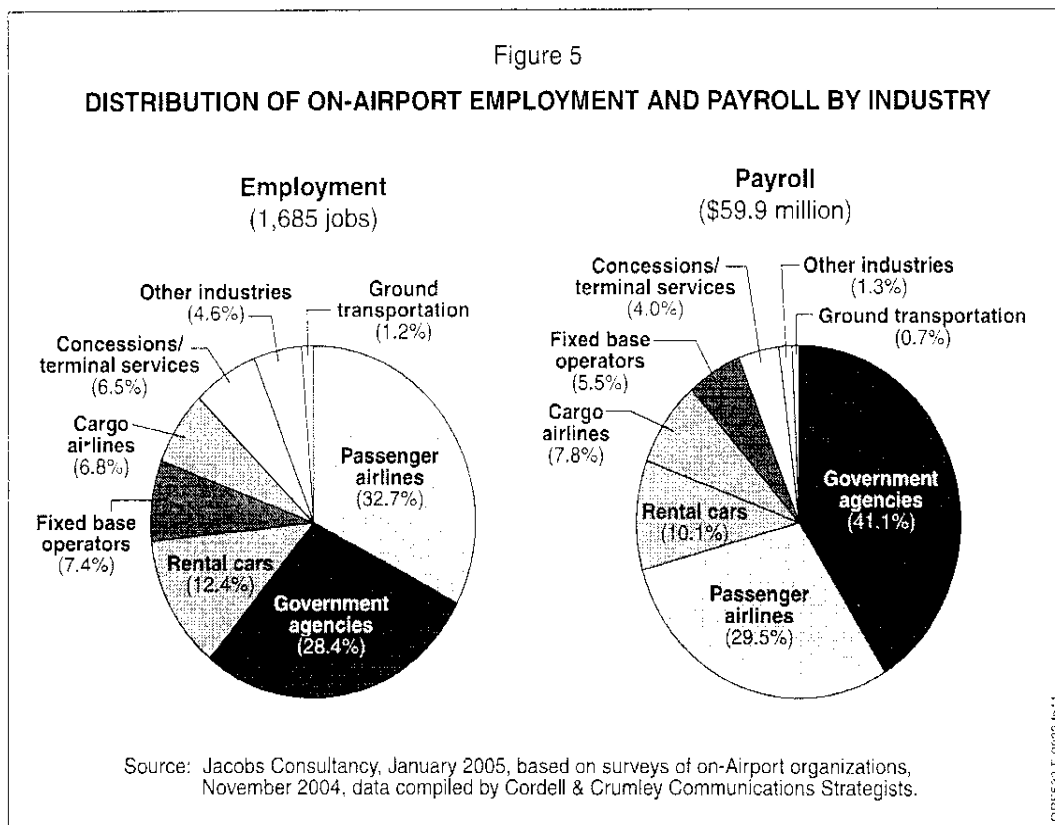


Table 3
ESTIMATED DIRECT ECONOMIC IMPACT BY INDUSTRY IN 2004

| Type of organization | Number of on-Airport employees | (millions) | | Direct economic impact |
|---------------------------------------|--------------------------------|---------------|--------------------|------------------------|
| | | Payroll (a) | + Expenditures (b) | |
| Airlines | | | | |
| Passenger | 551 | \$17.6 | \$ 6.0 | \$ 23.6 |
| Cargo | <u>115</u> | <u>4.7</u> | <u>2.9</u> | <u>7.6</u> |
| | 666 | \$22.3 | \$ 8.9 | \$ 31.2 |
| Terminal concessionaires | | | | |
| Concessionaires/ terminal services | 109 | \$ 2.4 | \$ 5.5 | \$ 7.9 |
| Rental car companies | <u>209</u> | <u>6.1</u> | <u>37.7</u> | <u>43.8</u> |
| | 318 | \$ 8.5 | \$43.2 | \$ 51.7 |
| Other | | | | |
| Ground transportation | 20 | \$ 0.4 | \$ 0.3 | \$ 0.7 |
| Fixed base operators | 125 | 3.2 | 2.4 | 5.6 |
| Government agencies | 479 | 24.7 | 21.4 | 46.1 |
| Other industries | <u>77</u> | <u>0.8</u> | <u>0.2</u> | <u>1.0</u> |
| | <u>701</u> | <u>\$29.1</u> | <u>\$24.3</u> | <u>\$ 53.4</u> |
| Total | 1,685 | \$59.9 | \$76.4 | \$136.3 |

(a) Includes wages, salaries, and proprietors' income.

(b) Includes any other local expenditures.

Sources: Jacobs Consultancy, January 2005, based on surveys of on-Airport organizations, November 2004; data compiled by Cordell & Crumley Communications Strategists.

On-Airport employment has increased steadily since 1997 (2.3% per year on average). The greatest increase has been in governmental agencies, which grew by 23.5% from 1997. A majority of this increase can be attributed to the creation of the Transportation Security Administration (TSA), which oversees baggage and passenger screening at the Airport. In addition, the number of people employed by the passenger airlines has increased since 1997 due to new service from Southwest Airlines (2001) as well as expansion by other carriers.

Table 4 presents the direct impact on employment by municipality in the Airport Service Region in 1997 and 2004. While the percent of direct impact on employment in Virginia Beach was at 37% in both 1997 and 2004, the percent of direct impact on employment in Norfolk decreased by 5% from 36% in 1997 to 31% in 2004.

Table 4

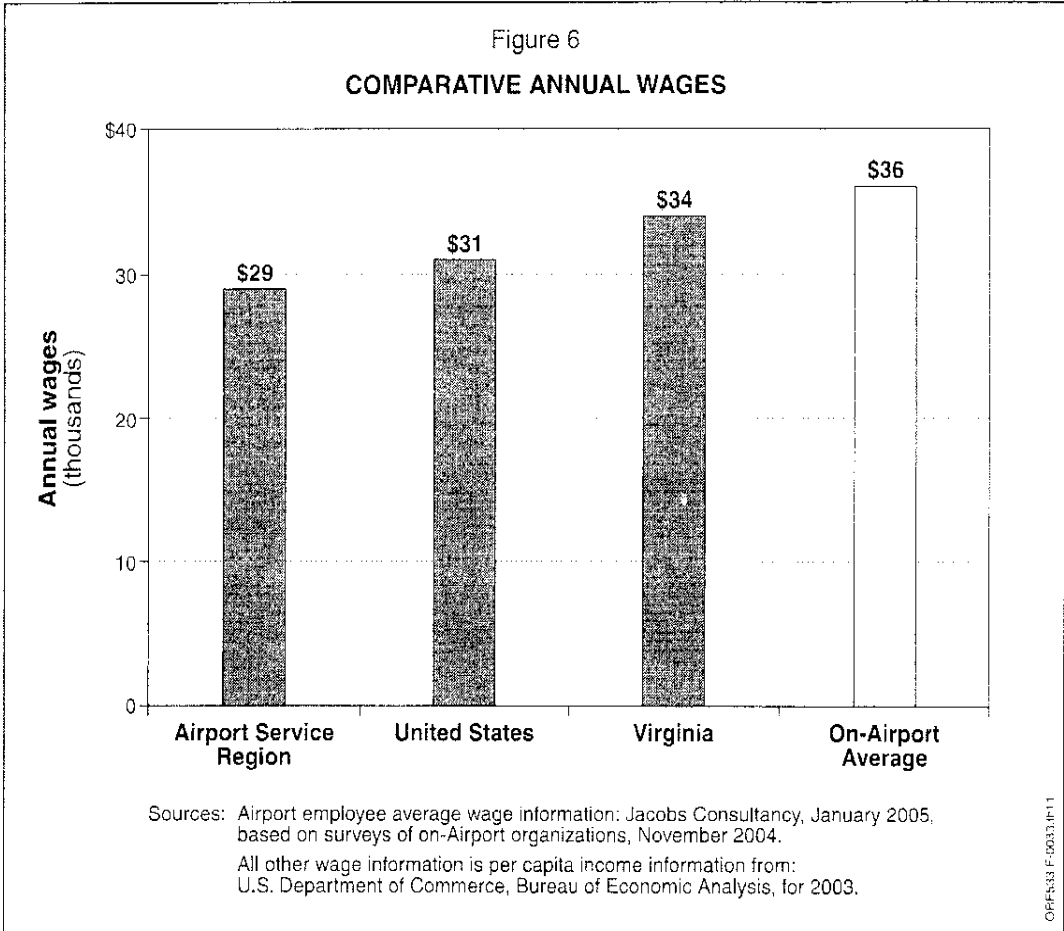
**DIRECT IMPACT ON EMPLOYMENT BY MUNICIPALITY
IN THE AIRPORT SERVICE REGION IN 2004**

| Municipality | 1997 | | 2004 | |
|----------------|----------|-----------|----------|-----------|
| Norfolk | 36% | 518 | 31% | 516 |
| Virginia Beach | 37 | 532 | 37 | 631 |
| Chesapeake | 16 | 230 | 15 | 252 |
| Portsmouth | 2 | 29 | 5 | 77 |
| Suffolk | 1 | 14 | 3 | 47 |
| Hampton | 3 | 43 | 4 | 69 |
| Newport News | 3 | 43 | 3 | 58 |
| North Carolina | na | na | 1 | 11 |
| Other | <u>2</u> | <u>29</u> | <u>1</u> | <u>24</u> |
| Total | 100% | 1,439 | 100% | 1,685 |

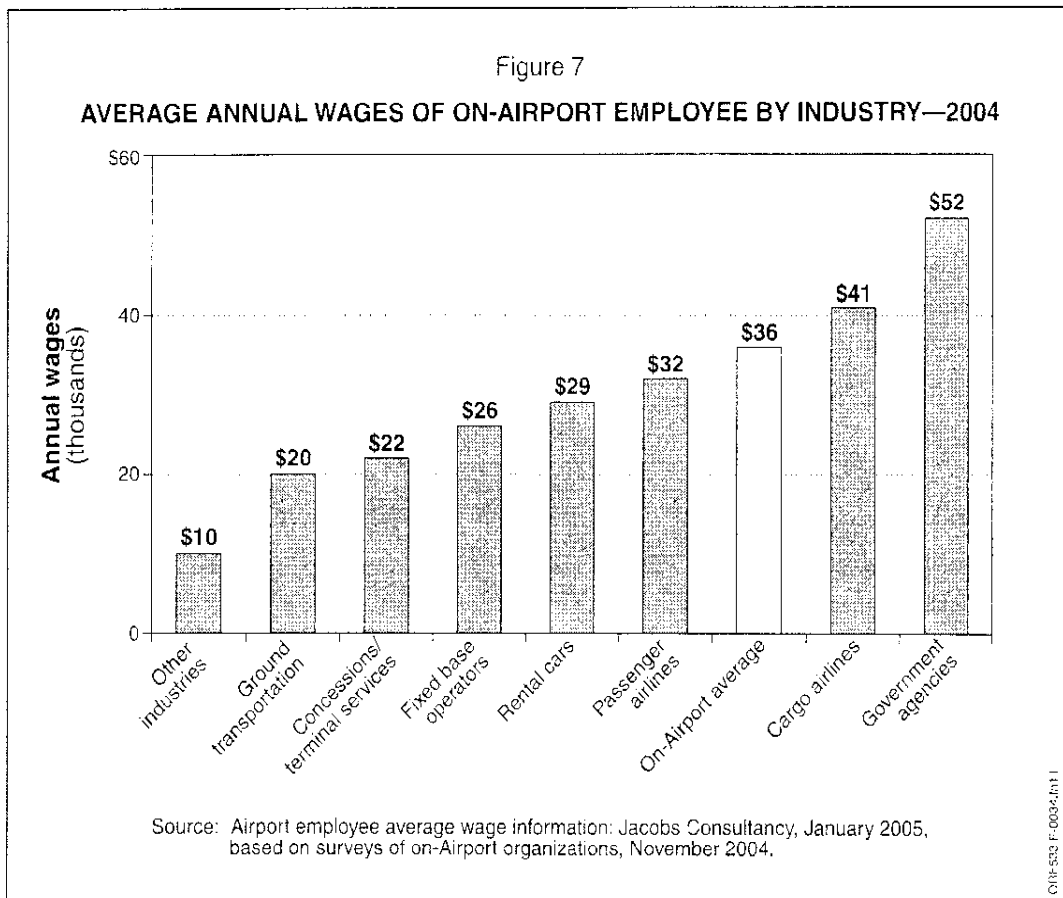
Sources: 1997: *The Economic Impact of Norfolk International Airport*, The Technology and Planning Group, Inc., March 1998; 2004: Jacobs Consultancy interpretation of data provided by the Airport Authority.

Payroll. As shown in Table 3, payroll paid to employees of on-Airport organizations totaled about \$60 million in 2004, an increase of \$16 million compared with the \$44 million in payroll in 1997. Payroll has increased faster between 1997 and 2004 (4.5%) than between 1992 and 1997 (1.1%), attributable to increases in passengers and types of services provided at the Airport since 1997.

Payroll expenditures are increasing faster than employment levels due to inflation and overall increases in the average salary received by on-Airport employees over the same timeframe. The average salary for on-Airport employees was \$27,374 in 1992; \$30,535 in 1997; and \$35,576 in 2004. As illustrated on Figure 6, the estimated average wage per on-Airport employee was 24.1% higher than the per capita income for the Airport Service Region and 5.9% higher than that of the Commonwealth of Virginia.

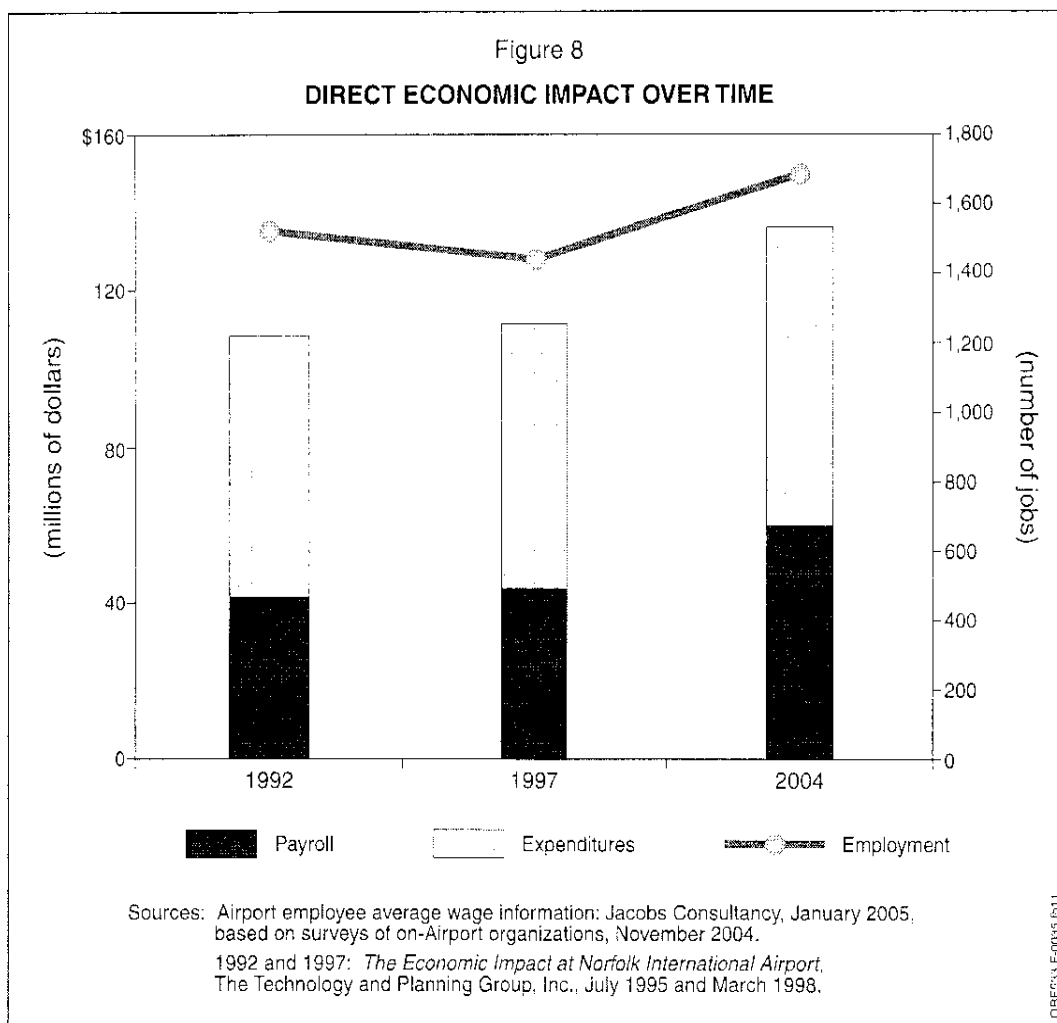


The distribution of the average annual salaries paid to on-Airport employees by industry is shown on Figure 7. Government agencies provide some of the highest paying jobs on-Airport, representing only 28.4% of employees but 41.1% of payroll at the Airport.



Expenditures. Non-payroll expenditures by on-Airport organizations were about \$76 million in 2004 compared with \$68 million in 1997 and \$67 million in 1992. While expenditures grew between 1997 and 2004 (1.8% increase per year), expenditures are a smaller portion of total direct economic impact in 2004 (56.0%) than in 1997 (60.6%).

Total Direct Economic Impact. Overall, the payroll and non-payroll local expenditures of on-Airport businesses—the direct economic impact of the Airport—totaled an estimated \$136 million in 2004, a 22.4% increase from 1997 (\$111 million). Commensurate with payroll, expenditures, and passengers, total direct economic impact grew at an annual average rate of 2.9% between 1997 and 2004, as shown on Figure 8. This growth rate is significantly higher than the 0.5% growth rate between 1992 and 1997.



3.2 Indirect Economic Impact

The indirect impact of the Airport is defined in this evaluation as the spending made locally by air passenger visitors while in the Airport Service Region and in the Commonwealth of Virginia.

The number of air passenger visitors was estimated using enplaned passenger information from the Authority and out-of-state passenger data from the Booney & Company survey. Using out-of-state passengers to estimate the number of visitors does not account for visitors living inside the Commonwealth of Virginia but outside the Airport Service Region. Information regarding visitors who reside outside the Airport Service Region, but in the Commonwealth of Virginia (such as the Washington, D.C. area) is not available. On the basis of data interpreted from the Booney & Company survey of Airport passengers, such visitors represent a small portion of total air passenger visitors. Not accounting for these air passenger visitors understates the indirect economic impact.

According to data provided by the Authority, the number of enplaned passengers at the Airport increased from 1,455,660 in 1997 to 1,891,797 in 2004. According to the Bonney & Company passenger survey, 41% of the passengers were out-of-state travelers. The Bonney & Company survey also found that the average visitor spent a total of \$868 during his or her trip. This spending includes amounts paid for car rentals on-Airport, which are already included in the direct economic impact. With approximately \$139 of visitor spending being transportation-related, the average visitor spent \$729 per trip off-Airport. On the basis of this information, air passenger visitors were estimated to spend about \$566 million in 2004, up from \$236 million in 1997. The number of jobs generated by this visitor spending also increased over the same period from 7,428 in 1997 to 12,580 in 2004.

Of the \$566 million spent by visitors in the Airport Service Region in 2004, an estimated \$211 million funded payroll for local employees. Employment generated by air passengers grew at an annual average rate of 7.6% from 1997 to 2004; whereas, air passenger visitor spending grew at a much faster annual average rate of 13.1% between 1997 and 2004.

While inflation is partly responsible for the higher growth rates of spending than employment, other factors contribute to why these aspects of the local economy were impacted more than employment. First, a moderate increase in impact on employment can be partly justified by the number of air passenger visitors to the Airport Service Region, increasing at an annual average rate of 3.7% between 1997 and 2004. This data suggests that normal hiring rates were sufficient to keep up with demand. Second, the dramatic increase in impact on spending can be largely justified by significant increases in the average amount spent per air passenger visitor per trip. As mentioned previously, the average amount spent per trip off-Airport in 2004 was estimated to be \$729, up from \$335 in 1997. The growth rate of the average amount spent per trip was 11.7% per year between 1997 and 2004.

Increased spending by visitors can be attributed to the higher annual average incomes of air travelers and longer average stays. According to a survey of Airport passengers published by Bonney & Company, the median annual household income of passengers interviewed at the Airport rose from \$52,100 in 1997 to \$64,100 in 2002. Between 2002 and 2003, however, the median household income of Airport passengers increased to \$75,000 for a 17.0% gain in one year, by far the largest increase since the study began. In 2004, the median household income was \$74,100, a slight decrease from record levels in 2003. The same survey also reports that non-local arriving passengers stayed an average of 3.9 nights in the area in 2004, compared with 3.5 nights in 1997. These findings suggest that the average air passenger visitor spends more money over a longer period of time, which would explain why visitor spending increased substantially more than employment from 1997 to 2004. Table 5 and Figure 9 present a breakdown of estimated visitor spending.

Table 5
VISITOR SPENDING BY TYPE

| Type of expenditure | Amount (millions) | | Percent of total | |
|---------------------|-------------------|----------------|------------------|---------------|
| | 1997 | 2004 | 1997 | 2004 |
| Lodging | \$133.9 | \$299.7 | 56.8% | 53.1% |
| Food and beverages | 63.9 | 147.0 | 27.1 | 26.0 |
| Entertainment | 14.6 | 28.3 | 6.2 | 5.0 |
| Retail stores | -- | 33.9 | n.a. | 6.0 |
| Other (a) | 23.4 | 56.6 | 9.9 | 9.9 |
| Total | \$235.8 | \$565.5 | 100.0% | 100.0% |

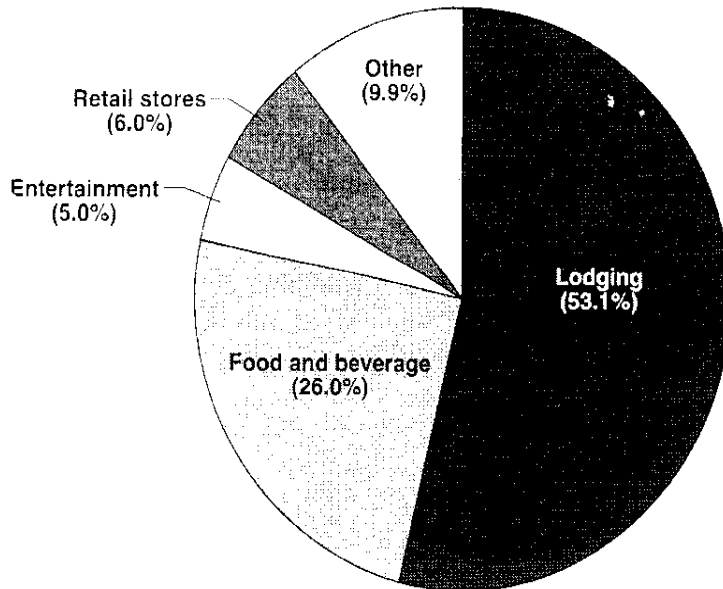
(a) Includes retail for 1997 data.

Source: 1997 – The Airport Technology and Planning Group, Inc., *The Economic Impact of Norfolk International Airport*, March 1998. Breakdown by type of expenditure derived by Jacobs Consultancy.

2004 – Jacobs Consultancy, based on data provided by the Norfolk, Virginia Convention and Visitors Bureau and contained in surveys of Airport passengers conducted by Cooney & Company, February 2004.

Figure 9

DISTRIBUTION OF VISITOR SPENDING



Sources: Jacobs Consultancy, based on data contained in surveys of Airport passengers conducted by Booney & Company, February 2004.

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Table 6 presents the indirect impact on employment by municipality in the Airport Service Region in 1997 and 2004. Like the change in direct impact on employment, the percent of indirect impact on employment in Norfolk also decreased by 5% from 36% in 1997 to 31% in 2004. The percent of indirect impact on employment in Virginia Beach, however, increased substantially from 18% in 1997 to 30% in 2004.

Table 6
**DIRECT IMPACT ON EMPLOYMENT BY MUNICIPALITY
 IN THE AIRPORT SERVICE REGION IN 2004**

| Municipality | 1997 | | 2004 | |
|----------------|-----------|--------------|----------|------------|
| Norfolk | 36% | 4,928 | 31% | 3,900 |
| Virginia Beach | 18 | 2,464 | 30 | 3,774 |
| Chesapeake | 7 | 958 | 12 | 1,510 |
| Portsmouth | 3 | 411 | 4 | 503 |
| Suffolk | 1 | 137 | 2 | 252 |
| Hampton | 12 | 1,643 | 6 | 755 |
| Newport News | 6 | 821 | 3 | 377 |
| North Carolina | na | na | 6 | 755 |
| Other | <u>17</u> | <u>2,327</u> | <u>6</u> | <u>755</u> |
| Total | 100% | 13,689 | 100% | 12,580 |

Sources: 1997: *The Economic Impact of Norfolk International Airport*, The Technology and Planning Group, Inc., March 1998; 2004: Jacobs Consultancy interpretation of data provided by the Booney & Company Airport passenger survey, February 2004.

3.3 Induced Economic Impact

As discussed previously, the induced impacts are defined in this evaluation as the additional local business that is generated specifically because of the Airport’s presence, including related employment, payroll, and employer expenditures. Induced impact also includes the successive rounds of spending caused by the direct and indirect impacts. This “multiplier effect” measures the extent to which the indirect and induced impacts flow from the direct impact. Table 7 presents the induced economic impacts of the Airport on the Airport Service Region and the Commonwealth of Virginia, respectively.

Table 7
INDUCED ECONOMIC IMPACT IN 2004

| Source of impact | Employment | Local expenditures (millions) | | |
|---------------------------------|------------|-------------------------------|--------------|---------|
| | | Payroll | Expenditures | Total |
| Airport Service Region | | | | |
| On-Airport tenants | 2,672 | \$ 67.6 | \$ 76.3 | \$143.9 |
| Air passenger visitors | 5,339 | 148.2 | 363.0 | 511.2 |
| Total induced impact | 8,011 | \$215.8 | \$493.3 | \$655.1 |
| Commonwealth of Virginia | | | | |
| On-Airport tenants | 2,829 | \$ 74.2 | \$ 76.7 | \$150.9 |
| Air passenger visitors | 7,316 | 161.2 | 411.1 | 572.3 |
| Total induced impact | 10,145 | \$235.4 | \$487.8 | \$723.2 |

Source: Jacobs Consultancy, December 2005.

Airport Service Region Induced Economic Impact. Off-Airport companies providing supplies and services to businesses located on-Airport were estimated to employ 2,672 people with a total payroll of about \$68 million in 2004 for an induced economic impact of \$144 million in the Hampton Roads Area. In 1997, off-Airport companies were estimated to have employed 1,712 people with a total payroll of \$37 million for an induced economic impact of \$104 million.

The induced impact of visitors arriving at the Airport, whose destination was in the Airport Service Region, contributed to an additional \$511 million locally, increasing from \$337 million in 1997. An estimated \$148 million of this induced impact was used toward payroll, creating an additional 5,339 jobs.

Commonwealth of Virginia Induced Economic Impact. Off-Airport companies in Virginia, but outside of the Airport Service Region, which provide supplies and services to organizations located on-Airport, employed an additional 157 people in 2004, for a total induced employment of 2,829 in Virginia that can be attributed to the Airport. These organizations created an additional induced impact of \$7 million, for a total induced impact of approximately \$151 million. An additional \$7 million is estimated to have been used toward payroll, for a total induced impact on payroll of \$74 million.

The induced impact of visitors arriving at the Airport, whose destination was the Commonwealth of Virginia but was outside the Airport Service Region, contributed to the employment of an additional 1,977 people, for a total induced employment of

7,316 in Virginia that can be attributed to the Airport. Air passenger visitors to Virginia also spent an additional \$61 million outside the Airport Service Region, for a total induced visitor impact of \$572 million. An additional \$13 million was used toward payroll, for a total induced impact on payroll of \$161 million.

Total Induced Economic Impact. The total induced impact of the Airport on the economy of the Airport Service region totaled an estimated \$655 million in 2004. The total induced impact of the Airport on the economy of the Commonwealth of Virginia totaled an estimated \$723 million in 2004.

3.4 Total Economic Impact

Total economic impact is the sum of direct, indirect, and induced impacts. The multiplier effect measures the extent to which the induced impact flows from the direct and indirect impacts. Thus, the direct employment and expenditures of on-Airport employers and indirect expenditures of all visitors “multiply” themselves throughout the regional economy, resulting in the total impact (or contribution) of Airport activity.

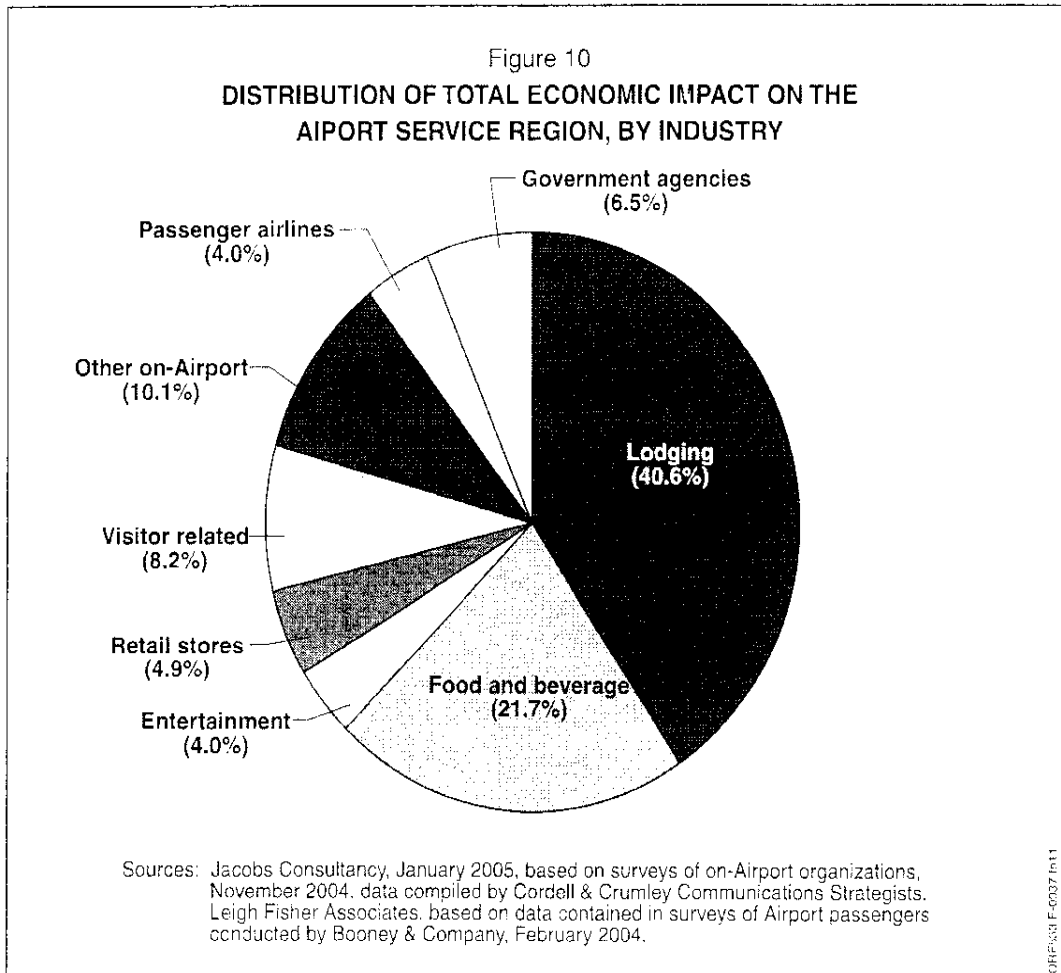
Airport Service Region Total Economic Impact. The overall contribution of Airport activity to the economy of the Airport Service Region is summarized in Table 8 and detailed on Figure 10 and in Table 9. The total economic impact—direct, indirect, and induced—in 2004 is estimated to be approximately \$1.36 billion, compared with \$795 million in 1997.

Table 8

TOTAL ECONOMIC IMPACT ON THE AIRPORT SERVICE REGION IN 2004

| | Employment | Local expenditures (millions) | | |
|----------|--------------|-------------------------------|--------------|--------------|
| | | Payroll | Expenditures | Total |
| Direct | 1,685 | \$ 59.9 | \$ 76.4 | \$ 136.3 |
| Indirect | 12,580 | 210.9 | 354.6 | 565.5 |
| Induced | <u>8,011</u> | <u>215.8</u> | <u>439.3</u> | <u>655.1</u> |
| Total | 22,276 | \$486.6 | \$870.3 | \$1,356.9 |

Source: Jacobs Consultancy, December 2005.



The total impact on employment estimated to result from direct employment is also presented in Table 9. In 2004, a total of 22,276 (16,839 in 1997) direct, indirect, and induced jobs are estimated to result from the direct employment of 1,685 people (1,439 in 1997). In terms of total impact on employment, one job was created for every 5.3 aircraft movements. In 2004, the total impact on employment was 2.9% of the Airport Service Region's total employment.

The total economic impact in terms of payroll is estimated to be about \$487 million in 2004 (\$300.6 million in 1997), or 35.9% of the total economic impact of \$1.36 billion.

Figure 11 illustrates the historical relationship between growth in the numbers of enplaned passengers and growth in area employment and economic impact in the Airport Service Region. As illustrated, employment in the Airport Service Region related to the Airport has increased at a rate consistent with enplaned passengers, while the total economic impact of the Airport grew at a rate that was approximately double than that of enplaned passengers.

Table 10 compares the total economic impact of the Airport on the Airport Service Region in 1992, 1997, and 2004.

Table 9
**ESTIMATED TOTAL ECONOMIC IMPACT BY INDUSTRY IN 2004
 IN THE AIRPORT SERVICE REGION**

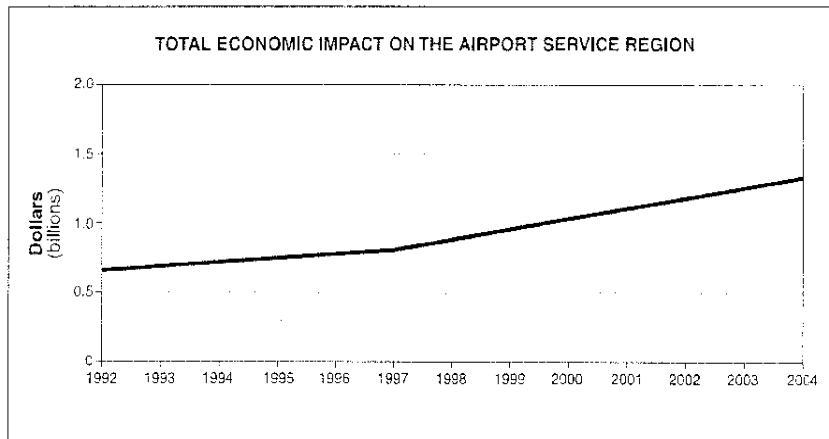
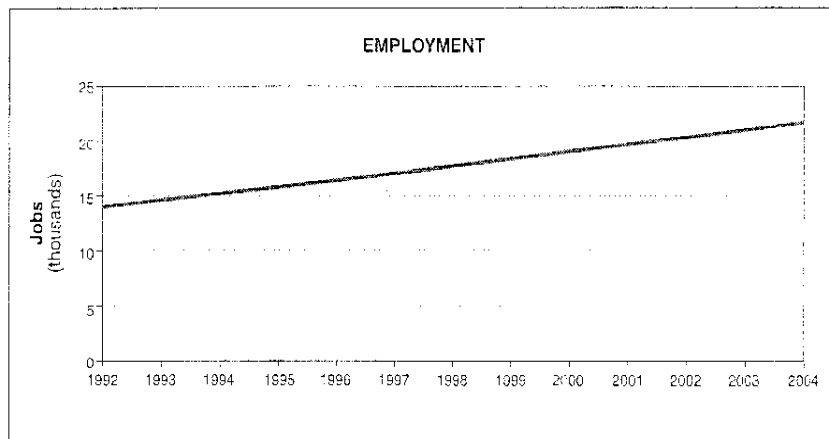
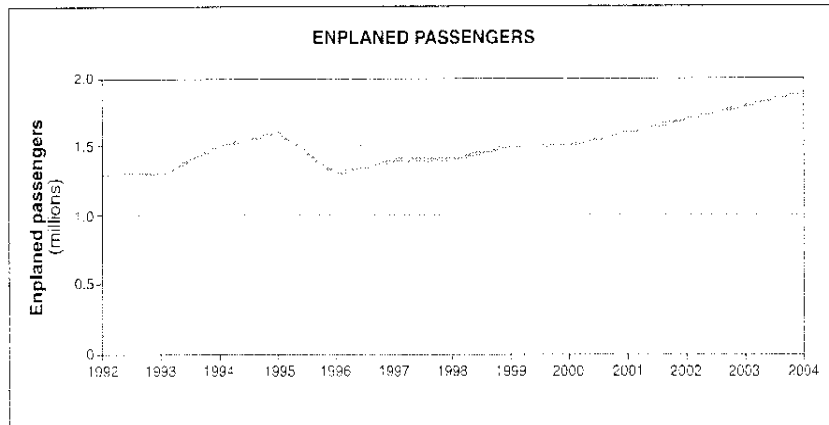
| Type of organization | Number of employees | (millions) | | | Total economic impact |
|--|---------------------|----------------|---|------------------|-----------------------|
| | | Payroll (a) | + | Expenditures (b) | |
| On-Airport (Direct and Induced) | | | | | |
| Airlines | | | | | |
| Passenger | 1,916 | \$ 41.0 | | \$ 12.8 | \$ 53.8 |
| Cargo | <u>400</u> | <u>10.8</u> | | <u>6.2</u> | <u>17.0</u> |
| | 2,316 | \$ 51.8 | | \$ 19.0 | \$ 70.8 |
| Terminal concessionaires | | | | | |
| Concessionaires/ terminal services | | | | | |
| | 157 | \$ 4.2 | | \$ 10.9 | \$ 15.1 |
| Rental car companies | | | | | |
| | <u>287</u> | <u>10.9</u> | | <u>77.8</u> | <u>88.7</u> |
| | 444 | \$ 15.1 | | \$ 88.7 | \$ 103.8 |
| Other | | | | | |
| Ground transportation | 27 | \$ 0.7 | | \$ 0.5 | \$ 1.2 |
| Fixed base operators | 435 | 7.6 | | 5.0 | 12.6 |
| Government agencies | 1,011 | 50.9 | | 39.0 | 89.9 |
| Other industries | <u>123</u> | <u>1.5</u> | | <u>0.4</u> | <u>1.9</u> |
| | <u>1,597</u> | <u>\$ 60.7</u> | | <u>\$ 44.9</u> | <u>\$ 105.6</u> |
| Subtotal on-Airport | <u>4,357</u> | <u>\$127.6</u> | | <u>\$152.6</u> | <u>\$ 280.2</u> |
| Air Passenger Visitors (Indirect and Induced) | | | | | |
| Lodging | 8,726 | \$183.0 | | \$367.2 | \$ 550.2 |
| Food and beverages | 5,838 | 100.9 | | 193.4 | 294.3 |
| Entertainment | 1,038 | 18.8 | | 35.1 | 53.9 |
| Retail Stores | 997 | 23.0 | | 43.9 | 66.9 |
| Other (b) | <u>1,320</u> | <u>33.3</u> | | <u>78.1</u> | <u>111.4</u> |
| Subtotal Air Passenger Visitors | <u>17,919</u> | <u>\$359.0</u> | | <u>\$717.7</u> | <u>\$1,076.7</u> |
| Total economic impact | 22,276 | \$486.6 | | \$870.3 | \$1,356.9 |

(a) Includes wages, salaries, and proprietors' income.

(b) Includes any other local expenditures.

Sources: Jacobs Consultancy, January 2005, based on surveys of on-Airport organizations.
 November 2004; data compiled by Cordell & Crumley Communications
 Strategists.

Data obtained from Hampton Roads Chamber of Commerce, March 2002.
 Bureau of Economic Analysis, Regional Input-Output Multiplier, RIMS II.



Sources: Norfolk Airport Authority; 1992 and 1997: *The Economic Impact of Norfolk International Airport*, The Technology and Planning Group, Inc., July 1995 and March 1998; 2004: Leigh Fisher Associates.

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Figure 11
**SUMMARY OF ENPLANED PASSENGERS,
 EMPLOYMENT, AND TOTAL ECONOMIC IMPACT ON
 THE AIRPORT SERVICE REGION FROM 1992-2004**
 Norfolk International Airport

October 2005

JACOBS
 CONSULTANCY

Table 10
TOTAL ECONOMIC IMPACT ON THE AIRPORT SERVICE REGION OVER TIME

| | Employment | | Payroll (millions) | | Expenditures (millions) (a) | | | Total (millions) | |
|-------------|------------|--------|--------------------|---------|-----------------------------|---------|---------|------------------|-----------|
| | 1992 | 1997 | 1992 | 1997 | 1992 | 1997 | 2004 | 1997 | 2004 |
| Direct | 1,521 | 1,439 | \$ 41.6 | \$ 43.9 | \$ 66.9 | \$ 67.5 | \$ 76.4 | \$108.5 | \$ 136.3 |
| Indirect | 5,679 | 7,521 | 70.9 | 98.6 | 109.4 | 140.2 | 354.6 | 180.3 | 565.5 |
| Induced (b) | 6,483 | 7,879 | 122.0 | 158.1 | 255.6 | 287.0 | 439.3 | 359.6 | 655.1 |
| Total | 13,683 | 16,839 | \$234.5 | \$300.6 | \$431.9 | \$494.7 | \$870.3 | \$795.3 | \$1,356.9 |

(a) Expenditures from 1992 and 1997 were not reported and were calculated by subtracting payroll from total.

(b) Due to differences in reporting methods for induced impacts, induced impacts for 1992 and 1997 were calculated by subtracting direct and indirect impact from total impact.

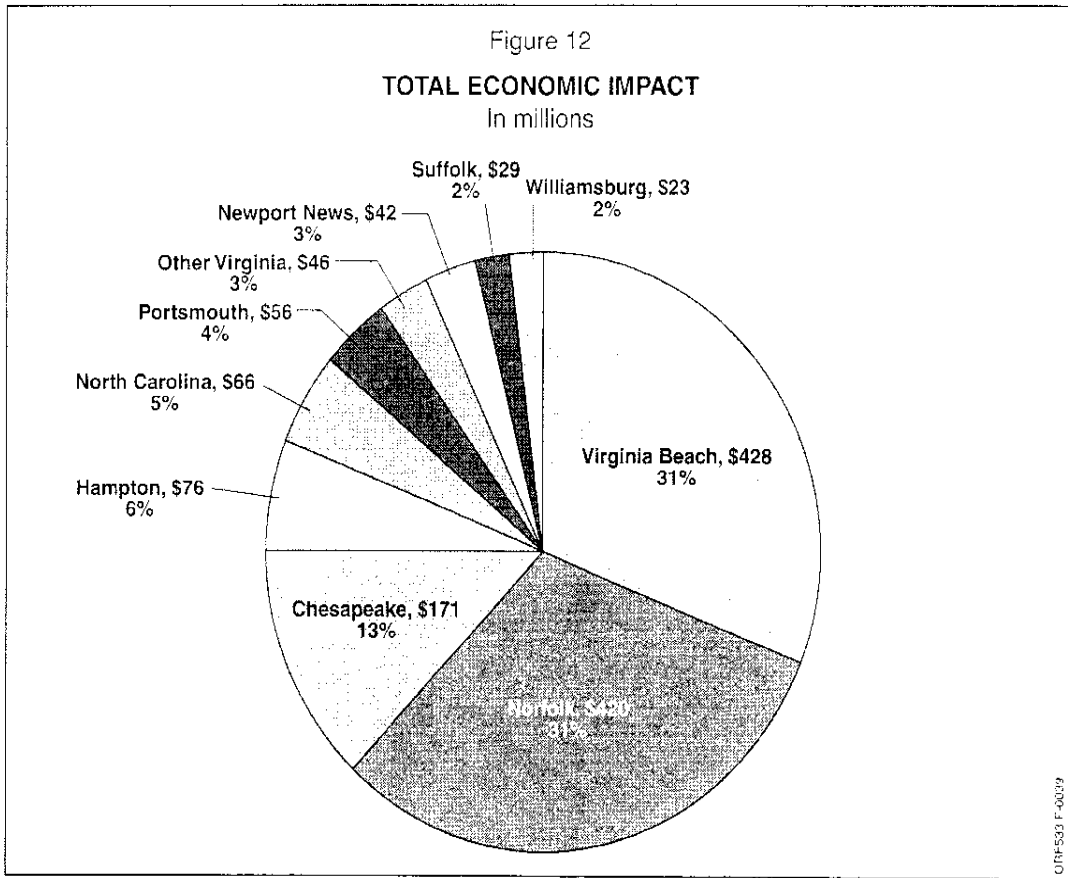
Sources: 1992 and 1997: *The Economic Impact of Norfolk International Airport*, The Technology and Planning Group, Inc., July 1995 and March 1998; 2004: Jacobs Consultancy.

Table 11 presents the total economic impact on employment, payroll, and output by municipality in the Airport Service Region in 1997 and 2004, and Figure 12 presents a distribution of total economic impact by municipality in the Airport Service Region in 2004. The total economic impacts in Virginia Beach, Chesapeake, Portsmouth, and Suffolk each increased by more than 11% per year from 1997 to 2004. The total economic impact in Newport News, however, increased by less than 1% over the entire 7-year period, and the total economic impact in Hampton decreased slightly over the same period. The total economic impact in Norfolk increased by 6% per year from 1997 to 2004.

Table 11
TOTAL ECONOMIC IMPACT BY MUNICIPALITY

| Municipality | Employment | | Payroll | | Total | |
|----------------|--------------|--------------|-------------------|-------------------|--------------------|-------------------|
| | 1997 | 2004 | 1997 | 2004 | 1997 | 2004 |
| Norfolk | 6,062 | 6,890 | \$104,473,100 | \$150,396,300 | \$282,526,600 | \$419,650,700 |
| Virginia Beach | 3,629 | 7,006 | 70,060,000 | 155,451,300 | 193,628,000 | 427,884,500 |
| Chesapeake | 1,462 | 2,801 | 30,319,700 | 62,124,400 | 65,568,500 | 171,030,400 |
| Portsmouth | 474 | 916 | 8,594,800 | 20,202,800 | 22,901,400 | 55,899,700 |
| Suffolk | 168 | 479 | 3,814,400 | 10,719,000 | 9,213,600 | 29,307,100 |
| Hampton | 1,738 | 1,254 | 28,136,000 | 26,767,300 | 76,262,000 | 76,076,500 |
| Newport News | 916 | 687 | 14,949,500 | 15,152,100 | 41,689,300 | 41,924,800 |
| North Carolina | na | 1,104 | na | 22,388,100 | na | 66,452,700 |
| Other | <u>2,390</u> | <u>1,138</u> | <u>40,226,200</u> | <u>23,398,700</u> | <u>103,515,100</u> | <u>68,673,600</u> |
| Total | 16,839 | 22,276 | \$300,573,700 | \$486,600,000 | \$795,304,500 | \$1,356,900,000 |

Sources: 1997: *The Economic Impact of Norfolk International Airport*, The Technology and Planning Group, Inc., March 1998; 2004: Jacobs Consultancy interpretation of data provided by the Airport Authority and the Booney & Company Airport passenger survey, February 2004.



Commonwealth of Virginia Total Economic Impact. The overall economic contribution of Airport activity on the economy of the Commonwealth of Virginia is summarized in Table 8. The total economic impact is estimated to be \$1.43 billion, as calculated using the input-output analysis described in Section 2. This represents an additional \$68 million in total economic impact in Virginia outside the Airport Service Region.

The total impact on employment in Virginia estimated to result from direct employment related to the Airport is also presented in Table 12. In 2004, a total of 24,410 direct, indirect, and induced jobs is estimated to result from the direct employment of 1,685, an additional 2,134 jobs created in Virginia outside the Airport Service Region.

The total economic impact in terms of wages in Virginia is estimated to equal \$506 million in 2004, an additional \$19 million in payroll for the 2,134 jobs in Virginia outside the Airport Service Area. These wages accounted for 35.5% of the total output of \$1.43 billion.

Table 12

TOTAL ECONOMIC IMPACT ON THE COMMONWEALTH OF VIRGINIA

| | <u>Employment</u> | <u>Local expenditures (millions)</u> | | |
|----------|-------------------|--------------------------------------|---------------------|--------------|
| | | <u>Payroll</u> | <u>Expenditures</u> | <u>Total</u> |
| Direct | 1,685 | \$ 59.9 | \$ 76.4 | \$ 136.3 |
| Indirect | 12,580 | 210.9 | 354.6 | 565.5 |
| Induced | <u>10,145</u> | <u>235.4</u> | <u>487.8</u> | <u>723.2</u> |
| Total | 24,410 | \$506.2 | \$918.8 | \$1,425.0 |

Source: Jacobs Consultancy, December 2005.

CRS Report for Congress

Foreign Investor Visas: Policies and Issues

January 29, 2007

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Prepared for Members and
Committees of Congress

Foreign Investor Visas: Policies and Issues

Summary

In the 110th Congress, issues surrounding the entry of foreign investors into the United States are likely to spark legislative debate as Members contemplate comprehensive immigration reform. Congress may face decisions regarding the possible renewal of the immigrant investor visa pilot program, as well as the expansion of the E-2 nonimmigrant treaty investor visa.

There are currently two categories of nonimmigrant investor visas and one category of immigrant investor visa for legal permanent residents (LPR). The visa categories used for nonimmigrant investors are: E-1 for treaty traders; and the E-2 for treaty investors. The visa category used for immigrant investors is the fifth preference employment-based (EB-5) visa category. According to Department of Homeland Security (DHS) statistics, there were 192,843 nonimmigrant investor visa arrivals in the United States in FY2005. For the same time frame, DHS reported the arrival of 346 LPR investors.

When viewed from a comparative perspective, the investor visas of the United States are most closely mirrored by those of Canada. The LPR investor visa draws especially strong parallels to the Canadian immigrant investor visa, since the latter served as the model for the former. Comparing the admissions data between these two countries, however, reveals that the Canadian investor provision attracts many times the number of investors of its United States counterpart. Yet, both countries showed an upward trend in immigrant investor visas in the last two years.

The investor visas offered by the United States operate on the principle that foreign direct investment into the United States should spur economic growth in the United States. According to the classical theory, if these investments are properly targeted towards the U.S. labor force's skill sets, it should reduce the international migration pressures on U.S. workers. To attract foreign investors, research indicates that temporary migrants are motivated most significantly by employment and wage prospects, while permanent migrants are motivated by professional and social mobility. Theoretically, however, it is unclear to what extent potential migration provides additional incentive for investment activity. Investors from developed countries may sometimes lack incentive to settle in the United States since they can achieve foreign direct investment (FDI) and similar standards of living from their home country. Yet, in cases where foreign investors have been attracted, the economic benefits have been positive and significant.

Immigrant investors have been subject to notable administrative efforts in the past couple of years. Attention has been focused on immigrant investment projects, which DHS has sought to expand. In 2005, DHS developed the Investor and Regional Center Unit (IRCU) to govern matters concerning LPR investor visas and investments to better adjudicate petitions and coordinate investments. In part because of these efforts, working with foreign financing from the immigrant investor program has become highly attractive for many domestic investors, particularly through limited partnerships. This report will be updated as warranted.

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Foreign Investor Visas: Policies and Issues

Introduction

In the 110th Congress, issues surrounding the entry of foreign investors into the United States is likely to spark legislative debate. For example, the immigrant investor visa pilot program, which was created to attract foreign investors to permanently emigrate to the United States, is set to expire at the end of FY2008.¹ Additionally, the government of Denmark has lobbied for legislation that would allow its nationals eligibility to enter the United States as E-2 nonimmigrant treaty investors. If such legislation is successful, other governments whose nationals, like Denmark, are currently only eligible for E-1 nonimmigrant treaty trader visas would likely seek similar treatment. Granting visas to foreign investors provides many potential benefits, including increased domestic employment and capital levels. Yet, extending foreign investor visas provides several potential risks as well, such as visa abuses, reduced foreign market growth, and security concerns.

The central policy question surrounding foreign investors — and particularly legal permanent resident (LPR) investors — is whether the benefits reaped from allocating visas to foreign investors outweigh the costs of denying visas to other applicant groups. The subsequent analysis provides a background and contextual framework for the consideration of foreign investor visa policy. After a brief legislative background, this report will provide discussions of immigrant and nonimmigrant investors visas, a comparison of U.S. and Canadian immigrant investor programs, an analysis of the relationship between investment and migration, and finally a review of current issues.

Background

Since the Immigration Act of 1924² the United States has expressly granted visas to foreign nationals for the purpose of conducting commerce within the United States. Although foreign investors had previously been allowed legal status under several Treaties of Friendship, Commerce and Navigation treaties, the creation in 1924 of the nonimmigrant treaty trader visa provided the first statutory recognition of foreign nationals as temporary traders. With the implementation of the Immigration and Nationality Act of 1952 (INA), the statute was expanded to include nonimmigrant treaty investors — a visa for which trade was no longer a

¹ P.L. 108-156.

² 43 Stat 153.

requirement.³ Nonimmigrant visa categories for traders and investors have always required that the principal visa holder stems from a country with which the United States has a treaty.⁴ The nonimmigrant visa classes are defined in §101(a)(15) of the INA. These visa classes are commonly referred to by the letter and numeral that denotes their subsection in §101(a)(15) of the INA, and are referred to as E-1 for nonimmigrant treaty traders and E-2 for nonimmigrant treaty investors.

Unlike nonimmigrant investors, who come to the United States as temporary admissions, immigrant investors are admitted into the United States as LPRs.⁵ With the Immigration Act of 1990,⁶ Congress expanded the statutory immigrant visa categories to include an investor class for foreign investors. The statute developed an employment-based (EB-5) investor visa for LPRs,⁷ which allows for up to 10,000 admissions annually and generally requires a minimum \$1 million investment. Through the Immigrant Investor Pilot Program, investors may invest in targeted regions and existing enterprises that are financially troubled. This pilot program was extended by the Basic Pilot Program Extension and Expansion Act of 2003⁸ to continue through FY2008.

Foreign investors are generally considered to help boost the United States economy by providing an influx of foreign capital into the United States and through job creation. For investor immigrants, job creation is an explicit criterion, while with the nonimmigrant visa categories economic activity is assumed to spur job growth. Additionally, foreign investors are often associated with entrepreneurship and increased economic activity. Critics, however, believe that such investors may be detrimental since they potentially displace potential entrepreneurs that are United States citizens.

³ INA §101(a)(15)(c)(ii).

⁴ INA §101(a)(15)(e).

⁵ The two basic types of legal aliens are *immigrants* and *nonimmigrants*. As defined in the INA, immigrants are synonymous with legal permanent residents (LPRs) and refer to foreign nationals who come to live lawfully and permanently in the United States. The other major class of legal aliens are nonimmigrants — such as tourists, foreign students, diplomats, temporary agricultural workers, exchange visitors, or intracompany business personnel — who are admitted for a specific purpose and a temporary period of time. Nonimmigrants are required to leave the country when their visas expire, though certain classes of nonimmigrants may adjust to LPR status if they otherwise qualify.

⁶ P.L. 101-649.

⁷ INA §203(b)(5).

⁸ P.L. 108-156, 8 USC §1324a note.

Immigrant Investors

There is currently one immigrant class set aside specifically for foreign investors coming to the United States.⁹ Falling under the employment-based class of immigrant visas, the immigrant investor visa is the fifth preference category in this visa class.¹⁰ Thus, the immigrant investor visa is commonly referred to as the EB-5 visa.

Goals. The basic purpose of the LPR investor visa is to benefit the United States economy, primarily through employment creation and an influx of foreign capital into the United States.¹¹ Although some members of Congress contended during discussions of the creation of the visa that potential immigrants would be “buying their way in,” proponents maintained that the program’s requirements would secure significant benefits to the U.S. economy.¹² Proponents of the investor provision offered predictions that the former-Immigration and Naturalization Service (INS) would receive approximately 4,000 applications annually. These petitioners’ investments, the drafters speculated, could reach an annual total of \$4 billion and create 40,000 new jobs.¹³ The Senate Judiciary Committee report on the legislation states that the provision “is intended to provide new employment for U.S. workers and to infuse new capital into the country, not to provide immigrant visas to wealthy individuals” (S.Rept. 101-55, p.21).

Requirements. As amended by the Immigration Act of 1990,¹⁴ the Immigration and Nationality Act (INA) provides for an employment-based LPR

⁹ The INA provides for a permanent annual worldwide level of 675,000 legal permanent residents (LPRs), but this level is flexible and certain categories of LPRs are permitted to exceed the limits, as described below. The permanent worldwide immigrant level consists of the following components: family-sponsored immigrants, including immediate relatives of U.S. citizens and family-sponsored preference immigrants (480,000 plus certain unused employment-based preference numbers from the prior year); employment-based preference immigrants (140,000 plus certain unused family preference numbers from the prior year); and diversity immigrants (55,000). Immediate relatives of U.S. citizens as well as refugees and asylees who are adjusting status are exempt from direct numerical limits. For further discussion see CRS Report RL32235, U.S. Immigration Policy on Permanent Admissions, by Ruth Ellen Wasem.

¹⁰ The INA provides that each category of immigrants has a set of preferences for the classes within that category. These preferences determine the priority of visa distribution for each category depending on certain formulas provided for in the INA. In the case of the LPR investor visa, being the fifth preference (and therefore the lowest) within the employment-based category, it has an annual maximum visa allocation of 10,000.

¹¹ 3 Charles Gordon, Stanley Mailman, and Stephen Yale-Loehr, *Immigration Law and Procedure*, § 39.07 (Matthew Bender, Rev. Ed.).

¹² For debate on this issue, see 136 Cong. Rec. S7768-75 (July 12, 1990).

¹³ The West Group. *New Pilot Program for Immigrant Investors*. 70 Interpreter Releases 1129. August 30, 1993.

¹⁴ P.L. 101-649.

investor visa¹⁵ program designated for individuals wishing to develop a new commercial enterprise¹⁶ in the United States (INA §203(b)(5)). The statute stipulates that

- The enterprise must employ at least 10 U.S. citizens, legal permanent residents (LPRs), or other work-authorized aliens in full time positions. These employees may not include the foreign investor's wife or children.
- The investor must further invest \$1 million¹⁷ into the enterprise, such that the investment goes directly towards job creation and the capital is "at risk."¹⁸ However, if an investor is seeking to invest in a "targeted area"¹⁹ then the required capital investment may be reduced to \$500,000.²⁰ For each fiscal year, 10,000 visas are set aside for EB-5 investors, of which 3,000 are reserved for entrepreneurs investing in "targeted areas."²¹
- The business and jobs created must be maintained for a minimum of two years.²²

According to regulations, enterprises being proposed need not be backed by a single applicant.²³ Multiple applicants may provide financial backing in the same enterprise, provided that each applicant invests the required minimum sum and each applicant's capital leads to the creation of 10 full-time jobs. The applicant may also combine the investment in a new enterprise with a non-applicant who is authorized to work in the United States. Furthermore, each individual applicant must demonstrate that he or she will be actively engaged in day-to-day managerial control

¹⁵ This visa category is for permanent immigrants and should not be confused with the E-2 Treaty Investor nonimmigrant visa.

¹⁶ Since 2002, applicants have also been allowed to invest funds in "troubled businesses." These businesses must have been in existence for at least two years, and must have incurred a net loss of at least 20% of the business' net worth (prior to the loss) during the twelve- or twenty-four-month period prior to filing the petition (8 CFR §204.6(e)).

¹⁷ These funds must be demonstrated to have been obtained lawfully. Generally, any burden of proof to show qualifying status for an EB-5 lies with the applicant (8 CFR §204.6(j)).

¹⁸ Depositing the funds into a corporate account does not qualify as making the investment "at risk." Clear guidelines for demonstrating that the capital is "at risk" do not exist in the regulations (8 CFR §204.6(j)).

¹⁹ "Targeted areas" are either rural areas or areas with unemployment rates of at least 150% of the national average. A "rural area" is defined as one not within a metropolitan statistical area or the outer boundary of a city or town with a population of 20,000 or more.

²⁰ 8 CFR §204.6(f).

²¹ INA §203(b)(5).

²² 8 CFR §204.6(j).

²³ 8 CFR §204.6(g).

or as a policymaker.²⁴ Petitions as a passive investor will not qualify.²⁵ However, since limited partnership is acceptable, regulations do not prevent the investor from living in another location or engaging in additional economic activities.

Immigrant Investor Pilot Program. The Immigrant Investor Pilot Program differs in certain ways from the standard LPR investor visa. Established by §610 of P.L. 102-395 (October 6, 1992), the pilot program was established to achieve the economic activity and job creation goals of the LPR investor statute by encouraging investors to invest in economic units known as “Regional Centers.”²⁶ Regional Center designation must be approved by the Department of Homeland Security’s (DHS) United States Citizenship and Immigration Service (USCIS), and is intended to provide a coordinated focus of foreign investment towards specific geographic regions. Areas with high unemployment are especially likely to receive approval as a Regional Center, since they are less likely to receive foreign capital through foreign direct investment (FDI)²⁷ (although the basic requirements apply to all regional petitions).²⁸ Up to 5,000 immigrant visas²⁹ may be set aside annually for the pilot program. These immigrants may invest in any of the Regional Centers that currently exist to qualify for their conditional LPR status.³⁰

²⁴ This latter criterion may be demonstrated through board membership, status as a corporation officer, or qualifying as a limited partner under the Uniform Limited Partner Act (ULPA) (8 CFR §204.6(i)).

²⁵ 8 CFR § 206.6.

²⁶ A Regional Center is defined as any economic unit, public or private, engaged in the promotion of economic growth, improved regional productivity, job creation and increased domestic capital investment.

²⁷ FDI is defined as an investment made by a foreign individual or company in an enterprise residing in an economy other than where the foreign direct investor is based.

²⁸ The basic requirements for Regional Center designation state that applicants must show how their proposed program will:

- focus on a geographic region (8 CFR 204.6(m)(3)(i));
- promote economic growth through increased export sales, if applicable;
- promote improved regional productivity (8 CFR 204.6(m)(3)(i));
- create a minimum of 10 jobs directly or indirectly per investor (8 CFR 204.6(m)(3)(ii));
- increase domestic capital investment (8 CFR 204.6(m)(3)(i));
- be promoted and publicized to prospective investors (8 CFR 204.6(m)(3)(ii));
- have a positive impact on the regional or national economy through increased household earnings (8 CFR 204.6(m)(3)(iii)); and
- generate a greater demand for business services, utilities maintenance and repair, and construction jobs both in and around the center (8 CFR 204.6(m)(3)(iv)).

²⁹ These 5,000 visas represent a subset of the 10,000 visas allocated for the LPR investor visa.

³⁰ As of June 1, 2004, there were 26 Regional Centers in the United States (USCIS, *EB-5 Immigrant Investor Pilot Program*, Background, June, 2004). Since then, a number of Regional Centers have been added (for example, see letter from Thomas E. Cook, Director (continued...))

The Basic Pilot Program Extension and Expansion Act of 2003³¹ extended the pilot program through FY2008. In response to this legislation USCIS decided to develop a new unit to govern matters concerning LPR investor visas and investments.³² On January 19, 2005, the Investor and Regional Center Unit (IRCU) was created by the USCIS, thereby establishing a nationwide and coordinated program. USCIS believes that the IRCU will serve the dual purpose of guarding against EB-5 abuse and encouraging investment.³³

The USCIS approximates that between 75-80% of EB-5 immigrant investors have come through the pilot program since it began, and that limited partnerships constitute the most significant portion of this group.³⁴

LPR Investor Visa Numbers

In contrast to the high number of applications for other employment-based LPR visas,³⁵ the full allotment of 10,000 LPR investor visas per fiscal year has never been used. As **Table 1** below shows, the number of LPR investor admissions peaked in FY1997, with 1,361 admissions, or 13.6% of the program's visa supply. In subsequent years, the program declined markedly, before increasing up to 346 in FY2005. Despite the low numbers of overall investor admissions, the program has seen a marked increase since the implementation of the Immigrant Investor Pilot Program expansion in 2004.

From FY1992 to FY2004, the cumulative total amount invested into the United States by LPR investor visa holders was approximately \$1 billion and the cumulative number of LPR investor visas issued was 6,024.³⁶ In the earlier years of the program, it attracted a relatively higher rate of derivatives than principals.³⁷ However, in the last three years the distribution of visas between principals and derivatives has more closely approximated parity. Derivatives have historically accounted for

³⁰ (...continued)

of USCIS's Office of Program and Regulations Development, to Bruce V. Malkenhorst, Executive Director of The Redevelopment Agency of the City of Vernon, December 23, 2005).

³¹ P.L. 108-156.

³² USCIS, *EB-5 Immigrant Investor Pilot Program, Background*, June, 2004.

³³ *Ibid.*

³⁴ Based on CRS discussions with Morrie Berez, Chief Adjudications Officer, USCIS Investor and Regional Center Program, November 20, 2006.

³⁵ According to a recent issue of the Department of State (DOS) *Visa Bulletin* (No. 99, Vol. VIII) there are backlogs for all the employment-based immigrant categories except LPR investor visas.

³⁶ U.S. Government Accountability Office, *Immigrant Investors: Small Number of Participants Attributed to Pending Regulations and Other Factors*, GAO-05-256, April 2005, pp. 8-11.

³⁷ Principals are the actual investors. Derivatives are comprised of spouses, children, and other dependents.

approximately 67% of immigrant investor visa recipients, while principals account for 33%.

Table 1. United States LPR Investor Visa Admissions, FY1996-FY2005

| Fiscal Year | EB-5 Visa Admissions | Principals | Derivatives |
|-------------|----------------------|------------|-------------|
| 1992 | 59 | 24 | 35 |
| 1993 | 583 | 196 | 387 |
| 1994 | 444 | 157 | 287 |
| 1995 | 540 | 174 | 366 |
| 1996 | 936 | 295 | 641 |
| 1997 | 1361 | 444 | 917 |
| 1998 | 824 | 259 | 565 |
| 1999 | 285 | 99 | 187 |
| 2000 | 218 | 79 | 147 |
| 2001 | 191 | 67 | 126 |
| 2002 | 142 | 52 | 97 |
| 2003 | 64 | 39 | 25 |
| 2004 | 129 | 60 | 69 |
| 2005 | 346 | 158 | 188 |

Source: CRS presentation of U.S. Department of Homeland Security Office of Immigration Statistics FY2005 data.

According to data from DHS' Performance Analysis System, in the time span of FY1992 through May 2006, authorities had received a cumulative total of 8,505 petitions for immigrant investor visas. Of these petitions, 4,484 petitions had been granted while 3,820 had been denied³⁸ — an approval rate of 52.7%. Furthermore, in this same time span, officials received 3,235 petitions for the removal of conditional status³⁹ from the LPRs of immigrant investors. These petitions were granted in 2,155 cases (a 66.6% approval rate), while the remaining 910 petitions for the removal of conditional status were denied.

Although numerous possible explanations for the overall low admission levels of LPR investor visas exist, the notable drop in admissions in FY1998 and FY1999 is due in part to the altered interpretations by the former-INS of the qualifying requirements that took place in 1998.⁴⁰ The 21st Century Department of Justice

³⁸ The discrepancy between the petitions granted, denied, and received is due to some petitions remaining adjudicated.

³⁹ "Conditional status" for an LPR immigrant means that the final approval of the LPR is contingent upon fulfilling certain requirements. For immigrant investors, the conditional status lasts for two years before the applicant is reviewed for final approval.

⁴⁰ The West Group, *Sections 203(b)(5) and 216A of the Immigration and Nationality Act*, 75 Interpreter Releases 332, March 9, 1998.

Appropriations Act (2002)⁴¹ provided remedies for those affected by the former-INS' 1998 decision, and provided some clarification to the requirements to promote an increase in petitions.⁴²

A 2005 report from GAO⁴³ listed a number of contributing factors to the low participation rates, including the rigorous nature of the LPR investor application process and qualifying requirements; the lack of expertise among adjudicators; uncertainty regarding adjudication outcomes; negative media attention on the LPR investor program; lack of clear statutory guidance; and the lack of timely application processing and adjudication. It is unknown how many potential investors opted to obtain a nonimmigrant investor visa or pursued other investment pathways. A recent law journal article on investor visas suggested that the two year conditional status of the visa and the alternate (and less expensive) pathways for LPR status often dissuaded potential investors from pursuing LPR investor visas.⁴⁴

According to the GAO study, of the LPR visas issued to investors, 653⁴⁵ had qualified for removal of the conditional status of LPR visa (not including dependents).⁴⁶ GAO estimates that these LPR investors invested approximately \$1 billion cumulatively into their collective enterprises and 99% kept their enterprise in the same state where it was established.⁴⁷ The types of enterprises these investors established were often hotels/motels, manufacturing, real estate, or domestic sales, with these four categories accounting for 61% of the businesses established by LPR-qualified investors. Furthermore, an estimated 41% of the businesses by LPR-qualified investors were set up in California. The subsequent states with the highest percentages of established enterprises were Maryland, Arizona, Florida and Virginia with 11%, 8%, 7%, and 7% respectively (for examples of current investment projects see **Appendix B**).

As **Figure 1** shows, LPR investors admitted to the United States between FY1992-FY2004 were predominantly from Asian countries. Asia accounted for approximately 83% of LPR investors in this time span, a total that is over nine times larger than the second highest contributing region. Europe was the only other region

⁴¹ P.L. 107-273.

⁴² 3 Charles Gordon, Stanley Mailman, and Stephen Yale-Loehr, *Immigration Law and Procedure*, § 39.07 (Matthew Bender, Rev. Ed.)

⁴³ U.S. Government Accountability Office, *Immigrant Investors: Small Number of Participants Attributed to Pending Regulations and Other Factors*, GAO-05-256, April 2005, pp. 8-11.

⁴⁴ Mailman, Stanley, and Stephen Yale-Loehr. "Immigrant Investor Green Cards: Rise of the Phoenix?" *New York Law Journal*, April 25, 2005. At [<http://www.millermayer.com/EB5NYLJ0405.html>], visited January 23, 2007.

⁴⁵ Of these investors, 247 (or 38%) applied for U.S. citizenship.

⁴⁶ The fact that they qualified for LPR status means that they had successfully maintained their business and 10 full-time qualifying employees for more than 2 years.

⁴⁷ GAO's report stated it could not provide reliable figures on the number of jobs created by these enterprises.

require that a treaty exist between the United States and the principal foreign national's country of citizenship.⁵⁰

In the majority of cases, a commerce or navigation treaty serves as the basis for the E-class visa extension (though other bilateral treaties and diplomatic agreements can also serve as a foundation).⁵¹ A number of countries offer both the E-1 and E-2 visas as a result of reciprocal agreements made with the United States, although many countries only offer one. Currently there are 75 countries who offer the treaty class visas. Of these countries, 28 offer only the E-2 treaty investor visa while 4 countries offer only the E-1 treaty trader visa (see **Table 3** in **Appendix A**). In the cases where a country offers both types of visas, an applicant who qualifies for both types of visa may choose based upon his or her own preference. Such decisions, however, would depend upon the specific nature of the business as the E category visas carry different qualifying criteria for renewal.

Although each category has some unique requirements, other requirements cut across all categories of nonimmigrant investor visas. An applicant for any of the nonimmigrant investor categories must satisfy the following criteria:

- the principal visa recipient must be a national of a country with which the United States has a treaty.⁵²
- the principal visa recipient must be in some form of executive or supervisory role in order to qualify as a treaty trader or investor.⁵³
- the skills the principal visa recipient possesses must be essential and unique to the enterprise under consideration.⁵⁴
- the visa holder must show an intent to depart the United States at the end of the visa's duration of status.⁵⁵

⁵⁰ 8 CFR §214.2(e)(6).

⁵¹ 2 Charles Gordon, Stanley Mailman, and Stephen Yale-Loehr, *Immigration Law and Procedure*, § 17.06[2][a] (Matthew Bender, Rev. Ed.).

⁵² Spouses and child dependents are not subject to the same nationality requirements as they can be nationals of any country, regardless of whether that country has treaties with the United States or not.

⁵³ There is no set formula for determining whether a person's role is sufficient to qualify, but is determined on a case by case basis using a number of different factors. These factors normally include such considerations as salary, position, duties, degree of control, and the number of employees under the applicant's supervision.

⁵⁴ A nominal position (e.g. having the title of manager) or title is not sufficient grounds to qualify for an E-class visa. Individuals with highly specialized skills or knowledge pertinent to the employer's business may also qualify, although if the individual's skills are determined to be of only a specialized nature that person must qualify for an H-1B visa (for highly skilled professionals). An example of a skill that has been rejected by DOS as an essential skill is knowledge of a foreign language.

⁵⁵ 8 CFR §214.2(e)(2)(iii).

- if investing in an existing enterprise, the applicant must show that the employer of the treaty trader or investor must be at least 50% owned by nationals of the treaty country.⁵⁶

A person granted an E-class visa is eligible to stay in the United States for a period of two years.⁵⁷ Although an applicant is obligated to show intent of departing the United States at the end of the visa duration, the E-class visas may be renewed for an indefinite number of two year periods provided that the individual still qualifies.⁵⁸ Spouses and child dependents are granted the same visa status and renewal as the principal visa holder so long as the child is under the age of 21, after which the child must apply and qualify for his or her own visa.⁵⁹

Generally with the E-class visas, the individual may not engage in other employment than that which is stipulated,⁶⁰ although incidental activities are generally allowed.⁶¹ If any E-class individual wishes to change employer, he or she is under obligation to contact the Department of State (DOS) and apply for adjustment of status.⁶²

E-1 Treaty Trader⁶³

The E-1 formally traces back to the 1924 Immigration Act, although merchants working under treaty terms were recognized visa holders prior to this act.⁶⁴ Under current law, the E-1 visa is to be issued to an individual who engages in substantial trade between the United States and his or her country of nationality. According to

⁵⁶ This criterion is more salient in the cases of smaller companies since ownership is more constant and concentrated. Large publically traded companies are largely not saddled with having to demonstrate ownership by nationals.

⁵⁷ 8 CFR §214.2(c)(19).

⁵⁸ 8 CFR §214.2(c)(20).

⁵⁹ 8 CFR §214.2(e)(4).

⁶⁰ 8 CFR §214.2(e)(8).

⁶¹ The rules on such incidental activities are quite flexible. The governing principle of such incidental activities is that the primary trade or investment activity remains paramount (see 9 FAM §41.40 n7 (Visa TL-872 February 20, 1975, i.e. prior to 1987 revision) and 9 FAM §41.11 n.3.1).

⁶² 8 CFR §214.2(e)(8).

⁶³ Although technically being a “trader” category as opposed to an “investor” category, there is sufficient grounds for believing that the E-1 traders should be included with the other investor categories. Although their activities must be related to trade, they are still allowed to make investments in United States enterprises. Also, investor categories such as the LPR investor visa have previously held requirements that investments must positively effect export levels in the industry where an investment is occurring (USCIS, *EB-5 Immigrant Investor Pilot Program*, Background, June, 2004).

⁶⁴ The term “treaty merchant,” for example, traces its roots at least back to the 1880 treaty with China to conduct trade (Treaty Between the United States and China, Concerning Immigration, November 17, 1880, art. I, 22 Stat. 826).

immigration regulations, trade is defined as “the exchange, purchase or sale of goods and/or services. Goods are tangible commodities or merchandise having intrinsic value. Services are economic activities whose outputs are other than tangible goods.”⁶⁵ This expanded definition of trade into the service sector allows for a fairly broad understanding of what trade may entail.

The term “substantial trade” has never been explicitly defined in terms of monetary value. Rather, the term is meant to indicate that there is an amount of trade necessary to ensure a continuing flow of international trade items.⁶⁶ For smaller businesses, regulatory qualification for treaty trader status may be derived from demonstrating that the trading activities would generate an income sufficient to support the trader and his or her family.⁶⁷ The qualifications for sufficient volume or transaction have not been explicitly set in the regulations,⁶⁸ but a minimum qualification is that more than 50% of the business’s trade must flow between the United States and the treaty country from which the E-1 visa holder stems.⁶⁹

E-2 Treaty Investor

The E-2 investor visa is a visa category that stems from the 1952 Immigration and Nationality Act (INA). The qualifying applicant for such a visa is coming to the United States in order to “develop or direct the operations of an enterprise in which he has invested, or is in the process of investing a substantial amount of capital.”⁷⁰ Unlike the E-1 visa, the business need not be engaged in trade of any kind. However, the same rules concerning ownership are still applicable.⁷¹ In cases of ownership of an enterprise, the regulations require that the E-2 visa holder control at least a 50% interest in an enterprise.⁷² The burden of proof for E-2 qualification lies with the applicant in the same manner as with the other E-class visas.⁷³

There is no explicit monetary amount for what constitutes a “significant amount of capital.” The DOS has operated under a regulatory proportionality principle that dictates that the amount an individual invests must be enough to ensure the successful establishment and growth of an enterprise, and there must be some level of investment risk assumed by the treaty investor.⁷⁴ Because of this proportionality

⁶⁵ 8 CFR §214.2(e)(2), as amended by 56 Fed. Reg. 10978, 10979 (1989).

⁶⁶ 8 CFR §214.2(e)(10).

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*

⁶⁹ 8 CFR §214.2(e)(11).

⁷⁰ INA §101(a)(15)(E)(ii).

⁷¹ 8 CFR §214.2(e)(3)(ii).

⁷² Certain joint ventures have been deemed permissible by the United States, provided that each joint venture partner have veto power over decisions by the other partner.

⁷³ 8 CFR §214.2(e)(12).

⁷⁴ 8 CFR §214.2(e)(14).

regulation, an investment in a small to medium-sized enterprise is acceptable.⁷⁵ For smaller sized investments, the DOS generally requires that the investment amount be a higher percentage of the enterprise value.⁷⁶ For higher valued enterprises the investment percentage becomes less relevant, provided that the monetary amount is deemed substantial.⁷⁷

As further grounds for regulatory qualification for an E-2 investor visa, investments in marginal enterprises are not eligible for acceptance.⁷⁸ Consequently, the DOS applies a two-pronged test for marginality.⁷⁹ On the one hand, the enterprise in which the applicant seeks to make an investment must be capable of providing more than a minimal living for the investor and his or her family. However, the rules are capable of recognizing that some businesses need time to establish themselves and become viable. Consequently, as a second prong of the test, the investor's enterprise must be deemed capable of making a significant economic impact within five years of starting normal business activity. If neither of these prongs is successfully passed, the enterprise is deemed marginal and the application is rejected.⁸⁰

An additional category of E-class nonimmigrant visa — the E-3 visa for Australian nationals — does exist, but it is set aside for use by specialized workers, and not for investors or traders.⁸¹

⁷⁵ 9 FAM §41.51 n.10.4, as amended, TL:VISA-322 (October 10, 2001).

⁷⁶ Visa Bulletin, Vol. V, No. 20 — Nonimmigrant Treaty Investors U.S. Department of State, Visa Office (1982).

⁷⁷ *Ibid.*

⁷⁸ 8 CFR §214.2(e)(15).

⁷⁹ 2 Charles Gordon, Stanley Mailman, and Stephen Yale-Loehr, *Immigration Law and Procedure*, § 17.06[3][c] (Matthew Bender, Rev. Ed.).

⁸⁰ *Ibid.*

⁸¹ A special category of nonimmigrants classified as the E-3 visa has been established and is only available to nationals of Australia. Although agreed upon under the Australian Free Trade Agreement, the agreement itself contained no explicit immigration provision. Rather, the FY2005 supplemental appropriations for military operations in Iraq and Afghanistan (P.L. 109-16) included §501 creating the E-3 visa category. This visa permits the employment by any United States employer of a qualifying Australian national for a specialty occupation. Unlike the other E-class visas, the E-3 carries an annual cap which is currently set at 10,500. However, the other rules generally remain the same as E-1 and E-2 visas, with admissions for two years and unlimited extensions for qualifying individuals.

The E-3 resembles the H-1B-1 visa which allows for similar admissions of specialized workers from Chile and Singapore. After legislation was passed implementing the Chile and Singapore Free Trade Agreements (P.L. 108-77 and P.L. 108-78, respectively), these new laws carved out a portion of §101(a)(15)(H) of the INA for professional workers entering through the free trade agreements. Unlike the other H-1B requirements, H-1B-1 recipients are only required to be *specialized* workers as opposed to *highly specialized*. This visa category also differs from the E-3 visa in that it allows for an 18 month admission and carries an annual cap of 1,400 for Chilean nationals and 5,400 for nationals of Singapore.

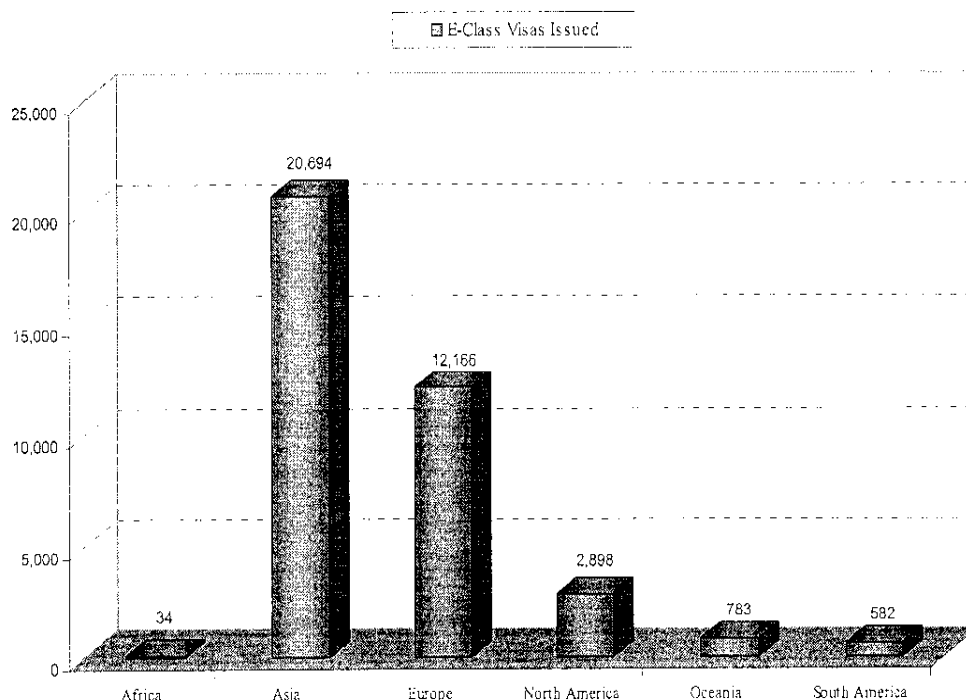
(continued...)

Nonimmigrant Investor Visa Numbers

E-class visas are largely distributed to foreign nationals from the regions of Asia and Europe. This result is not surprising since the majority of treaty countries are in these two regions. Furthermore, one could reasonably expect that the financial requirements embedded in nonimmigrant investor visa categories would result in a high correlation between the nationality of qualifying applicants and country membership in the Organization for Economic Cooperation and Development (OECD) — an organization of capital abundant countries.

As **Figure 2** shows, the Asian region is issued the highest number of E-class visas, with a total of 20,694 visas issued in FY2005. These Asian issuances constitute more than all other regions combined, and represent 55.7% of the worldwide total. Within the Asian region, the biggest user of the E-class visa is Japan, whose nationals accounted for 14,421 of the visa issuances in FY2005, a figure representing 38.8% of the 37,157 worldwide E-class visas issued that fiscal year. Europe's 12,166 E-Class visas accounted for 32.7% of the worldwide total, while the North American share of 2,898 visas represented 7.8%. Oceania, South America, and Africa each accounted for less than 2.2% of the worldwide total, and combined their nationals represented approximately 3.8% of the worldwide E-class visa issuances for FY2005.

Figure 2. E-Class Visas Issued by Region, FY2005



Source: Data is from the U.S. Department of State, Bureau of Consular Affairs (2005)

⁸¹ (...continued)

For further discussion on the E-3 and H-1B-1 visas, see CRS Report RL30498, *Immigration: Legislative Issues on Nonimmigrant Professional Specialty (H-1B) Workers*, by Ruth Ellen Wasem and CRS Report RL32982, *Immigration Issues in Trade Agreements*, by Ruth Ellen Wasem.

The admissions data on nonimmigrant investors offers more detailed insights into the origins of the visa holders. **Table 2** provides cumulative totals of E-class visa admissions into the United States in FY2005 by region of origin, with a detailed breakdown of the Asian region. The figures listed in **Table 2** show that the Asian region accounted for approximately 50% of the nonimmigrant investor visa admissions into the United States. In FY2005, Japan accounted for the majority of nonimmigrant investor admissions with 72,606 admissions.⁸² South Korea's 13,090 nonimmigrant investors admitted account for 6.9% of the United States total for FY2005. It is worth noting that the fast growing markets of China and India (the world's two largest population centers) combined for less than 1,000 admissions. The second largest region of origin for nonimmigrant investor admissions was Europe, with slightly more investors admitted than Japan. And while Europe's 74,338 admissions accounted for 38.6% of the total U.S. nonimmigrant investor admissions in FY2005, the 203 admissions of nationals from African countries accounted for approximately one-tenth of 1% of this same total.

Table 2. Nonimmigrant Treaty Trader and Investor Admissions, FY2005

| Country (or Region) of Origin | Number | Percentage of Total |
|-------------------------------|----------------|---------------------|
| <i>Asia:</i> | | |
| <i>Taiwan</i> | 4,613 | 2.5 |
| <i>South Korea</i> | 13,090 | 6.9 |
| <i>China^a</i> | 769 | 0.5 |
| <i>India</i> | 228 | 0.1 |
| <i>Japan</i> | 72,606 | 37.8 |
| <i>All other Asia</i> | 4,228 | 2.2 |
| Total for Asia | 95,534 | 50 |
| <i>All Other Regions:</i> | | |
| Europe | 74,338 | 38.6 |
| South America | 5,338 | 2.9 |
| Africa | 203 | 0.1 |
| North/Central America | 13,159 | 6.9 |
| Australia/New Zealand | 2,735 | 1.5 |
| Total | 192,823 | 100 |

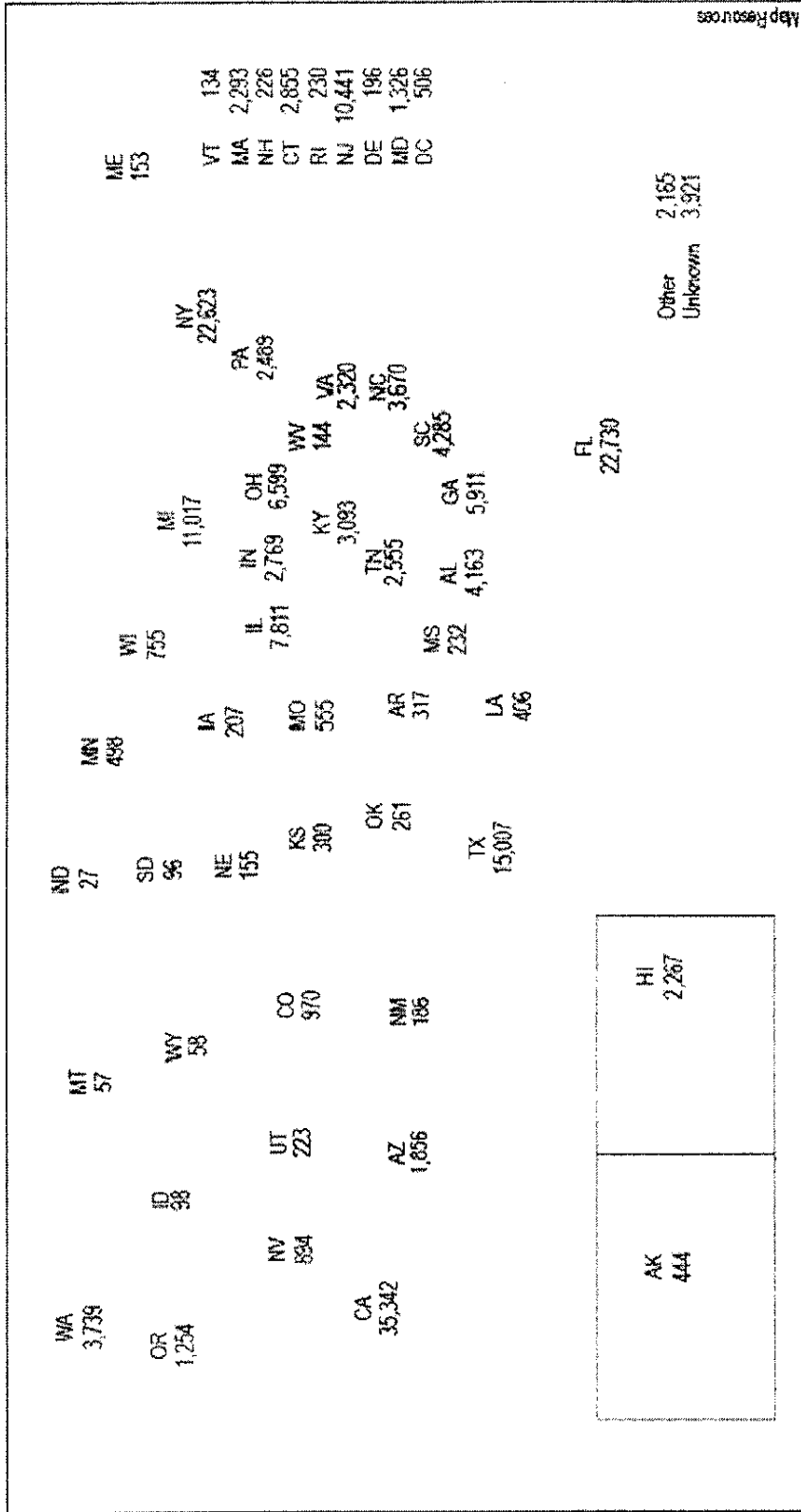
Source: CRS presentation of Department of Homeland Security Office of Immigration Statistics FY2005 data.

a. Denotes People's Republic of China, Hong Kong, and Macau.

⁸² Admissions figures differ significantly from visa issuance figures because individuals may leave the United States and return on the same visa, as long as the visa is still valid. Thus, some individuals may be counted multiple times in the admissions data.

The Department of Homeland Security (DHS) offers statistics on the admissions of nonimmigrants and their destination state. **Figure 3** indicates the destination states of E-class visa admissions into the United States for FY2005. The state with the highest number of nonimmigrant investors as their destination in FY2005 was California with 35,431 admissions, accounting for 18.4% of the admissions total. Following California, the next three biggest recipients of nonimmigrant investors were Florida, New York, and Texas with 22,765, 22,705, and 15,048 admissions each, respectively. In the respective order, these state admissions accounted for 11.8%, 11.8% and 7.8% of the admissions total in FY2005. The only other states with a combined total of more than 10,000 E-class admissions were Michigan and New Jersey. Michigan was the destination state of 11,034 nonimmigrant investors admitted, while New Jersey attracted 10,460 admissions. These totals accounted for 5.7% and 5.4% of the United States admissions total, respectively. The remaining states represented the destination states for approximately 31% of nonimmigrant investors.

Figure 3. Nonimmigrant Trader and Investor Admissions by Destination State, FY2005



Source: CRS presentation of DHS Office of Immigration Statistics data.

Historically, more investors have applied to enter the United States as nonimmigrants than immigrants, possibly because the less stringent requirements for the nonimmigrant investor visa make it easier to obtain. However, relative to other nonimmigrant categories, the admission levels of investor nonimmigrants are low. With the ease of movement, technological advances, and ease of trade restrictions, many investors may be choosing to invest in the United States from abroad and enter the United States on B-1 temporary business visas or visa waivers.⁸³

U.S. and Canadian Comparisons

Although there are many countries with investor visa programs — including the United Kingdom, Australia, and New Zealand — the Canadian investor program has the strongest parallels to those of the United States. These parallels are in part due to the fact that the U.S. immigrant investor program was modeled after its Canadian counterpart. The Canadian program allows investors who have a net worth of at least \$800,000 (Cdn) to make a \$400,000 (Cdn) investment through Citizenship and Immigration Canada (CIC).⁸⁴ The Canadian government additionally offers an entrepreneurial visa for foreign nationals with a net worth of \$300,000 (Cdn).⁸⁵ These nationals are required to invest and participate in the management of a certain sized business, and they must produce at least one new full-time job for a non-family member.⁸⁶ Between 1986 and 2002, the Canadian investor visa program attracted more than \$6.6 billion (Cdn) in investments.⁸⁷ From FY1992 through FY2004, United States LPR investor immigrants had invested an estimated \$1 billion in U.S. businesses.⁸⁸

According to published accounts, the Canadian investor visa was developed initially to attract investors from the British colony of Hong Kong.⁸⁹ The visa was created in 1986 in response to the significant numbers of investors seeking to migrate from Hong Kong in anticipation of the transfer of the colony from British to Chinese

⁸³ According to the DHS Office of Immigration Statistics' *2005 Yearbook of Immigration Statistics*, in FY2005 there were 2,432,587 admissions of B-1 visa holders and 2,261,354 admissions for business purposes on visa waivers.

⁸⁴ Citizenship and Immigration Canada, "Business Immigrant Links: FAQs," November 11, 2005, at [<http://www.cic.gc.ca/english/business/bi-faqs.html>], visited January 23, 2007.

⁸⁵ *Ibid.*

⁸⁶ *Ibid.*

⁸⁷ Mailman, Stanley, and Stephen Yale-Loehr. "Immigrant Investor Green Cards: Rise of the Phoenix?" *New York Law Journal*, April 25, 2005. At [<http://www.millermayer.com/EB5NYLJ0405.html>], visited January 23, 2007.

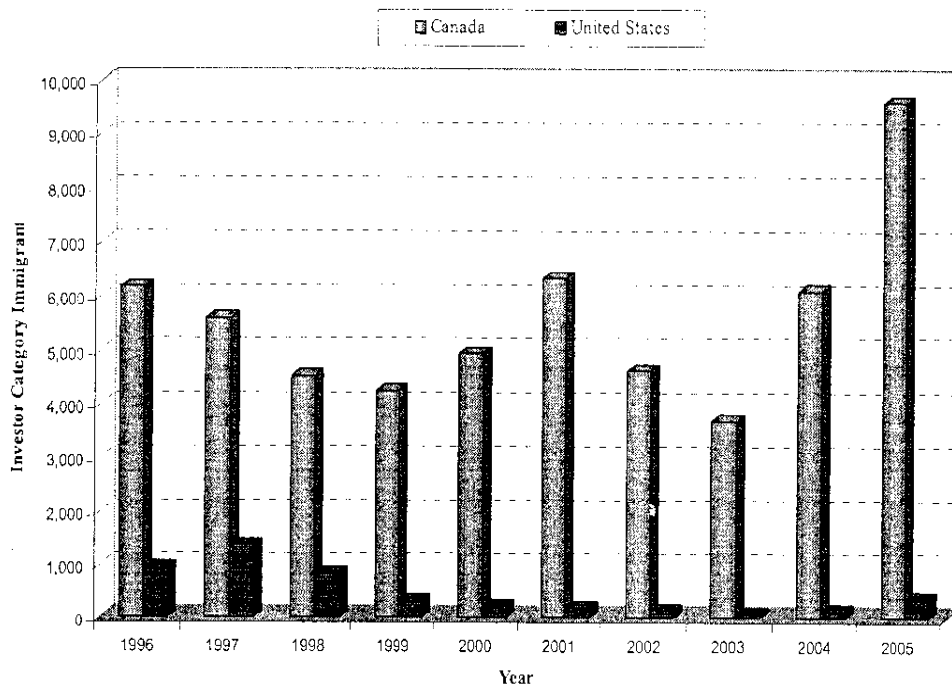
⁸⁸ U.S. Government Accountability Office, *Immigrant Investors: Small Number of Participants Attributed to Pending Regulations and Other Factors*, GAO-05-256, April 2005, pp. 8-11.

⁸⁹ Denton, Herbert H. "Canada Lures Hong Kong Immigrants: Well-Off Businessmen Willing to Invest Are Granted Special Status." *Washington Post*, March 8, 1986, pp. A11, A18.

control. For these investors, the visa offered an opportunity to establish legal permanent residence in a country that was perceived to be more embracing of individual property rights and open markets.⁹⁰ These immigrant investors from Hong Kong, along with other immigrant investors, have cumulatively invested over \$3 billion in the Canadian economy.⁹¹

As **Figure 4** demonstrates, the annual number of immigrant investor visas issued over the past decade has remained multiple times higher than that of its United States counterpart. The margin between these two programs was closest in 1997, when the Canadian issuance of 5,595 immigrant investor visas was approximately 400% higher than the U.S. total of 1,361 immigrant investor visas issued. Although these ratios have fluctuated, the sizable Canadian advantage in this measure has remained. In terms of the absolute levels, the Canadian immigrant visa level for 2005 represented a 10-year high, while the U.S. level for the same time period represented approximately 25% of its 10-year high. Both countries have shown an upward trend in immigrant investor visas in the last two years.

Figure 4. Immigrant Investors to Canada and the United States, 1996-2005



Source: Data are from the United States Government Accountability Office (2005) and Citizenship and Immigration Canada (2005).

What is unclear from the data is whether the competition between the U.S. and Canadian program (as well as investor programs in other countries) constitutes a zero-sum game. There are no data available showing the motive for migration among investors, or if they perceive the United States and Canada as interchangeable

⁹⁰ Ibid.

⁹¹ Citizenship and Immigration Canada, "Business Immigrant Links: FAQs." November 11, 2005, at [<http://www.cic.gc.ca/english/business/bi-faqs.html>], visited January 23, 2007.

investment locations. If the investors are motivated purely by the economic returns, then economic theory⁹² suggests that equalizing the program financial requirements should result in more equal rates of petitions. Furthermore, a lowering of the financial requirements should increase the supply for both countries. However, if the immigrant investors are motivated to migrate by non-financial considerations, then equalizing the United States program requirements with its Canadian counterpart is likely to have little impact on the current trends.

Analysis of the Relationship Between Investments and Migration

Classical economic theory has posited that trade liberalization (including the reduction of investment restrictions) establishes a conditional inverse theoretical relationship between foreign direct investment (FDI) and migration.⁹³ In other words, as trade increases, migration pressures decrease. The theory posits that an increased level of FDI should reduce migratory pressures through growth in the targeted economy. As economic growth produces a higher demand for labor, workers in that economy feel less pressure to seek employment in foreign economies, provided that the new jobs complement the workforce's skills. For example, if economic growth creates demand for skilled labor, then an unskilled labor force should not experience any reduced migration pressures. Thus, while FDI increases host-country growth, there is not necessarily a direct reduction in host-country migration pressures.

The investor visas offered by the United States operate on the principal that FDI into the United States should spur economic growth in the United States. According to the classical theory, if these investments are properly targeted towards the U.S. labor force's skill sets, it should reduce the migration pressures on U.S. workers. Such economic growth from FDI should further spur greater demand for trade. In FDI between capital abundant countries such as the OECD member states (between whom a marked majority of FDI flows), the empirical evidence has largely supported this notion.⁹⁴ Furthermore, it has provided an increased per capita income in these states, as well as boosted the general standard of living.

What is less clear from the empirical research is the degree to which potential migration provides any additional incentive for investment activity in the United States. The classical trade theory asserts that trade and migration are substitutes,⁹⁵ and

⁹² Xenogiani, Theodora. "Migration Policy and Its Interactions with Aid, Trade and Foreign Direct Investment Policies: A Background Paper." *OECD Development Centre, Working Paper No. 249*, June, 2006.

⁹³ For a brief discussion, see Xenogiani, Theodora. "Migration Policy and Its Interactions with Aid, Trade and Foreign Direct Investment Policies: A Background Paper." *OECD Development Centre, Working Paper No. 249*, June, 2006, p.36.

⁹⁴ *Ibid.*

⁹⁵ For further discussion on immigration and trade see CRS Report RL32982, *Immigration Issues in Trade Agreements*, by Ruth Ellen Wasem.

that trade liberalization should reduce migratory pressures.⁹⁶ These basic propositions are generally agreed to hold in the long term. Consequently, in the long term classical trade theory suggests there should be little migration of investors from countries with liberalized trade arrangements with the United States.⁹⁷ Instead, these investors would achieve their investments through conventional FDI. Furthermore, the theory suggests that investors would be more likely to migrate from countries with restrictive trade policies (a policy more highly correlated with less economically developed countries).

Critics of the classical economic models contend that despite elegant predictions, the models produced by the theory frequently do not capture the costs of international finance. Such critics argue that foreign investments often occur at the expense of local businesses, and result in exploitive practices of local labor.⁹⁸ These criticisms are particularly common when critiquing the economic relationship between capital abundant countries and less economically developed countries (LEDC). According to the argument, more powerful countries can leverage their power to construct investment relationships that shift a disproportionate amount of profits to the capital abundant countries. Simultaneously, a greater share of the costs⁹⁹ are shouldered by the less powerful country. Classical economists generally respond by noting that these investments are still producing growth in the LEDCs, making the countries better off than without the investments. However, LEDCs remain a source of contention between the classical economic theorists and their critics.

Less Economically Developed Countries. Some scholars have expressed doubt about the posited trade/migration substitutability, suggesting that the relationship in the short or medium term could look different from the long term.¹⁰⁰ One of the arguments put forward is that trade and migration are complementary for countries with different levels of development.¹⁰¹ Under such a scenario, economic

⁹⁶ This migratory pressure reduction should occur through the increased exports of unskilled labor-intensive goods, as well as the resulting fact-price equalization and subsequent convergence of wages.

⁹⁷ There exists the possibility that foreign investment and capital trade objectives of many investors are accomplished through multinational corporations. Under the construct of a multinational corporation, returns to the investor are achieved through the foreign direct investment by the corporation and through the migration of managers and technical experts to facilitate production efficiency.

⁹⁸ For example, see Banerjee, Subhabrata Bobby, and Stephen Linstead, "Globalization, Multiculturalism and Other Fictions: Colonialism for the New Millennium?" *Organization*, vol. 8, no. 4 (2001), pp. 683-722.

⁹⁹ These costs may include tax shelters, government sponsored benefits, subsidies, and the like.

¹⁰⁰ Schiff, M. "How Trade, Aid, and Remittances Affect International Migration." World Bank Policy Research Working Paper No. 1376, Washington, DC, 1994.

¹⁰¹ Xenogiani, Theodora. "Migration Policy and Its Interactions with Aid, Trade and Foreign Direct Investment Policies: A Background Paper." *OECD Development Centre*, (continued...)

growth in a sending country would provide potential migrants with the economic means to overcome relatively high migration costs. Other observers point to such factors as imperfect credit markets and currency fluctuations as significant “push” factors for potential migrants.¹⁰² These latter factors, however, are generally more highly correlated with LEDCs. Therefore, both the complementary and substitutability theories of trade and migration suggest that higher demand for investor out-migration should currently lie in the populations of LEDCs. However, as noted earlier, investor visas issued to regions with LEDCs are relatively few.

What makes the visa program distinct from conventional FDI is that it involves trade through the import of human capital. Consequently, these visas have potential for creating a so-called “brain drain” migration out of less-developed sending-countries.¹⁰³ LEDCs are by definition limited in their capital levels, and economic theory would suggest that exporting capital from a capital scarce country would inhibit its growth and development.¹⁰⁴ Classical theorists would argue that the United States would be better served by sending FDI into LEDCs, thereby promoting economic growth in LEDCs and a subsequent higher demand for U.S. goods.¹⁰⁵ Such investment, the theory dictates, would promote job growth both in the United States and abroad.¹⁰⁶ Instead, targeting investors from capital abundant countries for sector specific investments would serve a more complementary role for the global market.¹⁰⁷

¹⁰¹ (...continued)

Working Paper No. 249, June, 2006, p. 31-33.

¹⁰² Ibid.

¹⁰³ A large majority of the issued visas have been to foreign nationals from relatively capital abundant countries.

¹⁰⁴ For further discussion of FDI into the United States see CRS Report RS21857, *Foreign Direct Investment in the United States: An Economic Analysis*, by James K. Jackson.

¹⁰⁵ FDI does entail some degrees of risk and reward for both the home and host economies. For the home economy, FDI can improve competitiveness and performance of firms by providing value-added activities, better employment opportunities, better export performance, and higher national income. At the same time, engaging in FDI also runs the risks of lower additions to both domestic investment and capital stock, as well as loss of competitiveness and jobs in certain parts of the economy. For the host economies, the benefits include increases in employment and potential multiplier effects on other parts of the economy through productivity growth. Accepting FDI, however, does run the risk that domestic firms are crowded out of the market (United Nations *World Investment Report*, 2006).

¹⁰⁶ From the classical economic perspective, the immigrant investor pilot program is counter-intuitive. In the case of investors from developed countries there is little incentive for them to settle in the United States since they can achieve similar standards of living and all of their FDI objectives from their home country. As for LEDCs, a drain of their capital may provide short-term benefits to the United States, but would inhibit growth and trade in the long run. The flight of investors from Hong Kong in the late-1980s and the 1990's was a unique economic situation that has since subsided. Other than the Hong Kong scenario, there is seemingly little incentive for investors to relocate.

¹⁰⁷ The complementary roles would be achieved through what economists refer to as
(continued...)

By attracting capital abundant country investors, the United States' economic growth and productivity could be stimulated without adversely affecting the consumption and trade potential of the investor's country of origin.

Temporary and Permanent Investors. Some recent scholarly work has drawn a distinction between the decision-making factors of potential temporary and permanent migrants.¹⁰⁸ Amongst temporary migrants, it is the employment prospects and wage differentials that are significant variables in deciding whether to migrate. Differences in both gains and price levels should affect the cost/benefit calculation of the potential migrants, as these variables will affect potential levels of consumption and savings. For permanent migrants, however, the prospects for professional and social mobility are the main motivating factors.

The distribution of visas among Asian countries shows marked country-specific tendencies among investor visa petitioners. Specifically, the polarization among petitioners towards either immigrant (permanent) or nonimmigrant (temporary) visas suggests that a significant proportion of applicants are substituting immigrant visas for nonimmigrant visas, or vice versa. For example, while Japan accounted for 37.8% of all the foreign nationals arriving on nonimmigrant treaty trader and investor visas in FY2005 (**Table 2**), its nationals represented only 1% of all the LPR investor visas issued in the time frame FY1992-FY2004 (embedded in "Other Asia" of **Figure 1**). Conversely, from the same two sets of data-samples, nationals of Taiwan accounted for 39% of immigrant investors issued, but only 2.5% of nonimmigrant arrivals. In the context of the aforementioned theory, **Table 2** and **Figure 1** above suggest that Japanese investors are seeking to capitalize on wage differentials, while Taiwanese, Chinese, and (to some extent) South Korean investors are pursuing professional and social mobility.

Although some considerations weigh more heavily on the decisions of immigrant and nonimmigrant investors, no single explanation accounts for the behavior of investor visa petitioners. Japan, for example, has some trade restrictions with the United States through voluntary export restraint agreements limiting auto and steel exports to the United States, suggesting from the theoretical standpoint that Japanese investors would choose to temporarily migrate.¹⁰⁹ The Japanese governments have also complained that the post-9/11 customs regulations and

¹⁰⁷ (...continued)

"comparative advantage." Theoretically, each country should be able to produce a good or service more efficiently than the world average, thereby making the good or service exportable. By attracting investments in these comparatively advantaged sectors, costs should decrease while production increases. Thus, consumers at both ends of a trading relationship are able to consume more goods.

¹⁰⁸ Xenogiani, Theodora. "Migration Policy and Its Interactions with Aid, Trade and Foreign Direct Investment Policies: A Background Paper." *OECD Development Centre*, Working Paper No. 249, June, 2006, p. 31-33.

¹⁰⁹ CRS Report RL32649, *U.S.-Japan Economic Relations: Significance, Prospects, and Policy Options*, by William H. Cooper.

practices of the United States inhibit U.S./Japanese trade.¹¹⁰ Despite the suggestion by these factors that Japanese investors are temporarily substituting trade with migration, it is also plausible that Japan's weak economic performance has reduced the professional mobility opportunities — a motivation associated with permanent migration. From 1991-2000, Japan's real (adjusted for inflation) average GDP growth rate was 1.4%, and it fell to 0.9% from 2001 to 2003.¹¹¹ Yet, regardless of motivation, Japanese investors are predominantly choosing to temporarily migrate to the United States.

The fact that China, Taiwan and South Korea have had strong economic performance in the last decade and relatively higher levels of immigrant investors to the United States, suggests that these investors are migrating for more than financial purposes. These investors may be more strongly motivated by the family and/or social network connections to previously migrated investors and other LPRs in the United States. These theoretically derived motives, however, must be further tested empirically before any conclusive behavioral statements can be made.

Multiplier Effects. Classical economic theory holds that investments provide for multiplier effects throughout the economy by increasing demand for other goods and services. For example, an increase in demand for corn may increase the demand for storage facilities, which results in an increase in construction contracts. The U.S. Department of Commerce has quantified these effects through the Regional Input-Output Modeling System (RIMS II).¹¹² The RIMS II multipliers have become a significant factor in assessing indirect economic activity and employment effects for Immigrant Investor Pilot Program petitions.¹¹³ Using the regional multipliers for various industries, foreign investment funds are frequently shown to yield increases in demand across an economy that are several times higher than the direct input by an investor. Thus, despite the relatively low number of investors entering the United States, the impact of each investment by a foreign investor is a multiplied factor greater than the direct investment, depending upon which industry and region is being invested in. Furthermore, studies showing the direct economic investments of foreign investors may not fully capture the economic impact of these investors upon a region.¹¹⁴

¹¹⁰ Ibid.

¹¹¹ Ibid.

¹¹² For an explanation of the RIMS II multiplier, see U.S. Department of Commerce, *Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II)*, Third Edition, March, 1997.

¹¹³ According to the USCIS Chief Adjudications Officer for EB-5 visas, well established input-output models such as RIMS II are useful in assessing investments for limited partnerships, where the direct effects of an investment are difficult to demonstrate (based on CRS discussions with Morrie Berez, Chief Adjudications Officer, USCIS Investor and Regional Center Program, November 20, 2006). Such established economic models are permitted under regulations (8 CFR 204.6(m)(3)).

¹¹⁴ A recent study commissioned by the National Venture Capital Association found that over the past 15 years, immigrants have started 15% of venture-backed U.S. public
(continued...)

Administrative Efforts

In recent years, significant efforts have been made by administrative agencies to both promote investment by foreigners in the United States economy, and to close perceived loopholes for visa exploitation. At the center of these efforts has been the USCIS' changes to the Immigrant Investor Pilot Program, which addressed fraud concerns and the development of a Regional Center unit for coordination and targeting of foreign investments.

Fraudulent Investments. During the late 1990's, the LPR investor visa was suffering from high levels of fraudulent applications.¹¹⁵ There has been concern that potential immigrants could use schemes of pooling their funds and transferring the money to demonstrate the existence of sufficient capital.¹¹⁶ Furthermore, applicants could potentially use promissory notes that would allow for their repayment after a six year time period. Since the LPR was only conditional for two years, some observers feared that these investors could pull out of their respective investments after being granted their LPR, have the promissory notes forgiven, and the enterprise would collapse. As a result, the USCIS has engaged in a policy of not accepting promissory notes, although the regulations state that petitions with promissory notes may be considered for approval.¹¹⁷ Additionally, the creation of the Investor and Regional Center Unit (IRCU) has allowed greater scrutiny of applications through

¹¹⁴ (...continued)

companies. The value of these companies currently exceeds \$500 billion, and most of the companies were in technology-related industries. The study found that these companies employ 220,000 people in the United States, and 400,000 globally. Some of the more prominent companies included by the study's criteria include Google, Yahoo!, eBay, and Intel (Stuart Anderson and Michael Platzer, *American Made: The Impact of Immigrant Entrepreneurs and Professionals on U.S. Competitiveness*, National Venture Capital Association, November 15, 2006, pp. 5-8).

Although the study shows the potential benefits of immigrant entrepreneurs, it does not directly reflect on the investor visa categories. Most of the immigrants that founded these enterprises came to the United States as children, teenagers, graduate students, or were hired on H-1B visas in their mid-twenties. Thus, it is unclear to what extent these individuals would have qualified as either immigrant or nonimmigrant investors under the current regulations. Furthermore, the study's findings includes numbers from both companies wholly founded by immigrants and companies founded through partnerships with United States citizens (Ibid).

¹¹⁵ Some have expressed concern regarding the investor visas being a means for some foreign nationals to channel illegal funds into the United States. Opponents of the LPR investor visa raised objections during congressional debates by asserting that the LPR investor category would allow individuals to become United States citizens who had profited from drug cartels. According to DHS, there does exist documented past abuses in the alien investor program (U.S. Government Accountability Office, *Immigrant Investors: Small Number of Participants Attributed to Pending Regulations and Other Factors*, GAO-05-256, April 2005, pp. 39.). However, since the implementation of the "no promissory notes" policy, the fraudulent cases have largely disappeared.

¹¹⁶ Based on CRS discussions with Morrie Berez, Chief Adjudications Officer, USCIS Investor and Regional Center Program, November 20, 2006.

¹¹⁷ Ibid.

increased resources and coordination of petitions processing. Petitioners now must provide extensive documentation that traces the source of their funds to show that the capital was legally obtained.¹¹⁸

IRCU Expansion. Prior to the creation of IRCU, the former-INS had been criticized for becoming more restrictive in application reviews for Regional Center designation, including allowing some applications to remain pending for more than three years.¹¹⁹ In 2005, concerns were raised by both Members and advocates that the IRCU still did not process applications quickly enough,¹²⁰ and that staff members had competing obligations within IRCU.¹²¹ Proponents of the Immigrant Investor Pilot Program believe it has attracted a significant amount of capital and that addressing these criticisms would further increase the levels of foreign investments through the LPR investor visa.¹²² USCIS has responded to these criticisms by expanding the number of Regional Centers available for LPR investor investments. Most recently, IRCU has been expanded into Western Pennsylvania.

Working with foreign financing from the immigrant investor program has become highly attractive for many domestic investors. A number of current investment projects are using LPR investor financing because it is less costly for the domestic investors. For domestic investors, employing LPR investor funds becomes a significantly cheaper option than a bank loan, since there is no requirement to pay interest on the financing. Additionally, because the enterprises are less saddled with financing debt they are more quickly able to turn a profit. The LPR investor visa

¹¹⁸ This practice has made it especially difficult for investors from countries with business practices based on convention (as opposed to legal documentation) to qualify for investor visas. Documentation requirements may force a potential investor to trace funds back several decades, effectively disqualifying investors from countries where credible historical records of income tax documents do not exist (Wolfsdorf, Bernard P., Naveen Rahman-Bhora, Tien-Li Loke Walsh, and Kim Tran. "A Review of the Immigrant Investor Program." *Immigration Law Today*, July/August, 2006, pp. 27-33).

¹¹⁹ Lincoln Stone, *INS Decisions Cloud Future of Investor Pilot Program*, 6 *Bender's Immigration Bulletin* 233 (March 1, 2001).

¹²⁰ Rep. Sensenbrenner wrote a letter to USCIS Director Eduardo Aguirre on April 6, 2005 asking the USCIS to institute premium processing and concurrent filing for immigrant investor petitions (Mailman, Stanley, and Stephen Yale-Loehr. "Immigrant Investor Green Cards: Rise of the Phoenix?" *New York Law Journal*, April 25, 2005. At [<http://www.millermayer.com/EB5NYLJ0405.html>], visited January 23, 2007.).

¹²¹ Letter from Lincoln Stone, Chair of the Investor Committee of the American Immigration Lawyers Association, to Michael Aytes, USCIS Acting Associate Director of Operations, November 16, 2005.

¹²² Lincoln Stone, the Chair of the Investor Committee of the American Immigration Lawyers Association, noted the generated level of capital in four targeted areas. According to an informal survey Stone had conducted of four targeted centers (California Consortium for Agricultural Export, Philadelphia Investment Development Corporation, Golden Rainbow Freedom Fund, and South Dakota International Business Institute), these centers had attracted \$121.3 million in capital in their two-year existence (Letter from Lincoln Stone, Chair of the Investor Committee of the American Immigration Lawyers Association, to Michael Aytes, USCIS Acting Associate Director of Operations, November 16, 2005.).

petitioners are still able to qualify for conditional LPR status under these investment structures through the multiplier rules for employment and capital that the USCIS employs. Thus, limited partnerships of domestic investors with LPR investor visas has become a popular option for financial stabilization and enterprise start-up in Regional Centers as diverse as Philadelphia and South Dakota.

New Orleans. In the efforts to rebuild the sections of New Orleans damaged by Hurricane Katrina, developers and officials alike have taken an interest in attracting foreign capital. USCIS officials are working closely with New Orleans officials to establish New Orleans as another Regional Center for LPR investor visa investments. Officials at USCIS are hopeful that the program success that the Philadelphia targeted center is experiencing can be replicated in New Orleans. Since being designated a Regional Center, Philadelphia has attracted over 100 LPR investors and most of their investments are being used to help finance the renovation and transformation of the 1100 acre shipyard (for further discussion, see **Appendix B**).

Potential Issues for Congress

Several issues related to investor visas may surface during the 110th Congress. For example, the immigrant investor pilot program is scheduled to sunset at the end of FY2008. The immigrant investor pilot program visa was last extended under the Basic Pilot Program Extension and Expansion Act of 2003.¹²³ There are currently no other programs for targeting investments by immigrant investors to the United States.

Additional investor visa issues that could surface may relate to temporary investors. In terms of nonimmigrant visas, the Danish government has been lobbying the United States to grant E-2 treaty investor visas to Danish nationals. Originally, this provision was granted to the Danes on May 2, 2001 as part of a protocol to the treaty granting nationals of Denmark E-1 nonimmigrant trader visa eligibility. The protocol was never ratified, however, due to congressional objections over the inclusion of immigration provisions in a trade agreement. Subsequently, Representative Sensenbrenner introduced H.R. 3647, which was passed in the House on November 16, 2005, and would have allowed nationals of Denmark to enter and operate in the United States as investors under E-2 treaty investor nonimmigrant visas. Currently, Danish nationals are only allowed E-1 treaty trader visas. Denmark is one of four countries whose nationals are eligible for E-1 treaty trader visas, but not E-2 treaty investor visas (see **Table 3** in **Appendix A**).

¹²³ P.L. 108-156.

Appendix A

Table 3. E-Class Visa Privileges by Year of Attainment

| Country | Classification | Year of Visa |
|----------------------------------|----------------|--------------|
| Albania ^a | E-2 | 1998 |
| Argentina | E-1 | 1854 |
| Argentina | E-2 | 1854 |
| Armenia | E-2 | 1996 |
| Australia | E-1 | 1991 |
| Australia | E-2 | 1991 |
| Australia | E-3 | 2005 |
| Austria | E-1 | 1931 |
| Austria | E-2 | 1931 |
| Azerbaijan ^a | E-2 | 1901 |
| Bahrain ^a | E-2 | 1901 |
| Bangladesh ^a | E-2 | 1989 |
| Belgium | E-1 | 1963 |
| Belgium | E-2 | 1963 |
| Bolivia | E-1 | 1862 |
| Bolivia | E-2 | 2001 |
| Bosnia & Herzegovina | E-1 | 1982 |
| Bosnia & Herzegovina | E-2 | 1982 |
| Brunei ^b | E-1 | 1853 |
| Bulgaria ^a | E-2 | 1954 |
| Cameroon ^a | E-2 | 1989 |
| Canada | E-1 | 1993 |
| Canada | E-2 | 1993 |
| Chile | E-1 | 2004 |
| Chile | E-2 | 2004 |
| Chile | H-1B-1 | 2004 |
| China (Taiwan) | E-1 | 1948 |
| China (Taiwan) | E-2 | 1948 |
| Colombia | E-1 | 1948 |
| Colombia | E-2 | 1948 |
| Congo (Kinshasa) ^a | E-2 | 1989 |
| Congo (Brazzaville) ^a | E-2 | 1994 |
| Costa Rica | E-1 | 1852 |
| Costa Rica | E-2 | 1852 |
| Croatia | E-1 | 1982 |
| Croatia | E-2 | 1982 |
| Czech Republic ^a | E-2 | 1993 |
| Denmark ^b | E-1 | 1961 |
| Ecuador ^a | E-2 | 1997 |
| Egypt ^a | E-2 | 1992 |

| Country | Classification | Year of Visa |
|-------------------------|----------------|--------------|
| Estonia | E-1 | 1926 |
| Estonia | E-2 | 1997 |
| Ethiopia | E-1 | 1953 |
| Ethiopia | E-2 | 1953 |
| Finland | E-1 | 1934 |
| Finland | E-2 | 1992 |
| France | E-1 | 1960 |
| France | E-2 | 1960 |
| Georgia | E-2 | 1997 |
| Germany | E-1 | 1956 |
| Germany | E-2 | 1956 |
| Greece ^b | E-1 | 1954 |
| Grenada ^a | E-2 | 1989 |
| Honduras | E-1 | 1928 |
| Honduras | E-2 | 1928 |
| Iran | E-1 | 1957 |
| Iran | E-2 | 1957 |
| Ireland | E-1 | 1950 |
| Ireland | E-2 | 1992 |
| Israel ^b | E-1 | 1954 |
| Italy | E-1 | 1949 |
| Italy | E-2 | 1949 |
| Jamaica ^a | E-2 | 1997 |
| Japan | E-1 | 1953 |
| Japan | E-2 | 1953 |
| Jordan | E-1 | 2001 |
| Jordan | E-2 | 2001 |
| Kazakhstan ^a | E-2 | 1994 |
| Korea (South) | E-1 | 1957 |
| Korea (South) | E-2 | 1957 |
| Kyrgyzstan ^a | E-2 | 1994 |
| Latvia | E-1 | 1928 |
| Latvia | E-2 | 1996 |
| Liberia | E-1 | 1939 |
| Liberia | E-2 | 1939 |
| Lithuania ^a | E-2 | 2001 |
| Luxembourg | E-1 | 1963 |
| Luxembourg | E-2 | 1963 |
| Macedonia | E-1 | 1982 |
| Macedonia | E-2 | 1982 |
| Mexico | E-1 | 1994 |
| Mexico | E-2 | 1994 |
| Moldova ^a | E-2 | 1994 |
| Mongolia ^a | E-2 | 1997 |
| Morocco ^a | E-2 | 1991 |
| Netherlands | E-1 | 1957 |

| Country | Classification | Year of Visa |
|--------------------------------|----------------|--------------|
| Netherlands | E-2 | 1957 |
| Norway | E-1 | 1928 |
| Norway | E-2 | 1928 |
| Oman | E-1 | 1960 |
| Oman | E-2 | 1960 |
| Pakistan | E-1 | 1961 |
| Pakistan | E-2 | 1961 |
| Panama ^a | E-2 | 1991 |
| Paraguay | E-1 | 1860 |
| Paraguay | E-2 | 1860 |
| Philippines | E-1 | 1955 |
| Philippines | E-2 | 1955 |
| Poland ^a | E-2 | 1994 |
| Romania ^a | E-2 | 1994 |
| Senegal ^a | E-2 | 1990 |
| Singapore | E-1 | 2004 |
| Singapore | E-2 | 2004 |
| Singapore | H-1B-1 | 2004 |
| Slovak Republic ^a | E-2 | 1993 |
| Slovenia | E-1 | 1982 |
| Slovenia | E-2 | 1982 |
| Spain | E-1 | 1903 |
| Spain | E-2 | 1903 |
| Sri Lanka ^a | E-2 | 1993 |
| Suriname | E-1 | 1963 |
| Suriname | E-2 | 1963 |
| Sweden | E-1 | 1992 |
| Sweden | E-2 | 1992 |
| Switzerland | E-1 | 1855 |
| Switzerland | E-2 | 1855 |
| Thailand | E-1 | 1968 |
| Thailand | E-2 | 1968 |
| Togo | E-1 | 1967 |
| Togo | E-2 | 1967 |
| Trinidad & Tobago ^a | E-2 | 1996 |
| Tunisia ^a | E-2 | 1993 |
| Turkey | E-1 | 1993 |
| Turkey | E-2 | 1990 |
| Ukraine ^a | E-2 | 1996 |
| United Kingdom | E-1 | 1815 |
| United Kingdom | E-2 | 1815 |

Source: CRS presentation of data from the U.S. Department of State Foreign Affairs Manual, 9 FAM §41.51.

- a. Countries with only E-2 visa privileges.
b. Countries with only E-1 visa privileges.

Appendix B

There are currently numerous targeted economic regions set up for the Immigrant Investor Pilot Program for the EB-5 visa category. These targeted areas have focused on different types of investments in order to achieve economic benefits for the given region. Below are descriptions of a couple of the projects that are currently in place under the Immigrant Investor Pilot Program and the results these projects are producing.

South Dakota International Business Institute

The South Dakota International Business Institute (SDIBI), Dairy Economic Development Region (DEDR) is the only regional targeting center currently run by a state government. Approved in June 2005, this Regional Center was the result of a state-wide effort to find an improved method of attracting foreign capital to South Dakota. From the state's perspective, the EB-5 pilot investor program offered a more promising solution than the E-2 nonimmigrant visa, since officials could offer investors the benefit of LPR status.¹²⁴ Additionally, the job-creation criterion of the EB-5 visa aligned well with the state's focus on job creation from foreign investments (as opposed to isolated capital injections). In its application for Regional Center designation, the state said it would focus its efforts on attracting dairy farm investors. USCIS agreed to the designation on the condition that South Dakota would allow for limited partnerships of foreign investors with domestic farmers.¹²⁵ As a result, South Dakota currently has enterprises fully owned and operated by foreign investors, as well as limited partnerships.

Since the regional designation took effect, South Dakota has attracted 60 foreign investors to its dairy industry (with an additional 10 applications still pending).¹²⁶ These foreign investors have injected approximately \$30 million into the South Dakota economy, with an additional \$6 million in matching funds coming from local farmers. Furthermore, this combined \$36 million in invested funds has resulted in almost \$90 million in bank financing for the various dairy investment projects. As a direct consequence of these foreign investments, 240 additional jobs have been created and 20,000 additional cows have been brought to South Dakota.¹²⁷ Using the RIMS II multipliers for investment and employment,¹²⁸ the foreign investments from EB-5 immigrants have resulted in a total of 638 additional jobs and over \$360 million in additional funds to the regionally targeted economy.

¹²⁴ Based on CRS discussion with Joop Bollen, Director of the South Dakota International Business Institute, November 28, 2006.

¹²⁵ Letter from William R. Yates, Associate Director of USCIS Office of Operations, to Joop Bollen, Director of the South Dakota International Business Institute, June 11, 2005.

¹²⁶ Based on CRS discussion with Joop Bollen, Director of the South Dakota International Business Institute, November 28, 2006.

¹²⁷ *Ibid.*

¹²⁸ For the South Dakota targeted region, the RIMS II multipliers are 2.9 for investment and 2.66 for employment.

According to SDIBI/DEDR Director Joop Bollen, the pilot program has afforded South Dakota “a tremendous opportunity,” not only because of the direct investments and multiplier effects, but because of the other investments made by the foreign investors.¹²⁹ According to Director Bollen, the attraction of foreign investors has had significant spillover effects into the restaurant and meat packing industries. As a result, SDIBI/DEDR hopes to focus on attracting additional investments for its meat packing plants. As such, Director Bollen stated that it was of paramount concern to the SDIBI/DEDR that USCIS have sufficient resources to quickly adjudicate EB-5 immigrant visa petitions. If the adjudication process is too long, Director Bollen stated, then the opportunity cost may make a South Dakota dairy investment unappealing to foreign investors.¹³⁰

CanAm Enterprises

CanAm Enterprises is a private financial advising group which serves to structure, promote and administer the Philadelphia Industrial Development Center (PIDC) Regional Center. The group works in conjunction with the City of Philadelphia through the PIDC to facilitate the city development (mainly in the city’s shipyard area) and provide investor credibility. This public/private partnership was developed to aid the transition of Philadelphia from a manufacture-based to a service based economy.¹³¹ The main strategy has been to use collateralized loans to attract investments in industries that provide long-term full time employment. By doing so the city hopes that investors will wish to invest in other projects and sectors of the city’s economy.¹³²

When the Philadelphia Naval Base was closed as part of the base closures of the 1970s, the base was handed over to the PIDC for transformation to civilian use. Despite the city’s efforts the shipyard was unable to remain competitive in the ship construction industry.¹³³ However, with the passage of requirements following the Exxon Valdez oil spill¹³⁴ (and the ongoing regulations from the Jones-Shafroth Act),¹³⁵ the civilian shipbuilding industry in the United States became economically

¹²⁹ Based on CRS discussion with Joop Bollen, Director of the South Dakota International Business Institute, November 28, 2006.

¹³⁰ Ibid.

¹³¹ Based on CRS discussions with Tom Rosenfeld, President & CEO, CanAm Enterprises, November 28, 2006.

¹³² Ibid.

¹³³ Based on CRS discussions with Tom Rosenfeld, President & CEO, CanAm Enterprises, November 28, 2006.

¹³⁴ P.L. 101-380.

¹³⁵ The Jones-Shafroth Act is a section of the Merchant Marine Act of 1920 (46 U.S.C. 883; 19 CFR 4.80 and 4.80b). Designed to protect the United States shipping fleet, the law requires that cargo moving between U.S. ports be carried by ships that are built in the United States and at least 75% owned by American citizens or corporations.

viable again.¹³⁶ The federal government and the city of Philadelphia combined to invest over \$400 million into the Philadelphia shipyard. Additionally Norwegian shipbuilding companies were brought in as investors in the shipyard and provided valuable training and human capital to the shipyard. Since production restarted, EB-5 investors have become increasingly important for providing funds to remove production bottlenecks. A recent example includes the use of EB-5 funds for the development of a more advanced painting technology for the ships.¹³⁷

Philadelphia is one of the Regional Centers that has been most successful in attracting foreign investors through the EB-5 visa. There are approximately 60 EB-5 visa investors in Philadelphia who have invested a total of \$75 million into the city.¹³⁸ Additionally, there are around 30 petitions that are under review for other investment projects. The lead official at CanAm Enterprises told CRS that while they believe the funds have been important to the city, the human capital the investors bring is equally important. This official stated that the investors being brought to the United States represented highly competent entrepreneurs, who not only made investments in the city beyond their initial investment, but also facilitated greater economic activity through exchanges with their existing foreign networks.¹³⁹

¹³⁶ Based on CRS discussions with Tom Rosenfeld, President & CEO, CanAm Enterprises, November 28, 2006.

¹³⁷ Ibid.

¹³⁸ Ibid.

¹³⁹ Ibid.



Chicagoland

Foreign Investment Group

Delivered in Person

February 17, 2009

USCIS
Office of Service Center Operations, EB-5 Investor Program
20 Massachusetts Avenue, NW (Room 2123)
Washington, DC 20529

Dear Barbara Q. Valarde,

Please accept the enclosed materials as Chicagoland Foreign Investment Group's response to the Request for Additional Evidence from USCIS dated December 5, 2008.

(b)(6)

In addition, I would like to bring your attention to false information written in the RFE from USCIS. The letter lists Henry Sharfaei and [REDACTED] as applicants for Designation as a Regional Center, when in fact Henry Sharfaei is the only applicant. [REDACTED] [REDACTED] has no ownership interest in the company or the proposed Regional Center. Please make the appropriate changes to any and all of your records to clarify that Dr. Henry Sharfaei is the sole applicant for designation as a regional center and owner of Chicagoland Foreign Investment Group.

Sincerely,

Henry Sharfaei



U.S. Citizenship
and Immigration
Services

HQSCOPS 70/6.1.2-C

Henry Sharfaei
Chicagoland Foreign Investment Group, LLC
111 E. Wacker Dr., Suite 555
Chicago, IL 60601

DEC 05 2008

Application: Proposal for Designation as a Regional Center
Applicants: Henry Sharfaei and Shahram Heshmet
Proposed Enterprise: Chicagoland Foreign Investment Goup (CFIG) Regional Center

RE: Proposal for Designation as a Regional Center under the Immigrant Investor Pilot Program.

REQUEST FOR ADDITIONAL EVIDENCE

This office is unable to complete processing of your request without further information. **Please read and comply with those items requested below, then resubmit the evidence requested to the address listed below, including this letter, within 87 days.**

If your submission is more than several pages, please use acco-fasteners to attach the documents at the top of each page.

USCIS
Office of Service Center Operations, EB-5 Investor Program
20 Massachusetts Avenue, NW (**Room 2123**)
Washington, DC 20529

What is the Immigrant Investor Pilot Program?

The Immigrant Investor Pilot Program ("Pilot Program") was created by Section 610 of Public Law 102-395 (October 6, 1992). This is different in certain ways from the basic EB-5 investor program.

The Pilot Program began in accordance with a Congressional mandate aimed at stimulating economic activity and creating jobs for U.S. workers, while simultaneously affording eligible aliens the opportunity to become lawful permanent residents. Through this innovative program, foreign investors are encouraged to invest funds in an economic unit known as a "Regional Center."

A Regional Center is defined as any economic unit, public or private, engaged in the promotion of economic growth, improved regional productivity, job creation and increased domestic capital investment.

Initial evidence requirements.

1. 8 CFR 204.6 (m) states in pertinent part:

(3) Requirements for regional centers. Each regional center wishing to participate in the Immigrant Investor Pilot Program shall submit a proposal to the...[Chief, Office of Service Center Operations]..., which:

(i) Clearly describes how the regional center focuses on a geographical region of the United States, and how it will promote economic growth through improved regional productivity, job creation, and increased domestic capital investment;

(ii) Provides in verifiable detail how jobs will be created indirectly;

(iii) Provides a detailed statement regarding the amount and source of capital which has been committed to the regional center, as well as a description of the promotional efforts taken and planned by the sponsors of the regional center;

(iv) Contains a detailed prediction regarding the manner in which the regional center will have a positive impact on the regional or national economy in general as reflected by such factors as increased household earnings, greater demand for business services, utilities, maintenance and repair, and construction both within and without the regional center; and

(v) Is supported by economically or statistically valid forecasting tools, including, but not limited to, feasibility studies, analyses of foreign and domestic markets for the goods or services to be exported [if any], and/or multiplier tables.

2. When relying on econometric **models for indirect job creation**¹ it is imperative that “direct jobs” will be real identifiable jobs supported by wage reports or I-9 forms otherwise they must be explicitly identified as hypothetical in nature. Another method would be to predict jobs based on

¹ USCIS does not accept or credit creation of direct temporary “construction jobs” within a business plan or economic job creation forecasts activities which involve a limited duration construction phase of less than 3 years unless the scope, complexity, and the ongoing construction phase must be fully sustained for all the construction phase jobs for 3 years or more with respect to the size, scope, nature, engineering/technology challenges and breadth of the project--for example a massive-scale nuclear power facility, or major Dam or a giant oil refinery, or similar type of massive and expansive and major engineering project. Shorter term construction jobs less than three years in duration have been determined to be of such a short term in nature as to not be sustained and to decrease and disappear as the initial construction activities wind down to completion. Such shorter term construction jobs in many locations are seasonal at best. Nevertheless, for all capital investment expenditures for the construction phase, all capital-induced “down-stream” support activities and “indirect” jobs impacted and associated with the construction activities such as suppliers, transportation, engineering and architectural services, maintenance and repair services, interior design services, manufacturing of components and materials, etc., may be factored into the calculations for creation of indirect jobs.

dollar amount invested in the overall project and this too must be made clear. This distinction will be critical at the I-829 removal of condition stage of the immigration process.

Please supplement the RIMS II analysis with a statement as to whether the predicted jobs are direct and indirect or all indirect. See footnote 1.

3. The business aspects of the Regional Center must be fully explained as to its structure. This aspect of a proposal includes, but is not limited to, the following basic elements or samples of them as applicable to the business approach and structure to be used by the Regional Center:

- An overall Business Plan - mandatory
- Draft Operating Agreement
- Draft Partnership Agreement
- Draft Subscription Agreement
- Draft Escrow Agreements and Instructions (one for capital and one for any service fees). Such agreements usually include an "out clause" in the event of an unsuccessful visa process as a marketing tool² but are not required.
- List of proposed reputable financial institutions to serve as the Escrow Agent(s).
- Draft of an Offering Letter, Memorandum, Confidential Private Placement Memorandum, or similar offering made in writing to an immigrant investor through the Regional Center.
- Draft Memorandum of Understanding, Interagency Agreement, Contract, Letter of Intent, Advisory Agreement, or similar agreement to be entered into with any other party, agency or organization to engage in activities on behalf of or in the name of the Regional Center.

(b)(4)

4. The law, as reflected in the regulations at 8 CFR 204.6(m)(6), requires that an approved Regional Center in order to maintain the validity of its approval and designation must continue to meet the statutory requirements of the Immigrant Investor Pilot Program by serving the purpose of promoting economic growth, including increased export sales (where applicable), improved regional productivity, job creation, and increased domestic capital investment. Therefore, in order for USCIS to determine whether an approved and designated Regional Center is in compliance with the above cited regulation, and in order to continue to operate as a USCIS approved and designated Regional Center, your administration, oversight, and management of your Regional Center shall be such as to monitor all investment activities under the sponsorship of your Regional Center and to maintain records, data and information on a quarterly basis in order to report to USCIS upon request

² **NOTE: Under NO circumstances** may any agreement or document in support of an investor's I-526 petition offer or imply return or reimbursement of his/her capital investment should the subsequent I-829 Petition to Remove Conditions be denied by USCIS. The USCIS considers any such reimbursement provision within the period of an alien investor's conditional residence prohibited by precedent decision in Matter of Izumii.

the following year to date information for each Federal Fiscal Year³, commencing with the initial year as follows:

Submit a description of your plans to administer, oversee, and manage the proposed Regional Center, including but not limited to such things as to identify, assess and evaluate proposed immigrant investor projects and enterprises; how the proposed Regional Center would perform “due diligence” as to whether investment capital to be sought will consist solely of alien investor capital or a combination of alien investor capital and domestic capital; how to monitor all investment activities affiliated, through or under the sponsorship of the proposed Regional Center, and to maintain records, data and information on projects, investors, business activities, etc., in order to report to USCIS for each Federal Fiscal Year. This is known as “due diligence” and is coupled with “oversight reporting responsibilities” to be fully explained if approved and designated.

5. With respect to the process by which a High Unemployment Area (USCIS TEA) is designated by the State, the exact and complete relevant language of the regulation that covers this may be found at 8 CFR 204.6(i), where it reads as follows:

State designation of a high unemployment area. The state government of any state of the United States may designate a particular geographic or political subdivision located within a metropolitan statistical area or within a city or town having a population of 20,000 or more within such state as an area of high unemployment (at least 150 percent of the national average rate). Evidence of such designation, including a description of the boundaries of the geographic or political subdivision and the method or methods by which the unemployment statistics were obtained, may be provided to a prospective alien entrepreneur for submission with Form I-526. Before any such designation is made, an official of the state must notify the... [Chief, Office of Service Center Operations]... of the agency, board, or other appropriate governmental body of the state which shall be delegated the authority to certify that the geographic or political subdivision is a high unemployment area.

Therefore it is incumbent upon the state to notify USCIS which “governmental body of the state” has been delegated the authority by the Governor to certify that a geographic or political subdivision is a high unemployment area for purposes of being designated as a Targeted Employment Area (TEA) under USCIS regulations. [**Applicable sentence in bold above.**] It is left to the appropriate designee within the state to exercise its authority and utilize what method or methods of its choosing in obtaining the unemployment statistics.

A letter from the Governor of the state identifying the designated authority within the state to certify the geographic area(s) or political subdivision(s) within applicable metropolitan statistical areas as having high unemployment equal to 150% or more of the national unemployment rate would need to be addressed as follows and sent via Express Mail or courier service to:

³ A Federal Fiscal Year runs for twelve consecutive months from October 1st to September 30th.

**Chief, Office of Service Center Operations
U.S. Citizenship and Immigration Services
20 Massachusetts Avenue, NW (Room 2123)
Washington, DC 20529**

Further clarification of the role of the state designated authority in the I-526 process is found at 8 CFR 204.6 (j) (6) (ii) (B) as follows:

(6) If applicable, to show that the new commercial enterprise has created or will create employment in a targeted employment area, the petition must be accompanied by:

.....
(ii) In the case of a high unemployment area:

.....
(B) A letter from an authorized body of the government of the state in which the new commercial enterprise is located which certifies that the geographic or political subdivision of the metropolitan statistical area or of the city or town with a population of 20,000 or more in which the enterprise is principally doing business has been designated a high unemployment area. The letter must meet the requirements of 8 CFR 204.6(i). [Applicable sentence underlined above.]

It is hoped that the above references and information will be of help to you and the appropriate officials of the state with respect to your interest in seeking to establish a Regional Center through the Immigrant Investor Pilot Program that would focus within the state.

PLEASE NOTE: For your proposal submission and supporting evidence for items 1 through 11, above, as applicable, please use acco-fasteners to attach the documents at the top of each page or place in a three ring binder, and individually tab the written materials/responses which you submit for each of the applicable items listed above in items 1 through 5. Also, submit the information in duplicate.

Translations Any document containing a foreign language submitted to USCIS shall be accompanied by a full English translation that the translator has certified as complete and accurate, and by the translator's certification that he or she is competent to translate from the foreign language into English.

Copies Unless specifically required that an original document be filed with an application or petition, an ordinary legible photocopy may be submitted. Original documents submitted when not required will remain part of the record, even if the submission was not required.

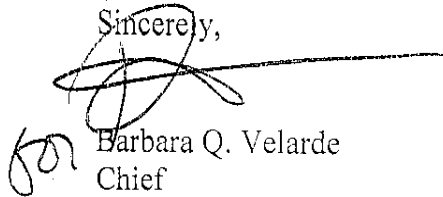
Address Changes.

If you change your address and you have a Regional Center proposal pending with USCIS, you may change your address by sending notification to:

**USCIS Chief of Service Center Operations
Attn: EB-5 Investor Program
20 Massachusetts Avenue, NW (RM. 2123)
Washington, DC 20529**

To make an inquiry or ask a question about the Regional Center Program you may send an e-mail to:
USCIS.ImmigrantInvestorProgram@dhs.gov

Sincerely,

A handwritten signature in black ink, appearing to read 'BQV', is written over the word 'Sincerely,'. The signature is stylized and somewhat illegible.

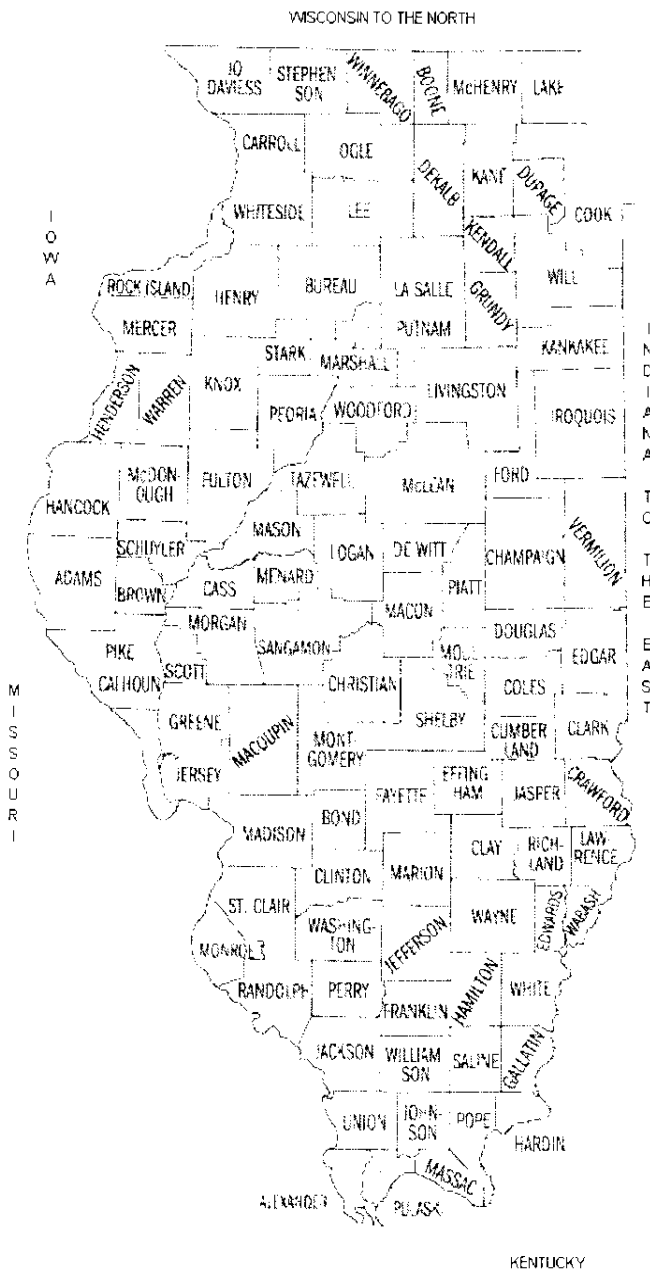
Barbara Q. Velarde
Chief

Office of Service Center Operations

1. Response to Requirements of Regional Center Proposals in 8 CFR 204.6

- (i) Clearly describes how the regional center focuses on a geographical region of the United States, and how it will promote economic growth through improved regional productivity, job creation, and increased domestic capital investment

The Chicagoland Foreign Investment Group regional center will focus on the geographic area of the city of Chicago and surrounding counties which extend west, north, and south. This basically covers the north-eastern corner of Illinois. The specific counties included are as follows: Boone, Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, Ogle, Stephenson, Will, and Winnebago. Below please find a map of Illinois with each county in the state labeled.



The proposed Regional Center will promote economic growth within this geographical region through investment in the industries which have been targeted (Accommodations, Agriculture, Education, Entertainment, Health Care, and Manufacturing). With the addition of regional center projects (i.e. new businesses into these industries), regional productivity, job creation, and domestic capital investments will no doubt increase. Job creation is a requirement of the EB5 Program, and with new businesses being created, new employees will have to be hired. Since these jobs will be added to industries which are already strong, with a skilled labor force, these new businesses will not have to spend money retraining employees, thus increasing productivity within these companies and within the region as a whole. Also, not all of the projects will receive 100% funding from foreign investors, therefore certain projects will need to have domestic capital investment as well, provided by either financial institutions or the business principals themselves. Furthermore, with new businesses opening in Targeted Employment Areas and Rural Areas, the Regional Center expects the overall business climate to improve, thus attracting other new businesses to enter the region and increase domestic capital.

The example of South Dakota Regional Center shows similar results as Chicagoland Foreign Investment Group expects from its own regional center.

“Since the regional designation took effect, South Dakota has attracted 60 foreign investors to its dairy industry (with an additional 10 applications still pending). These foreign investors have injected approximately \$30 million into the South Dakota economy, with an additional \$6 million in matching funds coming from local farmers. Furthermore, this combined \$36 million in invested funds has resulted in almost \$90 million in bank financing for the various dairy investment projects. As a direct consequence of these foreign investments, 240 additional jobs have been created and 20,000 additional cows have been brought to South Dakota. Using the RIMS II multipliers for investment and employment, the foreign investments from EB-5 immigrants have resulted in a total of 638 additional jobs and over \$360 million in additional funds to the regionally targeted economy.”¹

Chicagoland Foreign Investment Group expects the foreign investment to create jobs as well as increase domestic capital investment. For further details on the geographic region, target industries and the potential to create jobs and improve regional productivity, please see the Geographic Area section on pages 7-24, and the Target Industries section of the original proposal² on pages 25-39. Furthermore, a portion of the Statistical Data and RIMS II section which discusses regional growth and agglomeration economics can be found on pages 40-46 of the original proposal.

¹Haddal, Chad. “Foreign Investor Visas: Policies and Issues” Congressional Research Service Report RL 33844, page 32.

² Chicagoland Foreign Investment Group application for Regional Center designation submitted to USCIS on August 28, 2008.

(ii) Provides in verifiable detail how jobs will be created indirectly

The RIMS II program measures the economic impact of a specific economic event. When there is an investment, or a new business opens in a specific region, related and unrelated businesses are affected due to increased spending, consumption, jobs, etc. RIMS II calculates these economic multiplier effects. Please see pages 55-58 of the original proposal² which discusses these affects and gives examples of where indirect jobs may appear. In addition, please find economic multipliers in Exhibit 83 which show RIMS II data.

Because Chicagoland Foreign Investment Group does not have any specific projects already in place, there is no way to determine where these indirect jobs will appear in the future. An example would be the creation of a school, since we have included the education industry in the regional center. If a school were to open in a specific area, indirect jobs could be created at nearby food service businesses due to increase in demand from students and/or faculty and staff after adjournment. The regional center has explicitly stated it will only accept projects which can be proven to predict an adequate amount of job creation based on direct jobs and indirect jobs. Thus, indirect job creation will play a pivotal role in the regional center's activities and successes.

Indirect job creation has also been addressed in response to question 2 of the RFE.

(iii) Provides a detailed statement regarding the amount and source of capital which has been committed to the regional center, as well as a description of the promotional efforts taken and planned by the sponsors of the regional center

(b)(6) [REDACTED] has committed [REDACTED] to the regional center (As USCIS is already aware, he has applied for two regional centers in Illinois, one for Chicagoland and one for LaSalle County. Should both regional centers be approved this amount is raised to [REDACTED] These funds come from his [REDACTED] [REDACTED] Please find further details in the original proposal submitted to USCIS , found on pages 3-4.

A description of the promotional efforts to be taken by the regional center can be found on pages 79-90 of the original proposal², the “Promotional Efforts” section. This section describes plans to market to foreign investors as well as businesses interested in participating in the regional center program, emphasizing the importance of appealing to foreign investors.

On the following pages please find:

- The Start-Up Costs (Exhibit A of the original proposal²) has been included on pages 5-6 to show the use of the funds.
- A copy of Income Tax Returns for [REDACTED] (Exhibit C of the original proposal²) has been included on pages 7-9 to show the source of the capital that has been committed.
- An outline of the marketing campaign and costs (Exhibit B of the original proposal²) has been included on page 10 to show the promotional efforts and costs planned by the regional center.

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- (iv) **Contains a detailed prediction regarding the manner in which the regional center will have a positive impact on the regional or national economy in general as reflected by such factors as increased household earnings, greater demand for business services, utilities, maintenance and repair, and construction both within and without the regional center**

Positive regional and economic impacts are discussed throughout the original proposal², and especially in the Target Industries (pages 25-39) and Statistical Data and RIMS II (pages 40-63) sections. As mentioned before, the industries included in the Center have been chosen for their potential to positively affect the regional and national economy in respect to the above-mentioned factors.

According to classical economic theory, investment provides multiplier effects through the economy by increasing demand for other goods and services. RIMS II has been approved by USCIS to quantify these effects, and has been discussed in the original proposal as well as in response to question 1(ii). RIMS II multipliers are able to show how an investment can yield increases in demand across an economy, often several times higher than the direct input by the investor. For example, investment in the accommodations could increase demand in construction, investment in agriculture increases national exports, and investment in education increases personal income. For more detailed information please see the original proposal².

- (v) **Is supported by economically or statistically valid forecasting tools, including but not limited to, feasibility studies, analyses of foreign and domestic markets for the goods or services to be exported, and/or multiplier tables**

Chicagoland Foreign Investment Group has analyzed market information and RIMS II Data to choose the industries and overall strategy of the regional center. The industries of Accommodations, Agriculture, Education, Entertainment, Health Care, and Manufacturing have been chosen for their ability to positively affect the regional economy, with regards to the unique business environment of Chicagoland and surrounding areas. Each industry has been discussed in detail on pages 25-39 of the original proposal², in the "Target Industries" section. The below listed exhibits from the original proposal² contain these supporting documents, analyses of markets, multiplier tables, etc. Please refer to the original proposal already on file for these exhibits:

- Exhibit 27 "State of Working Illinois"
- Exhibit 29 "Chicago Office of Tourism 2006 Statistical Information"
- Exhibit 30 "Hotels a bright spot in Chicago-area construction"
- Exhibit 31 "Who Will Buy the Condos?"
- Exhibit 32 "Benefits of Olympics to Chicago"
- Exhibit 33 "Congress close to raising fuel economy standards"
- Exhibit 34 "Biofuels and Agriculture"
- Exhibit 35 "It's not a choice between food and fuels -- we'll need more of both"
- Exhibit 36 "Tomatoes, salmonella, and the 21st-century food chain"
- Exhibit 37 "Occupational Outlook Handbook, 2008-9 Edition"
- Exhibit 38 "Facts About Illinois Agriculture"
- Exhibit 39 "Illinois Agricultural Exports for Fiscal Year 2007"
- Exhibit 40 "Illinois Leading Counties in Crop Production"
- Exhibit 41 "Illinois Department of Agriculture 2007 Annual Report"
- Exhibit 42 "Education Investment in Illinois"
- Exhibit 43 "2007 Market Facts Article: Education"
- Exhibit 44 "2006 Market Facts Article: Education"
- Exhibit 45 "The Economic Impact of the Early Care and Education Industry in Illinois"
- Exhibit 46 "What is Autism?: An Overview"
- Exhibit 47 "New plan may help expand coverage for autism"
- Exhibit 48 "Autism Insurance Bill introduced in Illinois State Legislature"
- Exhibit 49 "Places to Go In the City"
- Exhibit 50 "Illinois Tourism News"
- Exhibit 51 "Chicago City 2000 Demographic Profile"
- Exhibit 52 "Chicago City 2006 Demographic Profile"
- Exhibit 53 "Gas Prices Not Likely To Affect Travel Plans of Most American Travelers"
- Exhibit 54 "What is Telemedicine"
- Exhibit 55 "Telemedicine 101: Telemedicine Coming of Age"
- Exhibit 56 "National Legislative Activities – Medicare"

- Exhibit 57 “Chicago Market Facts 2008 Article, Jobs”
- Exhibit 58 “Opportunity Returns: Northern Stateline Region”
- Exhibit 59 “A Look at Illinois’ Northeast Region”
- Exhibit 60 “Bearing the Brunt: Manufacturing Job Loss in the Great Lakes Region, 1995-2005”
- Exhibit 61 “Eye on Innovation”
- Exhibit 62 “Manufacturing in Illinois”
- Exhibit 63 “Global Access from Illinois”
- Exhibit 64 “Chicago Manufacturing Campus Opens with Suppliers Manufacturing Just-In-Time Inventory”
- Exhibit 65 “Building Freight’s Future”
- Exhibit 66 “Can the U.S. Bring Jobs Back From China?”
- Exhibit 67 “IBIS World Prescription Drug Wholesaling”
- Exhibit 68 “Chicago Metropolitan Statistical Division Shift Share Analysis 2001-2006”
- Exhibit 69 “Emerging Neutraceutical Markets”
- Exhibit 83 “RIMS II Results”

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Please find attached the following documents:

- Draft Operating Agreement (page 18)
- Draft Subscription Agreement (page 46)
- Draft Escrow Agreement (**updated with required changes**, page 53)
- Draft Consulting Services Escrow Agreement (page 63)
- List of proposed reputable financial institutions to serve as the Escrow Agent (page 72)
- Consulting Agreement (for Draft of an Offering Letter, Memorandum, Confidential Private Placement Memorandum, page 73)
- Advisory Agreement (page 78)
- Marketing Agreement (page 85)

The original proposal² in its entirety functions as a business plan, thus we have not included a separate version. All of the elements of a business plan have been included in the original proposal², including but not limited to, business description, marketing strategies, competition, financials, personnel, and operations. Also, a Partnership Agreement has not been included because the operating agreement would function similarly. Furthermore, these agreements are all drafts and subject to change. The final versions will be completely dependent on the specific investment project and its industry.

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PROPOSED FINANCIAL INSTITUTIONS TO SERVE AS ESCROW AGENT

Please note, whenever possible the regional center will prefer to work with local, Chicagoland-area banks.

Midwest Bank and Trust
300 South Michigan Avenue
Chicago, Illinois
60604

First American Bank
33 W. Monroe Street
Chicago, Illinois
60603

National City (recently purchased by PNC)
401 North LaSalle Street
Chicago, Illinois
60654

Bank of America
500 North Michigan Avenue
Chicago, Illinois
60611

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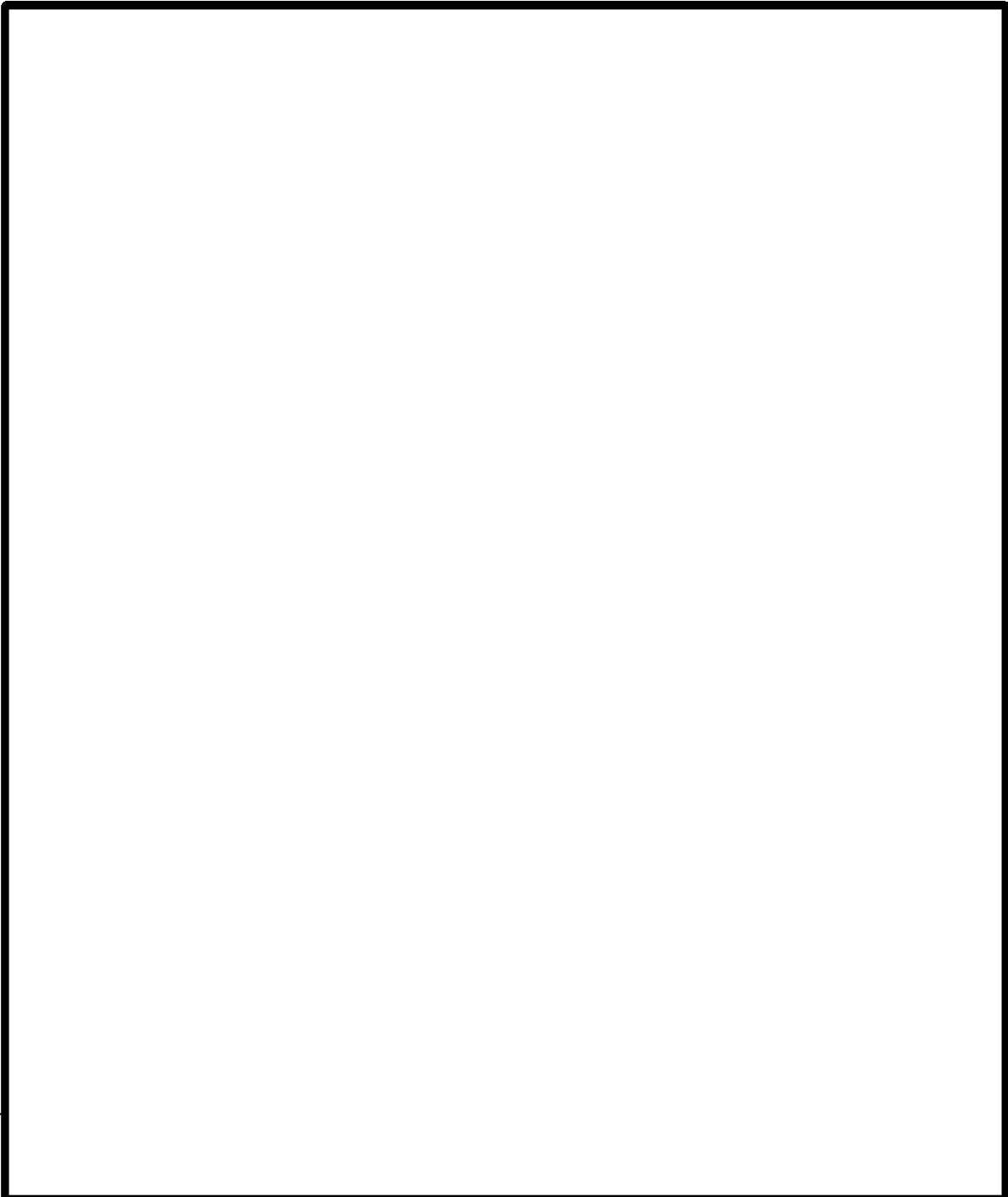
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4. Submit a description of your plan to administer, oversee, and manage the proposed Regional Center, including but not limited to such things as to identify, assess and evaluate proposed immigrant investor projects and enterprises; how the proposed Regional Center would perform “due diligence” as to whether investment capital to be sought will consist solely of alien investor capital or a combination of alien investor capital and domestic capital; how to monitor all investment activities affiliated, through, or under the sponsorship of the proposed Regional Center, and to maintain records, data and information on projects, investors, business activities, etc., in order to report to USCIS for each Federal Fiscal Year. This is known as “due diligence” and is coupled with “oversight reporting responsibilities” to be fully explained if approved and designated.

(b)(4)



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5. A letter from the Governor of the state identifying the designated authority within the state to certify the geographic area(s) or political subdivision(s) within applicable metropolitan statistical areas as having high unemployment equal to 150% or more of the national unemployment rate would need to be addressed as follows and sent to:

**Chief, Office of Service Center Operations
U.S. Citizenship and Immigration Services
20 Massachusetts Avenue, NW (Room 2123)
Washington, D.C. 20529**

(b)(6) Due to the recent impeachment and removal from office of Illinois Governor Rod Blagojevich, the delivery of this letter has been delayed. We expect the letter to be mailed approximately by February 13, 2009. Chicagoland Foreign Investment Group has been in contact with Mr. [REDACTED] Director of Correspondence for the Governor's Office, to answer this request. He may be reached by telephone at [REDACTED].

Based on its own research, Chicagoland Foreign Investment Group believes the designated authority in Illinois will be the Department of Commerce and Economic Opportunity. Our contact at this office is Edwin Taft. He may be reached by telephone at (217) 785-6117 or by email at Ed.Taft@illinois.gov.

(b)(6) In addition, we have included an email correspondence between [REDACTED] at the Governor's office in Springfield, which shows the email request for the letter from the Governor, found on the following page (page 94).

Date: Fri, 19 Dec 2008 14:56:03 -0800

From: [REDACTED]

To: [REDACTED]

Subject: Letter Request

Dear Megan,

I spoke with you on the phone yesterday about getting a letter from the governor's office as further evidence for an application for regional center designation under the EB5 Pilot Program.

A "regional center" seeks foreign investment for local businesses, especially areas considered Targeted Employment Areas (TEAs). These are defined as an area of high unemployment, at least 150 percent of the national average rate. If you need more information on the program or the application, I can provide this to you.

I am requesting "A letter from the Governor of the state identifying the designated authority within the state to certify the geographic area(s) or political subdivision(s) within applicable metropolitan statistical areas as having high unemployment equal to 150% or more of the national unemployment rate would need to be addressed as follows and sent via Express Mail or courier service to:

Chief Office of Service Center Operations
U.S. Citizenship and Immigration Services
20 Massachusetts Avenue, NW (Room 2123)
Washington, DC 20529"

Please let me know what information you need from me, and what you think the Governor's office will be able to do to fulfill this request.

(b)(6) Thank you and have a good weekend.

Best Regards,

[REDACTED]

Exhibit Volume 3 of 3

Chicagoland Foreign Investment Group

**ANALYZING THE ECONOMIC IMPACT
OF TRANSPORTATION PROJECTS
USING RIMS II, IMPLAN AND REMI**

Prepared for:
Office of Research and Special Programs
U. S. Department of Transportation, Washington D. C. 20690

Supported by a grant from
the U. S. Department of Transportation,
University Research Institute Program

Principal Investigator:

Dr. Tim Lynch, Director
Center for Economic Forecasting
and Analysis

October, 2000

Florida State University
Institute for Science and Public Affairs
2034 East Paul Dirac Drive
Suite 137, Morgan Building
Innovation Park
Tallahassee, Florida
850-644-7357

Available to the public through the National Technical Information Service (NTIS)
5285 Port Royal Road, Springfield, VA 22181 (703) 487-4650

INTRODUCTION

The early parts of this new century confront public transit managers and planners with unparalleled demands. There are more competing interests for the finite transit dollar, and an increasing need to complete comprehensive transit project economic impact analysis, project accountability studies and alternatives assessments. Elected local, state and federal representative and executive branch policy makers as well as average citizens are increasingly asking, "What is the economic importance of this project? Or "How does this project (or alignment) compare with another competing transportation investment for the limited public transportation dollar?" Ultimately the question is "What 'bang' do I get for investment of this buck?"

In order to answer this question, one requires a systematic analysis of the economic impacts of these projects and programs on the affected regions. The most commonly used tool for studying the impact of these projects is the input-output model. These models not only capture the direct effects of the project, but they also capture secondary indirect and induced effects.

There are a wide range of commercially available input-output models that can be used to evaluate differing transit projects. They range from the relatively inexpensive and fairly simple U.S. Department of Commerce, Regional Input-Output Modeling System (RIMS II)¹ to the moderately priced and more complex Minnesota IMPLAN² input-output model. One may also opt for the most sophisticated and expensive integrated input-output-econometric model currently available for analysis of this type developed by Regional Economic Modeling, Inc. know as REMI³. While the choice of models is complex, other use issues are also important to consider.

In addition to selecting the appropriate input-output software, there are a number of technical issues to resolve. Among these are questions of:

- What are the mechanics of applying RIMS, IMPLAN or REMI models?
- What is a proper interpretation of the results of the model?
- What is the difference between direct and indirect economic impact?
- What are final demand multipliers and how do we evaluate and use them and how do they work in estimating economic impacts?
- What do the final demand multipliers for output and earnings mean and how do we evaluate and use them and how do they work in estimating economic impacts?
- How do we compare the outcome of each proposed project with every other competing project?

1 See for example "Regional Multipliers: A user Handbook for the Regional Input-Output Modeling System (RIMSII)", U.S. Department of Commerce, Economics and Statistics Administration, Bureau of Economic Analysis, Second Edition, May, 1992, ISBN 0-16-037944-X

2 "IMPLAN Professional Social Accounting & Impact Analysis Software", Minnesota IMPLAN Group, Inc., Second Printing, February 1997.

3 "Regional Economic Modeling A Systematic Approach to Economic Forecasting and Policy Analysis", Treyz, I., George, University of Massachusetts at Amherst, 1993, Kluwer Academic Publishers, Third Printing 1994

- How do we best display and interpret the results for policy makers and what are the most important things for them to understand to evaluate the analysis results?

A number of these questions deal with complex (and often important) technical policy issues that even trained transportation economists grapple each time they undertake a public transit analysis anywhere in the country. Yet many of these key issues such as appropriate discount rate, project length, management of streams of earnings and expenditures render themselves to fairly well accepted standard responses in most applications. These methods are often taught as a standard parts of our graduate level quantitative training in transportation economics, engineering and planning programs across the country.

Yet for others, while an answer is neither particularly simple nor standardized, the approach to securing the answer is formalized into very clear and unambiguous steps. For example gathering the data, and performing the analysis and presenting the conclusions in a lucid fashion involves a well-developed series of steps (even if not always practiced) within the transportation economics discipline.

Unfortunately neither the standardized responses to key issues nor the formalized steps needed to complete a complex analysis are provided in a standard text book in a straightforward manner for transit managers, planners and operators. Each time the public transit system requires an "economic impact" analysis the process begins again as if it were the first time (each time). Even if the managers of the transit properties are contracting the work out to consultants (who will perform the impact analysis) they often do not have a clear idea of answers to the following questions:

1. What models or options exist to perform an economic impact analysis?
2. Which models or options are best suited to differing transit analysis needs and budgets (i.e. "Should we perform city specific or urban-wide regional analysis?" How quickly are the models available and what are their respective costs? .
3. What staffing and data needs and analysis limitations are associated with each method; and
4. How do you best manage and critique the final work product provided by consultants when performing this analysis?

While no document can address each of these issues, the following sections of this report will address a number of them. Specifically, this report will briefly describing each model, explain the theoretical and technical similarities and differences between the models, and provide a general guide for when it is appropriate to use each of the three models identified above. The final sections of this report will compare the results from these models for two hypothetical transit projects: the purchase and operation of a bus fleet and the construction and operation of a light rail transit. This examination of models, and standard analysis and display and discussion of findings and comparison and contrasts of results will provide a single reference to guide transit planners and analysts in future applications.

INTRODUCTION TO THE MODELS

RIMS II⁴

Effective planning for public- and private-sector projects and programs at the national, state, and local levels requires a systematic analysis of the economic impacts of these projects and programs on the affected regions. In turn, systematic analysis of economic impacts must account for the inter-industry relationships within regions because these relationships largely determine how regional economies are likely to respond to project and program changes. Thus, regional input-output (I-O) multipliers, which account for inter-industry relationships within regions, are useful tools for conducting economic impact analysis.

RIMS II is based on an accounting framework called an I-O table. For each industry, an I-O table shows the industrial distribution of inputs purchased and outputs sold. A typical I-O table in RIMS II is derived mainly from two data sources: BEA's national I-O table, which shows the input and output structure of nearly 500 U.S. industries, and the BEA's regional economic accounts, which are used to adjust the national I-O table to show a region's industrial structure and trading patterns.

Using RIMS II for impact analysis has several advantages. RIMS II multipliers can be estimated for any region composed of one or more counties and for any industry, or group of industries, in the national I-O table. The accessibility of the main data sources for RIMS II keeps the cost of estimating regional multipliers relatively low. Empirical tests show that estimates based on relatively expensive surveys and RIMS II-based estimates are similar in magnitude.

RIMS II is widely used in both the public and private sector. In the public sector, for example, the Department of Defense uses RIMS II to estimate the regional impacts of military base closings. State transportation departments use RIMS II to estimate the regional impacts of airport construction and expansion. In the private sector, analysts and consultants use RIMS II to estimate the regional impacts of a variety of projects, such as the development of shopping malls and sports stadiums.

Availability of Multipliers

For any region composed of one or more counties, RIMS II can provide two series of tables of I-O multipliers: Series 1 is for 490 detailed industries, and series 2 is for 38 industry aggregations. Each series consists of four tables: (1) final-demand output multipliers, (2) final-demand earnings multipliers, (3) final-demand employment multipliers, and (4) summary final-demand multipliers for output, earnings, and employment and direct-effect multipliers for earnings and employment.

⁴ This section is taken from "Measuring Gross Economic Impacts Associated with the Amtrak High Speed Rail Corridor Program," prepared by the Center for Urban Transportation Research University of South Florida, March 2000, pp. 4-7.

RIMS II Methodology

RIMS II uses BEA's 1992 national I-O table, which shows the input and output structure for approximately 500 industries. Since a particular region may not contain all the industries found at the national level, some direct input requirements cannot be supplied by that region's industries. Input requirements that are not produced in a study region are identified using BEA's regional economic accounts. Currently, data for 1997 are used.

The RIMS II method for estimating regional I-O multipliers can be viewed as a three-step process. In the first step, the producer portion of the national I-O table is made region-specific by using four-digit SIC location quotients. In the second-step, the household column from the national I-O table is made region-specific. In the last step, the Leontief inversion approach is used to estimate multipliers. This inversion approach produces output, earnings, and employment multipliers, which can be used to trace the impacts of changes in final demand on the directly and indirectly affected industries.

Accuracy of RIMS II

Empirical tests indicate that RIMS II yields multipliers that are not substantially different in magnitude from those generated by regional I-O models based on relatively expensive surveys. For example, a comparison of 224 industry-specific multipliers from survey-based tables for Texas, Washington, and West Virginia indicates that RIMS II average multipliers overstate the average multipliers from the survey-based tables by approximately 5 percent. For the majority of individual industry-specific multipliers, the difference between RIMS II and survey-based multipliers is less than 10 percent. In addition, RIMS II and survey multipliers show statistically similar distributions of affected industries.

Advantages of RIMS II

There are numerous advantages to using RIMS II. First, the accessibility of the main data sources makes it possible to estimate regional multipliers without conducting relatively expensive surveys. Second, the level of industrial detail in RIMS II helps avoid aggregation errors, which often occur when industries are combined. Third, RIMS II multipliers can be compared across areas because they are based on a consistent set of estimating procedures nationwide. Fourth, RIMS II multipliers are updated to reflect the most recent local-area wage-and-salary and personal income data.

Applications of RIMS II

RIMS II multipliers are used in a wide variety of impact studies. For example, the U.S. Nuclear Regulatory Commission has used RIMS II multipliers in environmental impact statements required for licensing electrical-generating facilities. The U.S. Department of Housing and Urban Development has used RIMS II multipliers to estimate the impacts of various types of urban redevelopment expenditures. In addition, BEA has provided

RIMS II multipliers to numerous individuals and groups outside the Federal Government. Among other applications, RIMS II multipliers have been used to estimate the regional impacts of the following: opening or closing military bases, energy conservation, offshore drilling, opening or closing manufacturing plants, shopping malls, new sports stadiums, and new airport facilities.

Data Requirements and Outputs

In order to apply the RIMS II multipliers the spending data for the project or program(s) in question are required. The data have to be classified with respect to each of the following traits:

| | |
|---------------------|---|
| Industry Category | Spending has to be classified by spending category consistent with the industry classification used by RIMS (see section below on spending categories). |
| Year of Expenditure | The time of expenditure needs to be specified in order to determine the time period of the economic consequences and in order to adjust the spending to 1997 dollars for use in the estimation of jobs. The RIMS models were calibrated on 1997 dollars and the estimate of jobs requires spending inputs in terms of 1997 dollars. |
| Location | The spending location also needs to be specified so that the multipliers for the appropriate region can be applied. |

The results of the analysis are expressed in terms of three measures of economic activity: Earnings (sometimes expressed as wages and salaries), Output (sometimes referred to as economic activity), and Jobs.

| | |
|----------|---|
| Earnings | Earnings refers to a measure, expressed in millions of dollars, of the change in the value earnings that are received by households from the production of regional goods and services for the time period covered by the cost estimate. |
| Output | This is a measure of the economic activity created by the spending. It refers to the change in the dollar value of production in all sectors of the economy to satisfy the new demands resulting from spending. Each time a dollar changes hands for products or services it increases the measure of output. By including products as well as labor, the output measure is inclusive of and typically significantly larger than the measure of earnings. Economic output is typically referred to as the Gross National Product (GNP) at the national level. The measure of output is in the same year dollars as the measure of spending used in the calculation. |

| | |
|------|--|
| Jobs | This measure refers to the employment or jobs expressed as full time person years of employment. The measure refers to person years of employment regardless of the term over which spending is aggregated in the input. Jobs are estimated by adjusting the year of spending to 1997 dollars as that is the calibration year for the multiplier used for jobs estimation. The jobs multiplier are expressed in terms of jobs per million dollars of spending. |
|------|--|

IMPLAN MODEL⁵

In contrast to REMI, IMPLAN is exclusively an input-output model. It is nonsurvey based, and its structure typifies that of input-output models found in the regional science literature. Similar to REMI, IMPLAN assumes a uniform national production technology and uses the regional purchase coefficient approach to regionalize the technical coefficients.

The model generates two types of multipliers: Type I multipliers and what IMPLAN refers to as Type III multipliers. The difference between IMPLAN's Type I and Type III multipliers is an induced consumption effect. Their Type III multiplier differs from the standard Type II multiplier because the consumption function is nonlinear, that is, the marginal propensity to consume is not constant, decreasing as income in the region rises. 2 Population completely responds to employment changes and drives consumer spending. Multipliers are generated for employment, output, value added, personal income, and total income.

Similar to REMI (which is described next), IMPLAN builds its data from top to bottom. National data serve as control totals for state data. In turn, state data serve as control totals for county data. The primary sources of employment and earnings data are County Business Patterns data and BEA data. Furthermore, IMPLAN's procedure for finding in suppressions in the 1985 model parallels REMI's, except the ES-202 data set is not a primary source of data for counties.

IMPLAN estimates output at the state level by using value added reported by BEA as proxies to allocate U.S. total gross output. Also, IMPLAN allocates state total gross output to counties based on county employment earnings. The use of the BEA Gross State Product series for states, and implicit assumption of uniform value added-to-earnings ratios across counties within a state, parallels REMI's procedure. However, because of REMI's neoclassical production function, differential labor costs cause REMI's labor intensities to differ across states and counties. In addition, REMI adjusts real value added in U.S. dollars reported by BEA for differences in regional unit factor costs.

⁵ This section taken from "A Systematic Comparison of the REMI and Implan Models: The Case of Southern Nevada," Dan S. Rickman and R. Keith Schwer, The Review of Regional Studies, Fall 1993, pp. 148-149.

REMI MODEL⁶

The REMI model, as Bolton (1985) states in his review of econometric models, "is a world apart in complexity, reliance on interindustry linkages, and modeling philosophy" from other econometric models. The REMI model is more than an econometric model, though. It may better be described as an eclectic model that links an input-output model to an econometric model. If the econometric responses are suppressed, the model collapses to an input-output model. The econometric specifications are derived from economic theories that are generally neoclassical in nature. The notion of regional equilibrium is central to the model's long-term portrait of regional economic growth.

Although a detailed description of the model is impossible within the scope of the present study, an outline of the basic structure facilitates the evaluation of model performance. Conceptually, the model consists of five basic blocks: (1) output, (2) labor and capital demands, (3) population and labor supply, (4) wages, prices, and profits, and (5) market shares.

The output block contains the input-output component of the model. Final demands drive the output block. Production uses factor inputs, labor, capital and fuel, and intermediate inputs. Coefficients of the production functions are based on national input-output tables produced by the Bureau of Labor Statistics. Intermediate inputs are used in fixed proportions. Factor input use is governed by Cobb-Douglas functions in Block 2. Thus, in contrast to input-output models such as IMPLAN, the relative factor intensities respond to changes in relative factor costs (i.e., wage rate changes, cost-of-capital changes, and changes in fuel prices).

Labor supply in Block 3 responds positively to wage rates because of migration. Also, the ratio of residence-adjusted employment to the potential labor force influences migration. Place-of-work income also is adjusted for place of residence to obtain disposable income. The interaction of labor demand calculated in Block 2 and of labor supply calculated in Block 3 determines wage rates in Block 4. Migration induces government spending through additional taxes paid and consumer spending through increased wage and nonwage income. The increase in real disposable income derived from migration also stimulates residential investment. Nonresidential investment is stimulated by increased capital demand by businesses.

Wage rates affect the competitiveness of local firms relative to firms in other regions in Block 5. Regional competitiveness affects the shares of local and export markets (market shares) that local firms capture. The proportion of the local market captured is known as the regional purchase coefficient (RPC), and the proportion of the export market is known as the interregional and international coefficient. Also, the RPC, which is a measure of self-sufficiency, increases as a region grows because of agglomeration effects.

⁶ This section taken from "A Systematic Comparison of the REMI and Implan Models: The Case of Southern Nevada," Dan S. Rickman and R. Keith Schwer, *The Review of Regional Studies*, Fall 1993, pp. 145-148.

Endogenous consumption, investment, and government expenditures plus exports are the final demands that drive the output block. The endogenous RPC gives the proportions of local expenditures satisfied by imports or local production. Solution values for the endogenous variables in the REMI model must satisfy the equations in all five blocks simultaneously.

By suppressing certain endogenous responses in the REMI model, multipliers comparable to those computed from an input-output model can be obtained. If the responses of labor intensities, labor supply, wage rates, industry RPC's, and endogenous final demands are suppressed, Type I input-output multipliers are obtained. By allowing consumption to be endogenously determined, Type II multipliers are obtained. Complete endogeneity in the REMI model produces what is referred to as Type III multipliers. This Type III multiplier differs from standard Type III input-output multipliers because of the endogeneity of export and propensity to import responses in the REMI model.

The detailed structure of the REMI model requires an extensive amount of data. The input-output component is non-survey based, using national technical coefficients. Of particular importance are data on employment, income, and output. Also, because complete regional accounts consistent with the National Income and Product Accounts are not routinely available, they must be constructed.

REMI uses three sources of employment and wage and salary data: the Bureau of Economic Analysis (BEA) employment, wage, and personal income series, ES-202 establishment employment and wage and salary data, and County Business Patterns (CBP) data published by the Bureau of the Census. The BEA data are annual averages and are reported at the two-digit level for states and at the one-digit level for counties. The ES-202 data, the foundation for the BEA data, are collected monthly in conjunction with the unemployment insurance program at the two-digit level for counties and states, and they are the foundation for the BEA data. CBP data are collected in conjunction with the Social Security program in March of each year.

Confidentiality requirements produce many suppressions in the data. Where suppressions occur, the number of establishments and the ranges of the number of employees for each establishment are supplied by CBP. REMI fills in the suppressions based on the hierarchical structure of the BEA data within regions and within industries. First, all two-digit S.I.C. industries are made consistent within the corresponding one-digit industries for each state simultaneous with all twodigit industries summed to the major region two-digit totals. Second, for counties REMI uses the ES-202 data, if available, and CBP data if ES-202 data is not available. Whichever data set is selected, it is made consistent with BEA one-digit county totals and state two-digit totals.

Output measures are based on regional employment data, the BEA Gross State Product series, and national output-to-employment ratios. REMI begins by applying the national output-to-employee ratio to employment by industry. This application is adjusted by regional differences in labor intensity and total factor productivity. Regional

differences in labor intensity are given by the industry production function and the unit factor costs. Total factor productivity calculations depend on industry value added in production reported in real U.S. dollars by BEA and on adjustments by REMI to the BEA numbers to reflect differences in regional production costs. The ratio of real regional value added per unit of input relative to U.S. value added per unit of input is the REMI relative total factor productivity.

TABLE 1⁷: A Comparison of the Different Models

| Characteristics | REMI | RIMS II | IMPLAN |
|-----------------------------------|---|---|--|
| I. Type | Conjoined input-output and behavior model | Regional input-output | Regional input-output |
| II. General Model Characteristics | | | |
| Base Year | 1977 | 1977 | 1982 |
| Reference Model | National A matrix | National A matrix | National A matrix |
| Open/closed | Open | Both | Both |
| III. Sector Scheme | | | |
| Disaggregated | 493 | 531 | 538 |
| Aggregated | 53 | 39 | User choice |
| IV. Regionalization Technique | | | |
| Product Mix | Keep at a disaggregated level | Keep at a disaggregated level | Keep at a disaggregated level |
| Consumption | BLS regional Consumer Expenditure Surveys | Row adjusted for commuting, column adjusted for savings and state tax leakages | Adjusted using RPC |
| Trade Patterns | Regional purchase coefficients | Regional purchase coefficients | Regional purchase coefficients |
| V. Impacts Measured | | | |
| Output | Yes | Yes | Yes |
| Employment | Yes | Yes | Yes |
| Income | Yes | Yes | Yes |
| VI. Special Features | | | |
| | Occupation impacts Pollution impacts | | |
| VII. Computer Requirement | | | |
| | IBM PC or Mainframe accessible via modem | IBM PC | IBM PC or Mainframe accessible via modem |
| VIII. Costs | | | |
| Purchase Model | | \$275 per region | \$450 Software State packages (counties + state) for \$475-\$2200 |
| Customized Simulation | Available | Not Available | Not Available |
| Other Options | Leasing models is available | | |
| IX. Web Site | http://www.remi.com/ | http://www.bea.doc.gov/bea/regional/rims/ | http://www.miq-inc.com/ |

7 Adapted from "An Assessment of Input-Output Models", for the U.S. Department of Transportation, Federal Highway Administration, Transportation Studies Division, by DRI/McGraw-Hill (Jan 1994), Contract Number DTFH61-93-C-00055

USING RIMS II, IMPLAN AND REMI FOR ECONOMIC IMPACT ANALYSIS

BUS FLEET ANALYSIS

The following example will provide a basis to estimate the economic impacts that would result from the purchase and operation of a bus fleet using each of the models described above. This project would involve capital costs and operating costs that are shown below:

TABLE 2

| BUS FLEET ANNUAL PURCHASE, OPERATION AND MAINTENANCE CASH FLOW ANALYSIS (YEAR 2000\$) | | | | | | | |
|---|---------------------------|--------------------------------|----------------------------|--------------------------------|------------------------------|------------------------------|---|
| Year | Bus Capital Costs—Instate | Bus Capital Costs—Out of State | Total Annual Capital Costs | Annual Operation & Maintenance | Driver and other Labor Costs | Total Annual Operating Costs | Total Annual Bus Costs--Capital & Operating Costs |
| 1 | \$ 28,440 | \$ 540,360 | \$ 568,800 | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 1,094,100 |
| 2 | \$ 28,440 | \$ 540,360 | \$ 568,800 | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 1,094,100 |
| 3 | \$ 28,440 | \$ 540,360 | \$ 568,800 | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 1,094,100 |
| 4 | \$ 28,440 | \$ 540,360 | \$ 568,800 | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 1,094,100 |
| 5 | \$ 28,440 | \$ 540,360 | \$ 568,800 | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 1,094,100 |
| 6 | \$ - | \$ - | | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 525,300 |
| 7 | \$ - | \$ - | | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 525,300 |
| 8 | \$ - | \$ - | | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 525,300 |
| 9 | \$ - | \$ - | | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 525,300 |
| 10 | \$ - | \$ - | | \$ 52,800 | \$ 472,500 | \$ 525,300 | \$ 525,300 |
| Total | \$ 142,200 | \$ 2,701,800 | \$ 2,844,000 | \$ 528,000 | \$ 4,725,000 | \$ 5,253,000 | \$ 8,097,000 |

These costs represent: (1) the capital cost associated with purchasing the bus fleet (divided into the amount that is spent inside the state, which will affect the economy, and the portion spent outside of the state, which will not affect the economy), and (2) the operating expenses associated with running the bus fleet that includes the maintenance expenses and the driver/labor costs. The above costs are expressed in year 2000 dollars, which means these costs are representative of what it would cost to purchase and run the bus fleet right now.

Using RIMS II

RIMS II is a set of regional multipliers maintained by the Bureau of Economic Analysis, Regional Economic Analysis Division. The following multipliers are used in this example:

TABLE 3

| EXAMPLES OF 1997 RIMS II MULTIPLIERS FOR THE STATE OF FLORIDA THAT CAN BE USED IN TRANSIT IMPACT ANALYSIS | | | | | |
|---|------------------------------|---------------|---------------------|-----------------------|-----------------------|
| COSTS | RIMS II Industries | RIMS II Codes | RIMS II Multipliers | | |
| | | | Output (per dollar) | Earnings (per dollar) | Jobs (per million \$) |
| Operating Costs | Transportation | 25 | 1.9520 | .7250 | 37.9 |
| Capital Costs | Motor Vehicles and Equipment | 21 | 1.4801 | .3302 | 15.6 |

The above multipliers are for the year 1997 so in order to use them, *the costs in Table 2 must be converted to year 1997 dollars.* If regional multipliers are available for a different year, then the costs must be expressed in dollars for whatever year the

multipliers correspond. Since there is inflation every year, a dollar in 2000 is not worth the same as a dollar in 1997 (i.e., one dollar will not buy the same amount of goods in 2000 as it would have in 1997). Inflation is measured by the consumer price index (CPI) and the CPI can be used to inflate or deflate dollars as needed to express them in alternative units. Since the above data is expressed in current year 2000 dollars, we must deflate these dollars and express them in terms of a year that corresponds to the RIMS II multipliers that are available. The below example deflates the above costs and expresses them in equivalent 1997 dollars. This means that the costs will then reflect what it would have cost to purchase and run the bus system in 1997 instead of in 2000.

In order to adjust the costs, we use the consumer price index supplied by the U. S. Bureau of Labor Statistics. The consumer price index series used here is based on an average of prices between 1982-1984. This means that the 1982-1984 is the base year and the CPI is equal to 100. For each year after the 1982-1984 where inflation occurs, the CPI number will be greater than 100. This means that the same products bought in the period 1982-1984 cost more in the current time period than they did in the base period. In order to convert the 2000 dollars to 1997 dollars we must calculate the deflator. The deflator is simply the ratio of the CPI in 1997 to the CPI in 2000. The CPI in 2000 is 171.20 and the CPI in 1997 is 160.52. The third row of the below table shows that the deflator to convert year 2000 dollars to 1997 dollars is:

$$(CPI\ 1997)/(CPI\ 2000) = 160.52/171.20 = .937616822.$$

TABLE 4: CONSUMER PRICE INDEX AND CPI DEFLATORS AND INFLATORS

| | | DEFLATORS | INFLATORS |
|----------|--------|--|--|
| CPI 2000 | 171.20 | From 2000\$ to 1999\$ = 166.58/171.2 = 0.9730140 | From 1992\$ to 2000\$ = 171.2/140.32 = 1.2200684 |
| CPI 1999 | 166.58 | From 2000\$ to 1998\$ = 163.01/171.2 = 0.9521612 | From 1995\$ to 2000\$ = 171.2/152.38 = 1.1235070 |
| CPI 1998 | 163.01 | From 2000\$ to 1997\$ = 160.52/171.2 = 0.937616822 | From 1997\$ to 2000\$ = 171.2/160.52 = 1.066534 |
| CPI 1997 | 160.52 | | |
| CPI 1995 | 152.38 | | |
| CPI 1992 | 140.32 | | |

Once the appropriate deflator has been calculated, the costs in Table 2 are deflated by multiplying each cost in the table by the deflator, .937616822. This is done in the following table:

TABLE 5

| BUS FLEET ANNUAL PURCHASE, OPERATION AND MAINTENANCE CASH FLOW ANALYSIS (YEAR 1997\$) | | | | | | | |
|---|--------------------------------|-------------------------------------|-------------------------------|--------------------------------------|---------------------------------|---------------------------------|---|
| Year | Bus Capital Costs-- Instate | Bus Capital Costs-- Out of State | Total Annual Capital Costs | Annual Operation & Maintenance | Driver and other Labor Costs | Total Annual Operating Costs | Total Annual Bus Costs--Capital & Operating Costs |
| 1 | \$ 26,666 | \$ 506,651 | \$ 533,316 | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 1,025,847 |
| 2 | \$ 26,666 | \$ 506,651 | \$ 533,316 | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 1,025,847 |
| 3 | \$ 26,666 | \$ 506,651 | \$ 533,316 | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 1,025,847 |
| 4 | \$ 26,666 | \$ 506,651 | \$ 533,316 | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 1,025,847 |
| 5 | \$ 26,666 | \$ 506,651 | \$ 533,316 | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 1,025,847 |
| 6 | \$ - | \$ - | \$ - | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 492,530 |
| 7 | \$ - | \$ - | \$ - | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 492,530 |
| 8 | \$ - | \$ - | \$ - | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 492,530 |
| 9 | \$ - | \$ - | \$ - | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 492,530 |
| 10 | \$ - | \$ - | \$ - | \$ 49,506 | \$ 443,024 | \$ 492,530 | \$ 492,530 |
| Total | \$ 133,329 | \$ 2,533,253 | \$ 2,666,582 | \$ 495,062 | \$ 4,430,239 | \$ 4,925,301 | \$ 7,591,883 |

Once this has been done, the output and earnings multipliers can be directly multiplied to the costs listed in Table 5 since they are the multipliers that occur per each dollar spent. However, in order to use the jobs multiplier, the costs must be expressed in terms of *millions of dollars* so they have to be converted. To convert the costs in Table 5 to units of millions of dollars, divide the costs by \$1,000,000. This will give the following costs:

TABLE 6: ANNUAL BUS PURCHASE AND OPERATING COSTS (IN YEAR 1997\$)

| YEAR | BUS CAPITAL COSTS—INSTATE | OPERATING EXPENSES | BUS CAPITAL COSTS—INSTATE (in million \$) | OPERATING EXPENSES (in million \$) |
|-------|---------------------------|--------------------|---|------------------------------------|
| 1 | \$ 26,666 | \$ 492,530 | \$0.02666 | 0.4925 |
| 2 | \$ 26,666 | \$ 492,530 | \$0.02666 | 0.4925 |
| 3 | \$ 26,666 | \$ 492,530 | \$0.02666 | 0.4925 |
| 4 | \$ 26,666 | \$ 492,530 | \$0.02666 | 0.4925 |
| 5 | \$ 26,666 | \$ 492,530 | \$0.02666 | 0.4925 |
| 6 | \$ - | \$ 492,530 | \$ - | 0.4925 |
| 7 | \$ - | \$ 492,530 | \$ - | 0.4925 |
| 8 | \$ - | \$ 492,530 | \$ - | 0.4925 |
| 9 | \$ - | \$ 492,530 | \$ - | 0.4925 |
| 10 | \$ - | \$ 492,530 | \$ - | 0.4925 |
| Total | \$ 133,329 | \$ 4,925,301 | \$0.1333 | 4.925 |

Once the costs are in the correct form, the RIMS II multipliers in Table 3 can be applied. The multipliers for output and earnings can be directly applied to the costs on the left hand side of the above table. The jobs multiplier must be applied to the costs on the right hand side of the table. This will yield the following economic impacts for output and earnings:

TABLE 7

| RIMS II ECONOMIC IMPACTS ON OUTPUT AND EARNINGS (IN 1997\$) | | | | |
|---|---------------|--------------------|---------------|--------------------|
| YEAR | OUTPUT | | EARNINGS | |
| | CAPITAL COSTS | OPERATING EXPENSES | CAPITAL COSTS | OPERATING EXPENSES |
| 1 | \$ 39,468 | \$ 961,419 | \$ 8,805 | \$ 357,084 |
| 2 | \$ 39,468 | \$ 961,419 | \$ 8,805 | \$ 357,084 |
| 3 | \$ 39,468 | \$ 961,419 | \$ 8,805 | \$ 357,084 |
| 4 | \$ 39,468 | \$ 961,419 | \$ 8,805 | \$ 357,084 |
| 5 | \$ 39,468 | \$ 961,419 | \$ 8,805 | \$ 357,084 |
| 6 | \$ - | \$ 961,419 | \$ - | \$ 357,084 |
| 7 | \$ - | \$ 961,419 | \$ - | \$ 357,084 |
| 8 | \$ - | \$ 961,419 | \$ - | \$ 357,084 |
| 9 | \$ - | \$ 961,419 | \$ - | \$ 357,084 |
| 10 | \$ - | \$ 961,419 | \$ - | \$ 357,084 |
| TOTAL | \$ 197,340 | \$ 9,614,188 | \$ 44,025 | \$ 3,570,843 |

Since the costs were expressed in year 1997 dollars and the multipliers do not inflate or deflate the costs, the results for output and earnings are also expressed in year 1997 dollars. Table 7 shows that the capital expenditures will have almost a \$200,000 impact

on output and the operating expenses will have a \$9.6 million impact. This table also shows the effect on earnings. The capital expenditures will have a \$44,025 impact on earnings (\$8,805 per year for the five years the dollars are expended) and the operating expenses will have a \$3.57 million impact on earnings (\$357,084 per year for the ten years depicted).

Table 8 shows the economic impact on jobs from the bus fleet expenditures. The capital expenditures will result in 2 jobs and the operating expenses will result in almost 1876 jobs.

TABLE 8

| RIMS II JOBS ECONOMIC IMPACTS | | |
|--------------------------------------|----------------------|---------------------------|
| YEAR | CAPITAL COSTS | OPERATING EXPENSES |
| 1 | 0.42 | 18.67 |
| 2 | 0.42 | 18.67 |
| 3 | 0.42 | 18.67 |
| 4 | 0.42 | 18.67 |
| 5 | 0.42 | 18.67 |
| 6 | - | 18.67 |
| 7 | - | 18.67 |
| 8 | - | 18.67 |
| 9 | - | 18.67 |
| 10 | - | 18.67 |
| TOTAL | 2.08 | 186.67 |

Since the multipliers used were for 1997, the results were expressed in terms of 1997 dollars. The jobs result cannot be adjusted since it is not a dollar value. However, the earnings and output results can be inflated to be expressed in current terms of year 2000 dollars. To inflate the results to year 2000 dollars, we will need to calculate the appropriate inflator. This can be found in Table 4. This table shows that the appropriate inflator is the ratio of the CPI 2000 to the CPI 1997. The 2000 CPI is 171.20 and the 1997 CPI is 160.52. The inflator is then:

$$[\text{CPI 2000}/\text{CPI 1997}] = 171.2/160.52 = 1.066534.$$

Now that the inflator has been calculated, the earnings and output results can be expressed in year 2000 dollars by multiplying the results in Table 7 by the inflator. This yields the following results for the earnings and output totals:

TABLE 9

| RIMS II ECONOMIC IMPACTS ON OUTPUT AND EARNINGS (IN YEAR 2000\$) | | | | |
|--|---------------|--------------------|---------------|--------------------|
| YEAR | OUTPUT | | EARNINGS | |
| | CAPITAL COSTS | OPERATING EXPENSES | CAPITAL COSTS | OPERATING EXPENSES |
| 1 | \$ 42,094 | \$ 1,025,386 | \$ 9,391 | \$ 380,843 |
| 2 | \$ 42,094 | \$ 1,025,386 | \$ 9,391 | \$ 380,843 |
| 3 | \$ 42,094 | \$ 1,025,386 | \$ 9,391 | \$ 380,843 |
| 4 | \$ 42,094 | \$ 1,025,386 | \$ 9,391 | \$ 380,843 |
| 5 | \$ 42,094 | \$ 1,025,386 | \$ 9,391 | \$ 380,843 |
| 6 | \$ - | \$ 1,025,386 | \$ - | \$ 380,843 |
| 7 | \$ - | \$ 1,025,386 | \$ - | \$ 380,843 |
| 8 | \$ - | \$ 1,025,386 | \$ - | \$ 380,843 |
| 9 | \$ - | \$ 1,025,386 | \$ - | \$ 380,843 |
| 10 | \$ - | \$ 1,025,386 | \$ - | \$ 380,843 |
| TOTAL | \$ 210,470 | \$ 10,253,856 | \$ 46,954 | \$ 3,808,425 |

Tables 9 shows the economic impacts on output and earnings expressed in year 2000 dollars. These results will be compared with the results from the other economic impact models later.

Using IMPLAN

IMPLAN is an input-output model that is similar to RIMS II. However, as the earlier technical discussion detailed, it allows you to use different types of multipliers. The Type II multipliers are the default multipliers and can be used in most circumstances. The Type II multipliers were used in this example.

In Table 2, the costs of purchasing and running the bus fleet were expressed for each year individually in year 2000 dollars. IMPLAN will not allow you to enter the data expressed in year 2000 dollars. Instead, IMPLAN will allow you to enter your data expressed in terms of any year between 1977-1998. Since there is inflation every year, a dollar in 1975 is not worth the same as a dollar in 1998 (i.e., one dollar will not buy the same amount of goods in 1998 as it would have in 1977). Inflation is measured by the consumer price index (CPI) and the CPI can be used to inflate or deflate dollars as needed to express them in alternative units. Since the above data is expressed in current year 2000 dollars, we must deflate these dollars and express them in terms of a year that IMPLAN will accept. The below example deflates the above costs and expresses them in equivalent 1998 dollars. This means that the costs will then reflect what it would have cost to purchase and run the bus system in 1998 instead of in 2000.

In order to adjust the costs, we use the consumer price index supplied by the U. S. Bureau of Labor Statistics. This consumer price index series is based on an average of prices between 1982-1984. This means that the 1982-1984 CPI is equal to 100. For each year after the 1982-1984 where inflation occurs, the CPI number will be greater than 100. This means that the same products bought in the period 1982-1984 cost more than they did in that time period. In order to convert the 2000 dollars to 1998 dollars we must calculate the deflator. The deflator is simply the ratio of the CPI in

1998 to the CPI in 2000. The CPI in 2000 is 171.20 and the CPI in 1998 is 163.01. The second row of Table 4 shows that the deflator to convert year 2000 dollars to 1998 dollars is:

$$(CPI\ 1998)/(CPI\ 2000) = 163.01/171.2 = .9521612.$$

Now that we have calculated the deflator, we use the deflator by multiplying the year 2000 costs by the deflator in order to express the costs in 1998 dollars. The following table shows the costs in Table 2 adjusted to be expressed in 1998 dollars. These costs are the costs expressed in Table 2 multiplied by the deflator, .9521612.

TABLE 10: BUS FLEET ANNUAL PURCHASE, OPERATION AND MAINTENANCE COSTS (IN 1998 \$)

| Year | Bus Capital Costs— Instate | Bus Capital Costs—Out of State | Total Annual Capital Costs | Annual Operation & Maintenance | Driver and other Labor Costs | Total Annual Operating Costs | Total Annual Bus Costs—Capital & Operating Costs |
|-------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|---------------------------------|------------------------------------|--|
| 1 | \$ 27,079 | \$ 514,510 | \$ 541,589 | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 1,041,760 |
| 2 | \$ 27,079 | \$ 514,510 | \$ 541,589 | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 1,041,760 |
| 3 | \$ 27,079 | \$ 514,510 | \$ 541,589 | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 1,041,760 |
| 4 | \$ 27,079 | \$ 514,510 | \$ 541,589 | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 1,041,760 |
| 5 | \$ 27,079 | \$ 514,510 | \$ 541,589 | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 1,041,760 |
| 6 | \$ - | \$ - | \$ - | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 500,170 |
| 7 | \$ - | \$ - | \$ - | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 500,170 |
| 8 | \$ - | \$ - | \$ - | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 500,170 |
| 9 | \$ - | \$ - | \$ - | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 500,170 |
| 10 | \$ - | \$ - | \$ - | \$ 50,274 | \$ 449,896 | \$ 500,170 | \$ 500,170 |
| Total | \$ 135,397 | \$ 2,572,549 | \$ 2,707,946 | \$ 502,741 | \$ 4,498,962 | \$ 5,001,703 | \$ 7,709,649 |

In addition, IMPLAN will not allow the user to enter the data on a year-by-year basis. Instead, IMPLAN requires that the costs for each category be summed to one total amount. Then, to enter these costs in the IMPLAN program, they must be assigned a code that identifies which sector of the economy they are spent in. The appropriate sector codes for this example are shown in the following table:

TABLE 11: IMPLAN INPUTS FOR BUS FLEET ANALYSIS

| CATEGORY OF SPENDING | SECTOR | AMOUNT |
|---|--------|--------------|
| Bus capital costs--truck & bus bodies | 385 | \$ 135,397 |
| Annual operation, maintenance & labor (local government passenger transit) | 510 | \$ 5,001,703 |

IMPLAN will provide economic impacts for employment, value added (wages), and output and are shown below for this example.

TABLE 12: IMPLAN ECONOMIC IMPACTS (EXPRESSED IN 1995\$)

| | EMPLOYMENT | VALUE ADDED | DEMAND |
|----------|------------|--------------|---------------|
| DIRECT | 178.9 | \$ 798,619 | \$ 4,490,742 |
| INDIRECT | 24.5 | \$ 1,142,086 | \$ 1,979,263 |
| INDUCED | 115 | \$ 4,996,963 | \$ 7,855,670 |
| TOTAL | 318.4 | \$ 6,937,667 | \$ 14,326,675 |

The IMPLAN results are expressed in 1995 dollars so, to determine what the current year 2000 equivalent dollars are, the dollars must be inflated from 1995 dollars to year 2000 dollars. To calculate the inflator, we will need the 1995 CPI and the 2000 CPI from Table 4. The 1995 CPI is 152.38 and the 2000 CPI is 171.20. The inflator is the ratio of the 2000 CPI to the 1995 CPI:

$$(2000 \text{ CPI}) / (1995 \text{ CPI}) = 171.20 / 152.38 = 1.1235070.$$

Now, to express the above economic impacts in year 2000 dollars, we multiply the value added and demand numbers by the inflator. This yields the following economic impacts expressed in year 2000 dollars.

TABLE 13: IMPLAN ECONOMIC IMPACTS (EXPRESSED IN 2000\$)

| | EMPLOYMENT | VALUE ADDED | DEMAND |
|----------|------------|--------------|---------------|
| DIRECT | 178.9 | \$ 897,254 | \$ 5,045,380 |
| INDIRECT | 24.5 | \$ 1,283,142 | \$ 2,223,716 |
| INDUCED | 115 | \$ 5,614,123 | \$ 8,825,900 |
| TOTAL | 318.4 | \$ 7,794,517 | \$ 16,096,120 |

Table 13 shows that IMPLAN provides results for direct, indirect, and induced economic impacts. These results are then summed to provide the total economic impact of the project.

Using REMI

REMI will accept data in 1992 or 1999 dollar units. Since the costs for the project are expressed in year 2000 dollars, we must deflate the costs to either year 1992 or year 1999 dollars. In this example we will deflate the costs to year 1999 dollars. From Table 4 we see that the CPI for 2000 is 171.20 and the CPI for 1999 is 166.58. To calculate the deflator to convert the year 2000 costs to year 1999 costs, we find the ratio of the 1999 CPI to the 2000 CPI = $166.58 / 171.20 = .9730140$. To deflate the costs, multiply each value in Table 2 by the deflator just calculated. This yields the following costs expressed in 1999 dollars:

TABLE 14

| BUS FLEET ANNUALIZED PURCHASE AND OPERATION AND MAINTENANCE CASH FLOW ANALYSIS (IN 1999\$) | | | | | | | |
|--|---------------------------|--------------------------------|----------------------------|--------------------------------|----------------------------|------------------------------|--|
| Year | Bus Capital Costs—Instate | Bus Capital Costs—Out of State | Total Annual Capital Costs | Annual Operation & Maintenance | Driver & other Labor Costs | Total Annual Operating Costs | Total Annual Bus Costs—Capital & Operating Costs |
| 1 | \$ 27,673 | \$ 525,778 | \$ 553,450 | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 1,064,575 |
| 2 | \$ 27,673 | \$ 525,778 | \$ 553,450 | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 1,064,575 |
| 3 | \$ 27,673 | \$ 525,778 | \$ 553,450 | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 1,064,575 |
| 4 | \$ 27,673 | \$ 525,778 | \$ 553,450 | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 1,064,575 |
| 5 | \$ 27,673 | \$ 525,778 | \$ 553,450 | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 1,064,575 |
| 6 | \$ - | \$ - | \$ - | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 511,124 |
| 7 | \$ - | \$ - | \$ - | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 511,124 |
| 8 | \$ - | \$ - | \$ - | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 511,124 |
| 9 | \$ - | \$ - | \$ - | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 511,124 |
| 10 | \$ - | \$ - | \$ - | \$ 51,375 | \$ 459,749 | \$ 511,124 | \$ 511,124 |
| Total | \$ 138,363 | \$ 2,628,889 | \$ 2,767,252 | \$ 513,751 | \$ 4,597,491 | \$ 5,111,243 | \$ 7,878,495 |

In REMI, the corresponding sectors are chosen in a different manner than in IMPLAN. Although the sector descriptions are the same, they are entered in a different way. REMI will ask you to select the policy variable categories that will be used. The corresponding REMI sectors for the costs in this example are the following:

TABLE 15: REMI INPUTS FOR BUS FLEET ANALYSIS

| COST | POLICY VARIABLE CATEGORIES | DETAIL SELECTION |
|-----------------------------|--|------------------------------------|
| Bus Capital Cost (In State) | Output Block→Detailed Industry Output→Durables→Motor Vehicle Sales | Truck & Bus Bodies |
| Annual Operating Cost | Output Block→Detailed Industry Output→Government Spending→State & Local Services | Local Government Passenger Transit |

Once these sectors have been chosen, unlike IMPLAN, REMI will allow you to input the costs on a year-by-year basis. Once the costs have been entered and the analysis has been run, REMI will provide numerous economic impacts including effects on the population as well as the economy. The results that are comparable to IMPLANS' are for the following categories:

TABLE 16: REMI BUS FLEET ECONOMIC IMPACTS (INPUT 1992\$)

| Year | Employment (Thous) | GRP (Bil 92\$) | Demand (Bil 92\$) |
|-------|--------------------|----------------|-------------------|
| 1 | 0.02734 | 0.001068 | 0.001953 |
| 2 | 0.02637 | 0.001068 | 0.001831 |
| 3 | 0.02637 | 0.0009766 | 0.001953 |
| 4 | 0.02246 | 0.000885 | 0.001709 |
| 5 | 0.02441 | 0.001007 | 0.001831 |
| 6 | 0.02051 | 0.000824 | 0.001404 |
| 7 | 0.02246 | 0.0009766 | 0.001587 |
| 8 | 0.02441 | 0.001038 | 0.001953 |
| 9 | 0.02246 | 0.0009155 | 0.001648 |
| 10 | 0.02246 | 0.0009766 | 0.001709 |
| Total | 0.23925 | 0.0097353 | 0.017578 |

These are the economic impacts on employment, gross revenue product and demand. The Employment results are expressed in terms of thousands of jobs and GRP and Demand results are expressed in terms of billions of dollars. This is different from IMPLAN which expresses its output in what ever units the results are in so that \$500,000,000 is expressed as \$500,000,000 instead of as \$.5 billion dollars. Since the above economic impacts are less than a billion dollars, the GRP and demand impacts are expressed as a fraction of a billion dollars instead of in units which may make more sense. To convert the above results, multiply the employment impacts by 1,000 and the GRP and Demand results by \$1,000,000,000. This will yield the following:

TABLE 17: REMI BUS FLEET ECONOMIC IMPACTS (IN 1992\$)

| YEAR | EMPLOYMENT | GRP (1992\$) | DEMAND (1992\$) |
|-------|------------|--------------|-----------------|
| 1 | 27.34 | \$ 1,068,000 | \$ 1,953,000 |
| 2 | 26.37 | \$ 1,068,000 | \$ 1,831,000 |
| 3 | 26.37 | \$ 976,600 | \$ 1,953,000 |
| 4 | 22.46 | \$ 885,000 | \$ 1,709,000 |
| 5 | 24.41 | \$ 1,007,000 | \$ 1,831,000 |
| 6 | 20.51 | \$ 824,000 | \$ 1,404,000 |
| 7 | 22.46 | \$ 976,600 | \$ 1,587,000 |
| 8 | 24.41 | \$ 1,038,000 | \$ 1,953,000 |
| 9 | 22.46 | \$ 915,500 | \$ 1,648,000 |
| 10 | 22.46 | \$ 976,600 | \$ 1,709,000 |
| TOTAL | 239.25 | \$ 9,735,300 | \$ 17,578,000 |

The economic impacts are now expressed in units that are comparable units to the IMPLAN results. However, the results are still expressed in 1992 dollars, so to express them in current year 2000 dollars we must inflate the dollars. To make the conversion, we must calculate the appropriate inflator. From Table 4, we know the 2000 CPI is 171.20 and the 1992 CPI is 140.32. The inflator to convert 1992 dollars to year 2000 dollars is:

$$(CPI\ 2000)/(CPI\ 1992) = 171.20/140.32 = 1.2200684.$$

Now, to convert the dollars, multiply each value in Table 17 by the inflator, and this will yield the following results:

TABLE 18: REMI BUS FLEET ECONOMIC IMPACTS (IN 2000\$)

| YEAR | EMPLOYMENT | GRP (2000\$) | DEMAND (2000\$) |
|--------------|---------------|----------------------|----------------------|
| 1 | 27.34 | \$ 1,303,033 | \$ 2,382,794 |
| 2 | 26.37 | \$ 1,303,033 | \$ 2,233,945 |
| 3 | 26.37 | \$ 1,191,519 | \$ 2,382,794 |
| 4 | 22.46 | \$ 1,079,761 | \$ 2,085,097 |
| 5 | 24.41 | \$ 1,228,609 | \$ 2,233,945 |
| 6 | 20.51 | \$ 1,005,336 | \$ 1,712,976 |
| 7 | 22.46 | \$ 1,191,519 | \$ 1,936,249 |
| 8 | 24.41 | \$ 1,266,431 | \$ 2,382,794 |
| 9 | 22.46 | \$ 1,116,973 | \$ 2,010,673 |
| 10 | 22.46 | \$ 1,191,519 | \$ 2,085,097 |
| TOTAL | 239.25 | \$ 11,877,732 | \$ 21,446,362 |

A Comparison of the Bus Fleet Analyses

TABLE 19: COMPARING THE RESULTS FROM RIMS II, IMPLAN, AND REMI

| | RIMS II | IMPLAN | REMI |
|---------------|---------------|--------------|---------------|
| OUTPUT | \$ 10,253,856 | \$16,096,120 | \$ 21,446,362 |
| INCOME | \$ 3,808,425 | \$ 7,794,517 | \$ 11,877,732 |
| JOBS | 187 | 318 | 239 |

Rail Transit Analysis

All of the analysis will be done using the following initial information about costs:

TABLE 20: RAIL TRANSIT PROJECT TEN YEAR CONSTRUCTION AND OPERATING EXPENSES (IN YEAR 2000 \$)

| Year | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATING EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|--------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ 1,000,000 | \$ 50,000 | \$ 15,000 | \$ 150,000 | \$ 2,850,000 | \$ - | \$ - | \$ - | \$ - | \$ 4,065,001 |
| 2 | \$ 2,000,000 | \$ 100,000 | \$ 25,000 | \$ 300,000 | \$ 5,700,000 | \$ - | \$ - | \$ - | \$ - | \$ 8,125,002 |
| 3 | \$ 1,000,000 | \$ 50,000 | \$ 2,500 | \$ 750,000 | \$ 14,250,000 | \$ 2,850,000 | \$ 150,000 | \$ - | \$ - | \$ 19,052,503 |
| 4 | \$ - | \$ - | \$ - | \$ 300,000 | \$ 5,700,000 | \$ 1,900,000 | \$ 100,000 | \$ - | \$ 50,000 | \$ 8,050,004 |
| 5 | \$ - | \$ - | \$ - | \$ 300,000 | \$ 5,700,000 | \$ 1,425,000 | \$ 75,000 | \$ - | \$ 150,000 | \$ 7,650,005 |
| 6 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,500,000 | \$ 1,500,006 |
| 7 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,575,000 | \$ 1,575,007 |
| 8 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,653,750 | \$ 1,653,758 |
| 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,736,438 | \$ 1,736,447 |
| 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,823,259 | \$ 1,823,269 |
| Total | \$ 4,000,000 | \$ 200,000 | \$ 42,500 | \$ 1,800,000 | \$ 34,200,000 | \$ 6,175,000 | \$ 325,000 | \$ - | \$ 8,488,447 | \$ 55,231,002 |

These costs represent: (1) the cost associated with purchasing the land where the railway will be built, (2) the cost of legal services to purchase the land, (3) the real estate cost associated with purchasing the land, (4) the cost of constructing the railway, (5) the cost of the railroad equipment or rolling stock, and (5) the operating expenses associated with running the railway. The above costs are expressed in year 2000 dollars, which means these costs are representative of what it would cost to purchase the land, construct, and run the rail line right now.

Using RIMS II

The RIMS II multipliers were explained in the previous example. Since the above example was studying the economic impact of purchasing and operating a bus fleet, the same multipliers cannot be used in this example. In order to study the economic impact of the rapid rail project, the appropriate multipliers must be used. A few of the multipliers that could be used are described in the following table:

TABLE 21: EXAMPLES OF 1997 RIMS II MULTIPLIERS FOR FLORIDA THAT CAN BE USED IN THIS ANALYSIS

| COST COMPONENTS | RIMS II Industries (bold italics indicates multipliers used in this analysis) | RIMS II CODES | RIMS II MULTIPLIERS | | |
|------------------------|--|-----------------------|------------------------|--------------------------|--------------------------|
| | | | OUTPUT (per dollar) | EARNINGS (per dollar) | JOBS (per million \$) |
| Operating Costs | <i>Railroads and related services</i> | <i>65.01</i> | <i>2.23</i> | <i>0.69</i> | <i>25.67</i> |
| Financing Fees | Security and commodity brokers | 70.03 | 2.10 | 0.68 | 26.28 |
| ROW Fees | <i>Real estate agents, managers, operators, and lessors.</i> | <i>71.0201</i> | <i>2.13</i> | <i>0.70</i> | <i>27.12</i> |
| Capital Costs | <i>Legal, engineering, accounting and related services</i> | <i>73.0302</i> | <i>2.18</i> | <i>0.73</i> | <i>27.52</i> |
| | <i>Other new construction</i> | <i>11.09</i> | <i>2.06</i> | <i>0.71</i> | <i>28.22</i> |
| | New building construction, office, industrial and commercial | 11.08 | 1.65 | 0.42 | 14.90 |
| | Maintenance and repair construction, other | 12.03 | 1.91 | 0.64 | 18.76 |
| | New construction, highways and streets | 11.04 | 2.12 | 0.82 | 19.52 |
| | Maintenance and repair of highways and streets | 12.0214 | 1.59 | 0.26 | 12.49 |
| Rolling Stock | <i>Railroad equipment</i> | <i>61.03</i> | <i>2.20</i> | <i>0.86</i> | <i>30.60</i> |

The following multipliers were taken from the above table and were used in this analysis. Since the analysis is only interested in the economic impact of the project on the Florida economy, the multipliers will not be applied to the out-of-state expenditures. Table 22 below shows the multipliers used for each expenditure category in this example:

TABLE 22: FINAL DEMAND MULTIPLIERS FROM RIMS II

| TYPES | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSES | |
|----------|--------------|------------------------|-------------|---------------|--------------|---------------|--------------|----------------------|--------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State |
| JOB | - | 27.521 | 27.119 | - | 28.218 | - | 30.602 | - | 25.672 |
| EARNINGS | - | 0.731 | 0.703 | - | 0.708 | - | 0.860 | - | 0.694 |
| OUTPUT | - | 2.181 | 2.135 | - | 2.062 | - | 2.198 | - | 2.233 |

As explained in the previous bus fleet analysis, the costs must be expressed in dollars for whatever year the multipliers correspond. The above multipliers are for the year 1997 so in order to use them, *the costs in Table 20 must be converted to year 1997 dollars*. Since the above data is expressed in current year 2000 dollars, we must deflate these dollars and express them in terms of a year that corresponds to our RIMS II multipliers. The below example deflates the above costs and expresses them in equivalent 1997 dollars. This means that the costs will then reflect what it would have cost to construct and run the rail system in 1997 instead of in 2000.

In order to adjust the costs, we use the consumer price index supplied by the U. S. Bureau of Labor Statistics. This consumer price index series is based on an average of prices between 1982-1984. This means that the 1982-1984 CPI is equal to 100. For each year after the 1982-1984 where inflation occurs, the CPI number will be greater than 100. This means that the same products bought in the period 1982-1984 cost more in the current time period than they did in the base period. In order to convert the 2000 dollars to 1997 dollars we must calculate the deflator. The deflator is simply the ratio of the CPI in 1997 to the CPI in 2000. The CPI in 2000 is 171.20 and the CPI in 1997 is 160.52. The third row of table 4 shows that the deflator to convert year 2000 dollars to 1997 dollars is:

$$(CPI\ 1997)/(CPI\ 2000) = 160.52/171.2 = .937616822.$$

Once the deflator has been calculated, the costs in Table 20 are deflated by multiplying each value by the deflator. Once this has been done, this will yield the following costs of running the rail system expressed in year 1997 dollars:

TABLE 23 : RAIL TRANSIT PROJECT TEN YEAR CONSTRUCTION AND OPERATING EXPENSES (IN 1997\$)

| YEAR | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATING EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|--------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ 937,617 | \$ 46,881 | \$ 14,064 | \$ 140,643 | \$ 2,672,208 | \$ - | \$ - | \$ - | \$ - | \$ 3,811,413 |
| 2 | \$ 1,875,234 | \$ 93,762 | \$ 23,440 | \$ 281,285 | \$ 5,344,416 | \$ - | \$ - | \$ - | \$ - | \$ 7,618,139 |
| 3 | \$ 937,617 | \$ 46,881 | \$ 2,344 | \$ 703,213 | \$ 13,361,040 | \$ 2,672,208 | \$ 140,643 | \$ - | \$ - | \$ 17,863,947 |
| 4 | \$ - | \$ - | \$ - | \$ 281,285 | \$ 5,344,416 | \$ 1,781,472 | \$ 93,762 | \$ - | \$ 46,881 | \$ 7,547,819 |
| 5 | \$ - | \$ - | \$ - | \$ 281,285 | \$ 5,344,416 | \$ 1,336,104 | \$ 70,321 | \$ - | \$ 140,643 | \$ 7,172,773 |
| 6 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,406,425 | \$ 1,406,431 |
| 7 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,476,746 | \$ 1,476,753 |
| 8 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,550,584 | \$ 1,550,591 |
| 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,628,113 | \$ 1,628,121 |
| 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,709,519 | \$ 1,709,528 |
| Total | \$ 3,750,467 | \$ 187,523 | \$ 39,849 | \$ 1,687,710 | \$ 32,066,495 | \$ 5,789,784 | \$ 304,725 | \$ - | \$ 7,958,911 | \$ 51,785,516 |

In order to apply the jobs multiplier, the costs must be converted to millions of dollars as in the previous bus fleet example. This is done by dividing each value by \$1,000,000. Once the conversion has been done and the multiplier has been applied to each year's costs, the following impacts result:

TABLE 24: FULL DIRECT AND INDIRECT ECONOMIC IMPACTS ON JOBS

| YEAR | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|--------------|---------------|--------------|----------------------|--------------|---------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | | 1.29 | 0.38 | | 75.40 | | 0.00 | | 0.00 | 77.08 |
| 2 | | 2.58 | 0.64 | | 150.81 | | 0.00 | | 0.00 | 154.03 |
| 3 | | 1.29 | 0.06 | | 377.02 | | 4.30 | | 0.00 | 382.68 |
| 4 | | 0.00 | 0.00 | | 150.81 | | 2.87 | | 1.20 | 154.88 |
| 5 | | 0.00 | 0.00 | | 150.81 | | 2.15 | | 3.61 | 156.57 |
| 6 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 36.11 | 36.11 |
| 7 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 37.91 | 37.91 |
| 8 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 39.81 | 39.81 |
| 9 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 41.80 | 41.80 |
| 10 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 43.89 | 43.89 |
| TOTAL | | 5.16 | 1.08 | | 904.86 | | 9.33 | | 204.32 | 1124.74 |

Table 24 shows that over 1,000 jobs will result from the project including over 900 resulting from the construction expenditure and over 200 from the annual operating expenses. Table 25 below shows the effects of the project on earnings.

TABLE 25: FULL DIRECT AND INDIRECT TRANSIT ECONOMIC IMPACTS ON EARNINGS

| Year | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|----------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ | 34,256 | \$ 9,891 | \$ - | \$ 1,891,389 | \$ - | \$ - | \$ - | \$ - | \$ 1,935,536 |
| 2 | \$ | 68,512 | \$ 16,486 | \$ - | \$ 3,782,778 | \$ - | \$ - | \$ - | \$ - | \$ 3,867,775 |
| 3 | \$ | 34,256 | \$ 1,649 | \$ - | \$ 9,456,944 | \$ - | \$ 120,910 | \$ - | \$ - | \$ 9,613,759 |
| 4 | \$ | - | \$ - | \$ - | \$ 3,782,778 | \$ - | \$ 80,607 | \$ - | \$ 32,517 | \$ 3,895,901 |
| 5 | \$ | - | \$ - | \$ - | \$ 3,782,778 | \$ - | \$ 80,455 | \$ - | \$ 97,550 | \$ 3,940,782 |
| 6 | \$ | - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 975,497 | \$ 975,497 |
| 7 | \$ | - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,024,271 | \$ 1,024,271 |
| 8 | \$ | - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,075,485 | \$ 1,075,485 |
| 9 | \$ | - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,129,259 | \$ 1,129,259 |
| 10 | \$ | - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,185,722 | \$ 1,185,722 |
| Total | \$ | 137,023 | \$ 28,026 | \$ - | \$ 22,696,665 | \$ - | \$ 261,972 | \$ - | \$ 5,520,300 | \$ 28,643,987 |

The above table shows there will be a \$28.6 million dollar impact on income as a result of this project. Over \$22 million will result from the construction of the rapid rail and almost \$5.5 million will result from the annual operating expenses. Table 26 below shows the economic impact on output as a result of the project.

TABLE 26: FULL DIRECT AND INDIRECT TRANSIT ECONOMIC IMPACTS ON OUTPUT

| YEAR | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|----------------------|---------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ - | \$ 102,242 | \$ 30,023 | \$ - | \$ 5,508,757 | \$ - | \$ - | \$ - | \$ - | \$ 5,641,022 |
| 2 | \$ - | \$ 204,485 | \$ 50,038 | \$ - | \$ 11,017,513 | \$ - | \$ - | \$ - | \$ - | \$ 11,272,036 |
| 3 | \$ - | \$ 102,242 | \$ 5,004 | \$ - | \$ 27,543,783 | \$ - | \$ 309,146 | \$ - | \$ - | \$ 27,960,176 |
| 4 | \$ - | \$ - | \$ - | \$ - | \$ 11,017,513 | \$ - | \$ 206,098 | \$ - | \$ 104,694 | \$ 11,328,305 |
| 5 | \$ - | \$ - | \$ - | \$ - | \$ 11,017,513 | \$ - | \$ 154,573 | \$ - | \$ 314,083 | \$ 11,486,169 |
| 6 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,140,829 | \$ 3,140,829 |
| 7 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,297,870 | \$ 3,297,870 |
| 8 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,462,764 | \$ 3,462,764 |
| 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,635,902 | \$ 3,635,902 |
| 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 3,817,697 | \$ 3,817,697 |
| TOTAL | \$ - | \$ 408,970 | \$ 85,065 | \$ - | \$ 66,105,080 | \$ - | \$ 669,817 | \$ - | \$ 17,773,839 | \$ 85,042,771 |

This table shows that there will be a \$85 million dollar impact on output resulting from this project. Construction will be responsible for \$66 million of this impact and the annual operating expenses will create an impact of almost \$18 million.

Since the multipliers used were for 1997, the results were expressed in terms of 1997 dollars. The jobs result cannot be adjusted since it is not a dollar value. However, the earnings and output results can be inflated to be expressed in current terms of year 2000 dollars. To inflate the results to year 2000 dollars, we will need to calculate the appropriate inflator. This can be found in Table 4. This table shows that the

appropriate inflator is the ratio of the CPI 2000 to the CPI 1997. The 2000 CPI is 171.20 and the 1997 CPI is 160.52. The inflator is then:

$$[\text{CPI 2000}/\text{CPI 1997}] = 171.2/160.52 = 1.066534.$$

Now that the inflator has been calculated, the earnings and output results can be expressed in year 2000 dollars by multiplying the results in Table 25 and Table 26 by the inflator. This yields the following results for the earnings and output totals:

TABLE 27: RIMS II ECONOMIC IMPACTS ON EARNINGS (IN YEAR 2000\$)

| | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSE | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|---------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| TOTAL | \$ - | \$ 146,140 | \$ 29,890 | \$ - | \$ 24,206,760 | \$ - | \$ 279,403 | \$ - | \$ 5,887,587 | \$ 30,549,780 |

TABLE 28: RIMS II ECONOMIC IMPACTS ON OUTPUT (IN YEAR 2000\$)

| | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATIONAL EXPENSE | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|---------------------|---------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| TOTAL | \$ - | \$ 436,180 | \$ 90,725 | \$ - | \$ 70,503,300 | \$ - | \$ 714,383 | \$ - | \$ 18,956,400 | \$ 90,700,987 |

Tables 27 and 28 show the economic impacts on earnings and output expressed in current year 2000 dollars.

Using IMPLAN

As stated previously, IMPLAN is an input-output model that is similar to RIMS II. However, as the earlier discussion detailed, it allows you to use different types of multipliers. The Type II multipliers are the default multipliers and can be used in most circumstances. The Type II multipliers were used in this example.

As explained in the bus fleet analysis, the costs must be deflated before they can be entered into IMPLAN. Since the above data is expressed in current year 2000 dollars, we must deflate these dollars and express them in terms of a year that IMPLAN will accept. The below example deflates the above costs and expresses them in equivalent 1998 dollars. This means that the costs will then reflect what it would have cost to construct and run the high speed rail system in 1998 instead of in 2000.

In order to adjust the costs, we use the consumer price index supplied by the U. S. Bureau of Labor Statistics. This consumer price index series is based on an average of prices between 1982-1984. This means that the 1982-1984 CPI is equal to 100. For

each year after the 1982-1984 where inflation occurs, the CPI number will be greater than 100. This means that the same products bought in the period 1982-1984 cost more than they did in that time period. In order to convert the 2000 dollars to 1998 dollars we must calculate the deflator. The deflator is simply the ratio of the CPI in 1998 to the CPI in 2000. The CPI in 2000 is 171.20 and the CPI in 1998 is 163.01. The second row of table 4 shows that the deflator to convert year 2000 dollars to 1998 dollars is:

$$(\text{CPI } 1998)/(\text{CPI } 2000) = 163.01/171.2 = .9521612.$$

Now that we have calculated the deflator, we use the deflator by multiplying the year 2000 costs by the deflator in order to express the costs in 1998 dollars. The following table shows the costs in Table 20 adjusted to be expressed in 1998 dollars. These costs are the costs expressed in Table 20 multiplied by the deflator, .9521612.

TABLE 29: RAIL TRANSIT PROJECT TEN YEAR CONSTRUCTION AND OPERATING EXPENSES (IN 1998 \$)

| Year | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATING EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|--------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ 952,161 | \$ 47,608 | \$ 14,282 | \$ 142,824 | \$ 2,713,659 | \$ - | \$ - | \$ - | \$ - | \$ 3,870,536 |
| 2 | \$ 1,904,322 | \$ 95,216 | \$ 23,804 | \$ 285,648 | \$ 5,427,319 | \$ - | \$ - | \$ - | \$ - | \$ 7,736,312 |
| 3 | \$ 952,161 | \$ 47,608 | \$ 2,380 | \$ 714,121 | \$ 13,568,297 | \$ 2,713,659 | \$ 142,824 | \$ - | \$ - | \$ 18,141,054 |
| 4 | \$ - | \$ - | \$ - | \$ 285,648 | \$ 5,427,319 | \$ 1,809,106 | \$ 95,216 | \$ - | \$ 47,608 | \$ 7,664,902 |
| 5 | \$ - | \$ - | \$ - | \$ 285,648 | \$ 5,427,319 | \$ 1,356,830 | \$ 71,412 | \$ - | \$ 142,824 | \$ 7,284,038 |
| 6 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,428,242 | \$ 1,428,248 |
| 7 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,499,654 | \$ 1,499,661 |
| 8 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,574,637 | \$ 1,574,644 |
| 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,653,368 | \$ 1,653,377 |
| 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,736,037 | \$ 1,736,046 |
| Total | \$ 3,808,645 | \$ 190,432 | \$ 40,467 | \$ 1,713,890 | \$ 32,563,914 | \$ 5,879,596 | \$ 309,452 | \$ - | \$ 8,082,370 | \$ 52,588,818 |

Once the costs have been deflated, the total expenditure in each category must be used since IMPLAN will not allow the costs to be entered on a year-by-year basis. Then, to enter these costs in the IMPLAN program, a code must be assigned that identifies which sector of the economy they are spent in. The appropriate sector codes for this example are shown in the following table:

TABLE 30: RAIL TRANSIT INPUTS

| CATEGORY OF SPENDING | SECTOR | AMOUNT |
|---|--------|---------------|
| Legal & Other Services | 494 | \$ 190,432 |
| Real Estate | 462 | \$ 40,467 |
| Construction--New Highways & Streets | 51 | \$ 32,563,914 |
| Rolling Stock--Railroad Equipment | 394 | \$ 309,452 |
| Operational Expenses--Railroad & Related Services | 433 | \$ 8,082,370 |

IMPLAN does not have a specific sector code for construction of railroad track. Therefore, the IMPLAN staff advised that the sector code for construction of new highways and streets be used since it is the best substitute.

IMPLAN will provide economic impacts for employment, value added (wages), and output (expressed in 1995 dollars) and are shown below for this example.

TABLE 31: IMPLAN ECONOMIC IMPACTS (EXPRESSED IN 1995\$)

| | EMPLOYMENT | VALUE ADDED | DEMAND |
|----------|------------|---------------|---------------|
| DIRECT | 338.2 | \$ 16,069,480 | \$ 39,315,768 |
| INDIRECT | 164.4 | \$ 7,870,395 | \$ 14,318,607 |
| INDUCED | 250.3 | \$ 10,876,946 | \$ 17,099,528 |
| TOTAL | 752.9 | \$ 34,816,821 | \$ 70,733,905 |

To determine what the current year 2000 equivalent dollars are, the dollars must be inflated from 1995 dollars to year 2000 dollars. To calculate the inflator, we will need the 1995 CPI and the 2000 CPI. The 1995 CPI is 152.38 and the 2000 CPI is 171.20. The inflator is the ratio of the 2000 CPI to the 1995 CPI:

$$(2000 \text{ CPI}) / (1995 \text{ CPI}) = 171.20 / 152.38 = 1.1235070.$$

Now, to express the above economic impacts in year 2000 dollars, we multiply the value added and demand numbers by the inflator. This yields the following economic impacts expressed in year 2000 dollars.

TABLE 32: IMPLAN ECONOMIC IMPACTS (EXPRESSED IN 2000\$)

| | EMPLOYMENT | VALUE ADDED | DEMAND |
|----------|------------|---------------|---------------|
| DIRECT | 338.2 | \$ 18,054,173 | \$ 44,171,541 |
| INDIRECT | 164.4 | \$ 8,842,444 | \$ 16,087,055 |
| INDUCED | 250.3 | \$ 12,220,325 | \$ 19,211,439 |
| TOTAL | 752.9 | \$ 39,116,942 | \$ 79,470,037 |

Using REMI

REMI will accept data in 1992 or 1999 dollar units. Since the costs for the project are expressed in year 2000 dollars, we must deflate the costs to either year 1992 or year 1999 dollars. In this example we will deflate the costs to year 1999 dollars. From Table 4, we see that the CPI for 2000 is 171.20 and the CPI for 1999 is 166.58. To calculate the deflator to convert the year 2000 costs to year 1999 costs, we find the ratio of the 1999 CPI to the 2000 CPI:

$$(CPI \ 1999) / (CPI \ 2000) = 166.58 / 171.20 = .9730140.$$

To deflate the costs, multiply each value in Table 20 by the deflator just calculated. This yields the following costs expressed in 1999 dollars:

TABLE 33: RAIL TRANSIT PROJECT TEN YEAR CONSTRUCTION AND OPERATING EXPENSES (IN 1999\$)

| Year | RIGHT OF WAY | | | CONSTRUCTION | | ROLLING STOCK | | OPERATING EXPENSES | | TOTALS |
|-------|--------------|------------------------|-------------|---------------|---------------|---------------|--------------|--------------------|--------------|---------------|
| | Land Costs | Legal & Other Services | Real Estate | Outside State | Inside State | Outside State | Inside State | Outside State | Inside State | |
| 1 | \$ 973,014 | \$ 48,651 | \$ 14,595 | \$ 145,952 | \$ 2,773,090 | \$ - | \$ - | \$ - | \$ - | \$ 3,955,303 |
| 2 | \$ 1,946,028 | \$ 97,301 | \$ 24,325 | \$ 291,904 | \$ 5,546,180 | \$ - | \$ - | \$ - | \$ - | \$ 7,905,741 |
| 3 | \$ 973,014 | \$ 48,651 | \$ 2,433 | \$ 729,761 | \$ 13,865,450 | \$ 2,773,090 | \$ 145,952 | \$ - | \$ - | \$ 18,538,353 |
| 4 | \$ - | \$ - | \$ - | \$ 291,904 | \$ 5,546,180 | \$ 1,848,727 | \$ 97,301 | \$ - | \$ 48,651 | \$ 7,832,767 |
| 5 | \$ - | \$ - | \$ - | \$ 291,904 | \$ 5,546,180 | \$ 1,386,545 | \$ 72,976 | \$ - | \$ 145,952 | \$ 7,443,562 |
| 6 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,459,521 | \$ 1,459,527 |
| 7 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,532,497 | \$ 1,532,504 |
| 8 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,609,122 | \$ 1,609,130 |
| 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,689,578 | \$ 1,689,587 |
| 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,774,057 | \$ 1,774,067 |
| Total | \$ 3,892,056 | \$ 194,603 | \$ 1,353 | \$ 1,751,425 | \$ 33,277,079 | \$ 6,008,362 | \$ 316,230 | \$ - | \$ 8,259,378 | \$ 53,740,539 |

Unlike IMPLAN, REMI does not have a sector coding that corresponds specifically to "Railroads and related services," the code we used for the operational expenses in IMPLAN. The REMI staff advised that the "Local government passenger transit" code be used instead. However, like IMPLAN, REMI does not have a specific sector code for construction of rail line so the REMI staff advised that the "New Highways" sector code be used instead since it would be the best substitute. In REMI, the corresponding sectors are chosen in a different manner than in IMPLAN. Although the sector descriptions are the same, they are entered in a different way. REMI will ask you to select the policy variable categories that will be used. The "Policy Variable Sorting" should be by "Variable Type", and then the corresponding REMI sectors for the costs are the following:

TABLE 34: REMI SECTOR CODES FOR RAIL EXPENDITURES

| Cost | Policy Variable Categories | Detail Selection |
|--------------------|--|------------------------------------|
| Legal Services | Output Block → Detailed Industry Output → Services → Miscellaneous Professional Services Sales | Legal Services |
| Real Estate | Output Block → Detailed Industry Output → Finance, Insurance & Real Estate → Real Estate Sales | Real Estate |
| Construction | Output Block → Detailed Industry Output → Non-Durables → Construction Sales | New Roads |
| Rolling Stock | Output Block → Detailed Industry Output → Durables → Rest of Transportation Equipment Sales | Railroad Equipment |
| Operating Expenses | Output Block → Detailed Industry Output → Government → State and Local Services | Local Government Passenger Transit |

There is an alternative method that can be used when entering the high speed rail data into REMI. In the above example, we identified the "Policy Variable Sorting" as "Variable Type" and located the appropriate sector by the block it fell under. Alternatively, you can identify the "Policy Variable Sorting" as "Study Type." Under "Study Type" several options are listed: Energy & Natural Resources, Economic Development, Labor Legislation, Environmental Policies, Welfare, Transportation, and Taxation & Budget. In this example, the high speed rail is a transportation project so that is the study you would select. Once that option has been selected, REMI will then provide an option for you to choose between a new highway project or a high speed rail project. In this example, you would choose the high speed rail project. REMI then will break down the project into ten parts: Construction of the rail line, other related construction/land purchase, manufacturing of rolling stock, program implementation, operation of high speed rail, highway user savings, high speed rail user savings, direct effects to air transportation, consumer cost savings, and funding of high speed rail system. There is another option listed for "other options." The packaged program offers a bit of a guide to find the appropriate sector for the cost components of the project and may offer guidance concerning what variables should be included in the economic impact analysis. However, use of the "Study Type" option is limited since there are only certain packaged studies included. As can be seen in this example, the only transportation projects that could be analyzed in this format are for the construction of new highways or a new high speed rail system.

Once these sectors have been chosen, unlike IMPLAN, REMI will allow you to input the costs on a year-by-year basis. Once the costs have been entered and the analysis has been run, REMI will provide numerous economic impacts including effects on the population as well as the economy. The results that are comparable to IMPLANS' are for the following categories:

TABLE 35: REMI RAIL TRANSIT ECONOMIC IMPACTS (IN 1992\$)

| YEAR | Employment (Thous) | GRP (Bil 92\$) | Demand (Bil 92\$) |
|-------|--------------------|----------------|-------------------|
| 1 | 0.06934 | 0.002838 | 0.005188 |
| 2 | 0.1338 | 0.005585 | 0.01007 |
| 3 | 0.3301 | 0.0137 | 0.02521 |
| 4 | 0.1162 | 0.004913 | 0.008728 |
| 5 | 0.1143 | 0.004913 | 0.008301 |
| 6 | 0.04395 | 0.00177 | 0.002502 |
| 7 | 0.05078 | 0.001892 | 0.002991 |
| 8 | 0.05957 | 0.00238 | 0.004089 |
| 9 | 0.06445 | 0.002533 | 0.004272 |
| 10 | 0.07324 | 0.003021 | 0.005249 |
| TOTAL | 1.05573 | 0.043545 | 0.0766 |

These are the economic impacts on Employment, Gross Revenue Product (GRP) and Demand. The Employment results are expressed in terms of thousands of jobs and GRP and Demand results are expressed in terms of billions of dollars. This is different from IMPLAN which expresses its output in what ever units the results are in so that

\$500,000,000 is expressed as \$500,000,000 instead of as \$.5 billion dollars. Since the above economic impacts are less than a billion dollars, the GRP and demand impacts are expressed as a fraction of a billion dollars instead of in thousand or million dollar units which may make more sense. To convert the above results, multiply the employment impacts by 1,000 and the GRP and Demand results by \$1,000,000,000. This will yield the following calculations:

TABLE 36: REMI RAIL TRANSIT ECONOMIC IMPACTS (IN 1992 DOLLARS)

| YEAR | EMPLOYMENT | GRP (1992\$) | DEMAND (1992\$) |
|-------|------------|---------------|-----------------|
| 1 | 69.34 | \$ 2,838,000 | \$ 5,188,000 |
| 2 | 133.8 | \$ 5,585,000 | \$ 10,070,000 |
| 3 | 330.1 | \$ 13,700,000 | \$ 25,210,000 |
| 4 | 116.2 | \$ 4,913,000 | \$ 8,728,000 |
| 5 | 114.3 | \$ 4,913,000 | \$ 8,301,000 |
| 6 | 43.95 | \$ 1,770,000 | \$ 2,502,000 |
| 7 | 50.78 | \$ 1,892,000 | \$ 2,991,000 |
| 8 | 59.57 | \$ 2,380,000 | \$ 4,089,000 |
| 9 | 64.45 | \$ 2,533,000 | \$ 4,272,000 |
| 10 | 73.24 | \$ 3,021,000 | \$ 5,249,000 |
| TOTAL | 1055.73 | \$ 43,545,000 | \$ 76,600,000 |

The economic impacts are now expressed in units that are comparable to the IMPLAN results. However, the results are still expressed in 1992 dollars, so to express them in current year 2000 dollars we must inflate the dollars. To make the conversion, we must calculate the appropriate inflator. From Table 4, we know the 2000 CPI is 171.20 and the 1992 CPI is 140.32. The inflator to convert 1992 dollars to year 2000 dollars is:

$$(CPI\ 2000)/(CPI\ 1992) = 171.20/140.32 = 1.2200684.$$

Now, to convert the dollars, multiply each value in Table 36 by the inflator, and this will yield the following results:

TABLE 37: REMI RAIL TRANSIT ECONOMIC IMPACTS (IN 2000 DOLLARS)

| YEAR | EMPLOYMENT | GRP (2000\$) | DEMAND (2000\$) |
|-------|------------|---------------|-----------------|
| 1 | 69.34 | \$ 3,462,554 | \$ 6,329,715 |
| 2 | 133.8 | \$ 6,814,082 | \$ 12,286,089 |
| 3 | 330.1 | \$ 16,714,937 | \$ 30,757,924 |
| 4 | 116.2 | \$ 5,994,196 | \$ 10,648,757 |
| 5 | 114.3 | \$ 5,994,196 | \$ 10,127,788 |
| 6 | 43.95 | \$ 2,159,521 | \$ 3,052,611 |
| 7 | 50.78 | \$ 2,308,369 | \$ 3,649,225 |
| 8 | 59.57 | \$ 2,903,763 | \$ 4,988,860 |
| 9 | 64.45 | \$ 3,090,433 | \$ 5,212,132 |
| 10 | 73.24 | \$ 3,685,827 | \$ 6,404,139 |
| TOTAL | 1055.73 | \$ 53,127,878 | \$ 93,457,239 |

A COMPARISON OF THE RAIL TRANSIT ANALYSES

TABLE 38

| | RIMS II | IMPLAN | REMI |
|--------|--------------|--------------|--------------|
| OUTPUT | \$90,700,987 | \$79,470,037 | \$93,457,239 |
| INCOME | \$30,549,780 | \$39,116,942 | \$53,127,878 |
| JOBS | 1,125 | 753 | 1056 |

Advantages and Disadvantages of Using the Different Models

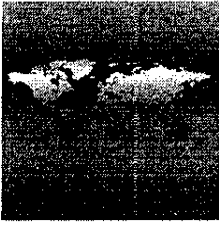
One advantage of using either IMPLAN or REMI instead of RIMS II is that since they are computer software packages, you can modify your model specification easily if you want to include or omit variables. Changing the model is simply a matter of clicking a button (so to speak). Since RIMS II is simply a spreadsheet analysis where the user is responsible for actually setting up the multiplier worksheet, every time a new variable is added, the worksheet must physically be changed. Additionally, IMPLAN is a more user-friendly software package. Although both packages are fairly easy to use, IMPLAN seems to make entering the required data easier. An additional benefit of using IMPLAN is that it explicitly breaks the impacts into direct, indirect and induced effects.

The benefit of using RIMS II is that you may not have to inflate or deflate any of your data. If you are using current year data and you want your results expressed in current year dollars, then you simply apply the multipliers to the costs and you are done. As the discussion indicated earlier, this is not the case with IMPLAN and REMI. The software packages limit the user to entering the expenditure data in term of certain years. This means that if the data is expressed in current year dollars, then it must be deflated before being entered into the program. Also, since the programs express the results in either 1995 or 1992 dollars, the results must be inflated to be expressed in current year dollars.

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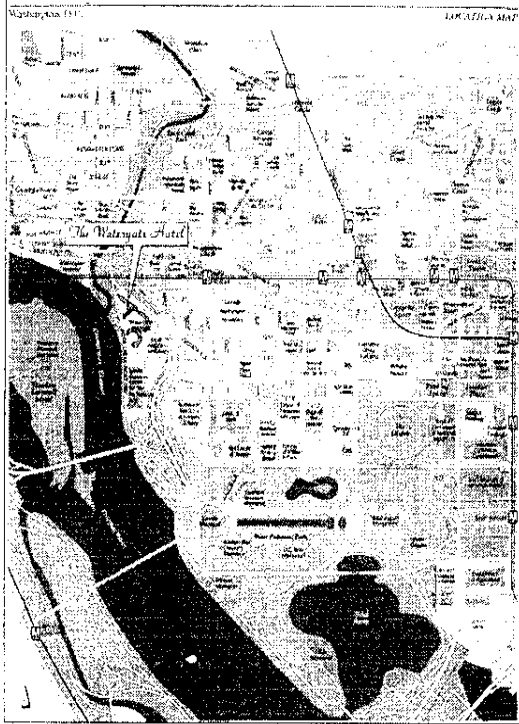


Capitol Area Regional Center™
888 Sixteenth Street NW, Suite 800
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Telephone: 1-202-349-9848
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TEA PLANNED INVESTMENT – WATERGATE HOTEL, WASHINGTON, DC



WATERGATE HOTEL & CONDOMINIUM DEVELOPMENT



Location: Washington, DC

Proposed Uses: 5-Star Luxury Hotel
Luxury Condominiums
World Class Spa
World Class Restaurant

Total Development: \$205.0 million

Estimated CARc Investment*: \$20.0- \$30.0 million

Estimated CARc Ownership: 40 – 50%

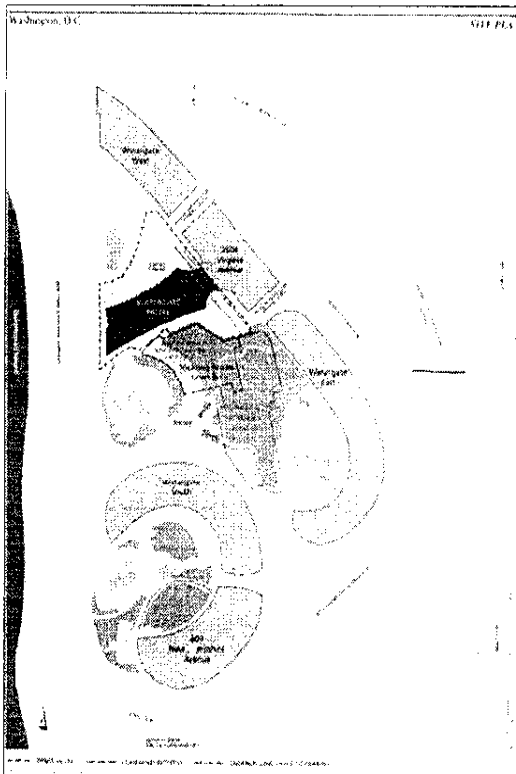
Construction Period: 18 months

Developer: Monument Realty (www.monumentrealty.com)

Project Exceeds Job/Investor Requirements

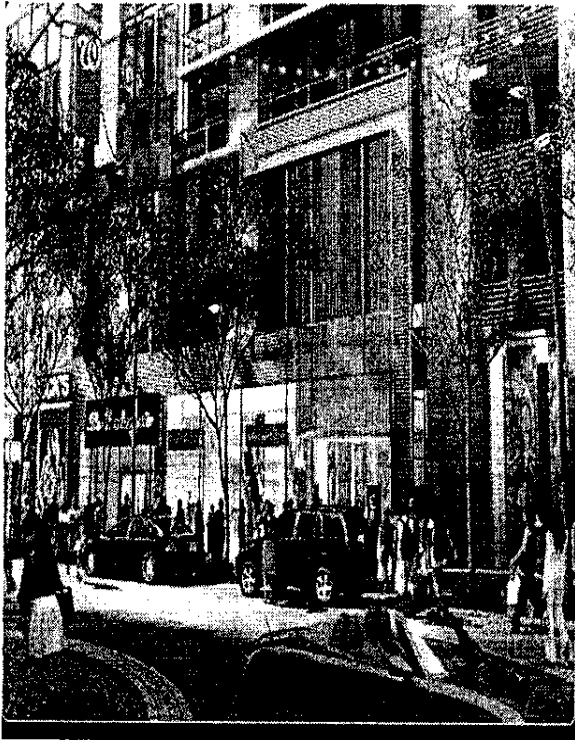
Project Pro Forma meets CARc JOB Fund underwriting goals

Minimum Investor Capital Contribution: \$500,000



**Letter of Intent signed. Subject to definitive documentation.*

ADDITIONAL TARGETED INVESTMENTS (TEA), HALF STREET – WASHINGTON, DC



Location: Washington, DC

**Proposed Uses: Commercial Office
Hotel
Residential
Entertainment
Retail**

Estimated Total Development: \$700.0 million

Estimated CARc Investment: TBD

Estimated CARc Ownership: TBD

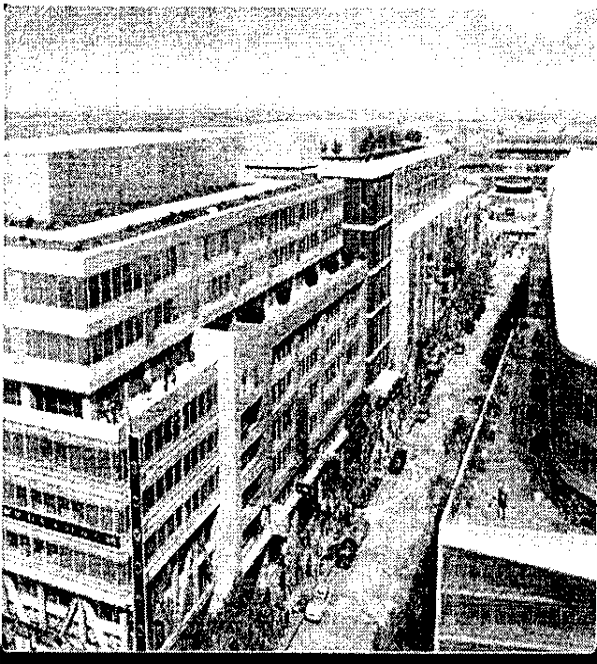
Construction Period: 18 - 30 months (multi phased)

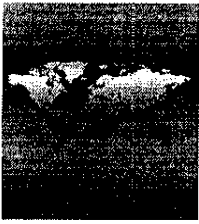
Developer: Monument Realty (www.monumentrealty.com)

Project Exceeds Job/Investor Requirements

Project Pro Forma meets CARc JOB Fund underwriting goals

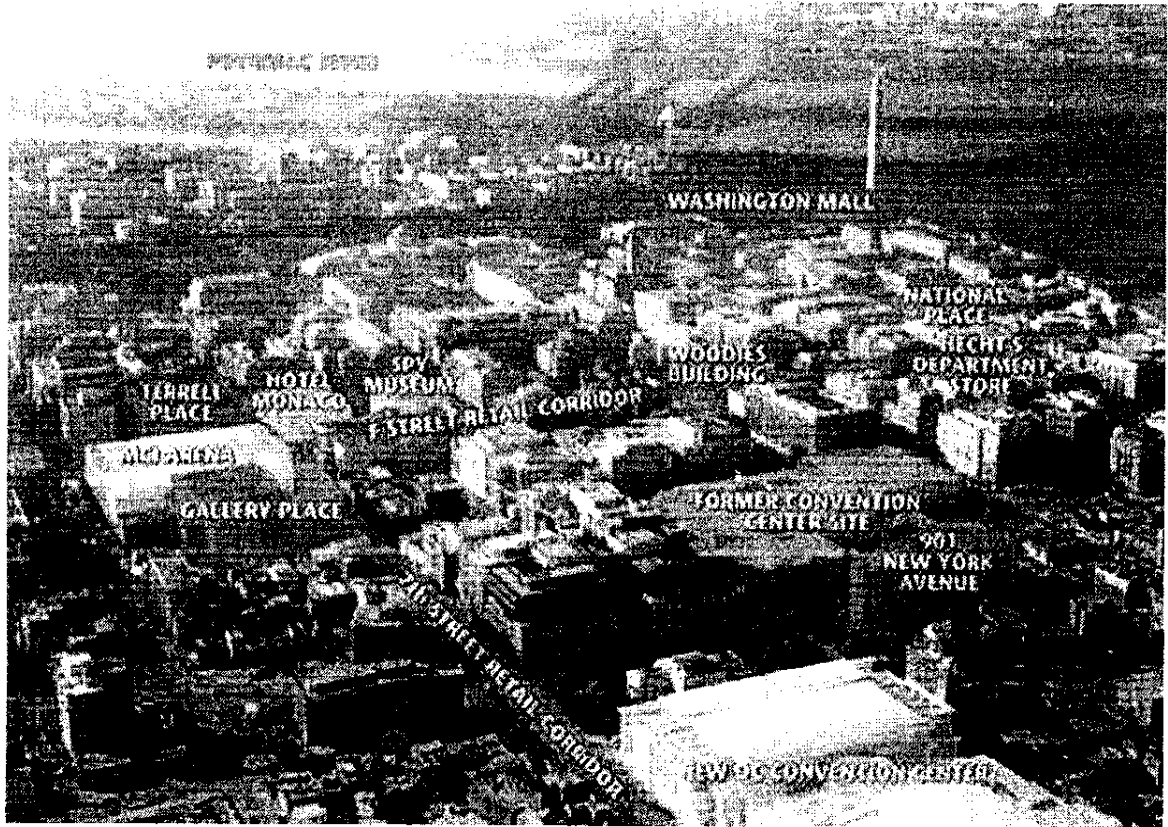
Minimum Investor Capital Contribution: \$500,000





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ADDITIONAL TARGETED INVESTMENTS (TEA) – FORMER CONVENTION CENTER, WASHINGTON, DC



Proposed Uses: Commercial Office
 Residential
 Retail

Est. Total Development: \$850.0 million

Estimated CARc Investment: TBD

Estimated CARc Ownership: TBD

Construction Period: 18 - 30 months

Developer:

Hines Company (www.hines.com)

Archstone Smith (www.archstone.com)

Project Exceeds Job/Investor Requirements

Project Pro Forma meets CARc JOB Fund underwriting goals

Minimum Investor Capital Contribution:
 \$500,000





OLD CONVENTION CENTER
SITE REDEVELOPMENT

News

Press Releases

December 17, 2007

CITY DEVELOPERS AGREE ON FINANCING PLAN FOR OLD CONVENTION SITE

By Jonathan O'Connell, *Washington Business Journal*

D.C. Mayor Adrian Fenty announced Monday the financial details of an agreement with Hines and Archstone-Smith for an \$850 million development of the old convention center site.

The project's plans include 250,000 square feet of retail, 760 housing units and 465,000 square feet of office space, parks and entertainment areas.

In the deal, the city will sell or provide long-term leases for land between Ninth and 11th streets NW along H Street, the southern portion of what is now a surface parking lot.

In return, the city will get \$200 million in benefits, including \$55 million to make 134 of the housing units affordable, \$48 million in infrastructure improvements, including the extension of 10th and Eye streets, \$28.5 million in rent and \$14 million to provide entertainment in a public square between four of the six buildings.

Fenty called the project the "capstone of downtown development" and said it would transform the area into a "live, work and play environment unlike anywhere else in D.C."

The city still controls a 53,700 square-foot parcel on the north end of the site, a plot pegged by former mayor Anthony Williams as a place to relocate the city's central library from the Martin Luther King Jr. Memorial Library. When asked about his plans for the site, Fenty deferred to Neil Albert, deputy mayor for economic development, who said that retail or housing might be appropriate but that "there might be civic uses that might be just as good."

Hines and Archstone Smith have first right to develop the District's remaining site, and have made plans that include space for big box retail needing in the range of 100,000 to 150,000 square feet.

Konrad Schlater, the city's project manager for the old convention center site, said the developers would present their ideas for that plot to the city during the first quarter of 2008, after which time the city would make its choice. He said there was interest from big retailers, but not from department stores.

The developers have been vetting a number of names for the project but have not announced one, although both Fenty and Ken Miller of Archstone-Smith used the term "city center" - one of the rumored names to describe the project at the announcement.

Council members Jack Evans, D-Ward 2, and Kwame Brown, D-at large and chair of the economic development committee, joined the mayor for the announcement, at the Walter E. Washington Convention Center.

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Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes | Detailed industry code and title | Related 1997 NAICS codes |
|--|--|---|--------------------------|
| AGRICULTURE, FORESTRY, FISHING, AND HUNTING | | MANUFACTURING | |
| 1110 Crop production | | 3110 Food manufacturing | |
| 1111A0 Oilseed farming | 11111, 11112 | 311111 Dog and cat food manufacturing | 311111 |
| 1111B0 Grain farming | 11113, 11114, 11115, 11116, 11119 | 311119 Other animal food manufacturing | 311119 |
| 111200 Vegetable and melon farming | 1112 | 311211 Flour milling | 311211 |
| 1113A0 Fruit farming | 11131, 11132, 111331-4, 111336, 111339 | 311212 Rice milling | 311212 |
| 111335 Tree nut farming | 111335 | 311213 Malt manufacturing | 311213 |
| 111400 Greenhouse and nursery production | 1114 | 311221 Wet corn milling | 311221 |
| 111910 Tobacco farming | 11191 | 311222 Soybean processing | 311222 |
| 111920 Cotton farming | 11192 | 311223 Other oilseed processing | 311223 |
| 1119A0 Sugarcane and sugar beet farming | 11193, 111991 | 311225 Fats and oils refining and blending | 311225 |
| 1119B0 All other crop farming | 11194, 111992, 111998 | 311230 Breakfast cereal manufacturing | 31123 |
| 1120 Animal production | | 311310 Sugar manufacturing | 31131 |
| 112100 Cattle ranching and farming | 1121 | 311320 Confectionery manufacturing from cacao beans | 31132 |
| 112300 Poultry and egg production | 1123 | 311330 Confectionery manufacturing from purchased chocolate | 31133 |
| 112A00 Animal production, except cattle and poultry and eggs | 1122, 1124, 1125, 1129 | 311340 Nonchocolate confectionery manufacturing | 31134 |
| 1130 Forestry and logging | | 311410 Frozen food manufacturing | 31141 |
| 113A00 Forest nurseries, forest products, and timber tracts | 1131, 1132 | 311420 Fruit and vegetable canning and drying | 31142 |
| 113300 Logging | 1133 | 311511 Fluid milk manufacturing | 311511 |
| 1140 Fishing, hunting and trapping | | 311512 Creamery butter manufacturing | 311512 |
| 114100 Fishing | 1141 | 311513 Cheese manufacturing | 311513 |
| 114200 Hunting and trapping | 1142 | 311514 Dry, condensed, and evaporated dairy products | 311514 |
| 1150 Agriculture and forestry support activities | | 311520 Ice cream and frozen dessert manufacturing | 31152 |
| 115000 Agriculture and forestry support activities | 115 | 311611 Animal, except poultry, slaughtering | 311611 |
| MINING | | 311612 Meat processed from carcasses | 311612 |
| 2110 Oil and gas extraction | | 311613 Rendering and meat byproduct processing | 311613 |
| 211000 Oil and gas extraction | 211 | 311615 Poultry processing | 311615 |
| 2121 Coal mining | | 311700 Seafood product preparation and packaging | 3117 |
| 212100 Coal mining | 2121 | 31181A Bread and bakery product, except frozen, manufacturing | 31181-2 |
| 2122 Metal ores mining | | 311813 Frozen cakes and other pastries manufacturing | 311813 |
| 212210 Iron ore mining | 21221 | 311821 Cookie and cracker manufacturing | 311821 |
| 212230 Copper, nickel, lead, and zinc mining | 21223 | 311822 Mixes and dough made from purchased flour | 311822 |
| 2122A0 Gold, silver, and other metal ore mining | 21222, 21229 | 311823 Dry pasta manufacturing | 311823 |
| 2123 Nonmetallic mineral mining and quarrying | | 311830 Tortilla manufacturing | 31183 |
| 212310 Stone mining and quarrying | 21231 | 311911 Roasted nuts and peanut butter manufacturing | 311911 |
| 212320 Sand, gravel, clay, and refractory mining | 21232 | 311919 Other snack food manufacturing | 311919 |
| 212390 Other nonmetallic mineral mining | 21239 | 311920 Coffee and tea manufacturing | 31192 |
| 2130 Support activities for mining | | 311930 Flavoring syrup and concentrate manufacturing | 31193 |
| 213111 Drilling oil and gas wells | 213111 | 311941 Mayonnaise, dressing, and sauce manufacturing | 311941 |
| 213112 Support activities for oil and gas operations | 213112 | 311942 Spice and extract manufacturing | 311942 |
| 21311A Support activities for other mining | 213113-5 | 311990 All other food manufacturing | 31199 |
| UTILITIES | | 3121 Beverage manufacturing | |
| 2211 Power generation and supply | | 312110 Soft drink and ice manufacturing | 31211 |
| 2211A0 Power generation and supply | 2211 (1) | 312120 Breweries | 31212 |
| 2212 Natural gas distribution | | 312130 Wineries | 31213 |
| 221200 Natural gas distribution | 2212 | 312140 Distilleries | 31214 |
| 2213 Water, sewage and other systems | | 3122 Tobacco manufacturing | |
| 221300 Water, sewage and other systems | 2213 | 312210 Tobacco stemming and redrying | 31221 |
| CONSTRUCTION | | 312221 Cigarette manufacturing | 312221 |
| 2300 Construction | | 312229 Other tobacco product manufacturing | 312229 |
| 230000 Construction | 23 | 3130 Textile mills | |
| | | 313100 Fiber, yarn, and thread mills | 3131 |
| | | 313210 Broadwoven fabric mills | 31321 |
| | | 313220 Narrow fabric mills and schiffli embroidery | 31322 |
| | | 313230 Nonwoven fabric mills | 31323 |
| | | 313240 Knit fabric mills | 31324 |
| | | 313310 Textile and fabric finishing mills | 31331 |
| | | 313320 Fabric coating mills | 31332 |
| | | 3140 Textile product mills | |
| | | 314110 Carpet and rug mills | 31411 |
| | | 314120 Curtain and linen mills | 31412 |
| | | 314910 Textile bag and canvas mills | 31491 |
| | | 314992 Tire cord and tire fabric mills | 314992 |
| | | 31499A Other miscellaneous textile product mills | 314991, 314999 |
| | | 3150 Apparel manufacturing | |
| | | 315111 Sheer hosiery mills | 315111 |

Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes | Detailed industry code and title | Related 1997 NAICS codes | | |
|--|--|---|--|---|--------|
| 315119 Other hosiery and sock mills | 315119 | 325320 Pesticide and other agricultural chemical manufacturing | 32532 | | |
| 315190 Other apparel knitting mills | 31519 | 3254 Pharmaceutical and medicine manufacturing | | | |
| 315200 Cut and sew apparel manufacturing | 3152 | | 325400 Pharmaceutical and medicine manufacturing | 3254 | |
| 315900 Accessories and other apparel manufacturing | 3159 | 3255 Paint, coating, and adhesive manufacturing | | | |
| 3160 Leather and allied product manufacturing | | | 325510 Paint and coating manufacturing | 32551 | |
| 316100 Leather and hide tanning and finishing | 3161 | | 325520 Adhesive manufacturing | 32552 | |
| 316200 Footwear manufacturing | 3162 | 3256 Soap, cleaning compound, and toiletry manufacturing | | | |
| 316900 Other leather product manufacturing | 3169 | | 325611 Soap and other detergent manufacturing | 325611 | |
| 3210 Wood product manufacturing | | | 325612 Polish and other sanitation good manufacturing | 325612 | |
| | 321113 Sawmills | | 321113 | 325613 Surface active agent manufacturing | 325613 |
| | 321114 Wood preservation | | 321114 | 325620 Toilet preparation manufacturing | 32562 |
| | 32121A Veneer and plywood manufacturing | 321211-2 | 3259 Other chemical product and preparation manufacturing | | |
| | 32121B Engineered wood member and truss manufacturing | 321213-4 | | 325910 Printing ink manufacturing | 32591 |
| | 321219 Reconstituted wood product manufacturing | 321219 | | 325920 Explosives manufacturing | 32592 |
| | 321911 Wood windows and door manufacturing | 321911 | | 325991 Custom compounding of purchased resins | 325991 |
| | 321912 Cut stock, resawing lumber, and planing | 321912 | | 325992 Photographic film and chemical manufacturing | 325992 |
| | 321918 Other millwork, including flooring | 321918 | 325998 Other miscellaneous chemical product manufacturing | 325998 | |
| | 321920 Wood container and pallet manufacturing | 32192 | 3260 Plastics and rubber products manufacturing | | |
| 321991 Manufactured home, mobile home, manufacturing | 321991 | 326110 Plastics packaging materials, film and sheet | | 32611 | |
| 321992 Prefabricated wood building manufacturing | 321992 | 326120 Plastics pipe, fittings, and profile shapes | | 32612 | |
| 321999 Miscellaneous wood product manufacturing | 321999 | 326130 Laminated plastics plate, sheet, and shapes | | 32613 | |
| 3221 Pulp, paper, and paperboard mills | | 3261A0 Foam product manufacturing | | 32614, 32615 | |
| | 322110 Pulp mills | 326160 Plastics bottle manufacturing | | 32616 | |
| | 3221A0 Paper and paperboard mills | 326192 Resilient floor covering manufacturing | | 326192 | |
| 3222 Converted paper product manufacturing | | 32619A Plastics plumbing fixtures and all other plastics products | | 326191, 326199 | |
| | 322210 Paperboard container manufacturing | 326210 Tire manufacturing | | 32621 | |
| | 32222A Coated and laminated paper and packaging materials | 326220 Rubber and plastics hose and belting manufacturing | | 32622 | |
| | 32222B Coated and uncoated paper bag manufacturing | 326290 Other rubber product manufacturing | 32629 | | |
| | 322225 Flexible packaging foil manufacturing | 3270 Nonmetallic mineral product manufacturing | | | |
| | 322226 Surface-coated paperboard manufacturing | | 327111 Vitreous china plumbing fixture manufacturing | 327111 | |
| | 322231 Die-cut paper office supplies manufacturing | | 327112 Vitreous china and earthenware articles manufacturing | 327112 | |
| | 322232 Envelope manufacturing | | 327113 Porcelain electrical supply manufacturing | 327113 | |
| | 322233 Stationery and related product manufacturing | | 327121 Brick and structural clay tile manufacturing | 327121 | |
| | 322291 Sanitary paper product manufacturing | | 327122 Ceramic wall and floor tile manufacturing | 327122 | |
| 322299 All other converted paper product manufacturing | 32712A Clay refractory and other structural clay products | | 327123-4 | | |
| 3230 Printing and related support activities | | | 327125 Nonclay refractory manufacturing | 327125 | |
| | 32311A Commercial printing | | 327213 Glass container manufacturing | 327213 | |
| | 323116 Manifold business forms printing | | 32721A Glass and glass products, except glass containers | 327211-2, 327215 | |
| | 323117 Books printing | 327310 Cement manufacturing | 32731 | | |
| | 323118 Blankbook and looseleaf binder manufacturing | 327320 Ready-mix concrete manufacturing | 32732 | | |
| | 323121 Tradebinding and related work | 327331 Concrete block and brick manufacturing | 327331 | | |
| | 323122 Prepress services | 327332 Concrete pipe manufacturing | 327332 | | |
| 3240 Petroleum and coal products manufacturing | | 327390 Other concrete product manufacturing | 32739 | | |
| | 324110 Petroleum refineries | 327410 Lime manufacturing | 32741 | | |
| | 324121 Asphalt paving mixture and block manufacturing | 327420 Gypsum product manufacturing | 32742 | | |
| | 324122 Asphalt shingle and coating materials manufacturing | 327910 Abrasive product manufacturing | 32791 | | |
| | 324191 Petroleum lubricating oil and grease manufacturing | 327991 Cut stone and stone product manufacturing | 327991 | | |
| | 324199 All other petroleum and coal products manufacturing | 327992 Ground or treated minerals and earths manufacturing | 327992 | | |
| 3251 Basic chemical manufacturing | | 327993 Mineral wool manufacturing | 327993 | | |
| | 325110 Petrochemical manufacturing | 327999 Miscellaneous nonmetallic mineral products | 327999 | | |
| | 325120 Industrial gas manufacturing | 331A Iron and steel mills and manufacturing from purchased steel | | | |
| | 325130 Synthetic dye and pigment manufacturing | | 331111 Iron and steel mills | 331111 | |
| | 325180 Other basic inorganic chemical manufacturing | | 331112 Ferroalloy and related product manufacturing | 331112 | |
| 325190 Other basic organic chemical manufacturing | 331210 Iron, steel pipe and tube from purchased steel | | 33121 | | |
| | 331221 Rolled steel shape manufacturing | | 331221 | | |
| 3252 Resin, rubber, and artificial fibers manufacturing | | 331222 Steel wire drawing | 331222 | | |
| | 325211 Plastics material and resin manufacturing | 331B Nonferrous metal production and processing | | | |
| | 325212 Synthetic rubber manufacturing | | 331311 Alumina refining | 331311 | |
| | 325221 Cellulosic organic fiber manufacturing | | 331312 Primary aluminum production | 331312 | |
| 325222 Noncellulosic organic fiber manufacturing | 331314 Secondary smelting and alloying of aluminum | | 331314 | | |
| | 331315 Aluminum sheet, plate, and foil manufacturing | | 331315 | | |
| 3253 Agricultural chemical manufacturing | | 331316 Aluminum extruded product manufacturing | 331316 | | |
| | 325311 Nitrogenous fertilizer manufacturing | 331319 Other aluminum rolling and drawing | 331319 | | |
| | 325312 Phosphatic fertilizer manufacturing | 331411 Primary smelting and refining of copper | 331411 | | |
| | 325314 Fertilizer, mixing only, manufacturing | | | | |

Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes | Detailed industry code and title | Related 1997 NAICS codes |
|---|-----------------------------|---|-----------------------------|
| 331419 Primary nonferrous metal, except copper and aluminum..... | 331419 | 333295 Semiconductor machinery manufacturing..... | 333295 |
| 331421 Copper rolling, drawing, and extruding..... | 331421 | 333298 All other industrial machinery manufacturing..... | 333298 |
| 331422 Copper wire, except mechanical, drawing..... | 331422 | | |
| 331423 Secondary processing of copper..... | 331423 | 3333 Commercial and service industry machinery | |
| 331491 Nonferrous metal, except copper and aluminum, shaping..... | 331491 | 33331A Automatic vending, commercial laundry and drycleaning machinery..... | 333311-2 |
| 331492 Secondary processing of other nonferrous..... | 331492 | 333313 Office machinery manufacturing..... | 333313 |
| 3315 Foundries | | 333314 Optical instrument and lens manufacturing..... | 333314 |
| 331510 Ferrous metal foundries..... | 331510 | 333315 Photographic and photocopying equipment manufacturing..... | 333315 |
| 33152A Aluminum foundries..... | 331521, 331524 | 333319 Other commercial and service machinery manufacturing..... | 333319 |
| 33152B Nonferrous foundries, except aluminum..... | 331522, 331525, 331528 | | |
| 3321 Forging and stamping | | 3334 HVAC and commercial refrigeration equipment | |
| 332111 Iron and steel forging..... | 332111 | 333411 Air purification equipment manufacturing..... | 333411 |
| 332112 Nonferrous forging..... | 332112 | 333412 Industrial and commercial fan and blower manufacturing..... | 333412 |
| 332114 Custom roll forming..... | 332114 | 333414 Heating equipment, except warm air furnaces..... | 333414 |
| 33211A All other forging and stamping..... | 332115-7 | 333415 AC, refrigeration, and forced air heating..... | 333415 |
| 3322 Cutlery and handtool manufacturing | | 3335 Metalworking machinery manufacturing | |
| 332211 Cutlery and flatware, except precious, manufacturing..... | 332211 | 333511 Industrial mold manufacturing..... | 333511 |
| 332212 Hand and edge tool manufacturing..... | 332212 | 333512 Metal cutting machine tool manufacturing..... | 333512 |
| 332213 Saw blade and handsaw manufacturing..... | 332213 | 333513 Metal forming machine tool manufacturing..... | 333513 |
| 332214 Kitchen utensil, pot, and pan manufacturing..... | 332214 | 333514 Special tool, die, jig, and fixture manufacturing..... | 333514 |
| | | 333515 Cutting tool and machine tool accessory manufacturing..... | 333515 |
| | | 33351A Rolling mill and other metalworking machinery..... | 333516, 333518 |
| 3323 Architectural and structural metals manufacturing | | 3336 Turbine and power transmission equipment manufacturing | |
| 332311 Prefabricated metal buildings and components..... | 332311 | 333611 Turbine and turbine generator set units manufacturing..... | 333611 |
| 332312 Fabricated structural metal manufacturing..... | 332312 | 33361A Speed changers and mechanical power transmission equipment..... | 333612-3 |
| 332313 Plate work manufacturing..... | 332313 | 333618 Other engine equipment manufacturing..... | 333618 |
| 332321 Metal window and door manufacturing..... | 332321 | | |
| 332322 Sheet metal work manufacturing..... | 332322 | 3339 Other general purpose machinery manufacturing | |
| 332323 Ornamental and architectural metal work manufacturing..... | 332323 | 333911 Pump and pumping equipment manufacturing..... | 333911 |
| 3324 Boiler, tank, and shipping container manufacturing | | 333912 Air and gas compressor manufacturing..... | 333912 |
| 332410 Power boiler and heat exchanger manufacturing..... | 332410 | 333913 Measuring and dispensing pump manufacturing..... | 333913 |
| 332420 Metal tank, heavy gauge, manufacturing..... | 332420 | 333921 Elevator and moving stairway manufacturing..... | 333921 |
| 332430 Metal can, box, and other container manufacturing..... | 332430 | 333922 Conveyor and conveying equipment manufacturing..... | 333922 |
| | | 333923 Overhead cranes, hoists, and monorail systems..... | 333923 |
| 332A Ordnance and accessories manufacturing | | 333924 Industrial truck, trailer, and stacker manufacturing..... | 333924 |
| 33299A Ammunition manufacturing..... | 332992-3 | 333991 Power-driven handtool manufacturing..... | 333991 |
| 332994 Small arms manufacturing..... | 332994 | 333992 Welding and soldering equipment manufacturing..... | 333992 |
| 332995 Other ordnance and accessories manufacturing..... | 332995 | 333993 Packaging machinery manufacturing..... | 333993 |
| | | 333994 Industrial process furnace and oven manufacturing..... | 333994 |
| 332B Other fabricated metal product manufacturing | | 333995 Fluid power cylinder and actuator manufacturing..... | 333995 |
| 332500 Hardware manufacturing..... | 332500 | 333996 Fluid power pump and motor manufacturing..... | 333996 |
| 332600 Spring and wire product manufacturing..... | 332600 | 33399A Scales, balances, and miscellaneous general purpose machinery..... | 333997, 333999 |
| 332710 Machine shops..... | 332710 | | |
| 332720 Turned product and screw, nut, and bolt manufacturing..... | 332720 | 3341 Computer and peripheral equipment manufacturing | |
| 332811 Metal heat treating..... | 332811 | 334111 Electronic computer manufacturing..... | 334111 |
| 332812 Metal coating and nonprecious engraving..... | 332812 | 334112 Computer storage device manufacturing..... | 334112 |
| 332813 Electroplating, anodizing, and coloring metal..... | 332813 | 334113 Computer terminal manufacturing..... | 334113 |
| 332910 Metal valve manufacturing..... | 332910 | 334119 Other computer peripheral equipment manufacturing..... | 334119 |
| 332991 Ball and roller bearing manufacturing..... | 332991 | | |
| 332996 Fabricated pipe and pipe fitting manufacturing..... | 332996 | 334A Audio, video, and communications equipment manufacturing | |
| 332997 Industrial pattern manufacturing..... | 332997 | 334210 Telephone apparatus manufacturing..... | 334210 |
| 332998 Enameled iron and metal sanitary ware manufacturing..... | 332998 | 334220 Broadcast and wireless communications equipment..... | 334220 |
| 332999 Miscellaneous fabricated metal product manufacturing..... | 332999 | 334290 Other communications equipment manufacturing..... | 334290 |
| | | 334300 Audio and video equipment manufacturing..... | 334300 |
| 3331 Agriculture, construction, and mining machinery | | 3344 Semiconductor and electronic component manufacturing | |
| 333111 Farm machinery and equipment manufacturing..... | 333111 | 334411 Electron tube manufacturing..... | 334411 |
| 333112 Lawn and garden equipment manufacturing..... | 333112 | 334413 Semiconductors and related device manufacturing..... | 334413 |
| 333120 Construction machinery manufacturing..... | 333120 | 33441A All other electronic component manufacturing..... | 334412, 334414-9 |
| 333131 Mining machinery and equipment manufacturing..... | 333131 | | |
| 333132 Oil and gas field machinery and equipment..... | 333132 | 3345 Electronic instrument manufacturing | |
| | | 334510 Electromedical apparatus manufacturing..... | 334510 |
| 3332 Industrial machinery manufacturing | | 334511 Search, detection, and navigation instruments..... | 334511 |
| 333210 Sawmill and woodworking machinery..... | 333210 | 334512 Automatic environmental control manufacturing..... | 334512 |
| 333220 Plastics and rubber industry machinery..... | 333220 | 334513 Industrial process variable instruments..... | 334513 |
| 333291 Paper industry machinery manufacturing..... | 333291 | 334514 Totalizing fluid meters and counting devices..... | 334514 |
| 333292 Textile machinery manufacturing..... | 333292 | 334515 Electricity and signal testing instruments..... | 334515 |
| 333293 Printing machinery and equipment manufacturing..... | 333293 | | |
| 333294 Food product machinery manufacturing..... | 333294 | | |

Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes | Detailed industry code and title | Related 1997 NAICS codes |
|---|--------------------------|--|--------------------------|
| 334516 Analytical laboratory instrument manufacturing | 334516 | 337212 Custom architectural woodwork and millwork | 337212 |
| 334517 Irradiation apparatus manufacturing | 334517 | 337214 Office furniture, except wood, manufacturing | 337214 |
| 33451A Watch, clock, and other measuring and controlling device manufacturing | 334518-9 | 337215 Showcases, partitions, shelving, and lockers | 337215 |
| 3346 Magnetic media manufacturing and reproducing | | 337910 Mattress manufacturing | 33791 |
| 334611 Software reproducing | 334611 | 337920 Blind and shade manufacturing | 33792 |
| 334612 Audio and video media reproduction | 334612 | 3391 Medical equipment and supplies manufacturing | |
| 334613 Magnetic and optical recording media manufacturing | 334613 | 339111 Laboratory apparatus and furniture manufacturing | 339111 |
| 3351 Electric lighting equipment manufacturing | | 339112 Surgical and medical instrument manufacturing | 339112 |
| 335110 Electric lamp bulb and part manufacturing | 33511 | 339113 Surgical appliance and supplies manufacturing | 339113 |
| 335120 Lighting fixture manufacturing | 33512 | 339114 Dental equipment and supplies manufacturing | 339114 |
| 3352 Household appliance manufacturing | | 339115 Ophthalmic goods manufacturing | 339115 |
| 335211 Electric housewares and household fan manufacturing | 335211 | 339116 Dental laboratories | 339116 |
| 335212 Household vacuum cleaner manufacturing | 335212 | 3399 Other miscellaneous manufacturing | |
| 335221 Household cooking appliance manufacturing | 335221 | 339910 Jewelry and silverware manufacturing | 33991 |
| 335222 Household refrigerator and home freezer manufacturing | 335222 | 339920 Sporting and athletic goods manufacturing | 33992 |
| 335224 Household laundry equipment manufacturing | 335224 | 339930 Doll, toy, and game manufacturing | 33993 |
| 335228 Other major household appliance manufacturing | 335228 | 339940 Office supplies, except paper, manufacturing | 33994 |
| 3353 Electrical equipment manufacturing | | 339950 Sign manufacturing | 33995 |
| 335311 Electric power and specialty transformer manufacturing | 335311 | 339991 Gasket, packing, and sealing device manufacturing | 339991 |
| 335312 Motor and generator manufacturing | 335312 | 339992 Musical instrument manufacturing | 339992 |
| 335313 Switchgear and switchboard apparatus manufacturing | 335313 | 339994 Broom, brush, and mop manufacturing | 339994 |
| 335314 Relay and industrial control manufacturing | 335314 | 339995 Burial casket manufacturing | 339995 |
| 3359 Other electrical equipment and component manufacturing | | 33999A Buttons, pins, and all other miscellaneous manufacturing | 339993, 339999 |
| 335911 Storage battery manufacturing | 335911 | WHOLESALE TRADE | |
| 335912 Primary battery manufacturing | 335912 | 4200 Wholesale trade | |
| 335921 Fiber optic cable manufacturing | 335921 | 420000 Wholesale trade | 42 |
| 335929 Other communication and energy wire manufacturing | 335929 | RETAIL TRADE | |
| 335930 Wiring device manufacturing | 33593 | 4A00 Retail trade | |
| 335991 Carbon and graphite product manufacturing | 335991 | 4A0000 Retail trade | 44, 45 |
| 335999 Miscellaneous electrical equipment manufacturing | 335999 | TRANSPORTATION AND WAREHOUSING, EXCLUDING POSTAL SERVICE | |
| 3361 Motor vehicle manufacturing | | 4810 Air transportation | |
| 336110 Automobile and light truck manufacturing | 33611 | 481000 Air transportation | 481 |
| 336120 Heavy duty truck manufacturing | 33612 | 4820 Rail transportation | |
| 336A Motor vehicle body, trailer, and parts manufacturing | | 482000 Rail transportation | 482 |
| 336211 Motor vehicle body manufacturing | 336211 | 4830 Water transportation | |
| 336212 Truck trailer manufacturing | 336212 | 483000 Water transportation | 483 |
| 336213 Motor home manufacturing | 336213 | 4840 Truck transportation | |
| 336214 Travel trailer and camper manufacturing | 336214 | 484000 Truck transportation | 484 |
| 336300 Motor vehicle parts manufacturing | 3363 | 4850 Transit and ground passenger transportation | |
| 3364 Aerospace product and parts manufacturing | | 485A00 Transit and ground passenger transportation | 485 (1) |
| 336411 Aircraft manufacturing | 336411 | 4860 Pipeline transportation | |
| 336412 Aircraft engine and engine parts manufacturing | 336412 | 486000 Pipeline transportation | 486 |
| 336413 Other aircraft parts and equipment | 336413 | 48A0 Scenic and sightseeing transportation and support activities for transportation | |
| 336414 Guided missile and space vehicle manufacturing | 336414 | 48A000 Scenic and sightseeing transportation and support activities for transportation | 487, 488 |
| 33641A Propulsion units and parts for space vehicles and guided missiles | 336415, 336419 | 4920 Couriers and messengers | |
| 336B Other transportation equipment manufacturing | | 492000 Couriers and messengers | 492 |
| 336500 Railroad rolling stock manufacturing | 3365 | 4930 Warehousing and storage | |
| 336611 Ship building and repairing | 336611 | 493000 Warehousing and storage | 493 |
| 336612 Boat building | 336612 | INFORMATION | |
| 336991 Motorcycle, bicycle, and parts manufacturing | 336991 | 5111 Newspaper, book, and directory publishers | |
| 336992 Military armored vehicles and tank parts manufacturing | 336992 | 511110 Newspaper publishers | 51111 |
| 336999 All other transportation equipment manufacturing | 336999 | 511120 Periodical publishers | 51112 |
| 3370 Furniture and related product manufacturing | | | |
| 337110 Wood kitchen cabinet and countertop manufacturing | 33711 | | |
| 337121 Upholstered household furniture manufacturing | 337121 | | |
| 337122 Nonupholstered wood household furniture manufacturing | 337122 | | |
| 337124 Metal household furniture manufacturing | 337124 | | |
| 337127 Institutional furniture manufacturing | 337127 | | |
| 33712A Other household and institutional furniture | 337125, 337129 | | |
| 337211 Wood office furniture manufacturing | 337211 | | |

Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes | Detailed industry code and title | Related 1997 NAICS codes |
|--|---------------------------|---|--------------------------|
| 511130 Book publishers | 51113 | 5414 Specialized design services | |
| 5111A0 Database, directory, and other publishers | 51114, 51119 | 541400 Specialized design services | 5414 |
| 5112 Software publishers | | 5415 Computer systems design and related services | |
| 511200 Software publishers | 5112 | 541511 Custom computer programming services | 541511 |
| 5120 Motion picture and sound recording industries | | 541512 Computer systems design services | 541512 |
| 512100 Motion picture and video industries | 5121 | 54151A Other computer related services, including facilities management | 541513, 541519 |
| 512200 Sound recording industries | 5122 | 5416 Management and technical consulting services | |
| 5131 Radio and television broadcasting | | 541610 Management consulting services | 54161 |
| 513100 Radio and television broadcasting | 5131 | 5416A0 Environmental and other technical consulting services | 54162, 54169 |
| 5132 Cable networks and program distribution | | 5417 Scientific research and development services | |
| 513200 Cable networks and program distribution | 5132 | 541700 Scientific research and development services | 5417 |
| 5133 Telecommunications | | 5418 Advertising and related services | |
| 513300 Telecommunications | 5133 | 541800 Advertising and related services | 5418 |
| 5141 Information services | | 5419 Other professional and technical services | |
| 514100 Information services | 5141 | 541920 Photographic services | 54192 |
| 5142 Data processing services | | 541940 Veterinary services | 54194 |
| 514200 Data processing services | 5142 | 5419A0 All other miscellaneous professional and technical services | 54191, 54193, 54199 |
| FINANCE AND INSURANCE | | MANAGEMENT OF COMPANIES AND ENTERPRISES | |
| 52A0 Monetary authorities, credit intermediation and related activities | | 5500 Management of companies and enterprises | |
| 52A000 Monetary authorities and depository credit intermediation | 521, 5221 | 550000 Management of companies and enterprises | 55 |
| 522A00 Nondepository credit intermediation and related activities | 5222, 5223 | ADMINISTRATIVE AND WASTE MANGEMENT SERVICES | |
| 5230 Securities, commodity contracts, investments | | 5613 Employment services | |
| 523000 Securities, commodity contracts, investments | 523 | 561300 Employment services | 5613 |
| 5240 Insurance carriers and related activities | | 5615 Travel arrangement and reservation services | |
| 524100 Insurance carriers | 5241 | 561500 Travel arrangement and reservation services | 5615 |
| 524200 Insurance agencies, brokerages, and related | 5242 | 561A All other administrative and support services | |
| 5250 Funds, trusts, and other financial vehicles | | 561100 Office administrative services | 5611 |
| 525000 Funds, trusts, and other financial vehicles | 525 | 561200 Facilities support services | 5612 |
| REAL ESTATE AND RENTAL AND LEASING | | 561400 Business support services | 5614 |
| 5310 Real estate | | 561600 Investigation and security services | 5616 |
| 531000 Real estate | 531 | 561700 Services to buildings and dwellings | 5617 |
| S008 Owner-occupied dwellings | | 561900 Other support services | 5619 |
| S00800 Owner-occupied dwellings | | 5620 Waste management and remediation services | |
| 5321 Automotive equipment rental and leasing | | 562000 Waste management and remediation services | 562 |
| 532100 Automotive equipment rental and leasing | 5321 | EDUCATIONAL SERVICES | |
| 532A Consumer goods and general rental centers | | 6100 Educational services | |
| 532A00 General and consumer goods rental except video tapes and discs | 53221, 53222, 53229, 5323 | 611100 Elementary and secondary schools | 6111 |
| 532230 Video tape and disc rental | 53223 | 611A00 Colleges, universities, and junior colleges | 6112, 6113 |
| 5324 Machinery and equipment rental and leasing | | 611B00 Other educational services | 6114, 6115, 6116, 6117 |
| 532400 Machinery and equipment rental and leasing | 5324 | HEALTH CARE AND SOCIAL ASSISTANCE | |
| 5330 Lessors of nonfinancial intangible assets | | 6210 Ambulatory health care services | |
| 533000 Lessors of nonfinancial intangible assets | 533 | 621A00 Offices of physicians, dentists, and other health practitioners | 6211, 6212, 6213 |
| PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES | | 621600 Home health care services | 6216 |
| 5411 Legal services | | 621B00 Other ambulatory health care services | 6214, 6215, 6219 |
| 541100 Legal services | 5411 | 6220 Hospitals | |
| 5412 Accounting and bookkeeping services | | 622000 Hospitals | 622 |
| 541200 Accounting and bookkeeping services | 5412 | 6230 Nursing and residential care facilities | |
| 5413 Architectural and engineering services | | 623000 Nursing and residential care facilities | 623 |
| 541300 Architectural and engineering services | 5413 | 6240 Social assistance | |
| | | 624400 Child day care services | 6244 |

Appendix B.—RIMS II Detailed Industries

| Detailed industry code and title | Related 1997 NAICS codes |
|---|---|
| 624A00 Social assistance, except child day care services | 6241, 6242, 6243 |
| ARTS, ENTERTAINMENT, AND RECREATION | |
| 71A0 Performing arts, spectator sports, museums, zoos, and parks | |
| 711100 Performing arts companies | 7111 |
| 711200 Spectator sports | 7112 |
| 711A00 Promoters of performing arts and sports and agents for public figures | 7113, 7114 |
| 711500 Independent artists, writers, and performers | 7115 |
| 712000 Museums, historical sites, zoos, and parks | 712 |
| 7130 Amusements, gambling, and recreation | |
| 713940 Fitness and recreational sports centers | 71394 |
| 713950 Bowling centers | 71395 |
| 713A00 Other amusement, gambling, and recreation industries | 7131, 7132, 71391, 71392, 71393, 71399 |
| ACCOMMODATION AND FOOD SERVICES | |
| 7210 Accommodation | |
| 7211A0 Hotels and motels, including casino hotels | 72111, 72112 |
| 721A00 Other accommodations | 72119, 7212, 7213 |
| 7220 Food services and drinking places | |
| 722000 Food services and drinking places | 722 |
| OTHER SERVICES, EXCEPT PUBLIC ADMINISTRATION | |
| 8111 Automotive repair and maintenance | |
| 8111A0 Automotive repair and maintenance, except car washes... | 81111, 81112, 811191, 811198 |
| 811192 Car washes | 811192 |
| 811A Electronic, commercial, and household goods repair | |
| 811200 Electronic equipment repair and maintenance | 8112 |
| 811300 Commercial machinery repair and maintenance | 8113 |
| 811400 Household goods repair and maintenance | 8114 |
| 8120 Personal and laundry services | |
| 812100 Personal care services | 8121 |
| 812200 Death care services | 8122 |
| 812300 Drycleaning and laundry services | 8123 |
| 812900 Other personal services | 8129 |
| 813A Religious, grantmaking and giving, and social advocacy organizations | |
| 813100 Religious organizations | 8131 |
| 813A00 Grantmaking and giving and social advocacy organizations | 8132, 8133 |
| 813B Civic, social, professional and similar organizations | |
| 813B00 Civic, social, professional and similar organizations | 8134, 8139 |
| SPECIAL INDUSTRIES | |
| S001 Federal and state and local government enterprises | |
| 491000 Postal service | 491 |
| S00A00 Other government enterprises | |
| S002 Households | |
| H00000 Households | |

1. Includes Federal Government enterprises.

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Appendix C.—RIMS II Industry Aggregations

| Aggregate industry code and title | | RIMS II detailed industry codes ¹ |
|--|--|--|
| Agriculture, forestry, fishing, and hunting | | |
| 1 | Crop and animal production..... | 1111A0-112A00 |
| 2 | Forestry, fishing, and related activities..... | 113A00-115000 |
| Mining | | |
| 3 | Oil and gas extraction..... | 211000 |
| 4 | Mining, except oil and gas..... | 212100-212390 |
| 5 | Support activities for mining..... | 213111-21311A |
| Utilities* | | |
| 6 | Utilities*..... | 2211A0-221300 |
| Construction | | |
| 7 | Construction..... | 230000 |
| Manufacturing | | |
| 8 | Wood product manufacturing..... | 321113-321999 |
| 9 | Nonmetallic mineral product manufacturing..... | 327111-327999 |
| 10 | Primary metal manufacturing..... | 331111-33152B |
| 11 | Fabricated metal product manufacturing..... | 332111-332999 |
| 12 | Machinery manufacturing..... | 333111-33399A |
| 13 | Computer and electronic product manufacturing..... | 334111-334613 |
| 14 | Electrical equipment and appliance manufacturing..... | 335110-335999 |
| 15 | Motor vehicle, body, trailer, and parts manufacturing..... | 336110-336300 |
| 16 | Other transportation equipment manufacturing..... | 336411-336999 |
| 17 | Furniture and related product manufacturing..... | 337110-337920 |
| 18 | Miscellaneous manufacturing..... | 339111-33999A |
| 19 | Food, beverage, and tobacco product manufacturing..... | 311111-312229 |
| 20 | Textile and textile product mills..... | 313100-31499A |
| 21 | Apparel, leather, and allied product manufacturing..... | 315111-316900 |
| 22 | Paper manufacturing..... | 322110-322299 |
| 23 | Printing and related support activities..... | 32311A-323122 |
| 24 | Petroleum and coal products manufacturing..... | 324110-324199 |
| 25 | Chemical manufacturing..... | 325110-325998 |
| 26 | Plastics and rubber products manufacturing..... | 326110-326290 |
| Wholesale trade | | |
| 27 | Wholesale trade..... | 420000 |
| Retail trade | | |
| 28 | Retail trade..... | 4A0000 |
| Transportation and warehousing* | | |
| 29 | Air transportation..... | 481000 |
| 30 | Rail transportation..... | 482000 |
| 31 | Water transportation..... | 483000 |
| 32 | Truck transportation..... | 484000 |
| 33 | Transit and ground passenger transportation*..... | 485A00 |
| 34 | Pipeline transportation..... | 486000 |
| 35 | Other transportation and support activities*..... | 48A000-492000, 491000 |
| 36 | Warehousing and storage..... | 493000 |

Appendix C.—RIMS II Industry Aggregations

| Aggregate industry code and title | RIMS II detailed industry codes ¹ |
|--|--|
| Information | |
| 37 Publishing including software | 511110-511200 |
| 38 Motion picture and sound recording industries | 512100-512200 |
| 39 Broadcasting and telecommunications | 513100-513300 |
| 40 Information and data processing services | 514100-514200 |
| Finance and insurance | |
| 41 Federal Reserve banks, credit intermediation and related services | 52A000-522A00 |
| 42 Securities, commodity contracts, investments | 523000 |
| 43 Insurance carriers and related activities | 524100-524200 |
| 44 Funds, trusts, and other financial vehicles | 525000 |
| Real estate and rental and leasing | |
| 45 Real estate | 531000, S00800 |
| 46 Rental and leasing services and lessors of intangible assets | 532100-533000 |
| Professional, scientific, and technical services | |
| 47 Professional, scientific, and technical services | 541100-5419A0 |
| Management of companies and enterprises | |
| 48 Management of companies and enterprises | 550000 |
| Administrative and waste management services | |
| 49 Administrative and support services | 561300-561900 |
| 50 Waste management and remediation services | 562000 |
| Educational services | |
| 51 Educational services | 611100-611B00 |
| Health care and social assistance | |
| 52 Ambulatory health care services | 621A00-621B00 |
| 53 Hospitals and nursing and residential care facilities | 622000-623000 |
| 54 Social assistance | 624400-624A00 |
| Arts, entertainment, and recreation | |
| 55 Performing arts, museums, and related activities | 711100-712000 |
| 56 Amusements, gambling, and recreation | 713940-713A00 |
| Accommodation and food services | |
| 57 Accommodation | 7211A0-721A00 |
| 58 Food services and drinking places | 722000 |
| Other services* | |
| 59 Other services* | 8111A0-813B00, S00A00 |
| Households | |
| 60 Households | H00000 |

* Includes Federal Government enterprises.
1. Appendix B identifies the RIMS II detailed industry codes.

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Appendix D.—RIMS II Industry Groups

| Group industry code and title | RIMS II detailed industry codes ¹ | RIMS II aggregate industry codes ² |
|--|--|---|
| 1 Agriculture, forestry, fishing, and hunting..... | 1111A0-115000 | 1-2 |
| 2 Mining..... | 211000-21311A | 3-5 |
| 3 Utilities*..... | 2211A0-221300 | 6 |
| 4 Construction..... | 230000 | 7 |
| 5 Manufacturing..... | 311111-33999A | 8-26 |
| 6 Wholesale trade..... | 420000 | 27 |
| 7 Retail trade..... | 4A0000 | 28 |
| 8 Transportation and warehousing*..... | 481000-493000 | 29-36 |
| 9 Information..... | 511110-514200 | 37-40 |
| 10 Finance and insurance..... | 52A000-525000 | 41-44 |
| 11 Real estate and rental and leasing..... | 531000-533000 | 45-46 |
| 12 Professional, scientific, and technical services..... | 541100-5419A0 | 47 |
| 13 Management of companies and enterprises..... | 560000 | 48 |
| 14 Administrative and waste management services..... | 561300-562000 | 49-50 |
| 15 Educational services..... | 611100-611B00 | 51 |
| 16 Health care and social assistance..... | 621A00-624A00 | 52-54 |
| 17 Arts, entertainment, and recreation..... | 711100-713A00 | 55-56 |
| 18 Accommodation and food services..... | 7211A0-722000 | 57-58 |
| 19 Other services*..... | 8111A0-813B00, S00A00 | 59 |
| 20 Households..... | H00000 | 60 |

* Includes Federal Government enterprises.

1. Appendix B identifies the RIMS II detailed industry codes.

2. Appendix C identifies the RIMS II aggregate industry codes.

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| Class of Property | Items Included |
|---------------------------|---|
| <i>3-year property</i> | Tractor units, racehorses over two years old, and horses over 12 years old when placed in service |
| <i>5-year property</i> | Automobiles, taxis, buses, trucks, computers and peripheral equipment, office machinery (faxes, copiers, calculators etc.), and any property used in research and experimentation. Also includes breeding and dairy cattle. |
| <i>7-year property</i> | Office furniture and fixtures, and any property that has not been designated as belonging to another class. |
| <i>10-year property</i> | Vessels, barges, tugs, similar water transportation equipment, single-purpose agricultural or horticultural structures, and trees or vines bearing fruit or nuts. |
| <i>15-year property</i> | Depreciable improvements to land such as shrubbery, fences, roads, and bridges. |
| <i>20-year property</i> | Farm buildings that are not agricultural or horticultural structures. |
| <i>27.5-year property</i> | Residential rental property. |
| <i>39-year property</i> | Nonresidential real estate, including home offices. (Note that the value of land may not be depreciated.) |

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Application Process

The Center was founded as an Illinois corporation in June of 2008 for the intended purpose of working with private entities and state and local government organizations to promote economic growth, improve regional productivity and job creation, increase domestic capital investment, develop economic research and consultation services for foreign national investors, and serve as Chicagoland's designated Regional Center.

The foreign investor shall have the opportunity to invest in an approved project, while keeping in line with the rules/regulations outlined by title 8, section 204.6 of the Code of Federal Regulations, the Department of Homeland Security's Citizenship and Immigration Services (USCIS). In addition, the investor must comply with the other Federal statutes, in regards to investments from foreign investors into the United States. See **Exhibit 103** for U.S. and Foreign Banks Compliance with the US Patriot Act.

The following outlines the general steps for participation in the business opportunity. As they occur, some of the steps may take place in tandem or in an order somewhat different from what is outlined below. The application cycle may take 30 to 120 days, or longer depending on the business, the industry and the required due diligence. The application cycle typically includes, but is not limited to, the following steps:

- Prior to the release of any confidential information regarding the investment opportunity, the prospective foreign investor shall sign a non-disclosure agreement.
- Once the investor has expressed interest in the project, he/she will be required to complete an Investor Questionnaire.
- Once the Investor Questionnaire is completed and submitted to the Center for review, the Center will confirm with the appropriate government agencies to check for persons at risk or Black Listed by the government.

- Prospective investors shall receive a comprehensive investment package, outlining the Center's current project(s) approved by the Board of Directors for their consideration. The management team will be available to answer any questions/concerns that the investor may have in regards to the proposed projects to gain a thorough understanding of the business plan as well as the general immigration process.
- The investor shall sign Subscription Agreements and other agreements and deposit the required capital investment of a minimum of \$530,000 into two interest bearing escrow account before the investor's I-526 immigration petition is submitted to the USCIS. See **Exhibit 105-106** for I-526 Immigrant Petition application and instructions. The initial investment of \$500,000 will be deposited into an escrow account to be dispersed to the subject Company, upon approval of the I-526. The remaining \$30,000, will be deposited into a separate escrow account.
- The Center's management team shall compile any documents created by the Center as required by the USCIS for approval of the investor's I-526. These documents will include the subscription agreement, business plan, operating agreements, and any other documents necessary for the proper filing of an I-526 Immigrant Petition by Alien Entrepreneur.
- The investor shall hire a legal firm, specializing in immigration law, shall thoroughly review the foreign investor's application prior to submitting it to the USCIS. Each investor can choose an attorney of his/her choice to file an I-526 petition with the USCIS, and the Center will cooperate with the attorney as long as the investor qualifies for the project. Furthermore, before any application is submitted, the application must be given to the immigration attorneys for the regional center for final review.
- Additionally, the investor must prove that the funds for the investment derive from a lawful source. Lawful sources of funds include: profits from the sales of a property, stocks or bonds, profits from business, business transactions, gifts, and inheritances. To prove the source of investment funds, USCIS may require tax returns, bank records, proof

of ownership in any businesses, financial statements for each business and business licenses, and other documents showing legitimate source of funds.

- In the event that the investor's Immigrant Petition (I-526) is denied, the investor's full 500,000 dollar investment plus 20,000 dollars shall be retrieved from the escrow accounts and returned to the investor, less any interest accrued and miscellaneous expenses. Any proceeds from interest accrued while the investors funds are held in escrow shall be used to pay for fees accumulated by the escrow agent. One-half of any remaining proceeds from interest accrued, after the escrow agent has been paid his/her fees, shall be distributed to the investor; the other half of the interest proceeds after the escrow agent has been paid shall be retained by the Center for its time and effort incurred in the application process of the potential foreign investor. However, prior to returning the funds to the investor, each investor will be granted a 90 day period to reapply for their Immigrant Petition and make attempt to resolve or fulfill any missing documents or address any concerns the USCIS may have that can potentially overturn their I-526 denial.

- In the event that the foreign investor's I-526 is approved by the USCIS but is then denied by the relevant U.S. Consulate abroad, the Center shall have already released the funds to the subject Company. In this event, the Center will provide the investor with two options: (1) The investor can chose to maintain their investment in the subject company, for the duration of five years as part of the investors investment portfolio, or (2) the investor shall grant the subject Company a period of 120 days to repay the investor their investment while using the 120 days to find an alternative investor to replace the foreign investors anticipated funds.

- Ninety days prior to the two-year anniversary of the investor's I-526 approval, the Center's management team shall use its best efforts to assist the investor with filing the required I-829 petition, as well as provide the investor with the verifying documentation

for direct and indirect job creation. When filing for the I-829, the investor must also show that the subject Company continued to pursue the business plan that was presented to the USCIS with the investor's I-526 petition. The I-829 removes the temporary conditions of legal permanent residence. The Center plans to enlist Dr. Shahram to assist with these economic impact reports.

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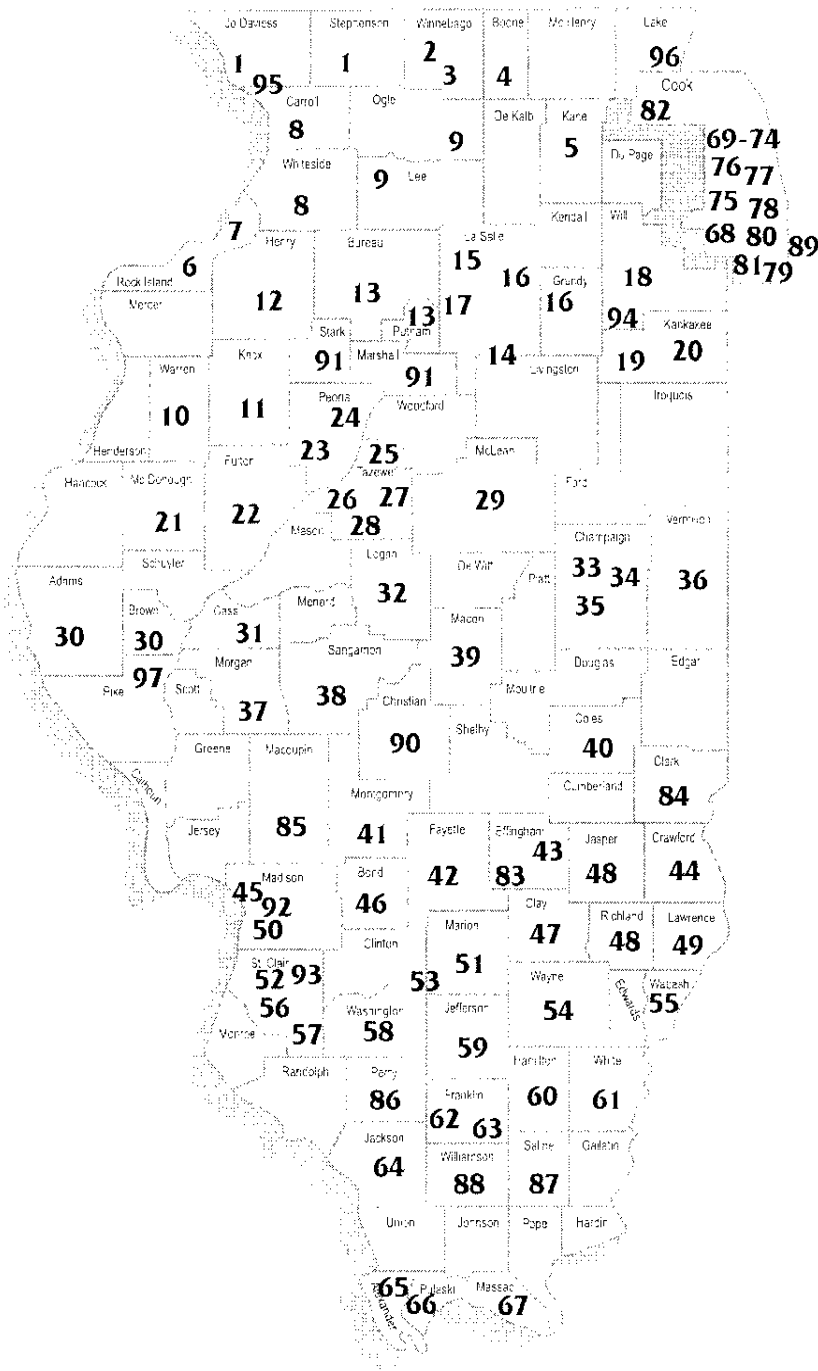
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- Danville/Tilton/Vermilion County (36)
- Decatur/Macon County (39)
- Des Plaines River Valley (18)
- Dixon/Lee County/Ogle County (9)
- East Peoria (26)
- East St. Louis/Washington Park (52)
- Effingham/Effingham County (43)
- Elgin (5)
- Fairfield/Wayne County (54)
- Flora/Clay County (47)
- Ford Heights/Sauk Village (89)
- Freeport/Stephenson County/Jo Daviess County (1)
- Galesburg (11)
- Gateway Commerce Center (92)
- Greenville/Smithboro (46)
- Harvey/Phoenix/Hazel Crest (81)
- Hoffman Estates (82)
- Illinois Valley (17)
- Jackson County (64)
- Jacksonville/Morgan County (37)
- Jo-Carroll (95)
- Joliet Arsenal (94)
- Kankakee County (Manteno) (19)
- Kankakee River Valley (20)
- Kewanee (12)
- Lawrenceville/Lawrence County (49)
- Lincoln/Logan County (32)
- Macomb/McDonough County (21)
- Macoupin County (85)
- Marshall County/Stark County (91)
- Massac County (67)
- Maywood (76)
- McCook/Hodgkins (68)
- McLeansboro/Hamilton County (60)
- Mendota (15)
- Monmouth (10)
- Montgomery County (41)
- Morton (27)
- Mound City/Pulaski County (66)
- Mt. Carmel/Wabash County (55)
- Mt. Vernon/Jefferson County (59)
- Nashville/Washington County (58)
- Olney/Richland County/Jasper County (48)
- Ottawa/LaSalle County/Grundy County (16)
- Pekin/Tazewell County (28)
- Peoria (24)
- Perry County (86)
- Quad Cities (7)
- Quincy/Adams County/Brown County (30)
- Rantoul (33)
- Riverbend (45)
- Robinson/Crawford County (44)
- Rockford (3)
- Rock Island (6)
- Salem/Marion (51)
- Saline County (87)
- South Beloit/Rockton/Winnebago County (2)
- Southwestern Madison County (50)
- Springfield (38)
- St. Clair County Mid America (93)
- Streator Area (14)
- Summit/Bedford Park (75)
- Taylorville/Christian County (90)
- Urbana (34)
- Vandalia/Fayette County (42)
- Washington (25)
- Waukegan/North Chicago (96)
- Western Illinois Economic Develop. Authority (97)
- West Frankfort (63)
- Whiteside County/Carroll County (8)
- Williamson County (88)

ILLINOIS ENTERPRISE ZONES

April 2007

- Altamont (83)
- American Bottoms (57)
- Bartonville/Peoria County (23)
- Beardstown (31)
- Belleville (56)
- Belvidere/Boone County (4)
- Benton/Franklin County (62)
- Bloomington/Normal/McLean County (29)
- Bureau/Putnam Area (13)
- Cairo/Alexander County (65)
- Cal-Sag (80)
- Calumet Region (78)
- Canton/Fulton County (22)

- Carmi/White County (61)
- Greater Centralia Area (53)
- Champaign/Champaign County (35)
- Chicago I (69)
- Chicago II (70)
- Chicago III (71)
- Chicago IV (72)
- Chicago V (73)
- Chicago VI (74)
- Chicago Heights (79)
- Cicero (77)
- Clark County (84)
- Coles County (40)



Contact us

Chinese

English

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Visitor Application

Healthplex is providing dynamic business opportunities in the growing China Market.

Exhibitor Application

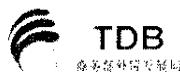
Approved and supported by Ministry of Commerce of P.R.C and supported by renowned organizations such as WHO, State Administration of TCM, NPA, KHSA etc., Healthplex is an influential health products expo in China. It has been held for two sessions and now it has become a very important trading platform to link international enterprises and professional traders in the health industry.



China Chamber of Commerce for Import & Export of Medicines & Health Products

The last Healthplex in 2007 saw a number of 130 companies from over 20 countries and attracted nearly 5,000 high-quality buyers. The event has grown steadily year-on-year placing it firmly as the must-attend event in the health calendar in China.

Healthplex constantly responds to the market and offers the perfect forum for suppliers and customers to meet and do business. In the last edition customers were able to see a wide range of products from suppliers from all over the world.



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High level conferences will offer unique networking opportunities, commercial and regulator information, insights into China market, new innovations and future developments in China.

The largest exhibition of its kind in China

Now in its 3rd year, Healthplex is the largest exhibition of its kind in China to focus on health industry. Healthplex was a major success with attendees who had a direct interest in health products.

We look forward to seeing you there!

World Health Organization

UNEP



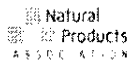
Hong Kong Trade Development Council



Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria



Department of International Cooperation, State Administration of Traditional Chinese Medicine, P.R.C



Natural Products Association



[China Chamber of Commerce for Import & Export Trade Development Bureau, Ministry of Commerce of P.R.C]

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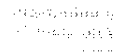
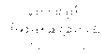


26 - 29 January 2009
Dubai International Convention & Exhibition Centre



EXHIBITOR PROFILE

-July08



The Arab Health Exhibition and Congress is the premier international healthcare event in the Middle East bringing together the world's leading healthcare manufacturers, tradesmen, organisations and professionals.

The 2008 edition of Arab Health achieved record success, showcasing products and services by nearly 2200 exhibitors representing over 65 countries and attracting nearly 50,000 participating professionals from healthcare sector all over the world.



Arab Health attracts a powerful blend of healthcare professionals and provides them with an excellent opportunity to assess and cater to the burgeoning healthcare sector in the Middle East, estimated to be worth over \$100 billion per year and increasing at an estimated annual rate of 16%. The show also provides its participants with access to established as well as emerging global markets outside the region.

With a long history spanning more than three decades and showcasing over 3900 product categories on exhibit, Arab Health forms the most preferred networking event for the healthcare industry in the world.



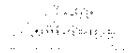
Astounding Results of the Arab Health 2008 Exhibitor Survey:

- 94% of exhibitors met or surpassed their overall objectives in terms of establishing contacts for future sales
- 91% of exhibitors stated that the number of visitors met or surpassed their expectations
- 95.5% of exhibitors stated that the quality of visitors met or surpassed their expectations
- 91% of exhibitors would recommend exhibiting at Arab Health

Arab Health has grown substantially over the last six years and the 2008 edition was 'venue-bound'. With Arab Health 2009 nearly sold out, there will be no additional space to accommodate the estimated 20-30% increase in demand we are forecasting for next year.



You can still benefit from the excellent sponsorship opportunities at Arab Health to ensure you stand out of the clutter. Write to ahsponsorship@ihrm.com for more details on enhancing your presence at Arab Health.



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 Press Release May
 2006



Trade Fairs in
 Düsseldorf
 International
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The 14th edition of **MEDICAL FAIR INDIA**, formerly named HOSPIMedica India, the most well-established fair in India for medical & hospital equipments and accessories, jointly organized by Messe Düsseldorf, Germany and its Indian subsidiary Messe Düsseldorf India Pvt. Ltd., ended successfully at Bombay Exhibition Center, Goregaon Mumbai.

India's only multi-faculty medical exhibition and conference was held from 14th to 16th March 2008 and attracted 170 exhibitors from 17 countries with group participations from China, Taiwan & Germany. Apart from a sizeable Indian participation, there was a huge international presence from Australia, Belgium, China, Germany, Hong Kong, Israel, Italy, Japan, Korea, Malaysia, Pakistan, Russia, Singapore, Spain, Taiwan, U.A.E., U.K and U.S.A. and India. Medical equipment manufacturers from all over the world showcased the latest innovations in the medical field. [View more](#)

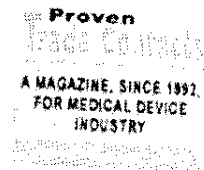
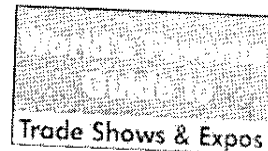
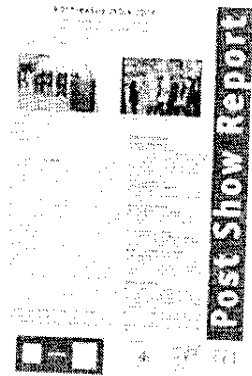
MEDICAL FAIR INDIA is the only event in India, which is truly multi-faculty in nature. There are various medical associations in India (catering to various disciplines like cardiology, orthopaedics, physicians, radiology, surgery, neurology etc) which conduct individual conferences.

Unfortunately, all these events are only restricted to that specific discipline only. But there are a large number of medical equipment and healthcare organisations, who are having a wide range of products, covering several disciplines / faculties.

To attend many such conferences, all over the country becomes highly inconvenient and uneconomical for them. For such organisations, a practical solution is to participate in **MEDICAL FAIR INDIA**, which is the only available business platform. It also serves as a meeting ground for medical professionals and the industry, to look at viable medical solutions. The concept is so popular and firmly entrenched, that this is now the oldest running medical exhibition, in India.

Some of the major associations and hospitals, which have been involved with **MEDICAL FAIR INDIA** from all our past shows, are mentioned below:

- A.I.I.M.S
- Cardiology Society of India
- Delhi Medical Association
- Delhi Ophthalmic Society
- E.S.I.S Corporation
- Escorts Heart Institute
- Indraprastha Apollo Hospital
- Maulana Azad Medical College
- N A.C.O
- Ministry of Health & Family Welfare



Free Business Information!

Sri Ramachandra Medical College

ARCON

Federation of Blood Banks

Leelawati Hospital

Apollo Hospitals, Hyderabad

Armed Forces Medical Services

I.C.R.C

Delhi Diabetes Research Centre

Association of Hospitals, Mumbai

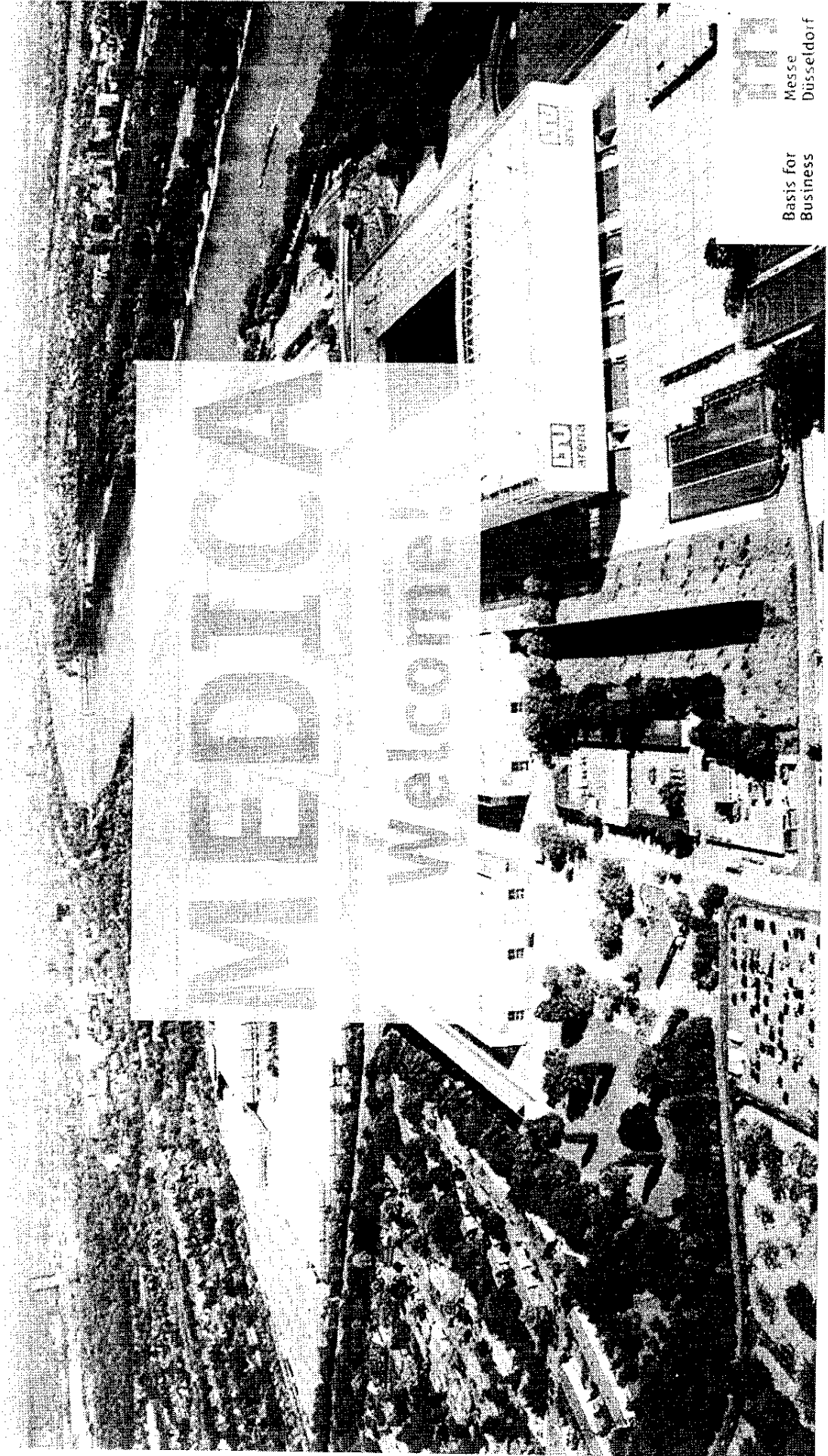
FORTIS Hospital

Global Hospital

www.indiafair.do
Wirtschaftsinformationen
Wirtschaftsschlagzeilen

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Basis for
Business

Messe
Düsseldorf

MEDICA The No. 1 medical trade fair worldwide



MEDICA: has long been the world's largest medical marketplace annually organised in November in Düsseldorf

The No. 1 for:

- Number of trade visitors
- Quality of trade visitors
- Internationality of visitors
- Number of exhibitors
- Quality of exhibitors
- Internationality of exhibitors
- Product spectrum

MEDICA: The annual highlight for the medical industry worldwide

Basis for
Business



MEDICA The No. 1 medical trade fair worldwide



■ **The three pillars of MEDICA**

- MEDICA – the trade fair with forums and theme parks
- MEDICA – the congress
- Der Deutsche Krankenhausstag (German Hospital Conference)

MEDICA: an incomparable range of products, congress themes, informative events and training seminars

Basis for
Business



Messe
Düsseldorf

MEDICA The No. 1 medical trade fair worldwide



■ How MEDICA is viewed by the visitors

- As an international meeting point for 136,000 trade visitors from virtually every state in the world with some 4,300 exhibitors from 80 countries
- As a business platform for worldwide contacts
- As a pool of knowledge for the further development of medical know-how
- As a trend barometer for product and market potential
- As a community event for experts from all continents

MEDICA: pure dynamics

Basis for
Business



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Düsseldorf

MEDICA The No. 1 medical trade fair worldwide



Visitor target groups for MEDICA

- Doctors in practice
- Hospital doctors
- Hospital management
- Hospital nursing staff
- Hospital technical managers
- Laboratory management
- Physiotherapists
- Medical trade
- Medical industry
- Assistants (hospital, doctors' surgeries, laboratories)
- Cost unit

MEDICA: concentrated on professionals in medical care

Basis for
Business



MEDICA The No. 1 medical trade fair worldwide



■ The significance of MEDICA - the trade fair

- Platform for an unparalleled, broad international range of medical products and services
- Product-orientated communications meeting point for all procedures in in-patient and out-patient care
- A reflection of worldwide competition, as a result of the internationality of the exhibitors

MEDICA – the trade fair: a comprehensive product spectrum – unique in the world

Basis for
Business



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Düsseldorf

MEDICA The No. 1 medical trade fair worldwide

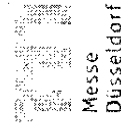


MEDICA - a reflection of the world market

- Virtually all market leaders participate
- MEDICA as a platform which demonstrates strength of performance
- A virtually complete picture of the medical-technical industry
- Strong presence of new companies and research establishments as a trend setter for new developments worldwide

MEDICA: in the focus of the global players

Basis for
Business

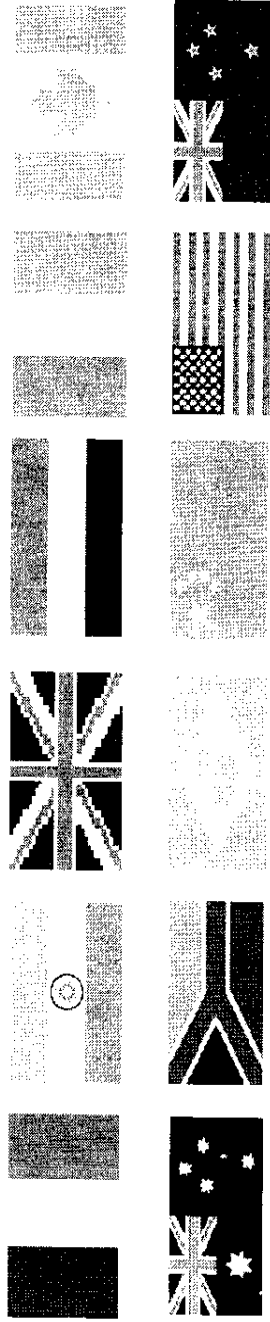


MEDICA The No. 1 medical trade fair worldwide



Group stands - a clear indication of international performance strength

- MEDICA as a base for some 25 national and 90 international pavilions
- From USA, Great Britain, France and Italy
- India, Brazil, China and Canada
- To New Zealand, Australia, Egypt and South Africa



MEDICA: The platform for the unparalleled presentation of national professionalism via group stands

Basis for
Business



MEDICA The No. 1 medical trade fair worldwide



- **MEDICA in Düsseldorf - for example, the marketplace for:**
 - German importers with American suppliers
 - Chinese buyers of large medical-technical equipment with German suppliers
 - Brazilian producers with Portuguese dealers
 - Saudi Arabian hospital owners with French manufacturers
 - Australian manufacturers with Italian importers
 - Mexican designers with Swedish suppliers
 - South African raw material suppliers with British consumers
 - American dealers with American manufacturers
 - Dutch delegations with Indian business partners

MEDICA: Meeting point for the medical community

Basis for
Business



MEDICA The No. 1 medical trade fair worldwide



The sectors covered by MEDICA

- Electromedicine / medical technology
- Laboratory technology
- Diagnostics
- Physiotherapy / orthopaedic technology
- Commodities and consumer products
- Information and communications technology
- OR equipment / medical furniture and fittings
- Textiles
- Facility management / building technology

MEDICA: from prevention, diagnostics, therapy to rehabilitation – a comprehensive service for patient care

Basis for
Business



MEDICA The No. 1 medical trade fair worldwide

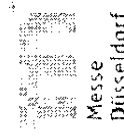


■ MEDICA's distinguishing features:

- Innovative → 50% of all products displayed are less than 3 years old
- Up-to-date → Many world premieres take place at MEDICA
- Visionary → Held annually, it is always at the forefront of events
- Dynamic → Being able to see in advance what the future holds
- Up-to-date → Quick recognition of market changes and trends

MEDICA: from prevention, diagnostics, therapy to rehabilitation – a comprehensive service for patient care

Basis for
Business



MEDICA The No. 1 medical trade fair worldwide



The significance of the MEDICA congress

- The MEDICA congress is the traditional hub of the overall MEDICA trade fair
- Since the 70s the congress has provided further medical education unique throughout Europe
- Some 10,000 doctors use more than 100 seminars to refresh their knowledge and obtain the latest information for their daily patient care
- National and international professional scientific institutions hold their annual conferences and symposiums at MEDICA

The MEDICA Congress: The world's largest arena for medical education and innovation in medical care

MEDICA The No. 1 medical trade fair worldwide



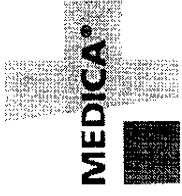
■ The significance of the MEDICA congress

- Top-calibre scientists from around the world complement the national further education programme with themes and visions of medical care in the future.
- International industry sessions provide MEDICA exhibitors with the opportunity to introduce their innovations into congress seminars

The MEDICA Congress: The world's largest arena for medical education and innovation in medical care

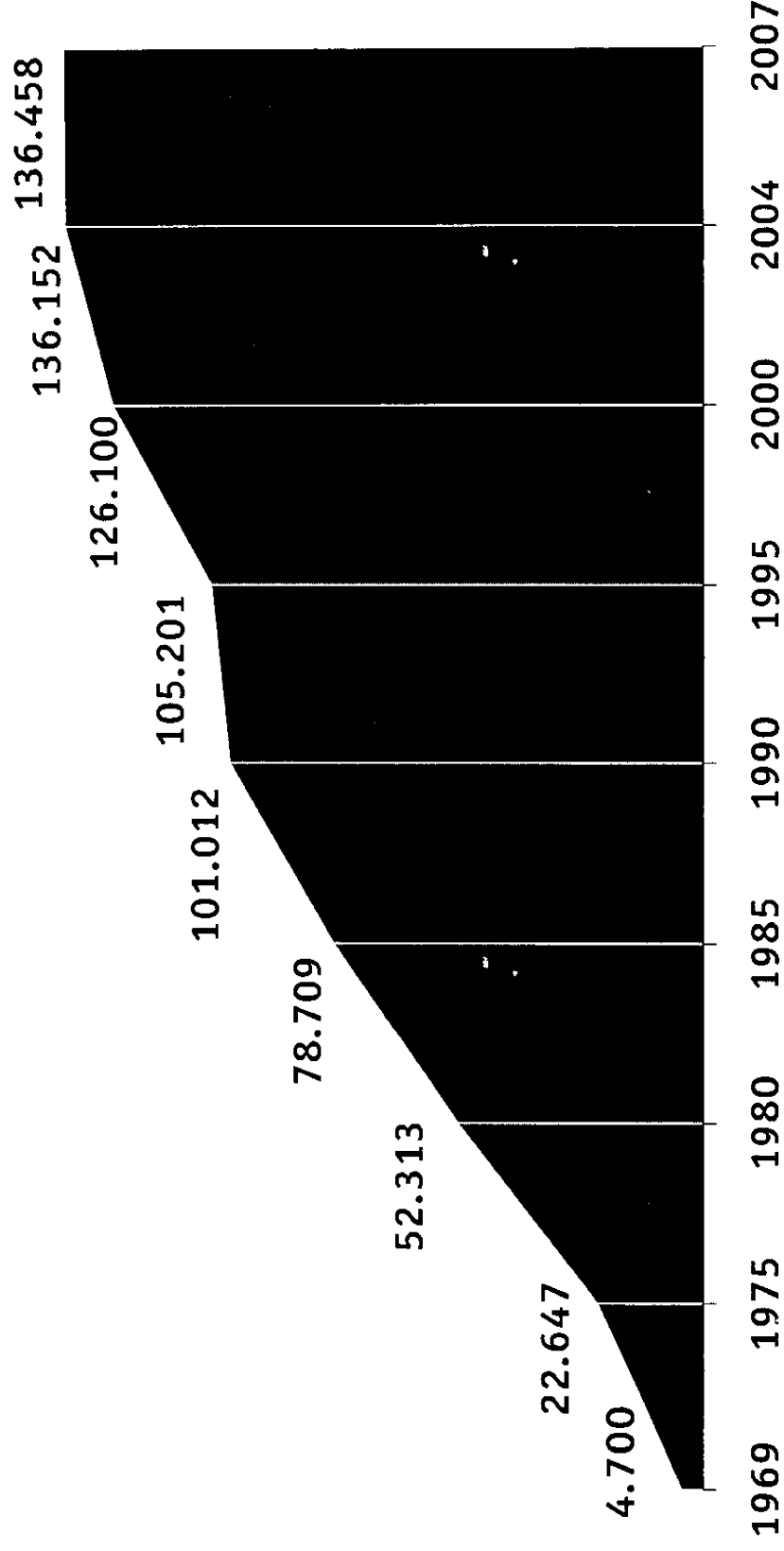
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Development of visitor numbers



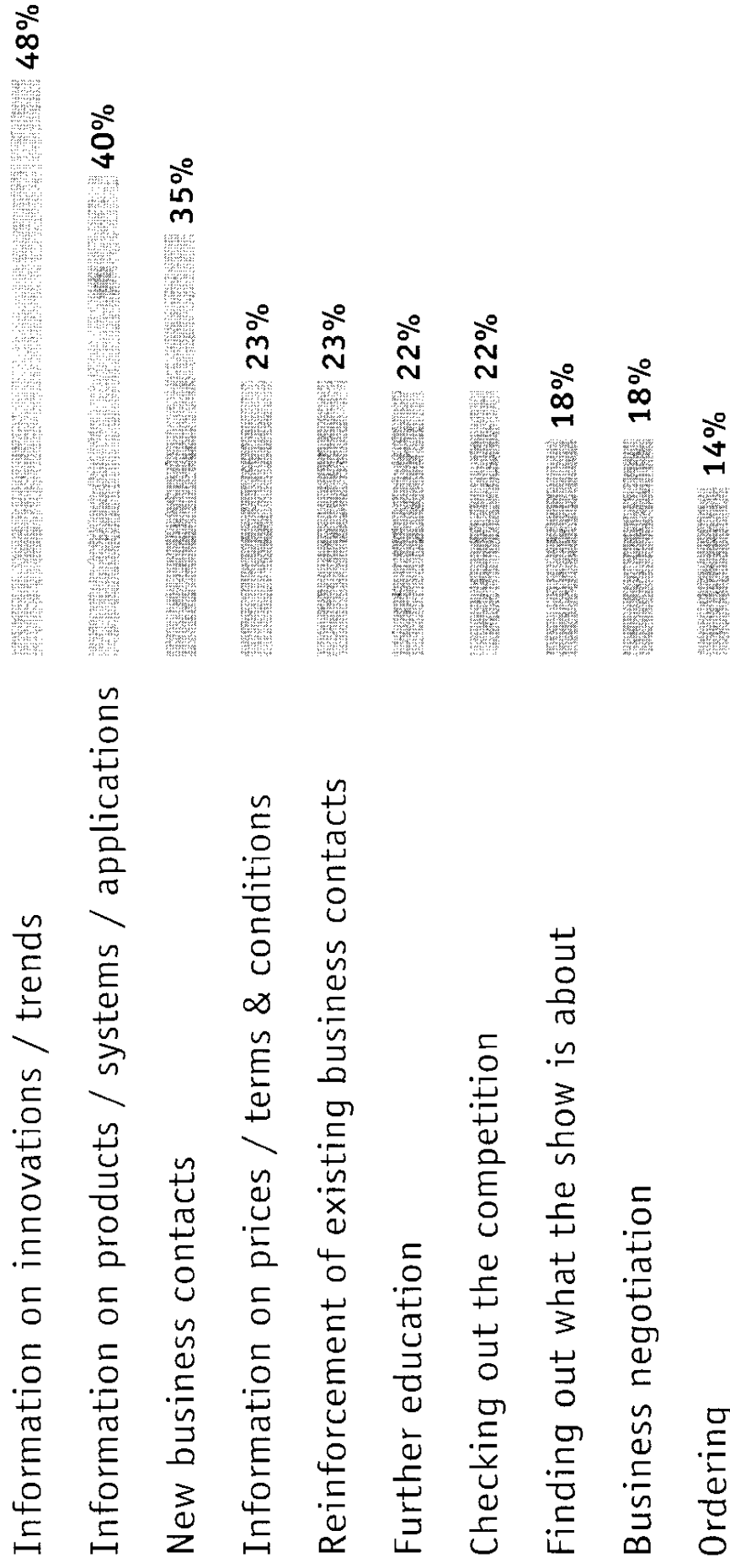
MEDICA: steady increase

Basis for
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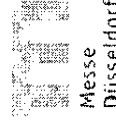
MEDICA The No. 1 medical trade fair worldwide

Reasons for visiting the show (multiple choice)



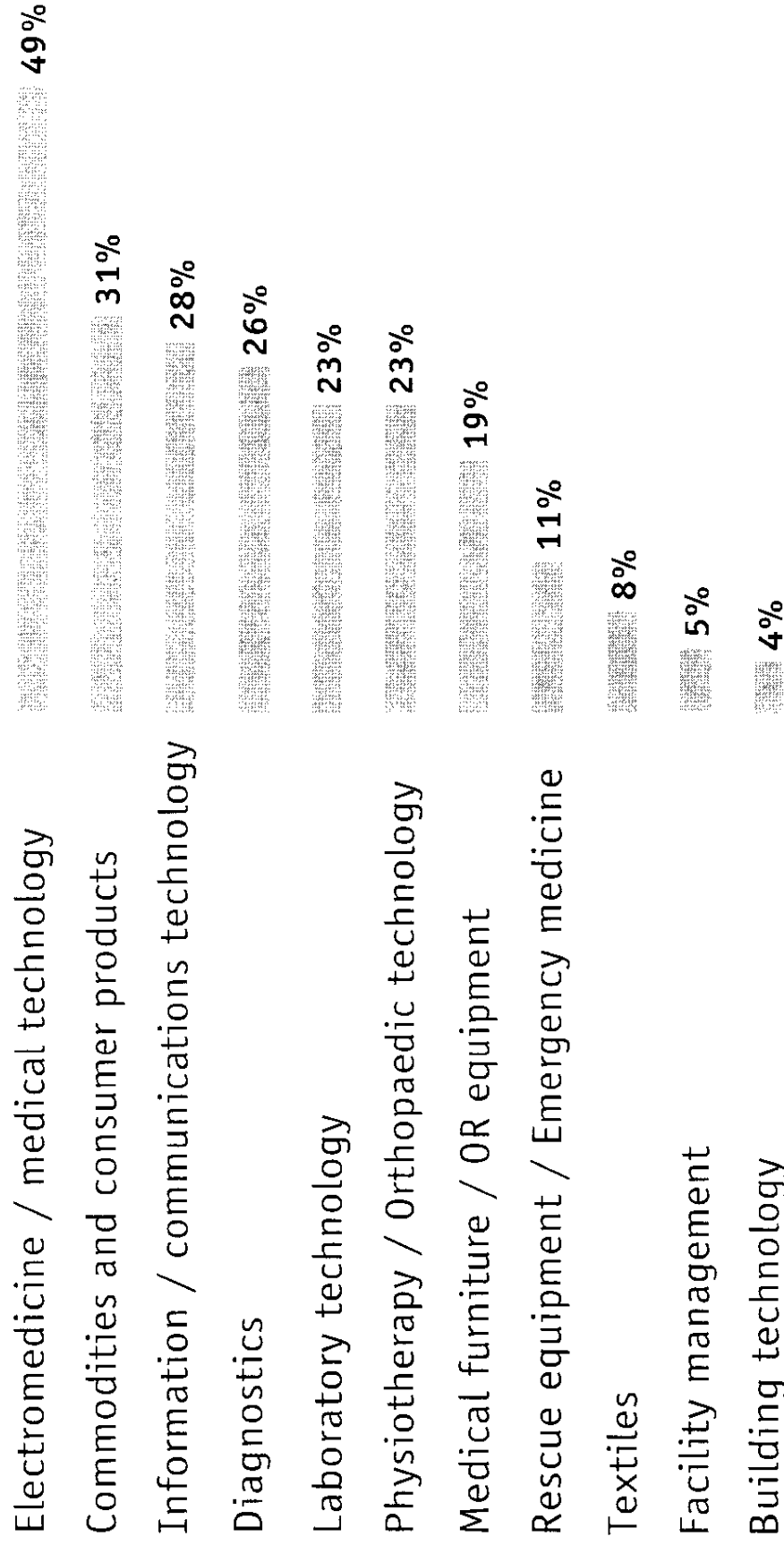
MEDICA: one show – many objectives

Basis for
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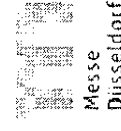
MEDICA The No. 1 medical trade fair worldwide

Visitor areas of interest (multiple choice)



MEDICA: A wide range to interest the visitor

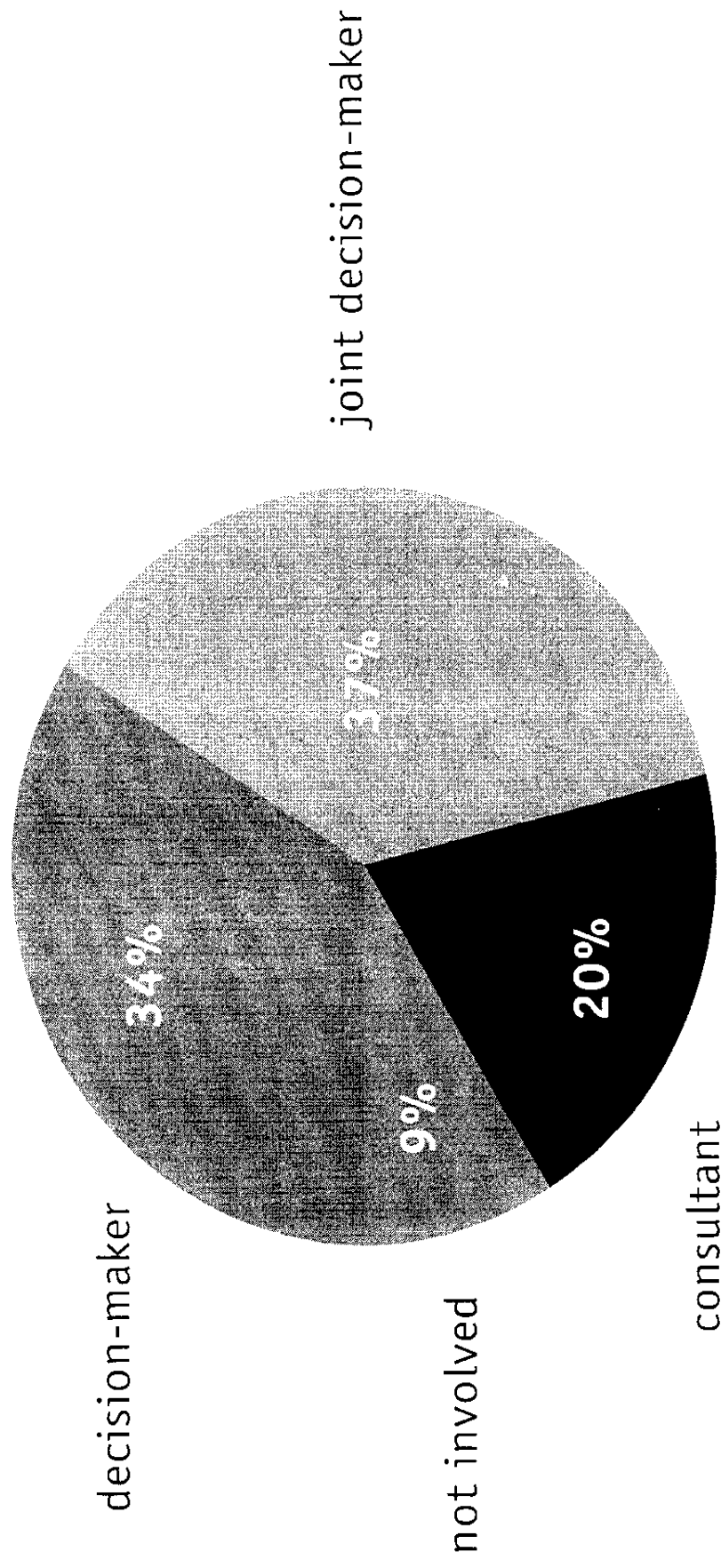
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Decision-making status of visitors



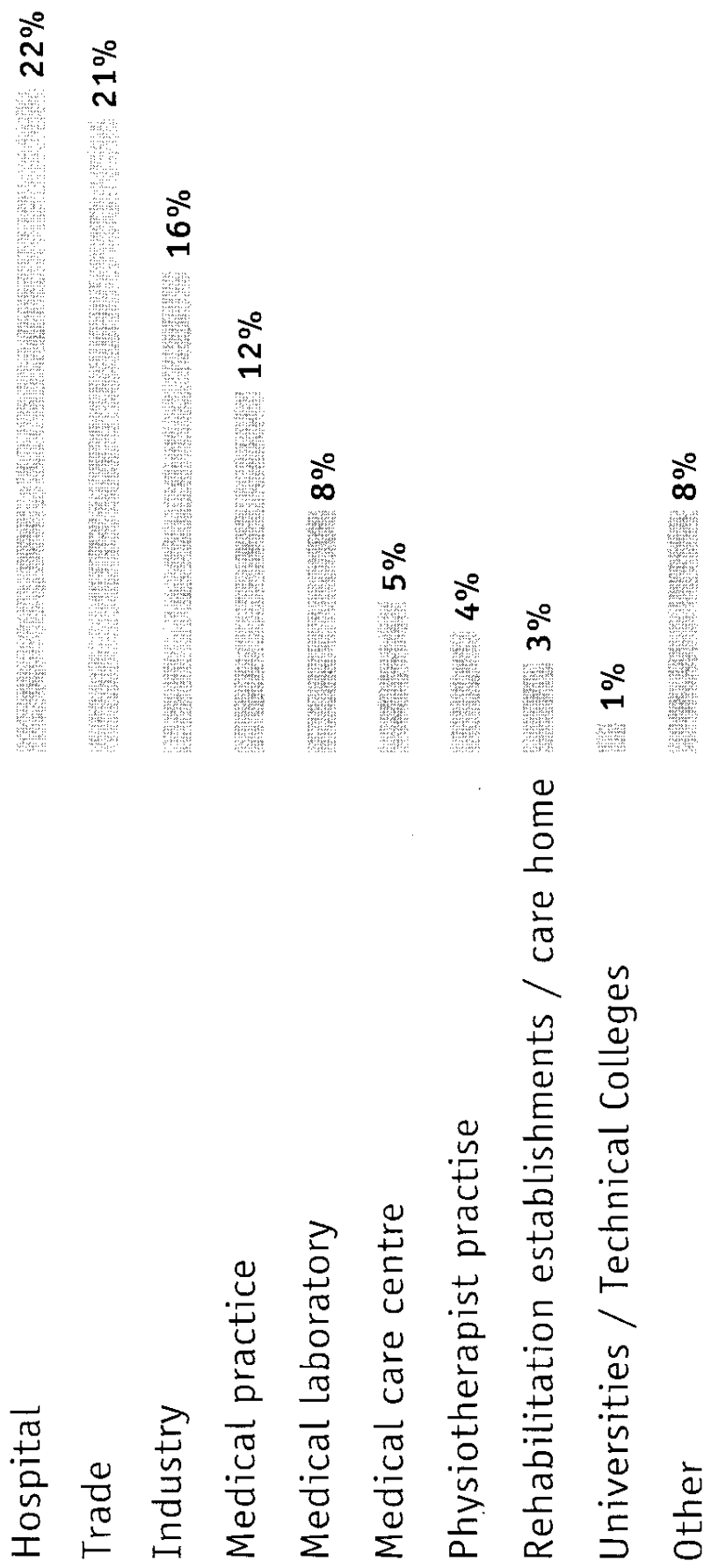
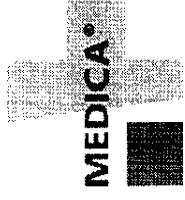
MEDICA: top-calibre decision-makers

Basis for
Business



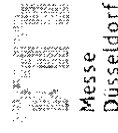
MEDICA The No. 1 medical trade fair worldwide

Work areas of visitors











MEDICA: Information medium for various professions

Basis for
Business



MEDICA The No. 1 medical trade fair worldwide

Country of origin of visitors

| | |
|--|------------|
|  Germany: | 57% |
|  Abroad: | 43% |
|  Europe: | 57% |
|  Non Europe: | 43% |
|  Asia / Australia: | 61% |
|  Africa: | 10% |
|  Northamerica: | 16% |
|  South- and Central-America | 13% |

MEDICA: Exhibitors and visitors from all over the world



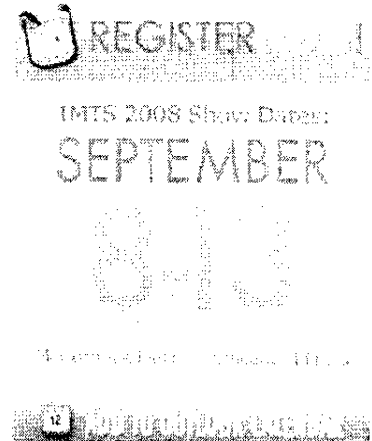
IMTS Fact Sheet

Name of Show: IMTS 2008 - International Manufacturing Technology Show

Show Sponsor: AMT-The Association For Manufacturing Technology

Show Dates: September 8-13, 2008

Show Location: McCormick Place, Chicago, IL USA



About the Event:

IMTS 2008 is the 27th edition of the premier manufacturing technology show in North America. More than 1,500 exhibiting companies will occupy 1.2 million net square feet of exhibit space at the McCormick Place complex in Chicago, Illinois. IMTS is held every even-numbered year in Chicago and attracts more than 91,000 buyers and sellers from 119 countries.

Pavilions:

To help guide attendees to booths quickly and easily, we organize exhibits in Pavilions that are geared toward specific industries, technologies and solutions. Following is the list of Pavilions: Abrasive Machining/Sawing /Finishing; Controls & CAD/CAM; EDM; Gear Generation; Machine Components/Cleaning/Environmental; Metal Cutting; Metal Forming & Fabricating/Lasers; Quality Assurance; and Tooling and Workholding Systems.

Attendees:

Manufacturing industry professionals from the United States and from over 119 countries from around the world attend IMTS. They attend to see more than 15,000 new machine tools, controls, computers, software, components, systems and processes that can improve their efficiency. They will also gain valuable ideas and insights from over 1,500 of the worlds leading equipment producers. They come to look and they come to buy.

Exhibitors:

Over 1,500 exhibitors from the metalworking industry will display their products and productivity solutions at McCormick Place in Chicago covering 1.2 million net square foot of show floor. Leading manufacturers will display their equipment in the following product category pavilions: Metal Cutting: Contains everything from machining centers and assembly automation to Flexible Manufacturing Systems and lathes. Tooling & Work holding Systems: Features jigs, fixtures, cutting tools of all types and related accessories. Metal Forming & Fabricating/Laser: Home to all type of presses as well as laser systems, coil and strip handling equipment, heat treating and more.

Other pavilions at IMTS include Abrasive Machining /Sawing/Finishing; Controls & CAD–CAM; EDM; Gear Generation; Machine Components/ Cleaning/ Environmental and Quality Assurance.

[IMTS 2008 Manufacturing Business and Technology Forum](#)

"Where Technology and Business Connect" The IMTS Forum brings together experts from the industry to give you the most useful and up-to-date technical information available.

Program to be presented by five partners: AMT-The Association For Manufacturing Technology, Society of Manufacturing Engineers, Center for Automotive Research, American Society for Precision Engineering, MTCConnect, Tooling U, and National Tooling & Machining Association. [Learn more.](#)

[Show Registration Fees for IMTS 2008](#)

Exhibits Only Registration

» [\\$25 on or before August 1, 2008](#)

» \$50 after August 1, 2008

To save money, take advantage of the special price given for groups. To qualify as a group, you must have 5 or more people from the same company, and everyone must register at the same time. Group registration is \$15.00/person.

Manufacturing Business and Technology Forum Registration

1. **Super Pass** - access to all conferences and the exhibit floor all week
 - o \$600 on or before August 1, 2008
 - o \$700 after August 1, 2008
2. **Daily Pass** - access to all conferences on one day and to the exhibit floor all week
 - o \$400 on or before August 1, 2008
 - o \$500 after August 1, 2008

» [Complete registration information](#)

» [Register NOW!](#)

[Show Management](#)

AMT - The Association For Manufacturing Technology
7901 Westpark Drive
McLean, VA 22102-4206 USA
<http://www.amt-online.org>

[Return to Show info main page](#)



CONNECTING GLOBAL TECHNOLOGY

International Manufacturing Technology Show: September 8-13, 2008 McCormick Place Chicago, IL
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AGRI TECH EXPO - 2008

[Submit a Show F](#)

Fast Facts

| | |
|------------------------------|----------------------------------|
| Show Organizer (s): | canndid |
| Event Date (s): | Aug 15, 2008 - Aug 17, 2008 |
| Hours: | 10:00 am - 8:00 pm |
| Venue: | SRI SUBHALAKSHMI MAHAL |
| Address: | MUTHIALPET, M.G.ROAD,PONDICHERRY |
| No. of Exhibitors: | 100 |
| No. of Attendees: | 5000 |
| Exhibition Floor Size: (sqm) | 3000 |
| Phone: | 91 - 044 - 42034758 |
| Fax: | 91 - 044 - 42034758 |

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[All Industries](#)
[All Months](#)
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Agriculture

Products and Services Focus

agri equipments , machinery products and services

Summary

AGRI TECH EXPO - 2008 The objective of this expo is to bring together under one roof, the manufacturers, traders and distributors in the Agricultural community, so that they can showcase the latest range of products and services to the small and medium farming community from all over the country. AGRI TECH EXPO - 2008 is a perfect platform to educate farmers on the latest trends in agriculture both in terms of practice and technology and also it provides the awareness among the farming community on the natural resource such as land, water and also about the harmful effects of using chemical fertilizers in excess. ABOUT THE ORGANIZER CANNDID is formed as a group of young, dynamic and professional event organizers who have an extremely successful track-record of organizing exhibitions in Tamilnadu which have proved highly beneficial for the exhibitors and the visitors for sourcing of new customer contact and expert tie-ups with leading companies.

General Information

ABOUT PONDICHERRY Pondicherry is located on the coromandal coast, about 160 kms south of Chennai, lies the union territory of Pondicherry. It noticed for its peace and neat places. Pondy once colonized by the French. Till now it stands as a living memorial of the French culture in India. It is bounces by Bay of Bengal and other three sides by the South Arcot district of Tamilnadu. Agriculture is one of the most important occupations for the people of Pondicherry. About 45% of the total population depends directly or indirectly on farming. The main crop of this territory is paddy. The plantation wealth of the Pondicherry lies in Mahe region mainly. Crops like coconuts, condiments and spices are grown in

less quantity. Pulses, groundnut and chilies are other crops grown in Yanam. The cash crops like Sugarcane, cotton and groundnuts are now grown in various parts of the territory. Most of the areas are irrigated. The major sources of irrigation are tanks and tube wells. Milk production is another source of income for the rural people. It is organized by the co-operative societies located in different villages. Pondicherry is also successful in having a cooperative milk producers' society which pasteurizes the milk and distribute in the entire region. Fishing is another important occupation for the coastal people as the territory extends a length of 45 km of coastline. There are some 28 sea fishing villages in this region

Attendee Information

5000

Exhibitor Information

Agro Machineries / Equipments, Agro Processed Foods / Oils / Aquaculture Agri Education and Research, Sericulture Sericulture

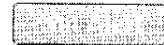
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canndid [India]

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Disclaimer: Please confirm dates and venues with organizers before attending shows.

Update Show



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- MIFB 2008 - The 9th Malaysia International Food & Beverage Trade Fair
- Venture Forum Perú 2008
- American Veterinary Medical Association Annual Convention
- All About Food Expo 2008

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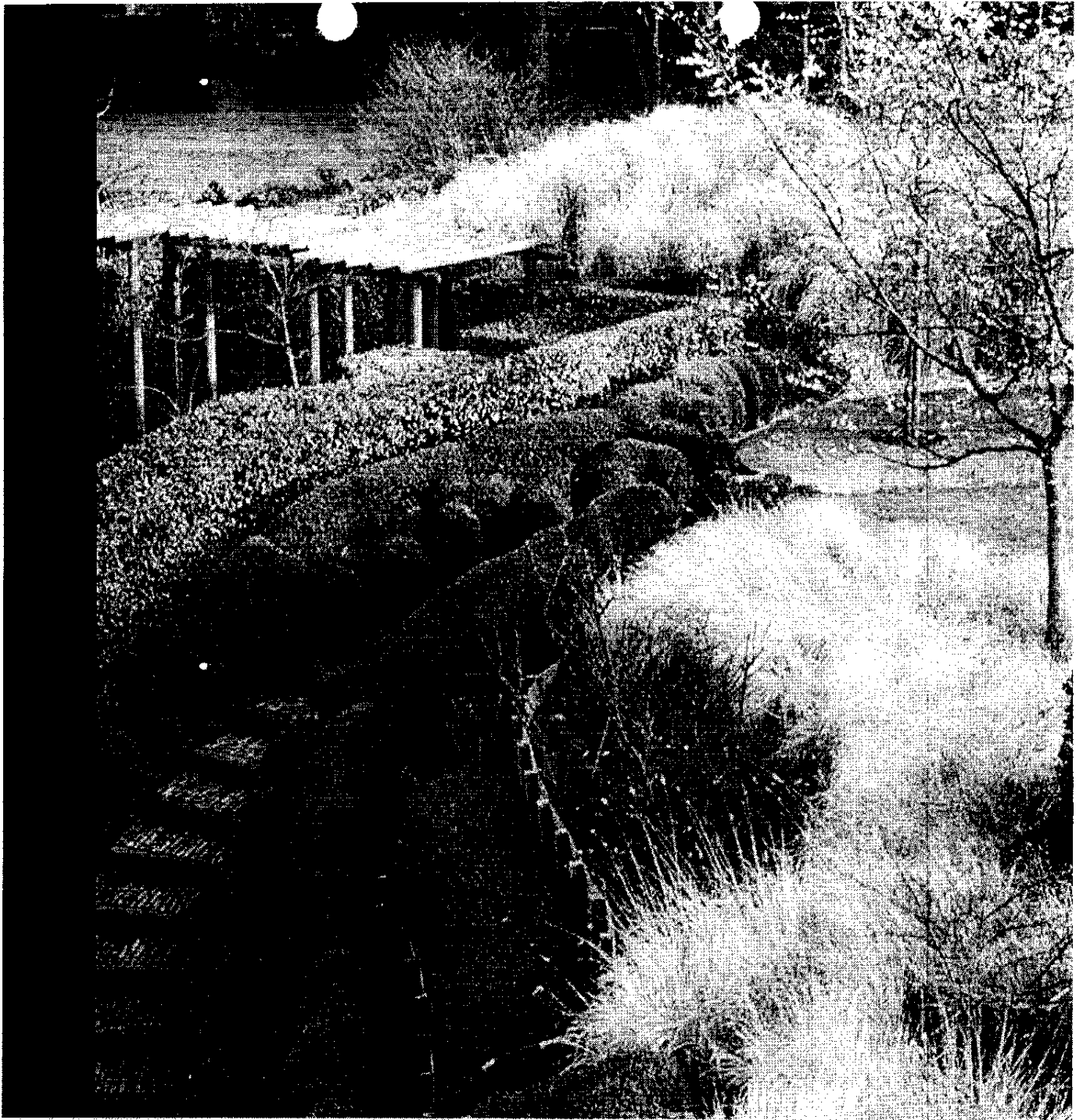
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Capgemini

CONSULTING TECHNOLOGY OUTSOURCING



Merrill Lynch

World Wealth Report

2008

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To Our Readers,

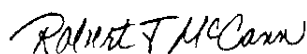
In our 12th year evaluating what are considered to be the key indicators impacting the global high net worth marketplace, we are pleased to present the 2008 *World Wealth Report*. Together, Capgemini and Merrill Lynch utilize more than 20 years of collaborative experience to analyze the macroeconomic factors that drive and inhibit wealth generation and to better understand how they influence high net worth individuals (HNWIs) around the world.

By most standards, 2007 was a very eventful year—for the wealth management industry, and the entire global economy. The first half of 2007 consisted of steady worldwide growth, while the second half was marked by a sharp divergence between mature and emerging economies. The U.S. economic slowdown weighed heavily on key mature regions. However, strong performances in emerging markets boosted HNWI gains around the globe. Although real GDP and market capitalization, the two key drivers of wealth creation, were weaker than in 2006, world growth was strong in 2007 and drove solid increases in both HNWI populations and overall wealth.

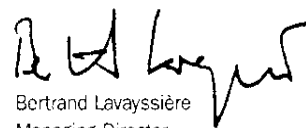
Our 2007 findings reveal that HNWIs assumed a more defensive approach to asset allocation in response to marked changes in economic environments. Steering away from some alternative investments, HNWIs favored safer options on more familiar grounds. As investor confidence rebounds, our expectation is that HNWIs will gravitate once again to less-conservative investments—particularly to the high returns and growth opportunities offered in emerging markets.

This year's Spotlight section focuses on the growing need for wealth management firms to create more customized infrastructure and service models to better target global HNWI growth markets. To meet the needs of increasingly diverse HNWI populations, leading firms are assessing their capabilities and tailoring key delivery models to ensure that service is aligned with the unique needs of clients in any given market.

We are pleased to present you with this year's Report and hope that you will find continued value in our latest insights.



Robert J. McCann
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Managing Director
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State of the World's Wealth

HNWI SECTOR GAINS IN 2007

- **10.1 million individuals worldwide held at least US\$1 million in financial assets, an increase of 6.0% over 2006**
- **Global HNWI wealth totaled US\$40.7 trillion, a 9.4% gain from 2006, with average HNWI wealth surpassing US\$4 million for the first time**
- **The Ultra-HNWI “wealth band” experienced the strongest growth, gaining 8.8% in population size and 14.5% in accumulated wealth**
- **Emerging markets, especially those in the Middle East and Latin America, scored the greatest regional HNWI population gains**
- **India, China and Brazil had the highest HNWI population growth at the country level**
- **HNWI financial wealth is projected to reach US\$59.1 trillion by 2012, advancing at an annual growth rate of 7.7%**

2007: A Story of Two Halves

For the global economy, 2007 was a transitional year that began and ended with sharply opposing macroeconomic environments: Momentum that was carried over from 2006 sustained unabated growth in the early months. By the latter end, heightened uncertainty and instability marked the deep change that was underway.

Overall, market performances were solid in 2007. However, closer analysis of the key drivers and inhibitors of wealth reveals how the many fundamental changes that took place over the course of the year led to deteriorating economic conditions in key markets, including the United States and several mature European nations. Evenly split, the two halves of the year tell very different stories: steady global growth in the first six months, followed by sharply diverging paths between mature and emerging economies in the second half.

In early 2007, strong economic gains spurred impressive performances in equity markets and various investment products, reflecting high levels of investor confidence. Robust growth in emerging markets, driven by high commodity prices and rising domestic demands, supported solid growth in mature economies. Stock markets worldwide performed well into the summer, led by Latin America and Emerging Asia, which saw roughly 25% and 17% growth, respectively, through July.¹ A variety of investment products performed well during the first half of the year; for instance, total announced private equity deals worldwide were on pace to shatter their 2006 record.²

The second half of 2007, however, revealed a distinct and growing divergence between mature and emerging economies—with the

advantage going to emerging nations. Whether hobbled by the downturn taking hold in the United States or challenged by the slowed growth of a major trading partner, with few exceptions, the performances of mature economies weakened significantly in the closing months of the year. In the European Union, for example, growth was dampened by a confluence of key market forces: slowing domestic consumer spending, a result of high levels of personal debt amid tightening credit conditions; a drop-off in exports brought on by easing demand in the United States, which received nearly 24% of E.U. goods and services shipped abroad; and an appreciating euro.³ Growth slowed among other global powers as well: In Japan—the world's second-largest economy—a decline in housing investment and low levels of consumer confidence took their toll.⁴ In essence, a long period of “easy money” in mature economies was routed by financial and credit market turmoil.

By contrast, emerging markets proved resilient and posted robust gains in the second half of 2007, even as uncertainty grew in mature markets. Building on their core competency, export-driven growth, many emerging economies converted sharp increases in energy and commodity prices into sources of high profitability and significant growth. Both GDP and market capitalization gains, particularly in Brazil, Russia, India and China—the BRIC nations—were strong, capping another impressive year for HNWI growth and investment opportunity. Given these nations' more stable consumption habits, rising domestic demand and healthy business environments, the slowing United States economy, which accounts for 21% of global GDP,⁵ did not appear to significantly compromise their economic growth in 2007.

¹ Latin America and Asia MSCI Emerging Market Indexes, accessed March 6, 2008

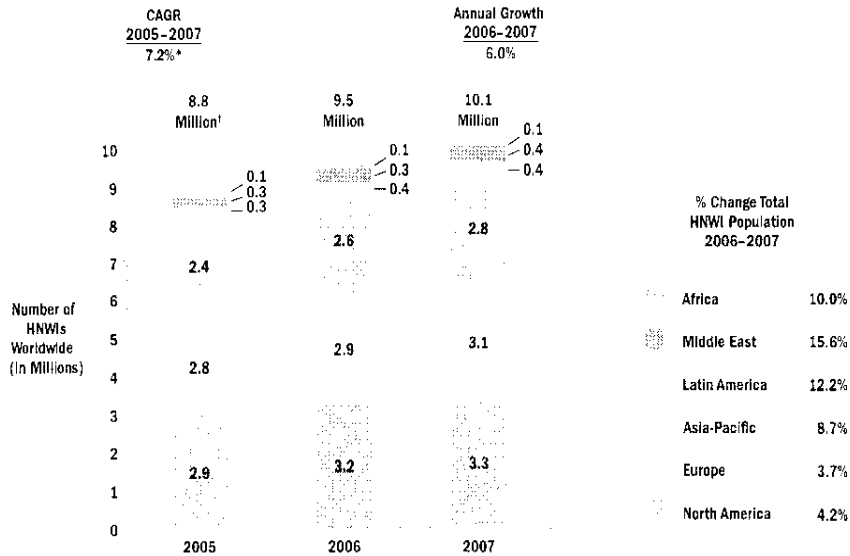
² “For Deal-makers, Tale of Two Halves,” Year-end Review of Markets & Finance, *The Wall Street Journal*, January 2, 2008

³ The Economist Intelligence Unit, “European Union Regional Overview,” January 2008

⁴ The Economist Intelligence Unit, “Japan Country Report,” January 2008

⁵ Alex Pateis, “Global Macro Outlook for 2008,” Merrill Lynch, March 5, 2008

Figure 1. | **HNWI Population, 2005 – 2007 (by Region)**
(In Millions)



Note: High Net Worth Individuals (HNWIs) hold at least US\$1 million in financial assets, excluding collectibles, consumables, consumer durables and primary residences.

Ultra High Net Worth Individuals (Ultra-HNWIs) hold at least US\$30 million in financial assets, excluding collectibles, consumables, consumer durables and primary residences.

Figure 2. | **HNWI Wealth Distribution, 2005 – 2007 (by Region)**
(US\$ Trillions)



† Bahrain and Qatar were added to model for years 2005 onward

* These CAGRs have been adjusted to account for the inclusion of Bahrain and Qatar in the model for years 2005 onward

Note: All chart numbers are rounded
Source: Capgemini Lorenz curve analysis, 2008

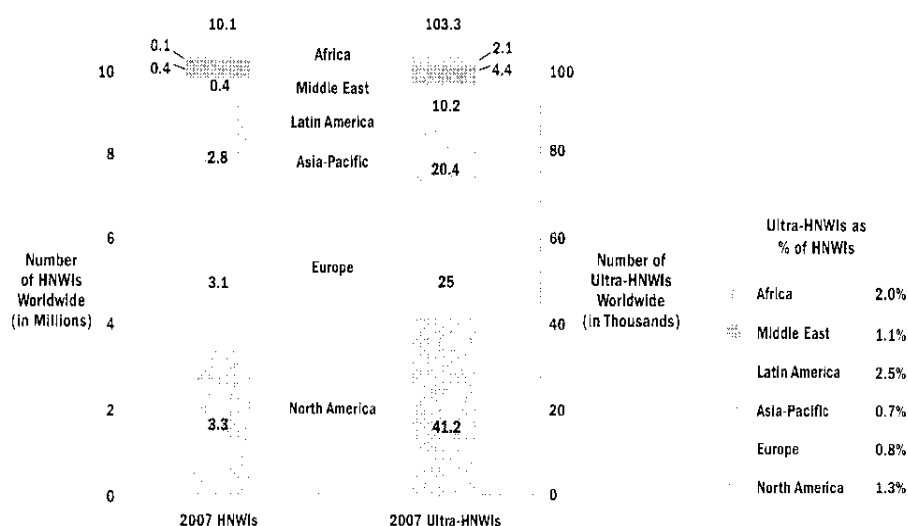
Despite these diverging trends, global growth remained solid for the year, in terms of both real GDP and market capitalization—two primary drivers of wealth generation. Strong worldwide gains in the first half of 2007 boosted HNWI growth across the globe; while in the second half, resilient emerging economies offset slowdowns in key mature economies.

Strong, yet Milder, Growth in 2007

Following the unprecedented level of world GDP growth in 2006, global performances in 2007, on average, decelerated slightly and returned to levels in line with those of 2005. The global HNWI population grew by 6.0%—to more than 10 million individuals for the first time—compared with 8.3% growth in 2006. HNWI population gains were highest in the Middle East, Eastern Europe⁶ and Latin America, expanding by 15.6%, 14.3% and 12.2%, respectively. These growth rates far exceeded those of more mature economies, in large part stemming from impressive gains in commodity exports and growing international acceptance of emerging financial centers as global players.

In 2007, global wealth continued to consolidate among the world's HNWIs. Last year, total HNWI wealth grew by 9.4%, to US\$40.7 trillion—a slight deceleration from the 11.4% growth witnessed in 2006—while the number of HNWIs themselves advanced by only 6.0%. The largest regional gains in wealth were in Latin America and the Middle East, up by 20.4% and 17.5%, respectively. For their part, Ultra-HNWIs posted the highest gains of any “wealth band,” both in population, up 8.8%, and total assets, up 14.5%.

Figure 3. | Geographic Distribution of HNWIs and Ultra-HNWIs, 2007 (by Region)



Source: Capgemini Lorenz curve analysis, 2008

Emerging Markets Lead the Way

While many factors drive or inhibit HNWIs' financial prospects from year to year, the most significant levers are real GDP growth, domestic savings rates and market capitalization performances. In 2007, the global economy grew by 5.1%,⁷ down slightly from the 5.3% global growth recorded in 2006. The highest-growth regions in 2007 included Eastern Europe, Latin America and Asia-Pacific—where gains in emerging nations were in marked contrast to the slowdowns taking place in more mature economies.

In the United States, real GDP growth in 2007 eased to 2.1%,⁸ down from 2.9% in 2006. Although growth rates reached 3.8% and 4.9%, respectively, in the second and third quarters,⁹ a slowdown in the fourth quarter weighed heavily on the yearly average—the compounded result of a cooling housing market, the destabilizing influence of losses from real estate-related securities and the tightening of credit conditions.

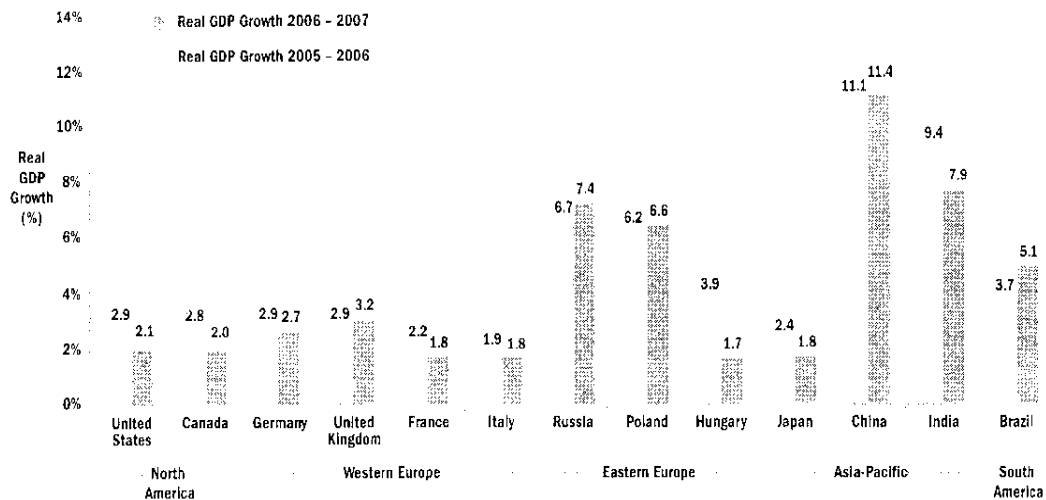
⁶ Eastern Europe includes Czech Republic, Hungary, Poland, Romania, Russia, Slovak Republic, Slovenia, Turkey and Ukraine

⁷ The Economist Intelligence Unit, Country Reports, January 2008

⁸ The Economist Intelligence Unit, "United States Country Report," January 2008

⁹ Bureau of Economic Analysis, National Economic Accounts, accessed February 21, 2008

Figure 4. Real GDP Growth in Select Economies, 2005 – 2007



Note: 2005 – 2006 Real GDP Growth rates may vary from figures in the 2007 World Wealth Report, according to Economist Intelligence Unit updates
 Source: The Economist Intelligence Unit, January 2008

In 2007, average real GDP growth rates for the member nations of the Organisation of Economic Cooperation & Development (OECD) and the European Union (EU-27) decelerated, although growth trends varied by country. Mature economies, such as those of Germany, France, Italy, Canada and Japan, experienced slower growth in 2007. The United Kingdom was a notable exception, with real GDP growth of 3.2%,¹⁰ up from 2.9% in 2006. Despite widespread slowdowns in the fourth quarter, mature markets did lend support to the 5.1% global growth rate in 2007, given that average GDP growth in emerging markets was just under 6.0%.¹¹

Most emerging economies continued to display impressive real GDP growth in 2007—boosted largely by thriving export sectors and heightened domestic demand. Despite weaker figures than in 2006, Argentina and Venezuela led Latin America with real GDP growth rates of 8.4% and 7.8%,¹² respectively, thanks to booming oil and commodity exports. Sharp increases in oil prices, highlighted by the 57.2% gain on crude oil futures,¹³ greatly boosted growth in oil-exporting nations, especially those concentrated in the Middle East. In Asia-Pacific, growth in the Philippines accelerated to 6.9%,¹⁴ as greater total consumption¹⁵ aided a recovery of fixed capital investment. In Eastern Europe, Poland and the Czech Republic were among the top performers, with GDP gaining through strong private consumption.

BRIC Nations Are at the Forefront of Global Growth

In 2007, the BRIC nations continued their roles as pivotal economies, building on relationships with their mature trading partners and capitalizing on the growth of their emerging counterparts. As mature economies slowed, the BRIC nations turned in particularly strong performances. They posted in aggregate the greatest gains in HNWI populations, 19.4%, and accumulated wealth, 25.1%, driven both by impressive economic gains and robust market capitalization growth. As a result of these record-setting performances, the BRIC nations are rapidly winning fiscal credibility and increasingly playing a central role on the world stage.

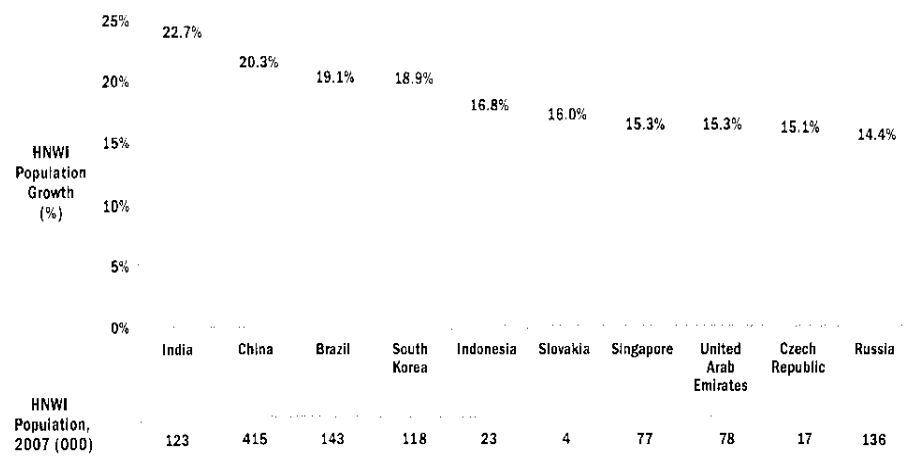
¹⁰ The Economist Intelligence Unit, "United Kingdom Country Report," January 2008
¹¹ Capgemini analysis, "Emerging Markets" refers to those countries included in the MSCI Emerging Market Index
¹² The Economist Intelligence Unit, "Argentina and Venezuela Country Reports," January 2008
¹³ "Year-end Review of Markets & Finance," *The Wall Street Journal*, January 2, 2008
¹⁴ The Economist Intelligence Unit, "Philippines Country Report," January 2008
¹⁵ Total Consumption = Private Consumption + Public (Government) Consumption

Today, the greatest single impediment to the BRIC nations' continued growth is the high level of inflation now sweeping the globe and most pronounced in emerging markets. In Russia, year-over-year money-supply growth in excess of 50% has kept inflation rates propped at around 12%.¹⁶ Similar levels of excess liquidity are evident in China and across the Middle East. With BRIC nations' inflation rates averaging roughly 7.5% at year-end,¹⁷ it is increasingly clear that this is the challenge most likely to shape 2008 outlooks.

In 2007, India led the world in HNWI population growth, rocketing ahead 22.7% and exceeding gains of 20.5% in 2006. Boosted by market capitalization growth of 118%¹⁸ and real GDP growth of 7.9%, HNWI sector gains reached all-time highs. Although the country's real GDP growth decelerated from 9.4% in 2006, current growth levels are considered more stable and sustainable. Market capitalization growth more than doubled from roughly 50%, accounting for greater HNWI gains.¹⁹ India's two largest exchanges, the Bombay Stock Exchange and the National Stock Exchange of India, benefited from rapidly expanding initial public offering (IPO) markets and heightened international interest; by the end of 2007, they ranked among the world's top-12 exchanges in total market capitalization terms.²⁰ Once recognized as a manufacturing superpower, characteristic of a more nascent market, much of India's recent growth has been driven by the technology, financial services, property, construction and infrastructure sectors. Growth in these arenas is indicative of the developing state of the Indian economy relative to other high-growth players.

China ranked second in HNWI population growth, advancing 20.3% in 2007, more than two-and-a-half times greater than its 2006 pace. Market capitalization and real GDP growth rates exploded last year, at 291%²¹ and 11.4%, respectively. Fueled by impressive price increases and strong IPO activity, the Shanghai Exchange grew to be the sixth-largest exchange in the world in terms of total market capitalization.²² Yet, despite rapid growth in its financial services sector, China's economy still is built on its manufacturing capacity. This helps explain why its HNWI population growth is slower than that of India—and why the gap continues to widen between China's richest citizens, a group with a particularly high concentration of wealth, and the middle-class, which continues to grow in size but remains largely unable to cross the HNWI threshold. Nonetheless, 2007 HNWI growth in China greatly exceeded its 2006 performance of 7.8% growth, reflecting strong economic fundamentals and great potential for future gains.

Figure 5. HNWI Population Growth, 2006 – 2007 (by Market)



Note: Growth rates and absolute HNWI numbers are rounded
Source: Capgemini Lorenz curve analysis, 2008

¹⁶ Bloomberg, accessed March 2008
¹⁷ Capgemini analysis, data derived from Economist Unit, Country reports, January 2008
¹⁸ World Federation of Exchanges, "Focus Report," January 2008
¹⁹ Capgemini/Merrill Lynch, 2007 World Wealth Report
²⁰ World Federation of Exchanges, "Focus Report," January 2008
²¹ *Ibid.*
²² *Ibid.*

The HNWI population in Brazil grew an impressive 19.1% last year, up significantly from 10.1% growth in 2006. Riding a wave of robust market capitalization growth of 93%²³ and real GDP growth of 5.1%, Brazil enjoyed the third-highest HNWI growth rate in 2007 among the countries analyzed. At the same time, net private capital flows to Latin America doubled in 2007, contributing to the Bovespa Stock Exchange's fourth-place ranking among the world's largest IPO markets and 7.2% market-share gain.²⁴ This lent support to the establishment and global integration of the Brazilian financial system. With well-developed agricultural, mining, manufacturing and service sectors, and as a major exporter of raw materials, energy products and other commodities, Brazil reaped the benefits of sharp increases in food and energy prices throughout last year. Further, Brazil is the world's largest exporter of ethanol,²⁵ giving it an important stake in the alternative energy market, which is gaining popularity as oil and conventional energy prices continue to rise around the world.

Russia was also home to one of the world's 10 fastest-growing HNWI populations, despite growth decelerating from 15.5% in 2006 to 14.4% in 2007. Solid gains in 2007 of 37.6%²⁶ in market capitalization and 7.4% in real GDP²⁷ were testaments to the growing international interest in the country as a global player. Indeed, despite serious problems, such as a critical lack of modern infrastructure, environmental degradation and a declining population, the ongoing development of external relationships is likely to improve the economy's fundamentals. Moscow is emerging as a respected and global financial center, highlighted by its playing host to the world's top-two IPOs in 2007. Notably, Russia is currently the world's largest exporter of gas and its second-largest producer of oil,²⁸ which allowed it to capitalize on sharp increases in energy prices through its exports of natural resources.

Domestic Savings Play Key Role in Wealth Accumulation

Domestic savings rates, important by-products of GDP and total consumption levels, are key drivers of wealth accumulation in a given year.

In 2007, most European nations saw domestic savings climb, a likely result of high and rising interest rates throughout 2006 and much of 2007. Among countries experiencing a drop-off in savings, most recorded greater decelerations in GDP growth than fluctuations in consumption behavior, underscoring the impact slowdowns had on mature markets. The United States had one of the world's lowest savings rates in 2007, at 10.9% of GDP, down from 11.4% in 2006, due to slowed GDP growth and increases in consumer and public spending. Also, the U.S. Federal Reserve held the target federal funds rate quite high, at 5.25%,²⁹ through July. However, indications of a slowing economy led to several sharp rate cuts during the remainder of 2007, further contributing to a decline in savings.

The characteristic rapid development of emerging economies goes hand in hand with very high levels of growth and consumption relative to their mature counterparts. In 2007, the savings rates of most emerging economies surpassed the benchmark average of the Group of Seven (G7) nations: 20.2% of GDP—a trend representative of the differences between emerging and mature economies.

Across the globe, key interest rates remained high through much of 2007. However, few central banks pursued rate cuts toward year-end. Given that monetary policy maintains the balance between growth and inflation, banks that cut rates in the second half of 2007, such as the U.S. Federal Reserve and the Bank of England, pursued economic stimulation as a priority, while most others were concerned with the inflationary pressures associated with rising food and energy prices.

Market Capitalization Growth Explodes in Emerging Markets

Given that HNWIs hold a significant portion of their wealth in stock markets, market capitalization performance is an important determinant of HNWI wealth generation. Representative of global market performances, the various Dow Jones World Indexes³⁰ experienced moderate returns in 2007, averaging 6.8%, well below the 17.3% average struck in 2006.³¹ As a result, stock market gains did not have as positive an impact on HNWI wealth generation last year as they did in 2006.

²³ World Federation of Exchanges, "Focus Report," January 2008

²⁴ "World's top IPO worth \$8B," *Asia Pulse*, December 27, 2007

²⁵ "Brazil Foreign Min. Trade Deal for Environment Needs Ethanol," *Dow Jones International News*, January 26, 2008

²⁶ Russia Trading System, <http://www.rts.ru/en>, accessed April 2008

²⁷ The Economist Intelligence Unit, "Russia Country Report," January 2008

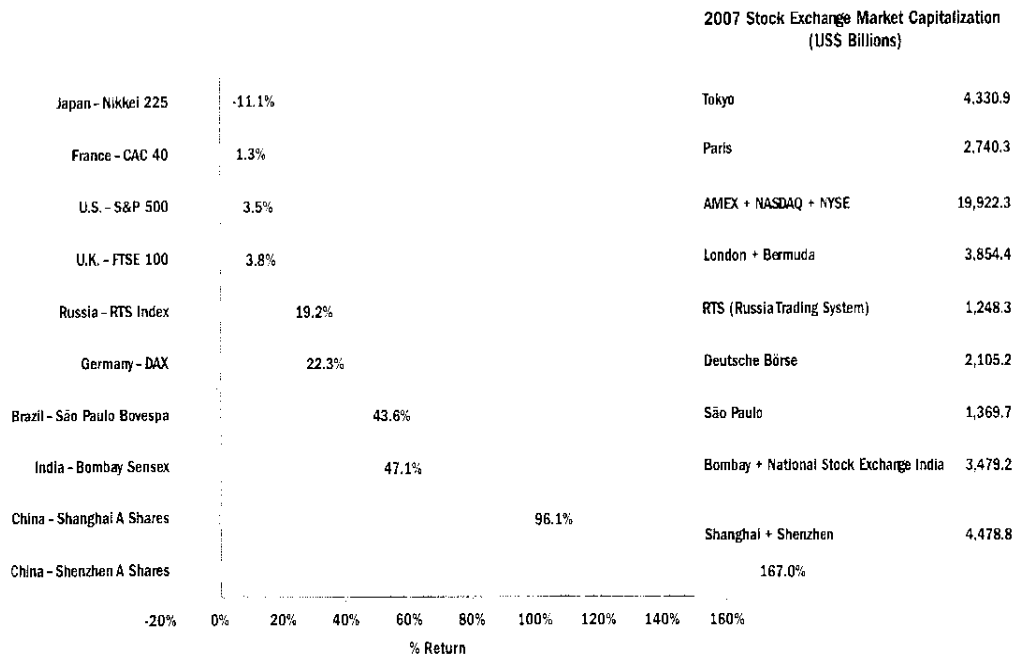
²⁸ "Gas version of OPEC fails to 'ignite,'" *The Australian*, February 4, 2008

²⁹ J.S. Federal Reserve, www.federalreserve.gov, accessed February 12, 2008

³⁰ The Dow Jones World Indexes consist of the large-cap, mid-cap and small-cap segments

³¹ Capgemini analysis using reported figures of each Dow Jones World Index

Figure 6. Returns on Global Stock Market Indexes, 2007



Note: Stock market capitalization values include all companies listed on the exchange.
 Source: "Year-End Review of Markets & Finance," *The Wall Street Journal*, January 2, 2008; Russia Trading System, <http://www.rts.ru/en>, accessed April 2008

In 2007, the divide between market capitalization growth in mature and emerging economies was significantly more pronounced than in previous years. Traditional United States, European and Asian stock indexes experienced moderate growth, while many emerging markets extended winning streaks of robust gains. In the United States, the Dow Jones Industrial Average and S&P 500 fell considerably, dropping from their respective growth rates of 16.3% and 13.6% in 2006 to 6.4% and 3.5% in 2007. Meanwhile, the NASDAQ saw its growth accelerate slightly, from 9.5% to 9.8%, supporting still-solid performances.³²

At the same time, most major European and Asian indexes were contained to low-single-digit growth, with the world's worst performer, the Nikkei 225, contracting 11.1%.³³ The German DAX, Europe's best performer, was the only major traditional index to outpace its 2006 performance and sustain double-digit growth. Although market capitalization growth rates varied widely among the traditional exchanges of mature markets, from Hong Kong's 54.8% growth to Tokyo's 6.1% contraction,³⁴ 2007 performances across the board were consistently weaker than 2006 levels.

While growth among traditional stock exchanges slowed in 2007, it exploded in several emerging markets' exchanges and placed them among the largest in the world. The Shanghai and the Shenzhen Stock Exchanges experienced the highest growth worldwide, at 303% and 244%,³⁵ respectively. While they did host China's very active IPO market, raising US\$64.5 billion in proceeds, growth in the two exchanges was mostly fueled by organic price increases. For example, new stock issues rose an average 191% on their first day of trading.³⁶ India's Bombay Exchange and the National Stock Exchange of India followed closely on China's heels, with respective growth rates of 122% and 115%.³⁷ Indian IPO activity in 2007 ranked fifth in the world in number of issues (95) and seventh in terms of total proceeds (US\$8.3 billion). However, market capitalization growth was driven mostly by price increases in the very active financial services, property, construction and infrastructure sectors.³⁸

³² "Year-end Review of Markets & Finance," *The Wall Street Journal*, January 2, 2008; Yahoo!Finance, accessed February 13, 2008

³³ Yahoo!Finance, accessed February 13, 2008

³⁴ World Federation of Exchanges, "Focus Report," January 2008

³⁵ *Ibid.*

³⁶ "RMB 447 bln raised from IPOs on China's stock market in 2007," *Xinhua News Agency*, January 2, 2008

³⁷ World Federation of Exchanges, "Focus Report," January 2008

³⁸ "India's boom spawns new wealth," *The Australian*, February 8, 2008

Record Wave of IPOs, Other Investments Draw HNWIs to Emerging Markets

Emerging markets made significant contributions to record-level worldwide IPO activity in 2007. Overall, more than 1,300 IPOs raised roughly US\$300 billion during the year,³³ with emerging markets capturing seven of the top-10 issues. The BRIC nations exhibited particular strength in this arena, accounting for 39% of global IPO volume in 2007, up from 32% in 2006.³⁴ Russian banks Sberbank and VTB raised nearly US\$17 billion together and ranked first and second in the 2007 race for largest public offerings. Brazil's Bovespa, the largest exchange in Latin America, ranked fourth in IPO activity among global exchanges, riding a 7.2% gain in market share as the volume of IPOs in Brazil nearly tripled.³⁵ The 2007 offerings of China CITIC Bank and China Railway ranked among the world's largest, while PetroChina's Shanghai A-share offering, which raised US\$8.94 billion, was the largest-ever issuance of its kind.³⁶ In India, IPO proceeds increased roughly 80% during the year, led by realty giant DLF's US\$2.3 billion issue.³⁷

Along with heightened market interest and activity, net private capital flows to emerging markets increased in 2007. While China attracted the largest absolute amount of private capital in 2007 at a country level, drawing in roughly US\$55 billion, Emerging Europe was the most popular regional destination, attracting US\$276 billion—enough to put it ahead of last year's leader, Emerging Asia.³⁸ The 20% drop in private capital flows experienced by Emerging Asia in 2007, in part, reflects that equity flows helped policymakers accumulate foreign exchange reserves, which reached roughly US\$1 trillion in China alone.³⁹ Notably, private capital flows to Latin America more than doubled to US\$106 billion in 2007, from US\$52.6 billion a year earlier.⁴⁰ Financing needs are expected to grow in countries such as Russia, where current accounts will likely become deficits, despite limitations on foreign-financing and other inflow constraints.

Hedge funds also performed well in 2007—another investment arena that reflected the growing strength of emerging markets. Although down slightly from 2006, average hedge fund gains in 2007 reached 12.6%.⁴¹ On average, hedge fund returns outperformed most traditional stock indexes in 2007, boosted by 20.3% average gains in emerging markets.⁴² In recent years, an increasing proportion of hedge fund assets (estimated at US\$1.7 trillion⁴³) has come from institutional investors, who account for the majority of the nearly US\$195 billion in net new money invested in 2007,⁴⁴ versus individual wealthy clients—shifting the main driver of the industry's growth.

Last year, venture capitalist fundraising and investing reached their highest levels since 2001, fueled largely by the growth of capital-intensive sectors, such as life sciences and clean technology. In 2007, 235 funds raised nearly US\$35 billion—only a 2.6% increase from 2006 in the number of funds, but a 9.4% increase in raised capital.⁴⁵ In targeting life sciences and clean technology, venture capitalists recognized a market opportunity with great potential—driven by high food and energy prices. In fact, the renewable energy sector hosted record IPO issuances last year, led by the US\$6.5 billion IPO of a Spanish utilities group, Iberdrola Renovables, and the US\$1.2 billion IPO of Brazilian sugar and ethanol producer Cosan.⁴⁶ Overall, total investment in clean technology increased 35%, to US\$117 billion, in 2007, exceeding expectations and helping drive immense growth in the sector—illustrated by numerous clean technology benchmark indexes gaining more than 50% for the year.⁴⁷

Mature Economies Slow as Market Volatility Rises, Credit Tightens

The downturn in the United States, whose effects, by and large, were limited to other mature economies—as evidenced by slowed GDP growth and weak equity market performances in parts of Europe and Asia—was fueled by three main factors: a cooling housing market, tightened credit availability, and greater volatility and price declines in equity markets. At the source of the problems, the negative wealth effect of falling home prices threatened to curtail consumers' spending and their ability to borrow against their homes' value. Meanwhile, declining home values also reduced banks' collateral and led to tighter lending standards—and, ultimately, to a rise in mortgage payment delinquency rates and, inevitably, home foreclosures. These, in turn, raised the level of risk associated with real estate-related

³³ "Year-end Review of Markets & Finance," *The Wall Street Journal*, January 2, 2008.

³⁴ Rachel Morajee, "Emerging markets push IPOs to record," *Financial Times*, December 21, 2007.

³⁵ *Ibid.*

³⁶ Conrad Tan, "Global IPOs raise record US\$," *The Business Times Singapore*, December 19, 2007.

³⁷ *Ibid.*

³⁸ Institute of International Finance, "Capital Flows to Emerging Market Economies," October 21, 2007.

³⁹ International Monetary Fund estimate as of December 2007.

⁴⁰ Institute of International Finance, "Capital Flows to Emerging Market Economies," October 21, 2007.

⁴¹ Credit Suisse/Tremont Hedge Index, www.hedgindex.com, accessed February 15, 2008.

⁴² Emerging Market Credit Suisse/Tremont Hedge Index, www.hedgindex.com, accessed February 15, 2008.

⁴³ Gregory Zuckerman, "Hedge funds weather stormy year," *The Wall Street Journal*, January 2, 2008.

⁴⁴ Vargot Patrick, "Hedge fund investors to shed light on industry in new guide," *Dow Jones International News*, January 30, 2008.

⁴⁵ Thomson Financial & National Venture Capital Association, "2007 Venture Fundraising," January 14, 2008.

⁴⁶ Rachel Morajee, "Emerging markets push IPOs to record," *Financial Times*, December 21, 2007.

⁴⁷ National Venture Capital Association and PricewaterhouseCoopers, "2007 Venture Capital Investing," January 21, 2008.

loans, particularly in the subprime segment (loans made to borrowers with poorer credit ratings), and reduced the market values of mortgage-backed securities and other similar assets. As a result, investment institutions involved with the sector absorbed multibillion-dollar write-downs, heightening uncertainty among investors and leaving equity markets jittery. Liquidity constraints resulting from these losses were exacerbated by the tightening of credit markets, quickly evident among many financial products and asset types, such as collateralized debt and loan obligations, asset-backed commercial paper, auction rate securities, liquidity puts, financial insurers and structured investment vehicles.⁵⁴ Ultimately, this chain of events impacted both consumers and institutions, impeding their ability to maintain liquidity and operate businesses.

In line with housing market downturns, REIT indexes incurred significant losses globally in 2007 after posting robust gains in 2006. Relatively stagnant performances in the first half of the year were supported by privatization efforts, whereas tighter credit conditions weighed on activity in the second half. Both the Dow Jones Equity REIT Index (U.S.) and the Dow Jones Wilshire Global REIT Index lost approximately 25% over the course of 2007—illustrative of global declines in real estate prices and devaluations of mortgage-related securities.⁵⁵

In the second half of 2007, worldwide equity market performances reflected the divergence between mature and emerging markets. The MSCI Global Indexes recorded 0.1% and 3.2% contractions in Europe and the United States, respectively, in the second half of the year, versus respective gains of 10.4% and 6.3% in the first half.⁵⁶ By contrast, the Emerging Market MSCI Global indexes excelled—led by Latin America in the first half of 2007, which gained 25.3% through the end of June, and the BRIC nations in the second half, up an explosive 34.1% between July and December.⁵⁷

The repercussions of equity market losses in mature economies reverberated throughout international credit markets in the second half of 2007. One U.S. Federal Reserve Board survey⁵⁸ indicated the extent of tightening lending practices: About 30% of respondents reported that credit standards “tightened somewhat” for firms of all sizes, while 40% of respondents claimed the cost of credit lines and the premiums charged on riskier loans did so as well. Roughly 8% of respondents felt premiums charged on riskier loans “tightened considerably.”

The economic slowdown in the United States drove a severe depreciation of the U.S. dollar against most major currencies worldwide. Notably, the dollar fell 10.5%, 15.8% and 17.0%, respectively, relative to the euro, the Canadian dollar and the Brazilian real.⁵⁹ A combination of levers—including foreign players’ loss of confidence in both the value of the U.S. dollar and the country’s overall economic strength, rising concerns of inflationary pressures, and the U.S. Federal Reserve’s decision to stimulate economic growth rather than contain inflation—all put sustained downward pressure on the U.S. dollar’s value.

Fundamental Problems Spur the U.S. Downturn

By general consensus, August 2007 marked the beginning of the economic slowdown in the United States. However, several fundamental problems, which originated years earlier, exacerbated the downturn’s impact. For instance, markets were seriously jolted by the collapse of several hedge funds; efforts by Countrywide Financial Corp.—the country’s top mortgage lender—to avoid insolvency by drawing down US\$11.5 billion from credit lines; and coast-to-coast home foreclosures, up by a staggering 93% year-over-year in July.⁶⁰ Yet, it seems likely that better control of issues such as the overextension of consumers and housing markets, as well as high levels of securitization, could have mitigated some of the repercussions of a downturn.

While most pronounced in the United States, unsustainable spending behavior was also evident in several other mature economies in 2007, namely in Australia, the United Kingdom and several other European nations, including Finland and Norway. Near-zero household savings rates in each of these countries, in comparison with the healthier savings rates in other economies, such as France (13.1%), Germany (11.1%) and Italy (6.8%),⁶¹ that also experienced slowed GDP growth, in part, highlight the evident consumer overextension.

⁵⁴ Allan Sloan, “On the brink of disaster,” *www.cnnmoney.com*, March 31, 2008

⁵⁵ Dow Jones REIT Indexes, *www.djindexes.com*, accessed February 15, 2008

⁵⁶ USA and Europe MSCI Global Indexes, *www.msici.com*, accessed March 5, 2008

⁵⁷ Latin America and BRIC Emerging Market MSCI Global Indexes, *www.msici.com*, accessed March 5, 2008

⁵⁸ U.S. Federal Reserve Board, “Senior Loan Officer Opinion Survey on Bank Lending Practices,” January 2008

⁵⁹ *www.ofores.com*, accessed February 2008

⁶⁰ “The US Credit Crunch Timeline,” *The Toronto Star*, December 16, 2007

⁶¹ Organization of Economic Cooperation & Development (OECD), “Economic Outlook No. 82,” accessed April 2008

Debt levels have a high correlation with savings rates. Not surprisingly, the United States, along with other nations that have low savings rates, has comparatively high levels of debt.⁶² In these countries, debt-ridden households allocate a much greater portion of disposable income to mortgages and long-term loans, further challenging overextended consumers in the wake of both slowing wealth growth and a higher dependency on home equity. Compared with international and historical trends, the U.S. consumer has long been overextended, particularly since 2001. In the recent turn of events, as market enthusiasm subsided, the discrepancy between perceived and actual wealth levels was realigned, curtailing consumption and investment perhaps more sharply than likely would have occurred in a downturn.

The motors driving the booming but overextended U.S. housing markets in recent years also intensified the downturn's impact. Over the past decade, strong economic growth, low interest rates and high levels of confidence, coupled with consumers' pronounced willingness to incur debt, all fueled housing markets' growth. Meanwhile, loose lending standards compromised the appropriateness of loan sizes and candidate eligibility, effectively raising the associated risk of each loan. When runaway real estate prices began to subside, as early as in 2006, the ensuing negative wealth effects were exacerbated by the overextension of the housing markets, illustrated by mortgage payment delinquency rates and home foreclosures increasing at a much greater rate than otherwise would have been expected, especially among subprime borrowers. In fact, while the subprime adjustable-rate-mortgage segment accounted for only 6.8% of outstanding loans, it represented roughly 43% of total home foreclosures.⁶³

Finally, the extensive use of securitization in the United States greatly magnified the consequences of a housing market downturn, as is evident in the industry-wide losses on real estate-related securities. The United States accounts for roughly 79% of global securitization issuances,⁶⁴ highlighting the immense investment opportunities in most sectors and the high dependency, in this case, on real estate performance. Ultimately, a wide array of investment products was revalued at lower market prices, resulting in industry-wide write-downs of more than US\$150 billion—with some projections calling for significantly greater credit-related losses before reaching bottom.⁶⁵

2008 Updates

A flurry of developments in international credit and equity markets, all stemming from the U.S. economic slowdown, shaped the opening months of 2008. Early on, greater downside risks to growth in the United States, along with the far-reaching implications of tightening international credit markets, weighed heavily on equity markets around the globe. By mid-January, losses incurred in virtually all geographic markets exceeded 10%.⁶⁶ Since then, however, mature markets have stabilized somewhat, bringing average 2008 losses down to roughly 4%, and emerging markets have actually reclaimed and exceeded incurred losses, generating an average net gain by mid-April.⁶⁷

Since the close of 2007, economic indicators in the United States have deteriorated further; notably: slowing consumer spending, cooling housing markets and softening labor market conditions. U.S. consumer confidence reached a 16-year low in March, falling from 70.8 to 69.5,⁶⁸ weighed down by record-level food and energy prices and significant financial market turmoil. In fact, the U.S. Department of Agriculture reported that domestic food prices rose 4% in 2007, a 17-year high that is significantly greater than the 2.5% average annual increase recorded over the previous 15 years. Further compounding U.S. economic difficulties, crude oil prices climbed persistently higher in the opening months of 2008, setting new records well above US\$120 per barrel. Also, reduced demand for housing depressed new home sales to a 13-year low in February.⁶⁹ Finally, jobless claims rose to a two-year high in early April,⁷⁰ after employers cut 80,000 jobs in March—the largest cut in five years.⁷¹

Although research may suggest that the fundamental challenges faced by major financial systems are contained within the United States, the global reach of securitization has hurt many international banks heavily invested in U.S. markets, particularly in real estate-related positions. Credit constraints and widespread unease culminated in the near-collapse of Bear Stearns, the fifth-largest U.S. investment bank. In the nine months leading to April 2008,

⁶² Organization of Economic Cooperation & Development (OECD), "Economic Outlook No. 80," estimates as of 2005

⁶³ Mortgage Bankers Association of America, "Delinquencies and Foreclosures Increase in Latest MBA National Delinquency Survey," December 6, 2007

⁶⁴ International Finance Services, London, "2006 Annual Issuance"

⁶⁵ "Goldman sees \$1.2 trillion global credit loss," Yahoo! News, March 25, 2008

⁶⁶ Dow Jones World Indexes, SunGard PowerData, accessed April 1, 2008

⁶⁷ Capgemini analysis, data derived from Dow Jones World Indexes and MSCI regional indexes

⁶⁸ Reuters/University of Michigan Surveys of Consumers, March 2008

⁶⁹ U.S. Department of Housing and Urban Development, "New residential sales in February 2008," U.S. Census Bureau News, March 26, 2008

⁷⁰ Jeannine Aversa, "Jobless claims shoot up to 2-year high," Yahoo! Finance, April 3, 2008

⁷¹ "Employers slashed 80,000 jobs in March," Yahoo! Finance, April 4, 2008

UBS, Switzerland's largest bank, reported total write-downs of US\$40 billion from exposure to the U.S. subprime market, the largest of any bank. In the first quarter of 2008 alone, UBS absorbed US\$19 billion in write-downs and a US\$12.1 billion net loss.⁷² Due to the lack of transparency in troubled asset classes, financial institutions around the world are acting aggressively to strengthen their capital bases and stave off any potential for collapse. Ultimately, business fundamentals are strong in the Euro Area and most emerging markets, making it unclear to what extent credit constraints will continue to threaten growth outside of the United States.

Equity markets, including the strong-performing emerging markets, tumbled worldwide in the early months of 2008, weighed down by weak U.S. growth prospects and the global impact of tightening credit. Representative of emerging markets, the MSCI Emerging Market Indexes for the BRIC nations, the Middle East and Asia fell sharply in the month of January, by 15.5%, 14.8% and 14.5%, respectively.⁷³ While the heightened volatility of equity markets around the world should not undermine the fundamental strength and growth potential of emerging markets, the extent and severity of the situation leaves authoritative powers in extremely delicate situations, attempting to stabilize troubled equity markets that appear to be as much a source of the problems as a by-product—a key factor in distinguishing the current situation from typical economic slowdowns.

In some cases, authorities have responded with aggressive and unconventional solutions to match the complex nature of the problems that surfaced. The U.S. Federal Reserve cut its target interest rate by 225 basis points in the first four months of the year,⁷⁴ aiming to stimulate economic growth and mitigate downside risks. Through April, other major central banks hesitated to follow suit and lower their target rates, largely due to concerns over historically high food and energy prices boosting inflation. Building on its initial responses, the Fed next created three mediums by which to inject markets with short-term money: the Term Auction Facility, the Primary-Deal Credit Facility and the Term Securities Lending Facility. These offerings, totaling more than a half trillion U.S. dollars, have been made widely available—including to investment banks, which are not typically granted access to the Fed's funding.⁷⁵

Amid heightened liquidity pressures and dwindling investor confidence, more than 20 hedge funds have frozen invested assets since November 2007 in order to avoid bank runs—preventing mass sell-offs, asset devaluations and margin calls.⁷⁶ These actions convey both the extreme measures financial institutions are willing to take to protect their portfolios and the widespread unease of investors.

To date, numerous financial institutions have obtained additional funding from foreign investors—specifically, sovereign wealth funds—to ease liquidity concerns. These sovereign wealth funds are state-owned investment vehicles that often disclose little information about their transactions. As a result, they have attracted significant media attention by purchasing minority stakes in leading financial institutions around the world. In the United States alone, such investments totaled more than US\$100 billion through February 2008.⁷⁷ However, given the lack of information transparency, published reports put the worldwide number of sovereign wealth funds between 30 and 40 and cite them as having control of an estimated US\$2 trillion to US\$3 trillion—a figure that may have quadrupled between 2003 and 2007.⁷⁸ These funds are playing an increasingly significant role in global markets. Nevertheless, like many other investment vehicles, sovereign wealth funds have generally infused capital at levels below thresholds that would trigger review and approval by federal banking agencies (typically, less than 10% of voting shares).

Conclusion

The early months of 2008 revealed further complications to the conditions facing the global economy at the end of 2007, heightening uncertainty among investors regarding the near-term global outlook. Deepening credit market woes threaten growth prospects in key mature markets. However, still-strong fundamentals in emerging markets are likely to sustain high levels of growth—a divergence that will likely impact consumer and business segments and shape policy choices. The balance between emerging market strength and mature market recovery is likely to persist through 2008, with the short-term outlook subject to variability given that aspects of potential risk may still be unknown.

⁷² "UBS writes off \$19 billion," *Yahoo! Finance*, April 1, 2008

⁷³ Select Emerging Market MSCI Global Indexes, www.msci.com, accessed March 5, 2008

⁷⁴ The Federal Reserve Board—Open Market Operations, www.federalreserve.gov/fomc, January 2008

⁷⁵ Allan Sloan, "On the brink of disaster," www.cnnmoney.com, March 31, 2008

⁷⁶ Matthew Goldstein, "Hedge funds frozen shut," *BusinessWeek*, March 17, 2008

⁷⁷ Bob Davis, "U.S. pushes sovereign funds to open to outside scrutiny," *The Wall Street Journal*, February 26, 2008

⁷⁸ Scott G. Alvarez, J.S. General Counsel, "Sovereign Wealth Funds," www.federalreserve.gov/newsevents/testimony/alvarez20080305a.htm, March 5, 2008

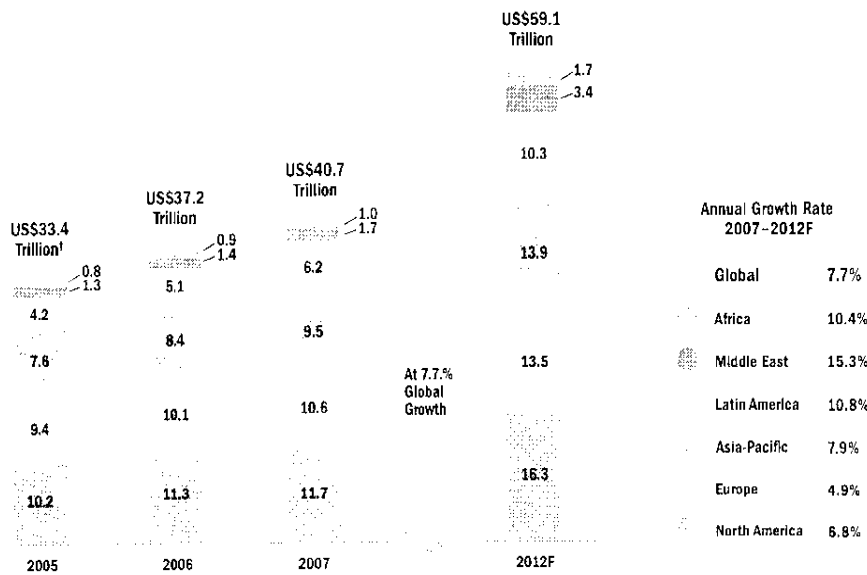
By and large, the global economy has two distinctive obstacles to overcome: inhibitors to growth in mature markets and high risks of inflation in emerging markets. How well these challenges are met will shape global HNWI growth prospects going forward.

Given 2007 performances and taking into consideration recent developments in world markets, we project that global HNWI wealth will grow to US\$59.1 trillion by 2012, advancing at a rate of 7.7% per year.

This upward revision of last year's *World Wealth Report* projections is based on several factors: Recent economic downturns in the United States have been shorter by historical comparison attributed, in part, to increasingly effective monetary policy. Therefore, the current complications are not expected to weigh on growth prospects as heavily as they may have in the past. Similarly, research suggests that emerging markets' recoveries have outpaced analysts' expectations.

Moreover, as HNWI portfolios continue to grow more diversified over the long term, spread across international boundaries and asset classes, their investments become increasingly mobile. Thus, as growth in one region or market slows, HNWIs can move freely, reallocating their funds to other areas, often more quickly than the troubled market itself can react and recover. Ultimately, this evolution will make HNWI investments less vulnerable to market downturns.

Figure 7. | HNWI Financial Wealth Forecast, 2005 – 2012F (by Region)
(US\$ Trillions)



* Bahrain and Qatar were added to the model for years 2005 onward
 Note: All chart numbers are rounded
 Source: Capgemini Lorenz curve analysis, 2008

HNWIs Retrench to Safer, More Familiar Investments

- **HNWIs moved to safer investment categories, with cash/deposits and fixed-income securities accounting for 44% of HNWI financial assets, up 9 percentage points from 2006**
- **Fixed-Income Securities saw a 6 percentage-point increase in asset allocation, accounting for 27% of holdings, up from 21% in 2006**
- **Globally, HNWIs continued to decrease their holdings in North America**
- **HNWIs showed greater interest in domestic market investments, preferring more familiar grounds amid heightened levels of economic uncertainty**

The diverging macroeconomic environments in the two halves of 2007 helped define HNWIs' asset allocation strategies last year. Building on the optimism of 2006, the early months of 2007 showed HNWIs betting heavily on riskier asset classes. However, as the year wore on and financial market turmoil and economic uncertainty intensified, HNWIs began to retrench, shifting their investments to safer, less volatile asset classes. By year-end, HNWIs were moving in favor of cash/deposits and fixed-income securities in an effort to mitigate their risk exposure in increasingly uncertain economic times. HNWIs also increased allocations to domestic products over the course of the year, a scenario consistent with an increasing desire to invest in more familiar grounds.

HNWIs Seek Refuge in Lower-Risk Assets

In 2007, HNWIs sought refuge in safer, more traditional investment vehicles, increasing their overall portfolio allocations to cash/deposits and fixed-income securities by 9 percentage points, to 44% of their holdings.⁷⁹ Of this amount, fixed-income securities accounted for 27%, up from 21% a year earlier, and cash/deposits rose to 17%, from a 14% share in 2006.⁸⁰

Latin American and North American HNWIs allocated more of their holdings to fixed-income securities than any of their peers, at 39% and 29%, respectively.⁸¹ Given the slowing economy in the United States and the currency value erosion, HNWIs increasingly invested in non-U.S. dollar-denominated bonds and stocks, hedging against growing risks in the United States by anchoring their investments to stronger-performing economies—and their respective currencies.⁸²

HNWI investors in Asia and Europe led in allocations to cash/deposits, setting aside 25% and 21%, respectively.⁸³ This is consistent with Asia's historical tendency toward high personal savings rates

relative to other regions. In 2006, for instance, Asian HNWIs allocated 24% of their financial assets to cash/deposits, compared with only 14% by their European peers.⁸⁴

Overall macroeconomic indicators weakened in Europe in 2007: GDP growth slowed in most of the continent's major economies and investor confidence receded, especially towards the end of the year. Additionally, European stock markets, with the exception of Germany's, performed relatively poorly during 2007 compared with the previous year. As a result, European HNWIs shifted their allocations to cash/deposits, from 14% in 2006 to 21% in 2007.⁸⁵ Given that European HNWIs already had a relatively high allocation to fixed income, many of them reallocated assets to cash/deposits in order to maintain a diversified portfolio while minimizing risks.

Alternative Investments' Popularity Eases

The economic downturn, and the heightened levels of uncertainty it created for investors in the second half of the year, deterred HNWIs from increasing their allocations to alternative investment vehicles. HNWI allocations to alternative investments were shaped by the balance between the uncertainty spurred by the economic turmoil and the strong performances of select products within that asset class. Ultimately, HNWIs trimmed their allocations to alternative investments by a single percentage point, from 10% of their financial assets in 2006 to 9% in 2007.⁸⁶

Counterbalancing HNWI concerns, growth opportunities developed as a result of shifting economic strengths. For instance, gold, among other commodities, gained popularity as a hedge against inflation and the sliding U.S. dollar, boosting gold futures by 31.4% in 2007.⁸⁷ Additionally, various hedge funds froze client withdrawals starting in late 2007, which helped minimize reductions in allocations to alternative investments.

⁷⁹ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

⁸⁰ Ibid.

⁸¹ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

⁸² George Mannes, "The Best Ways to Protect Your Money Today," *Money*, May 1, 2008

⁸³ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

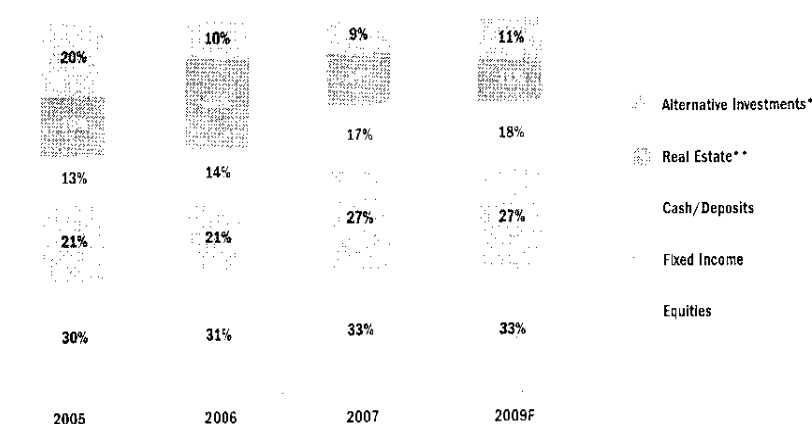
⁸⁴ Capgemini/Merrill Lynch Financial Advisor Survey, March 2007

⁸⁵ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

⁸⁶ Ibid.

⁸⁷ "Year-end Review of Markets & Finance," *The Wall Street Journal*, January 2, 2008

Figure 8. HNWIs' Allocation of Financial Assets, 2005 – 2009F (by Category)



* Includes: Structured products, hedge funds, derivatives, foreign currencies, commodities, private equity, venture capital, other (may include: structured credit, managed futures, investments of passion, etc.)
 ** Includes: Commercial real estate, REITs and other investment properties

Source: Capgemini/Merrill Lynch Financial Advisor Surveys, March 2006, March 2007, April 2008

Globally, hedge funds represented the largest portion—over 30%—of alternative investments.⁸⁸ During the course of the year, HNWIs seemed to grow more distrustful of hedge funds as subprime mortgage-related turmoil intensified. The collapse of two Bear Stearns hedge funds, resulting from losses stemming from highly leveraged mortgage-backed security positions, deepened investors' concerns over participation in hedge funds, limited pricing transparency and the investment vehicles they were likely to impact.⁸⁹ Ultimately, however, hedge funds' average gains of 12.6% in 2007 were enough to outweigh HNWIs' worries.⁹⁰ Consequently, HNWIs made only slight adjustments to their overall allocations to alternative investments.

Real Estate Loses Momentum

In 2006, real estate experienced record returns across various categories. Many HNWIs took profits from these increased values during 2007, and moved their money into other asset classes. However, HNWIs across the globe pulled out of real estate investments earlier and more significantly than anticipated, finishing 2007 with only 14% of their financial assets allocated to real estate, a 10 percentage-point drop from 2006 levels.⁹¹

REITs Fail to Meet High Expectations

While 2006 was a year of impressive returns for REITs, results in 2007 fell short of high expectations. REIT performances were split by the two halves of the year, scoring mild gains in the first half of 2007 and pulled down by tightening credit markets and deteriorating economic conditions in the second. However, REIT performances varied widely across regions, with differences most widely seen across Asia and North America.

Asian REITs performed particularly well in the first half of 2007, during which time 11 new REITs were listed—more than in any other region.⁹² This brought REIT market capitalization to more than US\$80 billion, roughly twice the size attained by the end of 2005.⁹³ While evidence suggested that Asia was becoming the new "REIT Tiger,"⁹⁴ the unfolding credit crisis in the second half of the year led many investors in the region to adopt a more cautious approach. The unsettled economic climate and significant market corrections caused the Asian REIT market capitalization to contract to US\$ 78.7 billion, producing an overall negative sentiment and undermining annual market results.⁹⁵ The year closed with only 18 new REITs introduced, compared with 35 in 2006.⁹⁶

⁸⁸ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

⁸⁹ "The US Credit Crunch Timeline," *The Toronto Star*, December 16, 2007

⁹⁰ Credit Suisse/Tremont Hedge Index, www.hedgeindex.com, accessed February 15, 2008

⁹¹ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

⁹² CB Richard Ellis, "REITs Around Asia, 1H 2007"

⁹³ *Ibid.*

⁹⁴ Ernst & Young, "Global REIT Report, REIT Market Overview," October 2007

⁹⁵ CB Richard Ellis, "REITs Around Asia, 2H 2007"

⁹⁶ *Ibid.*

In the United States, 2007 marked the end of seven consecutive years of positive returns for REITs. According to various indexes, U.S. REITs reported net losses of up to 26.2% in 2007, down significantly from the 30.8% average gains posted in 2006.⁹⁷ Even when many regional markets performed well, the first six months' results in North America were lackluster. The number of listed REITs contracted by 23%, to 169 (down from 220), in large part due to private equity deals taking REITs out of the listed markets.⁹⁸

Tightening credit markets added to other deteriorating economic conditions in the second half of 2007, with significant worldwide impact. Indeed, the United States accounted for 5.7 percentage points of the 14.7% contraction in the 2007 S&P/Citigroup World REIT Index.⁹⁹ Amid these global conditions, REITs lost ground with HNWI, accounting for 17% of their real estate asset allocations in 2007, down from 22% in 2006.¹⁰⁰

Global Direct Commercial Real Estate Performs Well

Globally, direct commercial real estate investments rose 8.4% (US\$59 billion), during 2007, amounting to US\$759 billion.¹⁰¹ During the first six months of 2007, high levels of investor confidence and healthy deal-making environments drove record transaction volumes to US\$394 billion.¹⁰² However, as credit markets tightened and real estate valuations deteriorated, transaction volumes steadily declined over the second half of the year.

In Europe, transaction volumes increased only 1.9% from 2006 to 2007, whereas in the Americas, they rose about 10%, to US\$312 billion.¹⁰³ For its part, the United States netted US\$291 billion.¹⁰⁴ Likewise, investments in the Asia-Pacific region increased by 27.4%, led by Japan, owner of approximately 50% of regional volumes.¹⁰⁵ Consistent with these trends, HNWIs in North America and Asia increased their exposure to commercial real estate in 2007, while globally, the portion of HNWI's financial assets allocated to commercial real estate remained unchanged.

The Middle East remained the region with the most exposure to commercial real estate, with 33% of HNWI real estate investments allocated to this asset.¹⁰⁶ The Dubai emirate, for instance, is undergoing massive construction projects, both commercial and residential, and offering incentives, such as tax-free property sales, to boost transactions. While these investment vehicles are not readily accessible to overseas investors, local HNWIs are able to leverage their domestic-market knowledge to generate profitable returns on such investments.¹⁰⁷

HNWIs Retrench to More Familiar Domestic Markets

At the regional level, the geographic distribution of HNWI investments underwent significant changes in 2007, with allocations to domestic markets gaining strong favor. We view this as a temporary, tactical move dictated by caution, as investors across all regions await further developments in the global markets.

HNWIs outside the United States moved to diminish their exposure to U.S. markets, the primary victims of the subprime and credit market turmoil. For instance, HNWIs in the Middle East and Latin America, who, among non-U.S. investors, traditionally have had the highest proportion of their financial assets allocated to North American markets, decreased their exposure to this part of the world by five and nine percentage points, respectively.¹⁰⁸ Globally, HNWI allocations to North America accounted for 42% in 2007, but have been decreasing in recent years.¹⁰⁹

Globally, the geographic distribution of HNWI's investments changed only slightly from 2006 to 2007. Allocations to North America, Asia-Pacific and Africa decreased by a single percentage point, while those to Europe remained unchanged. Meanwhile, allocations to Latin America and the Middle East increased by two and one percentage points, respectively.¹¹⁰

⁹⁷ Dow Jones Equity REIT Index, www.djindexes.com, accessed February 15, 2008

⁹⁸ Ernst and Young, "Global REIT Report, REIT Market Overview," October 2007

⁹⁹ S&P/Citigroup Global Equity Indexes, www.globalindices.standardandpoors.com, accessed February 26, 2008

¹⁰⁰ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

¹⁰¹ Jones Lang LaSalle, "Global Direct Commercial Real Estate Investment Reaches Record Levels in 2007 Despite Credit Crunch," New Global Capital Flows Research, January 31, 2008

¹⁰² *Ibid.*

¹⁰³ *Ibid.*

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

¹⁰⁶ *Ibid.*

¹⁰⁷ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

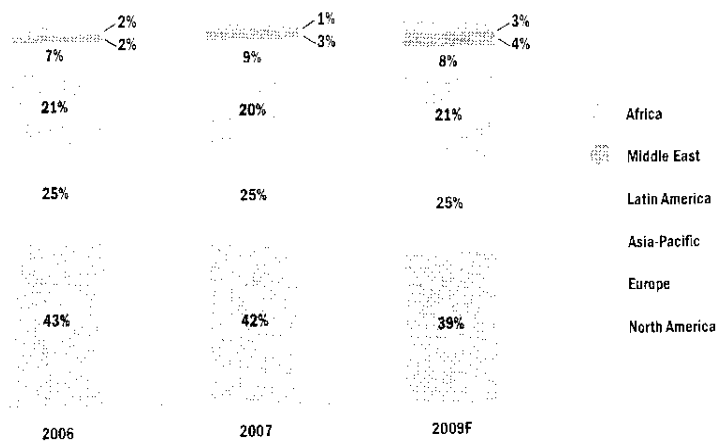
¹⁰⁸ Tom Burroughes, "Wealth Management," *The Business*, August 4, 2007

¹⁰⁹ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

¹¹⁰ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

¹¹¹ Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

Figure 9. | Geographic Distribution of HNWI's Financial Assets, 2006 – 2009F (by Region)



Source: Capgemini/Merrill Lynch Financial Advisor Surveys, March 2007, April 2008

Looking Ahead

As HNWIs across all regions regain confidence in financial markets, they will move from cash/deposits and fixed-income securities back into less risk-averse investments. Globally, we forecast the portion of HNWI assets invested in alternative investments will increase by two percentage points through 2009.¹¹¹ Asia-Pacific will likely lead the way, with a projected three percentage-point increase.¹¹²

Global allocation of HNWI investments to North America is expected to continue to erode, from 42% in 2007 to 39% by 2009.¹¹³ Additionally, as HNWIs shift away from a "retrenching-to-domestic-markets" strategy, they are likely to favor the higher-risk/higher-return investments of fast-growing markets. The BRIC nations, as well as North Africa and Latin America, will continue to benefit from the rising prices of commodities and natural resources. Additionally, HNWI allocations to Eastern Europe should continue to increase as it further benefits from strengthening relations with members of the European Union.

As signs of financial market recovery appear, we project that HNWIs will likely return to their pursuit of high returns, particularly in emerging and frontier markets—such as Bangladesh, Jamaica, Slovenia, and many other countries in Africa, South Asia, Eastern Europe, and the Caribbean—and alternative investments.

¹¹¹ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

¹¹² *Ibid.*

¹¹³ *Ibid.*

Green Investing Gains Traction in 2007

As the world community has grown more attentive to environmental concerns, such as global warming and climate change, the presence of related investment opportunities has greatly increased, driving robust growth of green investing in 2007. Whether perceived as an investment opportunity or a responsibility of global citizenship, overall participation in green initiatives has risen rapidly in recent years due to the fundamental need for sustainable development, and, as a result, the undeniable growth potential of the green sector. Furthermore, it seems the era of economically viable green power has finally arrived, as the impact of soaring oil prices on consumer attitudes and the widespread acceptance of global warming implications converge. Individuals, businesses and governments alike are actively pursuing the integration of green initiatives into everyday systems and investment strategies, adapting to and preparing for what is quickly becoming the way of the future. Capitalizing on the fundamental strength of demand for green initiatives, the investment community has been particularly invigorated by the attractive financial returns of green investments that have accompanied the already appealing environmental and social benefits generated.

More Investors Bet on Green

In much greater size and proportion than in recent years, investors have been supporting innovative research and development initiatives in search of alternative fuels, renewable energy and other advanced technologies. Today, investors are presented with many vehicles through which to back green initiatives, such as mutual funds, ETFs and other pooled products or alternative investments. In 2007, these investment vehicles drove robust growth in green sectors. For example, total investment in the clean technology sector increased to US\$117 billion in 2007, up 41% from 2005,¹¹⁴ with particular strength in the wind and solar segments. In fact, in the three years ending November 2007, gains in the wind segment exceeded 300%, while solar posted the highest growth in 2007, roughly 150%.¹¹⁵ Furthermore, the solar segment produced the highest proportion of IPOs of any green sector over the course of last year, including the Merrill Lynch-led US\$6.5 billion issuance of Iberdrola Renovables, the world's largest renewable energy company.¹¹⁶ Despite being burdened by poor overall market conditions in late 2007 and early 2008, green investing trends have been driven by an underlying commitment to sustainable development, which takes profit incentives into consideration alongside social responsibilities. As a result, the sector will likely weather short-term fluctuations and deliver strong returns in the long run.

Venture capital has played a leading role in green investing throughout North America and Europe, as investments in the sector reached nearly US\$5.2 billion in 2007, up from US\$3.6 billion in 2006 and only US\$714 million in 2001.¹¹⁷ In 2007, US\$3.9 billion of venture capital was invested in the United States in green technology, of which roughly US\$1.8 billion was invested in California alone—accounting for approximately 45% of all green investments in North America.¹¹⁸ Given the greater freedom with which individuals, relative to institutions, can allocate their assets, venture capital has flowed largely from wealthy private clients as opposed to stringently controlled institutional investors. In addition, private equity firms will likely play an increasingly active role and represent another important investing outlet as innovative technologies continue to emerge. Also, many top-tier banks showed heightened involvement in green stock market listings in 2007—Credic Suisse, Merrill Lynch and Morgan Stanley set the pace, handling deals worth US\$2.8 billion, US\$2.4 billion and US\$2.3 billion, respectively.¹¹⁹ Financial institutions of all classes are quickly realizing the growth potential of the green sector and are acting accordingly to secure an early stake in the market.

Heightened Interest Drives New Market Opportunities

Scientific evidence today overwhelmingly points to a massive expansion in greenhouse gases as the foremost consequence of rapid industrialization and driver of climate change. The widespread acceptance of such theories has warmed the international political climate to broader environmental issues and, as a result, has encouraged the general public to integrate green standards into their personal and professional lives. Informational broadcasts by the mass media and documentaries, such as Al Gore's *An Inconvenient Truth*, have raised public awareness of the global impact of everyday activities and habits and driven greater appreciation of the need for green initiatives. As a result, heightened public awareness has reshaped business dynamics and raised expectations for government and business endeavors, creating significant opportunities for future growth.

¹¹⁴ "Folding green: the investment boom," *The Observer*, February 24, 2008

¹¹⁵ "Green Light for Renewable Energy," *Davy Research Report*, November 2007

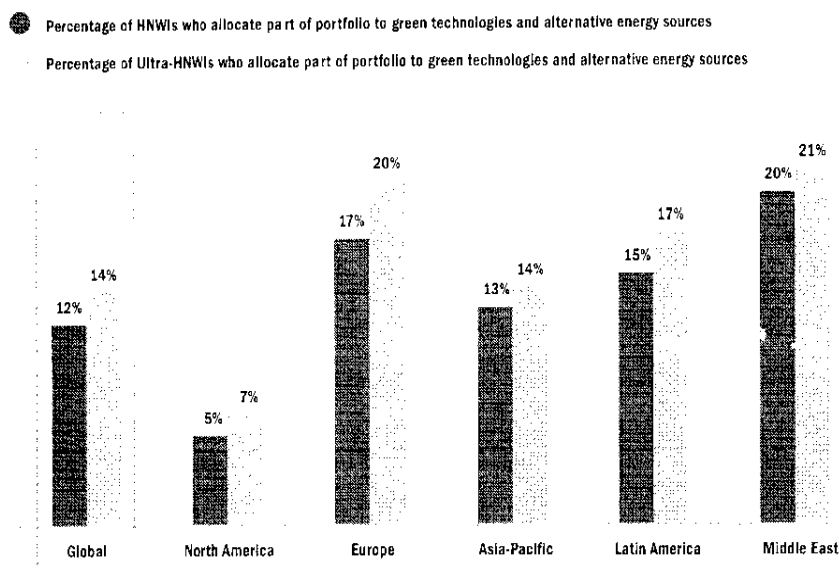
¹¹⁶ "Is 'green' power money misguided? Market is booming, but dot-com memories make some worry business of green," *International Herald Tribune*, March 1, 2008

¹¹⁷ "Green tech investments growing fast," *The San Francisco Chronicle*, January 17, 2008

¹¹⁸ *Ibid.*

¹¹⁹ "Is 'green' power money misguided? Market is booming, but dot-com memories make some worry business of green," *International Herald Tribune*, March 1, 2008

Figure 10. HNWI's and Ultra-HNWIs' Interest in Green Investing, 2007 (by Region)



Source: Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

Governments across the globe have played an active role in stimulating the growth of green initiatives, paving the way for lucrative market opportunities. Depleting fossil fuel reserves, volatile fuel prices, energy security worries and emission concerns are some of the key factors that convey the international nature of the issues at hand and, to date, have driven aggressive government advocacy of green initiatives.¹²⁰ European powers have been long-standing leaders and pioneers of green initiatives. In January 2008, Norway made an extraordinary pledge to be "carbon neutral" by 2030, such that it would generate no net greenhouse gases into the air.¹²¹ Despite concerns regarding carbon neutrality and the practice of offsetting domestic emissions with contributions to emission-reduction schemes abroad, Norway represents the high ambition necessary to bring about meaningful change. Britain may become the first country in the world to introduce legally binding CO₂ reduction targets if a climate change bill, aimed at reducing the country's emissions 20% by 2010, is passed, as expected, in summer 2008.¹²² In the United States, state-level policies, tax credits and cost-recovery systems are among the incentives that have been offered to encourage innovation. However, Abu Dhabi is exploring, arguably, the most ambitious plan of all: to create the world's first carbon-neutral metropolis.¹²³ Intended to host 100,000 inhabitants and likely to absorb billions of investment dollars in clean technology initiatives, this futuristic project illustrates Abu Dhabi's resolve to be a pioneer of post-oil alternatives, and is drawing significant global media attention. As climate change and other environmental concerns take center stage in the global arena, government bodies have demonstrated a keen interest in advancing even the most daring green initiatives in order to induce meaningful change and secure future economic and political stability.

Businesses "go green" in an effort to adapt to changing market dynamics and capitalize on growth opportunities, as heightened public interest redefines the rubrics by which companies are evaluated and governments raise the incentives to participate in environmentally conscious endeavors. A flurry of start-ups has sprouted in search of innovative technologies and other alternative solutions they hope will meet the fundamental needs critical for sustainable economic growth. Developing anything from online dashboards that monitor environmental activity in buildings (e.g., energy and water usage) to real-time tracking of transportation systems through GPS and mobile phone networks to improve efficiency and cut fuel costs, to thin-film solar panels that boast longer lifetimes at lower costs,¹²⁴ businesses are devoting resources to bring about improvements in all facets of daily life. Even the construction industry has fostered pioneering green initiatives that have altered the landscape of international building standards. For instance, the Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a third-party certification program that has become an international benchmark for high-performance green building standards; it is currently being utilized in 41 countries, representing both mature and emerging nations.¹²⁵

¹²⁰ HSBC, "The US Market, Global Natural Resources & Energy," December 3, 2007

¹²¹ "Lofty pledge to cut emissions comes with caveat in Norway," *The New York Times*, March 22, 2008

¹²² Heaton, Green and Kerry Capell, "Carbon Confusion," *BusinessWeek*, March 17, 2008

¹²³ Stanley Reed, "Guess who's building a green city," *BusinessWeek*, December 24, 2007

¹²⁴ "The most promising green tech startups," *Green Wombat*, October 30, 2007

¹²⁵ U.S. Green Building Council, "LEED Rating Systems," www.usgbc.org, accessed April 28, 2008

Around the world, scientists and entrepreneurs have been fusing creativity with abundant resources to extend green initiatives beyond their current reach. Business mogul and social activist Richard Branson hosted a private conference in early 2008 on his remote Caribbean island, Necker Island, to discuss with world leaders and other business executives possible green initiatives that would bring about both meaningful change and lucrative returns.¹²⁶ Efforts aimed at expanding the scope of alternative solutions are quickly increasing in number as individuals and companies of all backgrounds have been converting environmental and social concerns into actionable business opportunities in new and innovative ways.

Globally, consumers increasingly favor “environmentally friendly” products and more prudent green standards, putting pressure on businesses to meet new market demands. Even traditional industries have realigned their strategies to incorporate green initiatives in recognition of more sophisticated consumer expectations. Among others, the likes of Siemens, Wal-Mart and GE have executed mergers and acquisitions of green pure-plays to augment their own internal environmental-sustainability initiatives. Introducing environmental considerations to business decision processes has become increasingly important and, as a result, businesses across the globe have demonstrated concerted efforts to adapt to a changing global environment.

HNWIs Attracted to Growth in Green Investing

Green investing encompasses a wide range of industries, making the classification of applicable investment products quite subjective. Furthermore, green investments often match very different criteria and include anything from “best-in-class” oil rigs to true pioneers of clean technology. As a result, the green investing market is difficult to size. However, trends evident in the broader Socially Responsible Investing (SRI) category—which encompasses environmentally and socially screened assets—provide useful insight into the narrower green universe. Institutional investors and HNWIs held more than 70% of the US\$2.71 trillion SRI assets under management in 2007, representing an increasingly attractive target for financial institutions and advisors. Given the high development risk associated with the sector, green investing caters largely to institutions and HNWIs—more sophisticated investors willing to assume greater financial risk in hopes of high returns.

Roughly 12% of HNWIs and 14% of Ultra-HNWIs around the world allocate part of their investment portfolio to green technologies and alternative energy sources.¹²⁷ Regionally, the most environmentally attuned HNWI and Ultra-HNWI populations, as measured by the percentage of affluent investors allocating to green investing, were found in the Middle East and Europe—with participation rates ranging from around 17% to 21% in 2007, all exceeding global averages. By comparison, only 5% of HNWIs and 7% of Ultra-HNWIs in North America allocated part of their portfolio holdings to green investing. It is interesting to note that North America was the only region in which social responsibility was the primary driver of HNWIs' green investing. Among all HNWIs worldwide, approximately half pointed to financial returns as the primary reason for their allocations to green investing. The combination of lucrative returns and social responsibility underpin the rising popularity of green investing among HNWIs across the globe.

With Future Sustainability at Stake, Green Investing Will Grow

Investors, businesses and governments can no longer ignore the realities of climate change and other environmental risks. Therefore, all are looking for ways to systematically integrate eco- and sustainable investing into their moneymaking decisions.¹²⁸ Amid government efforts to promote and reward the pursuit of green initiatives, and the increasing dependence of corporate profitability on sustainable development, green products will be more commonly incorporated in households and businesses on the premise of practicality and efficiency gains. Furthermore, the sheer size of the energy market, estimated at US\$6 trillion,¹²⁹ coupled with the fundamental need for energy to drive economic growth, underpins the long-term, global security of green investing, even though higher levels of risk are often associated with nascent marketplaces, such as the green sector. Ultimately, the unilateral pursuit of economic progress against a backdrop of sustainability will be driven by consciously aligning investment choices with values and concern for the environment.

¹²⁶ “On an island paradise, talking about global warming's silver lining,” *The New York Times*, March 22, 2008

¹²⁷ 2008 Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

¹²⁸ “Personal wealth: Profiting from climate change,” *The Edge-Singapore*, July 16, 2007

¹²⁹ “Environment—Where the money is,” *The Wall Street Journal*, March 24, 2008

HNWIs' Pursuit of "Passion Investments" Is Not Deterred by Economic Volatility

HNWIs and Ultra-HNWIs allocate and spend a significant portion of their wealth on investments of passion: art collections, luxury autos, yachts, sports teams, memorabilia, wine collections, luxury travel and health/wellness, for example. However, allocations vary considerably from region to region, and between mature and emerging economies. Further differences emerge when allocations are studied in terms of whether they are tangible passion investments, such as art collections, or luxury expenditures, such as high-end travel, which are more experiential in nature.

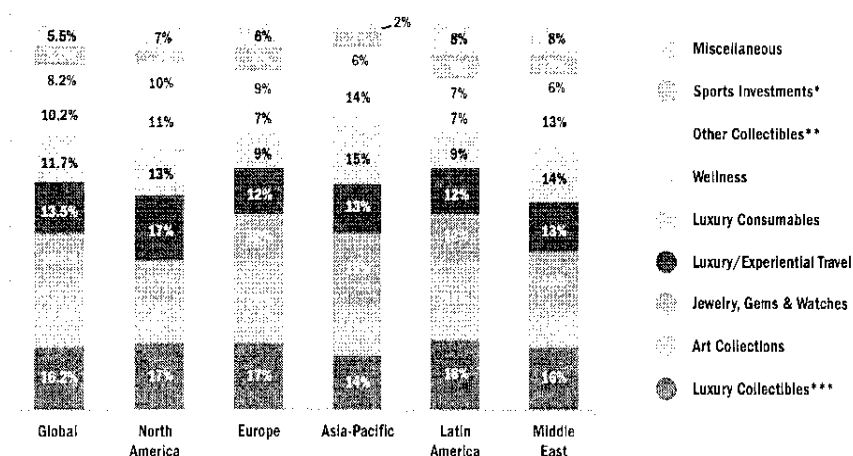
In 2007, luxury collectibles, accounting for 16.2% of passion investments, and fine art, representing 15.9%, continued to be the most popular choices of HNWIs worldwide.¹³⁰ Jewelry held third place, with 13.8%, and luxury/experiential travel ranked fourth, with 13.5%.¹³¹ These four categories are the most expensive of the passion investments studied, and together account for over half of all HNWIs' expenditures on luxury items.¹³²

Despite Rising Costs and Financial Market Turmoil, HNWIs Did Not Give Up Expensive Purchases

The Forbes' Cost of Living Extremely Well Index (CLEWI), which tracks the year-over-year cost of a basket of luxury goods, rose 6.2% from 2006 to 2007, more than double the rate of inflation.¹³³ Despite these significant price increases, various luxury segments reported record sales figures in 2007, testifying to the unquenchable appetite of HNWIs for luxury items.

Over the course of the past year, wealthy individuals from emerging markets demonstrated significant influence in the global luxury marketplace. Thus, even as financial market turmoil impacted the United States during the second half of 2007, luxury goods makers, high-end services providers and auction houses all found ready clients in the emerging markets of the world—most notably China, India, Russia and the Middle East—thereby sustaining their own growth. "We used to think in terms of hedge funds when targeting new customers," says David Norman, worldwide cochair of Sotheby's Impressionist and Modern Art Department. "Now, we look for barrels of oil."¹³⁴

Figure 11. | HNWIs' Investment-of-Passion Dollars, 2007 (by Region)



* "Sports Investments" represents sports teams, sailing, race horses, etc.
 ** "Other Collectibles" represents coins, wine, antiques, etc.
 *** "Luxury Collectibles" represents automobiles, boats, jets, etc.
 Source: Capgemini/Merrill Lynch Financial Advisor Survey, April 2008.

¹³⁰ Capgemini/Merrill Lynch Financial Advisor Survey, 2008

¹³¹ Ibid.

¹³² Ibid.

¹³³ Forbes CLEWI, updated September 20, 2007

¹³⁴ Kelly Crow, "Art Auctions Look Abroad," *The Wall Street Journal*, November 2, 2007

Luxury Collectibles

Private jets, yachts, high-end automobiles and other luxury collectibles again accounted for HNWIs' largest investments of passion, with wealthy Latin Americans at the forefront of this trend. While North Americans traditionally have been the largest purchasers of private jets, their position was eclipsed in 2007—the first year that orders for Gulfstream jets from overseas buyers surpassed those from North Americans, according to U.S.-based General Dynamics.¹³⁵

Luxury automobile makers reported similar trends for 2007. Ferrari recorded unprecedented growth in emerging markets. Its sales to Asia-Pacific rose by 47.2%, while the Middle East grew by 32.3%. This compared with strong—but single-digit—growth in the United States and Germany, historically Ferrari's largest markets.¹³⁶ Limited-edition and classic car prices remained immune to the economic downturn, and custom-built motorcycles experienced a boom in demand, with aficionados paying more than US\$300,000 for some of these one-of-a-kind "works of art."¹³⁷

The yacht market, long dominated by HNWIs from the Middle East, has been taken by storm by Russian buyers in recent years—further evidence of a surge in demand from emerging market buyers. The "Eclipse," perhaps the largest privately owned yacht in the world and still under construction, is believed to be the property of one of Russia's oil billionaires. Meanwhile, yacht brokers report that "at least 20% of the business for new vessels longer than 200 feet is coming from Russia—more than from any other country, including the United States."¹³⁸

Fine Art

Globally, fine art retained its position as one of the most popular investments of passion. Demand was greatest for contemporary and iconic art in mature and emerging markets alike. Similar to previous years, more European (22%) and Latin American (21%) HNWIs invested in fine art than did their North American (11%), Middle Eastern (10%), or Asian counterparts (13%) in 2007.¹³⁹

Newly minted millionaires from Moscow, to Mumbai, many of whom have made fortunes in the global commodities boom, were active auction participants.¹⁴⁰ Christie's International and Sotheby's both profited from the expanding Russian economy. Their combined 2007 Russian sales totaled US\$324.9 million, up 45% from US\$223.6 million in 2006.¹⁴¹ Accordingly, Christie's plans to open a showroom in Moscow in 2008 to better serve its Russian client base, which has grown significantly over the years.¹⁴²

While some critics suggest that U.S. HNWIs' driving role in the global art market has weakened after several decades of influence, auction houses have found that art sales have not been impacted by the tumultuous economy. In fact, during Christie's November 2007 auction of post-war and contemporary paintings, 50.8% of the presented items were bought by HNWIs from the United States, up from a reported 48.5% in 2006.¹⁴³

2007 also saw two growing trends within the art market: online auctions and private sales. Christie's online auction sales did particularly well during the year, with buyers comfortably bidding up to US\$1 million over the Internet for items that they couldn't view firsthand.¹⁴⁴ Private sales at auction houses, too, were on the rise during 2007, as more Ultra-HNWIs chose to avoid being named in the press on select purchases.¹⁴⁵

Jewelry, Gems and Watches

Jewelry, gems and watches attracted the largest share of passion investment allocations in the Middle East and Asia, while ranking third on a global basis. Wealthy collectors avidly pursued "fancy or colored diamonds," causing prices to soar last year.¹⁴⁶ In October 2007, Sotheby's sold a 6.04-carat emerald-cut blue diamond for a record US\$1.32 million per carat.¹⁴⁷ Although market watchers speculate about a "bubble," prices are expected to climb even higher in 2008 because of the growing demand. Men's luxury watches, too, were highly prized by collectors from around the world, with exclusive and limited-edition models from Patek Philippe, Franck Muller and other watchmakers viewed as enduring "collection" pieces.¹⁴⁸

¹³⁵ Stephen Manning, "Private Jet Sales Up, Fueled by Overseas Buyers," *The Post and Courier*, March 16, 2008.

¹³⁶ Fiat Group, Annual Report, December 31, 2007.

¹³⁷ "2008 Collectors Guide," *Forbes*, December 24, 2007.

¹³⁸ Robert Frank, "The Wealth Report: The Russians Are Coming..." *The Wall Street Journal*, January 12, 2007.

¹³⁹ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008.

¹⁴⁰ Kelly Crow, "Art Auctions Look Abroad," *The Wall Street Journal*, November 2, 2007.

¹⁴¹ John Varoli, "Sotheby's, Christie's Report Record Russian Art Sales in 2007," *Bloomberg.com*, January 11, 2008.

¹⁴² Interview with Toby Usnik, Christie's, New York, April 25, 2008.

¹⁴³ *Ibid.*

¹⁴⁴ *Ibid.*

¹⁴⁵ *Ibid.*

¹⁴⁶ "A Dazzling Palette," *Worth*, January/February 2008.

¹⁴⁷ *Ibid.*

¹⁴⁸ "2008 Collectors Guide," *Forbes*, December 24, 2007.

Luxury/Experiential Travel

With luxury goods increasingly within the reach of the upper-middle-class, especially in more mature markets, HNWI's continued to purchase "exclusive experiences" as a way to differentiate themselves. According to the founder of the travel firm DreamMaker International, HNWI's are "fixated on the story--and [want to] tell their friends what they did."¹⁴⁹ Whether it's an impromptu trip to Italy to race a Ferrari, Lamborghini and several Porsches from Florence to Portofino, or a three-week adventure across the world, with brief stops in some of the world's most exotic locales—from Africa's Serengeti to Peru's Machu Picchu—Ultra-HNWI's are ready to spend large sums of money to "live the dream" in the most luxurious conditions.¹⁵⁰

HNWI's also are seeking out philanthropic trips that give them the opportunity to do charitable work, while still enjoying luxurious accommodations. Tour operators arrange for wealthy clients to visit schools, health clinics and poor neighborhoods to see firsthand how financial donations might be implemented. HNWI demand for such trips has grown 15% over the past two years, according to luxury tour operator Artisans of Leisure.¹⁵¹

Other Luxury Categories

Luxury goods makers also reported strong growth in 2007. Richemont, the world's second-largest such firm after LVMH Group, reported that its sales rose 14% in the last three months of 2007, to 1.7 billion euros.¹⁵² Wealthy consumers in the Middle East, Asia-Pacific and North America showed the highest level of spending on Luxury Consumables (clothing, designer apparel and accessories, etc.).

Globally, HNWI's and Ultra-HNWI's allocated 10.2% to Health and Wellness spending, which included visits to high-end spas, investments in personal fitness facilities, as well as full body scans. At the regional level, HNWI's from the Middle East, Asia-Pacific and North America allocated the most to this particular category of passion investments.

Sports Investments, Club Memberships, Wine Collections and other personal interests rounded out the remaining categories for investments of passion. Wine distributors in Europe and the United States reported that sales of mid-priced wines slowed during the latter half of 2007 and the early months of 2008, while those of "good value" and expensive wines increased¹⁵³—in part, due to stepped-up interest from emerging market buyers from China and Russia investing their new wealth in wine collections.

While, globally, investment-of-passion interests were weighted more heavily toward tangible items, such as art collections, yachts, personal jets and the like, regional differences could be discerned. Asian HNWI's allocated the most to "intangible categories," such as luxury and experiential travel, health and wellness, and luxury consumables.¹⁵⁴ Luxury expenditures by Middle Eastern and North American HNWI's also exceeded global averages.¹⁵⁵ Compared with Ultra-HNWI's, who favored more tangible investments, such as art collections, HNWI's, in general, were more likely to spend on "intangibles."¹⁵⁶

Looking Ahead

The global art market and luxury industry segments tend to be "latecomers to economic downturns." Accordingly, some industry analysts have voiced concern that these sectors may yet be impacted by the financial market turmoil of late 2007.¹⁵⁷ However, historically, investments in fine art, private planes, luxury automobiles and other high-priced collectibles have been more immune to economic downturns, as their Ultra-HNWI buyers tend to be less adversely affected by such trends. "Affordable (and aspirational) luxury goods,"¹⁵⁸ which are more accessible to HNWI's as well as to less affluent individuals, may suffer more of an impact if the downturn is sustained.

Despite these concerns, analysis suggests that new wealth and growing consumer demand in Asia-Pacific, Eastern Europe and the Middle East will continue to outweigh the pressures of an economic slump in Western markets.¹⁵⁹

¹⁴⁹ Dan Wilchins, "What the Rich Want; The Trip Is Nothing without a Story to Tell Your Friends," *Reuters*, November 3, 2007

¹⁵⁰ Gene Sloan, "For \$100,000, See the World from a Richly Detailed 757," *USA Today*, March 28, 2008

¹⁵¹ Jennifer Alsever, "When a Luxury Vacation Cultivates Philanthropy," *The New York Times*, December 9, 2007

¹⁵² "Swiss Luxury Goods Still Sparkle Thanks to Eastern Promise," *Agence France Presse*, February 4, 2008

¹⁵³ Interview with Mehmet Yorukoglu, House of Burgundy, Inc., New York, April 2008

¹⁵⁴ Capgemini/Merrill Lynch Financial Advisor Survey, April 2008

¹⁵⁵ *Ibid.*

¹⁵⁶ *Ibid.*

¹⁵⁷ "Swiss Luxury Goods Still Sparkle Thanks to Eastern Promise," *Agence France Presse*, February 4, 2008

¹⁵⁸ Aaron Pressman, "Low Expectations for the High End," *BusinessWeek*, May 5, 2008,

¹⁵⁹ "Swiss Luxury Goods Still Sparkle Thanks to Eastern Promise," *Agence France Presse*, February 4, 2008

Spotlight: Wealth Management Firms Adapt to Meet Unique Needs of Growth Markets

The global pool of HNWIs is shifting in a way that presents enormous potential for wealth management firms. World wealth continues to grow broadly, despite fluctuations in markets and economic conditions, and global demographic and economic trends are bringing entirely new segments of clients into the HNW band all the time.

Some firms have already begun to grow and transition successfully into new markets, despite the volatile times, but the task is not an easy one. It requires firms to assess their own capabilities, strengths and limitations, and, most importantly, adapt existing go-to-market strategies to the unique needs of growth markets, both at home and abroad.

Not all firms will find the transition easy, or even viable, given their existing service models and information technology (IT) and operations structures. Fundamentally, the cost/benefit analysis of a short-term approach versus a long-term growth strategy for each market is needed. The question is: How much transformation will be required—and what specific issues of execution are involved to deliver a service proposition that clients demand and deserve, especially when those clients hail from unfamiliar territory?

In reality, designing a winning strategy, particularly for growth, means defining an effective model that incorporates a host of complex factors. While these factors are obviously interrelated, each must be resolved to pursue growth rationally—while taking into account what the firm is, and what it wants to be.

In designing a winning growth strategy, firms particularly need to look at six key dimensions. (See Figure 12.)

- Target-client needs
- Firm identity
- Service-delivery model
- Operations and technology
- External environment and factors
- Products and services

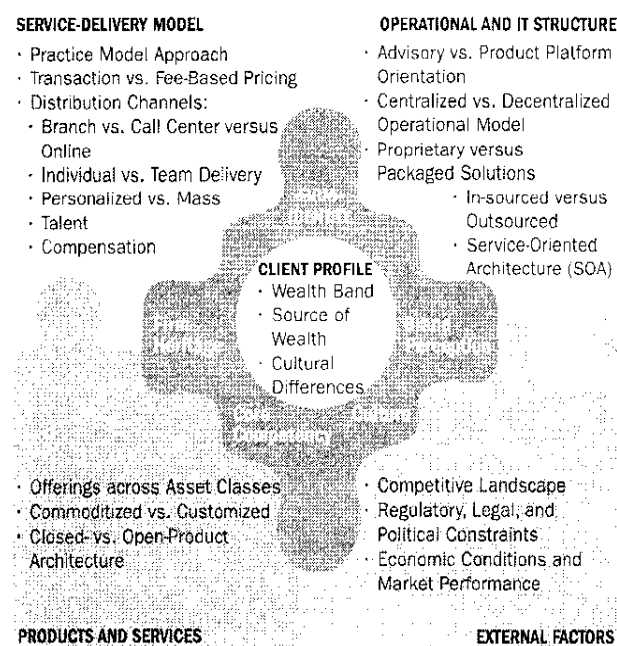
Client needs are the nucleus of any wealth management solution, so firms have to understand and respond to those needs first. However, they also have an opportunity to influence many of the other dimensions of the strategic equation—albeit some more than others.

Above All, Growth Depends on Winning Over the Client

HNW clients are demanding comprehensive and tailored services from the multiple firms with whom they do business; wealth managers are waging an impressive response to differentiate themselves. In the ensuing competition, however, different types of wealth management firms have begun to vie for the same clients—as well as for those they traditionally have not served.

Wealth management firms are making strategic investments to differentiate themselves in the eyes of existing and would-be HNW and Ultra-HNW clients. For example, retail banks and insurance firms are investing in advisory services to become wealth managers of choice for the burgeoning retirement segment, and to establish links with those in younger generations who will be beneficiaries of inter-generational wealth transfer. This move has taken them into territory once dominated by private banks and trusts—forcing those players to look at how best to differentiate their own propositions for their HNW and Ultra-HNW clients. Some private banks and trusts are looking to institutional capabilities, such as overlay management tools (once reserved just for fund managers), to offer clients more comprehensive asset allocation, rebalancing and portfolio oversight. Investments in reporting capabilities, which offer clients more detail and analysis of their comprehensive holdings, are on the rise. Other wealth management firms are investing in “client experience” initiatives to bring a more personalized, family office-like service to HNW delivery, or introducing customizable client solutions to respond to

Figure 12. | **Wealth Management Strategy: The Sum of Many Parts**



the growing demands of clients, who want improved visibility into embedded risk, holistic analysis of their assets and other benefits. These strategies all complement retention, while offering the potential for organic growth, but only if firms can execute them effectively.

Some leading firms have adopted more qualitative traits to define their HNWI's, such as demographics, investing behavior, geographic scope and source of wealth, since clients can no longer be segmented simply by their level of wealth. This approach helps them to distinguish and better serve clients—even among those in the same wealth band. For instance, comparing investing approaches and goals may reveal significant differences among a wealthy entrepreneur, a HNWI whose wealth is inherited, an affluent entertainer or sports figure and a baby boomer who has just cashed out a hefty retirement-savings account. By recognizing such distinctions, firms can tailor their approach—and some are going so far as to deploy teams of specialists dedicated to individual micro-segments.

Cultural factors are another variable when expanding into new regions. Consider, for example, the differences between wealthy individuals in Asia-Pacific and those in the Middle East—two fast-growing HNWI sectors. In the Asia-Pacific region, many HNWI's are first-generation, self-made entrepreneurs, with limited access to sophisticated wealth management services. In the Middle East, most wealth is inherited, and cultural and religious constraints mean Sharia-compliant products and services are a must to meet client needs and expectations.

Clearly, then, as wealth management firms increasingly compete for the same HNWI clients, and the clients themselves become more demanding, the pressure is on firms to understand the essence of client needs in existing and growth markets, even if they have already developed an accurate read on HNWI's in their established markets. Without this insight, firms will find it difficult to develop a distinguishing proposition.

Growth Can Elude Firms that Aim to Be What They Are Not

In seeking to capture a new market, firms also can hone their growth strategy and more easily differentiate themselves by looking first at who they are in the context of the wealth management process—their history, core competencies and brand identity. While many firms purport to be capable in all aspects of wealth management—from the advisory component to trading and execution—firms tend to excel in one area or the other, based on their history.

In short, if a firm's identity and capabilities do not align well with the needs of the target market, it will need to bolster its position—either by developing the missing capabilities or acquiring them via a joint venture or other partnership. A self-diagnosis is therefore needed before deciding which tactics to deploy to attain growth. It is especially important for firms to acknowledge and account for their roots. After all, different wealth management firms develop their value proposition from polar positions. (See Figure 13.)

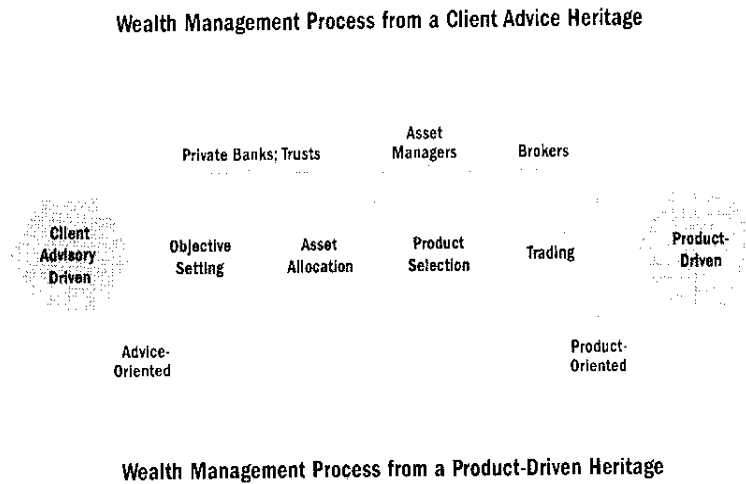
Firms with an advisory-centric approach focus on holistic client needs, develop a strategy to meet clients' financial objectives and execute against those needs with the product mix at their disposal. In essence, they are focused on the art of translating client needs into financial objectives. At the other end of the spectrum, firms with a product-centric approach excel in understanding market opportunities around specific products and how best to bring these products to clients. Both approaches combine the science of execution with the art of delivery—an "art" at which some are better than others, due largely to their respective heritages.

A firm's self-assessment also takes place, of course, against a backdrop of evolving client, market and competitive trends. These shifts are transforming the way clients perceive value in wealth management firms, and the way in which different wealth managers are positioned to deliver that value back to their clients. As a result, the approaches and models that have driven success in one market may not form the best basis for an appropriate and effective strategy for targeting growth in new markets. So, firms looking to develop winning value propositions for both existing and target growth markets need to resolve whether those propositions can comfortably coexist in the firm.

External Factors and Products/Services Need Attention, but May Not Be Big Growth Levers

When firms seek to develop an effective organizational model for growth, they consider external factors, a dimension in which they may find they have relatively little influence. For example, the regulatory environment and privacy laws may dictate or restrict what types of products can be sold to certain clients and limit the ability of "foreign" firms to serve local-market clients without investment in local infrastructure. In such circumstances, firms may have to reach clients

Figure 13. Wealth Management Value Chain



through a partnership or joint venture. Economic conditions, market stability, political factors and the competition of local financial institutions are other contributing factors. Brand is another issue: A firm's brand may be perceived in a positive light in their local market, but acquire negative connotations in other markets—sometimes compounded by political, economic or popular sentiment. These issues all impact the go-to-market strategy.

Meanwhile, as the wealth management market continues to mature, and becomes more global, products and services are becoming more commoditized, making it more difficult to differentiate on product. As a result, firms need to make strategic decisions as to whether they will simply provide commoditized products, or focus on unique, customized product solutions. They also need to decide whether to restrict their offering to proprietary products, or embrace an open-architecture model. In some markets, private banks are partnering with the institutional side of their businesses to find unique private equity placements or IPO participation for their HNW and Ultra-HNW clients—i.e., one-off opportunities that are hard to match. In new markets, some firms have taken the lead from the results of their self-assessments and focused on products or advice, depending on their innate strengths and weaknesses.

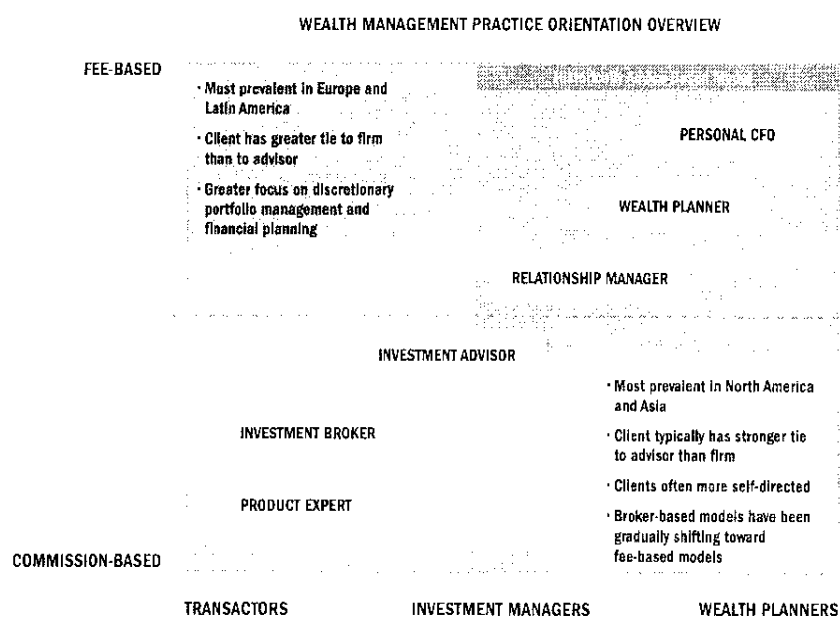
Aligned Service-Delivery Models Can Drive Significant Value

In contrast to external factors and products/services, service-delivery models can be directly influenced—and they offer significant potential for driving value in new markets. Leading wealth management firms have always known one-size-does-not-fit-all in the HNW segment, but the imperative when targeting new markets is to design a service-delivery model that is flexible enough in its architecture to accommodate diverse client needs and the diverse advisors serving them—even for firms that are not able or keen to invest heavily in the underlying technology.

Over time, many firms have acquired or developed a full spectrum of services through mergers and acquisitions or organic growth strategies, but the root of their service models often lies in their heritage, affecting key variables—from advisor talent to distribution channels, practice models and pricing structures. Successfully deploying the right type and combination of solutions is as much art as science, and may prove to be the critical differentiator—or the critical flaw—for a firm moving from one market to another.

A closer look at the typical wealth management practice models highlights how firms operate and deliver value. Practice models generally fall into three major categories: Transactors, Investment Managers and Wealth Planners. Each has a direct correlation to the preferred pricing structure—i.e., fee- versus commission-based. (See Figure 14.)

Figure 14. | Wealth Management Practice Orientation Overview



Transactors:

- Product Expert: Handles high-volume transactions involving sophisticated products or asset classes, such as foreign exchange derivatives
- Investment Broker: Handles transactions involving basic asset classes, such as equities, fixed income and options

Investment Managers:

- Investment Advisor: Offers strategic investment planning, as well as playing a hands-on role in constructing, reviewing and rebalancing client portfolios
- Relationship Manager: Establishes and nurtures client relationships, delegating portfolio management to internal or external managers

Wealth Planners:

- Wealth Planner: Offers holistic advice in accordance with client's finances and short-/long-term goals, such as real estate, retirement and generational wealth transfer
- Personal CFO: Aspires to provide quasi family-office services, often acting in a lead discretionary role coordinating with the client's other trusted advisors

The significance of these practice-model categories is that each reflects a different advisory approach, borne of a different perspective. While some firms claim to have a single practice orientation, many actually use multiple models in and across regions—and often leverage different models within their core markets to capitalize on the strengths of individual advisors. As they move into new markets, firms can create or exacerbate friction among the different advisory approaches they use. Importantly, practice orientations need not be mutually exclusive, but the mix of intra-firm practice models does need to be consciously managed.

When firms move into new markets and need to adapt existing service models or deploy new ones, management of coexisting service models can help them to flourish. This dynamic is also a factor for firms that consider partnering with or acquiring a local firm, or simply hiring local talent. For instance, a failure to understand the implications of prevalent practice models and those followed by new rainmakers can cripple the best-formulated strategy.

Locally dominant wealth management players are already testing their approach to service models by straying from what was once their base market to pursue opportunities. Most, however, still have a lot of work to do on the “art” facet of service delivery—the dimension in which leading firms are rallying their talent, organizational culture and distribution models to pursue new markets. In the successful pursuit of growth, however, it’s incumbent upon firms to fill any critical gaps between the identity and strengths they have and those they need to deliver service excellence in a new market.

A Rightly-Sized and Executed IT Strategy Can Reduce Risks of Entering a New Growth Market

New service-delivery models also pose a challenge for operations and IT because they add complexity and stress to the already complex task of supporting core wealth management activities, and meeting associated demands of risk, compliance and data management. For instance, middle-office staff, and integrated workflows and tools, are especially critical in cementing new-client relationships. During the relationship’s “on-boarding” stage, firms must be able to execute key middle-office activities effectively, such as setting up new-client portfolios and establishing initial statement cycles, to support both advisors and clients during the transition.

Simply stated, the imperative for firms is to develop from the outset an IT strategy that meets their operational objectives for new markets. Accordingly, leading firms are already assessing their existing operations and IT structures to gauge the degree to which they can be applied to other markets. In the process, it is not unusual to find strategic “blind spots,” especially when planning to serve a global constituency of HNWIs, advisors and operations personnel.

After all, globally relevant and effective platforms can deliver myriad capabilities, from integrated front, middle and back offices, and multicurrency and multijurisdictional transactions, accounting and reporting, to full tax optimization, business-rules automation, straight-through processing and personalized user experiences.

However, to support new service models, it is imperative to discern and plan which capabilities are critical to success, and what options IT has for delivering them. Moreover, those plans must be executed to full effect—which can be tough in practice. In theory, for example, firms often plan to pursue global scope, scale and governance through an incremental expansion of existing platforms into new markets. Then, however, they allow one-off IT decisions for individual new markets—decisions that seem more expedient at the time, and for which there is a more tangible business case in the near term. As a result, though, the initially well-conceived service model and IT strategy are compromised—potentially constraining the effectiveness of advisors and the entire operation, and posing significant risks to the brand as it seeks to establish a place in the new market.

By contrast, an IT strategy that is aligned to the growth strategy and is well defined and executed—leveraging core business platforms and enhancing operational capabilities—can substantially reduce the risks of entering a new growth market. However, no single technology, product or sourcing strategy offers the complete solution; so, given the array of IT options, how do wealth management firms pursue a strategically sound path forward, attaining scalable operational best practices?

Heritage, it turns out, plays an important part in a firm’s existing operations and IT structures as well as its service model—and therefore affects its attempts to achieve global scale and effectiveness. The differentiation among firms is not absolute, but, in general:

- “Transactors” typically have invested in large proprietary end-to-end IT systems, optimized for capturing economies of scale in execution volumes, and they usually have mature, differentiated wealth management processes and robust front- and middle-office IT capabilities.
- “Wealth Planners” have typically sought to capitalize on high-touch relationship management and specialized wealth management processes, so they leverage boutique front-office IT capabilities and back-office and execution platforms, based on application service providers (ASP) or commercial off-the-shelf (COTS) solutions.

Like the service models themselves, IT and operations structures have typically grown out of the firm's historical needs and approaches, potentially leaving a gap between the existing structure and the one needed to support the firm's growth strategy. To fill that gap, wealth management firms of all types have a range of go-to-market options—from installing quick-hit information-sharing systems that augment manual processes and workflows, and running regional operational and technology centers, to establishing robust service-oriented architectures (SOAs) with fully integrated transaction, accounting and reporting platforms.

For example, firms entering a new geographic market may not have a clearly defined operating or practice model, so investing in an overly integrated IT structure is neither appropriate nor necessary—and could end up constraining the practice model as it evolves. In such cases, it is rational and viable—and relatively quick—for the firm to move forward with a set of manual processes and limited information-sharing (e.g., via manual data entry). In effect, this approach focuses on defining the required processes, then automating and optimizing them—and that may be all that is required to execute transactions effectively (e.g., in the local currency), meet local compliance mandates and fulfill a high-touch service pledge to clients. As the new market's business scale grows over time and the business case is proven, firms can undertake the next stage of IT/operations evolution.

Similarly, some firms have a siloed approach in existing operations—perhaps as a result of acquiring firms with different systems in the past, or reflecting some legal need to hive off certain activities—and it may be senseless to deconstruct those silos simply to enter a new market. In fact, firms may be able to operate quite effectively with a technology silo, a middle-office silo, and so on, overlaying requisite capabilities and reconciling across the silos to meet operational and service-model objectives like achieving a top-down view of a business line. These silos may or may not converge at some point on a single processing site or technology platform, but firms nevertheless can achieve some standardization of processes—providing standards around risk and compliance, how customers are serviced, the look and feel of reports, and so on—across the different silos.

Another option is to adopt a service-oriented architecture (SOA) approach: A business-driven paradigm that injects operational flexibility through a framework of business activities, services, policies, practices and software. SOAs are a pragmatic choice in cases where core IT platform capabilities and operational scale are fundamental to business-case realization, and SOA adoption is viable for all firm types, large and small. The SOA approach:

- Provides a standard way of representing and interacting with software assets.
- Supports the creation of new internal applications from existing components.
- Simplifies the integration of core functions and third parties in legacy applications and elsewhere.

As such, SOA allows for judicious incremental IT investments, which can unlock value embedded in mature legacy platforms, while providing contemporary capabilities, such as fluid workflows, improved straight-through processing, business-rules automation and business-activity monitoring.

Clearly, there is no universal remedy for structuring IT and operations in existing or new growth markets; the solution depends in large part on the business case—and the state of the existing model. To select the most appropriate and viable path forward, firms must iterate around some key considerations, including:

- Stability and efficacy of the existing IT capabilities and operating model, and their applicability to target markets
- Scale of the target market
- Sophistication of required capabilities
- Level of integration needed in IT/operations
- Availability and maturity of industry utilities, components and service providers

Wealth Management Firms Encounter New Challenges When Addressing Growth-Market Needs

Figure 15A. | Global Private Bank Uses Advice to Target Lower Wealth Tier in Emerging Markets

Situation
This private bank successfully serves both HNWI and Ultra-HNW clients in its home market. As part of a broader growth strategy, it had invested heavily in a comprehensive reporting platform that allowed advisors to view clients' relationship holdings and serve them across regions. It rolled out the same advisory model and platform around the globe, differentiating itself by using a holistic advisory approach.

Growth Strategy
The bank was able to expand into emerging wealth markets in Asia by configuring the existing platform and limiting the functionality and complexity for a more-simplified advisory approach, in line with a tiered service model approach.

Lessons Learned
By utilizing an existing platform, and understanding local-market needs and expectations, the bank successfully differentiated itself by delivering sought-after advice to a lower-tier wealth segment.

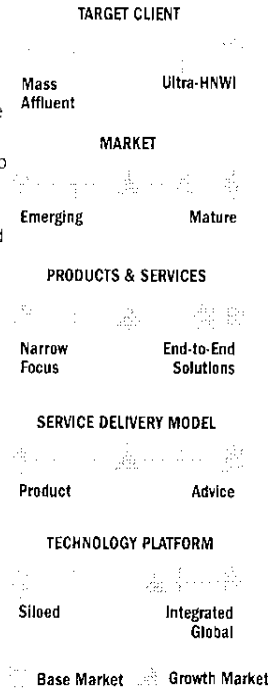


Figure 15B. | European Private Bank Struggles to Extend Offering Overseas

Situation
In its home market, the bank serves HNWI and Ultra-HNW clients from all over the world, providing a breadth of services to clients, including advisory and concierge services, but limited in the way of innovative products.

Growth Strategy
In both mature and emerging markets, the firm has led with the brand cache, but limited its service offerings and advice, instead looking to attract various wealth segments with some unique product propositions, but limited. The organizational model retained domestic orientation, and each market deployed their own siloed technology platform.

Lessons Learned
While enjoying moderate success, the firm has struggled to gain top billing in many markets. The siloed technology platform has inhibited the firm's effectiveness in growth markets by limiting access to home-market assets. Additionally, while struggling to gain traction, the private bank remains committed to its heritage domestic model, having strong convictions it will significantly differentiate them in their growth markets. As a result they have conceded convergence with the target market objectives will exceed originally forecasted timelines.

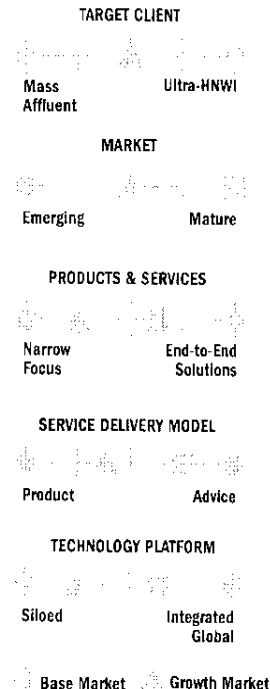


Figure 15C. | Brokerage Firm Overcomes Technology Constraints to Capture Emerging Market Ultra-HNW Clients

Situation
In its home market, the firm focuses heavily on its advisory process, and has invested in an extensible platform that serves Mass Affluent and HNWI clients. However, because the platform was only U.S. dollar-based, it was difficult to extend the platform for global scale without major overhaul and investment.

Growth Strategy
Instead, for its international growth strategy, it focused on the Ultra-HNW client segment, which it believed was looking primarily for unique product propositions—such as structured products and unique private equity participation.

Lessons Learned
Despite a U.S. dollar-based technology platform, the firm understood the needs of targeted Ultra-HNW clients, and paid much attention to cultural differences. It has succeeded with the product approach in emerging Europe and Russia, as well as in the Middle East with its Sharia products.

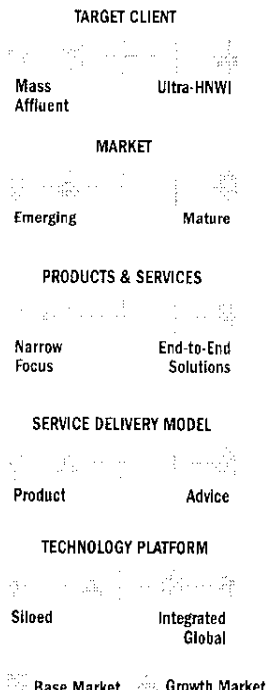
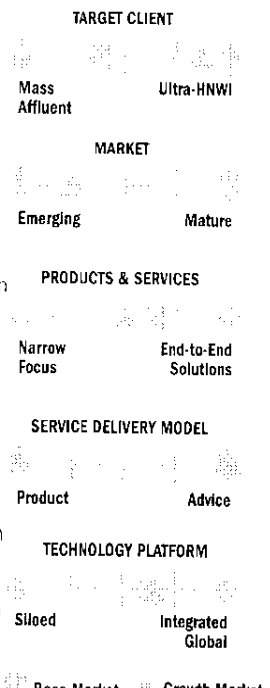


Figure 15D. | Boutique Bank, Misreading Needs, Fails in Bid for New Latin American HNWI Clients

Situation
A small boutique private bank, serving HNWI clients in its home market with advisory services, had a limited technology platform, but had access to a wide array of products for its clients with an open-architecture.

Growth Strategy
The firm decided to target the growing Latin American base of millionaires by locating itself in Miami, Florida, a travel and business hub for many Latin American clients. The firm assumed it would also gain some U.S. HNWI market share as a secondary target due to the location. It hoped to gain market share with its highly personalized approach, advice, and the open-architecture.

Lessons Learned
The boutique bank did not succeed with its plan, assuming that the Latin American clients needed the same products as U.S. HNWI clients. It failed to offer the products and services that Latin American clients needed when offshoring their money to the United States, with requisite tax advice.



Conclusion

The hallmarks of wealth management—sophisticated, discerning clients; complex services; and stiff competition—are all compounded in the HNW segment, where firms have long deployed superior talent, expertise and technology to differentiate themselves. The stakes are rising anew, as global economic and demographic trends produce new growth opportunities, forcing firms to search for go-to-market strategies able to attract new client segments through organic growth. In the process, firms are tackling an eternal dilemma: How to execute successfully to capture growth opportunities, differentiate themselves among target clients, and—ideally—become a firm of choice for the HNW and Ultra-HNW clients they serve.

When seeking to enter new markets, wealth management firms inevitably encounter challenges they do not face in their established markets. To define and execute a successful growth strategy, firms will need to respond to all the forces described, and ask and answer serious questions around the key dimensions of strategy. For example:

- Do we have a comprehensive understanding of client needs in our new target markets?
- Have we made an honest assessment of who we are and who we aspire to be?
- What are our long- and short-term growth strategies?
- How do we best leverage our existing capabilities and strengths to determine the most pragmatic and effective service-delivery model and operational/IT capabilities for enabling success in new markets?
- How can we improve speed to market entry, and what strategic sourcing options make the most sense?

Ultimately, the greatest success will be realized by those firms that comprehensively understand their clients, and are able to leverage their existing strengths to transform and adapt their service delivery and technology to cater effectively to client needs in their target growth markets.

The War for Talent Intensifies

More HNWIs Seek “Trusted Advisors”

The “trusted advisor” relationship is the cornerstone to long-term relationships between clients and advisors, as well as wealth management firms. While most HNWIs and UHNWIs have relationships with multiple wealth management firms,¹⁶⁰ many clients seek long-term “trusted advisors” who can help them navigate complex topics and strategies. HNWIs are becoming increasingly “hands-on” and sophisticated in their financial needs and investment behaviors. As a result, these wealthy individuals seek advisors they can trust for comprehensive wealth management services, not only guidance on investments. Clients expect advisors to understand them in the context of a larger relationship that encompasses personal and family finances as well as business partnerships or estate planning.

However, as HNWI population and wealth continue to climb, so does the number of clients seeking private bankers and wealth managers. Since 2002, total wealth held by HNWIs has grown by more than 50%, from US\$26.7 trillion to US\$40.7 trillion. During the same period, the number of HNWIs worldwide has increased by nearly three million individuals.¹⁶¹ This has compounded the demand for talented advisors from wealth management firms. Yet, the expectations of advisors may differ from one market to another. In many mature markets, for example, large retiree populations seek advice on how to draw steady income from their retirement assets. But in several emerging markets, HNW clients seek advisors who understand both the global financial markets and nuances of the local culture, as they desire to capture more sophisticated products as their wealth grows. Wealth management firms have adapted in response to the changes in their client base, shifting the industry from a transaction-driven business to an advice-oriented and fee-based business.

¹⁶⁰ Capgemini/Merrill Lynch Financial Advisor Survey, 2008

¹⁶¹ Capgemini analysis, 2008

In mature markets advisor talent is increasingly in demand by HNW clients and in emerging markets even more so. The challenge remains, however, in matching each client with their specific needs with the appropriate advisor. Client demand for a “trusted advisor” further exacerbates this trend as HNWIs tend to favor older—and, presumably, more experienced, dedicated and talented – private bankers and wealth managers. The average advisor in North America is now 52 years old, and industry experts estimate that, within five years, 42% of the advisors now practicing will pass 60 years of age and near retirement.¹⁶² Similar age trends among advisors exist globally. Some analysts speculate that if more advisors retire than enter the sector, the demand for talent will sharply increase. However, wealth management firms globally are actively hiring the next generation of advisors.

Developing and Attracting Top Talent Is a Major Investment

A decade or two ago, traditional firms had relatively linear tracks for recruiting and training future advisors. Today, however, wealth management firms have broadened the spectrum from which they seek out new talent. Before becoming an advisor, new recruits may be placed in different tracks to learn about the business, and conversely, firms learn about them before placing them in appropriate roles helping them build their client base. Attracting advisors involves recognizing the desired mix of personality and skill. Equally important for meeting the needs of HNW clients and earning their trust are relationship management skills as well as technical skills. And so, executives and recruiters attempting to tip the outcome of “the war for talent” in their firm’s favor have tried innovative spins on current strategies to grow, including looking for successful executives outside wealth management with similar skills, for new hires. Some firms have sought out successful lawyers, accountants, educators, consultants and salespeople to join their ranks.^{163,164} While new to wealth management, these hires from other industries making a mid-career switch often relate well to a wealthy clientele that may prefer older, or “life-experienced” advisors. Yet, as wealth transfer and estate planning becomes more important to HNW clients, firms are still seeking hires that can relate to and earn the trust of a younger generation.

However, given the increased costs of educating, training, and grooming talent to become future advisors, many wealth management firms have had to balance their programs with situational acquisitions that make sense. Despite the intensity of effort, capital, and resource on the part of firms, attrition among advisors is still high, as the job of an advisor is rigorous, demands discipline, as well as strong relationship and technical skills. Interviewing 15 to 20 candidates for every individual that eventually becomes an advisor is not unusual.¹⁶⁵ Some firms have reported drop-out rates in training programs between 40% and 60% over a five-year period.¹⁶⁶ Not that the acquisition of talent is necessarily an easier option. To acquire talent, firms find themselves balancing opportunity costs of promising upfront and guaranteed bonuses and capital firms could use instead to develop new and less experienced advisors, who are likely to have a greater loyalty as they mature and prosper.¹⁶⁷ The competition for talent has risen to an extent that bidding wars among firms for top advisors are not uncommon, with promised bonuses equaling two or three times the payouts from just a few years ago.¹⁶⁸ In many instances, firms need years to recoup recruitment costs for highly experienced financial advisors.

Strategies for Motivating Talent to Stay for the Long Haul

Advisor turnover and retirement—and the attendant impact on clients—is a constant concern for wealth management firms. While turnover rates can vary by firm size and location, many firms face rising attrition. To combat this trend, some of the industry’s innovative firms have experimented with novel ways to reward performance and loyalty. For example, firms are increasingly using the promise of a career path to aid advisor retention. Other wealth management firms are using more traditional tactics such as equity, as well as defined percentage payouts on new assets they bring to the firm.¹⁶⁹ Firms have reengineered compensation packages, revising voluntary deferred compensation and additional retirement options. In the past, firms used voluntary deferred compensation and longer vesting periods to compensate financial advisors and increase retention. Indeed, vesting periods in wealth management tend to be longer than for other sectors in the finance industry as relationships between client and advisor can take years to establish. But today, several firms have rethought their arrangements and have adjusted the defined vesting periods to incent advisors to behave strategically in the client’s and the firm’s long-term interests. For example, before advisors retire, wealth management firms have arranged a compensation plan that extends income into retirement, which works well for the client, the advisor and the firm. The advisor, reaching retirement, can carefully transition clients to colleagues, ensuring key relationships are maintained, while remaining a mentor/consultant for the firm/client relationship. The transition for clients is thus evolutionary and easier.

Time is increasingly becoming an important factor in the acquisition and retention of talent, as advisors weigh the advantages of the short- and long-term implications of their compensation packages. Several innovative wealth management firms have looked outside the sector

¹⁶² Helen Kearney and Lee Conrad, “The War For Talent,” *On Wall Street*, March 1, 2008

¹⁶³ Jane Croft, “War for Talent Fuels Pay Rises for Recruits,” *Financial Times*, June 20, 2007

¹⁶⁴ Capgemini research, 2008

¹⁶⁵ Interview with Phil Sieg, Merrill Lynch, April 2008

¹⁶⁶ Dennis Gallant, “The Top Producer Syndrome,” *Registered Rep.*, September 1, 2007

¹⁶⁷ Capgemini analysis, 2008

¹⁶⁸ Halah Touryalai, “Incependent Together,” *Registered Rep.*, March 1, 2008

¹⁶⁹ Joseph Giannone, “UBS sets awards plan to boost assets, keep brokers,” *Reuters*, May 22, 2008

for competitive compensation structures. For example, using a model frequently used in real estate investment firms,¹⁷⁰ wealth management executives and recruiters combine upfront and guaranteed bonuses into a multi-year compensation package and significant carried interest. Spreading out compensation, for example, from a four-year to a nine-year vesting period, allows a firm to pay more over the long term, and less upfront, as well as help keep the talent investment with the firm. From both the advisor and firm perspective, multi-year bonuses, together with voluntary deferred compensation and retirement plans, complete a competitive compensation package. And spreading a bonus over several years benefits executives concerned with the retention of talent, as it lessens the temptation for advisors to leave, and frees capital for firms to use elsewhere until the payout date.

Advisor Retention Correlates with Quality of Support

While compensation levels contribute to advisor satisfaction and retention, the quality of support a wealth management firm provides to its advisors is also a driver of advisor and client satisfaction.¹⁷¹ Because HNW clients tend to follow their “trusted advisors” when the advisors switch firms, both advisor retention and client retention correlate with the quality of support. As a way to enhance advisor and client retention, many firms invest in operational support and client-experience initiatives to deliver not just a “trusted advisor” but a “trusted firm” to the client. Thus, when advisors retire or switch firms, the clients are likely to trust the firm despite the change. Many firms now focus on enabling advisors to meet their clients’ needs more effectively as a way to lessen a clients’ desire to switch firms. Investments are being made in front-office operations and support as well as specialized technology so advisors cannot easily replicate the advisor-client relationship and related services if they go elsewhere.

Leading firms are investing in analytic tools that all advisors can use as training or coaching tools to provide them with a better understanding of the client needs. By providing advisors with real-time, detailed analytics to identify which clients are underserved and offer actionable recommendations, more advisors are likely to support clients effectively and holistically. Firm executives also are studying these “needs-based” analytics to pinpoint best practices unique to their organization and business models that are experiencing the most success. These analytic tools can help to identify advisors with the greatest retention-risk factors, and therefore, can help firms assess what impact their attrition could have on client satisfaction. Such warning allows executives to engage these at-risk advisors proactively.

In recent years, firms also have begun to place greater value on team-based models over individual advisors. Team models enable a firm to provide their clients with access to specialists, whose collective expertise covers the full spectrum of wealth management needs services to meet their growing demands and expectations. Firms too benefit from “team financial advisors” in the form of greater performance—10% to 20% over individual financial advisors—and higher retention rates.¹⁷² Additionally, convincing HNW clients to leave a firm is more difficult when more than one “trusted advisor” is integral to the long-term relationship. For those firms embracing a team-based model, a retiring advisor is not as daunting, as maturing advisors transition the client to other “trusted” team members. Team models enable strategies to develop talent, allowing firms to develop promising advisors with senior colleagues while enhancing the trust between advisors and clients.

Several leading firms have also developed in-house practice management consulting groups focused on maximizing the effectiveness of financial advisors in supporting their clients’ needs. These groups provide advisors teams with training on best practices, global perspectives, and objective evaluations with attendant recommendations to advise a client better. The support from the consulting groups range from individual consulting engagements (both short- and long-term) to one-on-one coaching, and may even include access to a best practice knowledge base. By investing in these in-house practice consulting groups, firms demonstrate their commitment to advisor satisfaction and success. Such investments and support can distinguish a firm in the recruiting and retention of talented advisors while enhancing the firm’s ability to earn the trust of its clients.

The competition for talent has led to firms taking more innovative approaches to invest in their wealth advisors. These strategies, including attracting individuals from outside the sector and enhancing the quality of support for current advisors, have not only facilitated firms to better support their advisors, but have also enabled them to more effectively meet their growing HNW client needs.

¹⁷⁰ Russell Reynolds Associates, “2007 Recruiting Trends: Asset and Wealth Management”

¹⁷¹ J.D. Power and Associates, “2007 Financial Advisor Satisfaction Study,” May 2, 2007

¹⁷² Interview with Richard Orlando, Merrill Lynch, April 11, 2008

Appendix A: Methodology

The *World Wealth Report* covers 71 countries in the market-sizing model, accounting for more than 98% of global gross national income and 99% of world stock market capitalization.

We have estimated the size and growth of wealth in various regions using the Capgemini Lorenz curve methodology, which was originally developed during consulting engagements with Merrill Lynch in the 1980s. It is updated on an annual basis to calculate the value of HNWI financial wealth at a macro level.

The model is built in two stages: first, the estimation of total wealth by country, and second, the distribution of this wealth across the adult population in that country. Total wealth levels by country are estimated using national account statistics from recognized sources, such as the International Monetary Fund and the World Bank, to identify the total amount of national savings in each year. These are summed over time to arrive at total accumulated country wealth. As this captures financial assets at book value, the final figures are adjusted based on world stock indexes to reflect the market value of the equity portion of HNWI wealth (in conjunction with the Economist Intelligence Unit's efforts to provide the most accurate data, select historical figures reported in the 2008 *World Wealth Report* have been updated since publication in previous reports).

Wealth distribution, which differs by country, is based on formalized relationships between wealth and income. Data on income distribution is provided by the World Bank, Global Insight and by countries' national statistics. We then use the resulting Lorenz curves to distribute wealth across the adult population in each country. To arrive at financial wealth as a proportion of total wealth, we have used statistics from countries with available data to calculate their financial wealth figures and extrapolated these findings to the rest of the world.

The financial asset wealth figures we publish includes the values of private equity holdings stated at book value as well as all forms of publicly quoted equities, bonds, funds and cash deposits. It excludes collectibles, consumables, consumer durables and real estate used for primary residences. Offshore investments are theoretically accounted for, but only insofar as countries are able to make accurate estimates of relative flows of property and investment in and out of their jurisdictions. We accommodate undeclared savings in the report.

In response to industry and media requests, in 2005, we revised the methodology to move from reporting our annual findings at a regional to a country level. In addition to applying up-to-date annual statistics, we made adjustments to estimate the number of HNWIs and their financials more precisely at a country level. We have continued with this approach in this year's report.

This year, we continued to enhance our macroeconomic model with increased analysis of domestic economic factors that influence wealth creation. We have worked, for example, with colleagues from Capgemini and Merrill Lynch in over 30 countries to best account for the impact of domestic, fiscal and monetary policies over time on HNWI wealth generation.

Given exchange rate fluctuations over the past years, especially with respect to the U.S. dollar, we again assessed the impact of currency fluctuations on our

results. From our analysis, we conclude that our methodology is robust and exchange rate fluctuations do not have a significant impact on our results.

The translation to U.S. dollars is made using a yearly average exchange rate. Wealth is calculated in the WWR model by first calculating cumulative savings at a country level, going back about 100 years. As our model calculates cumulative wealth in U.S. dollar terms using a time series of data going back over 100 years, the impact of a sharp currency appreciation for a year or two has a negligible effect. For example, our analysis shows that if exchange rates in 2007 had remained at the same level as in 2006, global HNWI wealth in 2007 would have been only 0.2% lower than our reported figure of US\$40.7 trillion.

The information contained herein was obtained from various sources; we do not guarantee its accuracy or completeness nor the accuracy or completeness of the analysis relating thereto. This research report is for general circulation and is provided for general information only; any party relying on the contents hereof does so at its own risk.

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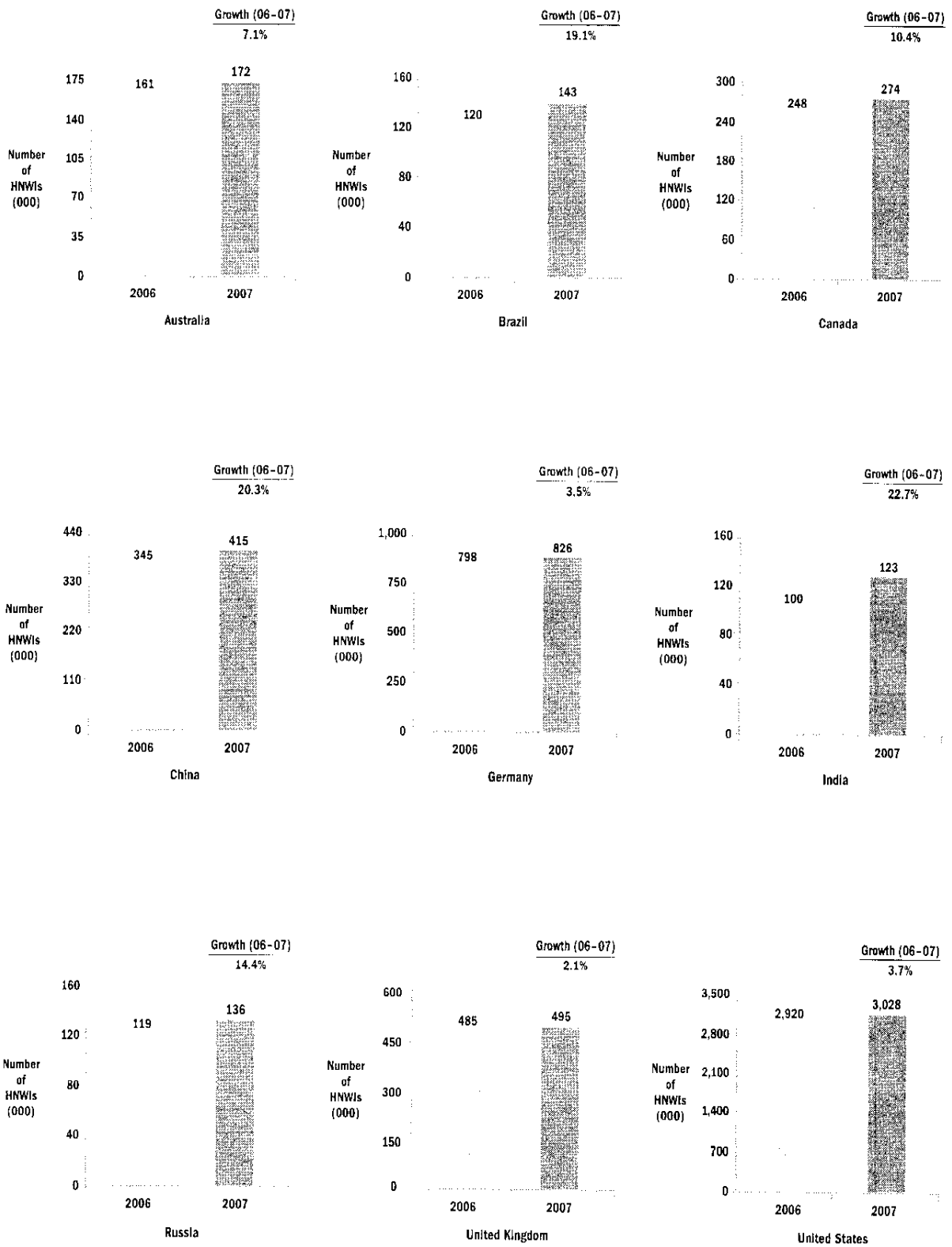
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We extend a special thanks to those firms that gave us insights into events that are impacting the Wealth Industry on a global basis as well as those participating in this year's Financial Advisor Survey: ABN AMRO Private Banking; ANZ Private Bank; Banco Urquijo; BBVA Patrimonios; Citigroup Private Bank and Smith Barney; Christie's; Credit Suisse; Morgan Stanley; Marshall & Ilsley Wealth Management; Popular Banca Privada; Santander Banca Privada; Schretlen & Co.; and Van Lanschot.

Appendix B: Select Country Breakdown



Source: Capgemini Lorenz curve analysis, 2008

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| Bangkok | +662 685 3548 | Mumbai | +91 22 6632 8000 |
| Beirut | +961 1 983 004 | New York City | +1 212 236 5500 |
| Beverly Hills | +1 310 858 1500 | Panama | +507 263 9911 |
| Boston | +1 800 937 0866 | Paris | +33 1 5365 5555 |
| Brussels | +32 2 7619520 | Pasadena | +1 626 817 6888 |
| Buenos Aires | +5411 4317 7500 | Rome | +39 06 684 01801 |
| Chicago | +1 800 937 0466 | San Francisco | +1 415 955 3700 |
| City of Industry | +1 626 965 6691 | Santiago | +562 370 7000 |
| Dubai | +9714 397 5555 | São Paulo | +5511 3175 4100 |
| Dublin | +353 1 243 8877 | Seoul | +82 2 3707 0400 |
| Geneva | +41 22 703 1717 | Shanghai | +8621 6132 4888 |
| Hong Kong | +852 2844 5678 | Singapore | +65 6331 3888 |
| Houston | +1 713 658 1200 | Sydney | +61 2 9225 6500 |
| London | +44 20 7628 1000 | Taipei | +886 2 8758 3600 |
| Los Angeles | +1 213 627 7900 | Tel Aviv | +972 3 607 2000 |
| Luxemburg | +352 49 49 111 | Tokyo | +81 3 6225 8300 |
| Madrid | +34 91 432 9900 | Washington, DC | +1 202 659 0232 |
| Melbourne | +61 3 9659 2666 | Zurich | +41 44 297 74 00 |

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Cap

GENERAL INVESTMENT CONSULTANTS



Merrill Lynch

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- A great place to live
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Bahrain is unique. Nowhere else in the Middle East is quite so business-friendly.

We have been welcoming foreign investors for decades, so we understand their needs and how to help them prosper.

The Gulf market is growing fast, by 5.5% a year. The combined GDP of the Gulf Cooperation Council (GCC) states – Saudi Arabia, the United Arab Emirates, Kuwait, Qatar, Oman and Bahrain – is already worth \$735 billion, and by 2050 could close the gap with G-7 economies.

The population of the Gulf has grown ten-fold in 50 years, to 40 million in 2006, one of the highest rates in the world.

The oil price windfall has been reinvested in new infrastructure, including transport, telecommunications, education, training and healthcare. Regionally, around \$1 trillion infrastructure investments are in the pipeline. By 2010 this could total \$3 trillion.

With its unique location at the heart of the Gulf, Bahrain is perfectly positioned to exploit one of the fastest-growing markets in the world.

Business Friendly Bahrain is here to help you understand the opportunities and challenges of doing business in Bahrain. We offer a range of services to help you get started, including:

- **Market access:** We provide information on the Bahraini market, including the legal and regulatory environment, and help you identify potential partners and suppliers.
- **Business environment:** We provide information on the Bahraini business environment, including the legal and regulatory environment, and help you understand the local market.
- **Competitive costs:** We provide information on the Bahraini cost of doing business, including labor, utilities, and other expenses.
- **Highly-skilled workforce:** We provide information on the Bahraini workforce, including the education and training system, and help you identify potential employees.
- **A great place to live:** We provide information on the Bahraini lifestyle, including the climate, culture, and amenities.
- **Investment opportunities:** We provide information on the Bahraini investment opportunities, including the legal and regulatory environment, and help you identify potential investment opportunities.

ANDREW TREVIS
 Past Director, KPMG

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Bahrain offers significant investment opportunities in several important economic sectors, including:

- [Financial services >](#)
- [Business and professional services >](#)
- [Information communication technology >](#)
- [High value-added manufacturing >](#)

Bahrain facts and figures

- The Middle East's freest economy ranked 19th worldwide, ahead of France and Germany
- The region's lowest taxes, with zero corporate tax
- The Gulf's lowest operating and living costs
- A 40 year track record as the Gulf's leading financial centre
- More licensed financial institutions than anywhere else in the Gulf
- Unrivalled access to the booming Gulf market worth \$735 billion annually
- One hour's drive from 50% of Saudi Arabia's economy
- More flight connections within the region than any other Gulf state
- The only Gulf state with a Free Trade Agreement with the United States

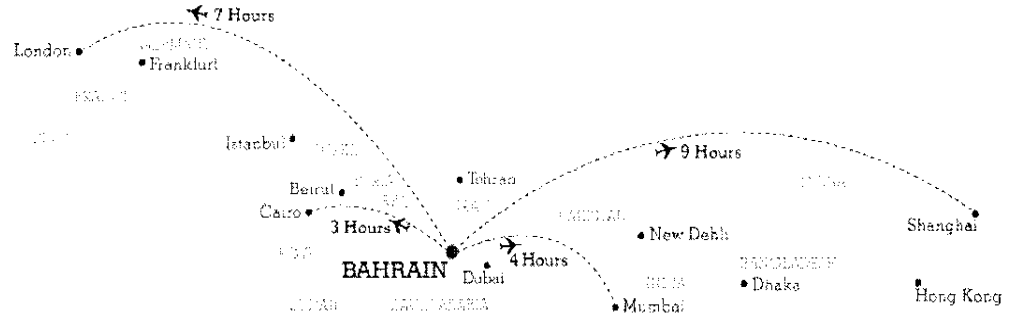


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Bahrain offers fast and efficient access to every market in the Middle East by air, sea and road, making it an ideal logistics hub. Saudi Arabia, the United Arab Emirates and Qatar are all less than 1.5 hours' drive or flight away.

By air

Bahrain is home to Gulf Air, with more flights to more cities in the region than any other Gulf carrier. The airport is also undergoing a major expansion to increase passenger and freight capacity.

By sea

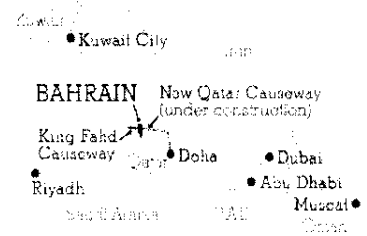
Bahrain's new Khalifa bin Salman Port will be one of the largest in the Middle East, transforming Bahrain from a regional port into a major international transshipment base.

By road

The King Fahd causeway provides a direct link to Saudi Arabia, the largest market in the region. Its 24 million people are just one hour's drive away.

In 2012 a second causeway will complete a new trans-Gulf highway running from Saudi Arabia through Bahrain to Qatar, the United Arab Emirates and Oman, connecting the entire Gulf market with Bahrain at the centre.

Business Friendly Bahrain is here to help >



Bahrain is a strategic location in the Middle East, offering fast and efficient access to every market in the region by air, sea and road. The King Fahd Causeway provides a direct link to Saudi Arabia, the largest market in the region. Its 24 million people are just one hour's drive away. In 2012 a second causeway will complete a new trans-Gulf highway running from Saudi Arabia through Bahrain to Qatar, the United Arab Emirates and Oman, connecting the entire Gulf market with Bahrain at the centre.

DAVE SPARGO
Regional Director
DIB
Middle East, Bahrain



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Why Bahrain

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Business environment

Competitive costs

Highly-skilled workforce

A great place to live

Investment opportunities

- Financial services
- Professional services
- Logistics
- ICT
- Manufacturing
- Healthcare
- Education and training
- Alternative energy
- Tourism

The role of the EDB

Key services

Major development projects



Free Trade Agreements:

- Bahrain has the freest economy in the Middle East, ranked 19 worldwide, ahead of France and Germany. We strive to maintain or improve that position every year.
- Part of the Arab Free Trade Zone
- Bilateral trade and economic agreements with 43 other countries, including China, France, India, Singapore and the UK
- Free Trade Agreement with the United States

Businesses enjoy:

- Zero corporate taxes
- Protection of an established legal system
- The most transparent regulatory system in the region
- Intellectual property protection
- Global best-practice standards
- Low inflation
- No 'free zone' restrictions

Sovereign credit ratings¹

- Standard & Poor's - A stable
- Moody's - A3
- Fitch - F1

¹ S&P Credit Rating 2007, Moody's Credit Rating 2007, and Fitch IBCR Rating 2007

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Bahrain offers significant investment opportunities in several important economic sectors, including:

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- [Business and professional services >](#)
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- [High value-added manufacturing >](#)

The freest economy in the Arab world

| Rank | Country |
|------|----------------|
| 1. | Hong Kong |
| 2. | Singapore |
| 3. | Ireland |
| 4. | Australia |
| 7. | Canada |
| 10. | United Kingdom |
| 18. | Mauritius |
| 23. | Germany |
| 39. | Kuwait |
| 42. | Oman |
| 48. | France |
| 60. | Saudi Arabia |
| 63. | UAE |
| 66. | Qatar |
| 74. | Turkey |
| 115. | India |
| 126. | China |

Source: The Heritage Foundation/Wall Street Journal Index of Economic Freedom 2008



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The cost of doing business is lower in Bahrain than elsewhere in the region:

The cost of living is low and wages are competitive, ensuring that businesses who wish to employ expatriate labour can do so more cost-effectively than in other Gulf states.

Office rents are lower too, and with recent and ongoing privatisations in the utilities sector, businesses can take advantage of highly competitive utility rates.

Bahrain also has the lowest taxes in the GCC.

- No corporation tax
- No income tax
- No value-added tax
- No withholding tax
- No capital gains tax
- No wealth tax
- No inheritance tax
- No death duties

AVERAGE MONTHLY SALARIES

| Country | 1st | 2nd |
|---------|--------|--------|
| Bahrain | 16,500 | 18,500 |
| UAE | 12,750 | |

AVERAGE MONTHLY LEASE RATES

| Country | 1st | 2nd |
|---------|-----|-----|
| Bahrain | 28 | 61 |
| UAE | 33 | |

Bahrain | U.A.E. | Qatar | Bahrain | Qatar | Dubai

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Bahrain offers significant investment opportunities in several important economic sectors, including:

- [Financial services >](#)
- [Business and professional services >](#)
- [Information communication technology >](#)
- [High value-added manufacturing >](#)

Bahrain is the ideal location for business

- 0% corporate taxation
- GDP growth rate 6.9%
- Unemployment rate 3.9%
- Inflation rate 3.5%
- Low labour costs
- Low energy costs
- The freest economy in the Arab World

Competitive costs

- Low cost of living
- Competitive wages
- Low office rents
- Competitive utility rates

NOTICE REGARDING NATIVE LANGUAGE TRANSLATION

Investor hereby agrees that it is the sole responsibility of Investor to ensure proper translation of this Agreement into their native language if necessary for Investor's understanding of the rights and obligations contained herein. Any language translation of this Agreement provided by any of the parties hereto is not a binding legal document, and is being provided solely for the Investor's convenience, and shall not in any way be construed as a contract or any part of the Agreement as set forth in English. None of the parties hereto are liable for any inaccuracies in any language translation or for any misunderstandings due to differences in language usage or dialect. In the event of any inconsistencies between this Agreement as set forth in English and any language translation, this Agreement as set forth in English and as executed shall govern. The Investor assumes the responsibility for fully understanding the nature and terms of the rights and obligations under this Agreement as set forth in English. None of the parties shall sign any translation of this Agreement.



| Agreement Title | Size Guide |
|--|------------|
| Albania Bilateral Investment Treaty | 107k Yes |
| Argentina Bilateral Investment Treaty | 77k Yes |
| Armenia Bilateral Investment Treaty | 92k Yes |
| Azerbaijan Bilateral Investment Treaty | 119k Yes |
| Bahrain Bilateral Investment Treaty | 107k Yes |
| Bangladesh Bilateral Investment Treaty | 97k Yes |
| Bolivia Bilateral Investment Treaty | 115k Yes |
| Bulgaria Bilateral Investment Treaty | 70k Yes |
| Cameroon Bilateral Investment Treaty | 92k Yes |
| Congo, Democratic Republic Of (Kinshasa) Bilateral Investment Treaty | 97k Yes |
| Congo, Republic Of (Brazzaville) Bilateral Investment Treaty | 124k Yes |
| Croatia Bilateral Investment Treaty | 116k Yes |
| Czech Republic Bilateral Investment Treaty | 81k Yes |
| Ecuador Bilateral Investment Treaty | 101k Yes |
| Egypt Bilateral Investment Treaty | 235k Yes |
| Estonia Bilateral Investment Treaty | 93k Yes |
| Georgia Bilateral Investment Treaty | 101k Yes |
| Grenada Bilateral Investment Treaty | 66k Yes |
| Honduras Bilateral Investment Treaty | 110k Yes |
| Jamaica Bilateral Investment Treaty | 93k Yes |
| Jordan Bilateral Investment Treaty | 111k Yes |
| Kazakhstan Bilateral Investment Treaty | 144k Yes |
| Kyrgyzstan Bilateral Investment Treaty | 141k Yes |
| Latvia Bilateral Investment Treaty | 95k Yes |
| Lithuania Bilateral Investment Treaty | 29k Yes |
| Moldova Bilateral Investment Treaty | 107k Yes |
| Mongolia Bilateral Investment Treaty | 155k Yes |
| Morocco Bilateral Investment Treaty | 87k Yes |
| Mozambique Bilateral Investment Treaty | 28k Yes |
| Panama Bilateral Investment Treaty | 103k Yes |
| Poland Business and Economic Relations Treaty | 130k Yes |
| Romania Bilateral Investment Treaty | 79k Yes |
| Senegal Bilateral Investment Treaty | 134k Yes |
| Slovakia Bilateral Investment Treaty | 87k Yes |
| Sri Lanka Bilateral Investment Treaty | 102k Yes |
| Trinidad And Tobago Bilateral Investment Treaty | 180k Yes |
| Tunisia Bilateral Investment Treaty | 102k Yes |
| Turkey Bilateral Investment Treaty | 120k Yes |
| Ukraine Bilateral Investment Treaty | 152k Yes |
| Uruguay Bilateral Investment Treaty | 28k Yes |



UNITED STATES INTERNATIONAL TRADE COMMISSION

**U.S. Trade Balance, by Partner Country 2007
in descending order of trade turnover (imports plus exports)**

| Partner country | Imports for Consumption | Domestic Exports | Merchandise Trade Balance |
|-------------------------|-------------------------|------------------|---------------------------|
| | ----million dollars---- | | |
| 1 1220.--Canada | \$312,504.5 | \$213,118.7 | (\$99,385.8) |
| 2 5700.--China | \$323,085.5 | \$61,013.2 | (\$262,072.3) |
| 3 2010.--Mexico | \$210,158.8 | \$119,381.1 | (\$90,777.7) |
| 4 5880.--Japan | \$144,927.9 | \$58,095.8 | (\$86,832.2) |
| 5 4280.--Germany | \$94,416.2 | \$44,294.1 | (\$50,122.1) |
| 6 4120.--United Kingdom | \$56,872.8 | \$45,435.6 | (\$11,437.2) |
| 7 5800.--Korea | \$45,368.3 | \$33,011.6 | (\$12,356.7) |
| 8 4279.--France | \$41,236.6 | \$25,784.4 | (\$15,452.2) |
| 9 5830.--Taiwan | \$38,052.4 | \$24,541.0 | (\$13,511.4) |
| 10 4210.--Netherlands | \$19,259.6 | \$30,535.8 | \$11,276.2 |
| 11 4759.--Italy | \$35,020.5 | \$12,537.5 | (\$22,483.0) |
| 12 3070.--Venezuela | \$37,582.3 | \$9,762.0 | (\$27,820.2) |
| 13 3510.--Brazil | \$25,017.7 | \$21,684.1 | (\$3,333.6) |
| 14 5170.--Saudi Arabia | \$35,284.5 | \$9,846.9 | (\$25,437.5) |
| 15 5570.--Malaysia | \$32,754.7 | \$10,215.3 | (\$22,539.5) |
| 16 5590.--Singapore | \$19,080.4 | \$23,576.8 | \$4,496.4 |
| 17 5330.--India | \$23,856.9 | \$16,308.6 | (\$7,548.2) |
| 18 4190.--Ireland | \$30,292.1 | \$8,426.5 | (\$21,865.6) |
| 19 4231.--Belgium | \$15,269.9 | \$22,977.3 | \$7,707.4 |
| 20 7530.--Nigeria | \$32,525.0 | \$2,688.6 | (\$29,836.4) |
| 21 5081.--Israel | \$20,817.0 | \$9,940.2 | (\$10,876.7) |
| 22 5490.--Thailand | \$22,684.7 | \$7,837.2 | (\$14,847.5) |
| 23 4419.--Switzerland | \$14,760.9 | \$15,056.1 | \$295.2 |
| 24 6021.--Australia | \$8,633.1 | \$17,916.5 | \$9,283.4 |
| 25 4621.--Russia | \$19,143.0 | \$6,681.0 | (\$12,462.0) |
| 26 5820.--Hong Kong | \$7,037.0 | \$14,881.9 | \$7,844.9 |

| | | | | |
|----|-----------------------|------------|------------|--------------|
| 27 | 4700.--Spain | \$10,499.1 | \$9,650.9 | (\$848.2) |
| 28 | 7210.--Algeria | \$17,397.1 | \$1,626.2 | (\$15,770.9) |
| 29 | 5600.--Indonesia | \$14,410.7 | \$4,132.5 | (\$10,278.1) |
| 30 | 3010.--Colombia | \$9,251.2 | \$7,884.4 | (\$1,366.9) |
| 31 | 4010.--Sweden | \$13,006.7 | \$4,084.1 | (\$8,922.6) |
| 32 | 5650.--Philippines | \$9,397.5 | \$7,335.8 | (\$2,061.6) |
| 33 | 3370.--Chile | \$8,969.5 | \$7,610.2 | (\$1,359.3) |
| 34 | 7910.--South Africa | \$9,131.9 | \$5,204.3 | (\$3,927.6) |
| 35 | 7620.--Angola | \$12,211.0 | \$1,264.0 | (\$10,947.0) |
| 36 | 5050.--Iraq | \$11,007.6 | \$1,527.9 | (\$9,479.7) |
| 37 | 5520.--Vietnam | \$10,541.2 | \$1,823.3 | (\$8,717.8) |
| 38 | 5200.--United Arab Em | \$1,333.7 | \$10,909.5 | \$9,575.8 |
| 39 | 4890.--Turkey | \$4,615.6 | \$6,442.6 | \$1,827.0 |
| 40 | 4330.--Austria | \$7,736.1 | \$2,958.0 | (\$4,778.1) |
| 41 | 2740.--Trin & Tobago | \$8,764.2 | \$1,679.1 | (\$7,085.1) |
| 42 | 4039.--Norway | \$7,243.6 | \$2,919.6 | (\$4,324.0) |
| 43 | 2470.--Dominican Rep | \$4,213.8 | \$5,793.4 | \$1,579.6 |
| 44 | 3570.--Argentina | \$4,258.0 | \$5,115.0 | \$857.0 |
| 45 | 3330.--Peru | \$5,207.1 | \$3,764.3 | (\$1,442.8) |
| 46 | 3310.--Ecuador | \$6,131.0 | \$2,709.3 | (\$3,421.8) |
| 47 | 4099.--Denmark | \$6,108.7 | \$2,652.6 | (\$3,456.0) |
| 48 | 2150.--Honduras | \$3,942.7 | \$4,327.9 | \$385.3 |
| 49 | 2230.--Costa Rica | \$3,915.7 | \$4,224.3 | \$308.6 |
| 50 | 4050.--Finland | \$5,289.7 | \$2,731.0 | (\$2,558.6) |
| 51 | 7290.--Egypt | \$2,380.1 | \$5,311.4 | \$2,931.3 |
| 52 | 2050.--Guatemala | \$3,031.5 | \$3,872.4 | \$840.9 |
| 53 | 5130.--Kuwait | \$4,191.3 | \$2,300.3 | (\$1,891.0) |
| 54 | 6141.--New Zealand | \$3,093.3 | \$2,681.5 | (\$411.9) |
| 55 | 5350.--Pakistan | \$3,577.5 | \$2,012.6 | (\$1,564.9) |
| 56 | 4710.--Portugal | \$3,071.6 | \$2,422.4 | (\$649.2) |
| 57 | 4550.--Poland | \$2,211.3 | \$3,011.4 | \$800.1 |
| 58 | 2110.--El Salvador | \$2,044.1 | \$2,209.6 | \$165.5 |
| 59 | 7250.--Libya | \$3,429.0 | \$490.5 | (\$2,938.4) |

| | | | | |
|----|------------------------|-----------|-----------|-------------|
| 60 | 4370.--Hungary | \$2,798.6 | \$1,112.3 | (\$1,686.3) |
| 61 | 5380.--Bangladesh | \$3,429.2 | \$451.1 | (\$2,978.1) |
| 62 | 2250.--Panama | \$361.4 | \$3,492.4 | \$3,131.0 |
| 63 | 4351.--Czech Republic | \$2,416.8 | \$1,123.5 | (\$1,293.2) |
| 64 | 4840.--Greece | \$1,197.4 | \$2,057.5 | \$860.1 |
| 65 | 2779.--Aruba | \$2,747.4 | \$492.5 | (\$2,254.9) |
| 66 | 7630.--Congo (ROC) | \$3,098.7 | \$138.8 | (\$2,959.9) |
| 67 | 5180.--Qatar | \$477.3 | \$2,550.9 | \$2,073.6 |
| 68 | 2410.--Jamaica | \$685.4 | \$2,236.7 | \$1,551.4 |
| 69 | 2360.--Bahamas | \$394.4 | \$2,422.8 | \$2,028.5 |
| 70 | 7550.--Gabon | \$2,146.9 | \$473.7 | (\$1,673.2) |
| 71 | 2771.--Netherlands Ant | \$710.7 | \$1,897.0 | \$1,186.3 |
| 72 | 5550.--Cambodia | \$2,463.9 | \$137.5 | (\$2,326.4) |
| 73 | 4623.--Ukraine | \$1,236.0 | \$1,282.3 | \$46.3 |
| 74 | 2190.--Nicaragua | \$1,608.4 | \$846.8 | (\$761.6) |
| 75 | 7560.--Chad | \$2,238.3 | \$71.0 | (\$2,167.3) |
| 76 | 5420.--Sri Lanka | \$2,060.3 | \$214.6 | (\$1,845.7) |
| 77 | 4359.--Slovak Republic | \$1,560.8 | \$657.4 | (\$903.4) |
| 78 | 5110.--Jordan | \$1,333.1 | \$831.7 | (\$501.4) |
| 79 | 4634.--Kazakhstan | \$1,240.5 | \$730.9 | (\$509.7) |
| 80 | 5230.--Oman | \$933.0 | \$1,034.9 | \$102.0 |
| 81 | 7140.--Morocco | \$625.9 | \$1,333.9 | \$708.0 |
| 82 | 7380.--Eq Guinea | \$1,682.9 | \$234.5 | (\$1,448.4) |
| 83 | 4632.--Azerbaijan | \$1,727.0 | \$174.5 | (\$1,552.4) |
| 84 | 4850.--Romania | \$1,063.6 | \$650.3 | (\$413.4) |
| 85 | 4239.--Luxembourg | \$527.4 | \$971.8 | \$444.4 |
| 86 | 5660.--Macao | \$1,095.1 | \$216.0 | (\$879.1) |
| 87 | 3530.--Paraguay | \$66.4 | \$1,167.9 | \$1,101.6 |
| 88 | 5250.--Bahrain | \$625.6 | \$565.4 | (\$60.2) |
| 89 | 2450.--Haiti | \$487.6 | \$696.2 | \$208.6 |
| 90 | 4622.--Belarus | \$1,032.7 | \$95.3 | (\$937.4) |
| 91 | 4510.--Lithuania | \$464.2 | \$662.0 | \$197.9 |
| 92 | 3550.--Uruguay | \$492.0 | \$541.7 | \$49.7 |

| | | | | |
|-----|------------------------|---------|---------|-----------|
| 93 | 5210.--Yemen | \$291.9 | \$626.3 | \$334.3 |
| 94 | 7790.--Kenya | \$326.1 | \$576.2 | \$250.1 |
| 95 | 5040.--Lebanon | \$105.3 | \$788.5 | \$683.3 |
| 96 | 7230.--Tunisia | \$448.4 | \$394.9 | (\$53.5) |
| 97 | 4000.--Iceland | \$207.2 | \$616.5 | \$409.3 |
| 98 | 4792.--Slovenia | \$487.8 | \$278.2 | (\$209.6) |
| 99 | 7480.--Cote d'Ivoire | \$585.4 | \$156.1 | (\$429.3) |
| 100 | 4870.--Bulgaria | \$425.4 | \$296.3 | (\$129.0) |
| 101 | 4490.--Latvia | \$328.7 | \$355.1 | \$26.3 |
| 102 | 2440.--Cayman Is | \$25.1 | \$604.3 | \$579.2 |
| 103 | 2320.--Bermuda | \$27.1 | \$591.3 | \$564.2 |
| 104 | 7490.--Ghana | \$198.7 | \$403.9 | \$205.3 |
| 105 | 4720.--Gibraltar | \$3.2 | \$593.5 | \$590.3 |
| 106 | 3350.--Bolivia | \$333.6 | \$262.6 | (\$71.0) |
| 107 | 4791.--Croatia | \$332.2 | \$238.5 | (\$93.6) |
| 108 | 5310.--Afghanistan | \$74.6 | \$473.0 | \$398.4 |
| 109 | 4470.--Estonia | \$295.6 | \$227.3 | (\$68.3) |
| 110 | 4730.--Malta | \$315.2 | \$202.6 | (\$112.5) |
| 111 | 5020.--Syria | \$159.4 | \$356.7 | \$197.3 |
| 112 | 5610.--Brunei | \$341.7 | \$138.4 | (\$203.3) |
| 113 | 2720.--Barbados | \$37.8 | \$418.3 | \$380.5 |
| 114 | 4633.--Georgia | \$188.1 | \$266.0 | \$77.9 |
| 115 | 7990.--Lesotho | \$443.0 | \$7.5 | (\$435.5) |
| 116 | 2390.--Cuba | \$0.3 | \$447.0 | \$446.8 |
| 117 | 7420.--Cameroon | \$306.7 | \$131.5 | (\$175.3) |
| 118 | 8220.--Transshipment | \$0.0 | \$428.2 | \$428.2 |
| 119 | 3150.--Suriname | \$129.4 | \$296.2 | \$166.8 |
| 120 | 4643.--Turkmenistan | \$219.3 | \$183.4 | (\$35.9) |
| 121 | 2430.--Turks & Caic Is | \$12.9 | \$387.2 | \$374.3 |
| 122 | 7880.--Madagascar | \$337.9 | \$31.8 | (\$306.1) |
| 123 | 7920.--Namibia | \$219.7 | \$116.4 | (\$103.4) |
| 124 | 7660.--Congo (DROC) | \$206.4 | \$110.3 | (\$96.1) |
| 125 | 5070.--Iran | \$173.2 | \$143.2 | (\$30.0) |

| | | | | |
|-----|------------------------|---------|---------|-----------|
| 126 | 2080.--Belize | \$86.7 | \$227.9 | \$141.2 |
| 127 | 3120.--Guyana | \$122.9 | \$178.9 | \$56.0 |
| 128 | 7520.--Togo | \$5.0 | \$285.5 | \$280.4 |
| 129 | 4411.--Liechtenstein | \$278.5 | \$11.1 | (\$267.4) |
| 130 | 7610.--Benin | \$5.1 | \$280.3 | \$275.3 |
| 131 | 7749.--Ethiopia | \$88.2 | \$165.9 | \$77.7 |
| 132 | 4644.--Uzbekistan | \$164.9 | \$87.3 | (\$77.6) |
| 133 | 7930.--Botswana | \$187.5 | \$52.5 | (\$135.0) |
| 134 | 2484.--Antigua Barbuda | \$8.7 | \$230.8 | \$222.1 |
| 135 | 7850.--Mauritius | \$187.0 | \$39.6 | (\$147.4) |
| 136 | 7830.--Tanzania | \$46.2 | \$172.0 | \$125.8 |
| 137 | 2482.--Br Virgin Is | \$43.2 | \$161.6 | \$118.4 |
| 138 | 2839.--Martinique | \$7.5 | \$191.5 | \$184.0 |
| 139 | 7650.--Liberia | \$115.3 | \$72.8 | (\$42.5) |
| 140 | 6863.--Fiji | \$152.8 | \$28.1 | (\$124.7) |
| 141 | 2487.--St Lucia Is | \$25.3 | \$155.3 | \$130.0 |
| 142 | 6414.--Fr Polynesia | \$62.3 | \$116.9 | \$54.6 |
| 143 | 7950.--Swaziland | \$148.0 | \$28.6 | (\$119.4) |
| 144 | 7960.--Zimbabwe | \$71.5 | \$103.6 | \$32.1 |
| 145 | 4910.--Cyprus | \$16.6 | \$155.5 | \$138.9 |
| 146 | 7440.--Senegal | \$18.7 | \$150.6 | \$131.8 |
| 147 | 6040.--Papua New Guin | \$106.9 | \$61.8 | (\$45.1) |
| 148 | 7460.--Guinea | \$95.7 | \$71.6 | (\$24.2) |
| 149 | 4802.--Serbia | \$58.1 | \$103.5 | \$45.4 |
| 150 | 2483.--St Kitts-Nevis | \$53.6 | \$103.4 | \$49.8 |
| 151 | 2831.--Guadeloupe | \$4.9 | \$133.7 | \$128.8 |
| 152 | 6412.--New Caledonia | \$79.0 | \$55.5 | (\$23.5) |
| 153 | 4631.--Armenia | \$32.7 | \$100.8 | \$68.2 |
| 154 | 7970.--Malawi | \$69.0 | \$50.9 | (\$18.1) |
| 155 | 7870.--Mozambique | \$5.4 | \$113.6 | \$108.3 |
| 156 | 5360.--Nepal | \$89.9 | \$27.0 | (\$62.8) |
| 157 | 7940.--Zambia | \$48.8 | \$67.4 | \$18.7 |
| 158 | 5740.--Mongolia | \$83.5 | \$25.7 | (\$57.8) |

| | | | | |
|-----|------------------------|---------------|----------------|----------|
| 159 | 4794.--Macedonia | <u>\$72.7</u> | <u>\$30.5</u> | (\$42.2) |
| 160 | 7410.--Mauritania | <u>\$0.7</u> | <u>\$102.3</u> | \$101.6 |
| 161 | 7470.--Sierra Leone | <u>\$48.1</u> | <u>\$54.6</u> | \$6.5 |
| 162 | 7780.--Uganda | <u>\$26.6</u> | <u>\$75.4</u> | \$48.8 |
| 163 | 2481.--Anguilla | <u>\$4.1</u> | <u>\$87.5</u> | \$83.4 |
| 164 | 2489.--Grenada Is | <u>\$8.2</u> | <u>\$80.5</u> | \$72.4 |
| 165 | 2486.--Dominica Is | <u>\$1.8</u> | <u>\$81.6</u> | \$79.9 |
| 166 | 7320.--Sudan | <u>\$7.5</u> | <u>\$66.9</u> | \$59.4 |
| 167 | 4641.--Moldova | <u>\$23.1</u> | <u>\$50.6</u> | \$27.5 |
| 168 | 7510.--Niger | <u>\$9.1</u> | <u>\$63.3</u> | \$54.2 |
| 169 | 2488.--St Vinc & Gren | <u>\$1.2</u> | <u>\$66.8</u> | \$65.6 |
| 170 | 6143.--Tokelau Is | <u>\$8.0</u> | <u>\$54.6</u> | \$46.6 |
| 171 | 7770.--Djibouti | <u>\$4.5</u> | <u>\$58.1</u> | \$53.6 |
| 172 | 4272.--Monaco | <u>\$19.8</u> | <u>\$37.0</u> | \$17.3 |
| 173 | 4642.--Tajikistan | <u>\$0.3</u> | <u>\$52.2</u> | \$51.9 |
| 174 | 4804.--Montenegro | <u>\$5.5</u> | <u>\$44.4</u> | \$39.0 |
| 175 | 4635.--Kyrgystan | <u>\$1.7</u> | <u>\$47.1</u> | \$45.3 |
| 176 | 4793.--Bosnia-Hercegov | <u>\$24.7</u> | <u>\$18.3</u> | (\$6.3) |
| 177 | 4810.--Albania | <u>\$9.5</u> | <u>\$33.1</u> | \$23.5 |
| 178 | 6820.--F St Micronesia | <u>\$4.1</u> | <u>\$37.5</u> | \$33.5 |
| 179 | 7450.--Mali | <u>\$9.7</u> | <u>\$30.4</u> | \$20.6 |
| 180 | 6810.--Marshall Is | <u>\$13.1</u> | <u>\$21.2</u> | \$8.0 |
| 181 | 7600.--Burkina Faso | <u>\$1.5</u> | <u>\$32.3</u> | \$30.9 |
| 182 | 5530.--Laos | <u>\$20.0</u> | <u>\$13.0</u> | (\$7.0) |
| 183 | 3170.--French Guiana | <u>\$0.4</u> | <u>\$30.3</u> | \$29.8 |
| 184 | 7690.--Rwanda | <u>\$12.7</u> | <u>\$14.2</u> | \$1.6 |
| 185 | 6224.--Vanuatu | <u>\$0.9</u> | <u>\$23.6</u> | \$22.8 |
| 186 | 7540.--Cen African Rep | <u>\$2.9</u> | <u>\$19.7</u> | \$16.8 |
| 187 | 6150.--Samoa | <u>\$5.4</u> | <u>\$16.6</u> | \$11.1 |
| 188 | 7700.--Somalia | <u>\$0.2</u> | <u>\$20.7</u> | \$20.5 |
| 189 | 5683.--Maldives Is | <u>\$2.0</u> | <u>\$18.2</u> | \$16.2 |
| 190 | 7800.--Seychelles | <u>\$10.3</u> | <u>\$9.1</u> | (\$1.2) |
| 191 | 7500.--Gambia | <u>\$0.1</u> | <u>\$19.1</u> | \$18.9 |

| | | | | |
|-----|------------------------|--------|--------|---------|
| 192 | 6864.--Tonga | \$5.5 | \$13.1 | \$7.6 |
| 193 | 4752.--Vatican City | \$0.1 | \$18.3 | \$18.1 |
| 194 | 5083.--West Bank | \$2.1 | \$13.0 | \$10.9 |
| 195 | 1010.--Greenland | \$10.7 | \$4.3 | (\$6.4) |
| 196 | 4751.--San Marino | \$1.4 | \$13.2 | \$11.8 |
| 197 | 6830.--Palau | \$0.4 | \$13.7 | \$13.3 |
| 198 | 4271.--Andorra | \$0.4 | \$12.7 | \$12.3 |
| 199 | 5601.--East Timor | \$0.3 | \$10.9 | \$10.5 |
| 200 | 4091.--Faroe Islands | \$7.1 | \$2.8 | (\$4.3) |
| 201 | 6862.--Nauru | \$0.6 | \$8.1 | \$7.5 |
| 202 | 7580.--St Helena | \$5.3 | \$3.2 | (\$2.1) |
| 203 | 5460.--Burma (Myanmar) | \$0.0 | \$8.5 | \$8.5 |
| 204 | 7670.--Burundi | \$1.1 | \$6.9 | \$5.8 |
| 205 | 7904.--Reunion | \$3.4 | \$4.5 | \$1.1 |
| 206 | 7643.--Cape Verde | \$2.2 | \$5.0 | \$2.8 |
| 207 | 7644.--Sao Tome & Prin | \$0.4 | \$6.7 | \$6.3 |
| 208 | 6024.--Christmas Is | \$4.3 | \$2.4 | (\$1.9) |
| 209 | 7642.--Guinea-Bissau | \$0.0 | \$6.5 | \$6.5 |
| 210 | 6223.--Solomon Is | \$1.1 | \$5.4 | \$4.3 |
| 211 | 5082.--Gaza Strip | \$1.5 | \$4.6 | \$3.2 |
| 212 | 7741.--Eritrea | \$0.4 | \$5.6 | \$5.1 |
| 213 | 3720.--Falkland Is | \$4.8 | \$1.0 | (\$3.9) |
| 214 | 2485.--Montserrat Is | \$0.5 | \$4.0 | \$3.4 |
| 215 | 6142.--Cook Is | \$1.7 | \$2.3 | \$0.6 |
| 216 | 5682.--Bhutan | \$0.8 | \$2.5 | \$1.7 |
| 217 | 6226.--Kiribati | \$1.2 | \$1.1 | (\$0.1) |
| 218 | 6023.--Cocos Is | \$0.9 | \$1.2 | \$0.3 |
| 219 | 6225.--Pitcairn Is | \$0.1 | \$1.9 | \$1.8 |
| 220 | 6022.--Norfolk Is | \$0.4 | \$1.5 | \$1.1 |
| 221 | 1610.--St Pierre & Miq | \$1.6 | \$0.2 | (\$1.4) |
| 222 | 6029.--Heard & McDn Is | \$0.0 | \$1.7 | \$1.7 |
| 223 | 5790.--North Korea | \$0.0 | \$1.7 | \$1.7 |
| 224 | 6144.--Niue | \$0.4 | \$1.0 | \$0.6 |

| | | | | |
|-----|------------------------|-------|-------|---------|
| 225 | 7810.--Br Indian O Ter | \$0.0 | \$1.0 | \$0.9 |
| 226 | 4031.--Svalbard,May Is | \$0.2 | \$0.7 | \$0.5 |
| 227 | 7905.--Fr S & Ant land | \$0.5 | \$0.4 | (\$0.1) |
| 228 | 7890.--Comoros | \$0.5 | \$0.2 | (\$0.3) |
| 229 | 7881.--Mayotte | \$0.3 | \$0.2 | (\$0.1) |
| 230 | 7370.--Western Sahara | \$0.0 | \$0.3 | \$0.3 |
| 231 | 6413.--Wallis & Futuna | \$0.0 | \$0.2 | \$0.2 |
| 232 | 6227.--Tuvalu | \$0.0 | \$0.1 | \$0.0 |

US and Foreign Banks' Compliance with the USA Patriot Act

Regional Workshop
Riga, Latvia
October 30, 2002

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INTRODUCTION

On October 26, 2001, President Bush signed a new set of laws known as the USA Patriot Act. These new laws were passed in response to the terrorist attacks against the United States on September 11, 2001. They contain numerous new laws designed to combat international crime and terrorism. Included in the Act are laws designed to combat money laundering — particularly terrorism money laundering. Title III of the Act is the “International Money Laundering Abatement and Financial Anti-Terrorism Act of 2001”. The anti-money laundering provisions in Title III of the Act contain numerous provisions applicable to foreign banks that maintain a correspondent banking relationship with United States banks. This paper will discuss the impact of these new laws on foreign banks.

The anti-money laundering provisions of the Patriot Act fall into five categories:

- Increased regulation of private banking and correspondent accounts.
- Provision to impose special measures on financial institutions, international transactions and foreign jurisdictions where there is a primary money laundering concern.
- Broadening the scope of U.S. criminal statutes dealing with money laundering.
- Expanding the subpoena power of U.S. law enforcement agencies.
- Expanding international cooperation.

The provisions providing for increased regulation of private banking and correspondent accounts are likely to have the most direct impact on foreign banks since many foreign banks have correspondent relationships with U.S. banks.

ANTI-MONEY LAUNDERING PROGRAMS

Section 352 of the Patriot Act requires U.S. banks to implement anti-money laundering programs. The anti-money laundering programs must include, at a minimum, (1) the development of internal policies, procedures and controls, (2) the appointment of a compliance officer, (3) an ongoing employee training program, and (4) an independent audit function to test the anti-money laundering program. On April 29, 2002, the U.S. Treasury published regulations requiring that the anti-money laundering programs must meet the following criteria:

- Be reasonably designed to achieve compliance with the Bank Secrecy Act and its implementing regulations.¹
- Be reasonably designed to detect activities indicative of money laundering, including activities designed to evade the requirements of the Bank Secrecy Act.
- Be in writing and approved by senior management of the bank's directors.
- Be based on an assessment of the money laundering or terrorist financing risk of the bank's clients, products and transactions.

U.S. banks are now implementing compliance programs designed to comply with the requirements of the Patriot Act. Foreign banks maintaining a correspondent relationship with a U.S. bank can expect that their transactions with the U.S. bank will receive increased scrutiny. This increased scrutiny will result in more questions to foreign banks concerning both the identity of the customer using the foreign account as well as the purpose of the

transaction. In order to be able to respond to these inquiries, foreign banks should themselves implement special procedures to ensure that they know the identity of the persons using their correspondent relationship and the purpose of their transactions.

INCREASED OVERSIGHT OF CORRESPONDENT AND PRIVATE ACCOUNTS

Section 312 of the Patriot Act requires U.S. banks to establish policies and procedures to detect and report money laundering through correspondent and private banking accounts. While the law directly applies to U.S. banks, its impact will also be felt by foreign banks that maintain a correspondent relationship with a U.S. bank.

In monitoring accounts for money laundering and suspicious activities, U.S. banks generally employ a “Know Your Customer” regime. Under this regime, U.S. banks take steps to verify the identity of their customer. In addition, U.S. banks determine what is a normal transaction for a particular customer and ascertain the purpose of any transaction that does not appear to fall within the pattern of the customer’s normal business activity. Because correspondent accounts are used by persons and organizations who are not customers of the U.S. bank, U.S. banks will require their foreign correspondent to supply the information they need to comply with Section 312.

In addition to requiring U.S. banks to increase their oversight of correspondent accounts of foreign banks, Section 312 also requires U.S. banks to employ enhanced policies, procedures to detect and report instances of money laundering when the following circumstances exist:

¹ The Bank Secrecy Act is the U.S. law that requires U.S. financial institutions, among
Presentation -- Bernard S. Bailor

- The correspondent account is requested or maintained by, or on behalf of, a foreign bank operating under an offshore banking license; or
- The correspondent account is requested or maintained by, or on behalf of, a foreign bank under a banking license issued by a foreign country that has been designated as non-cooperative with international anti-money laundering principles or procedures by an intergovernmental group or organization of which the United States is a member, provided the United States representative to the group or organization concurs; or
- The U.S. Secretary of the Treasury determines that the foreign bank or correspondent account warrants special measures due to money laundering concerns.

Section 312 requires that, at a minimum, the enhanced standards shall require the U.S. bank to take reasonable steps to ascertain the identity of each owner and the nature and extent of each owner's interest in a foreign correspondent bank if the shares of that bank are not publicly traded. In addition, under the enhanced scrutiny rules, the U.S. bank must conduct enhanced scrutiny of the correspondent account and determine if the foreign bank maintaining the correspondent account provides correspondent accounts to other foreign banks and, if so, the identity of those foreign banks and its owners.

U.S. banks must apply the enhanced procedures if foreign correspondent bank is operating under an offshore banking license. The term "offshore banking license" means a

other things, to maintain records concerning their customers and their activities.

license to conduct banking activities which, as a condition of the license, prohibits the licensed entity from conducting banking activities with the citizens of, or with the local currency of, the country which issued the license. Offshore banking licenses are common in tax haven and bank secrecy jurisdictions.

Section 312 also requires the U.S. Secretary of the Treasury to issue regulations that further set forth the procedures to be applied in carrying out the due diligence obligations imposed by Section 312. The U.S. Secretary of the Treasury has stated that he expects additional rules will be issued by October 25, 2002.

FOREIGN SHELL BANKING REGULATIONS

Section 313(a) of the Patriot Act prohibits covered financial institutions² from providing correspondent accounts to foreign shell banks and requires those institutions to implement reasonable procedures to ensure that correspondent banking accounts are not being used by foreign shell banks.

Foreign shell banks have a long history of being used to launder money. They are frequently located in tax haven jurisdictions and jurisdictions with bank secrecy laws. Many operate under lax or non-existent bank regulation. Drug traffickers and organized crime groups have used Caribbean shell banks and their correspondent relationships to access the U.S. financial system. The Patriot Act defines a foreign shell bank as a foreign bank without

² A "covered financial institution" is defined in Title 31 U.S.C. § 5318(j) as: (1) any insured bank as defined in section 3(h) of the Federal Deposit Insurance Act (12 U.S.C. § 1813(h)); a commercial bank or trust company; (3) a private banker; (4) an agency or branch of a foreign bank in the United States; (5) a credit union; (6) a thrift institution; (7) a broker or dealer registered with the Securities and Exchange Commission. Covered financial institutions include insured banks organized in U.S. territories, Puerto Rico, Guam, American Samoa, and the Virgin Islands.

a physical presence in any country.³ “Physical presence” is defined as a place of business maintained by a foreign bank that

- Is located at a fixed address, other than solely a post office box or an electronic address;
- Is located in a country in which it is authorized to conduct banking activities;
- Employs one or more individuals on a full-time basis;
- Maintains operating records; and
- Is subject to inspection by the banking authority that licensed the foreign bank to conduct banking activities.⁴

The prohibition against foreign shell banks does not apply to a foreign shell bank that is a “regulated affiliate.” A “regulated affiliate” is a foreign shell bank that: (1) is an affiliate of a depository institution, credit union or foreign bank that maintains a physical presence in the United States or a foreign country; and (2) is subject to supervision by a banking authority in the country regulating the affiliate depository institution.⁵

The Patriot Act prohibits covered financial institutions from providing correspondent accounts to foreign shell banks. Under U.S. law, a “correspondent account” is defined as an “account established to receive deposits from, make payments on behalf of foreign financial

³ 31 U.S.C. § 5318(j)(1).

⁴ 31 U.S.C. § 5318(j)(4)(B).

⁵ 31 U.S.C § 5318(j)(3).

institutions, or handle other financial transactions related to such institutions.⁶ It includes demand deposit, savings deposit or other transaction or asset accounts and a credit account or other extension of credit. The U.S. Department of the Treasury interprets the phrase “correspondent account” very broadly. In a Notice of Proposed Rulemaking, Treasury stated:

“It includes, for example, any account that falls within the definition of “transaction account” under Regulation D of the Board of Governors of the Federal Reserve System (Federal Reserve). It also includes clearing and settlement accounts (which may also fall within the definition of “transaction account”). Such accounts are typically used by foreign banks for remittance of funds in settlement of U.S. dollar transactions with parties other than the U.S. bank at which the account is maintained. In addition, foreign banks maintain fiduciary accounts with U.S. banks for the benefit of such foreign banks or their customers, including custody and escrow accounts. U.S. banks also establish time deposit accounts for foreign banks that are used by foreign banks primarily as funding mechanisms, as well as money market deposit accounts (“MMDAs”) that share limited use for transactions processing. In addition, U.S. banks engage in transactions with foreign banks in securities, derivatives, repurchase agreements, foreign exchange, and other instruments. To the extent that these

⁶ 31 U.S.C. § 5318A(c)(1)(B).

transactions involve an account, they would be covered by the definition of “correspondent account.”⁷

This broad definition of “correspondent account” has generated considerable controversy and the Treasury Department was requested to modify and narrow the scope of the rule. However, the Treasury Department has refused stating:

Treasury believes that, for the purposes of sections 313 and 319(b), the broad statutory definition is appropriate. Congress addressed shell banks separately in section 313, determining that they pose such a significant risk for money laundering that an absolute ban on correspondent accounts is justified. Section 319(b) requires that covered financial institutions maintain records regarding the ownership and an agent for service of process of any foreign bank for which it maintains a correspondent account. There is no clear justification for limiting the requirement to only certain foreign banks or to only those foreign banks for which certain types of correspondent accounts are maintained. Moreover, the principal argument asserted for adopting a more restrictive definition is to reduce the compliance burden that results from a broad definition, so that industry compliance resources may be focused on areas presenting a potentially greater risk. With

⁷ Department of the Treasury, Commentary on Proposed Rules, 66 F.R. No. 249, Page 67461 (December 28, 2001).

respect to this rulemaking, however, covered financial institutions will generally achieve compliance with the requirements of both sections 313 and 319(b) by obtaining one certification from the foreign bank.

Thus, requiring the ownership and process agent information in each case where the covered financial institution must already obtain the foreign bank's certification regarding its shell bank status should impose little additional burden on the covered financial institution. Accordingly, Treasury does not believe that the costs of complying with section 319(b) for all correspondent accounts outweigh the risks of excluding from the scope of coverage of section 319(b) foreign banks for which only certain types of accounts are maintained. Thus, for purposes of the final rule, Treasury is essentially retaining the proposed definition, with technical changes that clarify the definition. The final definition for purposes of these sections includes accounts for making "other disbursements" as well as payments "on behalf of a foreign bank." No inference should be drawn from this determination concerning the appropriate definition of "correspondent account" for purposes of section 312 of the Act.

Treasury is further clarifying the definition of "correspondent account" by defining the term "account" for this purpose. With respect to banks, section 311 of the Act

provides that the term account “(i) means a formal banking or business relationship established to provide regular services, dealings, and other financial transactions, and (ii) includes a demand deposit, savings deposit, or other transaction or asset account and a credit account or other extension of credit.” Treasury believes that the use of the term “regular” in the definition requires an arrangement to provide ongoing services, and would generally exclude infrequent or occasional transactions. Inasmuch as section 311 specifically applies this definition of “account” for purposes of section 313, Treasury is modifying the final rule by adding this definition of “account,” for purposes of defining “correspondent account.” This results in a definition of “correspondent account” that includes any transaction account, savings account, asset account, or extension of credit maintained for a foreign bank, as well as any other relationship with a foreign bank to provide regular services, dealings, and other financial transactions. Treasury anticipates that most isolated or occasional transactions that a covered financial institution conducts with a foreign bank would not constitute a correspondent account for purposes of the final rule.⁸

⁸ Department of the Treasury, Notice of Final Rule, September 18, 2002 (footnotes omitted).

All correspondent accounts in a covered financial institution are covered by the Patriot Act even if these accounts are located in a foreign country. For example, the law applies to a correspondent account with the London branch of a covered financial institution.

While the Patriot Act prohibits transactions with foreign shell banks and directs banks to insure that they are not being used to indirectly provide banking services to foreign shell banks, it does not prescribe the manner in which banks are to comply. However, U.S. Department of the Treasury has provided some compliance guidance to covered financial institutions in the form of “safe harbor” regulations. Under a “safe harbor” regulation, the government agrees that if a covered financial institution follows the regulations, it will be considered to be in compliance with the law.⁹ Consequently, it is anticipated that most, if not all covered financial institutions, will follow the “safe harbor” regulations.

The “safe harbor” regulations are set forth in the Code of Federal Regulations, 31 C.F.R., Part 104. The regulations require each covered financial institution to:

- (1) Ascertain the identity of each of the owners of its foreign correspondent banks unless the bank’s shares are publicly traded;
- (2) maintain a record of the name and address of a person who resides in the United States who has agreed and is authorized to accept legal process for records concerning the account;
- (3) implement enhanced procedures to avoid providing banking services to shell banks.

⁹ Id at 67460. 31 C.F.R. § 104.40(b).

The regulations envision that foreign banks will be requested to provide the information needed for compliance.

Correspondent Bank Certification

The regulations require each covered financial institution to maintain specific records in the United States concerning its correspondent banks.¹⁰ A covered financial institution will be deemed in compliance if it obtains from its foreign correspondent banks a certification concerning its physical presence and ownership.¹¹ A covered financial institution is required to obtain a recertification every two years or at any time it has “reason to believe” the original certification is inaccurate. Central banks and certain other government related banks are excluded from the definition of foreign bank for the purposes of the Patriot Act regulations.¹²

A copy of the Certification that U.S. banks are required to obtain from their foreign correspondent banks is attached as APPENDIX I. There are seven sections to the form as described below.

¹⁰ 31 C.F.R. § 104.40(a).

¹¹ 31 C.F.R. § 104.40(b).

¹² 31 C.F.R. § 104.10(d)(2)(ii). “The term foreign bank includes a branch of a foreign bank in a territory of the United States, Puerto Rico, Guam, American Samoa, or the Virgin Islands. (ii) The term foreign bank does not include: (A) A U.S. agency or branch of a foreign bank; [[Page 67466]] (B) An insured bank organized under the laws of a territory of the United States, Puerto Rico, Guam, American Samoa, or the Virgin Islands; (C) A foreign central bank or foreign monetary authority that functions as a central bank; and (D) The African Development Bank, Asian Development Bank, Bank for International Settlements, European Bank for Reconstruction and Development, Inter-American Development Bank, International Bank for Reconstruction and Development (the World Bank), International Finance Corporation, International Monetary Fund, North American Development Bank, African Development Bank, International Development Association, Multilateral Investment Guarantee Agency, and similar international financial institutions of which the United States is a member or as otherwise designated by the Secretary.”

Accounts Covered By The Certification

Part B of the form requires the foreign bank to certify whether all U.S. correspondent accounts of the foreign bank are covered by the certification or only accounts in a particular financial institution are covered by the certification. If the foreign bank certifies that all of its accounts are covered by the certification, it may provide a single certification on its website and all its U.S. correspondent banks may rely on this certification.

Certification Regarding Physical Location

The first part of the Correspondent bank Certification deals with the physical location of the bank. A foreign correspondent bank must state whether it

- (1) Has a fixed address (other than an electronic address or post office box) in a country where is authorized to conduct banking activities.
- (2) Employs one or more individuals on a full time basis.
- (3) Maintains operating records related to its banking activities.
- (4) Subject to inspection by a banking authority that issued its license.

If the foreign bank does not meet each of above four requirements, it is deemed a foreign shell bank unless it is a “regulated affiliate.” If the correspondent bank is a foreign shell bank, the U.S. bank must terminate the correspondent relationship.¹³

Certification Concerning Use By Other Shell Banks

The second item that the foreign correspondent bank must certify is that it

¹³ 31 C.F.R. § 104.40(d).

“does not use any correspondent account with the Covered Financial Institution to indirectly provide banking services to any foreign bank that does not have a physical presence in any country, and that is not a regulated affiliate.”

This certification is designed to prevent the use of “nested” accounts by foreign shell banks. In making this certification, foreign correspondent banks should carefully check their customers for banks that operate with an “offshore license”¹⁴ and customers that utilize the banks correspondent relationship as a “payable through” account.¹⁵

Certification Concerning Ownership

Part E of the Certification requires the foreign correspondent bank to provide information concerning its ownership. If the foreign correspondent bank is publicly traded or has previously reported its ownership to the U.S. Federal Reserve Board on a Form FR Y-7, it merely has to check the box. Otherwise, the bank must identify its owners as described below.

For purposes of the Certification, “owner” means any person who, directly or indirectly, (a) owns, controls, or has power to vote 25 percent or more of any class of voting securities or other voting interests of Foreign Bank; or (b) controls in any manner the election

¹⁴ An offshore banking license is a license to conduct banking activities but which prohibits the licensee from conducting banking activities in the local currency or with the citizens of the local country.

¹⁵ A “payable-through” account is an account through which a foreign financial institution permits its customers, either directly or indirectly, to engage in banking activities usual in connection with the business of banking in the United States.

of a majority of the directors (or individuals exercising similar functions) of Foreign Bank. For purposes of this Certification, (i) person means any individual, bank, corporation, partnership, limited liability company or any other legal entity; (ii) voting securities or other voting interests means securities or other interests that entitle the holder to vote for or select directors (or individuals exercising similar functions); and (iii) members of the same family¹⁶ shall be considered one person.

In making the certification concerning ownership, the foreign bank should include all persons who meet the definition of “owner.”

Certification Concerning Agent

Each foreign correspondent bank must identify an individual who is a resident in the United States that is authorized to accept service of process on behalf of the foreign correspondent bank.

IMPOSITION OF SPECIAL MEASURES

Section 311 of the Patriot Act authorizes the Secretary of the Treasury require U.S. financial institutions to impose special measures on financial institutions, international transactions and foreign jurisdictions where there is a primary money laundering concern. The special measures authorized are:

- Special record keeping and reporting requirements.

¹⁶ The same family means parents, spouses, children, siblings, uncles, aunts, grandparents, grandchildren, first cousins, stepchildren, stepsiblings, parents-in-law and spouses of any of the foregoing. In determining the ownership interests of the same family, any voting interest of any family member shall be taken into account

- Requiring domestic financial institutions and agencies to obtain information concerning beneficial ownership of accounts opened by foreign persons.
- Requiring domestic financial institutions and agencies to identify each customer utilizing a “payable through” account.¹⁷
- Requiring domestic financial institutions and agencies to identify each customer whose transactions are routed through a correspondent account.
- Prohibit or impose conditions on opening or maintaining correspondent or “payable through” accounts.

The special measures may be applied if the Secretary of the Treasury determines that reasonable grounds exist for concluding that one or more classes of transactions with or involving a foreign jurisdiction raise a concern about money laundering. The special measures may be imposed by order for up to 120 days or by regulation for a longer period. The law requires the Secretary of the Treasury to consider with respect to each foreign jurisdiction, *inter alia*, the following in deciding whether to impose the special measures.

- Evidence that organized crime and or terrorists have transacted business in the foreign jurisdiction.

¹⁷ A “payable-through” account is an account through which a foreign financial institution permits its customers, either directly or indirectly, to engage in banking activities usual in connection with the business of banking in the United States.

- Whether the foreign jurisdiction offers bank secrecy or special regulatory advantages to nonresidents and nondomiciliaries of the jurisdiction.
- The substance and quality of administration of the bank supervisory and counter-money laundering laws of the jurisdiction.
- The extent to which a jurisdiction is characterized by credible international organizations as an offshore banking or tax haven jurisdiction.
- Whether the United States has a mutual legal assistance treaty with the jurisdiction and the experience of the United States in obtaining information about transactions originating in or routed through the jurisdiction.

To date, no special measures have been reported against any bank or jurisdiction.

MONEY LAUNDERING LAW AMENDMENTS

The Patriot Act significantly expands the federal money laundering statute, 18 U.S.C. § 1956 and related forfeiture statutes. The Patriot Act increases the number of predicate acts in the money laundering statute, expands the definition of financial institution in the money laundering law to include foreign banks, and provides for “long arm” jurisdiction over foreign money launderers.

The inclusion of additional predicate offenses in the money laundering statute continues the trend of expanding the U.S. money laundering law towards an “all crimes” statute. The new predicate acts include:

- Bribery of a public official.
- Misappropriation or theft of public funds by a public official.
- Smuggling or export control violations involving items controlled by the U.S. Munitions List or the Export Administration regulations.
- Firearms trafficking offenses.
- False classification of goods for Customs purposes.
- Computer fraud (including unlawful access to computers).
- Any offense that the U.S. is obligated by a multilateral treaty to extradite the offender or submit the case for prosecution if the offender is found in the U.S.

The new predicate offenses involving bribery of a public official and misappropriation or thefts of public funds by a public official are **not** limited to offenses involving public officials in the U.S. Consequently, foreign bribery and corruption offenses will be predicate acts under the U.S. money laundering law. If the other elements of the statute are met, including the jurisdictional requirements, a foreign offense can be the basis of a U.S. money laundering prosecution.

Perhaps the most significant change to the money laundering statute is the assertion of “long arm” jurisdiction over foreign persons. Section 317 of the Patriot Act amends 18 U.S.C. § 1956 and provides that a U.S. District Court shall have jurisdiction over any foreign person, including foreign financial institutions, if service of process is made either (1) under the Federal Rules of Civil Procedure or (2) the laws of the foreign country in which the person is found and the foreign person either:

- Commits a money laundering offense involving a financial transaction that occurs in whole or in part in the U.S., or
- The foreign person converts to their use property in which the U.S. has an ownership interest by virtue of a forfeiture order, or
- The foreign person is a financial institution that maintains a bank account in the U.S.

This broadening of jurisdiction coupled with amendments to the forfeiture laws permitting the forfeiture of funds owned by a foreign person or bank in U.S. interbank accounts greatly expands the reach of the U.S. money laundering laws.

Section 318 of the Patriot Act expands the definition of “financial institution” in the money laundering statute, 18 U.S.C. § 1956, to include foreign banks as defined in the International Banking Act of 1978, 12 U.S.C. § 3101. Thus, for the purposes of money laundering, the term includes:

“any company organized under the laws of a foreign country, a territory of the United States, Puerto Rico, Guam, American Samoa, or the Virgin Islands, which engages in the

business of banking, or any subsidiary or affiliate, organized under such laws, of any such company. For the purposes of this chapter the term "foreign bank" includes, without limitation, foreign commercial banks, foreign merchant banks and other foreign institutions that engage in banking activities usual in connection with the business of banking in the countries where such foreign institutions are organized or operating.”

As a result of this amendment, a transaction through a foreign bank will trigger U.S. jurisdiction over a money laundering offense the same as a transaction through a domestic bank.

Because of these amendments, all foreign banks, face an increased risk of U.S. prosecution under the expanded US money laundering statute. If a money laundering transaction that impacts the U.S. as specified in the statute occurs anywhere in the world, the participants in the transaction may be prosecuted in the U.S. courts. Foreign banks may be subject to prosecution as aiders and abettors. The most likely prosecution theory is that the bank failed to maintain minimum standards for detecting money laundering. There is a pretty well defined consensus throughout the worldwide banking community of minimum anti-money laundering standards. Evidence that a particular bank failed to comply with these standards will likely satisfy the prosecution’s burden of proof in the U.S. courts.

INCREASED INTERNATIONAL COOPERATION

Several provisions of the Patriot Act are designed to increase international cooperation with the U.S. in combating international money laundering. Section 328 directs the Secretary of the Treasury to take steps to encourage foreign governments to require the

inclusion of the name of the originator in all wire transfers sent to the U.S. and other countries. This would obviously facilitate the tracing of wire transfers. Section 330 of the Act is a “sense of Congress” provision encouraging negotiations with foreign countries to encourage foreign financial institutions to maintain adequate records for the purpose of preventing and detecting money laundering and terrorism. Section 330 also encourages negotiations to establish mechanisms whereby such records will be made available to U.S. authorities.

SUBPOENA OF FOREIGN BANK RECORDS

The expanded jurisdiction provisions of the Patriot Act provide for the compulsory production of foreign bank records relating to correspondent accounts maintained in the U.S. by foreign banks. A summons, subpoena or a law enforcement request may demand the records. The demand may require the production of records located outside of the U.S. Failure to comply with the demand will result in the termination of the correspondent relationship. The failure of the U.S. bank to terminate the relationship will result in the imposition of a fine of up to \$10,000 a day. The failure of the foreign bank to comply with judicial process could also be punished as contempt.

APPENDIX I

APPENDIX A TO SUBPART I OF PART 103

CERTIFICATION REGARDING CORRESPONDENT ACCOUNTS FOR FOREIGN BANKS

[OMB Control Number 1505-0184]

The information contained in this Certification is sought pursuant to Sections 5318(j) and 5318(k) of Title 31 of the United States Code, as added by sections 313 and 319(b) of the USA PATRIOT Act of 2001 (Public Law 107-56).

This Certification should be completed by any **foreign bank** that maintains a **correspondent account** with any U.S. bank or U.S. broker-dealer in securities (a **covered financial institution** as defined in 31 C.F.R. 103.175(f)). An entity that is not a foreign bank is not required to complete this Certification.

A **foreign bank** is a bank organized under foreign law and located outside of the United States (see definition at 31 C.F.R. 103.11(o)). A **bank** includes offices, branches, and agencies of commercial banks or trust companies, private banks, national banks, thrift institutions, credit unions, and other organizations chartered under banking laws and supervised by banking supervisors of any state (see definition at 31 C.F.R. 103.11(c)).¹⁸

A **Correspondent Account** for a **foreign bank** is any account to receive deposits from, make payments or other disbursements on behalf of a foreign bank, or handle other financial transactions related to the foreign bank.

Special instruction for foreign branches of U.S. banks: A branch or office of a U.S. bank outside the United States is a foreign bank. Such a branch or office is not required to complete this Certification with respect to Correspondent Accounts with U.S. branches and offices of the same U.S. bank.

Special instruction for covering multiple branches on a single Certification: A foreign bank may complete one Certification for its branches and offices outside the United States. The Certification must list all of the branches and offices that are covered and must include the information required in Part C for **each** branch or office that maintains a Correspondent Account with a Covered Financial Institution. Use attachment sheets as necessary.

A. The undersigned financial institution, _____ (“**Foreign Bank**”) hereby certifies as follows:

B. Correspondent Accounts Covered by this Certification: Check **one** box.

¹⁸ A “foreign bank” does not include any foreign central bank or monetary authority that functions as a central bank, or any international financial institution or regional development bank formed by treaty or international agreement.

This Certification applies to **all** accounts established for Foreign Bank by Covered Financial Institutions.

This Certification applies to Correspondent Accounts established by _____ (name of Covered Financial Institution(s)) for Foreign Bank.

C. Physical Presence/Regulated Affiliate Status: Check **one** box and complete the blanks.

Foreign Bank maintains a **physical presence** in any country. That means:

- Foreign Bank has a place of **business** at the following street address: _____, where Foreign Bank employs one or more individuals on a full-time basis and maintains operating records related to its banking activities.
- The above address is in _____ (insert country), where Foreign Bank is authorized to conduct banking activities.
- Foreign Bank is subject to inspection by _____, (insert Banking Authority), the banking authority that licensed Foreign Bank to conduct banking activities.

Foreign Bank does not have a physical presence in any country, but Foreign Bank is a **regulated affiliate**. That means:

- Foreign Bank is an affiliate of a depository institution, credit union, or a foreign bank that maintains a physical presence at the following street address: _____, where it employs one or more persons on a full-time basis and maintains operating records related to its banking activities.
- The above address is in _____ (insert country), where the depository institution, credit union, or foreign bank is authorized to conduct banking activities.
- Foreign Bank is subject to supervision by _____, (insert Banking Authority), the same banking authority that regulates the depository institution, credit union, or foreign bank.

Foreign Bank does **not** have a physical presence in a country and is **not** a regulated affiliate.

D. Indirect Use of Correspondent Accounts: Check box to certify.

No Correspondent Account maintained by a Covered Financial Institution may be used to indirectly provide banking services to certain foreign banks. Foreign Bank hereby certifies that it does **not** use any Correspondent Account with a Covered Financial Institution to indirectly provide banking services to any foreign bank that does not maintain a physical presence in any country and that is not a regulated affiliate.

E. Ownership Information: Check box 1 or 2 below. **if applicable.**

1. **Form FR Y-7 is on file.** Foreign Bank has filed with the Federal Reserve Board a current Form FR Y-7 and has disclosed its ownership information on Item 4 of Form FR Y-7.
2. **Foreign Bank's shares are publicly traded.** Publicly traded means that the shares are traded on an exchange or an organized over-the-counter market that is regulated by a foreign securities authority as defined in section 3(a)(50) of the Securities Exchange Act of 1934 (15 U.S.C. 78c(a)(50)).

If **neither** box 1 nor 2 of Part E is checked, complete item 3 below, **if applicable.**

3. Foreign Bank has no **owner(s)** except as set forth below. For purposes of this Certification, **owner** means any person who, directly or indirectly, (a) owns, controls, or has power to vote 25 percent or more of any class of voting securities or other voting interests of Foreign Bank; or (b) controls in any manner the election of a majority of the directors (or individuals exercising similar functions) of Foreign Bank. For purposes of this Certification, (i) **person** means any individual, bank, corporation, partnership, limited liability company or any other legal entity; (ii) **voting securities or other voting interests** means securities or other interests that entitle the holder to vote for or select directors (or individuals exercising similar functions); and (iii) members of the same family¹⁹ shall be considered one **person**.

| Name | Address |
|------|---------|
| | |
| | |
| | |
| | |

F. Process Agent: complete the following.

The following individual or entity: _____ is a resident of the United States at the following street address: _____, **and** is authorized to accept service of legal process on behalf of Foreign Bank from the Secretary of the Treasury or the Attorney General of the United States pursuant to Section 5318(k) of title 31, United States Code.

¹⁹ The same family means parents, spouses, children, siblings, uncles, aunts, grandparents, grandchildren, first cousins, stepchildren, stepsiblings, parents-in-law and spouses of any of the foregoing. In determining the ownership interests of the same family, any voting interest of any family member shall be taken into account

G. General

Foreign Bank hereby agrees to notify in writing each Covered Financial Institution at which it maintains any Correspondent Account of any change in facts or circumstances reported in this Certification. Notification shall be given within 30 calendar days of such change.

Foreign Bank understands that each Covered Financial Institution at which it maintains a Correspondent Account may provide a copy of this Certification to the Secretary of the Treasury and the Attorney General of the United States. Foreign Bank further understands that the statements contained in this Certification may be transmitted to one or more departments or agencies of the United States of America for the purpose of fulfilling such departments' and agencies' governmental functions.

I, _____ (name of signatory), certify that I have read and understand this Certification, that the statements made in this Certification are complete and correct, and that I am authorized to execute this Certification on behalf of Foreign Bank.

[Name of Foreign Bank]

[Signature]

[Printed Name]

[Title]

Executed on this _____ day of _____, 200__.

Received and reviewed by:

Name: _____

Title: _____

For: _____

[Name of Covered Financial Institution]

Date: _____

Accredited Investors

Under the Securities Act of 1933, a company that offers or sells its securities must register the securities with the SEC or find an exemption from the registration requirements. The Act provides companies with a number of exemptions. For some of the exemptions, such as rules [505](#) and [506](#) of [Regulation D](#), a company may sell its securities to what are known as "accredited investors."

The federal securities laws define the term accredited investor in [Rule 501 of Regulation D](#) as:

1. a bank, insurance company, registered investment company, business development company, or small business investment company;
2. an employee benefit plan, within the meaning of the Employee Retirement Income Security Act, if a bank, insurance company, or registered investment adviser makes the investment decisions, or if the plan has total assets in excess of \$5 million;
3. a charitable organization, corporation, or partnership with assets exceeding \$5 million;
4. a director, executive officer, or general partner of the company selling the securities;
5. a business in which all the equity owners are accredited investors;
6. a natural person who has individual net worth, or joint net worth with the person's spouse, that exceeds \$1 million at the time of the purchase;
7. a natural person with income exceeding \$200,000 in each of the two most recent years or joint income with a spouse exceeding \$300,000 for those years and a reasonable expectation of the same income level in the current year; or
8. a trust with assets in excess of \$5 million, not formed to acquire the securities offered, whose purchases a sophisticated person makes.

For more information about the SEC's registration requirements and common exemptions, read our brochure, [Q&A: Small Business & the SEC](#).

<http://www.sec.gov/answers/accred.htm>

Do Not Write in This Block - For USCIS Use Only (Except G-28 Block Below)

| | | |
|-------------------------|--------------|--|
| Classification _____ | Action Block | Fee Receipt |
| Priority Date _____ | | To be completed by Attorney or Representative, if any <input type="checkbox"/> G-28 is attached Attorney's State License No. _____ |
| Remarks: | | |

START HERE - Type or print in black ink.

Part 1. Information about you.

Family Name Given Name Middle Name

Address: In care of

Number and Street Apt. #

City State or Province Country Zip/Postal Code

Date of Birth (mm/dd/yyyy) Country of Birth Social Security # (if any) A # (if any)

If you are in the United States, provide the following information: Date of Arrival (mm/dd/yyyy) I-94 #

Current Nonimmigrant Status Date Current Status Expires (mm/dd/yyyy) Daytime Phone # with Area Code

Part 2. Application type. (Check one)

- a. This petition is based on an investment in a commercial enterprise in a targeted employment area for which the required amount of capital invested has been adjusted downward.
- b. This petition is based on an investment in a commercial enterprise in an area for which the required amount of capital invested has been adjusted upward.
- c. This petition is based on an investment in a commercial enterprise that is not in either a targeted area or in an upward adjustment area.

Part 3. Information about your investment.

Name of commercial enterprise in which funds are invested

Street Address

Phone # with Area Code Business organized as (corporation, partnership, etc.)

Kind of business (e.g. furniture manufacturer) Date established (mm/dd/yyyy) IRS Tax #

RECEIVED: _____ RESUBMITTED: _____ RELOCATED: SENT _____ REC'D _____



Part 3. Information about your investment. (Continued.)

| | | | |
|---|-------------------------|--------------------------------------|-------------------------|
| Date of your initial investment (mm/dd/yyyy) | <input type="text"/> | Amount of your initial investment | \$ <input type="text"/> |
| Your total capital investment in the enterprise to date | \$ <input type="text"/> | Percentage of the enterprise you own | <input type="text"/> |

If you are not the sole investor in the new commercial enterprise, list on separate paper the names of all other parties (natural and non-natural) who hold a percentage share of ownership of the new enterprise and indicate whether any of these parties is seeking classification as an alien entrepreneur. Include the name, percentage of ownership and whether or not the person is seeking classification under section 203(b)(5). **NOTE:** A "natural" party would be an individual person and a "non-natural" party would be an entity such as a corporation, consortium, investment group, partnership, etc.

If you indicated in **Part 2** that the enterprise is in a targeted employment area or in an upward adjustment area, name the county and state:

| | | | |
|--------|----------------------|-------|----------------------|
| County | <input type="text"/> | State | <input type="text"/> |
|--------|----------------------|-------|----------------------|

Part 4. Additional information about the enterprise.

Type of Enterprise (check one):

- New commercial enterprise resulting from the creation of a new business.
- New commercial enterprise resulting from the purchase of an existing business.
- New commercial enterprise resulting from a capital investment in an existing business.

Composition of the Petitioner's Investment:

| | | |
|--|----|----------------------|
| Total amount in U.S. bank account | \$ | <input type="text"/> |
| Total value of all assets purchased for use in the enterprise..... | \$ | <input type="text"/> |
| Total value of all property transferred from abroad to the new enterprise..... | \$ | <input type="text"/> |
| Total of all debt financing..... | \$ | <input type="text"/> |
| Total stock purchases..... | \$ | <input type="text"/> |
| Other (explain on separate paper)..... | \$ | <input type="text"/> |
| Total | \$ | <input type="text"/> |

Income:

| | | | | |
|-----------------------------------|-------|-------------------------|-----|-------------------------|
| When you made the investment..... | Gross | \$ <input type="text"/> | Net | \$ <input type="text"/> |
| Now..... | Gross | \$ <input type="text"/> | Net | \$ <input type="text"/> |

Net worth:

| | | | | |
|-------------------------------|-------|-------------------------|-----|-------------------------|
| When you made investment..... | Gross | \$ <input type="text"/> | Now | \$ <input type="text"/> |
|-------------------------------|-------|-------------------------|-----|-------------------------|

Part 5. Employment creation information.

Number of full-time employees in the enterprise in U.S. (excluding you, your spouse, sons and daughters)

When you made your initial investment? Now Difference

How many of these new jobs were created by your investment? How many additional new jobs will be created by your additional investment?

What is your position, office or title with the new commercial enterprise?

Briefly describe your duties, activities and responsibilities.

What is your salary? \$ What is the cost of your benefits? \$

Part 6. Processing information.

Check One:

- The person named in **Part 1** is now in the United States and an application to adjust status to permanent resident will be filed if this petition is approved.
- If the petition is approved and the person named in **Part 1** wishes to apply for an immigrant visa abroad, complete the following for that person:

Country of nationality:

Country of current residence or, if now in the United States, last permanent residence abroad:

If you provided a United States address in **Part 1**, print the person's foreign address:

If the person's native alphabet is other than Roman letters, write the foreign address in the native alphabet:

Is a Form I-485, Application for Adjustment of Status, attached to this petition? Yes No

Are you in deportation or removal proceedings? Yes (Explain on separate paper) No

Have you ever worked in the United States without permission? Yes (Explain on separate paper) No

Part 7. Signature. Read the information on penalties in the instructions before completing this section.

I certify, under penalty of perjury under the laws of the United States of America, that this petition and the evidence submitted with it is all true and correct. I authorize the release of any information from my records that the U.S. Citizenship and Immigration Services needs to determine eligibility for the benefit I am seeking.

Signature Date

NOTE: If you do not completely fill out this form or fail to submit the required documents listed in the instructions, you may not be found eligible for the immigration benefit you are seeking and this petition may be denied.

Part 8. Signature of person preparing form, if other than above. (Sign below)

I declare that I prepared this application at the request of the above person and it is based on all information of which I have knowledge.

Signature Print Your Name Date

Firm Name

Address Daytime phone # with area code

**Instructions for I-526, Immigrant
Petition by Alien Entrepreneur****Instructions**

Please read these instructions carefully to properly complete this form. If you need more space to complete an answer, use a separate sheet(s) of paper. Write your name and Alien Registration Number (A #), if any, at the top of each sheet of paper and indicate the section and number of the item to which the answer refers.

What Is The Purpose of This Form I-526?

This form is for use by an entrepreneur to petition the U.S. Citizenship and Immigration Services (USCIS) for status as an immigrant to the United States pursuant to section 203(b)(5) of the Immigration and Nationality Act, as amended. That section of the law pertains to immigrant visas for an investor in a new commercial enterprise.

Who May File Form I-526?

You may file this petition for yourself if you have established a new commercial enterprise:

1. In which you will engage in a managerial or policy-making capacity, and
2. In which you have invested or are actively in the process of investing the amount required for the area in which the enterprise is located, and
3. Which will benefit the U.S. economy, and
4. Which will create full-time employment in the United States for at least ten U.S. citizens, permanent residents, or other immigrants authorized to be employed, other than yourself, your spouse, your sons or daughters, or any nonimmigrant aliens.

The establishment of a new commercial enterprise may include:

1. Creation of a new business;
2. The purchase of an existing business with simultaneous or subsequent restructuring or reorganization resulting in a new commercial enterprise; or
3. The expansion of an existing business through investment of the amount required, so that a substantial change (at least 40 percent) in either the net worth, number of employees, or both, results.

The amount of investment required in a particular area is set by regulation. Unless adjusted downward for targeted areas or upward for areas of high employment, the amount of investment shall be **\$1,000,000 (one million dollars)**. You may obtain additional information from our website at www.uscis.gov, or an American embassy or consulate abroad.

General Instructions.**Fill Out the Form I-526**

1. Type or print legibly in black ink.
2. If extra space is needed to complete any item, attach a continuation sheet, indicate the item number, and date and sign each sheet.
3. Answer all questions fully and accurately. State that an item is not applicable with "N/A." If the answer is none, write "none."

Initial Evidence Requirements.

The following evidence must be filed with your petition:

1. Evidence that you have established a lawful business entity under the laws of the jurisdiction in the United States in which it is located, or, if you have made an investment in an existing business, evidence that your investment has caused a substantial (at least 40 percent) increase in the net worth of the business, the number of employees, or both.

Such evidence shall consist of copies of articles of incorporation, certificate of merger or consolidation, partnership agreement, certificate of limited partnership, joint venture agreement, business trust agreement, or other similar organizational document; a certificate evidencing authority to do business in a state or municipality, or if such is not required, a statement to that effect; or evidence that the required amount of capital was transferred to an existing business resulting in a substantial increase in the net worth or number of employees, or both.

This evidence must be in the form of stock purchase agreements, investment agreements, certified financial reports, payroll records or other similar instruments, agreements or documents evidencing the investment and the resulting substantial change.

2. Evidence, if applicable, that your enterprise has been established in a targeted employment area. A targeted employment area is defined as a rural area or an area which has experienced high unemployment of at least 150 percent of the national average rate. A rural area is an area not within a metropolitan statistical area or not within the outer boundary of any city or town having a population of 20,000 or more.
3. Evidence that you have invested or are actively in the process of investing the amount required for the area in which the business is located.

Such evidence may include, but need not be limited to, copies of bank statements, evidence of assets that have been purchased for use in the enterprise, evidence of property transferred from abroad for use in the enterprise, evidence of monies transferred or committed to be transferred to the new commercial enterprise in exchange for shares of stock, any loan or mortgage, promissory note, security agreement, or other evidence of borrowing that is secured by assets of the petitioner.

4. Evidence that capital is obtained through lawful means. The petition must be accompanied, as applicable, by: foreign business registration records, tax returns of any kind filed within the last five years in or outside the United States, evidence of other sources of capital, or certified copies of any judgment, pending governmental civil or criminal actions, or private civil actions against the petitioner from any court in or outside the United States within the past 15 years.
5. Evidence that the enterprise will create at least ten full-time positions for U.S. citizens, permanent residents, or aliens lawfully authorized to be employed (except yourself, your spouse, sons, or daughters, and any nonimmigrant aliens). Such evidence may consist of copies of relevant tax records, Forms I-9, or other similar documents, if the employees have already been hired, or a business plan showing when such employees will be hired within the next two years.
6. Evidence that you are or will be engaged in the management of the enterprise, either through the exercise of day-to-day managerial control or through policy formulation. Such evidence may include a statement of your position title and a complete description of your duties, evidence that you are a corporate officer or hold a seat on the board of directors, or, if the new enterprise is a partnership, evidence that you are engaged in either direct management or policy-making activities.

Translations. Any document containing foreign language submitted to the Service shall be accompanied by a full English language translation which the translator has certified as complete and accurate, and by the translator's certification that he or she is competent to translate from the foreign language into English.

Copies. Unless specifically required that an original document be filed with an application or petition, an ordinary legible photocopy may be submitted. Original documents submitted when not required will remain a part of the record, even if the submission was not required.

Where To File?

If the new commercial enterprise is located, or will principally be doing business in: Alabama, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Kentucky,

Louisiana, Mississippi, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New Mexico, New York, North Carolina, South Carolina, Oklahoma, Pennsylvania, Puerto Rico, Rhode Island, Tennessee, or Texas, Vermont, the U.S. Virgin Islands, Virginia or West Virginia, mail the petition to:

USCIS Texas Service Center
P.O. Box 852135
Mesquite, TX 75185-2135

If the new commercial enterprise is located, or will principally be doing business in: Alaska, Arizona, California, Colorado, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, North Dakota, Ohio, Oregon, South Dakota, Utah, Washington, Wisconsin or Wyoming, mail the petition to:

USCIS California Service Center
P.O. Box 10140
Laguna Niguel, CA 92607-0526

What Is the Filing Fee?

The filing fee for the Form I-526 is **\$1,435.00**.

Use the following guidelines when you prepare your check or money order for the Form I-526:

1. The check or money order must be drawn on a bank or other financial institution located in the United States and must be payable in U.S. currency; and
2. Make the check or money order payable to **U.S. Department of Homeland Security**, unless:
 - A. If you live in Guam and are filing your petition there, make it payable to **Treasurer, Guam**.
 - B. If you live in the U.S. Virgin Islands and are filing your petition there, make it payable to **Commissioner of Finance of the Virgin Islands**.
 - C. If you live outside the United States, Guam, or the U.S. Virgin Islands, contact the nearest U.S. consulate or embassy for instructions on the method of payment.

NOTE: Please spell out U.S. Department of Homeland Security; do not use the initials "USDHS" or "DHS."

How to Check If the Fees Are Correct.

The form fee on this form is current as of the edition date appearing in the lower right corner of this page. However, because USCIS fees change periodically, you can verify if the fees are correct by following one of the steps below:

1. Visit our website at www.uscis.gov, select "Immigration Forms" and check the appropriate fee;

2. Review the Fee Schedule included in your form package, if you called us to request the form; or
3. Telephone our National Customer Service Center at **1-800-375-5283** and ask for the fee information.

Address Changes.

If you change your address and you have an application or petition pending with USCIS, you may change your address on-line at www.uscis.gov, click on "Change your address with USCIS" and follow the prompts or by completing and mailing Form AR-11, Alien's Change of Address Card, to:

**U.S. Citizenship and Immigration Services
Change of Address
P.O. Box 7134
London, KY 40742-7134**

For commercial overnight or fast freight services only, mail to:

**U.S. Citizenship and Immigration Services
Change of Address
1084-I South Laurel Road
London, KY 40744**

Processing Information.

Acceptance.

Any petition that is not signed or accompanied by the correct fee will be rejected with a notice that it is deficient. You may correct the deficiency and resubmit the petition. However, a petition is not considered properly filed until accepted by USCIS.

Initial processing.

Once the Form I-526 has been accepted, it will be checked for completeness, including submission of the required initial evidence. If you do not completely fill out the form or file it without required initial evidence, you will not establish a basis for eligibility and we may deny your Form I-526.

Requests for more information or interview.

We may request more information or evidence or we may request that you appear at a USCIS office for an interview. We may also request that you submit the originals of any copy. We will return these originals when they are no longer required.

Decision. The decision on the Form I-526 involves a determination of whether you have established eligibility for the requested benefit. You will be notified of the decision in writing.

Approval.

If you have established that you qualify for investor status, the petition will be approved. If you have requested that the petition be forwarded to an American embassy or consulate abroad, the petition will be sent there unless that consulate does not issue immigrant visas. If you are in the United States and state that you will apply for adjustment of status, and the evidence indicates you are not eligible for adjustment, the petition will be sent to an American embassy or consulate abroad. You will be notified in writing of the approval of the petition and where it has been sent, and the reason for sending it to a place other than the one requested, if applicable.

Meaning of petition approval.

Approval of a petition shows only that you have established that you have made a qualifying investment. It does not guarantee that the American embassy or consulate will issue the immigrant visa. There are other requirements that must be met before a visa can be issued. The American embassy or consulate will notify you of those requirements. Immigrant status granted based on this petition will be conditional. Two years after entry, the conditional investor will have to apply for the removal of conditions based on the ongoing nature of the investment.

Denial.

If you have not established that you qualify for the benefit sought, the petition will be denied. You will be notified in writing of the reasons for the denial.

USCIS Forms and Information.

To order USCIS forms, call our toll-free number at **1-800-870-3676**. You can also get USCIS forms and information on immigration laws, regulations and procedures by telephoning our National Customer Service Center at **1-800-375-5283** or visiting our internet website at www.uscis.gov.

As an alternative to waiting in line for assistance at your local USCIS office, you can now schedule an appointment through our internet-based system, **InfoPass**. To access the system, visit our website. Use the **InfoPass** appointment scheduler and follow the screen prompts to set up your appointment.

InfoPass generates an electronic appointment notice that appears on the screen.

Penalties.

If you knowingly and willfully falsify or conceal a material fact or submit a false document with this request, we will deny the benefit you are filing for, and may deny any other immigration benefit.

In addition, you will face severe penalties provided by law, and may be subject to criminal prosecution.

Privacy Act Notice.

We ask for the information on this form, and associated evidence, to determine if you have established eligibility for the immigration benefit for which you are filing. Our legal right to ask for this information can be found in the Immigration and Nationality Act, as amended. We may provide this information to other government agencies. Failure to provide this information, and any requested evidence, may delay a final decision or result in denial of your Form I-526.

Paperwork Reduction Act.

An agency may not conduct or sponsor an information collection and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The public reporting burden for this collection of information is estimated at 1 hour and 15 minutes per response, including the time for reviewing instructions, completing and submitting the form. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: U.S. Citizenship and Immigration Services, Regulatory Management Division, 111 Massachusetts Avenue, N.W., 3rd Floor, Suite 3008, Washington, DC 20529. OMB No. 1615-0026. **Do not mail your application to this address.**

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Exhibit Volume 1 of 3

Chicagoland Foreign Investment Group

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Map of Illinois Counties



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U.S. Citizenship
and Immigration
Services

August 12, 2004

Press Release

USCIS Announces September 17, 2004, Public Meeting to Address Regional Centers and the Immigrant Investor Pilot Program

All persons interested in attending a public informational meeting on the Immigrant Investor Pilot Program and Regional Centers are invited.

DATE: September 17, 2004

TIME: 10:00 am to 4:00 pm (Eastern Standard Time)

LOCATION: Holiday Inn
415 New Jersey Avenue NW
Washington, D.C.

Please email your RSVP to confirm your attendance by no later than August 30, 2004, to hqopr@dhs.gov, and provide the following information (required):

Name of person attending,
Affiliation (if any),
Mailing address,
Phone number,
Email address.

Copy of the [Meeting Agenda](#)

BACKGROUND: The Immigrant Investor Pilot Program ("Pilot Program") was created by Section 610 of Public Law 102-395 (October 6, 1992). This is different in certain ways from the basic EB-5 [Investor Program](#).

The Pilot Program began in accordance with a Congressional mandate aimed at stimulating economic activity and creating jobs for U.S. workers, while simultaneously affording eligible aliens the opportunity to become

lawful permanent residents. Through this innovative program, foreign investors are encouraged to invest funds in an economic unit known as a “Regional Center.”

A Regional Center is defined as any economic unit, public or private, engaged in the promotion of economic growth, improved regional productivity, job creation and increased domestic capital investment. Prior law required investment in a Regional Center to generate an increase in export sales. However, statutory amendments in 2000 and 2002, no longer require an increase in export sales for approval of a Regional Center, although the statutory amendments still encourage this aspect of the Pilot Program.

Presently up to 3000 immigrant visas are set aside each year for the Pilot Program. Although the Pilot Program temporarily sunset on September 30, 2003, it was reinstated and extended for five years by Congress via a law enacted in November 2003, with a new sunset date of November 2008. As of June 1, 2004, a total of 26 Regional Centers have been designated by the legacy Immigration and Naturalization Service (INS) and today, the U.S. Citizenship and Immigrations Services (USCIS).

Basic requirements for Regional Center designation: Applicants must show how their proposed program will:

- Focus on a geographic region;
- Promote economic growth through increased export sales, if applicable;
- Promote improved regional productivity;
- Create a minimum of 10 direct or indirect jobs per investor;
- Increase domestic capital investment;
- Be promoted and publicized to prospective investors;
- Have a positive impact on the regional or national economy through increased household earnings; and
- Generate a greater demand for business services, utilities maintenance and repair, and construction jobs both in and around the center.

How The Pilot Program And Regional Centers Fall Within The EB-5 Investor Requirements

The requirements for an investor under the Pilot Program are essentially the same as in the basic EB-5 investor program except that the Pilot Program allows for a less restrictive requirement for “indirect” job creation rather than “direct” job creation. The capital investment requirement for any EB-5 investor, inside or outside of a Regional Center is \$1 million. The capital investment requirement for an EB-5 investor in a Targeted Employment Area (TEA) or a Rural Area (RA) is \$500,000.

Indirect Job Creation: An important advantage to obtaining Regional Center designation is the “indirect” nature of the job creation, which is less difficult to achieve than the “direct” creation of 10 new jobs. The requirement of creating at least 10 new full-time jobs may be satisfied by showing that, as a result of the investment and the activities of the new enterprise, at least 10 jobs will be created indirectly through an employment creation multiplier effect. To show that 10 or more jobs are actually created indirectly by the business, reasonable methodologies may be used, such as multiplier tables, feasibility studies, analyses of foreign and domestic markets for the goods or services to be exported, and other economically or statistically valid forecasting tools which support the likelihood that the business will result in increased employment.

Targeted Employment Area (TEA): A TEA is a geographic area or political subdivision located within a metropolitan statistical area or within a city or town with a population in excess of 20,000 with an unemployment level at least 150% of the national unemployment rate. TEAs within a state are identified and designated by the governor (and for a TEA within the District of Columbia, designation is made by the Mayor). Typically a Regional Center seeks to encompass one or more TEAs. One example of a TEA is a Regional Center, which encompasses a large city which contains clearly delineated census tracts that have been designated as a TEA by the State based on the measured unemployment rates for the population residing within those locations.

Rural Area: A RA is a geographical area that is outside a metropolitan statistical area, or part of the outer boundary of any city or town having a population of 20,000 or less as shown by population indicators. In certain areas involving a sparsely populated state, an approved statewide Regional Center likely encompasses both TEAs and RAs.

Required Amount of Investment: Depending on the location of the commercial enterprise to be invested in, the required amount of the investment may be either \$1 million or \$500,000. If the investment is located within a TEA or RA, the required minimum threshold for investment is \$500,000. Otherwise, an alien must invest a minimum of \$1 million to qualify.

Required Commercial Enterprise: In order to qualify under the Pilot Program, an investment of the requisite amount (\$500K or \$1 million) must be made in a new commercial enterprise located within an approved Regional Center.

New Commercial Enterprise: The law and regulations require that the commercial enterprise in which the investment is made must:

1. Have been created/established after November 29, 1990; or
2. If the investment is made in a pre-1990 enterprise, the alien's investment must have created a 40% or more increase in either the enterprise's net worth or number of employees; or
3. The pre-1990 enterprise has been restructured or reorganized so that the result is a new commercial enterprise.

Although the 2002 EB-5 amendments eliminated the requirement that the alien "establish" the new commercial enterprise, the law retained the requirement that the enterprise into which the alien has invested be "new."

Risk: The regulations and precedent decisions require an alien to incur a reasonable risk for purposes of generating a return on his or her capital investment. As such there should be no guarantees, buy back arrangements, unsecured promissory notes, other agreements or arrangements that in effect merely structure or organize the investment for appearance sake only for purposes of obtaining the permanent resident status without the alien's capital being fully invested and at risk in the investment in the new commercial enterprise to create or spawn the required 10 jobs.

Engagement of the Alien Investor in the Enterprise: The regulations require that the alien investor is or will be engaged in the management of the new commercial enterprise, either through day-to-day managerial control or through participation in policy-making decisions for the commercial enterprise.

Application for Regional Center designation: There is no established application form by which to apply. The process provides that any entity, government or private organization which desires Regional Center designation by the USCIS proceed as follows:

1. Prepare a written narrative proposing a for-profit investment which addresses each of the requirements for Regional Center designation participating in the pilot program, with supporting evidence as prescribed in the regulations at 8 CFR 204.6(m).
2. Submission of the written proposal to the USCIS Associate Director for Operations.

At present there is no fee required to apply for Regional Center designation. The USCIS will then review and adjudicate the proposal and may request additional clarifying information and evidence to support representations made in the proposal. If the proposal is initially determined to fully meet each of the requirements for Regional Center designation, then such designation is issued through a letter to the applicant signed by the USCIS' Associate Director for Operations. If the proposal is initially determined to not meet all the requirements for such designation, then a request for additional evidence may be made. Based on the proposal and the supporting evidence for the proposal, a final determination to approve or deny the regional center request will be made by USCIS.

Important: The above information on Regional Center designation is provided as general information only. It is not intended to be, and may not be relied upon, to create any right or benefit, substantive or procedural, enforceable at law by any individual or other party in removal proceedings, in litigation with the United States, or in any other form or manner. Nothing herein restricts or limits USCIS' ability to administer, review, develop, or in any way change the Regional Center designation program.

-USCIS -



Volume 9,
No. 2

ILLINOIS LABOR MARKET REVIEW

New Standards and Geographic Definitions for Metropolitan Statistical Areas

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Featured
Articles:

By: [Rich Reinhold](#)

[An Examination of the Illinois and United States Economy Using Current Employment Statistics Data](#)

Metropolitan Statistical Areas were first established more than 50 years ago and provide nationally consistent definitions for reporting federal statistics, including economic data. While the definition has changed over time, a Metropolitan Statistical Area generally includes a city with substantial population along with adjacent communities having a high degree of economic and social integration. The U.S. Office of Management and Budget (OMB) maintains and updates Metropolitan Statistical Area classifications following the completion of each decennial census. In December 2000, the OMB announced new standards for designating Metropolitan Statistical Areas, including new statistical areas called Micropolitan Areas. The 2000 standards were developed over the course of several years with public comment and review. In June 2003, the OMB announced the official list of Metropolitan and Micropolitan Statistical Areas, based on population and worker commuting data reported in the 2000 Census.

[Demographic Issues Facing the "New" Workforce](#)

Metropolitan Statistical Areas

Under the 2000 standards, Metropolitan Statistical Areas are defined as having a central county or counties with an urbanized area of at least 50,000 people, plus adjacent outlying counties having a high degree of economic integration with the central county, as measured through worker commuting ties. Multiple counties are included in a Metropolitan Statistical Area if at least 25 percent of employed residents in the central county commute to work in one or more adjacent counties. The largest city in the Metropolitan Statistical Area is listed first in the title and additional cities may be included in the name if they meet certain population and employment criteria.

[New Standards and Geographic Definitions for Metropolitan Statistical Areas](#)

The Metropolitan Statistical Areas including a population of 2.5 million or more were further subdivided into Metropolitan Divisions. For example, the interstate Chicago-Naperville-Joliet, IL-IN-WI Metropolitan Statistical Area was subdivided into three separate Metropolitan Divisions: Chicago-Naperville-Joliet, IL, Lake County-Kenosha, IL-WI and Gary, IN.

[Important Changes to Illinois Statewide and Sub-State Labor Force Estimates](#)

The application of the 2000 standards to Census 2000 data resulted in the designation of 49 new Metropolitan Statistical Areas, bringing the total number of areas in the U.S. and Puerto Rico to 370 (as of June 2003). In Illinois, there are 11 Metropolitan Statistical Areas, including the Illinois part of the St. Louis Metropolitan Statistical Area. The Chicago-Naperville-Joliet IL-IN-WI Metropolitan Statistical Area has two Metropolitan Divisions that includes Illinois counties. The [table](#) and [map](#) below present the Metropolitan Statistical Area names and geographic definitions that were announced in June 2003.

Micropolitan Statistical Areas

The 2000 standards also provide for Micropolitan Statistical Areas. These are areas with a central county or counties and an urban cluster of 10,000-49,999 people, plus adjacent counties having a high degree of economic and social integration as measured through worker commuting. Multiple counties are included in a Micropolitan Area if at least 25 percent of employed residents in the central county commute to work in one or more adjacent counties. The naming convention for Micropolitan Areas is the same as for Metropolitan Areas, with the largest community presented first. As of June 2003, there were a total of 565 Micropolitan Statistical Areas in the U.S. and Puerto Rico. In Illinois, there were 23 Micropolitan Statistical Areas, including four shared with border states. The table above shows the names and geographic definitions of Illinois Micropolitan Statistical Areas.

[Archives](#)

Labor Force and Non-farm Employment Data for Metropolitan and Micropolitan Statistical Areas

The Local Area Unemployment Statistics (LAUS) program will publish monthly labor force estimates for 2000-based Metropolitan and Micropolitan Statistical Areas, beginning in March 2005, with the release of January 2005 data. The Current Employment Statistics (CES) program will publish non-farm industry employment estimates for 2000-based Metropolitan Statistical Areas beginning in March 2005, with the release of January 2005 data. Historical monthly and annual labor force and non-farm jobs data under the 2000-based geographic definitions will be available back to 1990.

You can find more information on Metropolitan Statistical Area standards and definitions as well as maps at:

<http://www.bls.gov/lau/lausmsa.htm> and <http://www.census.gov/population/www/estimates/metroarea.html>.

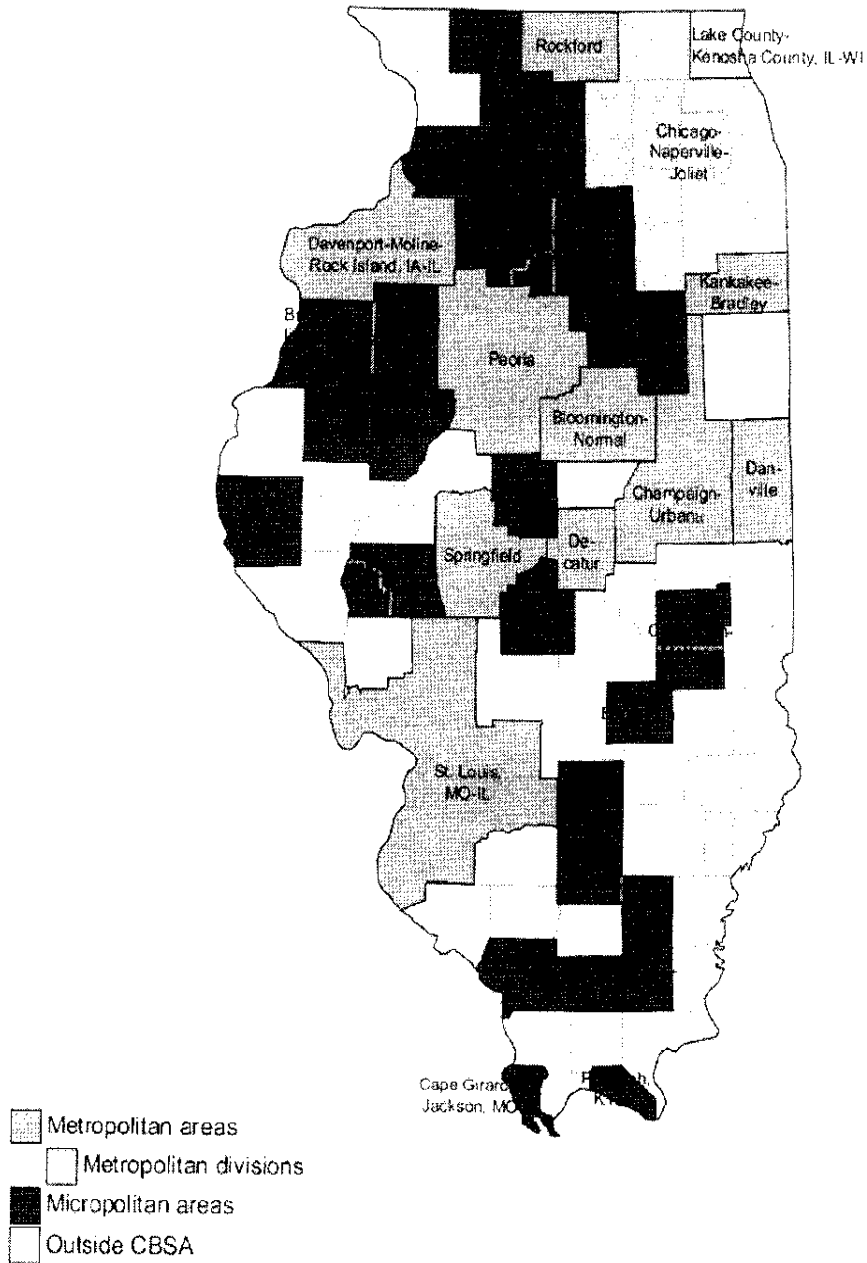
2000 Census-based Illinois Metropolitan Statistical Areas and Metropolitan Divisions

| Name | Counties |
|--|--|
| Elmhurst-Normal MSA | Mt. Pleasant |
| Champaign-Urbana MSA | Champaign Ford Piatt |
| Chicago-Naperville-Joliet II Metropolitan Division | Cook DeKalb DuPage Grundy Kane Kendall McHenry Will |
| Lake County-Kenosha County, WI Metropolitan Division | Lake Kenosha, Wisconsin |
| Danville, IL MSA | Vermilion |
| Decatur-Morris, Bell Island, IA, IL MSA | Harris McHenry Boyd Island Scott, Iowa |
| Decatur, IL MSA | McLean |
| Kennett, Butler, IL MSA | Kendall |
| Peoria, IL MSA | Peoria Macoupin Peoria Stark Tazewell Woodford |
| Rockford, IL MSA | Boone Winnebago |
| Springfield, IL MSA | Meridian Sangamon |
| St. Louis, MO, IL MSA (Illinois part) | Bond Calloway Clinton Franklin Madison Macon St. Clair |

2000 Census-based Illinois Metropolitan Statistical Areas

| Name | Counties |
|--|--|
| Burlington, IA, IL Metropolitan Area | Franklin De Moines, Iowa |
| Carbondale, IL Metropolitan Area | Fulton |
| Cape Girardeau, Illinois, MO, IL Metropolitan Area | Alexander Ballinger, Missouri Cape Girardeau, Missouri |
| Carbondale, IL Metropolitan Area | Lake |
| Carroll, IL Metropolitan Area | Madison |
| Charleston, Marion Metropolitan Area | Cook Cumberland |
| Champaign, IL Metropolitan Area | Lee |
| Effingham, IL Metropolitan Area | Effingham |
| East Peoria, IL Metropolitan Area | Stephenson |
| Galesburg, IL Metropolitan Area | Knox Warren |
| Hammond, IL Metropolitan Area | Saline |
| Jeffersonville, IL Metropolitan Area | Madison Scott |
| Lincoln, IL Metropolitan Area | Logan |
| Macomb, IL Metropolitan Area | Logan |
| Marion, Herron, IL Metropolitan Area | Williamson |
| Marion-Vernon, IL Metropolitan Area | Henderson Jefferson |
| Onawa-Sullivan, IL Metropolitan Area | Barren LaSalle Pulaski |
| Parkersburg, KY, IL Metropolitan Area | Marion Ballard, Kentucky Livingston, Kentucky Nichols, Kentucky |
| Peoria, IL Metropolitan Area | Franklin |
| Quincy, IL, MO Metropolitan Area | Madison Lewis, Missouri |
| Rockfall, IL Metropolitan Area | Ogle |
| Sterling, IL Metropolitan Area | Whiteside |
| Terre Haute, IL Metropolitan Area | Christian |

2000-based metropolitan and micropolitan areas in Illinois



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| 4

ILLINOIS - Core Based Statistical Areas, Counties, and Independent City



5

6

Local Area Unemployment Statistics - LAUS

| CITY | YEAR | LABOR FORCE | EMPLOYED | UNEMPLOYED |
|-----------------------------|------|-------------|-----------|------------|
| ADGSON VILLAGE | 2007 | 20,965 | 19,667 | 1,223 |
| ALDOVIN VILLAGE | 2007 | 18,867 | 18,136 | 667 |
| ALTON VILLAGE | 2007 | 14,338 | 13,725 | 613 |
| ARLINGTON HEIGHTS VILLAGE | 2007 | 40,235 | 38,405 | 1,827 |
| AURORA CITY | 2007 | 96,767 | 86,302 | 10,465 |
| BARTLET VILLAGE | 2007 | 23,286 | 22,506 | 780 |
| BATAVA CITY | 2007 | 15,195 | 14,636 | 559 |
| BELLEVILLE CITY | 2007 | 12,661 | 12,166 | 495 |
| BELLEVUE CITY | 2007 | 11,850 | 11,111 | 739 |
| BENIGN CITY | 2007 | 25,650 | 24,465 | 1,185 |
| BLOOMINGTON CITY | 2007 | 41,326 | 39,704 | 1,622 |
| BLOOMINGTON VILLAGE | 2007 | 38,876 | 38,074 | 802 |
| BUFFALO CITY | 2007 | 14,540 | 13,673 | 867 |
| BURBANK CITY | 2007 | 18,443 | 17,070 | 1,373 |
| CALUMET CITY | 2007 | 14,410 | 13,895 | 515 |
| CARBONDALE CITY | 2007 | 14,410 | 13,895 | 515 |
| CARROLL VILLAGE | 2007 | 17,300 | 16,520 | 780 |
| CARPENTERSVILLE VILLAGE | 2007 | 11,830 | 11,230 | 600 |
| CHICAGO CITY | 2007 | 1,328,117 | 1,253,361 | 74,756 |
| C-CHICAGO HEIGHTS CITY | 2007 | 13,541 | 12,359 | 1,182 |
| C-CHICAGO NORTH BRIDGE CITY | 2007 | 12,526 | 11,756 | 770 |
| COLLINGSVILLE CITY | 2007 | 14,408 | 13,508 | 899 |
| CRYSTAL LAKE CITY | 2007 | 22,498 | 21,546 | 952 |
| DECATUR CITY | 2007 | 37,159 | 34,162 | 2,997 |
| DECATUR VILLAGE | 2007 | 13,652 | 12,661 | 991 |
| DES PLAINES CITY | 2007 | 30,071 | 29,232 | 839 |
| DOLTON VILLAGE | 2007 | 12,433 | 11,604 | 829 |
| DOWNERS GROVE VILLAGE | 2007 | 27,711 | 25,786 | 1,925 |
| EAST ST. LOUIS CITY | 2007 | 10,103 | 9,065 | 1,038 |
| ELGIN CITY | 2007 | 20,526 | 19,700 | 826 |
| ELKHART CITY | 2007 | 24,916 | 24,229 | 687 |
| ELMWOOD PARK VILLAGE | 2007 | 13,374 | 12,795 | 579 |
| EMERYVILLE CITY | 2007 | 6,488 | 6,084 | 404 |
| EVANSTON CITY | 2007 | 13,968 | 12,300 | 1,668 |
| FREEPORT CITY | 2007 | 14,842 | 14,130 | 712 |
| GAI FERRING CITY | 2007 | 14,960 | 14,387 | 573 |
| GLENVIEW VILLAGE | 2007 | 19,866 | 19,172 | 694 |
| GLENVIEW VILLAGE | 2007 | 24,616 | 23,841 | 775 |
| GRANITE CITY | 2007 | 15,349 | 14,260 | 1,089 |
| GURNEIL VILLAGE | 2007 | 17,413 | 16,670 | 743 |
| HANOVER PARK VILLAGE | 2007 | 21,208 | 20,082 | 1,126 |
| HANOVER PARK VILLAGE | 2007 | 15,791 | 15,245 | 546 |
| HOTMAN ESTATES VILLAGE | 2007 | 30,886 | 29,760 | 1,126 |
| HOMER GLEN VILLAGE | 2007 | 14,430 | 13,903 | 527 |
| HUNTER VILLAGE | 2007 | 12,726 | 12,136 | 590 |
| KANKAKEE CITY | 2007 | 11,726 | 10,726 | 1,000 |
| LAKE IN THE HILLS VILLAGE | 2007 | 17,132 | 16,458 | 674 |
| LAKE IN THE HILLS VILLAGE | 2007 | 14,585 | 13,771 | 814 |
| LANSING VILLAGE | 2007 | 24,748 | 23,716 | 1,032 |
| LINDHARD VILLAGE | 2007 | 13,181 | 12,616 | 565 |
| MAPLE HURST CITY | 2007 | 13,747 | 13,084 | 663 |
| MOLINE CITY | 2007 | 24,058 | 22,953 | 1,105 |
| MORTON GROVE VILLAGE | 2007 | 11,901 | 11,471 | 430 |
| MOUNT PROSPECT VILLAGE | 2007 | 30,469 | 29,529 | 940 |
| MOUNTAIN VIEW CITY | 2007 | 17,846 | 17,384 | 462 |
| NAPERVILLE CITY | 2007 | 14,529 | 13,541 | 988 |
| NORMAL TOWN | 2007 | 27,817 | 26,665 | 1,152 |
| OSHTON VILLAGE | 2007 | 9,688 | 9,174 | 514 |
| NOR THURGOOD VILLAGE | 2007 | 16,053 | 15,378 | 675 |
| OAK FOREST CITY | 2007 | 16,093 | 15,378 | 715 |
| OAK LAWN VILLAGE | 2007 | 28,857 | 25,603 | 3,254 |
| OAK PARK VILLAGE | 2007 | 31,205 | 30,136 | 1,069 |
| OAK PARK VILLAGE | 2007 | 13,095 | 12,930 | 165 |
| OLINGDALE VILLAGE | 2007 | 14,871 | 14,291 | 580 |
| OSWEGO VILLAGE | 2007 | 14,871 | 14,291 | 580 |
| PALATINE VILLAGE | 2007 | 41,422 | 39,900 | 1,522 |
| PARK FOREST VILLAGE | 2007 | 13,590 | 11,854 | 1,736 |
| PARK FOREST VILLAGE | 2007 | 17,940 | 16,845 | 1,095 |
| PEORIA CITY | 2007 | 57,924 | 55,049 | 2,875 |
| PLAINFIELD VILLAGE | 2007 | 16,078 | 15,330 | 748 |
| PLAINFIELD VILLAGE | 2007 | 23,038 | 22,056 | 982 |
| QUINN CITY | 2007 | 14,408 | 13,508 | 899 |
| ROCKFORD CITY | 2007 | 23,982 | 22,763 | 1,219 |
| ROCKFORD CITY | 2007 | 21,803 | 20,763 | 1,040 |
| ROUND LAKE VILLAGE | 2007 | 15,206 | 13,962 | 1,244 |
| ROUND LAKE VILLAGE | 2007 | 48,238 | 46,432 | 1,806 |
| RYON VILLAGE | 2007 | 14,238 | 13,323 | 915 |
| SOUTH HOLLAND VILLAGE | 2007 | 10,865 | 10,317 | 548 |
| SPRINGFIELD CITY | 2007 | 84,538 | 81,427 | 3,111 |
| ST. CHARLES CITY | 2007 | 19,178 | 18,467 | 711 |
| ST. CHARLES CITY | 2007 | 19,178 | 18,467 | 711 |
| THEY PARK VILLAGE | 2007 | 33,031 | 31,770 | 1,261 |
| URBANA CITY | 2007 | 20,812 | 19,987 | 825 |
| VILLA PARK VILLAGE | 2007 | 13,369 | 12,837 | 532 |
| WALTON VILLAGE | 2007 | 44,355 | 41,449 | 2,906 |
| WEST MOUNT VILLAGE | 2007 | 13,766 | 13,261 | 505 |
| WHEATON CITY | 2007 | 30,019 | 29,053 | 966 |
| WHEELING VILLAGE | 2007 | 22,275 | 21,036 | 1,239 |
| WHEELING VILLAGE | 2007 | 16,111 | 15,744 | 367 |

7

ANNUAL UNEMPLOYMENT RATES FOR ILLINOIS SMALL COMMUNITIES (POPULATION < 25,000)
 UNOFFICIAL, UNPUBLISHED ESTIMATES (updated March 2008) - data subject to future revisions
 See footnotes at bottom of report

Source: Illinois Department of Employment Security, Economic Information and Analysis

| Name | County | 2007 |
|----------------------------|-----------|------|
| Hopkins Park village | Kankakee | 33.2 |
| Ford Heights village | Cook | 28.8 |
| Robbins village | Cook | 20.7 |
| Pingree Grove village | Kane | 20.5 |
| Volo village | Lake | 20.0 |
| Adeline village | Ogle | 17.9 |
| Fairmont CDP | Will | 16.5 |
| Dixmoor village | Cook | 16.4 |
| Markham city | Cook | 13.1 |
| Essex village | Kankakee | 12.1 |
| Riverdale village | Cook | 12.0 |
| Lisbon village | Kendall | 11.9 |
| Braceville village | Grundy | 11.6 |
| Round Lake Park village | Lake | 11.4 |
| Kirkland village | De Kalb | 11.0 |
| Lakewood Shores CDP | Will | 10.3 |
| Burnham village | Cook | 10.1 |
| Long Lake CDP | Lake | 10.1 |
| Round Lake village | Lake | 9.7 |
| Round Lake Heights village | Lake | 9.7 |
| Phoenix village | Cook | 9.5 |
| Preston Heights CDP | Will | 9.4 |
| Sun River Terrace village | Kankakee | 9.2 |
| Leaf River village | Ogle | 9.2 |
| Fox Lake Hills CDP | Lake | 9.1 |
| Virgil village | Kane | 9.0 |
| Godley village | Will | 9.0 |
| Durand village | Winnebago | 9.0 |
| Zion city | Lake | 8.8 |
| Calumet Park village | Cook | 8.7 |
| Stone Park village | Cook | 8.7 |
| Rockdale village | Will | 8.7 |
| Bellwood village | Cook | 8.6 |
| Reddick village | Kankakee | 8.6 |
| Posen village | Cook | 8.4 |
| Rochelle city | Ogle | 8.4 |
| Park City city | Lake | 8.3 |
| Harvard city | McHenry | 8.3 |
| Creston village | Ogle | 8.3 |

| | | |
|--------------------------|------------|-----|
| Genoa city | De Kalb | 8.2 |
| Old Mill Creek village | Lake | 8.1 |
| Summit village | Cook | 8.0 |
| Blue Island city | Cook | 7.9 |
| East Hazel Crest village | Cook | 7.9 |
| Capron village | Boone | 7.8 |
| Country Club Hills city | Cook | 7.8 |
| Lyons village | Cook | 7.7 |
| Millington village | Kendall | 7.7 |
| Mount Morris village | Ogle | 7.7 |
| Wilmington city | Will | 7.7 |
| Broadview village | Cook | 7.6 |
| Sauk Village village | Cook | 7.6 |
| Lena village | Stephenson | 7.6 |
| Hazel Crest village | Cook | 7.5 |
| South Wilmington village | Grundy | 7.4 |
| Grandwood Park CDP | Lake | 7.4 |
| Somonauk village | De Kalb | 7.3 |
| Venetian Village CDP | Lake | 7.3 |
| Lakemoor village | McHenry | 7.3 |
| Forreston village | Ogle | 7.2 |
| University Park village | Will | 7.2 |
| Diamond village | Grundy | 7.1 |
| Forest View village | Cook | 7.0 |
| Steger village | Will | 6.9 |
| Hillside village | Cook | 6.8 |
| Polo city | Ogle | 6.8 |
| Franklin Park village | Cook | 6.7 |
| Morris city | Grundy | 6.6 |
| Herscher village | Kankakee | 6.6 |
| Boulder Hill CDP | Kendall | 6.6 |
| South Beloit city | Winnebago | 6.6 |
| Carbon Hill village | Grundy | 6.5 |
| Maple Park village | Kane | 6.5 |
| Rock City village | Stephenson | 6.5 |
| Byron city | Ogle | 6.4 |
| Davis Junction village | Ogle | 6.4 |
| Itasca village | Du Page | 6.3 |
| Aroma Park village | Kankakee | 6.3 |
| McCullom Lake village | McHenry | 6.3 |
| Richton Park village | Cook | 6.2 |
| Malta village | De Kalb | 6.2 |
| Momence city | Kankakee | 6.2 |
| Machesney Park village | Winnebago | 6.2 |
| Melrose Park village | Cook | 6.0 |
| Midlothian village | Cook | 6.0 |
| Sandwich city | De Kalb | 6.0 |

| | | |
|-------------------------------|------------|-----|
| Justice village | Cook | 5.9 |
| Huntley village | McHenry | 5.9 |
| South Chicago Heights village | Cook | 5.8 |
| Coal City village | Grundy | 5.8 |
| Marengo city | McHenry | 5.8 |
| Ingalls Park CDP | Will | 5.8 |
| Lynwood village | Cook | 5.7 |
| Matteson village | Cook | 5.6 |
| Waterman village | De Kalb | 5.6 |
| Lake Villa village | Lake | 5.6 |
| Wauconda village | Lake | 5.6 |
| Wonder Lake CDP | McHenry | 5.6 |
| Loves Park city | Winnebago | 5.6 |
| Mazon village | Grundy | 5.5 |
| Winslow village | Stephenson | 5.5 |
| Lake Summerset CDP | Winnebago | 5.5 |
| Willow Springs village | Cook | 5.4 |
| Bourbonnais village | Kankakee | 5.4 |
| Grant Park village | Kankakee | 5.4 |
| Cedarville village | Stephenson | 5.4 |
| Alsip village | Cook | 5.3 |
| Crestwood village | Cook | 5.3 |
| Olympia Fields village | Cook | 5.3 |
| Wood Dale city | Du Page | 5.3 |
| Burlington village | Kane | 5.3 |
| Lake Barrington village | Lake | 5.3 |
| Hometown city | Cook | 5.2 |
| Antioch village | Lake | 5.2 |
| Beach Park village | Lake | 5.2 |
| Fox Lake village | Lake | 5.2 |
| Poplar Grove village | Boone | 5.1 |
| Berkeley village | Cook | 5.1 |
| Schiller Park village | Cook | 5.1 |
| Hainesville village | Lake | 5.0 |
| Holiday Hills village | McHenry | 5.0 |
| Ringwood village | McHenry | 5.0 |
| Woodstock city | McHenry | 5.0 |
| Worth village | Cook | 4.9 |
| Bensenville village | Du Page | 4.9 |
| Minooka village | Grundy | 4.9 |
| Sugar Grove village | Kane | 4.9 |
| Winthrop Harbor village | Lake | 4.9 |
| Crest Hill city | Will | 4.9 |
| Winnebago village | Winnebago | 4.9 |
| Cherry Valley village | Winnebago | 4.8 |
| River Grove village | Cook | 4.7 |
| Sycamore city | De Kalb | 4.7 |

| | | |
|--------------------------|-----------|-----|
| Willowbrook CDP | Will | 4.7 |
| Bloomington village | Du Page | 4.6 |
| Oregon city | Ogle | 4.6 |
| Roscoe village | Winnebago | 4.6 |
| North Riverside village | Cook | 4.5 |
| Stickney village | Cook | 4.5 |
| Bradley village | Kankakee | 4.5 |
| North Barrington village | Lake | 4.5 |
| Vernon Hills village | Lake | 4.5 |
| Wadsworth village | Lake | 4.5 |
| Stillman Valley village | Ogle | 4.5 |
| Pecatonica village | Winnebago | 4.5 |
| Merrionette Park village | Cook | 4.4 |
| Oak Brook village | Du Page | 4.4 |
| Hillcrest village | Ogle | 4.4 |
| Norridge village | Cook | 4.3 |
| St. Anne village | Kankakee | 4.3 |
| Hebron village | McHenry | 4.3 |
| Brookfield village | Cook | 4.2 |
| Glenwood village | Cook | 4.2 |
| Prairie Grove village | McHenry | 4.2 |
| Richmond village | McHenry | 4.2 |
| Channahon village | Will | 4.2 |
| Westchester village | Cook | 4.1 |
| Bannockburn village | Lake | 4.1 |
| Braidwood city | Will | 4.1 |
| Mokena village | Will | 4.1 |
| Homewood village | Cook | 4.0 |
| Rosemont village | Cook | 4.0 |
| Shabbona village | De Kalb | 4.0 |
| Elburn village | Kane | 4.0 |
| Third Lake village | Lake | 4.0 |
| Beecher village | Will | 4.0 |
| Frankfort Square CDP | Will | 4.0 |
| Manteno village | Kankakee | 3.9 |
| Deer Park village | Lake | 3.9 |
| Frankfort village | Will | 3.9 |
| New Millford village | Winnebago | 3.9 |
| Chicago Ridge village | Cook | 3.8 |
| Countryside city | Cook | 3.8 |
| Northlake city | Cook | 3.8 |
| Rolling Meadows city | Cook | 3.8 |
| North Aurora village | Kane | 3.8 |
| Lindenhurst village | Lake | 3.8 |
| Crystal Lawns CDP | Will | 3.8 |
| Flossmoor village | Cook | 3.7 |
| Hodgkins village | Cook | 3.7 |

| | | |
|--------------------------|---------|-----|
| South Elgin village | Kane | 3.7 |
| Cary village | McHenry | 3.7 |
| Island Lake village | McHenry | 3.7 |
| Bridgeview village | Cook | 3.6 |
| Lemont village | Cook | 3.6 |
| Prospect Heights city | Cook | 3.6 |
| Gardner village | Grundy | 3.6 |
| Lake Catherine CDP | Lake | 3.6 |
| Peotone village | Will | 3.6 |
| Forest Park village | Cook | 3.5 |
| East Dundee village | Kane | 3.5 |
| Crete village | Will | 3.5 |
| La Grange village | Cook | 3.4 |
| Willowbrook village | Du Page | 3.4 |
| Geneva city | Kane | 3.4 |
| Newark village | Kendall | 3.4 |
| Grayslake village | Lake | 3.4 |
| Barrington Hills village | Cook | 3.3 |
| Lincolnwood village | Cook | 3.3 |
| Palos Hills city | Cook | 3.3 |
| Wonder Lake village | McHenry | 3.3 |
| Goodings Grove CDP | Will | 3.3 |
| Manhattan village | Will | 3.3 |
| Harwood Heights village | Cook | 3.2 |
| Orland Hills village | Cook | 3.2 |
| Inverness village | Cook | 3.1 |
| Northfield village | Cook | 3.1 |
| Thornton village | Cook | 3.1 |
| Cortland town | De Kalb | 3.1 |
| Kingston village | De Kalb | 3.1 |
| Yorkville city | Kendall | 3.1 |
| Shorewood village | Will | 3.1 |
| Barrington village | Cook | 3.0 |
| Bedford Park village | Cook | 3.0 |
| Hinckley village | De Kalb | 3.0 |
| Hinsdale village | Du Page | 3.0 |
| Roselle village | Du Page | 3.0 |
| Elwood village | Will | 3.0 |
| Lockport city | Will | 3.0 |
| Hickory Hills city | Cook | 2.9 |
| South Barrington village | Cook | 2.9 |
| Darien city | Du Page | 2.9 |
| Lisle village | Du Page | 2.9 |
| West Dundee village | Kane | 2.9 |
| Deerfield village | Lake | 2.9 |
| Oakwood Hills village | McHenry | 2.9 |
| Pistakee Highlands CDP | McHenry | 2.9 |

| | | |
|----------------------------------|------------|-----|
| Davis village | Stephenson | 2.9 |
| Indian Head Park village | Cook | 2.8 |
| La Grange Park village | Cook | 2.8 |
| Lily Lake village | Kane | 2.8 |
| Lake Forest city | Lake | 2.8 |
| Long Grove village | Lake | 2.8 |
| Glencoe village | Cook | 2.7 |
| Kenilworth village | Cook | 2.7 |
| Winnetka village | Cook | 2.7 |
| Lincolnshire village | Lake | 2.7 |
| Fox River Grove village | McHenry | 2.7 |
| Fox River Valley Gardens village | Lake | 2.6 |
| Gages Lake CDP | Lake | 2.6 |
| Fox River Valley Gardens village | McHenry | 2.6 |
| Orangeville village | Stephenson | 2.6 |
| Libertyville village | Lake | 2.5 |
| Johnsburg village | McHenry | 2.5 |
| Spring Grove village | McHenry | 2.5 |
| Riverside village | Cook | 2.4 |
| Tower Lakes village | Lake | 2.4 |
| Palos Heights city | Cook | 2.3 |
| Warrenville city | Du Page | 2.3 |
| Hampshire village | Kane | 2.3 |
| Plano city | Kendall | 2.3 |
| Pearl City village | Stephenson | 2.3 |
| New Lenox village | Will | 2.3 |
| Rockton village | Winnebago | 2.3 |
| Palos Park village | Cook | 2.2 |
| Montgomery village | Kane | 2.2 |
| Lake Bluff village | Lake | 2.2 |
| Lake Zurich village | Lake | 2.2 |
| Monee village | Will | 2.2 |
| Golf village | Cook | 2.1 |
| Winfield village | Du Page | 2.1 |
| Sleepy Hollow village | Kane | 2.1 |
| Highwood city | Lake | 2.1 |
| Lakewood village | McHenry | 2.0 |
| Wayne village | Du Page | 1.9 |
| Forest Lake CDP | Lake | 1.8 |
| Kildeer village | Lake | 1.8 |
| River Forest village | Cook | 1.7 |
| Western Springs village | Cook | 1.7 |
| Channel Lake CDP | Lake | 1.7 |
| Riverwoods village | Lake | 1.7 |
| Gilberts village | Kane | 1.6 |
| Burr Ridge village | Du Page | 1.4 |
| Clarendon Hills village | Du Page | 1.3 |

| | | |
|------------------------|---------|-----|
| Hawthorn Woods village | Lake | 1.0 |
| Green Oaks village | Lake | 0.9 |
| Oakbrook Terrace city | Du Page | 0.8 |

Notes:

1) Data for small communities which reported zero unemployed in the 2000 Census were excluded from this report. The Census 2000 unemployed estimates used to develop Illinois 2006 small community unemployment rates were based on a special tabulation produced by the U.S. Census Bureau that excluded residents living in group quarters, such as college and university dormitories. Also, the Census Bureau rounded the data in the special tabulation to the nearest 10, resulting in communities which reported less than five unemployed in the 2000 Census being excluded from this report.

2) The county assigned to cities with boundaries overlapping two or more counties is the county portion with the largest number of residents, as reported in the 2000 Census.

3) Unemployment rates for Illinois communities with at least 25,000 residents, as of the latest annual Census Bureau population estimates, are available on-line at <http://lmi.ides.state.il.us/laus/laus.menu>

1 00

**ANNUAL AVERAGE UNEMPLOYMENT RATES
UNPUBLISHED, UNOFFICIAL DATA (Revised March 2008)**

Source: Illinois Department of Employment Security, Economic Information and Analysis

| CA # | COMMUNITY AREA | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 |
|------|-----------------|------|------|------|------|------|------|------|------|
| 1 | ROGERS PARK | 4.6 | 4.3 | 5.8 | 6.1 | 6.7 | 6.8 | 5.5 | 4.5 |
| 2 | WEST RIDGE | 3.1 | 2.9 | 4.0 | 4.2 | 4.6 | 4.7 | 3.8 | 3.1 |
| 3 | UPTOWN | 3.6 | 3.4 | 4.6 | 4.9 | 5.3 | 5.4 | 4.4 | 3.5 |
| 4 | LINCOLN SQUARE | 3.2 | 3.0 | 4.1 | 4.3 | 4.7 | 4.8 | 3.9 | 3.1 |
| 5 | NORTH CENTER | 2.6 | 2.4 | 3.3 | 3.5 | 3.8 | 3.9 | 3.2 | 2.5 |
| 6 | LAKE VIEW | 1.4 | 1.3 | 1.8 | 1.9 | 2.1 | 2.2 | 1.7 | 1.4 |
| 7 | LINCOLN PARK | 1.4 | 1.3 | 1.7 | 1.8 | 2.0 | 2.0 | 1.6 | 1.3 |
| 8 | NEAR NORTH SIDE | 2.9 | 2.7 | 3.7 | 3.9 | 4.3 | 4.4 | 3.5 | 2.8 |
| 9 | EDISON PARK | 2.1 | 1.9 | 2.6 | 2.8 | 3.0 | 3.1 | 2.5 | 2.0 |
| 10 | NORWOOD PARK | 1.6 | 1.5 | 2.0 | 2.2 | 2.4 | 2.4 | 1.9 | 1.6 |
| 11 | JEFFERSON PARK | 1.8 | 1.7 | 2.3 | 2.5 | 2.7 | 2.8 | 2.2 | 1.8 |
| 12 | FOREST GLEN | 1.6 | 1.5 | 2.0 | 2.1 | 2.3 | 2.4 | 1.9 | 1.5 |
| 13 | NORTH PARK | 2.5 | 2.3 | 3.1 | 3.3 | 3.6 | 3.7 | 3.0 | 2.4 |
| 14 | ALBANY PARK | 4.3 | 4.0 | 5.4 | 5.8 | 6.3 | 6.4 | 5.2 | 4.2 |
| 15 | PORTAGE PARK | 2.8 | 2.7 | 3.6 | 3.8 | 4.2 | 4.3 | 3.4 | 2.8 |
| 16 | IRVING PARK | 3.4 | 3.1 | 4.2 | 4.5 | 4.9 | 5.0 | 4.1 | 3.3 |
| 17 | DUNNING | 2.8 | 2.6 | 3.6 | 3.8 | 4.1 | 4.2 | 3.4 | 2.7 |
| 18 | MONTCLARE | 3.8 | 3.5 | 4.7 | 5.0 | 5.5 | 5.6 | 4.5 | 3.7 |
| 19 | BELMONT CRAGIN | 4.3 | 4.0 | 5.3 | 5.7 | 6.2 | 6.3 | 5.1 | 4.1 |
| 20 | HERMOSA | 6.9 | 6.5 | 8.6 | 9.1 | 10.0 | 10.2 | 8.3 | 6.7 |
| 21 | AVONDALE | 5.3 | 5.0 | 6.6 | 7.0 | 7.7 | 7.8 | 6.4 | 5.1 |
| 22 | LOGAN SQUARE | 4.7 | 4.4 | 5.9 | 6.2 | 6.8 | 7.0 | 5.6 | 4.5 |
| 23 | HUMBOLDT PARK | 10.9 | 10.2 | 13.4 | 14.2 | 15.4 | 15.7 | 12.9 | 10.6 |
| 24 | WEST TOWN | 3.9 | 3.7 | 5.0 | 5.3 | 5.8 | 5.9 | 4.8 | 3.8 |
| 25 | AUSTIN | 10.5 | 9.9 | 13.0 | 13.7 | 14.9 | 15.2 | 12.5 | 10.2 |
| 26 | WEST GARFIELD | 12.8 | 12.0 | 15.7 | 16.6 | 17.9 | 18.3 | 15.2 | 12.5 |
| 27 | EAST GARFIELD | 13.4 | 12.6 | 16.5 | 17.3 | 18.7 | 19.1 | 15.9 | 13.1 |
| 28 | NEAR WEST SIDE | 7.8 | 7.3 | 9.8 | 10.3 | 11.2 | 11.5 | 9.4 | 7.6 |

**ANNUAL AVERAGE UNEMPLOYMENT RATES
UNPUBLISHED, UNOFFICIAL DATA (Revised March 2008)**

Source: Illinois Department of Employment Security, Economic Information and Analysis

| CA # | COMMUNITY AREA | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 |
|------|-----------------|------|------|------|------|------|------|------|------|
| 29 | NORTH LAWDALE | 16.2 | 15.3 | 19.7 | 20.7 | 22.4 | 22.7 | 19.1 | 15.8 |
| 30 | SOUTH LAWDALE | 6.9 | 6.4 | 8.6 | 9.1 | 9.9 | 10.1 | 8.3 | 6.7 |
| 31 | LOWER WEST SIDE | 5.3 | 4.9 | 6.6 | 7.0 | 7.6 | 7.8 | 6.3 | 5.1 |
| 32 | LOOP | 1.4 | 1.3 | 1.8 | 1.9 | 2.1 | 2.2 | 1.7 | 1.4 |
| 33 | NEAR SOUTH SIDE | 5.4 | 5.1 | 6.8 | 7.2 | 7.8 | 8.0 | 6.5 | 5.2 |
| 34 | ARMOUR SQUARE | 3.5 | 3.2 | 4.4 | 4.6 | 5.1 | 5.2 | 4.2 | 3.4 |
| 35 | DOUGLAS | 11.9 | 11.2 | 14.6 | 15.4 | 16.7 | 17.0 | 14.1 | 11.6 |
| 36 | OAKLAND | 16.3 | 15.3 | 19.8 | 20.8 | 22.4 | 22.8 | 19.1 | 15.8 |
| 37 | FULLER PARK | 11.0 | 10.3 | 13.6 | 14.3 | 15.5 | 15.8 | 13.1 | 10.7 |
| 38 | GRAND BOULEVARD | 15.2 | 14.3 | 18.5 | 19.5 | 21.0 | 21.4 | 17.9 | 14.8 |
| 39 | KENWOOD | 6.6 | 6.2 | 8.3 | 8.7 | 9.5 | 9.7 | 7.9 | 6.4 |
| 40 | WASHINGTON PARK | 15.1 | 14.2 | 18.4 | 19.4 | 20.9 | 21.3 | 17.8 | 14.7 |
| 41 | HYDE PARK | 2.6 | 2.4 | 3.3 | 3.5 | 3.8 | 3.9 | 3.1 | 2.5 |
| 42 | WOODLAWN | 11.4 | 10.7 | 14.0 | 14.8 | 16.0 | 16.3 | 13.5 | 11.1 |
| 43 | SOUTH SHORE | 9.2 | 8.6 | 11.4 | 12.1 | 13.1 | 13.4 | 11.0 | 9.0 |
| 44 | CHATHAM | 7.6 | 7.1 | 9.4 | 9.9 | 10.8 | 11.1 | 9.0 | 7.3 |
| 45 | AVALON PARK | 4.9 | 4.6 | 6.2 | 6.5 | 7.2 | 7.3 | 5.9 | 4.8 |
| 46 | SOUTH CHICAGO | 11.2 | 10.5 | 13.8 | 14.6 | 15.8 | 16.1 | 13.3 | 10.9 |
| 47 | BURNSIDE | 11.6 | 10.9 | 14.3 | 15.1 | 16.4 | 16.7 | 13.8 | 11.3 |
| 48 | CALUMET HEIGHTS | 5.5 | 5.1 | 6.9 | 7.3 | 7.9 | 8.1 | 6.6 | 5.3 |
| 49 | ROSELAND | 10.4 | 9.8 | 12.9 | 13.6 | 14.7 | 15.0 | 12.4 | 10.1 |
| 50 | PULLMAN | 10.5 | 9.9 | 13.0 | 13.7 | 14.9 | 15.2 | 12.5 | 10.2 |
| 51 | SOUTH DEERING | 7.1 | 6.6 | 8.8 | 9.3 | 10.2 | 10.4 | 8.5 | 6.9 |
| 52 | EAST SIDE | 7.6 | 7.1 | 9.5 | 10.0 | 10.9 | 11.1 | 9.1 | 7.4 |
| 53 | WEST PULLMAN | 8.3 | 7.8 | 10.4 | 10.9 | 11.9 | 12.1 | 10.0 | 8.1 |
| 54 | RIVERDALE | 21.7 | 20.5 | 26.1 | 27.3 | 29.2 | 29.7 | 25.2 | 21.2 |
| 55 | HEGEWISCH | 4.7 | 4.4 | 5.9 | 6.2 | 6.8 | 6.9 | 5.6 | 4.5 |
| 56 | GARFIELD RIDGE | 3.7 | 3.5 | 4.7 | 5.0 | 5.4 | 5.6 | 4.5 | 3.6 |

ANNUAL AVERAGE UNEMPLOYMENT RATES
UNPUBLISHED, UNOFFICIAL DATA (Revised March 2008)
 Source: Illinois Department of Employment Security, Economic Information and Analysis

| CA # | COMMUNITY AREA | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 |
|------|------------------------|------|------|------|------|------|------|------|------|
| 57 | ARCHER HEIGHTS | 3.8 | 3.6 | 4.8 | 5.1 | 5.6 | 5.7 | 4.6 | 3.7 |
| 58 | BRIGHTON PARK | 6.8 | 6.4 | 8.5 | 9.0 | 9.8 | 10.0 | 8.2 | 6.6 |
| 59 | MCKINLEY PARK | 5.1 | 4.8 | 6.4 | 6.8 | 7.5 | 7.6 | 6.2 | 5.0 |
| 60 | BRIDGEPORT | 4.6 | 4.3 | 5.8 | 6.1 | 6.7 | 6.8 | 5.6 | 4.5 |
| 61 | NEW CITY | 8.8 | 8.3 | 11.0 | 11.6 | 12.6 | 12.8 | 10.6 | 8.6 |
| 62 | WEST ELSDON | 4.2 | 3.9 | 5.3 | 5.6 | 6.2 | 6.3 | 5.1 | 4.1 |
| 63 | GAGE PARK | 6.3 | 5.9 | 7.8 | 8.3 | 9.0 | 9.2 | 7.5 | 6.1 |
| 64 | CLEARING | 2.9 | 2.7 | 3.6 | 3.8 | 4.2 | 4.3 | 3.5 | 2.8 |
| 65 | WEST LAWN | 4.3 | 4.0 | 5.4 | 5.7 | 6.3 | 6.4 | 5.2 | 4.2 |
| 66 | CHICAGO LAWN | 9.3 | 8.7 | 11.6 | 12.2 | 13.3 | 13.5 | 11.1 | 9.1 |
| 67 | WEST ENGLEWOOD | 15.5 | 14.6 | 18.9 | 19.8 | 21.4 | 21.8 | 18.2 | 15.1 |
| 68 | ENGLEWOOD | 16.3 | 15.3 | 19.8 | 20.8 | 22.4 | 22.8 | 19.1 | 15.9 |
| 69 | GREATER GRAND CROSSING | 11.3 | 10.6 | 13.9 | 14.7 | 15.9 | 16.2 | 13.4 | 11.0 |
| 70 | ASHBURN | 5.1 | 4.8 | 6.4 | 6.8 | 7.4 | 7.6 | 6.1 | 5.0 |
| 71 | AUBURN GRESHAM | 10.2 | 9.6 | 12.7 | 13.3 | 14.5 | 14.8 | 12.2 | 9.9 |
| 72 | BEVERLY | 3.3 | 3.1 | 4.2 | 4.4 | 4.9 | 5.0 | 4.0 | 3.2 |
| 73 | WASHINGTON HEIGHTS | 7.8 | 7.3 | 9.7 | 10.2 | 11.1 | 11.4 | 9.3 | 7.6 |
| 74 | MOUNT GREENWOOD | 2.5 | 2.3 | 3.1 | 3.3 | 3.6 | 3.7 | 3.0 | 2.4 |
| 75 | MORGAN PARK | 5.0 | 4.7 | 6.3 | 6.6 | 7.3 | 7.4 | 6.0 | 4.9 |
| 76 | O'HARE | 2.3 | 2.2 | 2.9 | 3.1 | 3.4 | 3.5 | 2.8 | 2.2 |
| 77 | EDGEWATER | 3.5 | 3.2 | 4.4 | 4.6 | 5.1 | 5.2 | 4.2 | 3.4 |
| | CHICAGO CITY | 5.6 | 5.3 | 7.0 | 7.5 | 8.1 | 8.3 | 6.8 | 5.5 |

DECENNIAL CENSUS POPULATION DATA FOR CHICAGO COMMUNITY AREAS, CHICAGO CITY
 Source: Northeastern Illinois Planning Commission, City of Chicago, U.S. Census Bureau

| CA# | NAME | 2000 | 1990 | 1980 | 1990-2000 | 1980-1990 | 1980-1990% | 1990-2000% | 1980-2000 | 1980-2000% |
|-----|--------------------|---------|---------|---------|-----------|-----------|------------|------------|-----------|------------|
| 1 | AUSTIN | 117,527 | 114,079 | 138,026 | 3,448 | -23,947 | 3.0% | -17.3% | -20,499 | -14.9% |
| 2 | LAKE VIEW | 94,817 | 91,031 | 97,519 | 3,786 | -6,488 | 4.2% | -6.7% | -2,702 | -2.8% |
| 3 | SOUTH LAWDALE | 91,071 | 81,155 | 75,204 | 9,916 | 5,951 | 12.2% | 7.9% | 15,867 | 21.1% |
| 4 | WEST TOWN | 87,435 | 87,703 | 96,428 | -268 | -8,725 | -0.3% | -9.0% | -8,993 | -9.3% |
| 5 | LOGAN SQUARE | 82,715 | 82,605 | 84,768 | 110 | -2,163 | 0.1% | -2.6% | -2,053 | -2.4% |
| 6 | BELMONT CRAGIN | 78,144 | 56,787 | 53,371 | 21,357 | 3,416 | 37.6% | 6.4% | 24,773 | 46.4% |
| 7 | WEST RIDGE | 73,199 | 65,374 | 61,129 | 7,825 | 4,245 | 12.0% | 6.9% | 12,070 | 19.7% |
| 8 | NEAR NORTH SIDE | 72,811 | 62,842 | 67,167 | 9,969 | -4,325 | 15.9% | -6.4% | 5,644 | 8.4% |
| 9 | HUMBOLDT PARK | 65,836 | 67,573 | 70,879 | -1,737 | -3,306 | -2.6% | -4.7% | -5,043 | -7.1% |
| 10 | PORTAGE PARK | 65,340 | 56,513 | 57,349 | 8,827 | -836 | 15.6% | -1.5% | 7,991 | 13.9% |
| 11 | LINCOLN PARK | 64,320 | 61,092 | 57,146 | 3,228 | 3,946 | 5.3% | 6.9% | 7,174 | 12.6% |
| 12 | LPTOWN | 63,551 | 63,839 | 64,414 | -288 | -575 | -0.5% | -0.9% | -863 | -1.3% |
| 13 | ROGERS PARK | 63,484 | 60,378 | 55,525 | 3,106 | 4,853 | 5.1% | 8.7% | 7,959 | 14.3% |
| 14 | EDGEWATER | 62,198 | 60,703 | 58,561 | 1,495 | 2,142 | 2.5% | 3.7% | 3,637 | 6.2% |
| 15 | SOUTH SHORE | 61,556 | 61,517 | 77,743 | 39 | -16,226 | 0.1% | -20.9% | -16,187 | -20.8% |
| 16 | CHICAGO LAWN | 61,412 | 51,243 | 46,568 | 10,169 | 4,675 | 19.8% | 10.0% | 14,844 | 31.9% |
| 17 | IRVING PARK | 58,643 | 50,159 | 49,489 | 8,484 | 670 | 16.9% | 1.4% | 9,154 | 18.5% |
| 18 | ALBANY PARK | 57,655 | 49,501 | 46,075 | 8,154 | 3,426 | 16.5% | 7.4% | 11,580 | 25.1% |
| 19 | AUBURN GRESHAM | 55,928 | 59,808 | 65,132 | -3,880 | -5,324 | -6.5% | -8.2% | -9,204 | -14.1% |
| 20 | ROSELAND | 52,723 | 56,493 | 64,372 | -3,770 | -7,879 | -6.7% | -12.2% | -11,649 | -18.1% |
| 21 | NEW CITY | 51,721 | 53,226 | 55,860 | -1,505 | -2,634 | -2.8% | -4.7% | -4,139 | -7.4% |
| 22 | NEAR WEST SIDE | 46,419 | 46,197 | 57,305 | 222 | -11,108 | 0.5% | -19.4% | -10,886 | -19.0% |
| 23 | WEST ENGLEWOOD | 45,282 | 52,772 | 62,089 | -7,490 | -9,297 | -14.2% | -15.0% | -16,787 | -27.0% |
| 24 | BRIGHTON PARK | 44,912 | 32,207 | 30,770 | 12,705 | 1,437 | 39.4% | 4.7% | 14,142 | 46.0% |
| 25 | LINCOLN SQUARE | 44,574 | 44,891 | 43,954 | -317 | 937 | -0.7% | 2.1% | 620 | 1.4% |
| 26 | LOWER WEST SIDE | 44,031 | 45,654 | 44,951 | -1,623 | 703 | -3.6% | 1.6% | -920 | -2.0% |
| 27 | AVONDALE | 43,083 | 35,579 | 33,527 | 7,504 | 2,052 | 21.1% | 6.1% | 9,556 | 28.5% |
| 28 | DUNNING | 42,164 | 36,957 | 37,860 | 5,207 | -903 | 14.1% | -2.4% | 4,304 | 11.4% |
| 29 | NORTH LAWDALE | 41,768 | 48,434 | 61,534 | -5,528 | -14,238 | -11.7% | -23.1% | -19,766 | -32.1% |
| 30 | ENGLEWOOD | 40,222 | 47,296 | 59,075 | -8,212 | -10,641 | -17.0% | -18.0% | -18,853 | -31.9% |
| 31 | ASHBURN | 39,584 | 37,092 | 40,477 | 2,492 | -3,385 | 6.7% | -8.4% | -893 | -2.2% |
| 32 | GAGE PARK | 39,193 | 26,957 | 24,445 | 12,236 | 2,512 | 45.4% | 10.3% | 14,748 | 60.3% |
| 33 | GREATER GRAND CROS | 38,619 | 38,644 | 45,218 | -25 | -6,574 | -0.1% | -14.5% | -6,599 | -14.6% |
| 34 | SOUTH CHICAGO | 38,596 | 40,645 | 46,422 | -2,049 | -5,777 | -5.0% | -12.4% | -7,826 | -16.9% |
| 35 | NORWOOD PARK | 37,452 | 37,697 | 40,459 | -245 | -2,762 | -0.6% | -6.8% | -3,007 | -7.4% |
| 36 | CHATHAM | 37,275 | 36,779 | 40,725 | 496 | -3,946 | 1.3% | -9.7% | -3,450 | -8.5% |
| 37 | WEST PULLMAN | 36,649 | 39,846 | 44,904 | -3,197 | -5,058 | -8.0% | -11.3% | -8,255 | -18.4% |
| 38 | GARFIELD RIDGE | 36,101 | 33,948 | 37,935 | 2,153 | -3,987 | 6.3% | -10.5% | -1,834 | -4.8% |
| 39 | BRIDGEPORT | 33,694 | 29,877 | 30,923 | 3,817 | -1,046 | 12.8% | -3.4% | 2,771 | 9.0% |
| 40 | NORTH CENTER | 31,895 | 33,010 | 35,161 | -1,115 | -2,151 | -3.4% | -6.1% | -3,266 | -9.3% |
| 41 | HYDE PARK | 29,920 | 28,630 | 31,198 | 1,290 | -2,568 | 4.5% | -8.2% | -1,278 | -4.1% |
| 42 | WASHINGTON HEIGHTS | 29,843 | 32,114 | 36,453 | -2,271 | -4,339 | -7.1% | -11.9% | -6,610 | -18.1% |
| 43 | WEST LAWN | 29,235 | 23,402 | 24,748 | 5,833 | -1,346 | 24.9% | -5.4% | 4,487 | 18.1% |

DECENNIAL CENSUS POPULATION DATA FOR CHICAGO COMMUNITY AREAS, CHICAGO CITY

Source: Northeastern Illinois Planning Commission, City of Chicago, U.S. Census Bureau

| CA# | NAME | 2000 | 1990 | 1980 | 1990-2000 | 1990-2000% | 1980-1990 | 1980-1990% | 1980-2000 | 1980-2000% |
|-----|-----------------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|------------|
| 44 | GRAND BOULEVARD | 28,006 | 35,897 | 53,741 | -7,891 | -22.0% | -17,844 | -33.2% | -25,735 | -47.9% |
| 45 | WOODLAWN | 27,086 | 27,473 | 36,323 | -387 | -1.4% | -8,850 | -24.4% | -9,237 | -25.4% |
| 46 | HERMOSA | 26,908 | 23,131 | 19,547 | 3,777 | 16.3% | 3,584 | 18.3% | 7,361 | 37.7% |
| 47 | DOUGLAS | 26,470 | 30,652 | 35,700 | -4,182 | -13.6% | -5,048 | -14.1% | -9,230 | -25.9% |
| 48 | JEFFERSON PARK | 25,859 | 23,649 | 24,583 | 2,210 | 9.3% | -934 | -3.8% | 1,276 | 5.2% |
| 49 | MORGAN PARK | 25,226 | 26,740 | 29,315 | -1,514 | -5.7% | -2,575 | -8.8% | -4,089 | -13.9% |
| 50 | EAST SIDE | 23,653 | 20,450 | 21,331 | 3,203 | 15.7% | -881 | -4.1% | 2,322 | 10.9% |
| 51 | WEST GARFIELD | 23,019 | 24,095 | 33,885 | -1,076 | -4.5% | -9,770 | -28.8% | -10,846 | -32.0% |
| 52 | CLEARING | 22,331 | 21,490 | 22,584 | 841 | 3.9% | -1,094 | -4.8% | -253 | -1.1% |
| 53 | BEVERLY | 21,992 | 22,385 | 23,360 | -393 | -1.8% | -975 | -4.2% | -1,368 | -5.9% |
| 54 | EAST GARFIELD | 20,881 | 24,030 | 31,580 | -3,149 | -13.1% | -7,550 | -23.9% | -10,699 | -33.9% |
| 55 | MOUNT GREENWOOD | 18,820 | 19,179 | 20,084 | -359 | -1.9% | -905 | -4.5% | -1,264 | -6.3% |
| 56 | NORTH PARK | 18,514 | 16,236 | 15,273 | 2,278 | 14.0% | 963 | 6.3% | 3,241 | 21.2% |
| 57 | KENWOOD | 18,363 | 18,178 | 21,974 | 185 | 1.0% | -3,796 | -17.3% | -3,611 | -16.4% |
| 58 | FOREST GLEN | 18,165 | 17,655 | 18,991 | 510 | 2.9% | -1,336 | -7.0% | -826 | -4.3% |
| 59 | SOUTH DEERING | 16,990 | 17,755 | 19,400 | -765 | -4.3% | -1,645 | -8.5% | -2,410 | -12.4% |
| 60 | LOOP | 16,388 | 11,954 | 6,462 | 4,434 | 37.1% | 5,492 | 85.0% | 9,926 | 153.6% |
| 61 | CALUMET HEIGHTS | 15,974 | 17,453 | 20,505 | -1,479 | -8.5% | -3,052 | -14.9% | -4,531 | -22.1% |
| 62 | MCKINLEY PARK | 15,962 | 13,297 | 13,248 | 2,665 | 20.0% | 49 | 0.4% | 2,714 | 20.5% |
| 63 | WEST ELSDON | 15,921 | 12,266 | 12,797 | 3,655 | 29.8% | -531 | -4.1% | 3,124 | 24.4% |
| 64 | WASHINGTON PARK | 14,146 | 19,425 | 31,935 | -5,279 | -27.2% | -12,510 | -39.2% | -17,789 | -55.7% |
| 65 | MONTCLARE | 12,646 | 10,573 | 10,793 | 2,073 | 19.6% | -220 | -2.0% | 1,853 | 17.2% |
| 66 | ARCHER HEIGHTS | 12,644 | 9,227 | 9,708 | 3,417 | 37.0% | -481 | -5.0% | 2,936 | 30.2% |
| 67 | O HARE | 12,173 | 11,214 | 11,183 | 959 | 8.6% | 31 | 0.3% | 990 | 8.9% |
| 68 | ARMOUR SQUARE | 12,032 | 10,801 | 12,475 | 1,231 | 11.4% | -1,674 | -13.4% | -443 | -3.6% |
| 69 | EDISON PARK | 11,259 | 11,426 | 12,457 | -167 | -1.5% | -1,031 | -8.3% | -1,198 | -9.6% |
| 70 | AVALON PARK | 11,147 | 11,711 | 13,792 | -564 | -4.8% | -2,081 | -15.1% | -2,645 | -19.2% |
| 71 | RIVERDALE | 9,809 | 10,821 | 13,539 | -1,012 | -9.4% | -2,718 | -20.1% | -3,730 | -27.6% |
| 72 | HEGEWISCH | 9,781 | 10,136 | 11,572 | -355 | -3.5% | -1,436 | -12.4% | -1,791 | -15.5% |
| 73 | NEAR SOUTH SIDE | 9,509 | 6,828 | 7,243 | 2,681 | 39.3% | -415 | -5.7% | 2,266 | 31.3% |
| 74 | PULLMAN | 8,921 | 9,344 | 10,341 | -423 | -4.5% | -997 | -9.6% | -1,420 | -13.7% |
| 75 | OAKLAND | 6,110 | 8,197 | 16,748 | -2,087 | -25.5% | -8,551 | -51.1% | -10,638 | -63.5% |
| 76 | FULLER PARK | 3,420 | 4,364 | 5,832 | -944 | -21.6% | -1,468 | -25.2% | -2,412 | -41.4% |
| 77 | BURNSIDE | 3,294 | 3,445 | 3,942 | -151 | -4.4% | -497 | -12.6% | -648 | -16.4% |
| | CHICAGO CITY | 2,896,016 | 2,783,726 | 3,005,061 | 112,290 | 4.0% | -221,335 | -7.4% | -109,045 | -3.6% |

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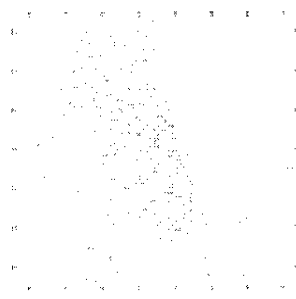
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METROPOLITAN CHICAGO REFERENCE
MAP

Chicagoans inhabit a dual metropolis, experiencing daily reminders of decay and glitter, despair and aspiration. As of 2000, the region encompassed 293 municipalities (263 in Illinois) spread over 4,401 square miles in Cook, DuPage, Kane, Lake, McHenry, and Will Counties, plus the northwestern Indiana counties of Lake and Porter. What sociologists refer to as spatial mismatch is among the region's dominant and most entrenched characteristics: technologically oriented job opportunities requiring high skill levels, mostly concentrated along suburban corridors; poorly educated, underemployed labor pools, more often than not in the most socially isolated locales within central cities; and disparities in transportation networks, inhibiting opportunities for links between residence and work. The poorest residents of inner cities, contentiously labeled an "underclass," suffer disproportionately from the compound effects of their environs as one affliction builds upon another.

Replete with the starkest of contrasts, the contemporary metropolis—whether measured residentially or occupationally—is indicative of national political structures and an economic system that too often proves disdainful of the inner city, its depleted resources, and its most beleaguered inhabitants. A quandary with deep historical roots, the imbalance intensified during 1980s. Historian Richard C. Wade foresaw as early as 1982 that the Reagan administration's policy—an artifice with the positivist label "new federalism"—deepened imbalances between tax-rich municipalities and their poorest neighbors. Federal spending on cities diminished from 15 to 6 percent of the national budget between 1980 and 1990; the nation's central cities accounted for 43 percent of Americans below the poverty line in 1991, up from 27 percent in 1959. The ratio of median family incomes between metropolitan Chicago's richest and poorest communities in 1989 was nine to one; in 1960, it had been roughly five to one. The United States Conference of Mayors itemized the accumulating urban afflictions in 1986: population loss, impoverishment, racial concentration, deindustrialization, unemployment, homelessness, crime; poor schooling; and high taxes. European urban experts visiting American cities expressed puzzlement upon encountering conditions comparable to those in the Third World.

Historian Kenneth T. Jackson has argued that a single process—population deconcentration—has shaped American metropolitan areas during the twentieth century. (The category of suburban is avoided, wherever possible, because it confuses as much as it explains.) While the foundation of American demographic patterns was constructed in the nineteenth century, in the final third of the twentieth century the process accelerated.

Two fateful statistical benchmarks reached in 1990—both widely reported and assessed—underscored the consequences of sustained deconcentration. First, Chicago's total population fell below 3 million for the first time since 1920; between 1970 and 1990, the city lost 17 percent of its population as its collar-county suburbs advanced 24 percent. Second, Chicago's share of metropolitan private-sector employment dropped to slightly under 40 percent for the first time; it was 56 percent in 1972. In 1992, Sears, Roebuck attracted attention when it relocated corporate headquarters from Sears Tower,

affecting five thousand employees. Their destination was a newly constructed, horizontally organized 1.9-million-square-foot facility (as of 2002 expanded to 2.4 million square feet) in the northwestern suburb of Hoffman Estates.



CABRINI HOME DEVELOPMENT,
1959

Embodying the bleakest circumstances of the dual metropolis is Census Tract # 3805 on Chicago's South Side. Lying four miles south of the Loop, the area includes the Chicago Housing Authority's Robert Taylor Homes. Constructed between 1960 and 1962, this complex included 28 identical high-rise buildings until 2000, each 16 stories, with a total of 4,415 apartment units. The Taylor Homes, like the adjacent Stateway Gardens to the north, was part of a wider public policy intended to contain the increasing black population within existing ghettos. The second wave of the Great Migration increased Chicago's black population from 277,731 to 1,102,620 between 1940 and 1970. Only 8 percent of the city's population in 1940, black Chicago constituted one-third of the city by 1970. Exacerbating the physical isolation of this area was the completion of the Dan Ryan Expressway in 1962 immediately to its west, sealing its isolation from jobs, facilities, and white residents on the other side of the 10-lane highway. The census of 1990 documented the grim statistics of hyperpauperization: 100 percent of the census tract's 2,169 residents were African American; 89 percent lived below the poverty line, as contrasted with 64 percent for the surrounding area; 89 percent of the families were headed by a female; 58 percent of the civilian labor force was unemployed (versus 11 percent citywide); 44 percent were under the age of 13; and 6 percent of all adults had graduated from high school.

Kenilworth, in turn, exemplifies the glitter and aspirations of the dual metropolis. In 1990, it ranked as the wealthiest place in the metropolis (per capita income of \$69,814). It was also the nation's ninth richest community and had one of the highest proportions (163 per 10,000 adults) of listings in *Who's Who in America*; 83 percent of its adult population held at least a bachelor's degree and 98 percent had graduated from high school. Situated in the northeastern corner of Cook County, Kenilworth is one of the eight suburban municipalities known compositely as the North Shore, all linked to Chicago by a railroad operating since 1855. The rush-hour commute by rail covers 16 miles in 32 minutes. Such places—whether on Philadelphia's Main Line or north of New York City in Westchester County—amounted to classic suburbs. Cultural homogeneity reinforced by restrictive covenants—white Protestants only—defined what Kenilworth's founder envisioned. Contrived as a sociological island, it was purposefully designed to resist the sweeping social and cultural changes unleashed by the economic transformation of the nineteenth century. By 1990, only 60 of Kenilworth's 2,562 residents were nonwhite. The median housing price exceeded \$500,000.



RACIAL RESTRICTIVE
COVENANTS (MAP)

Ford Heights, in spite of its classification as a suburb, represents a textbook case study of decay and despair. Twenty-five miles from Chicago in southern Cook County, it was identified in 1990 as the nation's poorest suburb. Known until 1987 as East Chicago Heights, it deliberately altered its name, (unsuccessfully) hoping to annex an adjacent unincorporated site upon which Ford Motor Company operated a factory. Between 1980 and 2000, the population of Ford Heights declined from 5,437 to 3,456. Ninety-six percent of its residents were African American. Per capita income (adjusted for inflation) declined 22 percent between 1979 and 1989, to \$4,660, compared to Chicago's \$12,889 and Kenilworth's \$69,814. Unemployment in Ford Heights approached 40 percent, and only 30 percent of its housing stock was privately owned. In 2000, it registered the nation's highest percentage of single-mother households (34 percent).

Naperville, 30 miles west of Chicago, is a widely cited example of population

deconcentration in large American metropolises. As recently as 1950 it looked like a commuter suburb and stood 91st among Illinois municipalities in total population. Today its characteristics defy traditional assumptions about urban and suburban. Labels for such places include boomburb, edge city, technoburb, and totalized suburb. These communities are situated 30 to 40 miles from their original urban centers. People work, live, and pursue many of their leisure activities in some 200 of these settings scattered across the United States (e.g., Bellevue, Washington; Gwinnett County, Georgia; Overland Park, Kansas; and Tysons Corner, Virginia).

Notable within the dual metropolis for its combination of burgeoning population and affluence, Naperville was singled out in 1992 as having the lowest poverty rate (1.5 percent) among cities nationwide with populations of at least 50,000. Whatever label is attached to this locale, its rudimentary ingredients included location along interstate highways, ease of access to major airports, reliance upon automobiles, excellent public schools, university research centers in close reach, and rapid economic development led by assorted technology-related and retail enterprises. Naperville's corporate roster includes BP Amoco Research Center, Dow Jones & Co., Lucent Technologies, Nalco Chemical Company, and Nicor. Nearby are Argonne National Laboratory and Fermi National Laboratory.

Naperville ranked fourth in population (ahead of Peoria and behind Aurora) statewide in 2000. It is the largest city in DuPage County (and its oldest, founded in 1831), with a population of 128,358 in 2000 (its municipal bounds have spilled over into Will County). It experienced the second biggest surge (growing by 43,007, or 50 percent) among the 20 largest municipalities within the collar counties over the preceding decade; surpassing 100,000 in 1994, it was the 10th-fastest-growing city in the nation since 1990. In new-home construction it ranked first among the collar counties as of 1982; in physical size, it expanded from 5.8 square miles in 1960 to 31 square miles, the result of nearly 400 separate annexations. But in its demographic attributes, unlike so many places conventionally portrayed as suburbs, Naperville changed notably. Among its 5,272 residents in 1940, 99.9 percent were white. In 2000, nonwhites accounted for 15 percent of its total population. Asians constituted the largest nonwhite proportion (9.6 percent), while African Americans accounted for 3 percent of the population.

Metropolitan Chicago's deconcentration is hardly a contemporary phenomenon. From 1860 to 1910, the city's population increased 20 times, to nearly 2.2 million; New York City's, by contrast, grew sixfold. By 1910, Chicago's population exceeded Berlin's (2 million) and was making inroads upon Paris (2.9 million). Although Chicago's physical size had expanded significantly between 1880 and 1900, from 43 to 169 square miles, as a result of consolidation and annexation, thereafter its growth stagnated. Suburbs—among them Evanston and Oak Park—rejected annexation during the 1890s. Their residents demonstrated a determination to set apart their communities politically and culturally.

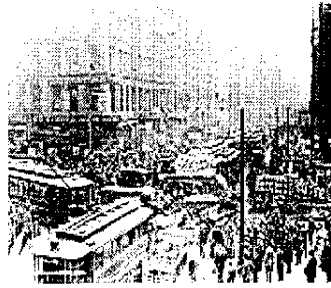
The Loop, since its completion in 1897, symbolized Chicago's magnetism. Drawing on major advances in the technology of electrified railway transportation realized in the late 1880s, the elevated line encircled the central business district and connected it to the South, West, and North Sides. The district pulsated. Each workday, according to a 1910 study, approximately 650,000 commuters journeyed to the Loop. During the evening rush, it was estimated in 1916, 100,000 passengers used the trains between 5 and 6 p.m.

Street-level space was at a premium. The top cost per front foot, at the corner of State and Madison—possibly the world's busiest intersection—was \$10,000 in 1910. Ten years later it was almost \$25,000. Correspondingly, rents for downtown office space soared, increasing 15 percent in 1902 and again in 1903. Between 1905 and 1911 the city, county, and federal governments each erected major downtown office structures. LaSalle Street



STATE AND MADISON, C. 1905

was the financial center. The Loop was also close to a complex of newly opened edifices housing renowned cultural institutions, including the Auditorium (1889), the Art Institute (1893), the Chicago Public Library (1897), Orchestra Hall (1904), and the Field Museum of Natural History (1920).



TRAFFIC ON DEARBORN AND RANDOLPH,
1909

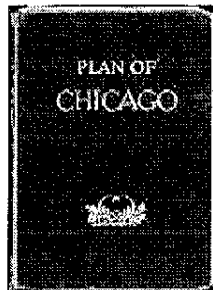
Among the multiplicity of forces encountered in the Loop, none caused more chaos than the competition among drivers of motorized vehicles, horse-drawn wagons, and streetcars. They battled for access to public roadways, a problem confounded by the proliferating number of automobiles. A 1907 traffic survey reported 1,421 automobiles entering the district via the Rush Street bridge in a 12-hour period; eight years later the figure reached 10,158. By 1911, to contend with this morass, approximately 85 police officers were assigned to daily traffic duty; parking time was limited beginning that year to

60-minute intervals and in 1915 was reduced to 30 minutes. Traffic lights were introduced, with only limited success, in 1916. A survey in 1919 revealed 130,000 vehicles—motorized and horse-drawn—entering the Loop daily. Yet whenever Chicago's aldermen deliberated on the question of imposing new restrictions on parking, proprietors of small businesses feared the loss of valued customers.

William A. Wieboldt realized the predicament caused by congestion in the Loop. In 1917 he established a major retail operation—the eight-story Wieboldt Department Store—situated at the intersection of Lincoln, Belmont, and Ashland Avenues—entirely outside the central business district. Sears first opened neighborhood branches in 1925, and Marshall Field's launched its suburban stores in 1929. Recognizing audience demands in outlying neighborhoods, local movie theaters—the Pastime on West Madison, the Tivoli at Cottage Grove and 63rd Street, Schumacher's in the Back of the Yards—commenced their operations during that decade. Wholesale and manufacturing enterprises also required less costly, more expansive sites away from the Loop. Notable relocations included Western Electric (1903), Sears, Roebuck (1904), Montgomery Ward (1906), and Edward Hines Lumber (1906). South Chicago emerged as a major center for heavy manufactured products, and by 1916 commerce along the Calumet River exceeded that on the Chicago River by five times. Ten years before, the proportion had been equal. Another mark of the decentralization of economic activity was the founding of Gary, Indiana, in 1906 by the United States Steel Corporation. Just beyond the eastern boundary of Illinois at the southernmost tip of Lake Michigan, it was the nation's first instant industrial city, although its fortunes were linked to Chicago's transportation network and labor supply.



LEVELING DUNES FOR U.S. STEEL, 1906



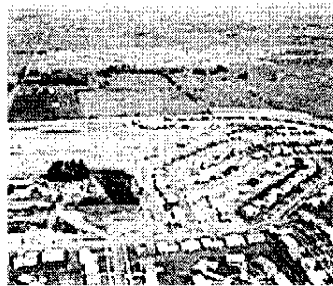
PLAN OF CHICAGO

Daniel H. Burnham embodied the hopes inspired by Chicago's monumental progress since the fire of 1871. He had risen to fame as chief of construction for the World's Columbian Exposition of 1893. In 1906, in the culminating assignment of his career, he was retained by the Merchants Club of Chicago to formulate a comprehensive design for future growth. The heralded *Plan of Chicago*, written in collaboration with Edward H. Bennett, appeared on July 4, 1909, and caused an international sensation. (The Merchants Club and the Commercial Club merged in 1908, hence the Commercial Club is credited with having sponsored the plan.) Burnham's plan combined fanciful aspiration and practicality; its focus was the metropolis, not the city

alone. After Haussmann's plan for Paris of 1853–1859, Chicago amounted to the next step in the progression toward a comprehensive urban design. Distinguishing the work of Burnham and Bennett was the attention to the city in the age of rapid, mechanized mobility. Some of their recommendations were fulfilled, notably the preservation of the lakefront as a central space for culture, recreation, and leisure. Also enduring, although in less dramatic terms, was the attention to traffic patterns on streets and waterways. Other objectives remained unfulfilled, none more regrettable than their call for a unified commuter-rail terminal facility.

But the deconcentration of Chicago's population, as the authors of the *Plan of Chicago* recognized, could not be denied. Between 1900 and 1910, the population of the city and the six-county region increased nearly 30 percent. Lake County, Illinois, was the fastest-growing county in the metropolis; its population increased 60 percent to Cook's 31 percent. During the following decade the population of Chicago increased 24 percent, but the average growth of the combined northern and western suburbs was 100 percent. Significant advances in population registered in Winnetka (113 percent), Oak Park (105 percent), Wilmette (58 percent), and Evanston (49 percent). Starting in the mid-1920s, major corporations offering well-paid employment departed from Chicago—including Abbott Laboratories (to North Chicago), G. D. Searle (Skokie), Jewel Tea Company (Barrington), Motorola (Franklin Park)—to fulfill their needs for enlarged operating expanses.

A 1947 census bureau study of the redistribution of population within American metropolises pinpointed a multiplicity of causal factors: improved mass transit; the cachet of a suburban address; the deconcentration of industry; and technological advances such as telephone and electrical services. But the primary cause—"a factor of great importance," claimed Thompson—was the automobile. The marriage between suburb and automobile was consummated during the 1920s: vehicle registration nationwide reached 8 million in 1920 and 26 million by 1929.

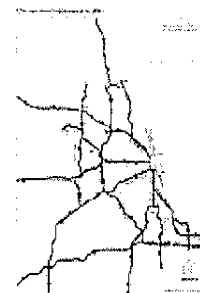


LEVITT SUBDIVISION IN BUFFALO GROVE,
1968

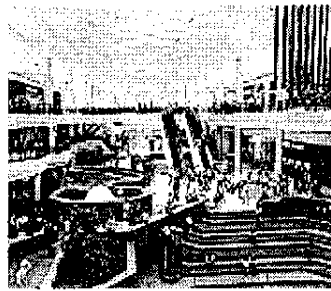
Following the Second World War, the suburban trend—Chicago's and across the nation—seemed a self-fulfilling prophecy. Families coveting security after 15 exhausting years of depression and war often realized their quest in suburban communities. A record 2.2 million marriages occurred during 1946, and 20 percent more babies were born that year than in 1945. The federal government also exercised an important influence. Many new homes were situated on the metropolitan periphery, constructed inexpensively and with federally subsidized mortgages. Housing starts between 1946

and 1955 doubled compared with the preceding 15 years. A suburban life inspired two-car families as well as rising numbers of women remaining in the postwar labor force; *Glamour* (1953) linked home ownership to two-income households. New car sales nationwide soared from 69,500 in 1945 to 2.1 million in 1946 and 5.1 million in 1949; Chicago's automobile count increased from 428,000 in 1945 to 765,000 in 1953. Highway construction burgeoned, reaching \$2 billion in 1949 and \$4 billion by 1955 across the United States.

As early as 1943, the federal government urged large metropolises nationwide—including the governments of Chicago and Cook County—to devise plans for a postwar system of modern highways. The culmination was the Interstate Highway Act of 1956, which spurred a transcontinental network of superhighways stretching 42,500 miles and costing \$60 billion. The resulting complex of metropolitan expressways in and around Chicago proved pivotal. These included the Bishop Ford Freeway (begun 1953 and completed 1956); Edens Expressway (1951–1958); Tri-State Tollway



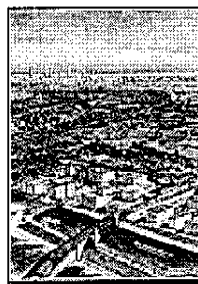
(1953–1958); Eisenhower Expressway (1954–1960); East-West Tollway (1958–1972); Kennedy Expressway (1958–1960); Dan Ryan Expressway (1961–1962); and Stevenson Expressway (1964–1966). Residents of Naperville, appreciating the benefits of securing improved ties to Chicago, campaigned unabashedly to place the route of the East-West Tollway just north of its boundary.



WOODFIELD MALL INTERIOR, 1973

Postwar deconcentration of retailing underscored consumer proclivities first evident during the 1920s. The proliferation of suburban malls (42 of them built in the 1950s around Chicago) affirmed the preference for living and shopping in automobile-dependent suburbs. To the consternation of businesses in the central business district, Chicago's segment of metropolitan revenue derived from retail sales—measured in the billions—dropped from 71 percent in 1949 to approximately 40 percent in 1972. Correspondingly, receipts in downtown movie palaces dropped as early as 1947. Woodfield Mall opened in the northwestern suburb of Schaumburg in 1971. Its 2.3-million square feet featured four major department stores, 230 smaller retail establishments, and 11,000 parking spaces spread over nearly 200 acres. Malls became civic space, featuring artistic performances and civic meetings as well as consumer-oriented pursuits.

At the beginning of the twenty-first century, meaningful prospects existed for addressing Chicago's metropolitan future. They centered in an abiding faith in our capacity as a democratic nation to foster renewal and change, with the suburban majority discovering compelling reasons to recast its sensibilities on a regional scale. One project took aim at alleviating the spatial mismatch. Originally advanced by the mayor of Schaumburg in 1997 and endorsed by other municipalities along the northwest suburban corridor, it anticipated shortages in the private-sector workforce. This unprecedented plan would expand the reach of the Chicago Transit Authority rail line into the northwest suburbs, with suburban stations strategically situated at Hoffman Estates and Woodfield Mall. The CTA outlined a more comprehensive design in 2002 to extend itself beyond the city in other directions as well.



METROPOLIS 2020 PLAN

During the 1990s, several Chicago-based not-for-profit organizations—the Chicago Community Trust, the Civic Federation, the John D. and Catherine T. MacArthur Foundation, and the Metropolitan Planning Council—worked to advance regional solutions. More often than not, their ally was the Northeastern Illinois Planning Commission. A public agency created by the state of Illinois in 1957, it identifies salient regional issues but lacks legislative authority for implementation. (“We’re like the United Nations except that we have no army—and more governments,” an NIPC representative observed in 1993.) Because of the leverage resulting from its philanthropic resources and its sustained commitment to the future of Chicago, the MacArthur Foundation emerged as a champion of regional initiatives rooted in consensus. Favorites included enlarged transportation systems, metropolitan land-use planning, augmenting the stock as well as dispersing the locations of affordable housing, and metropolitan government as well as tax structures.

But disagreement surfaced about how to implement policy objectives. Activists—urban and suburban—envisioned political action and welcomed the likelihood of needier communities contesting for the prerequisites savored by their prosperous neighbors. Whether by means of consensus or contention, the desired end might culminate in a series of political and economic imperatives—involving the public and private sectors, diverse neighborhoods and communities, giant corporations, small enterprises, and labor unions—at the local, state, and even national levels.

Legal scholar Gerald E. Frug has raised the possibilities of interlocal political institutions. The Puget Sound Regional Council, founded in 1991 to encompass four counties constituting metropolitan Seattle, is a singular example. Constituencies, in addition to the 4 counties, include 70 municipalities, 3 public authorities, and 2 state agencies. The problems it contends with—in the areas of transportation, economics, and growth management—are caused mainly by population deconcentration. In other metropolises, initiatives take varied forms, among them Minnesota's Fiscal Disparities Act (1971), Oregon's Urban Growth Boundaries (1973), the South Coast Air Quality Management District in Southern California (1976), and the Georgia Regional Transportation Authority (1999). Chicago's programmatic strategy, embodied in *Metropolis 2020*, is by contrast decidedly ad hoc.

"Metropolitan" is a contested word in the glossary of American urban history, a continuous source of fractious debate. Reaching back to the very inception of the American nation-state, the lack of provision for cities in the federal system created by the Constitution has rendered their status perpetually unresolved. Viewed through skeptical eyes, "metropolitan" is regarded pejoratively, invoking images of people furtively escaping into their local suburban enclaves. Their expectation: eluding the intricacies associated with their daily lives as citizens of the metropolis. Alternately, this key word also can take its form as a set of programmatic solutions. Their goal: diminishing rather than perpetuating the disparities between the neighborhoods and communities that separate the citizens who inhabit the dual metropolis.

Michael H. Ebner

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Rich '90s failed to lift all
Income disparity between races widened greatly, census analysis shows

By David Mendell and Darnell Little
Tribune staff reporters
Published August 20, 2002

The economic boom of the 1990s bypassed poor minority communities in the city, as many predominantly black neighborhoods on the South and West Sides remained mired in poverty as deeply entrenched as a decade earlier, according to 2000 census data released Tuesday.

Throughout the Chicago region, the income gap between whites and blacks, as well as between whites and Latinos, widened during the decade. While blacks made clear economic gains in the 1990s, they did not keep pace with the huge income increases of whites or, for that matter, Hispanics, the data shows.



The good news: Poverty and unemployment among all racial and ethnic groups fell in the city and region as a whole, although this data was collected before the current economic downturn. Nevertheless, in Chicago, nearly 30 percent of blacks, 20 percent of Latinos and nearly 18 percent of Asians lived in poverty in 1999. That's compared with just 8.2 percent of whites who

reported incomes below the poverty line.

Chicago's wealthiest communities were mostly white North Side neighborhoods: Lincoln Park (median household income: \$68,613) and Forest Glen (\$68,269). Its poorest communities were nearly all black and mostly on the South or Far South Sides: Oakland (\$10,739) and Riverdale (\$13,178).

As gentrification swept across city neighborhoods and returned white wealth to the North and Near West Sides as well as the area surrounding the Loop, the income gap between whites and blacks widened to more than \$20,000 in the city. Median household income in the city was \$49,222 for whites and \$29,086 for blacks. Chicago's Hispanic householders reported a median income of \$36,543, while Asians reported \$40,519.

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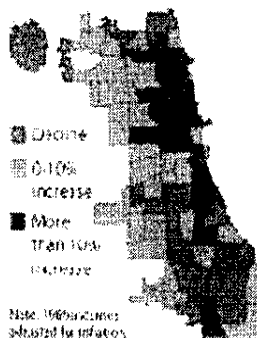
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[Change in median household income \(Chicago Tribune\)](#)

[Not all shared in boom decade \(Chicago Tribune/David Constantine, Chris Soprych\)](#)

[Chicago area's boom](#)
May 15, 2002

Technology

Those figures were disappointing, albeit not surprising, to those who have long voiced concerns that one of the largest peacetime economic expansions in U.S. history essentially bypassed entire communities of impoverished Americans.

Europeans maintain influence
May 15, 2002

Sports

Leisure

"For those of us who value the richness of city life, these kinds of statistics are particularly disturbing," said state Sen. Barack Obama (D-Chicago).

Travel

Registration

"In the long term, you can't hold together the social fabric and community cohesion if the various components of that community are experiencing different fortunes," Obama said. "We are going to have to look at these numbers closely and take them very seriously. But even without them, just a walk through Englewood would tell you how much work needs to be done."

Today's newspaper

Customer service

The new data was derived from the Census Bureau's long form, which was delivered to one in six households across the nation in April 2000. It asked a series of questions about income, housing, education and other subjects that were not included on the short form delivered to most households.

Long-form results for individual Illinois municipalities were released in May and show that the Chicago region and the Midwest fared better overall than much of the country during the prosperous 1990s.

Special reports

Rediscovered score pianist's last legacy

But the data released Tuesday was far more detailed and allowed for analysis of the economic and social characteristics of individual Chicago neighborhoods.

Tribune investigation: Unhealthy hospitals

Irish, Poles and bureaucrats

Special report: Wacker Drive reconstruction

It included a trove of demographic information for the consumption of city planners, sociologists and trivia buffs alike:

2001 Illinois School Report Card: Grade schools

- The neighborhood that is home to the most workers on government payrolls? Austin, by far, with 8,523, followed by South Shore with 5,282.

All special reports

- West Town, riding a crest of gentrification, saw median home values soar 176 percent, to \$271,194, the steepest increase in the city.

Top news headlines

Update: Storms soak Chicago region

- Lincoln Park (78 percent) and Lakeview (71 percent) held bragging rights for the most college graduates 25 and older. The city's Riverdale community ranked last with 2.7 percent of its residents attaining a degree.

New: Bush unveils plan to fight wildfires

- Homeowners in predominantly Hispanic Humboldt Park have the most difficulty paying their mortgages, with 37 percent devoting more than 35 percent of their incomes toward housing costs. Renters as well as homeowners in other largely minority neighborhoods, such as Burnside, West Englewood and North Lawndale, also devoted an outsized portion of their paychecks to keeping a roof over their heads.

New: Zoos move against West Nile

- The neighborhood with the biggest population of ethnic Irish is Lakeview on the North Side with 16,758. Bridgeport, despite its reputation as a breeding ground for Irish politicians, had only 3,923. Beverly, home to the annual South Side Irish Parade, had 7,681.

State maps terror response

- Honors for the most populous ethnic Polish community belong to Portage Park, with 20,850, while Lakeview was home to 19,765 residents of German background, the most of any city neighborhood.

New: U.S. chopper missing in S. Korea

- More than 3,300 grandparents in Austin reported that they were the primary caregivers for a child, the most in any neighborhood in the city.

The income data for the Chicago region, to some degree, mirrors racial economic trends in other metropolitan regions. But the sharp white income growth in the city surprised demographers.

That growth largely was due to widespread gentrification as luxury high-rises were constructed downtown and lofts were converted into residential apartments. For example, median household income in the West Town neighborhood, which includes the Wicker Park and Bucktown enclaves, jumped 50 percent during the

decade.

Though the overall population of whites declined in the city, trendy city neighborhoods saw an influx of whites with a degree of wealth. At the same time, many city blacks who ascended the income ladder migrated to the suburbs, particularly to the south. In fact, median household incomes of blacks in some south suburbs surpassed the median incomes of whites in those communities.

In Olympia Fields, the median household income of blacks was \$105,879, while whites reported a median of \$83,437. In South Holland, black householders earned a median \$73,471 compared to white householders' \$49,521.

And in DuPage County, the median household income for blacks fell by 9 percent, presumably because lower- and middle-class blacks arrived from the city, pulling down the overall wealth of the region's most affluent county.

Missing the boat

The income stagnation that plagued many Chicago neighborhoods is all the more worrisome to demographers and economists because they had hoped the unprecedented economic expansion of the 1990s would lift many people out of poverty. If people remained incredibly poor after the robust 1990s, they asked, what will become of them through the present bleak economy?

"You had this historic and unprecedented growth, but the size of the group that was not helped by that growth is shocking. It proves that the economy alone, as potent as it was in the '90s, is not enough of a force for dramatic social change," said Roderick Harrison, a demographer for the Washington-based Joint Center for Political and Economic Studies and an instructor at Howard University. "A potent economy still is not going to solve the problems of these poor, uneducated populations and bring them into the economic mainstream."

Added John Logan, a sociologist for the State University of New York at Albany: "This period of prosperity should have been the time to close the gap, a time to lift all boats. But in the end, that didn't happen."

Indeed, the widening gap between blacks and whites can be traced to the 1970s, although experts believe it slowed to some degree in the 1980s.

Logan's initial research into the latest Chicago-area census data showed that the region, historically one of the most racially segregated in the nation, is becoming more economically divided, as well. Minorities with equal incomes to whites are not living in equal neighborhoods when these neighborhoods are evaluated using education, poverty and economic factors as benchmarks, Logan's study showed.

He said while many blacks moved up to the middle-class in the 1990s, most were largely isolated in inner-ring and southern suburbs, where median home values rose only slightly or stagnated after being adjusted for inflation.

"Neighborhood economic disparities in Chicago don't appear to be getting better--they are getting worse," said Logan, who directs the Lewis Mumford Center for Comparative Urban and Regional Research. "It strikes me that some individuals may be climbing up, but whole communities are being left behind."

For example, gentrifying areas such as the Near South Side saw major drops in poverty rates and leaps in household income and home values. Median household income for the Near South Side, which includes Printers Row and Dearborn Park neighborhoods, rose 275 percent after inflation during the decade. Median income for households in Englewood on the South Side rose just 6.2 percent after inflation.

Experts said various social and economic factors played into regional and race disparities. Geographic isolation from suburban jobs, a beleaguered school system and economic disinvestment have left many impoverished Chicago neighborhoods struggling decade after decade, with little hope for the future.

"These are highly complex and deeply entrenched problems. I think there is a tendency and hope that a

couple of magic bullets--greater access to a higher education, a better economy-- would turn things around in these communities," Harrison said. "But I think with this data, the evidence is now overwhelming that while that has worked for some segments of the black and Hispanic populations, it has not worked to remedy these deep-seated problems in high poverty zones."

Search for census data for your community at chicagotribune.com/census

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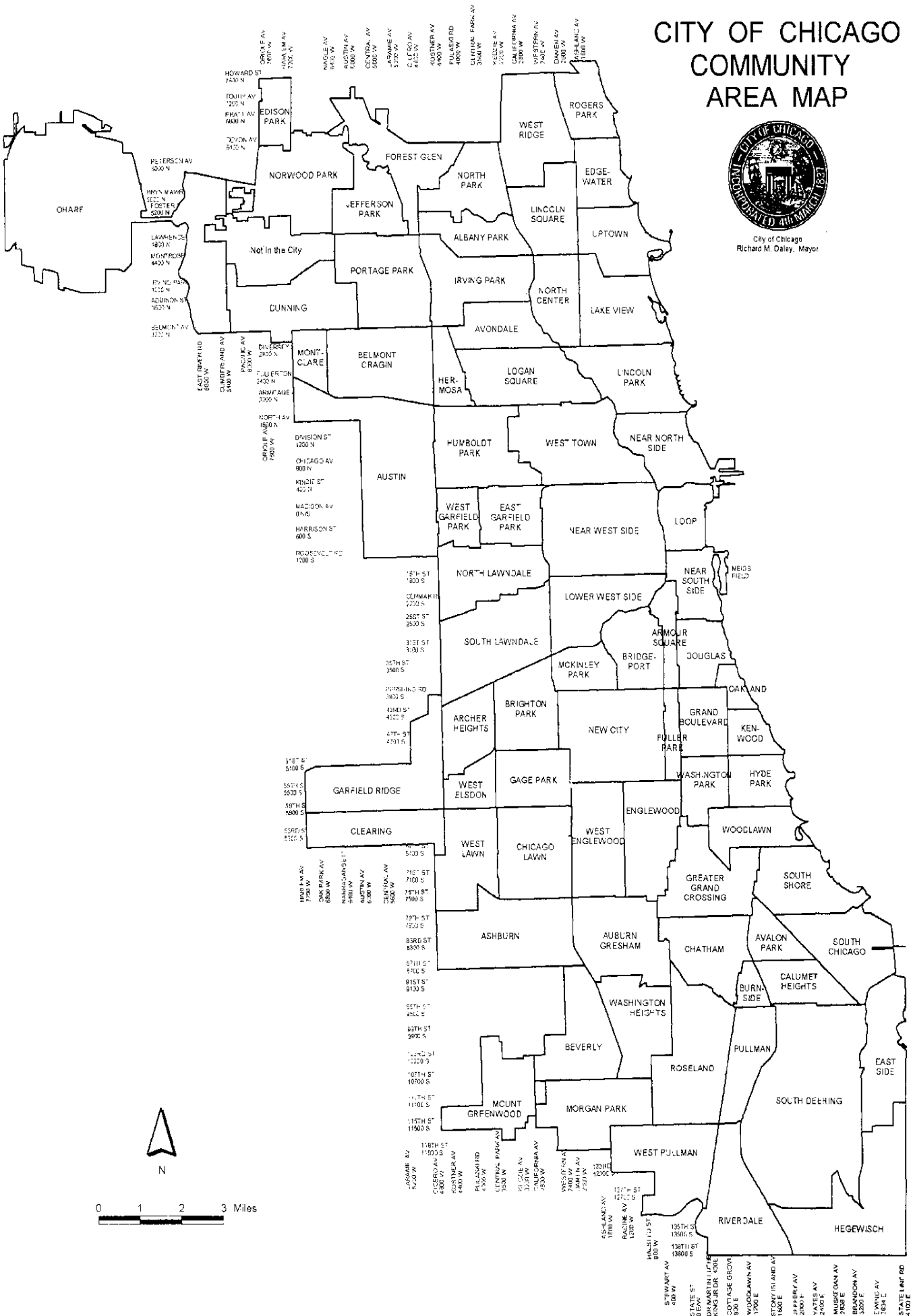
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CITY OF CHICAGO COMMUNITY AREA MAP



City of Chicago
Richard M. Daley, Mayor



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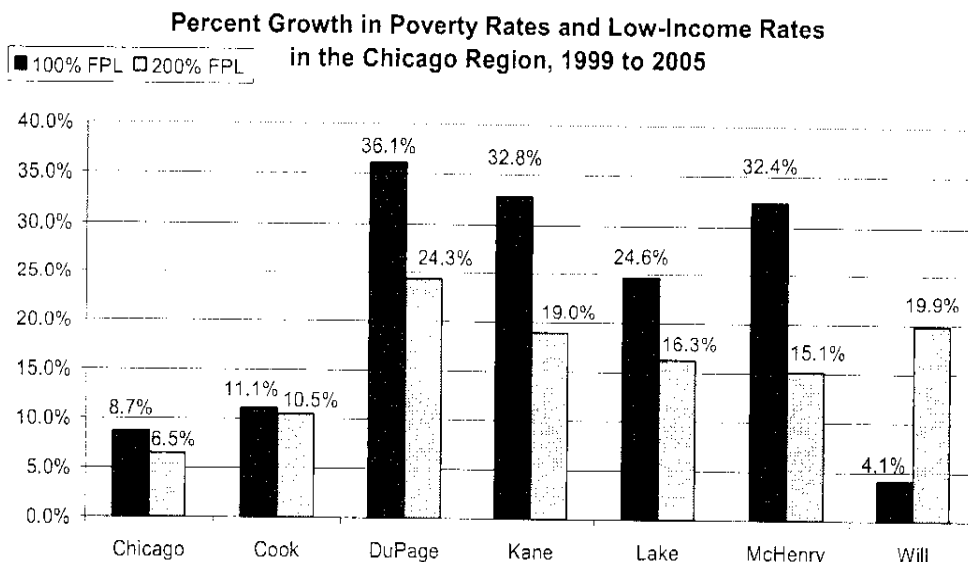
2007 Report on Illinois Poverty: Chicago Area Snapshot

The seventh annual *Report on Illinois Poverty* illustrates that there are many indications Illinois families are experiencing significant hardship. Over one third of Illinoisans in poverty are children, disparities in income and wealth are widening, young adults face significant obstacles to economic success, and hundreds of thousands of Illinoisans live in extreme poverty, with incomes below half the poverty line.

The story is no different in the Chicago region. Each of the six counties that comprise the Chicago region had higher poverty rates in 2005 than they did in 1999. Historically, poverty rates have always been higher in Chicago than in the surrounding region. While this is still true, recent data indicate that from 1999 to 2005, poverty growth in the region has been fueled not solely by Chicago, but also by the surrounding suburbs.

| Poverty Rates and Numbers in 1999 and 2005 | | |
|--|-------------------|-------------------|
| | 1999 ¹ | 2005 ² |
| Illinois | 10.7% (1,291,958) | 12.0% (1,483,873) |
| Chicago | 19.6% (556,791) | 21.3% (573,486) |
| Cook | 13.5% (713,040) | 15.0% (777,089) |
| DuPage | 3.6% (32,163) | 4.9% (44,921) |
| Kane | 6.7% (26,587) | 8.9% (42,161) |
| Lake | 5.7% (35,714) | 7.1% (48,360) |
| McHenry | 3.7% (9,446) | 4.9% (14,906) |
| Will | 4.9% (24,225) | 5.1% (32,502) |

While the City of Chicago, Cook, DuPage, Kane, Lake, McHenry, and Will counties have all experienced growing poverty, the collar counties experienced significantly greater growth in poverty rates and low-income rates than Chicago or Cook County.³



The following pages highlight other indicators of hardship in Chicago and the surrounding counties. The growth in poverty across the board paired with the loss of good paying jobs, troublesome inequalities, declining incomes, and rising costs, indicate that far too many Chicago area families are struggling to get by.

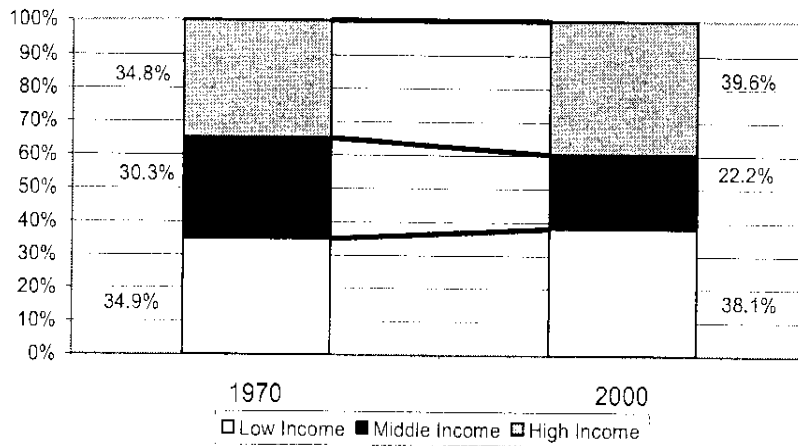
Note: Low-income rates refer to the percent of people living below twice the poverty line or 200% Federal Poverty Level (FPL). For more information on poverty definitions, see page 5.

Income & Poverty

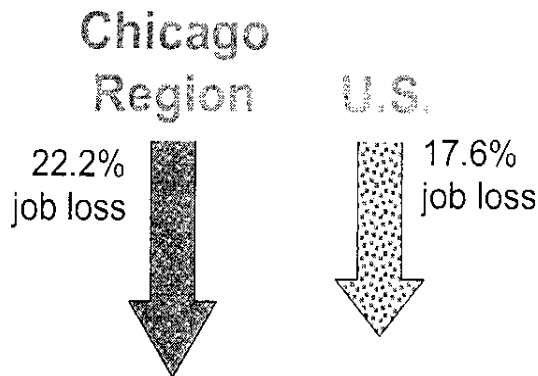
The Chicago region struggles with a shrinking middle class, and loss of manufacturing jobs, as well as concentrated and extreme poverty.

The proportion of middle-income families dropped while the share of low-income and high-income families grew in the Chicago region from 1970 to 2000.⁴

Share of Families by Income Category in the Chicago Region, 1970 to 2000



The Chicago region was hit harder by manufacturing job loss than the nation as a whole from 2000 to 2005.⁵



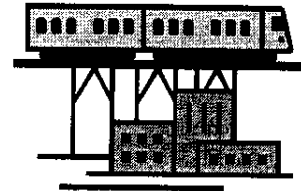
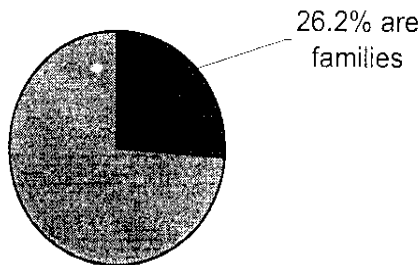
436,270 Chicago region residents live in extreme poverty, meaning their annual income is less than half the poverty line.⁶

The City of Chicago has **110** high poverty-concentrated areas (as defined by census tracts) meaning over 40% of residents in those areas are poor.⁷

Housing & Transportation

Rising housing and transportation costs have created hardship for many Chicago region families.

Families comprise over a quarter of the City of Chicago's homeless population.⁸



City of Chicago households spend on average

\$4,800 less per year on transportation costs than their suburban counterparts.⁹

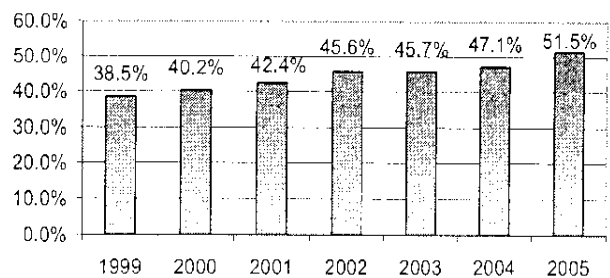
Overall foreclosure starts on sub-prime loans have

increased 858%

in the City of Chicago since 1993.¹⁰

A growing proportion of Chicago region renter households are rent-burdened, meaning they pay more than 30% of their income toward housing costs.¹²

Proportion of Chicago Region Renter Households that are Rent-Burdened 1999-2005



Working families in the Chicago region earning between \$20,000 and \$50,000 annually, spend an average of **55%** of their budget on housing and transportation costs.¹¹

Health &
Education

Chicago region youth and families continue to face challenges in meeting their health, nutrition, and education needs.

Male Chicago Public School students have significantly lower graduation rates than female students.¹³

GRADUATION RATES
2005-2006 SCHOOL YEAR

Female Grad Rate **79.4%**

Male Grad Rate **67.7%**

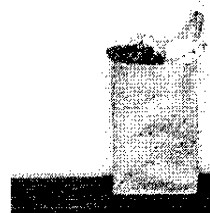
Teen birth rates rose in Cook, DuPage, Kane, McHenry, and Will Counties and remained unchanged in Lake County from 2003 to 2004.¹⁵

23,881 households a month on average sought food through the Northern Illinois Food Bank's network of food pantries in **DuPage, Kane, Lake, McHenry,** and **Will** Counties in 2006.¹⁶

Of Chicago Public School graduates who attend 4-year colleges immediately after high school

only 35% graduate college within 6 years.¹⁴

Each year, close to **500,000 people** rely on emergency and supplemental food provided by the Greater Chicago Food Depository.¹⁷



Poverty Definitions

Four definitions of poverty are instructive for an analysis of well-being in the Chicago region.

Income Poverty: as defined by the federal government using food cost as a basis. There are two slightly different versions of the federal poverty measure: the poverty thresholds and the poverty guidelines.

The *poverty thresholds* are the original version of the federal poverty measure. They are updated each year by the Census Bureau and are used mainly for statistical purposes – for instance, preparing estimates of the number of Americans in poverty each year.

The *poverty guidelines*, also called the Federal Poverty Level (FPL), are the other version of the poverty measure. They are issued annually in the Federal Register by the Department of Health and Human Services and are a simplification of the poverty thresholds used for administrative purposes – for instance, determining financial eligibility for certain federal programs.¹⁸

| Federal Poverty Guidelines, or 100% FPL ¹⁹ | | | | |
|---|-------------------------|-------------------------|-------------------------|-------------------------|
| Size of family unit | 2007 poverty guidelines | 2006 poverty guidelines | 2005 poverty guidelines | 2004 poverty guidelines |
| 1 | \$ 10,210 | \$ 9,800 | \$ 9,570 | \$ 9,310 |
| 2 | 13,690 | 13,200 | 12,830 | 12,490 |
| 3 | 17,170 | 16,600 | 16,090 | 15,670 |
| 4 | 20,650 | 20,000 | 19,350 | 18,850 |
| 5 | 24,130 | 23,400 | 22,610 | 22,030 |
| 6 | 27,610 | 26,800 | 25,870 | 25,210 |
| 7 | 31,090 | 30,200 | 29,130 | 28,390 |
| 8 | 34,570 | 33,600 | 32,390 | 31,570 |

Deep or Extreme Poverty: defined as those people living below 50% of the federal poverty threshold.

Low-Income or Near Poor: as experienced by people living below 200% of the poverty threshold who often have trouble meeting their basic needs due to skyrocketing costs (e.g., rent, childcare, health insurance).

Asset Poverty: defined as households without sufficient net worth to subsist at the poverty level for 3 months²⁰ – so that a crisis (such as job loss, illness, or divorce) can push a household into poverty or homelessness.

Chicago Region Poverty Summary

For more data by county, definitions, and explanations of data sources, refer to the Appendix of the *2007 Report on Illinois Poverty*.

| | Median Household Income ²¹ | | Child Poverty ²² | | Number of Households Receiving Food Stamps ²³ | Wage needed to afford 2BR FMR ²⁴ | Extreme Poverty ²⁵ | |
|-----------------|---------------------------------------|----------|-----------------------------|-------|--|---|-------------------------------|------|
| | 1999 | 2005 | 1999 | 2005 | 2005 | 2006 | 1999 | 2005 |
| Chicago | \$45,279 | \$41,015 | 28.5% | 30.8% | 131,666 | n/a | 10.1% | 9.7% |
| Cook | \$53,833 | \$48,950 | 19.3% | 21.3% | 173,538 | \$17.98 | 6.8% | 6.9% |
| DuPage | \$79,582 | \$70,560 | 4.1% | 5.5% | 7,923 | \$17.98 | 1.8% | 1.9% |
| Kane | \$69,575 | \$63,317 | 9.1% | 11.5% | 7,527 | \$17.98 | 2.9% | 3.6% |
| Lake | \$78,510 | \$68,744 | 7.2% | 9.1% | 8,606 | \$17.98 | 2.4% | 3.0% |
| McHenry | \$75,994 | \$70,908 | 4.2% | 6.3% | 2,979 | \$17.98 | 1.7% | 2.7% |
| Will | \$72,960 | \$68,414 | 5.9% | 6.0% | 8,707 | \$17.98 | 2.4% | 2.2% |
| Illinois | \$54,616 | \$50,260 | 14.3% | 16.4% | 358,607 | \$15.95 | 5.1% | 5.5% |

1 U.S. Census Bureau, Decennial Census 2000.

2 U.S. Census Bureau, American Community Survey 2005.

3 U.S. Census Bureau, Decennial Census 2000 and American Community Survey 2005, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

4 Booza, J.C., Cutsinger, J., & Galster, George. (2006, June). *Where did they go? The decline of middle-income neighborhoods in metropolitan America*. Living Cities Census Series. Washington DC: The Brookings Institution.

5 Wial, H., & Friedhoof, A. (2006, July). *Bearing the brunt: Manufacturing job loss in the Great Lakes Region, 1995-2005*. Metro Economy Series. Washington DC: The Brookings Institution.

6 U.S. Census Bureau, American Community Survey 2005.

7 Berube, A., & Katz, B. (2005, October). *Katrina's window: Confronting concentrated poverty across America*. Metropolitan Policy Program. Washington DC: The Brookings Institution.

8 The United States Conference of Mayors – Sodexo, Inc. (2006, December). *Hunger and homelessness survey: A status report on hunger and homelessness in America's cities, a 23-city survey*. Washington DC: Author.

9 Haas, P.M., & Makarewicz, C. (2006, June 29). *Housing & transportation affordability index*. Presented at the Housing + transportation: Moving the region toward greater affordability meeting, Chicago, IL.

10 Rose, D.C. (2005, June). *Chicago foreclosure update*. Chicago: National Training and Information Center.

11 Lipman, B.J. (2006, October). *A heavy load: The combined housing and transportation burdens of working families*. Washington DC: Center for Housing Policy.

12 U.S. Census Bureau, Decennial Census 2000 and American Community Survey 2005, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

13 Illinois State Board of Education. (n.d.). *2005-2006 State school report card*. Springfield, IL: Author.

14 Roderick, M. (2006, April). *Closing the aspirations-attainment gap: Implications for high school reform. A commentary from Chicago*. Chicago: MDRC.

15 Illinois Department of Public Health. (n.d.). *Illinois teen births by county*. Retrieved January 2, 2007, from <http://www.idph.state.il.us/health/teen/teen0304.htm>, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

16 Northern Illinois Food Bank (personal communication February 1, 2007).

17 Greater Chicago Food Depository. (2006, September). *The National Hunger Study: Chicago profile*. Chicago: Author.

18 U.S. Department of Health & Human Services. (2006). *Frequently asked questions related to the poverty guidelines and poverty*. Retrieved December 21, 2006, from <http://aspe.hhs.gov/poverty/faq.shtml#differences>

19 U.S. Department of Health & Human Services. (2007). *Poverty guidelines, research, and measurement*. Retrieved January 26, 2007, from <http://aspe.hhs.gov/poverty/index.shtml>

20 CFED. (2007). *Asset poverty*. Retrieved January 2, 2007, from <http://www.cfed.org/focus.m?showmeasures=&siteid=504&id=509&measureid=2841>

21 U.S. Census Bureau, Decennial Census 2000 and American Community Survey 2005, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

22 U.S. Census Bureau, Decennial Census 2000 and American Community Survey 2005, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

23 U.S. Census Bureau, American Community Survey 2005.

24 National Low Income Housing Coalition. (2006). *Out of reach 2006*. Washington DC: Author.

25 U.S. Census Bureau, Decennial Census 2000 and American Community Survey 2005.

The Illinois Poverty Summit is an initiative of Heartland Alliance for Human Needs & Human Rights.
This report can be downloaded from <http://www.heartlandalliance.org/maip/research.html>



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2008 Report on Illinois Poverty

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This report was produced independently of the Illinois Poverty Summit Steering Committee and is intended to stimulate dialogue about anti-poverty initiatives in the state. The policy recommendations in this report have been developed by Heartland Alliance for Human Needs & Human Rights and do not necessarily reflect the views of members of the Illinois Poverty Summit Steering Committee.

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Terms used throughout the report are defined in the appendix. Also included in the appendix are data related to income, poverty, housing, health, and education for each county in Illinois as well as an explanation of the various Census Bureau data sources.

Introduction

This eighth Report on Illinois Poverty comes at a unique moment of barriers and opportunities. A moment when the state of Illinois holds the distinction of having the worst budget deficit in the nation for 4 years running. Yet, it is also a moment when people across the United States are talking about poverty as a threat to our well-being, when leaders are proposing solutions, and when communities are taking important steps to decrease hardship.

Seizing this moment to create change is vital to the millions of Americans and Illinoisans that live in poverty every day:

- 1.5 million people in Illinois and 39 million people in the nation are poor.
- 686,000 people in Illinois and 17 million people in the nation live in the most extreme form of dire poverty.
- 543,000 of our children in Illinois and 13 million of our children in the nation are poor.

Poverty deprives people of their dignity and compromises their ability to meet their most basic of needs:

- We must act to address poverty because it limits chances and restricts opportunity for the people who experience it.
- We must act to address poverty because it is dangerous when children cannot get enough healthy food to eat, adults lack shelter, and seniors skip doses of vital medication.
- We must act to address poverty because it erodes the quality of life for us all. A society, a state, a community is only as strong its weakest member.

This year's report includes a new Spotlight on Challenges to Women's Economic Well-Being. The Spotlight on Women can be found on page 16.

As you read this report, you will see how Illinois families struggle to achieve or maintain economic stability. Negative economic shifts including stagnating wages and rising costs have taken their toll on people across Illinois, hitting those with the least to start with the hardest. **But there is hope.** There is a movement stirring throughout the country to act now to address poverty. With this momentum building and new collective efforts in Illinois, we can eliminate the poverty that deprives people of their human rights.

The momentum to address poverty is coming from many directions:

- In poll after poll, members of the public are saying that addressing poverty is important to them.
- Presidential candidates are putting forth anti-poverty proposals, and leading national groups have identified key next steps to reducing poverty.
- State legislatures are creating poverty commissions and county boards are forming poverty task forces.
- More than 1,400 Illinoisans and growing have endorsed the goal of cutting extreme poverty in half by 2015.

Illinois is poised to be a leader in this movement to significantly reduce poverty. Throughout the report, recommendations on ways to address poverty are identified as Opportunities for Change and are denoted by the symbol to the right. Implementing these recommendations can help us make strong, safe, and stable communities across Illinois that are poverty free.



The gap between stagnant incomes and rising prices is stretching Illinois families thin.

The effect of our struggling economy has the greatest impact for those with the least income to begin with. These negative economic trends do not appear to be slowing, forecasting more entrenched hardship in the future.

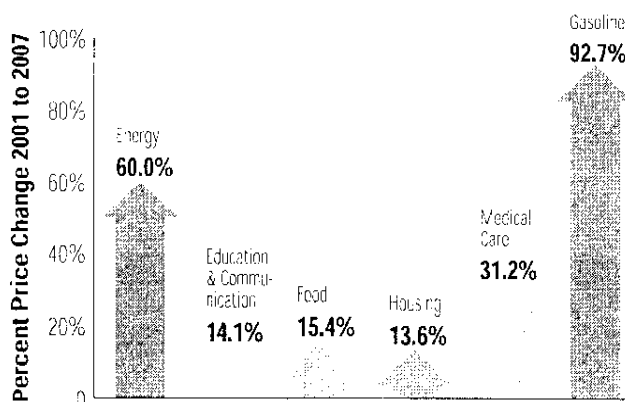
Average weekly wages fell in 7 of the 11 job sectors in Illinois from 2001 to 2007.¹ This means that on a weekly basis, many Illinoisans have less purchasing power to pay for their needs.

After adjusting for inflation, real weekly wages declined by:

| | |
|--|--|
| \$32 | \$16 |
| for people working in the business services sector | for people working in the retail trade |

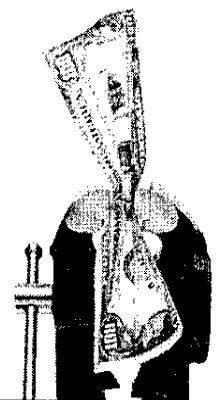
The reality of a changing economy and labor market in Illinois is reflected in families having less money coming in annually. Median household incomes dropped in 70 of Illinois' 102 counties from 2001 to 2005, with the statewide median income declining **\$1,547.**²

During this period of declining wages and incomes, prices for essential goods and services rose substantially, putting the squeeze on many families.³



Over 1 in 4

Illinois renter households are spending over half their income on housing, an increase of 42.2% since 1999, leaving less to spend on other essentials like food and clothing.⁴



Throughout the pages of this report are recommendations, or Opportunities for Change, that together can increase stability and security for Illinois families and reduce poverty throughout the state.

¹ Center for Tax and Budget Accountability & Northern Illinois University. (2007). The state of working Illinois. Chicago & DeKalb, IL: Author.
² U.S. Census Bureau. Small Area Income and Poverty Estimates 2001-2005, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.
³ U.S. Department of Labor Bureau of Labor Statistics. (n.d.). Consumer price index - create customized tables. Retrieved February 28, 2008, from <http://www.bls.gov/cpi/>
⁴ U.S. Census Bureau. 2000 Decennial Census & 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

The eroding safety net keeps hundreds of thousands of Illinoisans in extreme poverty.

Extreme poverty, living on an annual income of less than half the poverty line (below \$10,000 for a family of four), affects over 680,000 Illinoisans. Those living in extreme poverty are often in unsafe living conditions and struggle to meet the most basic of their needs.

Children, seniors, and people with disabilities comprise nearly half of all people living in extreme poverty in Illinois. The government plays a role in providing support, in the form of a safety net, for children, seniors, and people with work-limiting disabilities. However, that support has eroded over the past few decades and hundreds of thousands of Illinoisans fall through the cracks.

Of Illinoisans in extreme poverty:⁵

245,888 are children

- 78,960 are under age 5
- 166,928 are ages 5 to 17
- 16,231 are disabled

402,524 are working age adults ages 18 to 64

- **52,562 have a disability** that makes it difficult to work
- 92,072 are enrolled in school*
- 77,406 of the remaining do not have a high school diploma making meaningful employment difficult to secure

14,944 are seniors

333,384

or nearly HALF of Illinoisans living in extreme poverty are not expected to be working or may not be able to work.

*of those who are not disabled

Over **THREE QUARTERS**

of Illinois households eligible for TANF cash assistance and housing assistance do not receive the benefit.⁶

Average annual benefit levels in Illinois fall far short of what Illinois families need to get by:

Supplemental Security Income (government program for people with disabilities with low incomes)⁷ **\$7,803**

Temporary Assistance to Needy Families (government program to help poor families with dependent children)⁸ **\$2,856**

Supports designed to help struggling families often fail to make it into the hands of eligible families. Additionally, the benefit amounts for key supports are so low they fail to provide the meaningful support needed to make ends meet.



Establish the Commission on the Elimination of Poverty in Illinois so there is a formal entity to comprehensively address poverty in Illinois by developing a substantive, measurable plan to cut the number of people living in extreme poverty in Illinois in half by 2015.

⁵ U.S. Census Bureau, 2006 American Community Survey, Microdata, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance

⁶ Anelda N. Brashley, H. Chinnichelli, R. Ray, R. S. Yunker et al. (2007, October), Budgeting the gaps: A picture of how work supports work in the states, Washington, DC: Heaton, Easter for Economic and Policy Research & Center for Social Policy.

⁷ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance

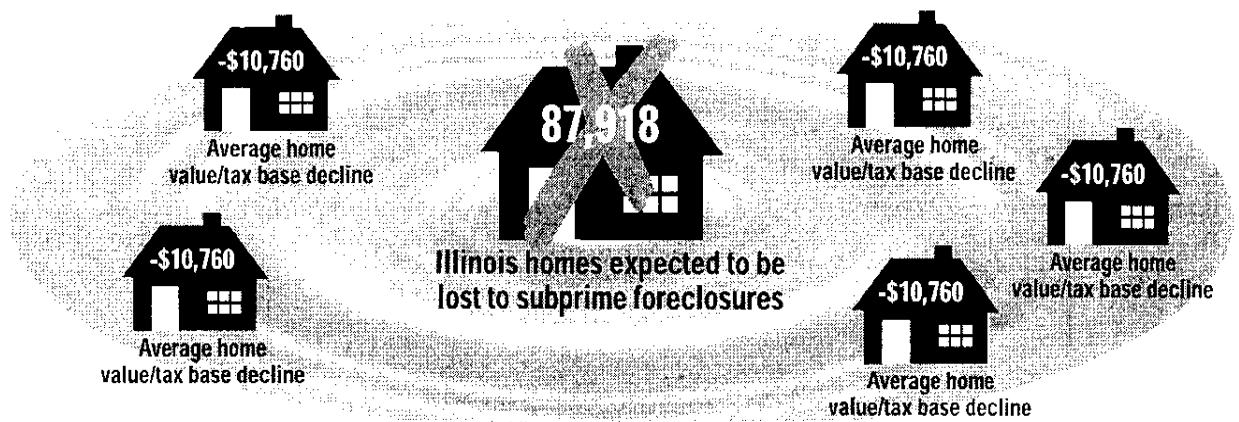
⁸ Illinois Department of Human Services, Bureau of Research & Analysis, (2007, December), TANF, FHR and Food Stamps cases and persons in metro area counties with estimated Chicago, September of each year 2000-2007.

Families' attempts at moving ahead are being severely undercut by risky loans and debt.

Debt, predatory lending, and foreclosures are draining savings and eroding the wealth of low-income families in Illinois. Without opportunities to build assets, Illinois families cannot get ahead.

Though subprime loans make up a smaller share of all mortgage loans, they comprise a much greater share of foreclosures.

Forecasted Impact of Subprime Foreclosures in 2008-2009 on Illinois Families and Communities⁹



An additional 2.5 million surrounding homes will be affected by home value/tax base declines.

The median debt per Illinois household in 2006 includes:¹⁰

\$13,384

in installment debt, such as car loans, student loans, or financed furniture

\$1,782

in credit card and line of credit debt, which have relatively high interest rates compared to other forms of debt

Payday lenders proliferate in Illinois

trapping workers in cycles of debt. To illustrate how common they are, there are almost 3 times as many payday licenses as McDonald's in the state.

There is:

1 payday lending license in Illinois for every 100 poor families in the state¹¹

vs.

1 McDonald's in Illinois for every 442 poor families in the state¹²



Improve the Payday Loan Reform Act to strengthen provisions that protect Illinois families from abusive predatory lending practices that can lead them down the path to financial ruin.

⁹ Center for Responsible Lending. (2008, February). The impact of court-supervised modifications on subprime foreclosures in Ill. Falls. Washington, DC: Author.

¹⁰ CFED. (2006). 2007-2008 Assets and Opportunity Scorecard. Retrieved February 6, 2008, from <http://www.cfed.org/focus/>?parentid=31&stid=2471&id=2475

¹¹ Illinois Department of Financial and Professional Regulations. (n.d.). Search Licenses. Retrieved February 29, 2008, from <http://www.idfpr.com/dfs/ices/srSearch/frmSearch/ices/srSearch.asp>; calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹² Graves, S.M. (2006). McDonald's vs. Payday Lenders - 2006. Retrieved March 10, 2008, from http://www.csun.edu/~sd4002/resos/cr/mcdonalds_by_state.htm; calculation conducted by the Mid-America Institute on Poverty of

In Illinois, the tax system demands more from people with less.

Lower-income families in Illinois shoulder a relatively high tax responsibility, meaning a greater share of their incomes as compared to those with higher incomes, is paid in state and local taxes.

Taking taxes from poor families counters efforts to help them achieve economic self-sufficiency and stability.

Illinois is one of only:¹³

15 states that tax single-parent families of three who are poor

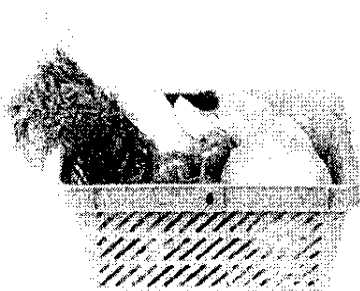
19 states that tax two-parent families of four who are poor

The poorest Illinois families have a tax rate that is **2.7 times higher** than the highest income Illinois families.¹⁴

| Income Group | Average Total State and Local Tax Rate with Exemptions Considered |
|---|---|
| Top 1 percent of Illinois families Average incomes of \$1.7 million | 5.1% |
| Illinois families in the middle of income distribution Average incomes of \$44,000 | 10.7% |
| Poorest Illinois families Average incomes of \$9,800 | 13.7% |

Illinois is one of only 14 states that taxes food purchased for consumption at home.

Grocery taxes take a larger chunk out of a low-income family's budget than a higher income family's.¹⁵



Illinois' state Earned Income Tax Credit, designed to offset the large share of state and local taxes shouldered by low-income families, is among the lowest in the nation, averaging only

around \$100 per family.¹⁶



Increase the Illinois Earned Income Tax Credit to put more dollars in the pockets of low-income Illinois families. This improves the likelihood that families will be able to meet basic needs and save money for the future.

¹³ Levitsky, J.A. (2007, March). The impact of state income taxes on low-income families in 2006. Washington, DC: Center on Budget and Policy Priorities.

¹⁴ Institute on Taxation and Economic Policy. (2008). Preliminary analysis of state and local taxes in 2006. On file with author.

¹⁵ Center on Budget and Policy Priorities. (2007, November). Which states tax the sale of food for home consumption in 2007? Washington, DC: Author.

¹⁶ Make Work Pay in Illinois. (2008, February). Help working families: Grow the Illinois EITC. Chicago: Voices for Illinois Children.

State Poverty Profile

Poverty rates presented here originate from various Census Bureau surveys and estimates. The use of different surveys is based on Census Bureau recommendations that certain surveys be used for specific purposes. Thus, the American Community Survey is used for point-in-time state estimates, and when comparing between states or states and smaller geographies. The Small Area Income and Poverty Estimates are used for comparing all counties. As a result, the poverty rates vary slightly when using the recommended survey and the appropriate methodologies. Due to a change in Census Bureau methodology in the American Community Survey, poverty rate comparisons between 2005 and 2006 are not valid, so this section discusses state change over time from 1999 to 2006. For more detail on the sources, please see pages 31 and 32.

Poverty is widespread and will directly or indirectly touch the majority of people in the nation at some point during their lifetimes. Estimates suggest that 38.4% of 25 year olds in the United States will experience poverty at some point in their adult years.¹⁷ Though individuals in poverty are very diverse, certain groups are disproportionately impacted by poverty.

Who are more likely to be poor?

- Women face a greater risk of poverty.
- African Americans and Latinos face a greater risk of poverty.
- Children face a greater risk of poverty.
- Female-headed households are at a far greater risk of poverty.
- Immigrants face greater risk of poverty than native-born individuals, but comprise a much smaller number of all people in poverty.
- People with disabilities face greater risk of poverty than those without, yet comprise a much smaller number of all people in poverty.

Poverty exists in every corner of the country and in every county of Illinois. Rural counties in southern Illinois have some of the highest rates of poverty in the state. Suburban Chicago counties are experiencing rapidly growing poverty. High rates of extreme poverty can be found in areas rural and urban alike. Poverty compromises the stability of entire communities, counties, and the state. This section highlights the magnitude of poverty in the state, its geographic spread, and its density.

¹⁷ Rank, M.R., & Hirschl, T.A. (1999). The likelihood of poverty across the American adult life span. *Social Work*, 44 (3), 201-216.

Poverty Definitions

Four definitions of poverty are instructive for an analysis of well-being in Illinois.

Income Poverty: as defined by the federal government using food cost as a basis. There are two slightly different versions of the federal poverty measure: the poverty thresholds and the poverty guidelines.

The poverty thresholds are the original version of the federal poverty measure. They are updated each year by the Census Bureau and are used mainly for statistical purposes — for instance, preparing estimates of the number of Americans in poverty each year.

The poverty guidelines, also called the Federal Poverty Level (FPL), are the other version of the poverty measure. They are issued each year in the Federal Register by the Department of Health and Human Services and are a simplification of the poverty thresholds used for administrative purposes — for instance, determining financial eligibility for certain federal programs.¹⁸

| Federal Poverty Guidelines, at 100% FPL | | | | |
|---|-------------------------|-------------------------|-------------------------|-------------------------|
| Size of family unit | 2008 poverty guidelines | 2007 poverty guidelines | 2006 poverty guidelines | 2005 poverty guidelines |
| 1 | \$10,400 | \$ 10,210 | \$ 9,800 | \$ 9,570 |
| 2 | 14,000 | 13,690 | 13,200 | 12,830 |
| 3 | 17,600 | 17,170 | 16,600 | 16,090 |
| 4 | 21,200 | 20,650 | 20,000 | 19,350 |
| 5 | 24,800 | 24,130 | 23,400 | 22,610 |
| 6 | 28,400 | 27,610 | 26,800 | 25,870 |
| 7 | 32,000 | 31,090 | 30,200 | 29,130 |
| 8 | 35,600 | 34,570 | 33,600 | 32,390 |

Deep or Extreme Poverty: defined as living below 50% of the federal poverty threshold.

Low-Income or Near Poor: defined as living between 100% and 200% of the poverty threshold — an income level where people often have trouble meeting their basic needs due to skyrocketing costs (e.g. rent, child care, health insurance).

Asset Poverty: defined as households without sufficient net worth to subsist at the poverty level for 3 months²⁰ — so that a crisis (such as job loss, illness, divorce) can push a household into poverty or homelessness.

¹⁸ U.S. Department of Health & Human Services (2006). Frequently asked questions related to the poverty guidelines and poverty. Retrieved December 21, 2006, from <http://aspe.hhs.gov/poverty/fac.shtml#differences>

¹⁹ U.S. Department of Health & Human Services (2008). The 2008 FPL Poverty Guidelines. Retrieved March 8, 2008, from <http://aspe.hhs.gov/poverty/index.shtml>

²⁰ C.F.O. (2007). Asset poverty. Retrieved January 2, 2007, from http://www.cfed.org/focus.nsf/newsmeasures_11&parentid=504&id=508&menuid=2841

State Poverty Rates

Poverty in Illinois, 2006²¹



Illinois Poverty Rates Over Time²²

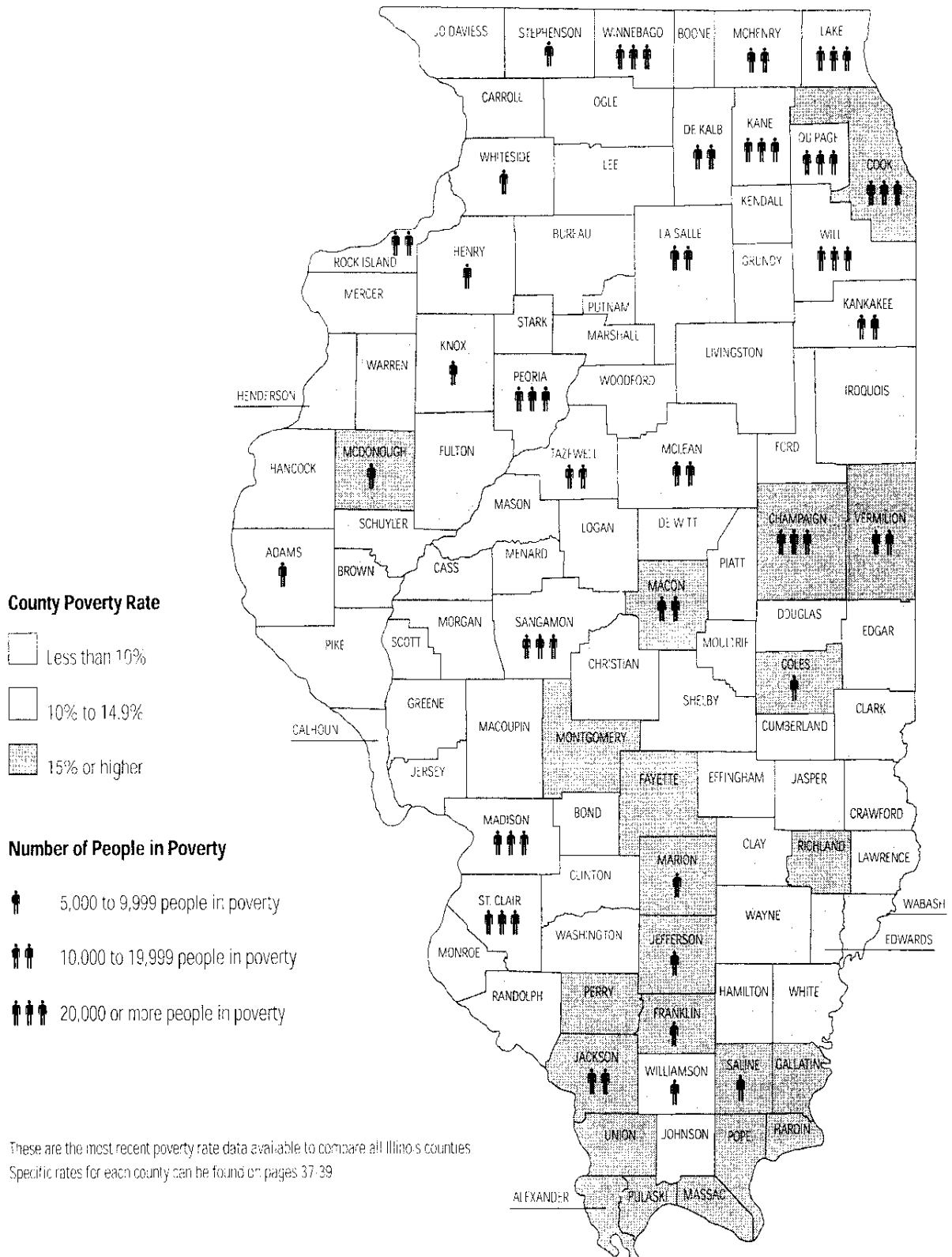
| 1999 | | 2006 | |
|-----------|-------|-----------|-------|
| Number | Rate | Number | Rate |
| 1,291,958 | 10.7% | 1,539,033 | 12.3% |

Note: For data related to asset poverty, see page 30.

²¹ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

²² U.S. Census Bureau, 2000 Decennial Census & 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

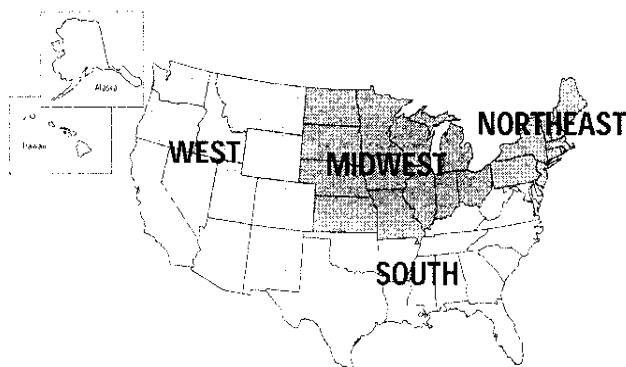
State Poverty Map, All Ages in Poverty, 2005²³



²³ U.S. Census Bureau, Small Area Income and Poverty Estimates, 2005

Midwest Poverty

Midwest states share many similar characteristics that make it important to understand the region in which Illinois is situated. After decades of having some of the lowest poverty rates in the nation, the Midwest is now one of the leaders of the nation's poverty and child poverty growth.



The Midwest poverty rate climbed from 10.2% in 1999 to 12.4% in 2006.

This was the largest increase in any region of the country.²⁴

Poverty by Region: Percent Change from 1999 to 2006²⁵

| | Percent Change in Total Population | Percent Change in Number of People who are Poor | Percent Change in Poverty Rate |
|-----------------------|------------------------------------|---|--------------------------------|
| United States | 6.4% | 14.3% | 7.3% |
| Northeast Region | 2.1% | 4.7% | 2.6% |
| Midwest Region | 2.8% | 25.8% | 21.6% |
| South Region | 8.9% | 16.6% | 7.2% |
| West Region | 9.9% | 8.5% | -0.8% |

Child Poverty by Region: Percent Change from 1999 to 2006²⁶

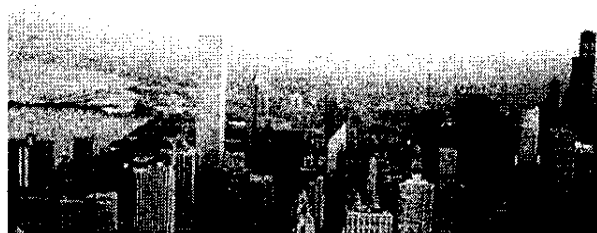
| | Percent Change in Total Child Population | Percent Change in Number of Children who are Poor | Percent Change in Child Poverty Rate |
|-----------------------|--|---|--------------------------------------|
| United States | 2.2% | 13.1% | 10.2% |
| Northeast Region | -3.0% | 2.2% | 5.9% |
| Midwest Region | -2.4% | 23.9% | 27.1% |
| South Region | 5.7% | 17.8% | 11.2% |
| West Region | 5.4% | 4.7% | -0.6% |

From 1999 to 2006, Midwest child poverty rates jumped from 13.3% to 16.9%.²⁷

The regions included in this analysis reflect the regional breakdowns designated by the Census Bureau. See page 52 for explanation.

The Midwest experienced a decline in the overall child population which makes the increase in children living in poverty all the more stark.

Nationally, 10 of the top 20 poorest cities are in the Midwest.^{28,29}



²⁴ U.S. Census Bureau, 2000 Decennial Census & 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

²⁵ Ibid.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Webster Jr., B.H. & Bishaw, A. (2007, August). Income, earnings and poverty data from the 2006 American Community Survey (ACS-08). Washington, DC: U.S. Census Bureau.

Major Groups in Poverty: Illinois

Populations in Poverty 2006³⁰

| Group* | Population** | Percent of State Population | Number Below Poverty | Percent of the Poverty Population | Percent in Poverty |
|-----------------------|-------------------|-----------------------------|----------------------|-----------------------------------|--------------------|
| Illinois Total | 12,516,453 | 100.0% | 1,539,033 | — | 12.3% |
| Children (0-17) | 3,173,411 | 25.4% | 543,373 | 35.3% | 17.1% |
| Working Age (18-64) | 7,891,815 | 63.1% | 865,359 | 56.2% | 11.0% |
| Seniors (65+) | 1,451,227 | 11.6% | 130,301 | 8.5% | 9.0% |
| White Non-Hispanic | 8,159,767 | 65.2% | 631,014 | 41.0% | 7.7% |
| Black | 1,823,512 | 14.6% | 509,836 | 33.1% | 28.0% |
| Asian | 528,942 | 4.2% | 47,199 | 3.1% | 8.9% |
| Hispanic | 1,858,224 | 14.8% | 327,871 | 21.3% | 17.6% |

* Groups may not be mutually exclusive.

** Total population is the population used to calculate poverty. This excludes persons under age 15 who are not related to the head of household.

DISABILITY & Poverty

Illinoisans with a disability are much more likely to be poor than those without a disability.

ILLINOIS POVERTY BY RACE/ETHNICITY FOR PEOPLE WITH DISABILITIES³¹

| Group | Poverty Rate | Number in Poverty |
|--------------------|--------------|-------------------|
| Asian | * | * |
| Black | 41.9% | 72,063 |
| Hispanic | 30.7% | 17,313 |
| White Non-Hispanic | 13.7% | 78,313 |



* sample size too small to calculate

Note: work-limiting disability for populations 16 and over

Nearly 1 out of 5 Illinois households has at least one member with a disability.³²

Illinoisans with a disability are more likely to have low earnings than their non-disabled counterparts.

PERCENT OF ILLINOISANS WITH EARNINGS BELOW \$15,000 IN 2006³³

| | |
|--------------|---|
| Disabled |  42.9% |
| Non-Disabled |  27.4% |

³⁰ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

³¹ U.S. Census Bureau, Current Population Survey 2006-2007 Annual Social and Economic Supplement, Microdata, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

³² U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

SENIORS & Poverty

Once poor, senior households are less likely to exit poverty than any other age group.³⁴

ILLINOIS SENIOR POVERTY BY RACE/ETHNICITY³⁵

| Group | Poverty Rate | Number in Poverty |
|--------------------|--------------|-------------------|
| Asian | * | * |
| Black | 20.1% | 32,317 |
| Hispanic | 17.3% | 12,225 |
| White Non-Hispanic | 6.8% | 80,172 |

*sample size too small to calculate

Over half of Illinois seniors do not have retirement income other than Social Security.³⁶

The effects of education have a lasting impact on income even into the later years of life.

MEDIAN ANNUAL INCOME FOR SENIORS, 2006³⁷

| Educational Attainment | Median Annual Income |
|------------------------------------|----------------------|
| Less than high school diploma | \$12,062 |
| High school diploma or equivalency | \$16,302 |
| Some college or associate's degree | \$19,300 |
| Bachelor's degree | \$32,000 |

CHILDREN & Poverty

Illinois children are particularly vulnerable to poverty.

ILLINOIS CHILD POVERTY BY RACE/ETHNICITY³⁸

| Group | Poverty Rate | Number in Poverty |
|--------------------|--------------|-------------------|
| Asian | 8.3% | 9,688 |
| Black | 38.8% | 220,177 |
| Hispanic | 23.0% | 148,831 |
| White Non-Hispanic | 8.6% | 152,635 |

Since 1999, the child poverty rate in Illinois has grown by 19.6%.³⁹

Children that live in families with the potential for only one wage earner are hard hit by poverty.

POVERTY RATES FOR ILLINOIS CHILDREN BY FAMILY TYPE, 2006⁴⁰

| | |
|-------------------------|-------|
| Single-Father Families | 24.3% |
| Single-Mother Families | 43.9% |
| Married-Couple Families | 6.8% |

³⁴ McKernan, S. M., & Ratcliffe, C. (2002, December). Events that trigger poverty entries and exits. Washington, DC: The Urban Institute.

³⁵ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

³⁶ Ibid.

³⁷ Puccio, P. (2007, September). Income and poverty among older Americans in 2006. CRS Report for Congress. Washington, DC: Congressional Research Service, The Library of Congress.

³⁸ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

GENDER & Poverty

Women overall face barriers to avoiding poverty as do men and women with criminal records.

ILLINOIS POVERTY BY RACE/ETHNICITY FOR WOMEN & MEN AGES 18 TO 64⁴¹

| Group | Women | Men |
|--------------------|-------|-------|
| Asian | 8.5% | 9.2% |
| Black | 26.6% | 19.6% |
| Hispanic | 18.7% | 11.2% |
| White Non-Hispanic | 8.7% | 6.5% |

Though women in general continue to have higher poverty rates than men, since 1990, the rate of Illinois men in poverty has grown by 10.0% while the rate of Illinois women in poverty has grown by only 3.3%.⁴²

Changes in Illinois drug laws and enforcement have led to a skyrocketing prison population. Having a record is a huge barrier to getting a job and avoiding poverty.

PERCENT INCREASE IN ADMISSIONS TO ILLINOIS PRISONS FOR DRUG OFFENSES BY GENDER, EARLY 1980s TO EARLY 2000s⁴³

| Gender | Percent Increase |
|----------------|------------------|
| Illinois Men | 2650% |
| Illinois Women | 4041% |

IMMIGRANTS & Poverty

Immigrants in Illinois are only slightly more likely to be in poverty than their native-born counterparts.

ILLINOIS POVERTY BY NATIVITY⁴⁴

| Group | Poverty Rate | Number in Poverty |
|--------------|--------------|-------------------|
| Native Born | 12.2% | 1,308,994 |
| Foreign Born | 13.1% | 230,039 |

Immigrants in Illinois have relatively little affect on poverty rates. Without the foreign-born population, the Illinois poverty rate would only be one tenth of a percentage point less.⁴⁵

Illinois children living in immigrant families have the same poverty rate as children living in U.S.-born families.⁴⁶

⁴¹ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance

⁴² U.S. Census Bureau, 1990 Decennial Census & 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

⁴³ Kana-Wilds, K., Janicsek, J., & Clark, B. (n.d.). Intersecting issues: impacts of Illinois' drug policies. Chicago: The Illinois Consortium on Drug Policy, Institute for Metropolitan Affairs, Roosevelt University

⁴⁴ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance

Spotlight on Challenges to Women's Economic Well-Being

Though women bear substantial responsibility for their families' economic well-being, they face many challenges to economic security. In recent decades women have entered the workforce at unprecedented rates, yet women are still disproportionately impacted by poverty. Women are particularly vulnerable to poverty for a number of reasons:

Being paid less at work:

- Women are paid lower wages than men for comparable work.
- Women are more likely to work in low-paying occupations.

Child rearing and care giving responsibilities:

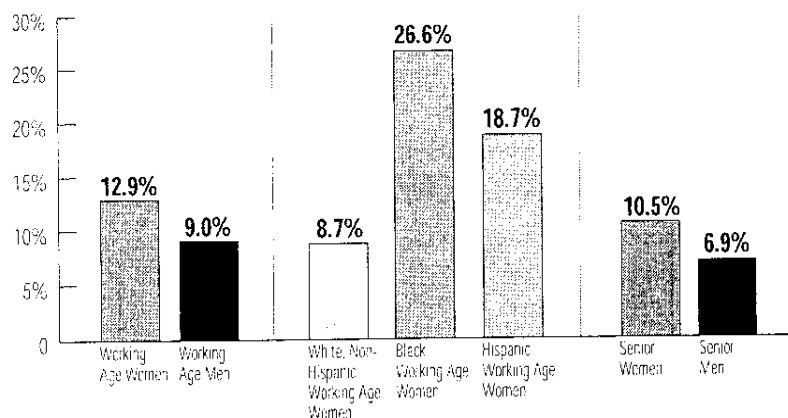
- Women may need to reduce hours or work part time.
- Women may have to take a leave of absence or retire early.

Having a much smaller retirement cushion:

- Women have lower lifetime earnings.
- Women own fewer assets and consequently have much less wealth.

These factors have forced many women and families to try to make ends meet on low incomes and have pushed others into poverty. System and policy changes must be designed to ensure family economic well-being.

Illinois women are significantly more likely to be poor than men during their working and child-rearing years as well as during retirement or old age, and minority women are particularly impacted.⁴⁷



Illinois Poverty Rates by Gender and Race/Ethnicity, 2006

Finding: Low earnings and low-paying occupations are key determinants of women's poverty.

Meaningful work opportunities that pay family-sustaining wages are vital to preventing poverty and for helping people escape poverty, yet troublesome disparities continue to exist between the incomes and earnings of Illinois women and men who work full time, year round:⁴⁸

- The median annual income for Illinois women is \$35,192, which is \$11,518 less than Illinois men.
- Illinois women make \$0.75 for every dollar Illinois men make.
- Women make less than men in every single industry in Illinois. The same holds true for every single class of paid workers — private, nonprofit, government, and self-employed — and every occupation group.

If women were paid the same as comparable men, even if only for the hours women currently work, a recent study shows that poverty rates would fall by half for both single mothers and married women.⁴⁹

Many factors help explain the poverty experiences and different wages between men and women:

- I. Women and men tend to work in different industries, with women underrepresented in a number of higher-paying industries, and overrepresented in low-paying ones.⁵⁰

Higher-Paying Industries: Illinois Women Comprise a Smaller Share of the Workforce

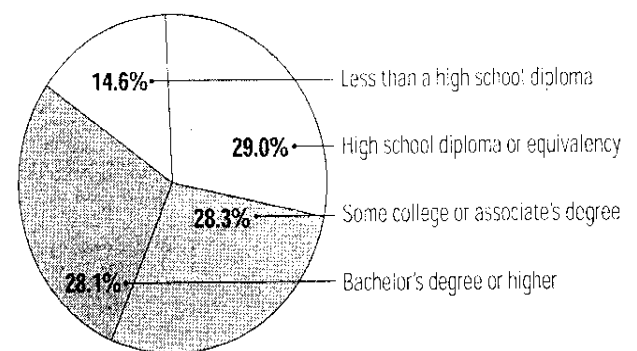
| | |
|--|-------|
| Construction..... | 7.9% |
| Transportation and warehousing, and utilities..... | 23.1% |

Lower-Paying Industries: Illinois Women Comprise a Greater Share of the Workforce

| | |
|---|-------|
| Education, health care, and social assistance..... | 71.4% |
| Arts/entertainment, recreation, accomodation & food svcs..... | 40.1% |
| Other services, except public administration..... | 40.9% |

- II. Households headed by someone without a high school degree are the most likely to enter poverty of any educational grouping,⁵¹ and have lower earnings. Education has significant value in reducing poverty; just one year of post-secondary education has been shown to cut the poverty rates of households headed by women of color in half.⁵²

Over 2 in 5 Women in Illinois Have Only a High School Diploma or Less⁵³



⁴⁸ U.S. Census Bureau, 2006 American Community Survey, calculated and conducted by the Mid-America Institute on Poverty of Heartland Alliance.
⁴⁹ Hartmann, H. L., Allen, K., & Owens, C. (1990). Equal pay for working families. Washington, DC: AFL-CIO & Institute for Women's Policy Research.
⁵⁰ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.
⁵¹ McKenna, S. M., & Ratcliffe, C. (2002, December). Events that trigger poverty entries and exits. Washington, DC: The Urban Institute.
⁵² Cox, K. J., & Spriggs, W. (2002). Negative effects of TANF on college enrollment. Washington, DC: National Urban League Institute for Opportunity and Equality.

Discrimination and other hard to measure factors likely play a significant role in the earnings gap between women and men. A study that analyzed the period from 1983 to 2000 found that approximately over half of the wage gap between men and women could not be explained by the differences in human capital, industry and occupation, unionization, and work hours.⁵⁴

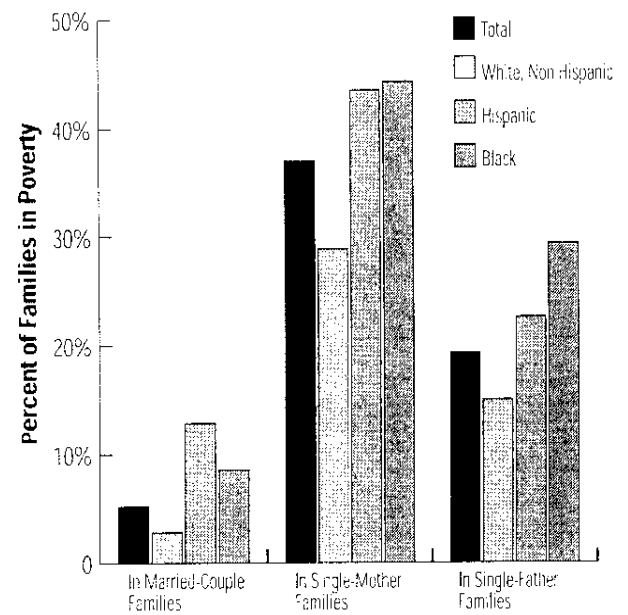
Finding: Women who are heads of households with children and women with care giving responsibilities are extremely vulnerable to poverty.

Households headed by women are far more likely to be poor than other types of households:

- In Illinois, there are over 403,756 Illinois households with children headed by women, and 24.3% of all Illinois children live in female-headed households.⁵⁵
- The poverty rate for female-headed households with children is 2.6 times as high as the overall family poverty rate in Illinois. 149,460 female-headed Illinois families with children are in poverty.⁵⁶

- Households headed by a single mother are much more likely to be poor than those headed by married-couple parents.⁵⁷

Poverty Rates for Illinois Families with Children by Race/Ethnicity, 2006



- Many female-headed households begin with a divorce. In Illinois, over half a million adult women are divorced, and 19.3% of them are living in poverty.⁵⁸ Median household income for divorced households with children declines 40%, on average, during the 5 years following divorce.⁵⁹
- Only 31% of Illinois female-headed families received child support in 2004.⁶⁰

⁵⁴ U.S. General Accounting Office. (2003). Women's earnings: Work patterns partially explain difference between men's and women's earnings. GAO-04-35. Washington, DC: Author.

⁵⁵ U.S. Census Bureau. 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ U.S. Census Bureau. Current Population Survey 2006-2007 Annual Social and Economic Supplement, Microdata, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

⁵⁹ Amato, P. & Maynard, R. (2007). Decreasing nonmarital births and strengthening marriage to reduce poverty. *The Future of Children*, 17 (2), 117-141. (citing McLanahan, S., & Sandefur, G. (1994).

Growing up with a single parent. Cambridge: Harvard University Press.)

Female-headed households' status is closely tied to poverty because single-parent families typically have just one potential earner and are less likely than married parents to have a full-time worker. When there is only one adult earner in the household, fewer hours are worked and fewer hours are available to be worked due to care giving responsibilities:

- Employment rates are high for single women. In Illinois, three quarters work with 58.7% working full time and 41.3% working part time or part year.⁶¹
- Nationally, among women ages 20 to 64 who did not work for 4 or more consecutive months, 39% of were taking care of children or others. This is the primary reason among these women for not working.⁶²

Women are much more likely to be in a caregiver role than men. Research reveals that working caregivers can incur significant losses in career development, salary, and retirement income, and can incur substantial out-of-pocket expenses as a result of their care giving obligations.⁶³

- Nearly 25% of U.S. households have at least one adult who has provided care for an elderly person at some point during the past 12 months.⁶⁴
- 84% of caregivers make formal adjustments to their work schedules: 33% decrease hours, 22% take a leave of absence, 20% switch from full to part time, 16% quit their job, and 13% retire early.⁶⁵
- 40% of caregivers reported that care giving affected their job advancement.⁶⁶
- Nearly two thirds of caregivers report that care giving had a direct negative impact on their earnings.⁶⁷

⁶¹ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

⁶² Dolrazaq, N. (2007, September). Reasons people do not work. 2004 Household Economic Studies, PR0-111. Washington, DC: U.S. Department of Commerce, U.S. Census Bureau.

⁶³ MetLife Market Institute of Metropolitan Life Insurance Company. (1999, November). The MetLife Juggling Act Study: Balancing caregiving with work and the costs involved. New York: Author.

⁶⁴ Ibid.

⁶⁵ Ibid.

⁶⁶ Ibid.

Finding: Looking toward the future, women face having fewer assets to fall back on and low retirement income.

Women often have fewer assets to depend on in times of need. Historically, women have faced barriers to or been prevented from acquiring assets, especially property and capital, which has contributed to disparities in wealth:

- 26.7% of female-headed Illinois households are asset poor compared to 14.8% of male-headed households.⁶⁸
- Illinois households headed by women have a median net worth of \$50,200 compared to men's \$92,200.⁶⁹

The disadvantages of women's lower wages and earnings last into retirement for many women, especially women who are heads of households. Having spent fewer years in the workforce and having received lower wages results in less retirement savings and Social Security for women, making older women particularly vulnerable to poverty. Married senior women typically fare better until becoming widowed, when their Social Security benefit is cut by one third to one half, and their pension benefit is either reduced or disappears.⁷⁰ Therefore women, who typically outlive men, face a reduction in income. Also, because they live longer, the purchasing power of their retirement income is eroded by inflation.



Policy recommendations to expand opportunities for women include:

- Provide paid sick leave for Illinois workers who do not currently have paid sick days. This would help millions of Illinois workers stay home when illness strikes without having to forfeit a day's wage.
- Support low-wage workers and their families by making it easier to receive Food Stamps, medical, and cash assistance by allowing clients to select the office that is most accessible to them for applications and ongoing case management.
- Make child care more affordable for working families by raising income eligibility guidelines to 200% of the poverty line and adopting a co-payment scale that makes them affordable while capping them at 10% of family income.
- Increase state financial aid resources so that awards better reflect student need and more low-income Illinoisans can afford to increase their educational attainment.
- Increase the monthly TANF cash assistance grant by 15% to help poor families with dependent children.

Women daily face a daunting task of balancing work and care giving responsibilities. The job opportunities available to women are often low-paying and lack flexibility. These factors impede women's chances to ensure their families' economic well-being now and into the future. Opportunities for women must be strengthened to guarantee that their hard work is rewarded, that care giving and child rearing are supported, and that in retirement, senior women have what they need to make ends meet.

⁶⁸ CFED. (2008). 2007-2008 Assets and opportunity scorecard. Retrieved March 4, 2008. From <http://www.cfed.org/focus.n?parentid=37&siteid=2477&id=2474>

⁶⁹ Ibid.

Momentum to Address Poverty in the United States

A large number of Americans see poverty and hardship in their communities firsthand:⁷¹

- 45% of Americans say that they **regularly cross paths** with people who are struggling to make ends meet.
- 50% of Americans say that there are **a lot of people struggling to make ends meet** in their own communities.
- 50% of Americans **personally know someone** in their community that is working two or more jobs and is still struggling to make ends meet.

With poverty and hardship hitting so close to home, people are identifying poverty as a problem in this country and looking to leaders for solutions. This section highlights the opinions and attitudes of people throughout America and illustrates the growing collective voice behind taking action to eliminate poverty. Also showcased are a number of efforts that are working toward poverty reduction by implementing solutions to affect long-term change.

With the support of the American public, the momentum of poverty reduction efforts from across the country, and new collective efforts in our own state of Illinois, there is renewed hope and real possibility for meaningful solutions to poverty that can ultimately reduce hardship and expand opportunity for millions, strengthening communities, states, and the nation.

Throughout the Nation and Illinois, People are Voicing the Need to Address Poverty.

Recent polls and surveys show there is a voice growing stronger in America today. It's the voice of every day Americans who are saying that in the Land of Opportunity, people should not be living in poverty. This collective voice is saying that poverty is a moral issue that must be addressed. It is saying that addressing poverty is pragmatic both for people who are poor and for society in general. It is declaring that we must work together toward comprehensive and sustainable solutions.

Poverty as a Problem and Moral Issue

37% of American voters consider poverty a very severe problem in the United States.⁷²

When American voters are asked, "Which one of the following do you think is the biggest moral issue?" the number one answer is fighting hunger/poverty.⁷³

48% of Americans say that helping people in their communities who are struggling is a top concern.⁷⁴

Support for Government Efforts to Address Poverty & Hardship

56% of American voters say the government is doing too little to combat poverty.⁷⁵

90% of Americans say that it is important that local elected officials work to help people struggling to make ends meet.⁷⁶

54% of American voters do not believe that "political candidates have spent an adequate amount of time discussing hunger and poverty issues."⁷⁷

69% of Americans agree that the government should care for those who can't care for themselves.⁷⁸

54% of Americans believe that the government should help the needy even if it means greater debt.⁷⁹

64% of people say they would be likely to pay \$50 more per year in taxes to go to programs in their own communities that help people struggling to make ends meet.⁸⁰

⁷² Rasmussen Reports. (2007, July 19). 56% say government doing too little to combat poverty. Retrieved September 10, 2007, from http://www.rasmussenreports.com/public_content/politics/current_events/general_current_events/56_say_government_doing_too_little_to_combat_poverty

⁷³ Freedman, T.Z., McLaughlin, J., Gossen, N., Lindsey, M., Mertz, C., & Paik, S. (2007, October). New attitudes about poverty and hunger: The rise of the "do right" voter and other lessons from recent research. Washington, DC: The Alliance to End Hunger.

⁷⁴ Northwest Area Foundation. (2007, April). Struggling to make ends meet: What can be done? Who should do it? St. Paul, MN: Authors.

⁷⁵ Rasmussen Reports. (2007, July 19). 56% say government doing too little to combat poverty. Retrieved September 10, 2007, from http://www.rasmussenreports.com/public_content/politics/current_events/general_current_events/56_say_government_doing_too_little_to_combat_poverty

⁷⁶ Northwest Area Foundation. (2007, April). Struggling to make ends meet: What can be done? Who should do it? St. Paul, MN: Authors.

⁷⁷ Freedman, T.Z., McLaughlin, J., Gossen, N., Lindsey, M., Mertz, C., & Paik, S. (2007, October). New attitudes about poverty and hunger: The rise of the "do right" voter and other lessons from recent research. Washington, DC: The Alliance to End Hunger.

⁷⁸ Pew Research Center. (2007, March). Trends in political values and core attitudes, 1987-2007. Retrieved February 22, 2008, from <http://people-press.org/reports/display.php3?ReportID=312>

⁷⁹ Ibid.

A Sample of Poverty Reduction Strategies, Campaigns, and Initiatives from Across the Nation

There are movements afoot across the country to reduce poverty. Some of them target state legislation as a mechanism for achieving change. Others rally a broad base of support among community members, religious institutions, local governments, and business leaders who feel compelled to act. While their players differ and their approaches vary in method and scope, these efforts are expanding the notion of addressing poverty past the charitable realm and into the realm of broadly shared responsibility.

National Movement

U.S. House of Representatives

On January 22, 2008, the House passed a Sense of Congress resolution that sets a national goal of cutting poverty in half over the next 10 years. The resolution states that poverty "can be seen as a deep, structural problem that implicates our value system and our educational and economic institutions," and that poverty may be defined as "lack of basic necessities of life such as food, shelter, clothing, health care, education, security, and opportunity." While non-binding, the resolution is an important expression of where the House stands and its readiness to consider future legislation.⁶¹

Center for American Progress — *From Poverty to Prosperity: A National Strategy to Cut Poverty in Half* Drawing on the expertise of a task force of diverse national experts, the strategy calls for cutting poverty in half in the next 10 years and proposes specific strategies to reach the goal.⁶²

Catholic Charities USA — Campaign to Reduce Poverty in America

The Campaign seeks to reduce poverty in the country by 50 percent by the year 2020 by improving public policies that strengthen and support families.⁶³

Sojourners/Call to Renewal — *From Poverty to Opportunity — A Covenant for a New America* The aim of this initiative is to make overcoming poverty a moral priority by putting poverty onto the national agenda through elections and legislation, and to build the political will to overcome poverty.⁶⁴

Community Action Partnership — Rooting Out Poverty: A Campaign by America's Community Action Network

With over 1,000 participating agencies, the Campaign is a call for action at the national, state, and community levels to promote economic security for all Americans, especially those who are poor.⁶⁵

State-Based Initiatives

Connecticut — *Child Poverty Prevention Council* The Council is charged with creating a plan that will cut in half the number of children experiencing poverty by 2014.

Iowa — *Successful Families Caucus* The Caucus is designed to engage legislators in considering comprehensive state policy that will begin to address the needs of Iowa's poorest families and communities.

Alabama — *House Task Force on Poverty* Created by the House Speaker, the Task Force, which is comprised of legislators, nonprofit leaders, and people experiencing poverty, expects to consider legislative proposals on poverty for the 2008 session.

Minnesota — *Legislative Commission to End Poverty* In 2006, the Legislature created the Commission to prepare recommendations by the end of 2008 for consideration in the 2009 assembly on how to end poverty.

Vermont — *Child Poverty Council* The Child Poverty Council is charged with creating a 10-year plan to reduce child poverty by 50 percent.

Wisconsin — *Vision 2020* Vision 2020 seeks to increase knowledge about child poverty, discuss solutions, and convince state policymakers that eliminating child poverty should be their top priority.

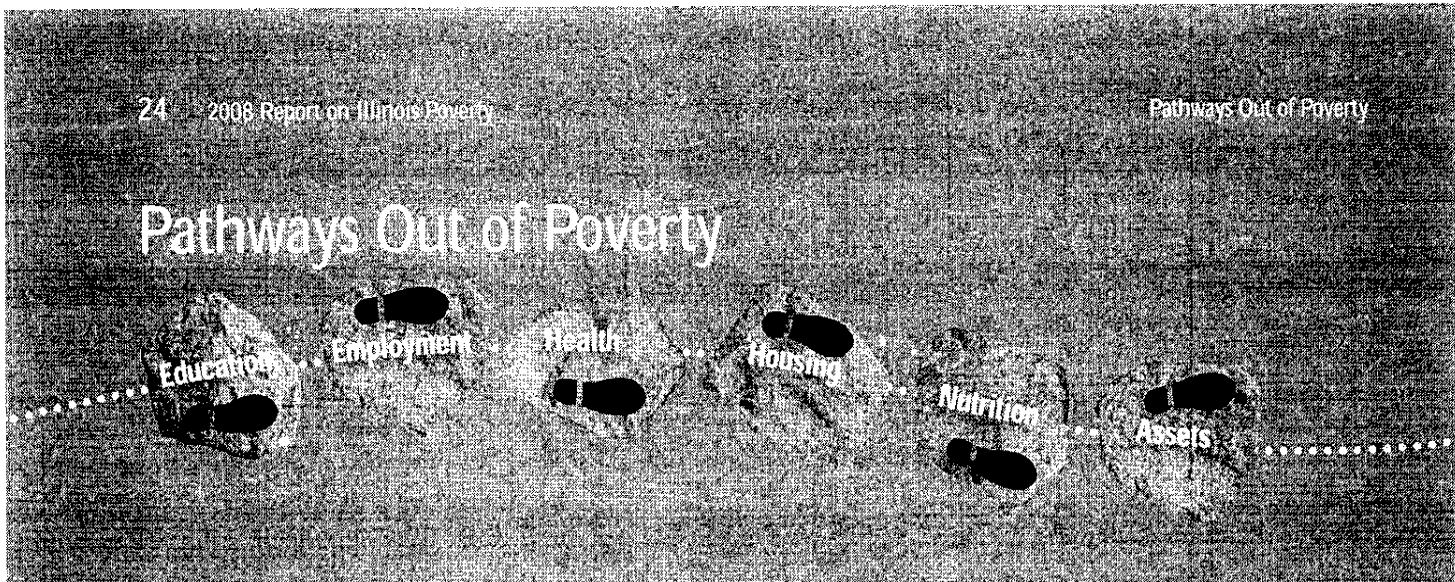
Illinois — *From Poverty to Opportunity Campaign: Realizing Human Rights in Illinois* The Campaign has mobilized thousands of individuals and organizations from across Illinois who believe that freedom from poverty is a human right and who say that we should work toward eradicating poverty. To this end, the Campaign is working to establish a Commission on the Elimination of Poverty to be charged with creating a poverty eradication strategy for Illinois that is grounded in human rights standards. This strategy will be a substantive, measurable plan to cut extreme poverty in half by the year 2015.

⁶¹ Center for American Progress, (2008, January 25). House embraces poverty goal. Retrieved March 2, 2008, from http://www.americanprogress.org/issues/2008/01/poverty_goal.html

⁶² <http://www.americanprogress.org/projects/poverty>

⁶³ <http://www.catholiccharitiesusa.org/NetCommunity/Page.aspx?pid=897&wid=301>

⁶⁴ http://www.sojourners.net/index.cfm?action=action_04VA&item=04VA_main



The pathway out of poverty is comprised of individual yet interdependent stepping stones, each representing an area in which families must gain a foothold to escape poverty. A negative event occurring in one stepping stone area has the potential to undermine stability in all areas and can catapult families into poverty. For instance, if a family experiences a job loss, they may lose health insurance, be unable to purchase adequate food, and their ability to keep their home may become jeopardized. As more steps are compromised, it becomes more difficult for families to work themselves out of poverty without adequate supports.

The state's ability to provide the supports to help Illinois families avoid or escape poverty is dependent on adequate revenue. Though Illinois has wisely identified education, health care, and human services as priorities, the state's ability to make progress in these areas is severely undermined by the failure to fix the state budget's structural deficit. Illinois' system of generating revenue is antiquated, not taxing the growing parts of our economy. Illinois faces a revenue shortfall year after year, with the cost of simply maintaining current services significantly exceeding revenue.

As a result, Illinois' infrastructure of services and supports continues to weaken, creating problems now and into the future. Providers of essential services go without a cost of doing business adjustment, sometimes for several years in a row, limiting their capacity and weakening their ability to maintain existing programs and services. Families and communities go without the supports that can make a difference in whether or not they are able to get by, let alone get ahead.



Enact comprehensive reform of Illinois' revenue system to cure the structural deficit and provide adequate dollars for the general revenue fund to support the state's priorities, including the fight against poverty and adequate funding for human services.

Education



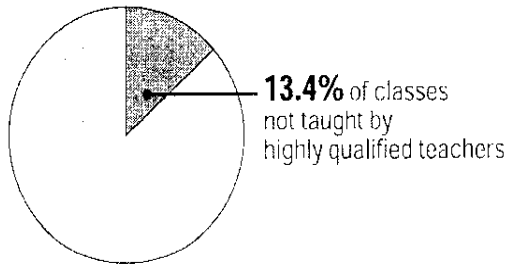
All Illinois children and youth should have equal access to quality education. The reality is that many are unable to realize the promise of education due to unequal resource distribution, resulting performance disparities, and rising costs.

Illinois Graduation Rate, 2006-2007⁸⁶
85.9%

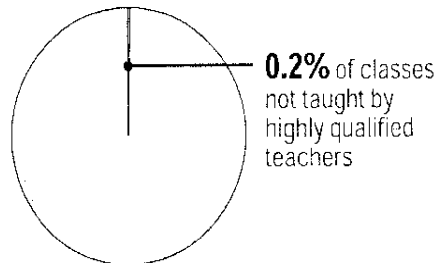
Illinois public schools with high percentages of poor children have fewer highly qualified teachers than schools with lower percentages of poor children.

Percent of Public School Classes Not Taught by Highly Qualified Teachers⁸⁷

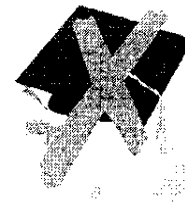
High Poverty Schools



Low Poverty Schools

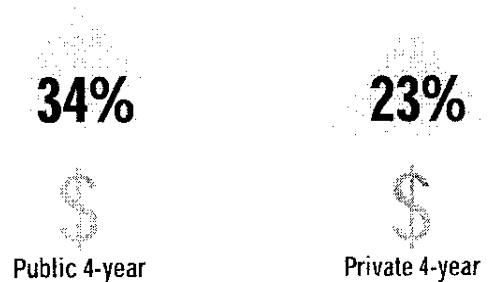


42.8% of Illinois African American male 9th graders and 53.4% of Illinois Latino male 9th graders will not graduate from high school 4 years later.⁸⁸



The cost of college has soared, often forcing students to take on unmanageable debt, which is an additional barrier to low-income students attaining higher education.

Rise in Illinois College Costs from 2000-2001 to 2004-2005 School Year⁸⁹



Create an Illinois Commission on Children and Youth to develop a strategic plan for state investments in programs and services for children and youth. Include a focus on education completion to help ensure that all youth have the opportunity to earn a high school diploma and receive appropriate individualized supports when they face challenges in doing so.

⁸⁶ Illinois State Board of Education, (n.d.). 2006-2007 State school report card. Springfield, IL: Author.
⁸⁷ Ibid.
⁸⁸ Editorial Projects in Education Research Center, (June 2007). Illinois diplomas count. Ready for work? Bethesda, MD: Author.

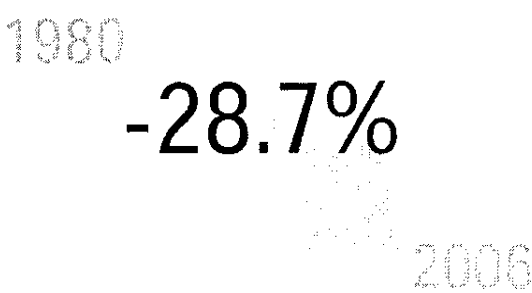
Employment



Illinois Unemployment Rate, 2007⁹¹
5.0%

Realizing the right to work rests on three things: good jobs that pay living wages, a skilled workforce, and a strong safety net that supports workers, people who are unemployed, and those unable to work.⁹¹

Over the last few decades, median hourly wages have fallen for Illinoisans with less than a high school diploma.*⁹²



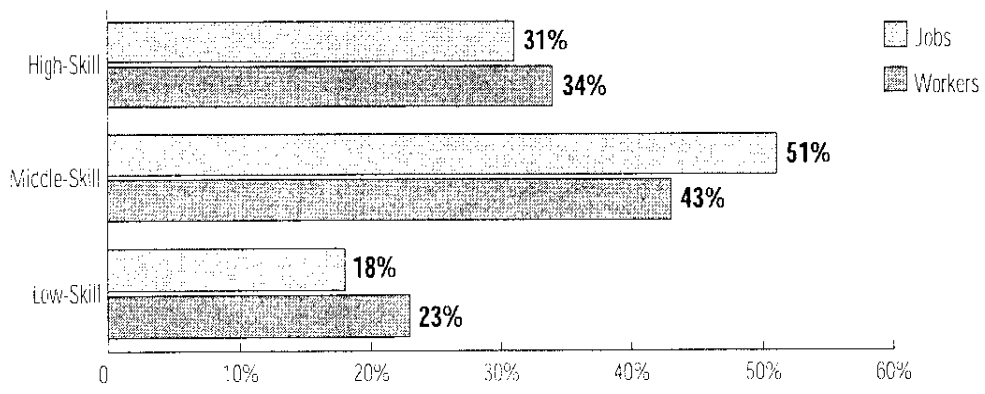
*when adjusted for inflation

Around **2.5 million**

Illinois workers do not get paid sick days, including three fourths of low-wage earners.⁹³

There is a mismatch between available jobs in Illinois and the skill level of Illinois workers, resulting in too many Illinois workers struggling to find decent jobs and too many employers struggling to find skilled employees.

Illinois Jobs and Workers by Skill Level, 2004⁹⁴



Increase investments into effective training strategies to prepare the Illinois workforce for the future and help make Illinois more competitive in recruiting new businesses to grow job opportunities.

⁹¹ Illinois Department of Employment Security, "Local Employment Dynamics," (n.d.). Annual average data. Retrieved March 8, 2008, from <http://imi.iles.state.il.us/ils/laus/screen.htm>
⁹² Theodore, N., & Duossard, M. (2006, September 6). The hidden public cost of low-wage work in Illinois. Chicago & Berkeley, CA: Center for Urban Economic Development & Center for Labor Education and Research.
⁹³ Center for Tax and Budget Accountability & Northern Illinois University. (2007). The state of working Illinois: Chicago & DeKalb, IL. Author.
⁹⁴ Lovell, V. (forthcoming). Taking care: Adequacy and equity of paid leave. Washington, DC: Institute for Women's Policy Research, calculation conducted by Women Employed.

Health

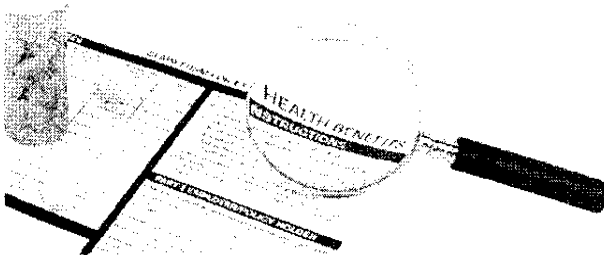
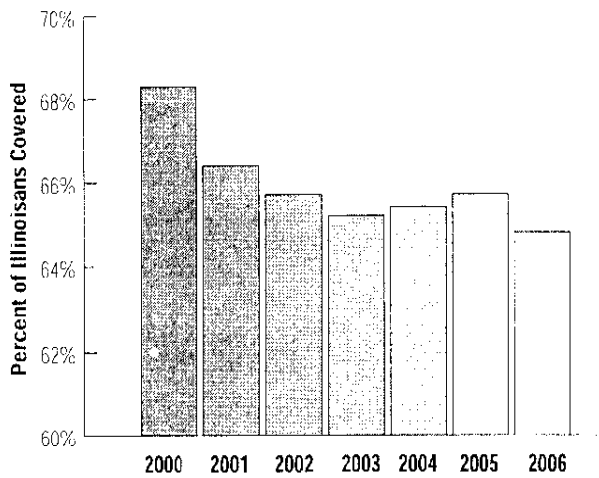


People in poverty are less able to access preventive care, have limited opportunity to engage in health-promoting activities, and are less likely to be offered health insurance through their jobs. These issues, compounded by rising health care costs, leave low-income Illinoisans struggling to meet their health needs.

**Illinois Health
Uninsurance Rate
Ages 0 to 64, 2006⁹⁵**
15.5%

Since 2000, the rate of Illinoisans covered by health insurance offered through the workplace has declined.

Illinoisans Covered by Employer-Sponsored Health Insurance⁹⁶



Expand public health insurance coverage to poor adults who are currently not eligible (nonelderly, childless, and non-disabled) to ensure that those least able to obtain coverage can have this first crucial component to accessing care.

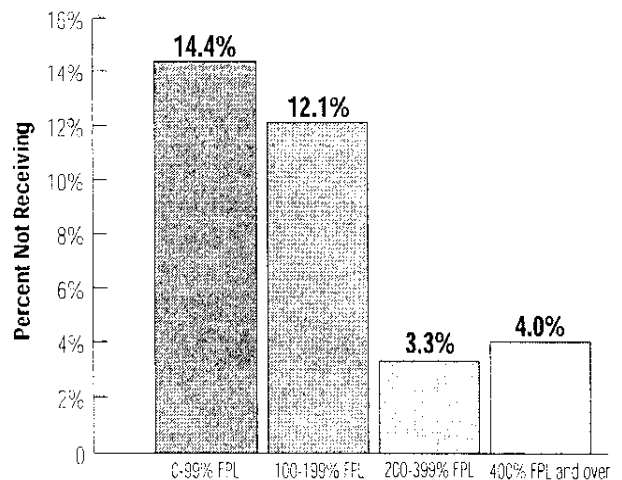
Medical-related bankruptcies

Jumped 2,200%

from the early 1980s to the early 2000s.⁹⁷

The pain associated with many untreated oral conditions can render concentration difficult, leading to diminished school performance and increased days absent.

Percent of Illinois Children Not Receiving all Needed Dental Care, by Income⁹⁸



⁹⁵ U.S. Census Bureau, Current Population Survey 2006-2007 Annual Social and Economic Supplement, Microdata; calculations conducted by the Mid-America Institute on Poverty at Heartland Alliance.
⁹⁶ U.S. Census Bureau, Current Population Survey 2001-2007 Annual Social and Economic Supplement, Microdata; calculations conducted by the Mid-America Institute on Poverty at Heartland Alliance.
⁹⁷ Himmelstein, D.U., Warren, E., Thorne, D., & Woolhandler, S. (2005, February). Illness and injury as contributors to bankruptcy. Health Affairs Web Exclusive, 63-73.
⁹⁸ National Survey of Children's Health. (2003). Data query. Retrieved June 15, 2007, from <http://nschdata.org/DataQuery/>

Housing

Education

Employment

Health



Education

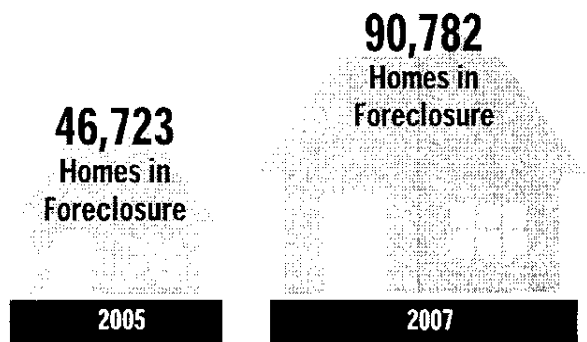
Assets

Illinois Rent-Burdened Households, 2006⁹⁹
49.3%

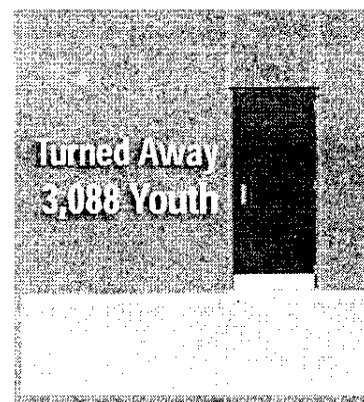
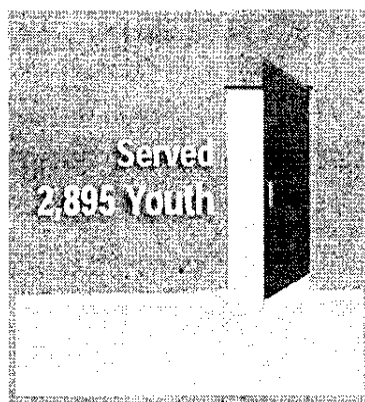
Safe, decent, and affordable housing is a human right. Affordable housing is part of our basic infrastructure — just like roads, bridges, and schools — on which businesses and communities depend.

While demand is growing, since 2000 alone more than 10,000 units of subsidized affordable housing have been lost to market-rate and condominium conversions in Illinois.¹⁰⁰

The number of Illinois properties in foreclosure nearly doubled from 2005 to 2007.¹⁰¹



Illinois homeless youth providers had more requests for services than they could fulfill in 2007, due to lack of funding.¹⁰²



Include affordable housing construction and rehabilitation in the proposed capital budget to both provide and expand safe, decent, affordable housing options and help improve Illinois' economy.

⁹⁹ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance
¹⁰⁰ Illinois Housing Development Authority, (2008, January), On the road to success: Illinois' comprehensive housing plan, Chicago, Author.
¹⁰¹ Realty Trac, (2008, January 29), U.S. foreclosure activity increases 75 percent in 2007, Retrieved February 21, 2008, from <http://www.realtytrac.com/ContentManagement/pressrelease.aspx?ChannelID=9&ItemID=3989&acct=64847>
¹⁰² Chicago Coalition for the Homeless, (2007), Results of 2007 survey of unaccompanied homeless youth providers, Chicago, IL: Author.

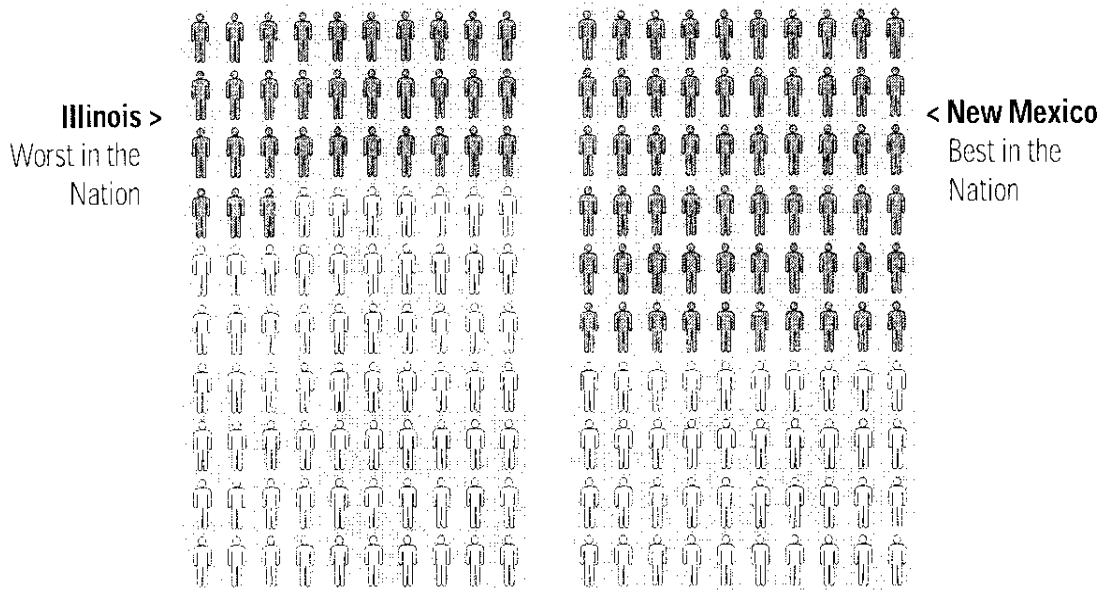
Nutrition



Though freedom from hunger is a human right, the ability of poor and low-income families to access adequate food is often limited. Families who are struggling to get by are often forced to make tradeoffs to make food last longer. This may mean skipping meals or eating meals sporadically, which can lead to a variety of negative health and educational outcomes.

Illinois Food Insecurity Rate, 2006¹⁰³
9.8%

Illinois ranks 48th among all states for school breakfast participation with nearly half the participation of the highest ranked state.¹⁰⁴



Students Participating in the School Breakfast Program per 100 in the School Lunch Program, 2006-2007 School Year

172,795 Illinois households experiencing hunger
 + **311,034** Illinois households experiencing food insecurity
483,829 Illinois households at risk of the negative effects of hunger and improper nutrition.¹⁰⁵

The Food Stamp Program is an important line of defense against hunger and undernutrition, yet 25.5% of Illinois households eligible for Food Stamps are not receiving the benefit.¹⁰⁶



Implement a universal school breakfast program, rather than an optional program, in Illinois districts with high percentages of low-income students. This can significantly increase low-income student participation in the program since it reduces stigma and eliminates fee barriers for many low-income families.

¹⁰¹ Nord, M., Andrews, M., & Carlson, S. (2007, November). Household food security in the United States: 2006. Economic Research Report Number 49. Washington, DC: U.S. Department of Agriculture Economic Research Service.
¹⁰² Food Research and Action Center. (2007, December). School Breakfast scorecard 2007. Washington, DC: Author.
¹⁰³ Nord, M., Andrews, M., & Carlson, S. (2007, November). Household food security in the United States: 2006. Economic Research Report Number 49. Washington, DC: U.S. Department of Agriculture Economic Research Service. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.
¹⁰⁴ Albolida, R., Boushey, H., Chimento, E., Ray, R., & Zippner, B. (2007, October). Bridging the gaps: A picture of how work supports work in ten states. Washington, DC & Boston: Center for Economic and Policy Research & Center for

Assets



Illinois Asset Poverty Rate, 2004¹⁰⁷
20.5%

Assets are pools of resources and as such act as a security against unforeseen events. Assets are also investments in that they generate returns and generally increase family wealth over time.¹⁰⁸ Developing a solid asset base, in the form of savings, education, and/or homeownership is critical for Illinoisans to prevent future poverty.

1 in 5

Illinois households is asset poor meaning they do not have enough saved to survive at the poverty level if they should lose their income.

There has been little progress on reducing asset poverty since the mid-1990s.¹⁰⁹

15.4%

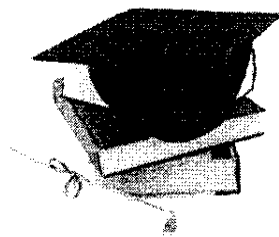
of all Illinois households have zero or negative net worth, meaning they may owe more than they own. There are also striking racial disparities in net worth.

Median Net Worth of Illinois Households by Race, 2004¹¹⁰

White – \$128,444

Minority – \$12,100

As an asset, education has a cumulative life-long impact in the form of higher annual incomes and more money to put away into savings or investments such as a home.



Illinois Educational Attainment, 2006¹¹¹

| Highest Educational Level Attained | Percent of Illinois Adults age 25 and Over | Median Annual Earnings |
|------------------------------------|--|------------------------|
| Less than a high school diploma | 15.0% | \$20,019 |
| High school diploma | 28.9% | \$27,048 |
| Some college or associate's degree | 27.3% | \$33,383 |
| Bachelor's degree | 18.1% | \$47,484 |
| Graduate or professional degree | 10.8% | \$60,695 |



Create a universal Children's Savings Account program in Illinois that includes financial education to ensure that all children have the opportunity for lifelong learning and asset building by providing youth and their families with the tools to accumulate savings.

¹⁰⁷ CFED, (2007), 2007-2008 Assets and opportunity scorecard. Retrieved January 3, 2009, from <http://www.cfed.org/>?axis=ml&parentid=318&stoid=2471&id=2475
¹⁰⁸ Carasso, A., & McKernan, S.M. (2007, November). The balance sheets of low-income households: What we know about their assets and liabilities. Washington, DC: The Urban Institute.
¹⁰⁹ CFED, (2008). 2007-2008 Assets and opportunity scorecard. Retrieved February 5, 2008, from <http://www.cfed.org/focus.cfm?parentid=318&stoid=2471&id=2475>
¹¹⁰ Ibid.
¹¹¹ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance

Working Toward Change in the Heart of Central Illinois: DeWitt County and the City of Clinton

2006 Population

DeWitt County
167,768

City of Clinton
7,331

Special thanks to Mayor Ed Woller, City of Clinton; Sherry Fulton, University of Illinois Extension Service; Patrice Jones, Illinois Coalition for Community Services; Helen Michelassi, DeWitt County Human Resource Center; Anita Russell, Central Illinois Economic Development Corporation; Tim Steel, DeWitt County Human Resource Center; and Terry Tedrick, DeWitt County Health Department for their time spent in helping tell this story.

The county seat of DeWitt County, Clinton, began as a prairie town in 1835. The 1840's were the heyday of circuit riders in Clinton, and during this period Abraham Lincoln had a law office in town. The first locomotive moved into town in 1854, and by the end of the decade had ushered in a social and economic transformation that moved Clinton from a rough settlement into a thriving town. However, the railroad's prosperity was undermined by the Great Depression, so the city of Clinton turned to the area's farmers to maintain the local economy. For the last half-century, Clinton relied on a variety of industry and manufacturing to preserve economic stability.¹¹²

The town is currently redefining itself as a bedroom community within a tourism corridor of lakes, state parks, the state Capitol, and antiques. Located in the heart of central Illinois, Clinton is in close proximity to four urban hubs: Springfield, Champaign-Urbana, Bloomington-Normal, and Decatur. With a charming city center, Clinton has a hometown atmosphere and has ideal amenities for raising a family including small schools and a supportive community.

While some industry still remains, Clinton has experienced a decline in its industrial base and the changing local economy has put the squeeze on many families. In the last decade a major employer, Revere-Corning, closed its Clinton plant and moved operations overseas. In addition to a decline in manufacturing, other factors are impacting residents, including growth in low-paying jobs, less local tax revenue available to fund services and infrastructure, an aging population, and climbing costs of basic goods.

Impacts are being felt at all levels. Community members report that poverty now feels more pervasive than in the past. Middle-class families are struggling to keep their heads above water. People who used to contribute to nonprofits are now in need themselves. Families are living doubled and tripled up with others. One local leader explained, "We have come across three families living in one home and recently found 11 people living in one double-wide trailer."

¹¹² City of Clinton. (n.d.). Clinton Illinois. Retrieved March 8, 2006, from <http://www.clintonillinois.com/?page=history>

¹¹³ U.S. Census Bureau, Population Estimates.



About 4 years ago community leaders in Clinton and DeWitt County came together to identify local improvements for residents who were struggling. Representatives of faith communities, local government, health care professionals, social service agencies, school districts, and the public health department discussed issues faced by those in need in their communities, identified what they were currently doing to address those issues, and then sought ways for those in need to become empowered and self sufficient. The group identified poverty as a serious problem in the area and decided to form a Poverty Action Coalition united by the common goal of addressing the root causes of poverty. They began to work locally to improve the following:

- Job loss has led to a growing need for employment assistance. Coalition members organized a job readiness training for low-skilled job seekers which included interviewing skills, dressing for success, and creating a resume.
- There is no public transportation in DeWitt County. Volunteers provide some transportation support for people who need ongoing medical care, though they are overburdened with requests. Coalition members met with the state to discuss the problem and consequently, a transportation company is finally coming to DeWitt County.
- Hunger, particularly for children in Clinton, continues to be an ongoing issue. In the past the summer food program only targeted residents

of public housing, though many more in the community were in need. Coalition members are now working to open the program to the entire community and it looks promising that this will happen. In addition, the schools are working on technology that will help reduce stigma for low-income kids by make it unnecessary for them to publicly identify that they are eligible for a free or reduced price school lunch.

Educational Attainment for Population Age 25 and Over, 2000¹¹⁴

| Highest Educational Level Attained | Illinois | DeWitt County | City of Clinton |
|------------------------------------|----------|---------------|-----------------|
| Less than a high school diploma | 18.6% | 16.5% | 18.5% |
| High school diploma | 27.7% | 43.6% | 43.3% |
| Some college or associate's degree | 27.6% | 26.4% | 26.7% |
| Bachelor's degree or higher | 26.1% | 13.4% | 11.5% |

- The Coalition's future agenda includes increasing opportunities for more youth to go on to higher education. They are considering doing workshops on financial aid programs to help people learn about and apply for student aid.

¹¹⁴ U.S. Census Bureau, 2000 Decennial Census, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.



Ed Wollet was elected Mayor of Clinton in 2007. Increasing employment opportunities, retaining current businesses, and increasing jobs skills of current residents are on the top of his to do list. Many people leave DeWitt County every day to commute to employment in neighboring cities and counties. “Low-income folks who lost jobs at Revere can’t as easily travel outside of the town for jobs.” Recruiting new business to Clinton could help broaden both the tax base and opportunities for residents. “While the state does offer some incentives for new businesses to come in, when an existing company is struggling it is hard to get the same level of state assistance – and we end up losing good businesses. Helping the struggling businesses is job retention.”

Mayor Wollet also seeks to increase job skills of unemployed residents to make them competitive in the local labor market. He wants to partner with higher education institutions to increase worker skills, offer on-the-job training, and provide other resources the Clinton workforce needs. Decatur’s Richland Community College has an extension in Clinton located in the high school. He hopes to partner with Richland to raise the literacy levels of unemployed adults and adults in low-wage jobs, and to train people for the industries that are in Clinton and for those that may come. “In 4 years when I’m done with this term, my goal is have fewer families with low incomes -- as a measure I’d like to see fewer kids eligible for free and reduced price school lunches.”

Communities across Illinois have assets as well as struggles. What sets Clinton and DeWitt County apart is the commitment and action of leaders to enrich the community for all residents. “Everyone deserves basic human dignity and opportunities regardless of income.”

1 in Every 10 Residents of DeWitt County and Clinton is Living in Poverty

| | Overall Poverty | Child Poverty |
|---|-----------------|---------------|
| DeWitt County, 2005 rate ¹¹⁵ | 9.8% | 15.5% |
| City of Clinton, 2000 rate ¹¹⁶ | 10.8% | 16.2% |

Percent of Children Eligible for Free and Reduced Price School Lunches, 2006-2007¹¹⁷

| | Percent Eligible |
|-----------------|------------------|
| DeWitt County | 34.7% |
| City of Clinton | 35.8% |

¹¹⁵ U.S. Census Bureau, Small Area Income and Poverty Estimates 2005

¹¹⁶ U.S. Census Bureau, 2000 Decennial Census

¹¹⁷ Illinois State Board of Education, (2007). Nutrition programs, Free and Reduced-Price Meal eligibility data. Retrieved March 4, 2008, from http://www.isbe.state.il.us/nutrition/nutris/eligibility_list.nut.htm, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

County Well-Being Indicators

Four key indicators of well-being are assessed in each of Illinois' 102 counties – high school graduation rates, unemployment rates, teen birth rates, and poverty rates. Counties in Illinois are evaluated using a point system, with the higher number of points indicating a worse score. A point is given to a county if its rate is higher than the state average and/or if they have worsened since the previous year. For each indicator a total of 2 points is possible and overall a total of 8 points is possible. Counties that score 4 or 5 points are placed on a Watch List and counties that score 6, 7, or 8 points are placed on a Warning List.

Using this methodology, **66 Illinois counties have been placed on either the Poverty Watch or Poverty Warning lists.**

Number of counties changing lists:

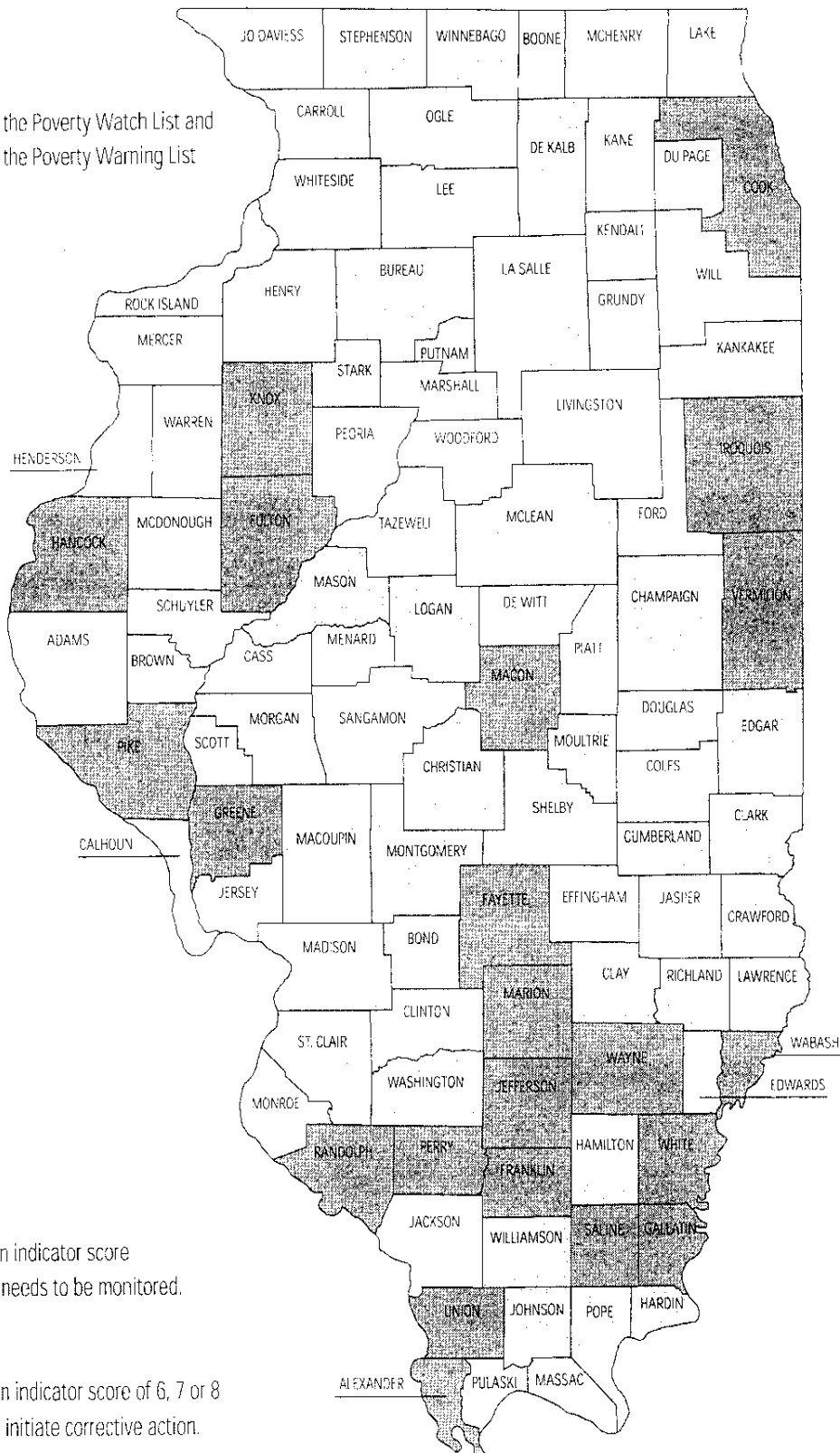
| | |
|---|----|
| Worsened (from Watch to Warning or not on a list to Watch or Warning) | 30 |
| Improved (from Warning to Watch or Watch to not on a list) | 25 |
| No change (on same list as last year) | 47 |

The County Well-Being Indicators illustrate that poverty and hardship are not limited to one region of the state. Counties all across Illinois struggle with poverty-related issues. This year's Watch and Warning lists must serve as a wake-up call for leaders to begin deliberate efforts to reverse these trends in their communities.


Often the agencies that provide data for the County Well-Being Indicator report improvement methods or correct errors, which results in changes to the numbers and analyses in previous years' reports. Each year, the most current accurate data are re-gathered and subsequent changes to Watch or Warning List status are incorporated before comparing one year to the next.

Countries of Concern

44 counties are on the Poverty Watch List and
22 counties are on the Poverty Warning List



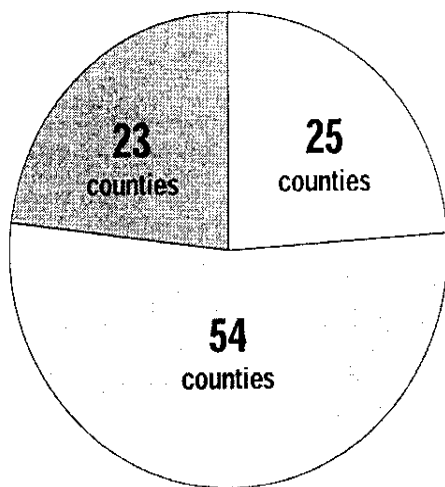
Watch
 County has an indicator score of 4 or 5 and needs to be monitored.

 **Warning**
 County has an indicator score of 6, 7 or 8 and needs to initiate corrective action.

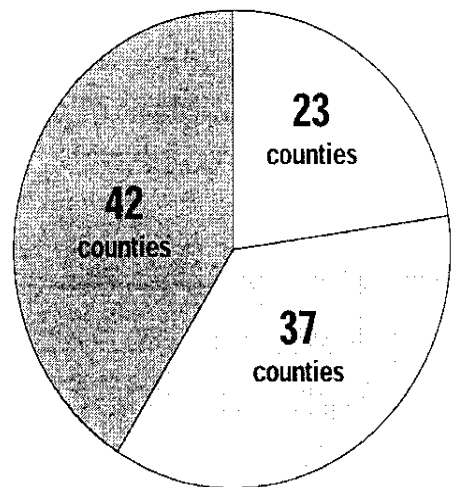
Overview of Counties by Well-Being Indicator

This overview of the well-being indicators shows how Illinois as a whole is faring on each of the four well-being indicators.

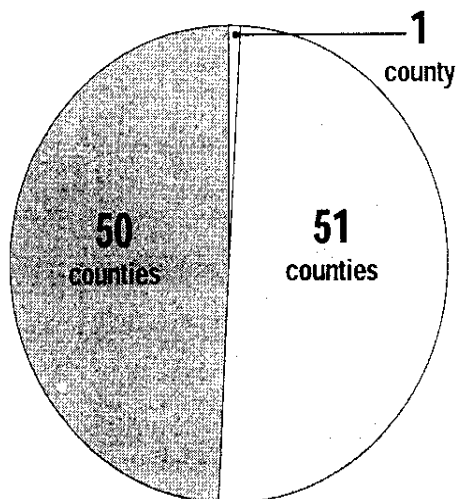
Teen Birth Rates



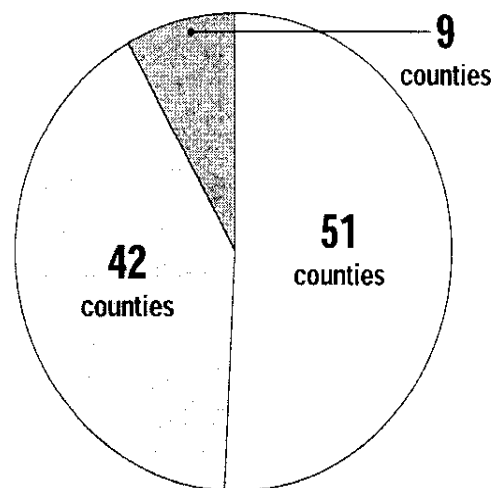
Poverty Rates



Unemployment Rates



Graduation Rates



A point is given to a county if its rate is higher than the state average and/or if they have worsened since the previous year.

- Counties with zero points
- Counties with one point
- Counties with two points

See footnotes in tables on the following pages.

Overview of Counties by Well-Being Indicator

Bold — Counties on the Watch List (see page 35)
Bold Italic — Counties on the Warning List (see page 35)

| County | ISBE High School Grad Rate, 2006-2007 ¹³ | Point Change in Grad Rates from Previous Year ¹³ | Teen Birth Rate, 2005 ¹⁴ | Point Change in Teen Birth Rate from Previous Year ¹⁴ | Unemployment Rate, August 2007 ¹⁵ | Point Change in Unemployment Rate from Previous August ¹⁵ | Poverty Rate, 2005 ¹⁶ | Point Change in Poverty Rate from Previous Year ¹⁶ |
|-------------------|---|---|-------------------------------------|--|--|--|----------------------------------|---|
| Illinois | 85.9% | -1.9% | 9.7% | -0.2% | 5.2% | 0.7% | 12.0% | 0.1% |
| Adams | 90.0% | 0.3% | 12.0% | -2.2% | 4.5% | 0.9% | 11.2% | -0.1% |
| Alexander | 95.2% | -1.8% | 24.6% | 3.2% | 9.1% | 0.1% | 33.9% | 10.1% |
| Bond | 89.0% | 5.0% | 10.6% | -0.9% | 5.4% | 0.5% | 12.8% | 1.6% |
| Boone | 85.1% | 0.2% | 8.6% | 0.6% | 6.2% | 1.1% | 8.0% | 0.1% |
| Brown | 98.1% | -1.9% | 9.3% | 2.2% | 3.1% | 0.1% | 13.9% | 1.6% |
| Bureau | 89.5% | -3.6% | 8.6% | 1.0% | 5.1% | 1.0% | 10.1% | 1.3% |
| Calhoun | 96.7% | 3.7% | 6.9% | -8.8% | 6.4% | 1.5% | 10.4% | 1.5% |
| Carroll | 97.9% | 9.6% | 11.3% | 0.0% | 5.2% | 0.7% | 10.9% | 0.8% |
| Cass | 95.6% | 1.4% | 10.1% | -2.1% | 4.6% | 0.3% | 11.8% | 1.1% |
| Champaign | 92.7% | 2.1% | 9.0% | 0.3% | 4.9% | 0.8% | 17.7% | 4.3% |
| Christian | 87.8% | 2.2% | 11.7% | -3.2% | 5.5% | 0.5% | 11.4% | 0.3% |
| Clark | 91.7% | -5.9% | 10.3% | -2.9% | 5.8% | 0.6% | 11.9% | 1.3% |
| Clay | 90.0% | 2.0% | 12.1% | -0.2% | 6.3% | 1.3% | 13.3% | 1.2% |
| Clinton | 93.5% | 5.8% | 7.2% | -0.3% | 5.1% | 0.3% | 7.5% | -0.1% |
| Coles | 88.8% | 2.3% | 9.1% | -1.3% | 4.9% | 0.3% | 18.8% | 4.4% |
| Cook | 78.5% | -4.6% | 10.7% | -0.4% | 5.4% | 0.7% | 15.0% | -0.2% |
| Crawford | 95.3% | 1.0% | 14.3% | -1.2% | 6.0% | 0.9% | 13.7% | 1.8% |
| Cumberland | 98.0% | -0.7% | 11.0% | 4.4% | 5.3% | 0.7% | 10.9% | 0.6% |
| DeKalb | 92.3% | -1.6% | 6.4% | -1.0% | 4.6% | 0.9% | 14.6% | 5.0% |
| DeWitt | 90.8% | 2.6% | 11.7% | 2.8% | 5.2% | 1.1% | 9.8% | -0.5% |
| Douglas | 94.7% | -5.3% | 6.5% | -2.0% | 4.7% | 0.4% | 7.5% | -0.7% |
| DuPage | 95.5% | 1.2% | 4.1% | 0.0% | 3.9% | 0.5% | 5.0% | -1.0% |
| Edgar | 89.4% | -2.3% | 12.9% | -1.7% | 5.2% | 0.6% | 13.2% | 1.0% |
| Edwards | 100.0% | 7.1% | 9.3% | 0.6% | 5.3% | 0.8% | 10.5% | 1.1% |
| Effingham | 89.6% | -3.3% | 8.3% | -1.5% | 4.2% | 0.1% | 9.2% | 0.0% |
| Fayette | 88.6% | -2.4% | 10.3% | -0.4% | 6.7% | 1.3% | 15.3% | 1.7% |
| Ford | 89.2% | 6.6% | 7.0% | -4.3% | 5.2% | 0.8% | 9.1% | 1.0% |
| Franklin | 91.9% | -1.4% | 10.4% | -1.1% | 9.2% | 1.7% | 16.7% | 1.3% |
| Fulton | 85.6% | -6.0% | 10.2% | -3.5% | 5.8% | 0.4% | 12.1% | 0.0% |
| Gallatin | 100.0% | 0.0% | 22.6% | 17.5% | 6.8% | 0.4% | 18.9% | 2.8% |
| Greene | 84.7% | -4.3% | 14.9% | 7.0% | 5.4% | 0.4% | 13.7% | 1.2% |
| Grundy | 93.0% | -2.3% | 6.9% | -1.1% | 5.1% | 0.4% | 5.3% | -0.7% |

*At the time of print, these are the most accurate August unemployment rates available from the Illinois Department of Employment Security.

¹³ Illinois State Board of Education. (n.d.). 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author.

¹⁴ Illinois State Board of Education. (n.d.). 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author. calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹⁵ Illinois Department of Public Health. (n.d.). Illinois teen births by county. Retrieved March 10, 2008, from <http://www.idph.state.il.us/health/teen/teen0304.htm>

¹⁶ Illinois Department of Public Health. (n.d.). Illinois teen births by county. Retrieved March 10, 2008, from <http://www.idph.state.il.us/health/teen/teen0304.htm>, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹⁷ Illinois Department of Employment Security. Local Area Unemployment Statistics. (n.d.). Annual average data. Retrieved March 8, 2008, from <http://lm.illides.state.il.us/laus/lausmenu.htm>

¹⁸ Illinois Department of Employment Security. Local Area Unemployment Statistics. (n.d.). Annual average data. Retrieved March 8, 2008, from <http://lm.illides.state.il.us/laus/lausmenu.htm>, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹⁹ U.S. Census Bureau. Small Area Income and Poverty Estimates, 2005.

²⁰ U.S. Census Bureau. Small Area Income and Poverty Estimates, 2004-2005. calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

Overview of Counties by Well-Being Indicator (continued)

Bold — Counties on the Watch List (see page 35)**Bold Italic** — Counties on the Warning List (see page 35)

| County | ISBE High School Grad Rate, 2006-2007 ¹¹⁸ | Point Change in Grad Rates from Previous Year ¹¹⁹ | Teen Birth Rate, 2005 ¹²⁰ | Point Change in Teen Birth Rate from Previous Year ¹²¹ | Unemployment Rate, August 2007 ¹²² | Point Change in Unemployment Rate from Previous August ¹²³ | Poverty Rate, 2005 ¹²⁴ | Point Change in Poverty Rate from Previous Year ¹²⁵ |
|------------------|--|--|--------------------------------------|---|---|---|-----------------------------------|--|
| Illinois | 85.9% | -1.9% | 9.7% | -0.2% | 5.2% | 0.7% | 12.0% | 0.1% |
| Hamilton | 92.3% | -3.5% | 6.5% | -9.4% | 6.2% | 0.5% | 13.8% | 1.2% |
| Hancock | 95.3% | -2.6% | 12.1% | 2.6% | 6.0% | 1.1% | 11.0% | 1.2% |
| Hardin | 94.1% | -0.2% | 11.1% | -12.0% | 8.8% | -0.2% | 19.0% | 3.7% |
| Henderson | 97.0% | 16.7% | 9.1% | -2.2% | 4.8% | -0.2% | 11.8% | 1.4% |
| Henry | 91.9% | 0.1% | 8.5% | 1.8% | 4.9% | 1.0% | 10.3% | 2.1% |
| Iroquois | 85.0% | -2.6% | 11.8% | 1.6% | 5.1% | 1.0% | 10.5% | 0.3% |
| Jackson | 97.1% | 6.3% | 8.7% | -2.1% | 5.3% | 0.9% | 29.1% | 8.9% |
| Jasper | 100.0% | 2.1% | 9.3% | -3.5% | 5.5% | 0.0% | 10.8% | 0.8% |
| Jefferson | 80.6% | 0.3% | 14.3% | -1.1% | 5.5% | 0.7% | 15.6% | 1.7% |
| Jersey | 96.8% | -0.8% | 9.5% | -1.2% | 5.6% | 1.1% | 8.2% | -0.3% |
| Jo Daviess | 94.2% | 2.1% | 5.5% | -4.1% | 3.9% | 0.6% | 9.0% | 1.2% |
| Johnson | 95.6% | -3.7% | 6.8% | -0.2% | 6.7% | 1.2% | 14.9% | 1.4% |
| Kane | 90.3% | 0.6% | 8.9% | 0.2% | 4.5% | 0.6% | 8.5% | 0.6% |
| Kankakee | 87.0% | 1.9% | 11.1% | -1.1% | 6.6% | 1.0% | 13.1% | 1.2% |
| Kendall | 95.0% | 3.9% | 3.8% | -0.7% | 4.6% | 0.7% | 3.1% | -1.0% |
| Knox | 83.9% | -1.7% | 14.7% | 3.3% | 5.5% | 0.2% | 14.7% | 1.3% |
| Lake | 90.0% | -4.1% | 7.1% | 0.4% | 5.1% | 0.9% | 7.0% | -0.1% |
| LaSalle | 92.1% | 1.9% | 9.5% | 1.1% | 6.1% | 1.1% | 11.7% | 1.9% |
| Lawrence | 87.0% | 0.8% | 7.9% | -6.3% | 5.6% | 0.1% | 14.9% | 1.8% |
| Lee | 91.9% | 7.0% | 10.7% | 2.7% | 5.4% | 1.0% | 9.2% | -0.1% |
| Livingston | 93.1% | 3.8% | 11.2% | 2.0% | 4.9% | 0.7% | 9.7% | -0.4% |
| Logan | 86.7% | -3.6% | 16.4% | 3.5% | 5.2% | 0.3% | 11.3% | 0.6% |
| Macon | 84.2% | -1.1% | 16.3% | 2.0% | 6.5% | 0.8% | 15.2% | 0.9% |
| Macoupin | 94.7% | 5.3% | 13.7% | 3.7% | 6.0% | 1.1% | 10.4% | -0.2% |
| Madison | 88.3% | -3.6% | 11.1% | -0.5% | 5.8% | 0.8% | 11.0% | -0.2% |
| Marion | 80.0% | 3.9% | 17.2% | 1.8% | 7.3% | 1.0% | 16.1% | 2.5% |
| Marshall | 97.6% | 5.5% | 11.0% | 0.8% | 4.2% | 0.4% | 8.0% | -0.1% |
| Mason | 88.8% | 3.4% | 13.9% | -0.3% | 7.7% | 1.1% | 14.2% | 2.9% |
| Massac | 93.2% | 2.6% | 13.9% | -6.2% | 6.0% | 0.3% | 16.4% | 2.6% |
| McDonough | 94.8% | -0.3% | 9.2% | 0.8% | 5.0% | 0.1% | 20.9% | 4.5% |
| McHenry | 93.3% | 0.9% | 5.5% | 0.1% | 4.1% | 0.7% | 4.6% | 0.1% |
| McLean | 88.9% | -3.2% | 7.4% | 0.8% | 4.3% | 0.7% | 11.4% | 1.3% |
| Menard | 94.4% | -4.5% | 6.3% | -3.2% | 4.5% | 0.9% | 9.3% | 0.5% |
| Mercer | 94.0% | 0.1% | 10.6% | 1.7% | 4.9% | 0.3% | 8.1% | -0.5% |
| Monroe | 98.7% | 6.6% | 3.5% | -1.0% | 4.6% | 0.5% | 3.8% | -0.2% |

*At the time of print, these are the most accurate August unemployment rates available from the Illinois Department of Employment Security.

¹¹⁸ Illinois State Board of Education. (n.d.). 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author.¹¹⁹ Illinois State Board of Education. (n.d.). 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author; calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.¹²⁰ Illinois Department of Public Health. (n.d.). Illinois teen births by county. Retrieved March 10, 2008, from <http://www.idph.state.il.us/health/teen/teen0304.htm>¹²¹ Illinois Department of Public Health. (n.d.). Illinois teen births by county. Retrieved March 10, 2008, from <http://www.idph.state.il.us/health/teen/teen0304.htm>; calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.¹²² Illinois Department of Employment Security. Local Area Unemployment Statistics. (n.d.). Annual average data. Retrieved March 8, 2008, from <http://il.mides.state.il.us/laus/lausmenu.htm>¹²³ Illinois Department of Employment Security. Local Area Unemployment Statistics. (n.d.). Annual average data. Retrieved March 8, 2008, from <http://il.mides.state.il.us/laus/lausmenu.htm>; calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.¹²⁴ U.S. Census Bureau. Small Area Income and Poverty Estimates 2005.¹²⁵ U.S. Census Bureau. Small Area Income and Poverty Estimates 2004-2005; calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

Overview of Counties by Well-Being Indicator (continued)

Bold — Counties on the Watch List (see page 35)
Bold Italic — Counties on the Warning List (see page 35)

| County | ISBE High School Grad Rate, 2006-2007 ¹⁸ | Point Change in Grad Rates from Previous Year ¹⁹ | Teen Birth Rate, 2005 ²⁰ | Point Change in Teen Birth Rate from Previous Year ²¹ | Unemployment Rate, August 2007 ²² | Point Change in Unemployment Rate from Previous August ²³ | Poverty Rate, 2005 ²⁴ | Point Change in Poverty Rate from Previous Year ²⁵ |
|--------------------|---|---|-------------------------------------|--|--|--|----------------------------------|---|
| Illinois | 85.9% | -1.9% | 9.7% | -0.2% | 5.2% | 0.7% | 12.0% | 0.1% |
| Montgomery | 86.4% | 1.1% | 15.6% | -0.1% | 6.8% | 1.0% | 15.4% | 2.5% |
| Morgan | 98.6% | 4.3% | 11.9% | -2.2% | 5.5% | 0.6% | 13.6% | 1.2% |
| Moultrie | 93.9% | -4.8% | 9.8% | 0.1% | 4.4% | 0.6% | 9.5% | 1.2% |
| Ogle | 90.3% | -0.3% | 8.6% | 0.2% | 5.6% | 0.9% | 8.4% | -0.3% |
| Peoria | 91.2% | 4.2% | 13.3% | -0.8% | 5.1% | 0.7% | 12.8% | -0.4% |
| Perry | 91.0% | 6.5% | 12.9% | 0.3% | 9.8% | 2.5% | 16.2% | 2.4% |
| Piatt | 95.6% | -1.2% | 4.8% | -2.5% | 4.4% | 0.6% | 6.2% | -0.2% |
| Pike | 85.2% | -6.4% | 11.7% | -0.6% | 4.6% | 0.2% | 14.3% | 1.7% |
| Pope | 87.8% | 14.8% | 15.0% | -10.0% | 8.3% | 0.9% | 17.9% | 2.5% |
| Pulaski | 100.0% | 1.4% | 23.3% | -2.5% | 8.1% | 0.2% | 28.7% | 8.0% |
| Putnam | 89.5% | -0.5% | 3.2% | -4.3% | 5.7% | 1.2% | 6.6% | 0.2% |
| Randolph | 89.0% | -6.0% | 10.1% | -3.6% | 6.0% | 1.0% | 12.8% | 0.8% |
| Richland | 92.9% | 0.6% | 12.7% | 0.6% | 5.3% | 0.1% | 15.2% | 2.9% |
| Rock Island | 85.1% | 0.0% | 12.4% | -1.5% | 4.7% | 0.6% | 13.4% | 1.4% |
| Saline | 84.9% | -3.2% | 16.3% | -2.3% | 7.3% | 1.2% | 20.6% | 4.5% |
| Sangamon | 93.6% | 1.3% | 10.8% | -0.7% | 5.0% | 0.8% | 11.2% | 0.9% |
| Schuyler | 95.8% | 2.2% | 1.4% | -4.7% | 3.9% | 0.1% | 11.2% | 1.1% |
| Scott | 93.1% | 0.1% | 11.8% | -5.3% | 4.6% | 0.1% | 10.6% | 0.8% |
| Shelby | 91.5% | -1.9% | 10.9% | -0.7% | 5.3% | 0.5% | 10.5% | 1.0% |
| St. Clair | 88.6% | 2.1% | 13.9% | -0.7% | 6.8% | 0.8% | 13.0% | -2.0% |
| Stark | 86.4% | -13.6% | 9.1% | 3.4% | 5.5% | 1.0% | 10.4% | 1.1% |
| Stephenson | 91.9% | -0.9% | 13.0% | -0.5% | 5.5% | 0.9% | 10.7% | -0.1% |
| Tazewell | 89.9% | 0.3% | 8.8% | -0.5% | 4.8% | 0.9% | 8.7% | 0.1% |
| Union | 86.5% | -1.0% | 9.9% | -1.4% | 7.2% | 1.6% | 16.7% | 2.6% |
| Vermilion | 79.2% | 0.1% | 16.2% | -0.2% | 7.1% | 1.0% | 18.3% | 3.4% |
| Wabash | 97.8% | 9.4% | 13.0% | 4.4% | 6.7% | 1.5% | 14.8% | 3.0% |
| Warren | 89.4% | -0.6% | 8.5% | -3.0% | 5.2% | 0.2% | 13.3% | 2.0% |
| Washington | 92.2% | 0.5% | 12.2% | 5.2% | 5.1% | 1.1% | 7.8% | 0.6% |
| Wayne | 84.8% | -6.8% | 14.9% | 5.6% | 5.4% | 1.2% | 14.9% | 2.8% |
| White | 87.2% | -0.9% | 11.3% | -4.6% | 6.0% | 0.9% | 14.1% | 1.4% |
| Whiteside | 87.4% | 0.4% | 11.9% | -0.7% | 6.0% | 0.7% | 10.9% | 1.2% |
| Will | 88.5% | -0.9% | 6.0% | 0.3% | 4.8% | 0.7% | 5.4% | -1.2% |
| Williamson | 98.1% | 0.8% | 10.8% | -0.3% | 7.2% | 1.9% | 13.0% | -0.7% |
| Winnebago | 80.4% | 3.9% | 13.4% | 1.5% | 6.4% | 1.2% | 11.9% | -0.8% |
| Woodford | 94.6% | -1.5% | 6.7% | 0.4% | 3.9% | 0.7% | 5.5% | -0.5% |

¹⁸ At the time of print, these are the most accurate August unemployment rates available from the Illinois Department of Employment Security.

¹⁹ Illinois State Board of Education, (n.d.). 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author.

²⁰ Illinois State Board of Education, (n.d.). 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

²¹ Illinois Department of Public Health, (n.d.). Illinois teen births by county. Retrieved March 10, 2008, from <http://www.idph.state.il.us/health/teen/teen0304.htm>

²² Illinois Department of Public Health, (n.d.). Illinois teen births by county. Retrieved March 10, 2008, from <http://www.idph.state.il.us/health/teen/teen0304.htm>. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

²³ Illinois Department of Employment Security, Local Area Unemployment Statistics, (n.d.). Annual average data. Retrieved March 6, 2008, from <http://lma.des.state.il.us/lmaus/ausmenu.htm>

²⁴ Illinois Department of Employment Security, Local Area Unemployment Statistics, (n.d.). Annual average data. Retrieved March 6, 2008, from <http://lma.des.state.il.us/lmaus/ausmenu.htm>. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

²⁵ U.S. Census Bureau, Small Area Income and Poverty Estimates, 2005.

²⁶ U.S. Census Bureau, Small Area Income and Poverty Estimates, 2006-2005. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

Appendix

The following tables provide detailed information on each county in Illinois relating to income, poverty, housing, health, and education. For the poverty rate by county, see pages 37-39. A new table has been added this year containing data on income and poverty by Congressional District and can be found on page 50.

Income & Poverty

| County | Number of People in Poverty, 2005 ¹⁵ | Poverty Rate for Population Under Age 18, 2005 ¹⁵ | Bankruptcies Per 1,000 People, 2006 ¹⁶ | Net Job Flow, 2005 ¹⁶ | Change in Average New Hire Monthly Earnings, 2004 to 2005 ¹⁷ | Percent Change in Average New Hire Monthly Earnings, 2004 to 2005 ¹⁷ | Average Wage per Job, 2006 ¹⁷ |
|-----------------|---|--|---|----------------------------------|---|---|--|
| Illinois | 1,484,992 | 16.5% | 2.3 | 114,631 | \$73 | 3.3% | \$45,032 |
| Adams | 7,172 | 15.5% | 2.3 | 1,123 | -\$117 | -7.5% | \$30,590 |
| Alexander | 2,826 | 57.2% | 6.1 | -104 | \$45 | 2.6% | \$29,271 |
| Bond | 1,991 | 15.4% | 2.4 | -66 | -\$747 | -46.1% | \$29,314 |
| Boone | 3,981 | 10.2% | 2.6 | 957 | -\$299 | -15.0% | \$46,388 |
| Brown | 671 | 12.8% | 1.2 | 143 | \$144 | 7.1% | \$33,844 |
| Bureau | 3,491 | 15.2% | 2.1 | -33 | \$254 | 13.6% | \$31,906 |
| Calhoun | 529 | 12.8% | 1.6 | 28 | \$29 | 2.1% | \$21,069 |
| Carroll | 1,725 | 16.9% | 1.8 | 44 | -\$317 | -24.8% | \$26,809 |
| Cass | 1,605 | 17.3% | 1.7 | 24 | -\$55 | -3.2% | \$27,384 |
| Champaign | 29,800 | 15.5% | 1.9 | 1,406 | -\$75 | -4.6% | \$33,051 |
| Christian | 3,770 | 17.0% | 2.1 | 145 | \$39 | 2.6% | \$28,717 |
| Clark | 1,980 | 17.7% | 3.6 | -44 | -\$118 | -9.1% | \$27,234 |
| Clay | 1,806 | 18.3% | 2.0 | 85 | -\$142 | -9.5% | \$28,536 |
| Clinton | 2,534 | 9.8% | 1.7 | 157 | \$33 | 2.5% | \$27,283 |
| Coles | 8,892 | 17.0% | 2.5 | 1,584 | -\$122 | -10.2% | \$27,050 |
| Cook | 780,189 | 21.4% | 2.3 | 27,847 | -\$35 | -1.4% | \$51,385 |
| Crawford | 2,494 | 19.5% | 3.0 | -28 | \$23 | 1.4% | \$34,307 |
| Cumberland | 1,172 | 16.2% | 2.5 | -70 | -\$208 | -18.4% | \$24,210 |
| DeKalb | 12,952 | 10.7% | 1.9 | 1,609 | -\$95 | -6.0% | \$31,893 |
| DeWitt | 1,595 | 15.5% | 2.6 | -160 | \$269 | 15.0% | \$37,613 |
| Douglas | 1,462 | 12.1% | 2.1 | 109 | -\$1 | -0.1% | \$29,964 |
| DuPage | 45,560 | 5.8% | 1.3 | 19,682 | -\$138 | -5.4% | \$50,420 |
| Edgar | 2,415 | 19.2% | 3.1 | -140 | -\$197 | -14.0% | \$28,029 |
| Edwards | 705 | 15.5% | 2.4 | -189 | -\$54 | -3.5% | \$29,160 |
| Effingham | 3,139 | 12.8% | 2.8 | 342 | \$244 | 14.2% | \$29,370 |
| Fayette | 3,048 | 22.1% | 1.4 | 50 | -\$288 | -22.8% | \$26,301 |
| Ford | 1,248 | 12.1% | 2.5 | -46 | -\$41 | -2.4% | \$28,780 |
| Franklin | 6,517 | 26.0% | 4.9 | 74 | -\$99 | -7.4% | \$27,039 |
| Fulton | 4,245 | 17.6% | 3.2 | 363 | -\$91 | -7.2% | \$25,428 |
| Gallatin | 1,146 | 27.7% | 3.9 | 143 | -\$34 | -1.8% | \$30,141 |
| Greene | 1,945 | 19.7% | 1.3 | 19 | -\$334 | -31.2% | \$23,351 |
| Grundy | 2,303 | 7.1% | 3.0 | 279 | \$336 | 14.4% | \$43,408 |

¹⁵ U.S. Census Bureau, Small Area Income and Poverty Estimates 2005.

¹⁶ Ibid.

¹⁷ FDIIC Regional Economic Conditions (2007): Personal bankruptcy filing rate, per 1,000 population, Illinois. Retrieved March 10, 2008, from http://www2.ilidc.gov/recon/svgs.asp?CPT_CODE=NBR&ST_CODE=17&RPT_TYPE=Tables

¹⁸ Illinois Department of Employment Security, Local Employment Dynamics. In (a). LEHD state of Illinois county reports - Quarterly Workforce Indicators. Retrieved January 15, 2008, from <http://mi.uides.state.il.us/IFD/default.htm>. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Bureau of Economic Analysis, Regional Economic Accounts, (2006, December), Local Area Personal Income: Average wage per job. Retrieved March 10, 2008, from <http://www.bea.gov/bea/regional/reis/>

Income & Poverty (continued)

| County | Number of People in Poverty, 2005 ¹⁴ | Poverty Rate for Population Under Age 18, 2005 ¹⁴ | Bankruptcies Per 1,000 People, 2005 ¹⁵ | Net Job Flow, 2005 ¹⁶ | Change in Average New Hire Monthly Earnings, 2004 to 2005 ¹⁶ | Percent Change in Average New Hire Monthly Earnings, 2004 to 2005 ¹⁶ | Average Wage per Job, 2005 ¹⁷ |
|-----------------|---|--|---|----------------------------------|---|---|--|
| Illinois | 1,484,992 | 16.5% | 2.3 | 114,631 | \$73 | 3.3% | \$45,032 |
| Hamilton | 1,115 | 21.0% | 1.9 | 48 | -\$134 | -10.7% | \$25,917 |
| Hancock | 2,061 | 15.3% | 2.1 | -2 | \$775 | 35.2% | \$24,877 |
| Hardin | 855 | 28.3% | 2.6 | 95 | -\$327 | -31.7% | \$24,964 |
| Henderson | 927 | 18.3% | 2.3 | -73 | -\$137 | -11.0% | \$23,205 |
| Henry | 5,129 | 15.2% | 2.1 | 430 | -\$218 | -16.8% | \$27,048 |
| Iroquois | 3,143 | 15.7% | 1.9 | 204 | \$194 | 9.3% | \$26,252 |
| Jackson | 15,281 | 27.1% | 3.2 | 719 | -\$165 | -12.0% | \$27,979 |
| Jasper | 1,076 | 15.8% | 1.8 | -25 | -\$33 | -2.3% | \$30,217 |
| Jefferson | 5,896 | 23.0% | 2.9 | -62 | -\$184 | -12.4% | \$32,320 |
| Jersey | 1,760 | 11.5% | 1.8 | 164 | \$21 | 1.6% | \$25,096 |
| Jo Daviess | 2,003 | 13.2% | 0.7 | 248 | -\$12 | -0.8% | \$26,957 |
| Johnson | 1,607 | 19.0% | 3.2 | 87 | \$24 | 1.5% | \$27,854 |
| Kane | 40,414 | 11.4% | 1.4 | 8,822 | -\$151 | -8.6% | \$39,182 |
| Kankakee | 13,510 | 18.6% | 3.2 | 2,101 | -\$146 | -8.9% | \$32,222 |
| Kendall | 2,431 | 4.3% | 1.9 | 2,641 | \$8 | 0.4% | \$37,515 |
| Knox | 7,162 | 21.3% | 3.2 | 198 | \$151 | 9.8% | \$28,581 |
| Lake | 48,048 | 8.9% | 1.6 | 9,166 | -\$102 | -3.9% | \$51,844 |
| LaSalle | 12,793 | 16.5% | 2.7 | 623 | -\$178 | -11.0% | \$32,861 |
| Lawrence | 2,163 | 21.6% | 1.8 | -180 | \$132 | 7.4% | \$27,938 |
| Lee | 3,017 | 12.0% | 2.4 | -154 | -\$211 | -12.4% | \$33,227 |
| Livingston | 3,481 | 12.9% | 2.3 | 129 | -\$457 | -28.8% | \$34,126 |
| Logan | 2,962 | 16.4% | 2.7 | 255 | -\$105 | -6.6% | \$29,762 |
| Macon | 16,121 | 24.5% | 3.2 | 171 | -\$105 | -5.8% | \$39,193 |
| Macoupin | 4,940 | 15.4% | 1.7 | 51 | \$40 | 2.9% | \$28,000 |
| Madison | 28,253 | 14.9% | 3.5 | 1,219 | -\$125 | -7.1% | \$34,625 |
| Marion | 6,277 | 23.6% | 3.3 | 540 | -\$202 | -14.1% | \$29,871 |
| Marshall | 1,034 | 11.3% | 2.9 | -72 | -\$79 | -5.3% | \$28,717 |
| Mason | 2,198 | 20.4% | 2.4 | 39 | -\$55 | -4.2% | \$27,026 |
| Massac | 2,462 | 23.9% | 4.3 | -37 | -\$328 | -22.4% | \$34,687 |
| McDonough | 5,596 | 21.6% | 1.6 | -32 | -\$56 | -4.6% | \$27,696 |
| McHenry | 13,922 | 5.5% | 1.6 | 3,857 | -\$3 | -0.2% | \$37,083 |
| McLean | 16,664 | 11.3% | 2.1 | 570 | \$68 | 3.7% | \$40,645 |
| Menard | 1,166 | 13.7% | 1.4 | 126 | -\$196 | -16.7% | \$23,936 |
| Mercer | 1,342 | 12.0% | 2.0 | 121 | \$100 | 7.4% | \$23,943 |
| Monroe | 1,177 | 4.3% | 1.9 | 221 | \$81 | 5.3% | \$28,776 |

¹⁴ U.S. Census Bureau, Small Area Income and Poverty Estimates, 2005¹⁵ Ibid.¹⁶ FRED Regional Economic Conditions (2007), Personal bankruptcy filing rate (per 1,000 population) Illinois. Retrieved March 10, 2008, from http://www2.fred.stlouisfed.org/fredcat/series.asp?CPT_CODE=NBPR&ST_CODE=17&RP1_TYPE=Tables¹⁷ Illinois Department of Employment Security, Local Employment Dynamics (L.E.D.) state of Illinois county reports - Quarterly Workforce Indicators. Retrieved January 15, 2006, from <http://mi.mides.state.il.us/LED/default.htm>, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.¹⁸ Ibid.¹⁹ Ibid.²⁰ Bureau of Economic Analysis, Regional Economic Accounts (2006), State-Self Local Area Personal Income: Average wage per job. Retrieved March 10, 2008, from <http://www.bea.gov/regional/ireis/>

Income & Poverty Indicators

| County | Number of People in Poverty, 2005 ¹²⁵ | Poverty Rate for Population Under Age 18, 2005 ¹²⁵ | Bankruptcies Per 1,000 People, 2006 ¹²⁶ | Net Job Flow, 2005 ¹²⁷ | Change in Average New Hire Monthly Earnings, 2004 to 2005 ¹²⁸ | Percent Change in Average New Hire Monthly Earnings, 2004 to 2005 ¹²⁸ | Average Wage per Job, 2006 ¹²⁹ |
|-----------------|--|---|--|-----------------------------------|--|--|---|
| Illinois | 1,484,992 | 16.5% | 2.3 | 114,631 | \$73 | 3.3% | \$45,032 |
| Montgomery | 4,259 | 20.1% | 2.5 | -25 | \$93 | 6.6% | \$28,926 |
| Morgan | 4,384 | 18.4% | 2.0 | -384 | -\$26 | -1.7% | \$30,377 |
| Moultrie | 1,328 | 14.2% | 2.2 | -140 | -\$62 | -3.6% | \$28,857 |
| Ogle | 4,500 | 11.2% | 2.0 | -34 | \$59 | 3.0% | \$35,601 |
| Peoria | 22,272 | 21.2% | 3.4 | 2,907 | \$36 | 1.9% | \$40,556 |
| Perry | 3,290 | 22.4% | 2.8 | -141 | \$175 | 11.0% | \$28,470 |
| Platt | 1,017 | 8.0% | 2.0 | 120 | -\$112 | -8.3% | \$26,573 |
| Pike | 2,343 | 19.6% | 1.8 | 62 | -\$233 | -20.1% | \$23,924 |
| Poppe | 690 | 29.6% | 0.7 | 31 | -\$457 | -52.9% | \$23,726 |
| Pulaski | 1,856 | 41.9% | 5.8 | 164 | -\$23 | -1.2% | \$28,836 |
| Putnam | 402 | 10.0% | 2.2 | 67 | -\$212 | -9.9% | \$37,036 |
| Randolph | 3,759 | 18.2% | 2.7 | -10 | -\$27 | -1.9% | \$31,671 |
| Richland | 2,374 | 21.7% | 1.4 | 324 | \$135 | 10.0% | \$26,427 |
| Rock Island | 19,115 | 21.4% | 2.7 | 1,566 | -\$86 | -5.1% | \$43,386 |
| Saline | 5,110 | 32.3% | 3.4 | 129 | -\$283 | -6.6% | \$30,515 |
| Sangamon | 21,079 | 17.3% | 2.1 | 1,631 | \$48 | 2.5% | \$37,945 |
| Schuyler | 777 | 16.1% | 2.3 | 91 | -\$389 | -27.3% | \$33,002 |
| Scott | 566 | 14.9% | 1.3 | 199 | -\$497 | -31.4% | \$30,821 |
| Shelby | 2,295 | 14.8% | 1.5 | -44 | -\$5 | -0.4% | \$25,143 |
| St. Clair | 33,041 | 19.4% | 4.6 | 1,797 | -\$37 | -2.1% | \$35,934 |
| Stark | 627 | 15.8% | 2.7 | 89 | \$280 | 15.8% | \$26,582 |
| Stephenson | 5,010 | 16.1% | 3.2 | 214 | -\$88 | -5.3% | \$34,284 |
| Tazewell | 11,046 | 12.6% | 2.9 | 1,827 | -\$114 | -5.9% | \$47,789 |
| Union | 2,878 | 22.8% | 3.1 | 25 | -\$65 | -5.2% | \$27,459 |
| Vermilion | 14,435 | 27.0% | 3.2 | -136 | -\$73 | -4.6% | \$33,180 |
| Wabash | 1,829 | 20.1% | 1.3 | 278 | -\$395 | -27.5% | \$29,269 |
| Warren | 2,160 | 18.6% | 2.7 | -10 | \$424 | 21.7% | \$26,581 |
| Washington | 1,138 | 9.9% | 2.1 | -62 | \$137 | 7.8% | \$31,607 |
| Wayne | 2,465 | 20.0% | 1.3 | 467 | -\$472 | -28.6% | \$25,468 |
| White | 2,085 | 21.5% | 1.5 | 47 | \$23 | 1.4% | \$27,974 |
| Whiteside | 6,338 | 16.6% | 2.0 | 283 | \$42 | 2.8% | \$29,685 |
| Will | 33,952 | 6.8% | 2.3 | 10,444 | -\$65 | -3.2% | \$38,148 |
| Williamson | 7,982 | 19.9% | 4.5 | 1,492 | -\$111 | -7.8% | \$30,289 |
| Winnebago | 33,725 | 18.7% | 4.0 | 3,287 | -\$216 | -13.0% | \$36,282 |
| Woodford | 1,977 | 7.6% | 1.3 | 601 | \$58 | 3.4% | \$29,771 |

¹²⁵ U.S. Census Bureau, Small Area Income and Poverty Estimates 2005.

¹²⁶ Ibid.

¹²⁷ F.D.C. Regional Economic Conditions (2007): Personal bankruptcy filing rate (per 1,000 population) (Inc.), Retrieved March 10, 2008, from http://www2.fdic.gov/reconcept.asp?CPI_CODE=NBR&S1_CODE=17&RPT_TYPE=Tables

¹²⁸ Illinois Department of Employment Security, Local Employment Dynamics, Inc., LEHD state of Illinois county reports - Quarterly Workforce Indicators, Retrieved January 15, 2008, from <http://ilmides.state.il.us/LED/default.htm>, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹²⁹ Ibid.

¹³⁰ Ibid.

¹³¹ Bureau of Economic Analysis, Regional Economic Accounts (2006), Appendix A, Local Area Personal Income, Average wage per job, Retrieved March 10, 2008, from <http://www.bea.gov/bea/regional/reis/>

HOUSING

| County | Renters as a Percent of Total Households, 2000 ¹⁷ | Fair Market Rent (FMR) for 2BR, 2008 ¹⁴ | Estimate of Mean Renter Hourly Wage, 2008 ¹⁵ | Monthly Rent Affordable at Mean Renter Wage, 2008 ¹⁶ | Wage Needed to Afford 2BR FMR, 2008 ¹⁴ | 2BR Housing Wage as a Percent of IL Minimum Wage, 2008 ¹⁸ | Work Hours per Week at IL Min. Wage to Afford 2BR FMR, 2008 ¹⁹ |
|-----------------|--|--|---|---|---|--|---|
| Illinois | 33% | \$844 | \$14.58 | \$758 | \$16.23 | 216% | 87 |
| Adams | 26% | 528 | \$9.50 | \$494 | \$10.15 | 135% | 54 |
| Alexander | 28% | 528 | \$6.52 | \$339 | \$10.15 | 135% | 54 |
| Bond | 20% | 528 | \$7.79 | \$405 | \$10.15 | 135% | 54 |
| Boone | 21% | 666 | \$14.25 | \$741 | \$12.81 | 171% | 68 |
| Brown | 26% | 528 | \$9.24 | \$480 | \$10.15 | 135% | 54 |
| Bureau | 24% | 574 | \$11.14 | \$579 | \$11.04 | 147% | 59 |
| Calhoun | 19% | 711 | \$7.02 | \$365 | \$13.67 | 182% | 73 |
| Carroll | 23% | 571 | \$9.44 | \$491 | \$10.98 | 146% | 59 |
| Cass | 25% | 528 | \$9.65 | \$502 | \$10.15 | 135% | 54 |
| Champaign | 44% | 662 | \$9.01 | \$469 | \$12.73 | 170% | 68 |
| Christian | 24% | 528 | \$8.41 | \$438 | \$10.15 | 135% | 54 |
| Clark | 22% | 528 | \$9.07 | \$472 | \$10.15 | 135% | 54 |
| Clay | 20% | 528 | \$9.33 | \$485 | \$10.15 | 135% | 54 |
| Clinton | 20% | 711 | \$7.89 | \$410 | \$13.67 | 182% | 73 |
| Coles | 38% | 562 | \$6.90 | \$359 | \$10.81 | 144% | 58 |
| Cook | 42% | 944 | \$17.66 | \$918 | \$18.15 | 242% | 97 |
| Crawford | 20% | 528 | \$12.43 | \$646 | \$10.15 | 135% | 54 |
| Cumberland | 18% | 550 | \$7.20 | \$375 | \$10.58 | 141% | 56 |
| DeKalb | 40% | 784 | \$9.29 | \$483 | \$15.08 | 201% | 80 |
| DeWitt | 25% | 530 | \$12.14 | \$631 | \$10.19 | 136% | 54 |
| Douglas | 23% | 550 | \$9.72 | \$505 | \$10.58 | 141% | 56 |
| DuPage | 24% | 944 | \$16.24 | \$844 | \$18.15 | 242% | 97 |
| Edgar | 25% | 528 | \$8.77 | \$456 | \$10.15 | 135% | 54 |
| Edwards | 19% | 528 | \$8.94 | \$465 | \$10.15 | 135% | 54 |
| Effingham | 24% | 560 | \$9.34 | \$486 | \$10.77 | 144% | 57 |
| Fayette | 20% | 528 | \$8.06 | \$419 | \$10.15 | 135% | 54 |
| Ford | 24% | 662 | \$10.18 | \$529 | \$12.73 | 170% | 68 |
| Franklin | 22% | 528 | \$7.54 | \$392 | \$10.15 | 135% | 54 |
| Fulton | 24% | 528 | \$7.33 | \$381 | \$10.15 | 135% | 54 |
| Gallatin | 19% | 528 | \$8.04 | \$418 | \$10.15 | 135% | 54 |
| Greene | 24% | 531 | \$8.55 | \$445 | \$10.21 | 136% | 54 |
| Grundy | 28% | 817 | \$14.96 | \$778 | \$15.71 | 209% | 84 |

¹⁷ National Low Income Housing Coalition, (2008). Out of reach 2008. Washington, DC: Author.¹⁸ Ibid.¹⁹ Ibid.¹⁶ Ibid.¹⁵ Ibid.¹⁴ Ibid.¹³ National Low Income Housing Coalition, (2008). Out of reach 2008. Washington, DC: Author. Data also conducted by the Mid-America Institute of Poverty of Earlwood Alliance.¹² Ibid.

Housing and Income

| County | Renters as a Percent of Total Households, 2000 ¹⁷ | Fair Market Rent (FMR) for 2BR, 2008 ¹⁸ | Estimate of Mean Renter Hourly Wage, 2008 ¹⁹ | Monthly Rent Affordable at Mean Renter Wage, 2008 ²⁰ | Wage Needed to Afford 2BR FMR, 2008 ²¹ | 2BR Housing Wage as a Percent of IL Minimum Wage, 2008 ²² | Work Hours per Week at IL Min. Wage to Afford 2BR FMR, 2008 ²³ |
|------------|--|--|---|---|---|--|---|
| Illinois | 33% | \$844 | \$14.58 | \$758 | \$16.23 | 216% | 87 |
| Hamilton | 18% | 528 | \$6.93 | \$361 | \$10.15 | 135% | 54 |
| Hancock | 20% | 528 | \$8.60 | \$447 | \$10.15 | 135% | 54 |
| Hardin | 20% | 528 | \$7.70 | \$400 | \$10.15 | 135% | 54 |
| Henderson | 21% | 528 | \$7.49 | \$390 | \$10.15 | 135% | 54 |
| Henry | 21% | 643 | \$8.69 | \$452 | \$12.37 | 165% | 66 |
| Iroquois | 24% | 528 | \$9.55 | \$497 | \$10.15 | 135% | 54 |
| Jackson | 47% | 549 | \$6.58 | \$342 | \$10.56 | 141% | 56 |
| Jasper | 17% | 528 | \$9.08 | \$472 | \$10.15 | 135% | 54 |
| Jefferson | 26% | 552 | \$9.51 | \$495 | \$10.62 | 142% | 57 |
| Jersey | 22% | 711 | \$6.78 | \$353 | \$13.67 | 182% | 73 |
| Jo Daviess | 23% | 528 | \$7.89 | \$410 | \$10.15 | 135% | 54 |
| Johnson | 15% | 528 | \$5.49 | \$286 | \$10.15 | 135% | 54 |
| Kane | 24% | 944 | \$11.17 | \$581 | \$18.15 | 242% | 97 |
| Kankakee | 31% | 674 | \$10.20 | \$530 | \$12.96 | 173% | 69 |
| Kendall | 16% | 917 | \$11.95 | \$621 | \$17.63 | 235% | 94 |
| Knox | 28% | 559 | \$7.83 | \$407 | \$10.75 | 143% | 57 |
| Lake | 22% | 944 | \$14.31 | \$744 | \$18.15 | 242% | 97 |
| LaSalle | 25% | 621 | \$10.49 | \$546 | \$11.94 | 159% | 64 |
| Lawrence | 23% | 528 | \$10.35 | \$538 | \$10.15 | 135% | 54 |
| Lee | 26% | 561 | \$10.48 | \$545 | \$10.79 | 144% | 58 |
| Livingston | 26% | 605 | \$10.97 | \$570 | \$11.63 | 155% | 62 |
| Logan | 29% | 543 | \$9.33 | \$485 | \$10.44 | 139% | 56 |
| Macon | 28% | 577 | \$11.27 | \$586 | \$11.10 | 148% | 59 |
| Macoupin | 21% | 584 | \$9.10 | \$473 | \$11.23 | 150% | 60 |
| Madison | 26% | 711 | \$10.00 | \$520 | \$13.67 | 182% | 73 |
| Marion | 23% | 528 | \$7.45 | \$387 | \$10.15 | 135% | 54 |
| Marshall | 20% | 623 | \$8.99 | \$468 | \$11.98 | 160% | 64 |
| Mason | 23% | 528 | \$8.76 | \$456 | \$10.15 | 135% | 54 |
| Massac | 21% | 528 | \$10.27 | \$534 | \$10.15 | 135% | 54 |
| McDonough | 37% | 528 | \$5.76 | \$300 | \$10.15 | 135% | 54 |
| McHenry | 17% | 944 | \$10.80 | \$562 | \$18.15 | 242% | 97 |
| McLean | 34% | 673 | \$12.22 | \$636 | \$12.94 | 173% | 69 |
| Menard | 21% | 623 | \$6.27 | \$326 | \$11.98 | 160% | 64 |
| Mercer | 20% | 643 | \$8.05 | \$419 | \$12.37 | 165% | 66 |
| Monroe | 20% | 711 | \$9.35 | \$486 | \$13.67 | 182% | 73 |

¹⁷ National Low Income Housing Coalition, (2006). Out of reach 2008. Washington, DC: Author.¹⁸ Ibid.¹⁹ Ibid.²⁰ Ibid.²¹ Ibid.²² National Low Income Housing Coalition, (2006). Out of reach 2008. Washington, DC: Author. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.²³ Ibid.

HOUSING (continued)

| County | Renters as a Percent of Total Households, 2000 ¹¹ | Fair Market Rent (FMR) for 2BR, 2008 ¹² | Estimate of Mean Renter Hourly Wage, 2008 ¹³ | Monthly Rent Affordable at Mean Renter Wage, 2008 ¹³ | Wage Needed to Afford 2BR FMR, 2008 ¹³ | 2BR Housing Wage as a Percent of IL Minimum Wage, 2008 ^{13a} | Work Hours per Week at IL Min. Wage to Afford 2BR FMR, 2008 ^{13b} |
|-------------|--|--|---|---|---|---|--|
| Illinois | 33% | \$844 | \$14.58 | \$758 | \$16.23 | 216% | 87 |
| Montgomery | 22% | 528 | \$9.01 | \$469 | \$10.15 | 135% | 54 |
| Morgan | 30% | 570 | \$8.84 | \$459 | \$10.96 | 146% | 58 |
| Moultrie | 22% | 542 | \$10.51 | \$546 | \$10.42 | 139% | 56 |
| Ogle | 26% | 628 | \$11.90 | \$619 | \$12.08 | 161% | 64 |
| Peoria | 32% | 623 | \$11.61 | \$604 | \$11.98 | 160% | 64 |
| Perry | 21% | 528 | \$8.32 | \$433 | \$10.15 | 135% | 54 |
| Piatt | 20% | 662 | \$9.43 | \$491 | \$12.73 | 170% | 68 |
| Pike | 23% | 528 | \$7.65 | \$398 | \$10.15 | 135% | 54 |
| Pope | 18% | 528 | \$5.06 | \$263 | \$10.15 | 135% | 54 |
| Pulaski | 24% | 528 | \$8.72 | \$453 | \$10.15 | 135% | 54 |
| Putnam | 18% | 549 | \$13.17 | \$685 | \$10.56 | 141% | 56 |
| Randolph | 21% | 528 | \$9.71 | \$505 | \$10.15 | 135% | 54 |
| Richland | 24% | 528 | \$7.71 | \$401 | \$10.15 | 135% | 54 |
| Rock Island | 30% | 643 | \$12.44 | \$647 | \$12.37 | 165% | 66 |
| Saline | 24% | 528 | \$8.78 | \$547 | \$10.15 | 135% | 54 |
| Sangamon | 30% | 623 | \$10.49 | \$546 | \$11.98 | 160% | 64 |
| Schuyler | 21% | 528 | \$13.95 | \$725 | \$10.15 | 135% | 54 |
| Scott | 22% | 531 | \$11.38 | \$592 | \$10.21 | 136% | 54 |
| Shelby | 19% | 528 | \$8.21 | \$427 | \$10.15 | 135% | 54 |
| St. Clair | 33% | 711 | \$10.44 | \$543 | \$13.67 | 182% | 73 |
| Stark | 23% | 623 | \$9.93 | \$516 | \$11.98 | 160% | 64 |
| Stephenson | 25% | 611 | \$10.58 | \$550 | \$11.75 | 157% | 63 |
| Tazewell | 24% | 623 | \$14.56 | \$757 | \$11.98 | 160% | 64 |
| Union | 25% | 528 | \$6.55 | \$341 | \$10.15 | 135% | 54 |
| Vermilion | 28% | 562 | \$10.01 | \$520 | \$10.81 | 144% | 58 |
| Wabash | 25% | 528 | \$7.49 | \$389 | \$10.15 | 135% | 54 |
| Warren | 26% | 528 | \$9.47 | \$493 | \$10.15 | 135% | 54 |
| Washington | 19% | 528 | \$11.30 | \$588 | \$10.15 | 135% | 54 |
| Wayne | 20% | 528 | \$8.28 | \$431 | \$10.15 | 135% | 54 |
| White | 22% | 528 | \$8.78 | \$456 | \$10.15 | 135% | 54 |
| Whiteside | 26% | 586 | \$8.59 | \$447 | \$11.27 | 150% | 60 |
| Will | 17% | 944 | \$10.00 | \$520 | \$18.15 | 242% | 97 |
| Williamson | 26% | 528 | \$8.35 | \$434 | \$10.15 | 135% | 54 |
| Winnebago | 30% | 666 | \$10.97 | \$570 | \$12.81 | 171% | 68 |
| Woodford | 17% | 623 | \$9.46 | \$492 | \$11.98 | 160% | 64 |

¹¹ National Low Income Housing Coalition, (2006). Out of Reach 2006. Washington, DC: Author.¹² Ibid.¹³ Ibid.^{13a} Ibid.^{13b} Ibid.^{13c} National Low Income Housing Coalition, (2006). Out of Reach 2006. Washington, DC: Author. Calculation conducted by the Mid-America Institute of Poverty at Heartland Alliance.^{13d} Ibid.

Health & Education

| County | ISBE High School Grad Rate for Low-Income Students, 2006-2007 ¹⁴¹ | Point Change in Grad Rate for Low-Income Students from Previous Year ¹⁴¹ | Percent of 11th Graders That Passed PSAT Reading Tests, 2006-2007 ¹⁴² | Point Change in Rate of 11th Graders That Passed PSAT Reading Tests from Previous Year ¹⁴² | Percent of Children Eligible for Free or Reduced-Price School Lunches, 2007 ¹⁴³ | Point Change in Percent of Children Eligible for Free or Reduced-Price School Lunches, 2000 to 2007 ¹⁴³ | Percentage of Babies Born Low Birth Weight, 2005 ¹⁴⁵ |
|------------|--|---|--|---|--|--|---|
| Illinois | 74.9% | -1.6% | 54.1% | -4.3% | 46.9% | 5.4% | 8.6% |
| Adams | 80.7% | 1.4% | 53.8% | -0.6% | 39.6% | 4.4% | 7.5% |
| Alexander | 87.7% | -1.5% | 19.5% | -4.1% | 78.6% | 0.1% | 11.5% |
| Bond | 70.3% | -0.8% | 60.5% | 2.7% | 33.9% | 5.0% | 5.8% |
| Boone | 85.0% | -1.7% | 56.8% | 1.0% | 33.7% | 15.1% | 7.4% |
| Brown | 100.0% | 0.0% | 43.3% | -4.2% | 37.5% | 13.0% | 1.9% |
| Bureau | 68.3% | -17.2% | 52.7% | -1.4% | 34.0% | 10.1% | 7.1% |
| Calhoun | 100.0% | 7.7% | 56.1% | -1.7% | 36.0% | 13.0% | 3.4% |
| Carroll | 100.0% | 38.8% | 52.9% | -6.8% | 37.5% | 10.0% | 8.1% |
| Cass | 90.0% | 1.1% | 46.7% | -5.3% | 52.3% | 13.0% | 6.0% |
| Champaign | 85.2% | 6.6% | 57.5% | -6.8% | 39.7% | 8.3% | 8.6% |
| Christian | 69.9% | 0.9% | 50.0% | -7.4% | 39.1% | 9.3% | 10.7% |
| Clark | 83.3% | -13.8% | 57.6% | -2.6% | 35.8% | 10.2% | 5.9% |
| Clay | 84.8% | -3.7% | 51.9% | 3.3% | 45.1% | 12.3% | 8.6% |
| Clinton | 66.7% | 3.6% | 59.0% | 2.0% | 21.5% | 2.3% | 6.2% |
| Coles | 84.2% | 1.8% | 55.1% | -6.2% | 38.2% | 10.1% | 7.1% |
| Cook | 72.1% | -1.8% | 51.5% | -1.8% | 64.9% | 4.2% | 9.5% |
| Crawford | 83.1% | -4.4% | 53.2% | -5.0% | 39.9% | 10.4% | 6.0% |
| Cumberland | 88.0% | -7.7% | 57.1% | 1.8% | 33.4% | 11.0% | 3.7% |
| DeKalb | 85.7% | -0.4% | 55.6% | -3.0% | 21.8% | 9.5% | 6.3% |
| DeWitt | 82.5% | -6.7% | 51.0% | -7.5% | 34.7% | 12.0% | 11.7% |
| Douglas | 92.0% | -8.0% | 50.5% | -13.6% | 25.0% | 7.6% | 4.3% |
| DuPage | 88.5% | -0.9% | 67.6% | -4.0% | 20.0% | 8.1% | 7.5% |
| Edgar | 95.1% | 3.1% | 43.2% | -17.2% | 39.0% | 8.8% | 6.7% |
| Edwards | 100.0% | 0.0% | 62.0% | -3.7% | 27.6% | -1.1% | 4.0% |
| Effingham | 90.5% | 5.0% | 57.3% | 3.5% | 27.5% | 5.4% | 7.5% |
| Fayette | 91.6% | 7.5% | 49.3% | -1.2% | 48.8% | 14.7% | 8.7% |
| Ford | 94.6% | 18.5% | 65.6% | 1.2% | 29.1% | 9.7% | 7.6% |
| Franklin | 82.4% | -10.6% | 47.6% | -7.5% | 51.3% | 11.3% | 6.8% |
| Fulton | 72.4% | -7.0% | 48.5% | 3.3% | 42.1% | 5.3% | 7.8% |
| Gallatin | 100.0% | 0.0% | 58.3% | -6.5% | 55.0% | 11.6% | 9.8% |
| Greene | 55.9% | -11.8% | 42.4% | -7.9% | 39.9% | 4.7% | 8.3% |
| Grundy | 90.6% | -5.6% | 59.0% | -0.9% | 17.6% | 5.5% | 6.4% |

¹⁴¹ Illinois State Board of Education. (n.d.). 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author.

¹⁴² Illinois State Board of Education. (n.d.). 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹⁴³ Illinois State Board of Education. (n.d.). 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author.

¹⁴⁴ Illinois State Board of Education. (n.d.). 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹⁴⁵ Illinois State Board of Education. (n.d.). Nutrition programs, Free and Reduced-Price Meal eligibility data. Retrieved January 31, 2008, from http://www.isbe.state.il.us/nutrition/forms/eligibility_listing.htm. Calculator conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹⁴⁶ Ibid.

¹⁴⁷ Illinois Department of Public Health. (2008). Policy, Planning & Statistics. (2008). January data records request data file. (File with author)

Health & Education Indicators

| County | ISBE High School Grad Rate for Low-Income Students, 2006-2007 ¹⁴¹ | Point Change in Grad Rate for Low-Income Students from Previous Year ¹⁴¹ | Percent of 11th Graders That Passed PSAE Reading Tests, 2006-2007 ¹⁴² | Point Change in Rate of 11th Graders That Passed PSAE Reading Tests from Previous Year ¹⁴² | Percent of Children Eligible for Free or Reduced-Price School Lunches, 2007 ¹⁴³ | Point Change in Percent of Children Eligible for Free or Reduced-Price School Lunches, 2000 to 2007 ¹⁴³ | Percentage of Babies Born Low Birth Weight, 2005 ¹⁴⁵ |
|------------|--|---|--|---|--|--|---|
| Illinois | 74.9% | -1.6% | 54.1% | -4.3% | 46.9% | 5.4% | 8.6% |
| Hamilton | 76.2% | -23.8% | 46.2% | -12.9% | 42.6% | 10.1% | 10.4% |
| Hancock | 85.9% | -2.0% | 47.2% | -13.6% | 39.3% | 9.2% | 5.0% |
| Hardin | 65.0% | -35.0% | 52.9% | 18.1% | 55.8% | 6.4% | 8.9% |
| Henderson | 64.0% | 20.0% | 46.4% | -5.8% | 45.4% | 10.9% | 3.6% |
| Henry | 82.3% | -10.9% | 56.0% | -2.5% | 31.7% | 8.2% | 5.4% |
| Iroquois | 79.4% | 6.3% | 49.2% | -10.5% | 36.4% | 6.5% | 5.0% |
| Jackson | 90.8% | 17.0% | 52.5% | -3.9% | 50.1% | 7.7% | 8.3% |
| Jasper | 100.0% | 10.0% | 56.7% | 4.1% | 35.1% | 5.4% | 6.8% |
| Jefferson | 71.7% | 12.7% | 45.2% | -6.5% | 44.2% | 7.3% | 10.0% |
| Jersey | 100.0% | 0.0% | 50.9% | -1.9% | 31.2% | 8.1% | 8.7% |
| Jo Daviess | 80.4% | -4.0% | 53.8% | 1.7% | 26.3% | 7.6% | 4.1% |
| Johnson | 95.1% | -4.9% | 55.6% | -2.9% | 43.4% | 8.6% | 5.1% |
| Kane | 76.9% | -1.6% | 51.9% | -5.7% | 39.2% | 11.6% | 7.4% |
| Kankakee | 70.1% | -5.7% | 49.7% | -6.3% | 43.1% | 5.2% | 8.9% |
| Kendall | 80.0% | -11.7% | 54.0% | -5.8% | 15.7% | 9.2% | 7.1% |
| Knox | 67.6% | -1.5% | 57.5% | 0.9% | 48.0% | 14.4% | 10.0% |
| Lake | 80.5% | -7.7% | 64.5% | -2.8% | 31.7% | 8.0% | 7.4% |
| LaSalle | 71.7% | -9.2% | 54.2% | -2.8% | 33.8% | 8.9% | 9.3% |
| Lawrence | 84.6% | -2.4% | 37.5% | -16.9% | 42.1% | 4.5% | 6.7% |
| Lee | 82.7% | 10.0% | 58.2% | 4.1% | 31.6% | 10.4% | 7.7% |
| Livingston | 89.2% | 4.7% | 53.3% | -1.9% | 33.0% | 9.5% | 10.2% |
| Logan | 74.5% | 3.4% | 57.2% | -2.4% | 34.5% | 11.0% | 7.5% |
| Macon | 61.9% | -3.3% | 51.9% | -3.6% | 46.4% | 9.0% | 9.7% |
| Macoupin | 82.3% | 2.1% | 55.7% | -4.0% | 35.0% | 11.6% | 7.7% |
| Madison | 83.6% | -3.4% | 54.1% | -6.8% | 36.6% | 6.8% | 8.4% |
| Marion | 71.2% | 4.7% | 46.6% | -4.5% | 51.5% | 14.1% | 7.4% |
| Marshall | 87.0% | -13.0% | 47.7% | -8.9% | 32.8% | 9.0% | 8.3% |
| Mason | 84.1% | 2.1% | 48.8% | -5.1% | 40.3% | 8.8% | 10.9% |
| Massac | 91.4% | 10.6% | 46.8% | -8.8% | 47.5% | 8.8% | 9.5% |
| McDonough | 93.2% | -6.8% | 58.7% | -4.1% | 44.6% | 11.8% | 8.2% |
| McHenry | 74.9% | -1.5% | 59.5% | -5.2% | 14.4% | 5.9% | 6.7% |
| McLean | 77.3% | -6.9% | 62.5% | -4.0% | 27.3% | 5.2% | 9.1% |
| Menard | 79.3% | -20.7% | 62.8% | 0.5% | 22.5% | 2.0% | 5.5% |
| Mercer | 96.2% | 4.9% | 50.4% | -0.4% | 30.8% | 7.2% | 6.1% |
| Monroe | 90.3% | 11.7% | 61.2% | -9.2% | 9.8% | 3.5% | 10.1% |

¹⁴¹ Illinois State Board of Education (in) I. 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author.¹⁴² Illinois State Board of Education (in) I. 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.¹⁴³ Illinois State Board of Education (in) I. 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author.¹⁴⁴ Illinois State Board of Education (in) I. 2005-2006 and 2006-2007 State school report cards. Springfield, IL: Author. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.¹⁴⁵ Illinois State Board of Education (in) I. Nutrition programs: Free and Reduced-Price Meal eligibility data. Retrieved January 31, 2008, from http://www.isbe.state.il.us/nutrit/inf/ctms/eligibility_listings.htm. Calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.¹⁴⁶ Ibid.¹⁴⁷ Illinois Department of Public Health, Office of Policy, Planning & Statistics, 2008. January. Vital records: resident birth file. On file with author.

Health & Education

| County | ISBE High School Grad Rate for Low-Income Students, 2006-2007 ¹⁴⁰ | Point Change in Grad Rate for Low-Income Students from Previous Year ¹⁴¹ | Percent of 11th Graders That Passed PSAE Reading Tests, 2006-2007 ¹⁴² | Point Change in Rate of 11th Graders That Passed PSAE Reading Tests from Previous Year ¹⁴³ | Percent of Children Eligible for Free or Reduced-Price School Lunches, 2007 ¹⁴⁴ | Point Change in Percent of Children Eligible for Free or Reduced-Price School Lunches, 2000 to 2007 ¹⁴⁵ | Percentage of Babies Born Low Birth Weight, 2005 ¹⁴⁶ |
|-------------|--|---|--|---|--|--|---|
| Illinois | 74.9% | -1.6% | 54.1% | -4.3% | 46.9% | 5.4% | 8.6% |
| Montgomery | 72.8% | -3.1% | 51.9% | -10.4% | 39.3% | 9.5% | 8.1% |
| Morgan | 91.9% | 8.6% | 52.5% | -4.8% | 39.9% | 8.7% | 7.9% |
| Moultrie | 97.1% | -2.9% | 56.7% | 1.6% | 29.6% | 10.2% | 5.2% |
| Ogle | 83.8% | 1.6% | 58.0% | -1.9% | 23.3% | 9.3% | 7.1% |
| Peoria | 87.0% | 2.9% | 52.0% | -0.9% | 43.3% | 5.1% | 9.7% |
| Perry | 66.7% | -7.6% | 45.4% | -2.3% | 32.5% | 4.2% | 6.0% |
| Piatt | 79.4% | -6.3% | 69.8% | -2.7% | 22.1% | 4.6% | 9.1% |
| Pike | 73.5% | -16.6% | 53.3% | -7.5% | 40.0% | 8.1% | 6.1% |
| Pope | 82.4% | 20.9% | 58.1% | -16.9% | 45.5% | 1.5% | 2.5% |
| Pulaski | 100.0% | 0.0% | 30.5% | -2.4% | 77.4% | -6.7% | 14.4% |
| Putnam | 75.0% | 8.3% | 61.3% | 4.0% | 28.6% | 5.1% | 9.5% |
| Randolph | 77.8% | -10.3% | 41.1% | -6.9% | 33.8% | 6.8% | 7.7% |
| Richland | 76.3% | -21.3% | 54.1% | -4.9% | 39.9% | 3.9% | 5.5% |
| Rock Island | 77.8% | -9.2% | 48.0% | -2.2% | 43.7% | 3.4% | 6.7% |
| Saline | 67.1% | -23.9% | 43.8% | -10.4% | 49.1% | 13.5% | 8.2% |
| Sangamon | 88.3% | 7.3% | 58.0% | -1.9% | 48.0% | 14.2% | 9.3% |
| Schuyler | 93.8% | 17.9% | 51.5% | 2.5% | 43.9% | 10.2% | 5.6% |
| Scott | 75.0% | -2.8% | 54.7% | 1.1% | 34.6% | 9.4% | 5.9% |
| Shelby | 67.2% | -28.5% | 53.8% | -13.0% | 33.4% | 6.4% | 4.0% |
| St. Clair | 63.2% | -17.1% | 53.1% | -5.3% | 43.5% | 4.4% | 10.0% |
| Stark | 87.5% | -12.5% | 63.6% | 3.9% | 33.4% | 17.1% | 7.6% |
| Stephenson | 87.3% | 12.0% | 57.2% | -8.0% | 41.1% | 10.9% | 8.8% |
| Tazewell | 82.1% | -13.9% | 61.8% | -0.4% | 28.1% | 7.2% | 7.4% |
| Union | 79.1% | 12.4% | 41.3% | -13.6% | 49.2% | 7.3% | 4.3% |
| Vermilion | 69.7% | 10.9% | 46.9% | -6.0% | 51.2% | 11.1% | 9.9% |
| Wabash | 91.4% | 24.7% | 51.9% | -2.4% | 33.2% | 9.9% | 4.8% |
| Warren | 72.7% | -11.3% | 52.8% | -10.1% | 44.1% | 11.9% | 6.1% |
| Washington | 66.7% | -26.2% | 67.5% | 3.4% | 22.1% | 4.4% | 6.3% |
| Wayne | 65.6% | -30.4% | 52.3% | -8.5% | 39.8% | 6.2% | 5.7% |
| White | 68.6% | -9.2% | 54.0% | 7.7% | 41.0% | 2.9% | 4.8% |
| Whiteside | 72.8% | -0.7% | 51.9% | -8.2% | 34.6% | 8.5% | 5.4% |
| Will | 79.6% | -2.3% | 56.8% | -2.9% | 28.3% | 6.2% | 7.0% |
| Williamson | 96.3% | 0.3% | 50.0% | -10.2% | 40.7% | 2.4% | 8.0% |
| Winnebago | 77.4% | 12.3% | 47.2% | -7.2% | 52.5% | 13.3% | 10.3% |
| Woodford | 90.8% | -6.7% | 63.5% | 5.1% | 18.8% | 4.9% | 6.7% |

¹⁴⁰ Illinois State Board of Education, in (d), 2005-2006 and 2006-2007 State school report cards, Springfield, IL: Author.

¹⁴¹ Illinois State Board of Education, in (d), 2005-2006 and 2006-2007 State school report cards, Springfield, IL: Author, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹⁴² Illinois State Board of Education, in (d), 2005-2006 and 2006-2007 State school report cards, Springfield, IL: Author.

¹⁴³ Illinois State Board of Education, in (d), 2005-2006 and 2006-2007 State school report cards, Springfield, IL: Author, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹⁴⁴ Illinois State Board of Education, in (d), 2005-2006 and 2006-2007 State school report cards, Springfield, IL: Author, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance.

¹⁴⁵ Ibid.

¹⁴⁶ Illinois Department of Public Health, Office of Policy Planning & Statistics, (2008), January. Data records, resident birth file. On file with author.

Congressional District Income & Poverty

| Illinois 168th Congressional District | Number of People in Poverty, 2006 ¹²⁷ | Poverty Rate, 2006 ¹²⁸ | Number of People Under Age 18 in Poverty, 2006 ¹²⁹ | Poverty Rate for Population Under Age 18, 2006 ¹³⁰ | Number of People in Extreme Poverty, 2006 ¹³¹ | Extreme Poverty Rate, 2006 ¹³² | Median Household Income, 2006 ¹³³ |
|---------------------------------------|--|-----------------------------------|---|---|--|---|--|
| Illinois | 1,539,033 | 12.3% | 543,373 | 17.1% | 685,970 | 5.5% | \$52,006 |
| Congressional District 1 | 138,176 | 21.8% | 52,979 | 30.4% | 67,166 | 10.6% | \$40,578 |
| Congressional District 2 | 118,360 | 18.7% | 50,087 | 26.8% | 55,581 | 8.8% | \$43,830 |
| Congressional District 3 | 61,860 | 9.6% | 23,565 | 14.2% | 27,217 | 4.2% | \$53,550 |
| Congressional District 4 | 140,027 | 23.3% | 58,698 | 32.5% | 57,868 | 9.6% | \$38,620 |
| Congressional District 5 | 72,771 | 11.1% | 21,471 | 15.1% | 31,377 | 4.8% | \$55,561 |
| Congressional District 6 | 42,190 | 6.5% | 14,209 | 8.9% | 14,835 | 2.3% | \$65,818 |
| Congressional District 7 | 140,387 | 23.2% | 52,948 | 31.8% | 73,618 | 12.2% | \$47,113 |
| Congressional District 8 | 44,094 | 6.0% | 15,582 | 8.0% | 19,867 | 2.7% | \$70,694 |
| Congressional District 9 | 76,490 | 12.4% | 19,257 | 15.3% | 29,202 | 4.7% | \$51,464 |
| Congressional District 10 | 34,461 | 5.4% | 13,974 | 8.0% | 16,755 | 2.6% | \$78,269 |
| Congressional District 11 | 71,616 | 9.9% | 22,130 | 12.2% | 29,075 | 4.0% | \$55,759 |
| Congressional District 12 | 91,786 | 14.6% | 32,613 | 21.8% | 42,071 | 6.7% | \$40,705 |
| Congressional District 13 | 31,433 | 4.1% | 10,714 | 5.0% | 14,351 | 1.9% | \$80,703 |
| Congressional District 14 | 67,213 | 8.6% | 23,974 | 11.2% | 31,093 | 4.0% | \$62,067 |
| Congressional District 15 | 94,518 | 15.1% | 25,499 | 18.1% | 44,013 | 7.0% | \$42,633 |
| Congressional District 16 | 72,563 | 10.2% | 24,074 | 13.2% | 31,041 | 4.4% | \$52,192 |
| Congressional District 17 | 95,522 | 15.9% | 33,654 | 24.7% | 38,883 | 6.5% | \$38,792 |
| Congressional District 18 | 65,754 | 10.4% | 21,862 | 15.1% | 25,026 | 4.0% | \$47,375 |
| Congressional District 19 | 79,812 | 12.4% | 26,083 | 17.3% | 36,931 | 5.7% | \$43,922 |

To find Representatives by district, go to http://www.house.gov/house/MemberWWW_by_State.shtml

¹²⁷ U.S. Census Bureau, 2006 American Community Survey, calculation conducted by the Mid-America Institute on Poverty of Heartland Alliance

¹²⁸ Ibid.

¹²⁹ Ibid.

¹³⁰ Ibid.

¹³¹ Ibid.

¹³² Ibid.

¹³³ Ibid.

Definitions and Data Notes

Definitions

Consumer Purchasing Power: The value of money measured by the quantity and quality of the goods and services it can buy.¹⁵⁴

Disability: A long-lasting physical, mental, or emotional condition that can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work.¹⁵⁵

Fair Market Rent: Fair Market Rents (FMRs) are used to determine the eligibility of rental housing units for Section 8 Housing Assistance. For a more detailed explanation of their uses and how they are calculated, see <http://www.nuduser.org/datasets/fmr/fmrover.doc>

Food Insecurity: A family is considered food insecure if they did not have access at all times to enough food for an active, healthy life for all household members.¹⁵⁶

Household Net Worth: This is the difference between household assets and household liabilities.¹⁵⁷

Human Rights: Universal rights belonging to individuals by virtue of their being human. Human rights encompass civil, political, economic, social, and cultural rights and freedoms and are based on the notion of personal human dignity and worth.

Hunger: A family is considered to have experienced hunger if food intake of one or more adults was reduced and their eating patterns were disrupted at times during the year because the household lacked money and other resources for food.¹⁵⁸

Poverty: See page 9.

Rent-burdened Households (unaffordable housing): Households are rent burdened when they spend over 30% of their income for housing. Renter costs include contract rent plus the estimated average monthly cost of utilities (electricity, gas, water, and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else).¹⁵⁹

Structural Deficit: An economic term used to describe a situation where a state's tax revenue scheme, including types of tax, rates, and base (that is, items subject to a particular tax) will not bring in enough money to continue funding current service levels, when changing economic and demographic conditions are considered.¹⁶⁰

Subprime Mortgage: Subprime mortgages are loans offered to higher-risk borrowers (e.g., those with lower credit scores) and feature higher interest than prevailing rates, higher upfront origination fees, and higher pre-payment penalties.¹⁶¹

¹⁵⁴ Investopedia.com. (n.d.). Purchasing power. Retrieved November 17, 2006, from http://www.investopedia.com/3969/purchasing_power.html

¹⁵⁵ U.S. Census Bureau. (n.d.). Disability. Retrieved December 21, 2006, from <http://www.census.gov/hhes/www/disability/dsability.htm>

¹⁵⁶ Nord, M., Andrews, M., & Carlson, S. (2007, November). Household food security in the United States, 2006. Economic Research Report Number 49. Washington, DC: U.S. Department of Agriculture Economic Research Service.

¹⁵⁷ CFED. (2007). Net worth of households. Retrieved January 2, 2007, from <http://www.cfed.org/focus.nsf/showmeasures-1&parentid=6&siteid=504&id=509&measureid=2840>

¹⁵⁸ Nord, M., Andrews, M., & Carlson, S. (2007, November). Household food security in the United States, 2006. Economic Research Report Number 49. Washington, DC: U.S. Department of Agriculture Economic Research Service.

¹⁵⁹ U.S. Census Bureau. (2006). American Community Survey and Puerto Rico Community Survey 2006 subject definitions. Washington, DC: Author.

¹⁶⁰ Martie, R.M. (2005). Fiscal system basics. Chicago: Center for Tax and Budget Accountability.

¹⁶¹ Acarwell, S., & Ho, C.T. (2007, August). Comparing the prime and subprime mortgage markets. Chicago Fed Letter, Number 241. Chicago: The Federal Reserve Bank of Chicago.

Data Notes

American Community Survey (ACS): The Census Bureau's American Community Survey is used for income, poverty, and housing estimates. The ACS is used for comparisons between the nation and states, for comparison of states with each other, and for comparisons between states and smaller geographies. This report relies on the ACS income and poverty estimates, as opposed to the Current Population Survey estimates, because using the ACS allows for comparisons between states and smaller geographies. Due to a change in Census Bureau methodology in the ACS, poverty rate comparisons between 2005 and 2006 are not valid, so this report discusses change over time from 1999 to 2006. For more information on the ACS visit <http://www.census.gov/acs/www/>

Current Population Survey (CPS): The Census Bureau's Current Population Survey March Supplement/Annual Social and Economic Supplement is used for health insurance data and for cross tabulations that are not available through the ACS. The Census Bureau recommends using a 2-year floating average when analyzing state data over time due to the small sample size of the CPS; this increases confidence in the estimates. For more information about the CPS visit <http://www.bls.census.gov/cps/cpsmain.htm>

Small Area Income and Poverty Estimates (SAIPE): The Census Bureau's Small Area Income and Poverty Estimates are used for county poverty rates. The SAIPE's calculations include information from the CPS, the 2000 Census, unemployment rates, and other economic indicators to estimate levels of poverty in counties and school districts. The most recent SAIPE data were released in 2007 and included poverty rates for 2005. For more information about the SAIPE visit <http://www.census.gov/hhes/www/saipe/>

High School Graduation Rate Calculations: The graduation rates reported in the Education section and the County Well-Being Indicators section were provided by the Illinois State Board of Education (ISBE) and are derived from the School Report Cards. The ISBE method of calculating graduation rates excludes students who transfer out of the school and into alternative schools, which may result in inflated graduation rates.

Race and Ethnicity: The terms Hispanic and Black are used instead of Latino and African American in racial and ethnic discussions because these are the categories the U.S. Census Bureau uses.

Regions: The regions included in the Midwest analysis reflect the regional breakdowns designated by the Census Bureau.

Midwest region: Illinois, Indiana, Iowa, Kansas, Nebraska, North Dakota, Michigan, Minnesota, Missouri, Ohio, South Dakota, and Wisconsin.

Northeast Region: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

South Region: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia.

West Region: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

The Illinois Poverty Summit

The Illinois Poverty Summit was established in 2000 to develop strategies to eliminate poverty in Illinois. Poverty in Illinois has a wide reach – touching women, children, teens, seniors, people with disabilities, and working families.

The Illinois Poverty Summit:

develops bipartisan support for strategic priorities to eliminate poverty in Illinois;

analyzes current poverty data and serves as an information source on trends impacting the state's economic health; and

convenes legislators and other key civic leaders to determine the most effective use of state and federal anti-poverty resources and to develop new anti-poverty strategies.

Four precepts guide the Illinois Poverty Summit:

People who work full time should not live in poverty.

All people who can work should be given the tools to work toward their fullest potential.

A safety net should be provided for those who cannot work.

Eliminating poverty is an investment in Illinois' future.

Illinois Poverty Summit Steering Committee

Co-chairs

U.S. Senator Richard J. Durbin (D)
U.S. Representative Judy Biggert (R)

Elected Officials

State Representative Patricia Bellock (R)
State Representative Elizabeth Coulson (R)
State Senator William Delgado (D)
State Representative Sara Feigenholtz (D)
State Representative Constance Howard (D)
State Senator Mattie Hunter (D)
State Representative Naomi Jakobsson (D)
State Senator David Luechtefeld (R)
State Senator Iris Martinez (D)
State Representative Sandra Pihos (R)
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ENTRIES

S

South Side
Next

South Side



AFRICAN AMERICAN NEIGHBORHOOD, C.1925

The boundaries of Chicago's South Side have shifted over time and varied according to the diverse spatial and cultural perspectives that influence how Chicagoans label sections of the city. To a considerable extent the section is a state of mind: the South Side is that part of the city that houses people who consider themselves South Siders. To the east, Lake Michigan and the Indiana state line have provided enduring points of demarcation. Roosevelt Road (12th Street) provides a stable northern border. Chicago's expanding city limits have provided a dynamic, but readily identifiable southern boundary.

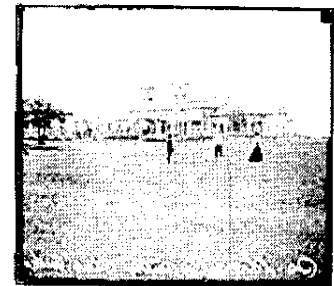
The greatest uncertainty lies along the western edge, in part because neither a natural nor even an artificial dividing line provides a meaningful marker. A contemporary perspective informed by historical circumstances points to the railroad tracks just east of Western Avenue, a marker that would have to be bent to accommodate a few blocks of westward drift to take in the Beverly and Morgan Park Community Areas.

Chicago South Side has long had a distinct identity. Often identified in the second half of the twentieth century with the city's African American population, it has actually accommodated remarkable diversity.

The South Side boasts its own major league baseball team, the Chicago White Sox, and once provided a home to the Chicago American Giants of the Negro National Leagues and the Cardinals of the National Football League. It long has served as the location for much of the city's convention business, first with the Chicago Coliseum and the International Amphitheater, and later with the massive McCormick Place exhibition complex. The South Side has also provided a fertile site for creative energy, from the fiction of Upton Sinclair, James T. Farrell, and Richard Wright to the poetry of Gwendolyn Brooks, the paintings of Archibald Motley, Jr., the sculpture of Lorado Taft and Henry Moore, the gospel music of Thomas A. Dorsey and Mahalia Jackson, the blues of Muddy Waters.

Neighborhoods developed south of the Loop as early as the 1850s. After the Great Fire of 1871, the South Side expanded quickly as both the rich and the poor left the city's center.

The late 1860s and 1870s also saw the movement of industry away from the Loop. In 1865 the Union Stock Yard opened in Lake Township, south and west of downtown Chicago. The Pullman Palace Car Company brought its plant and model city to Hyde Park Township in 1880. One year later Illinois Steel began operations at its massive South Works in

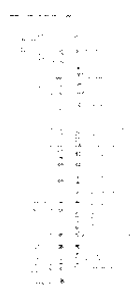


SOUTH SHORE COUNTRY CLUB, 1908

South Chicago, also in Hyde Park Township. Chicago annexed both of these townships to the city in 1889, creating much of the South Side in the process.

Development was directly connected to transportation technologies and their expansion. The Illinois Central Railroad opened its first Hyde Park station at 51st and Lake Park

Avenue in 1856. The expansion of horse-drawn streetcars and later cable cars (1880s) and electric trolleys (1890s) proved to be a boon to developers. From 1890 to 1892, the South Side "Alley L" began to make its way south from the Loop to Jackson Park in time for the World's Columbian Exposition (1893).



PRAIRIE AVENUE ELITE IN 1886
(MAP)

The pattern of affluent residents moving outward from the central city was set early in Chicago's history. Wealthy white Protestants originally lived in the southeast quadrant of the Loop, but moved south along the lakefront, leaving behind an area increasingly devoted to industry, wholesaling, and the expanding vice district. The upper crust settled along Prairie Avenue. By the 1870s and 1880s, elegant houses lined Prairie Avenue from 16th Street to 22nd Street (Cermak Road). Other prosperous residential districts developed farther south in Kenwood and Hyde Park. Hyde Park was especially

transformed by the Columbian Exposition and by the opening in 1892 of the University of Chicago along the Midway

Plaisance just west of Frederick Law Olmsted's Jackson Park.

American-born, white, middle-class families also pushed south along the boulevards, populating large sections of the Near South Side, Douglas, and Grand Boulevard Community Areas. They were soon joined by other groups, especially middle-class Irish Roman Catholics and German Jews. The Irish founded the parish of St. James on 26th and Wabash Avenue in 1855. In 1889 the Christian Brothers established De La Salle Institute at 35th Street and Wabash Avenue in the Douglas Community Area. Among its graduates are five Chicago mayors.

German Jews also came to Douglas. In 1881 Michael Reese Hospital opened its doors at 29th Street and Cottage Grove. In 1889 the Standard Club, an elite Jewish men's organization, moved to 24th and Michigan Avenue. Kehilath Anshe Mayriv (KAM) Synagogue moved in 1890 to 33rd and Indiana Avenue.

Other European ethnic groups also made their way to the South Side. German Catholics and Protestants spread across the area. Working-class Irish communities appeared in Bridgeport, Canaryville, and Back of the Yards. After 1880, large numbers of Poles, Lithuanians, Czechs, Slovaks, East European Jews, and other immigrants from Southern and Eastern Europe settled near the stockyards. These groups also followed the Irish, Scottish, Welsh, Scandinavians, and Germans to South Chicago and South Deering near the rapidly expanding steel mills and to other manufacturing centers.

South Side African American residents and institutions date back to the decades preceding the Civil War, although a concentrated settlement emerged only toward the end of the nineteenth century. More growth took place between World War I and the 1920s, when new employment opportunities in northern industry opened the doors for what came to be known as the Great Migration.

Residential segregation, rooted in nineteenth-century patterns, emerged in full force during the war era. With few exceptions, African Americans found themselves confined to a narrow strip south of the Loop between State Street on the east and Wentworth Avenue to the west. White residents moved farther south to Washington Park, Hyde Park, and South Shore. As population pressures increased, African American families pushed south of 39th Street (Pershing Road) toward Garfield Boulevard (5500 South) into Grand Boulevard and Washington Park, and east across State Street toward Cottage Grove. These predominantly white middle-class neighborhoods that included parts of the Douglas, Grand Boulevard, Oakland, Kenwood, and Hyde Park Community Areas resisted black residential encroachments. To the west of the Black Belt lay the predominantly white ethnic working-class neighborhoods of Bridgeport, Armour Square, Fuller Park, Canaryville, and Englewood. Here too blacks were not welcome.

As World War I came to a close, social, residential, political, and economic pressures

reached a peak. In July 1919, a race riot broke out resulting in 38 deaths and hundreds of injuries. While rioting took place across the city, most of the injuries and deaths occurred on the South Side where the black and white Chicagoans lived and worked in close proximity.

The 1920s witnessed the development of what is often called the Black Metropolis, or Bronzeville. Centering on the intersections of 35th and State Streets and 47th Street and Grand Boulevard (King Drive), Bronzeville developed as an institutional, social, cultural, and economic center of black urban life. The Chicago Defender emerged as spokesman for this community as well as its ambassador to the rest of black America. Large mainline churches such as Olivet and Pilgrim Baptist and Quinn Chapel African Methodist Episcopal drew thousands of worshippers each Sunday morning. Jazz clubs, and two decades later blues clubs, provided a musical signature for both the South Side and Chicago as a whole.



OLIVET BAPTIST CHURCH, 1952

The 1920s also saw the further dispersal of the population. White families made their way to the Southwest Side and to outlying parts of the South Side. Chicago's Bungalow Belt emerged, forming a wide ring around the city. These single-family free-standing structures modeled on Prairie School architecture were intimately tied to yet another transportation system, the private automobile. During the 1920s well-established ethnic groups, such as the Irish, Scandinavians, and Germans, pushed out of the older core neighborhoods to these newer middle-class and lower-middle-class developments. They were followed in turn by Poles, Lithuanians, and other Eastern and Southern Europeans.

In Back of the Yards, Bridgeport, and South Chicago, the Polish and other East European ethnic communities developed a wide range of social, cultural, and economic institutions including parishes, parochial schools, fraternal organizations, banks, savings and loans, and other businesses. By the end of the 1920s these European ethnic groups were joined, particularly in South Chicago and Back of the Yards, by Mexican immigrants.



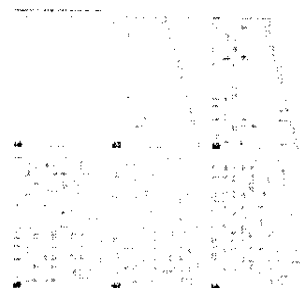
PILSEN GOOD FRIDAY PARADE, 1978

After World War II, cars and roads opened neighborhoods and suburbs not easily accessible by public transportation. The result was a housing explosion on the periphery of the city and in the suburbs. The South Side also saw more residential development on its edges in Jeffery Manor, South Deering, East Side, and Hegewisch. The result was white flight and the expansion of the South Side's African American neighborhoods well beyond the confines of the old Black Metropolis. This process provoked considerable conflict, as race riots broke out across the South Side, most notably in the Trumbull Park Homes in South Deering and in Englewood. Especially after 1960, the South Side witnessed a great expansion of the Mexican community from its base in Back of the Yards, South Chicago, and the West Side's Pilsen neighborhood. Other Hispanics also settled on the South Side, including a small Puerto Rican community.

Older South Side neighborhoods, especially the traditional Black Belt, also saw new housing in the 20 years after 1945. This housing was for the most part public housing built and administered by the Chicago Housing Authority. Dearborn Homes, Stateway Gardens, and Robert Taylor Homes replaced much of Federal Street. The new campus of the Illinois Institute of Technology (IIT), designed by Ludwig Mies van der Rohe, replaced another part of the old Federal Street slum. Private housing developments also appeared as Prairie Shores and Lake Meadows were constructed in the 1960s along the

lakefront south of 26th Street. New and restored housing also appeared in Hyde Park, Kenwood, and Beverly. Urban renewal took various forms, but the South Side's landscape was most dramatically affected by public housing; institutional expansion in the form of IIT, the University of Chicago, and various hospitals; and the construction of the Dan Ryan and Stevenson Expressways. The new South Side, however remained very familiar to Chicagoans, as it retained its segregated housing patterns and huge pockets of poverty and wealth.

What the South Side could not retain was its industrial base. In the mid-1950s Chicago faced its first postindustrial crisis as the major meatpacking companies began to close their production facilities. By 1964 most of the large packers had disappeared. The Union Stock Yard finally closed its doors on August 1, 1971, after nearly 106 years of operation. The late 1970s and early 1980s saw the further decline of the city's industrial base, especially among the steel mills on the Southeast Side. The closing of Wisconsin Steel in 1980 signaled the end of Chicago's dominance of the steel industry. U.S. Steel's South Works closed, after more than a hundred years of operation, in 1993. Empty factories and warehouses symbolized the shift in Chicago's employment base from manufacturing to the service industries.



PRAIRIE AVENUE, 1853-2003 (MAP)

The South Side, however, has continued to attract investment. By the 1990s over a hundred firms had located at the site of the old Union Stock Yard. This industrial park is the most successful in Chicago even though employment levels remain well below those of the meatpacking industry at its height. A variety of neighborhoods have provided sites for new upscale housing, including Dearborn Park (which has expanded from the South Loop south of Roosevelt Road), Central Station (along the lakefront south of Roosevelt Road), Bridgeport, Hyde Park, Kenwood, the Gap, and Chatham. Chinatown has spread beyond its earlier boundary along Archer Avenue with the development of Chinatown Square. In 1991 the Chicago White Sox began to play in a new Comiskey Park across the street from the old stadium. With its neighborhoods, parks, museums, and universities, the South Side continues to play an important role in the social, cultural, political, and economic life of the city.

Dominic A. Pacyga

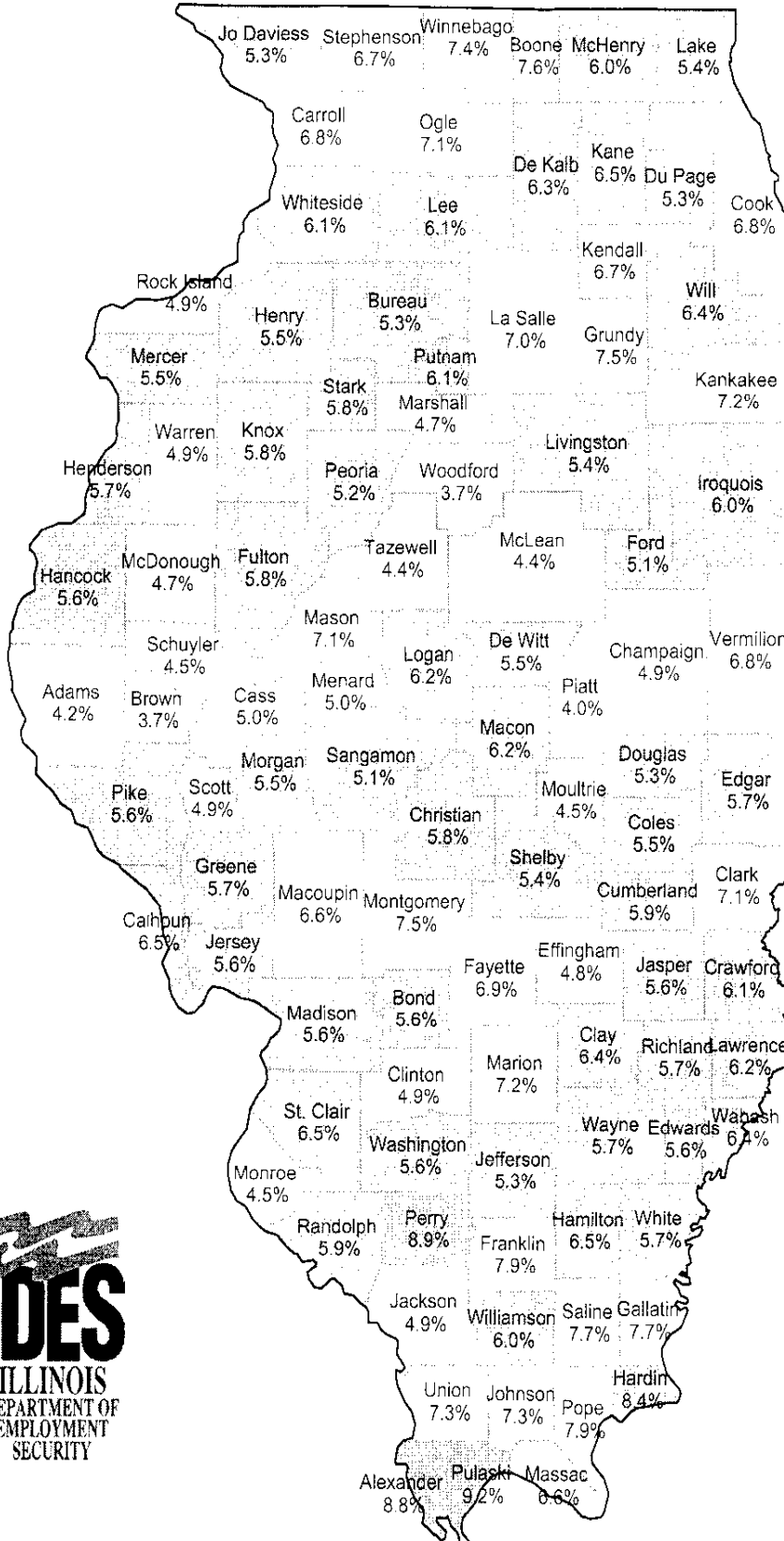
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Illinois Unemployment Rate by County May, 2008 - Not Seasonally Adjusted

IL Dept. of Employment Security, Economic Information & Analysis Division



Unemployment Rate

- <= 5.0%
- 5.1 - 6.5%
- 6.6 - 8.0%
- >=8.1%



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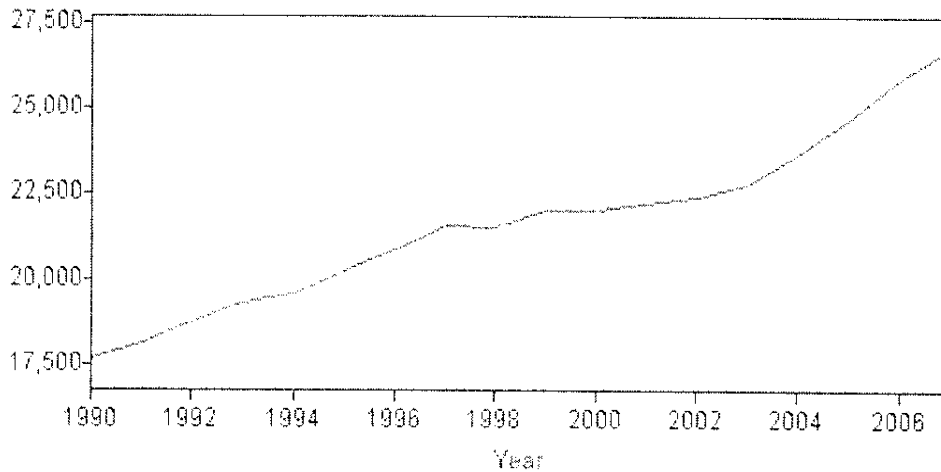
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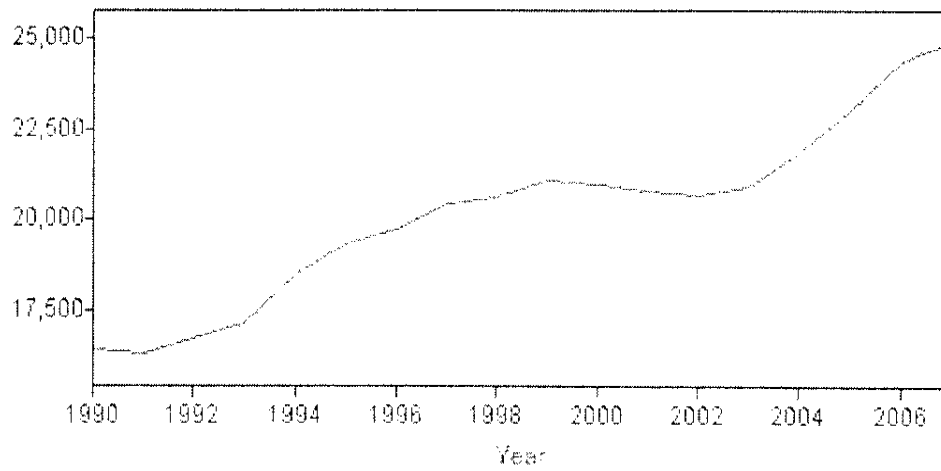
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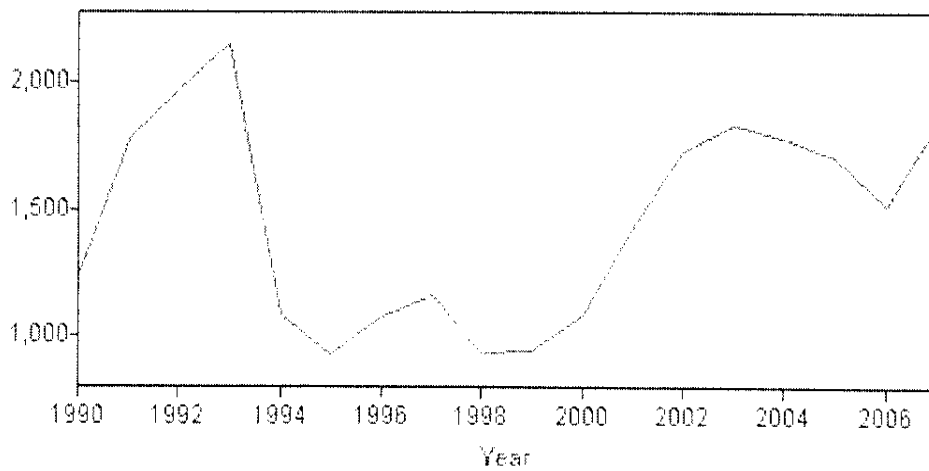
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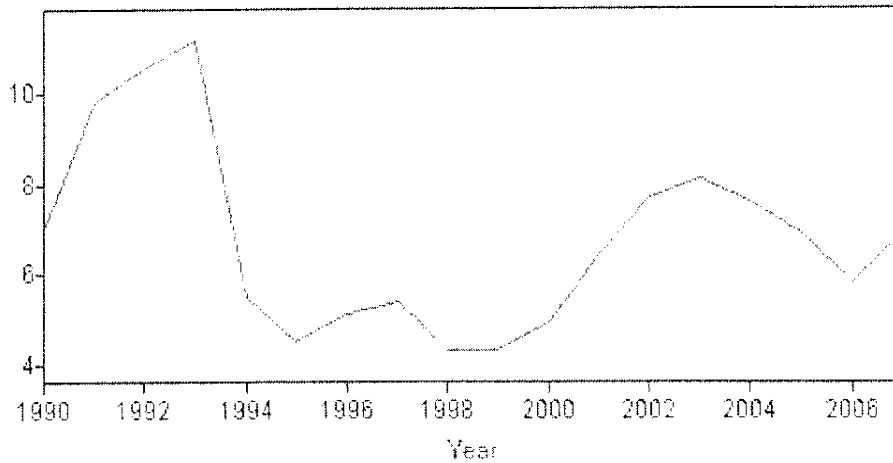
employment



unemployment



unemployment rate

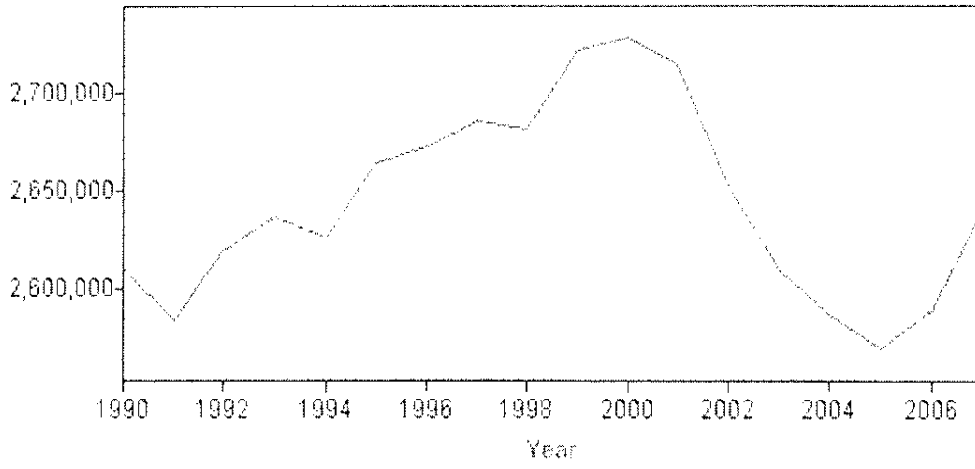


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| 1994 | Annual | 19559 | 18479 | 1080 | 5.5 |
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| 1997 | Annual | 21572 | 20417 | 1155 | 5.4 |
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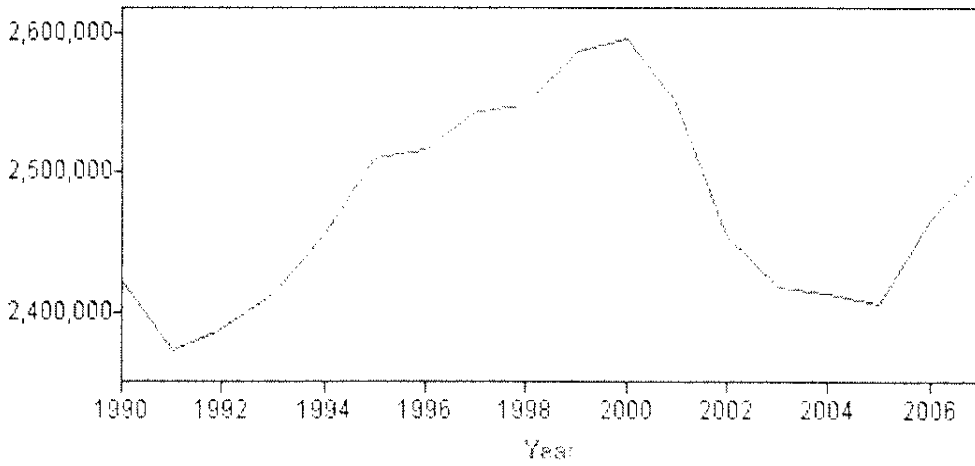
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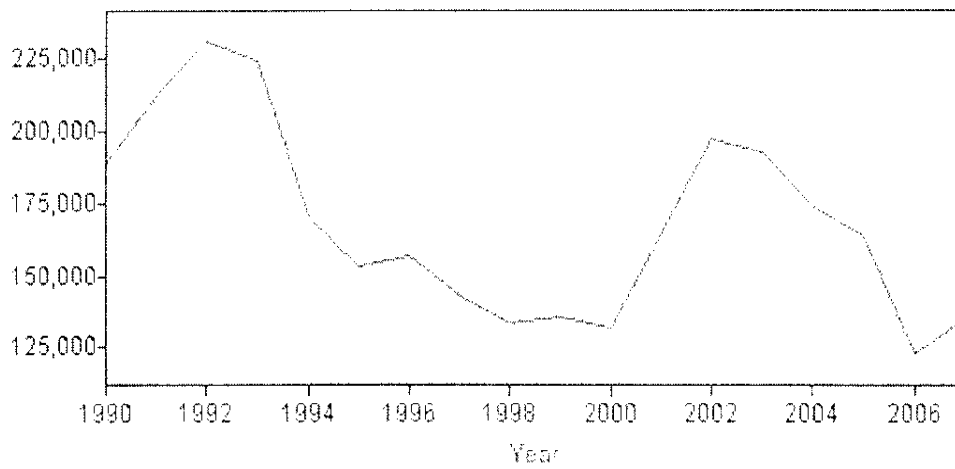
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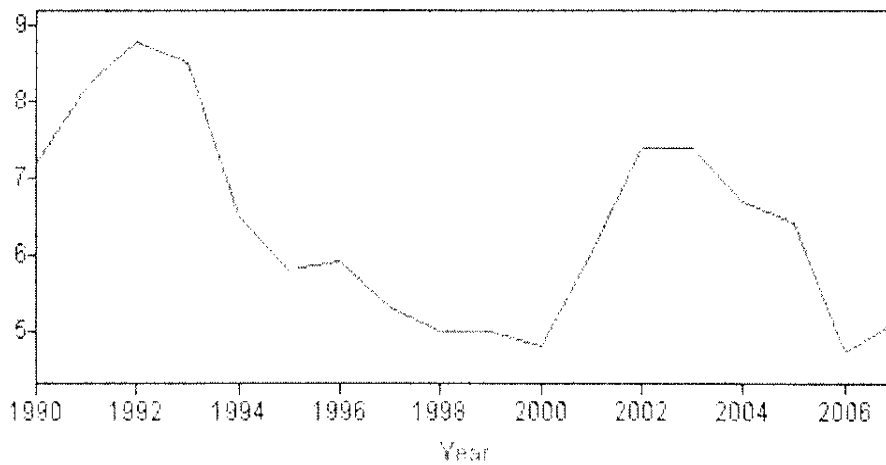
employment



unemployment



unemployment rate



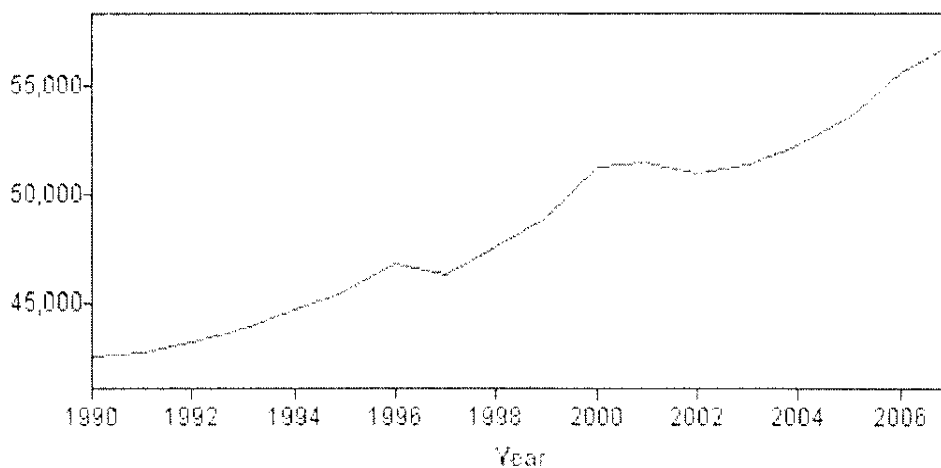
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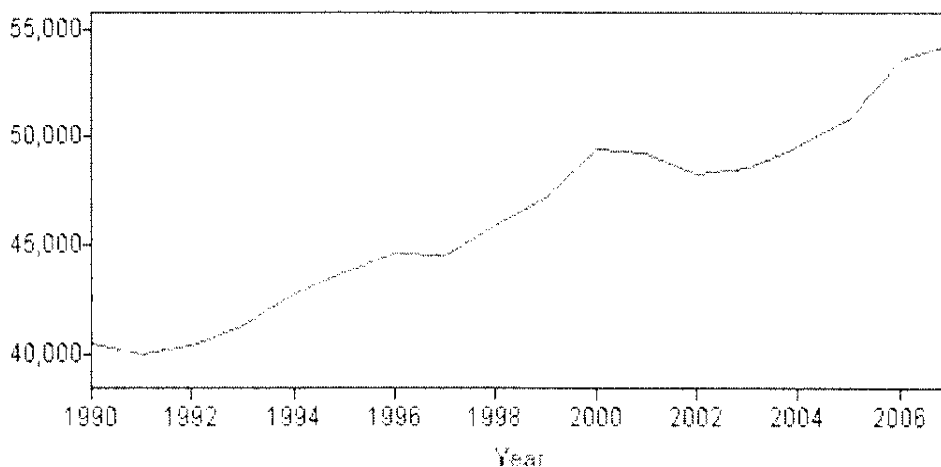
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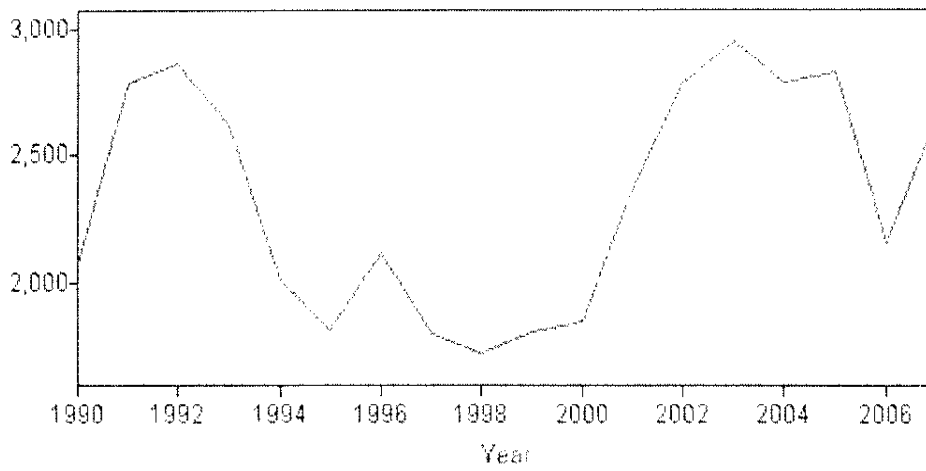
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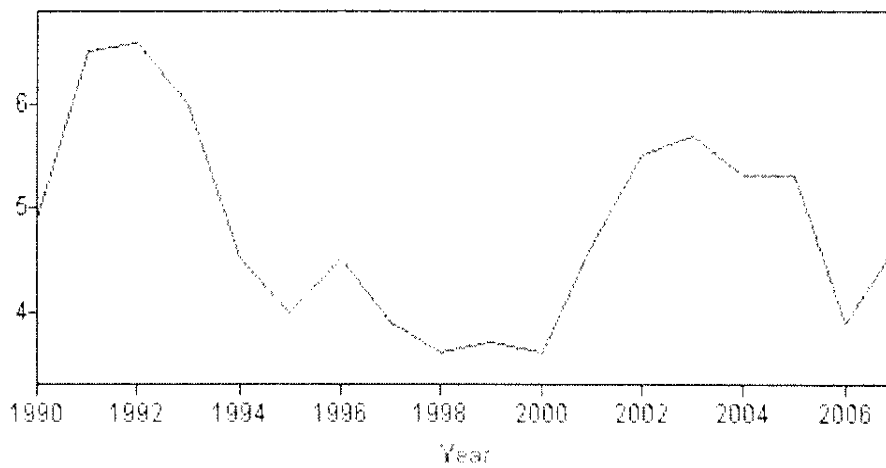
employment



unemployment



unemployment rate



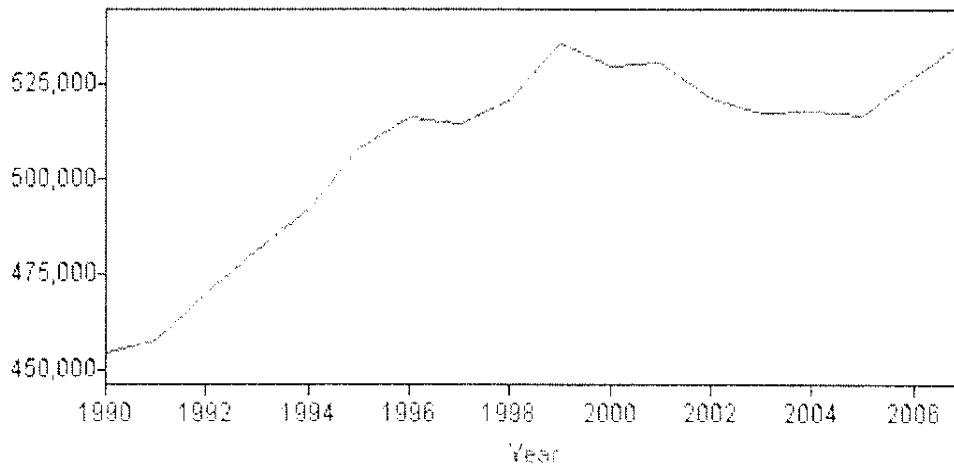
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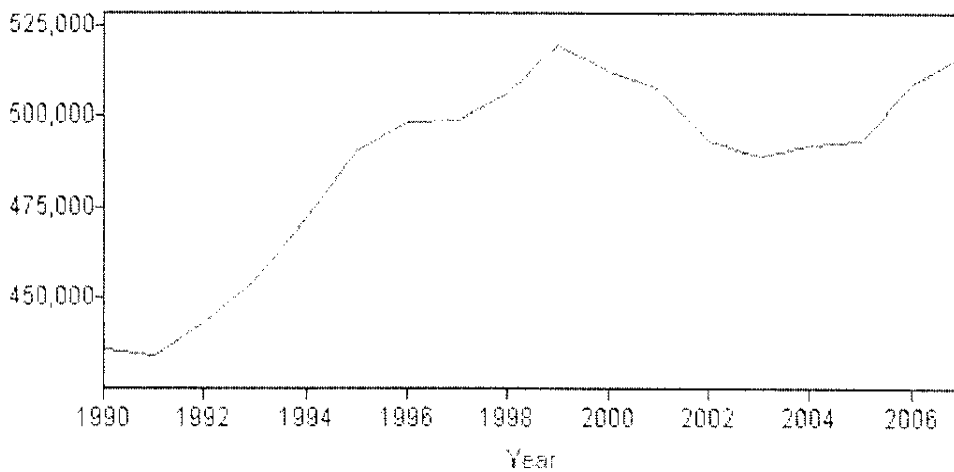
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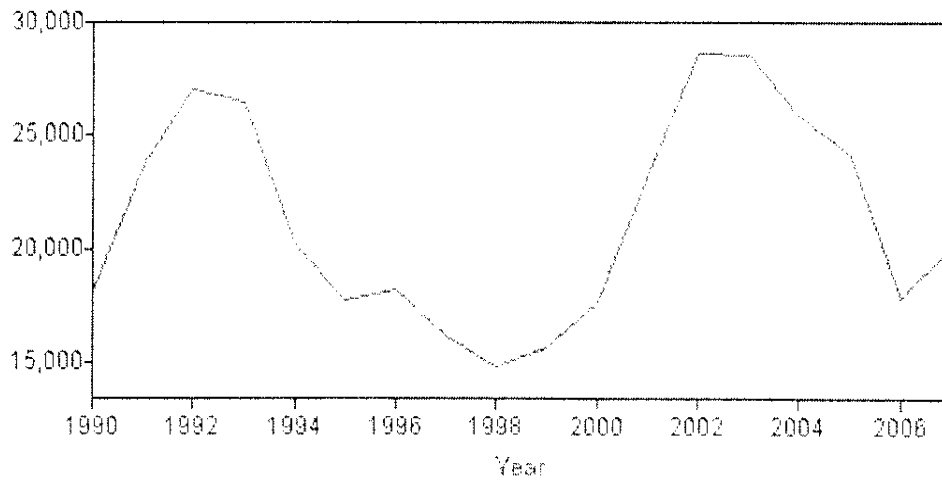
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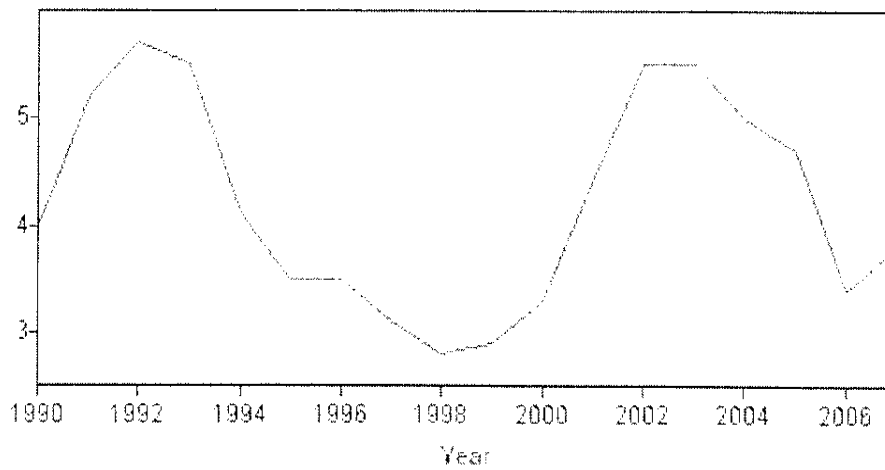
employment



unemployment



unemployment rate



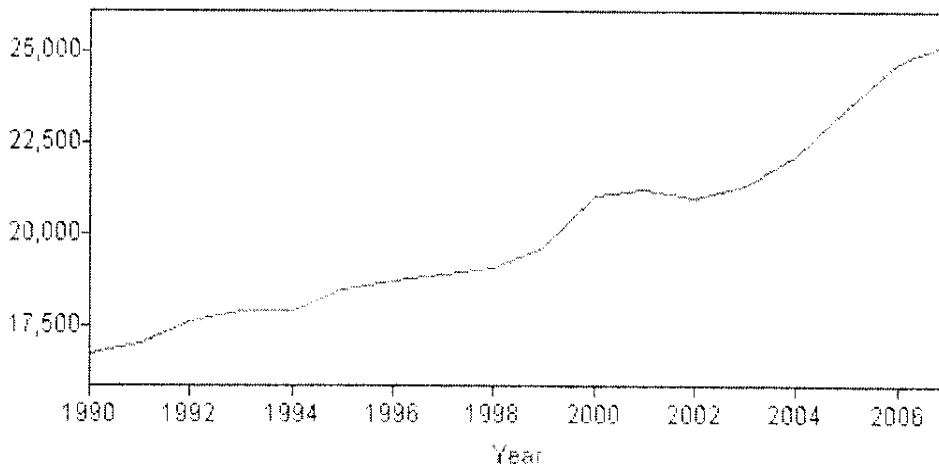
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| | | | | |
|--------------------|-----------|-----------|----------|--------|
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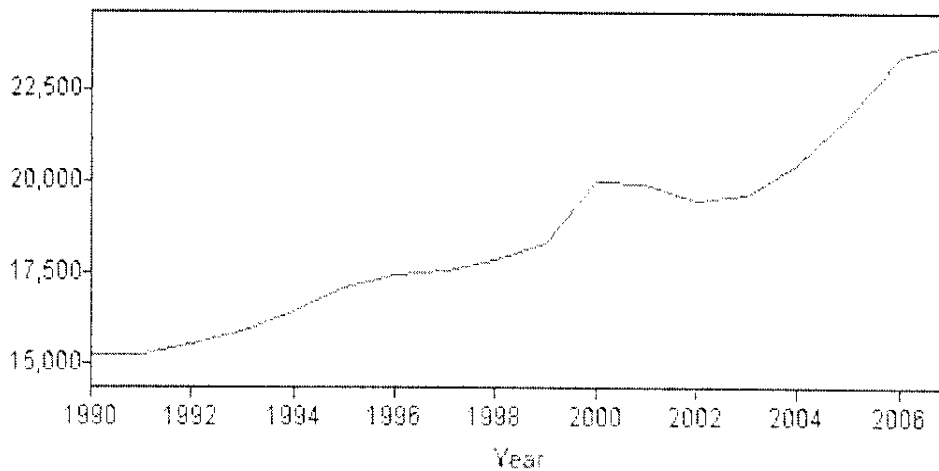
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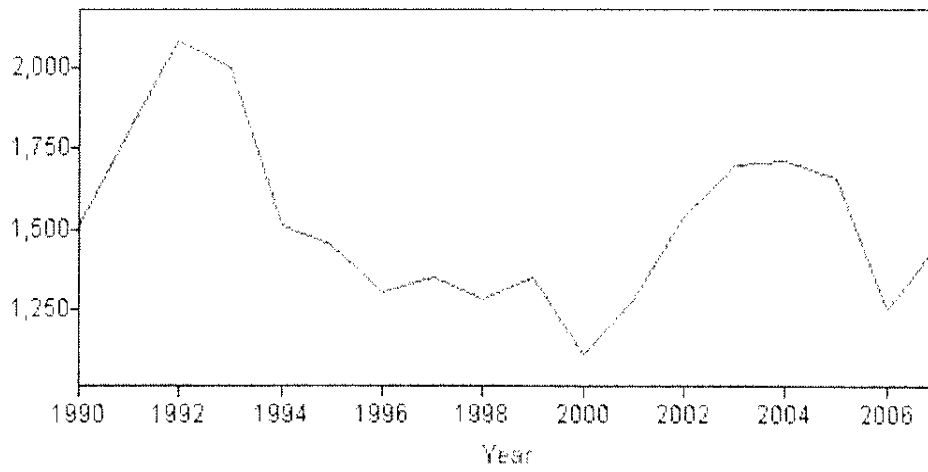
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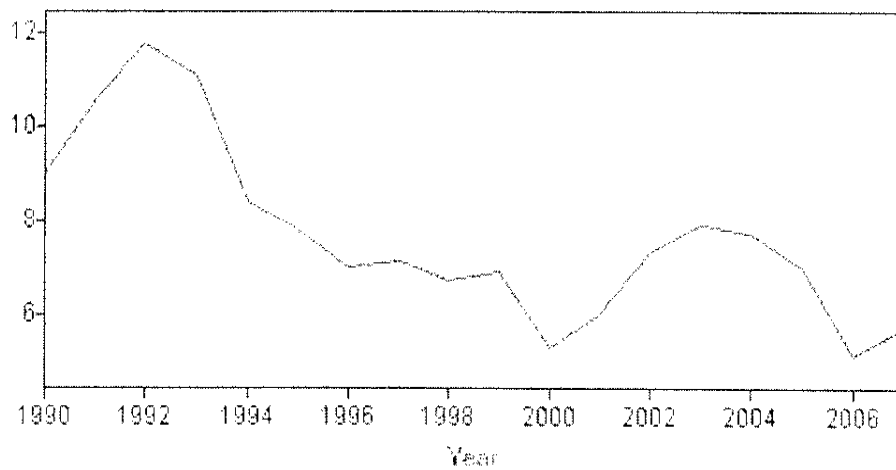
employment



unemployment



unemployment rate



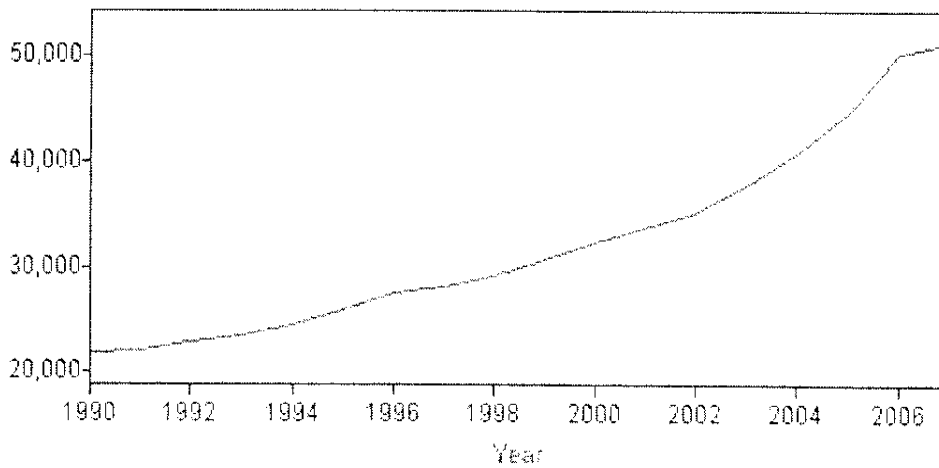
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| 1994 | Annual | 17942 | 16434 | 1508 | 8.4 |
| 1995 | Annual | 18510 | 17058 | 1452 | 7.8 |
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| 1997 | Annual | 18907 | 17556 | 1351 | 7.1 |
| 1998 | Annual | 19112 | 17830 | 1282 | 6.7 |
| 1999 | Annual | 19659 | 18309 | 1350 | 6.9 |
| 2000 | Annual | 21093 | 19985 | 1108 | 5.3 |

| | | | | |
|--------------------|----------|----------|---------|--------|
| 2001 Annual | 21219 | 19943 | 1276 | 6.0 |
| 2002 Annual | 21001 | 19467 | 1534 | 7.3 |
| 2003 Annual | 21352(e) | 19656(e) | 1696(e) | 7.9(e) |
| 2004 Annual | 22198(e) | 20488(e) | 1710(e) | 7.7(e) |
| 2005 Annual | 23492(e) | 21838(e) | 1654(e) | 7.0(e) |
| 2006 Annual | 24724(e) | 23475(e) | 1249(e) | 5.1(e) |
| 2007 Annual | 25281(e) | 23834(e) | 1447(e) | 5.7(e) |

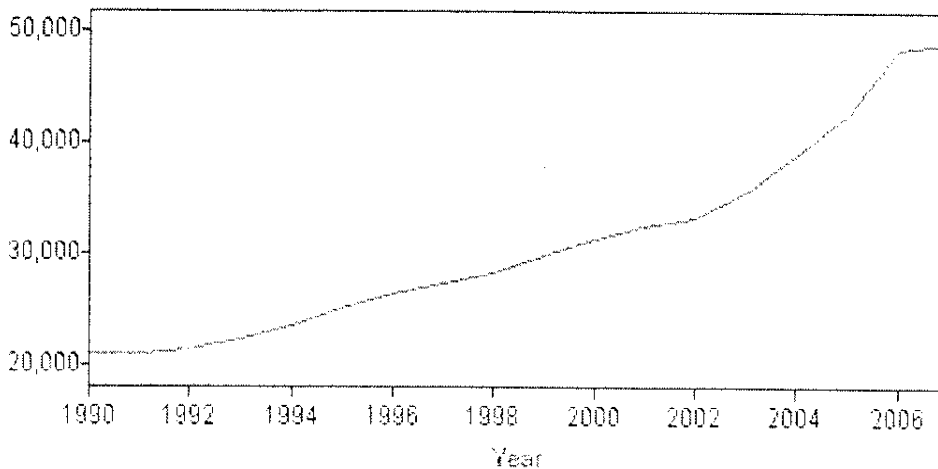
e : Reflects revised inputs, reestimation, and new statewide controls.

Series Id: LAUCN17093003,LAUCN17093004,LAUCN17093005,LAUCN17093006
 Not Seasonally Adjusted
 Area: Kendall County, IL
 Area Type: Counties and equivalents
 State/Region/Division: Illinois

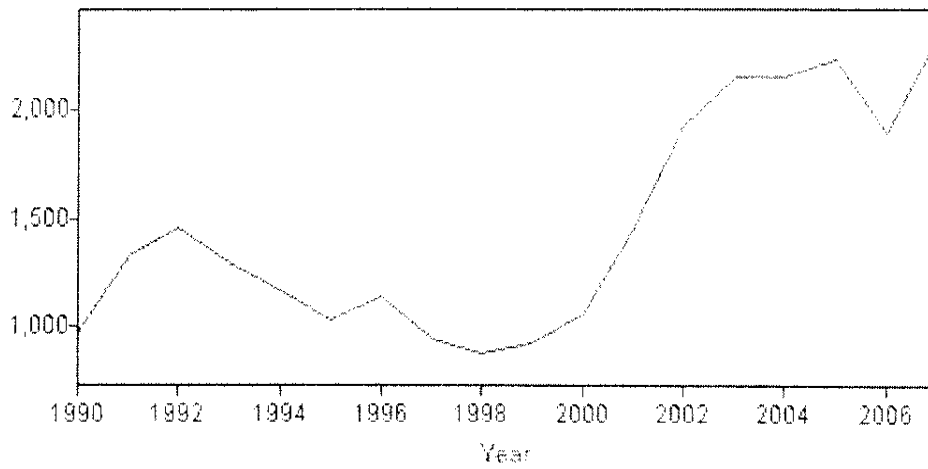
labor force



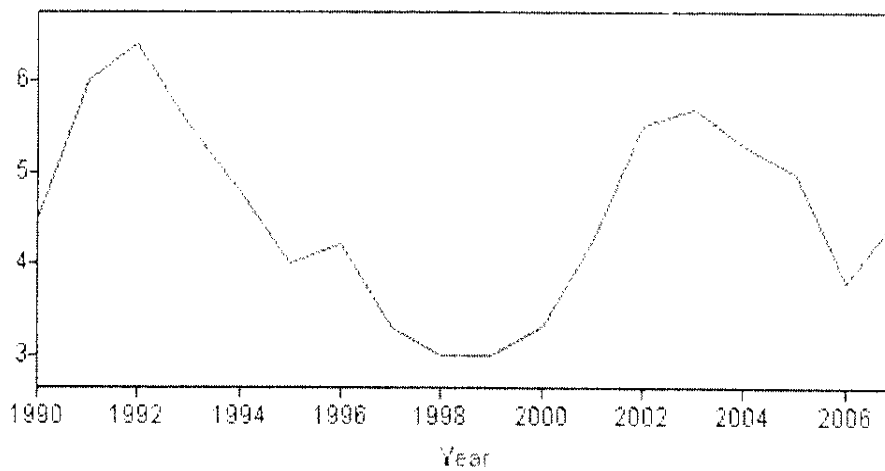
employment



unemployment



unemployment rate



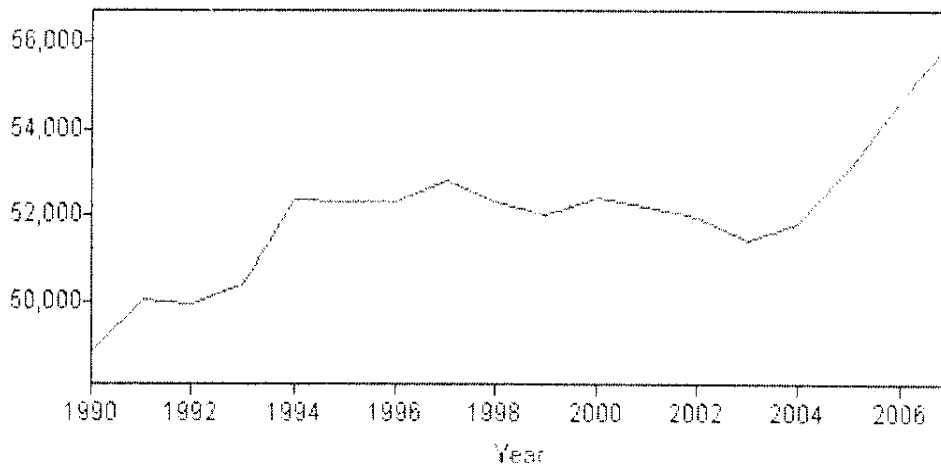
| Year | Period | labor force | employment | unemployment | unemployment rate |
|------|--------|-------------|------------|--------------|-------------------|
| 1990 | Annual | 21850 | 20875 | 975 | 4.5 |
| 1991 | Annual | 22195 | 20867 | 1328 | 6.0 |
| 1992 | Annual | 22827 | 21369 | 1458 | 6.4 |
| 1993 | Annual | 23468 | 22169 | 1299 | 5.5 |
| 1994 | Annual | 24608 | 23439 | 1169 | 4.8 |
| 1995 | Annual | 25906 | 24868 | 1038 | 4.0 |
| 1996 | Annual | 27457 | 26317 | 1140 | 4.2 |
| 1997 | Annual | 28146 | 27205 | 941 | 3.3 |
| 1998 | Annual | 29158 | 28285 | 873 | 3.0 |
| 1999 | Annual | 30668 | 29742 | 926 | 3.0 |
| 2000 | Annual | 32355 | 31290 | 1065 | 3.3 |

| | | | | |
|--------------------|----------|----------|---------|--------|
| 2001 Annual | 33766 | 32332 | 1434 | 4.2 |
| 2002 Annual | 35097 | 33179 | 1918 | 5.5 |
| 2003 Annual | 37726(e) | 35578(e) | 2148(e) | 5.7(e) |
| 2004 Annual | 40823(e) | 38669(e) | 2154(e) | 5.3(e) |
| 2005 Annual | 44570(e) | 42342(e) | 2228(e) | 5.0(e) |
| 2006 Annual | 50172(e) | 48275(e) | 1897(e) | 3.8(e) |
| 2007 Annual | 51337(e) | 49014(e) | 2323(e) | 4.5(e) |

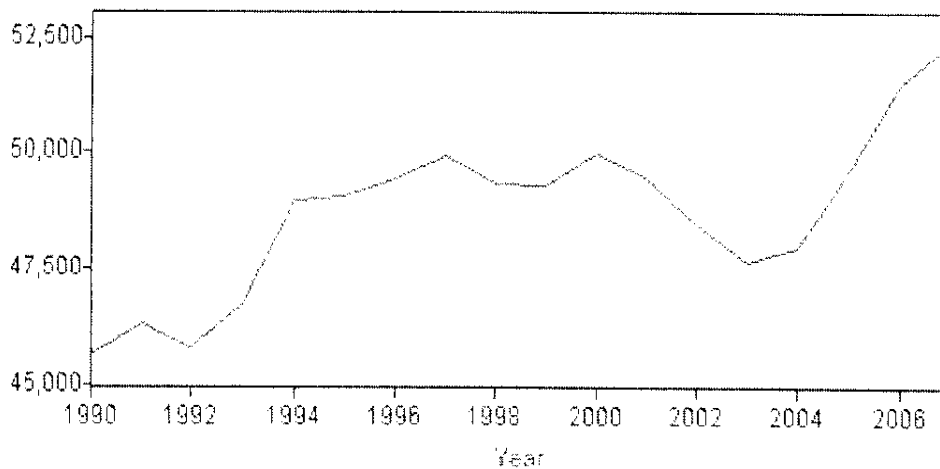
e : Reflects revised inputs, reestimation, and new statewide controls.

Series Id: LAUPA17100003, LAUPA17100004, LAUPA17100005, LAUPA17100006
 Not Seasonally Adjusted
 Area: Kankakee County, IL
 Area Type: Counties and equivalents
 State/Region/Division: Illinois

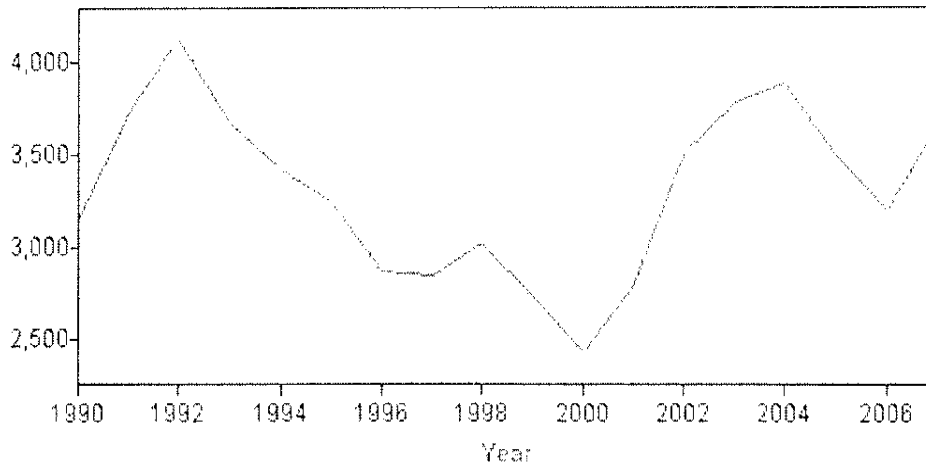
labor force



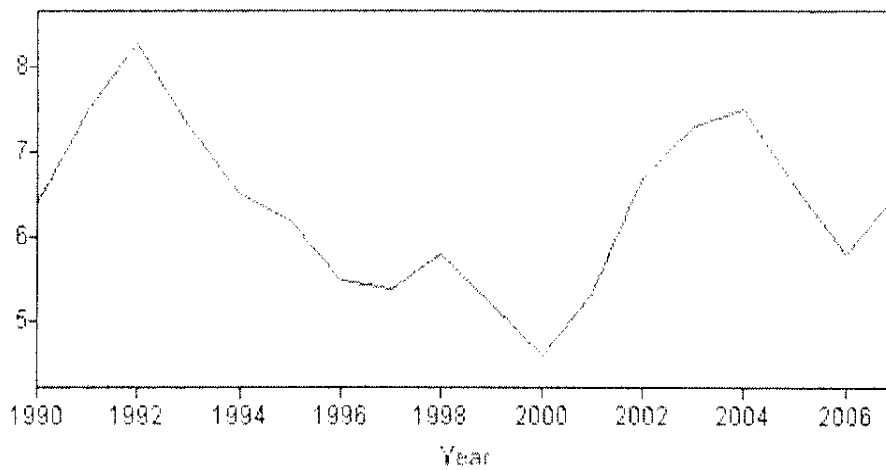
employment



unemployment



unemployment rate



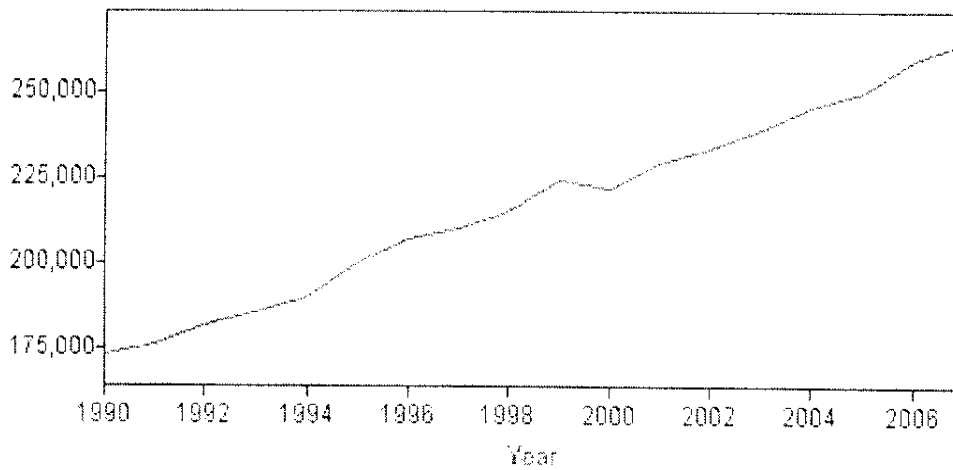
| Year | Period | labor force | employment | unemployment | unemployment rate |
|------|--------|-------------|------------|--------------|-------------------|
| 1990 | Annual | 48788 | 45642 | 3146 | 6.4 |
| 1991 | Annual | 50026 | 46289 | 3737 | 7.5 |
| 1992 | Annual | 49914 | 45780 | 4134 | 8.3 |
| 1993 | Annual | 50369 | 46698 | 3671 | 7.3 |
| 1994 | Annual | 52374 | 48960 | 3414 | 6.5 |
| 1995 | Annual | 52288 | 49041 | 3247 | 6.2 |
| 1996 | Annual | 52291 | 49422 | 2869 | 5.5 |
| 1997 | Annual | 52782 | 49932 | 2850 | 5.4 |
| 1998 | Annual | 52326 | 49308 | 3018 | 5.8 |
| 1999 | Annual | 52009 | 49286 | 2723 | 5.2 |
| 2000 | Annual | 52406 | 49984 | 2422 | 4.6 |

| | | | | |
|--------------------|----------|----------|---------|--------|
| 2001 Annual | 52217 | 49440 | 2777 | 5.3 |
| 2002 Annual | 51947 | 48444 | 3503 | 6.7 |
| 2003 Annual | 51395(e) | 47621(e) | 3774(e) | 7.3(e) |
| 2004 Annual | 51824(e) | 47937(e) | 3887(e) | 7.5(e) |
| 2005 Annual | 53101(e) | 49602(e) | 3499(e) | 6.6(e) |
| 2006 Annual | 54654(e) | 51460(e) | 3194(e) | 5.8(e) |
| 2007 Annual | 56026(e) | 52374(e) | 3652(e) | 6.5(e) |

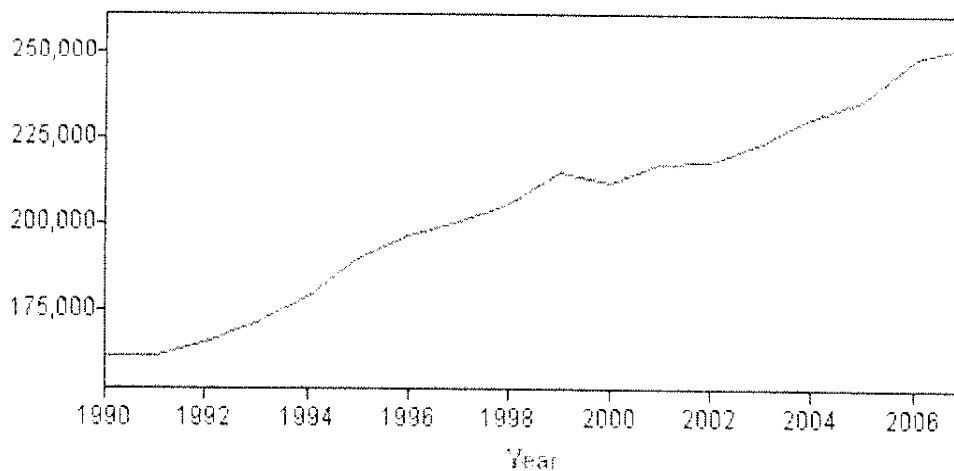
e : Reflects revised inputs, reestimation, and new statewide controls.

Series Id: LAUPS17032003,LAUPS17032004,LAUPS17032005,LAUPS17032006
 Not Seasonally Adjusted
 Area: Kane County, IL
 Area Type: Counties and equivalents
 State/Region/Division: Illinois

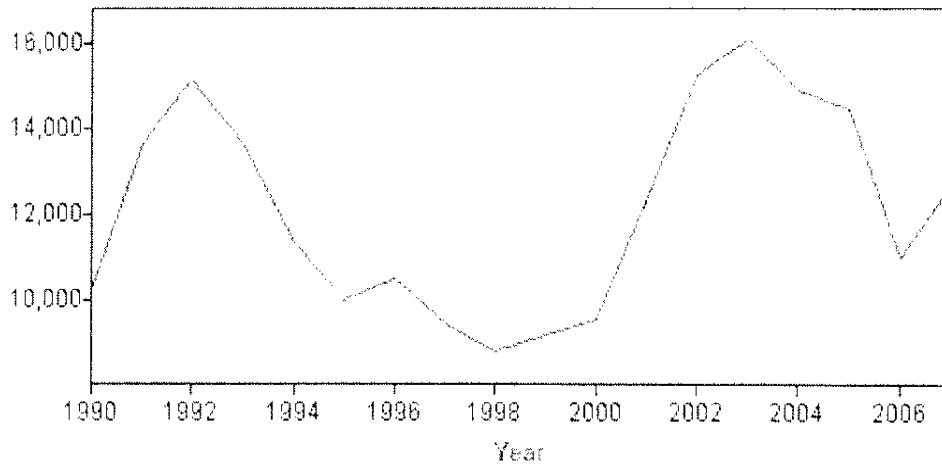
labor force



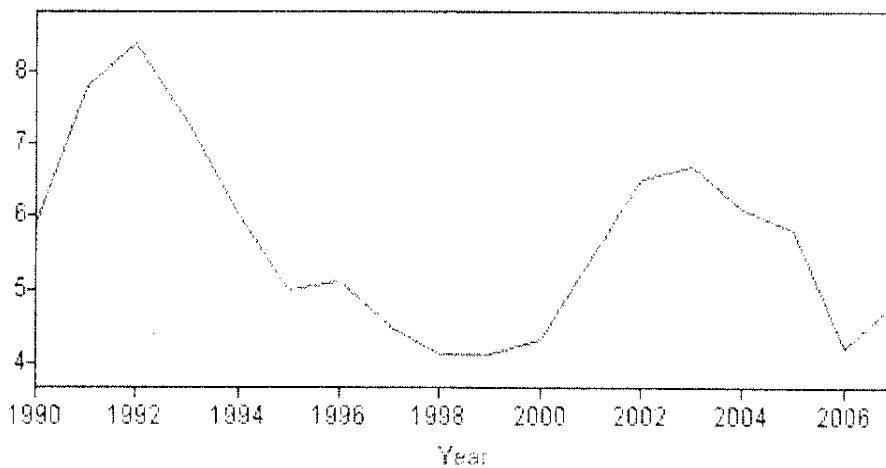
employment



unemployment



unemployment rate



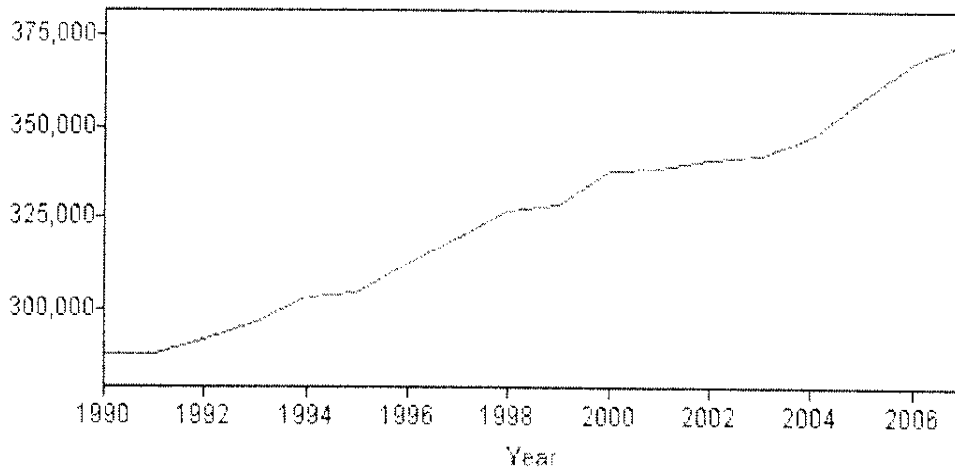
| Year | Period | labor force | employment | unemployment | unemployment rate |
|------|--------|-------------|------------|--------------|-------------------|
| 1990 | Annual | 172731 | 162514 | 10217 | 5.9 |
| 1991 | Annual | 175769 | 162143 | 13626 | 7.8 |
| 1992 | Annual | 181382 | 166233 | 15149 | 8.4 |
| 1993 | Annual | 185249 | 171641 | 13608 | 7.3 |
| 1994 | Annual | 189925 | 178586 | 11339 | 6.0 |
| 1995 | Annual | 199577 | 189587 | 9990 | 5.0 |
| 1996 | Annual | 206752 | 196290 | 10462 | 5.1 |
| 1997 | Annual | 210007 | 200582 | 9425 | 4.5 |
| 1998 | Annual | 214737 | 205966 | 8771 | 4.1 |
| 1999 | Annual | 224064 | 214874 | 9190 | 4.1 |
| 2000 | Annual | 221739 | 212203 | 9536 | 4.3 |

| | | | | |
|--------------------|-----------|-----------|----------|--------|
| 2001 Annual | 229474 | 217176 | 12298 | 5.4 |
| 2002 Annual | 233434 | 218226 | 15208 | 6.5 |
| 2003 Annual | 239393(e) | 223291(e) | 16102(e) | 6.7(e) |
| 2004 Annual | 245720(e) | 230847(e) | 14873(e) | 6.1(e) |
| 2005 Annual | 250118(e) | 235696(e) | 14422(e) | 5.8(e) |
| 2006 Annual | 259169(e) | 248212(e) | 10957(e) | 4.2(e) |
| 2007 Annual | 264619(e) | 252011(e) | 12608(e) | 4.8(e) |

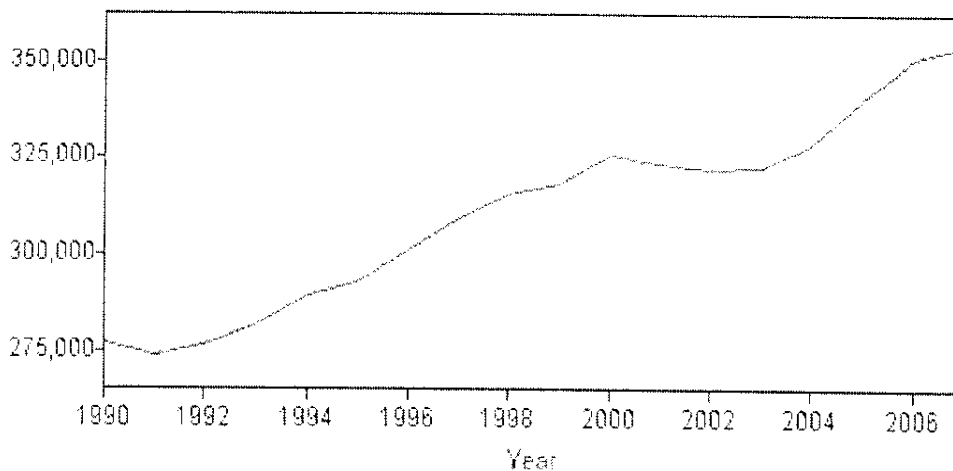
e : Reflects revised inputs, reestimation, and new statewide controls.

Series Id: LAUCN17097003, LAUCN17097004, LAUCN17097005, LAUCN17097006
 Not Seasonally Adjusted
 Area: Lake County, IL
 Area Type: Counties and equivalents
 State/Region/Division: Illinois

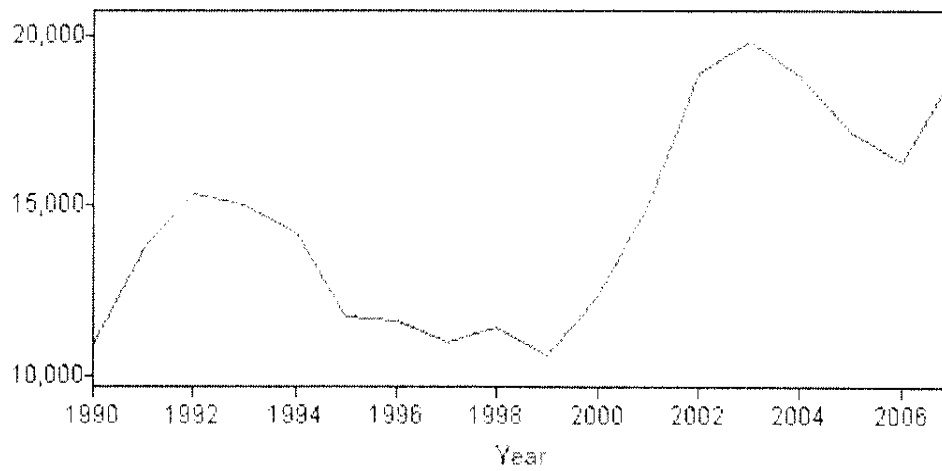
labor force



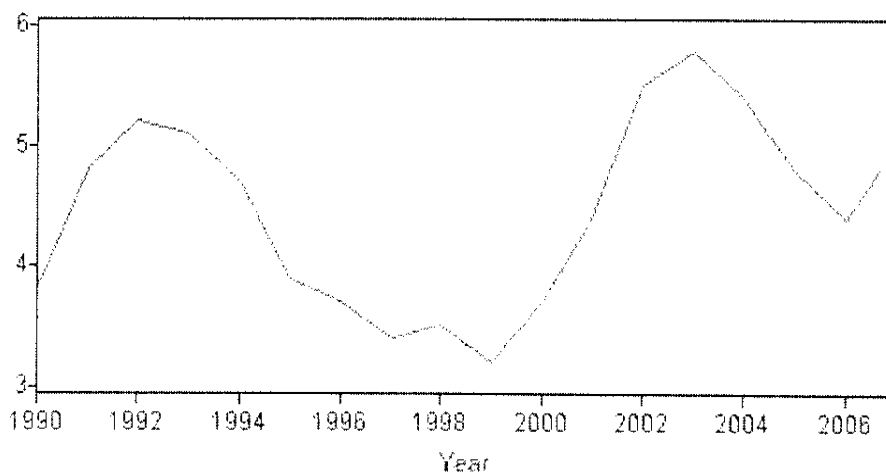
employment



unemployment



unemployment rate



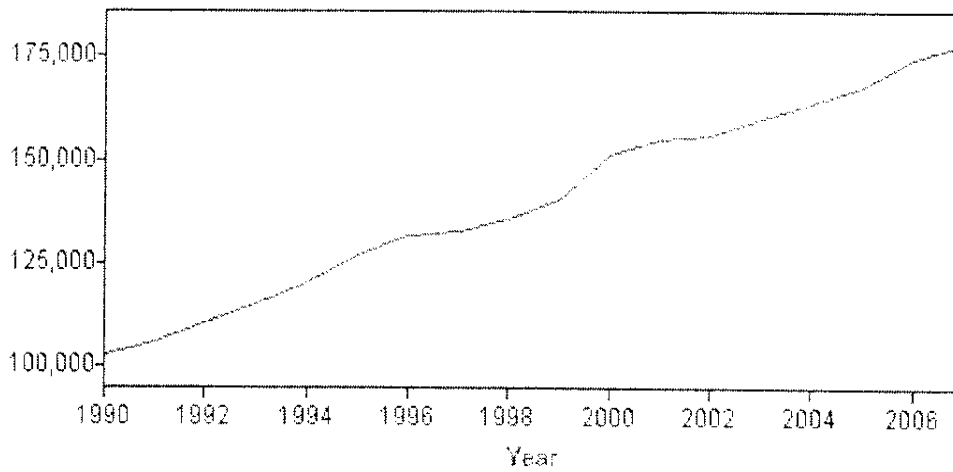
| Year | Period | labor force | employment | unemployment | unemployment rate |
|------|--------|-------------|------------|--------------|-------------------|
| 1990 | Annual | 287774 | 276849 | 10925 | 3.8 |
| 1991 | Annual | 287364 | 273643 | 13721 | 4.8 |
| 1992 | Annual | 291573 | 276276 | 15297 | 5.2 |
| 1993 | Annual | 296336 | 281326 | 15010 | 5.1 |
| 1994 | Annual | 303531 | 289353 | 14178 | 4.7 |
| 1995 | Annual | 304575 | 292819 | 11756 | 3.9 |
| 1996 | Annual | 312530 | 300924 | 11606 | 3.7 |
| 1997 | Annual | 320068 | 309063 | 11005 | 3.4 |
| 1998 | Annual | 326613 | 315209 | 11404 | 3.5 |
| 1999 | Annual | 328484 | 317893 | 10591 | 3.2 |
| 2000 | Annual | 338306 | 325926 | 12380 | 3.7 |

| | | | | |
|--------------------|-----------|-----------|----------|--------|
| 2001 Annual | 338547 | 323596 | 14951 | 4.4 |
| 2002 Annual | 340812 | 321999 | 18813 | 5.5 |
| 2003 Annual | 342313(e) | 322498(e) | 19815(e) | 5.8(e) |
| 2004 Annual | 347247(e) | 328445(e) | 18802(e) | 5.4(e) |
| 2005 Annual | 358124(e) | 341001(e) | 17123(e) | 4.8(e) |
| 2006 Annual | 367721(e) | 351429(e) | 16292(e) | 4.4(e) |
| 2007 Annual | 373570(e) | 354846(e) | 18724(e) | 5.0(e) |

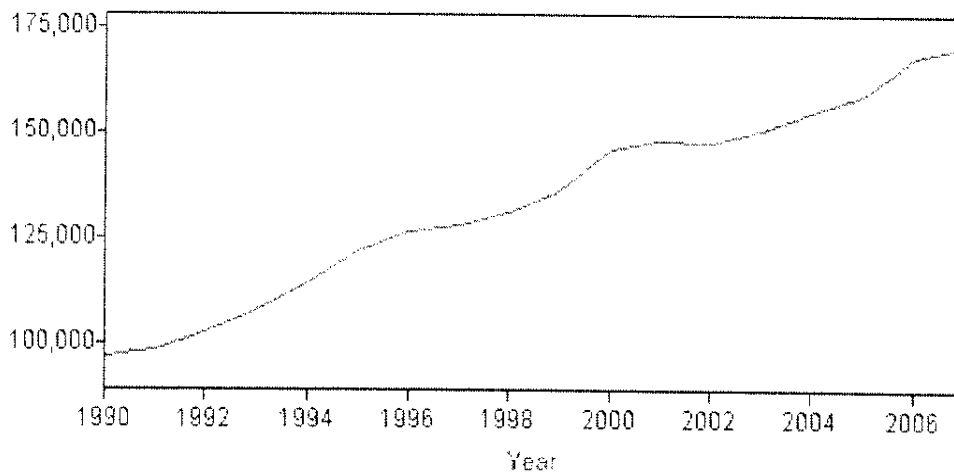
e : Reflects revised inputs, reestimation, and new statewide controls.

Series Id: LAUPS17050003,LAUPS17050004,LAUPS17050005,LAUPS17050006
 Not Seasonally Adjusted
 Area: McHenry County, IL
 Area Type: Counties and equivalents
 State/Region/Division: Illinois

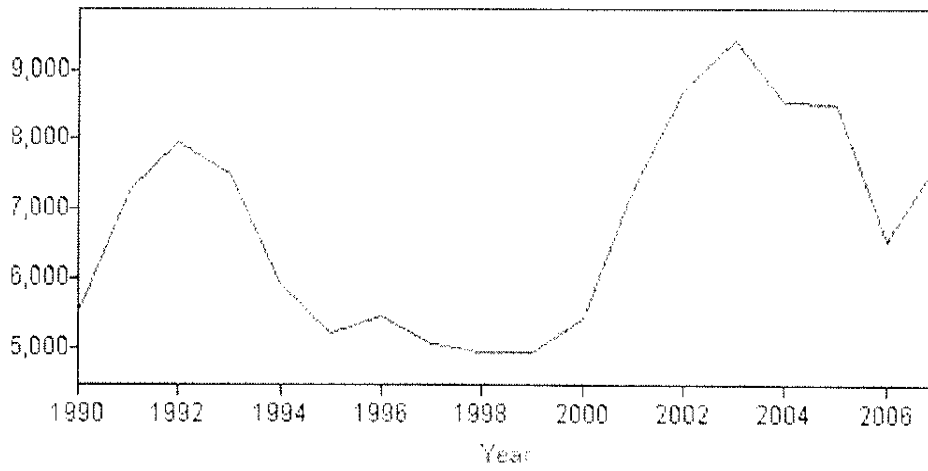
labor force



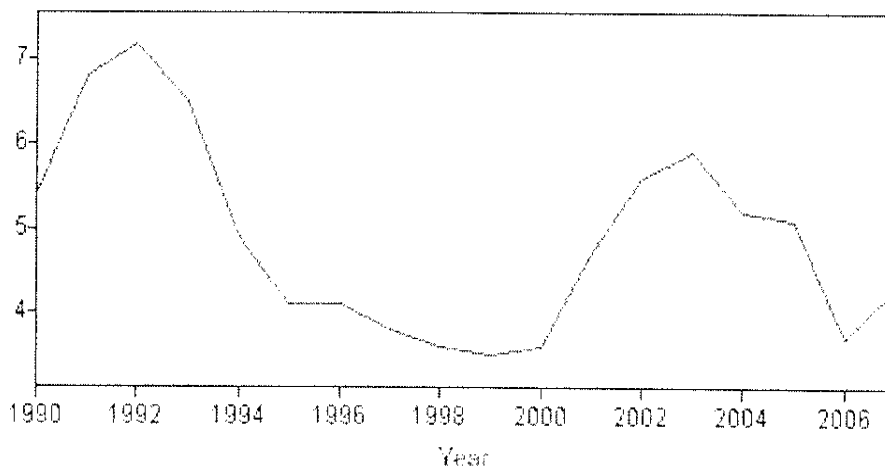
employment



unemployment



unemployment rate



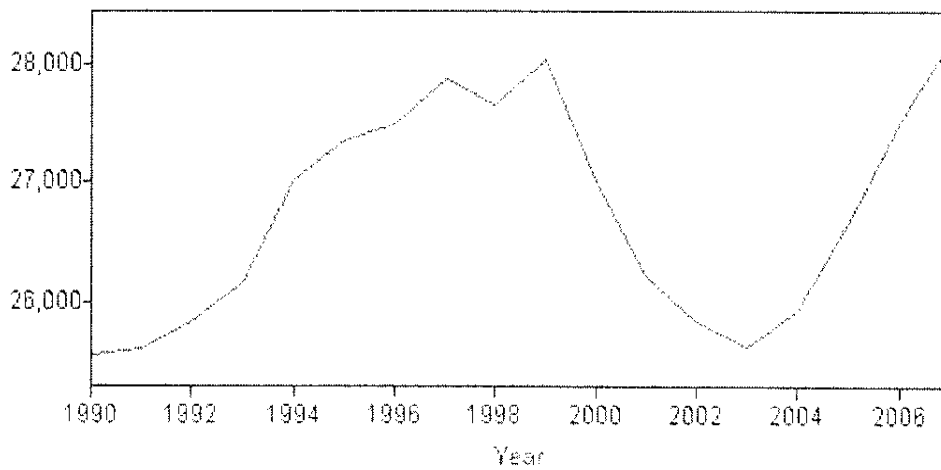
| Year | Period | labor force | employment | unemployment | unemployment rate |
|------|--------|-------------|------------|--------------|-------------------|
| 1990 | Annual | 102572 | 97057 | 5515 | 5.4 |
| 1991 | Annual | 105852 | 98612 | 7240 | 6.8 |
| 1992 | Annual | 110524 | 102571 | 7953 | 7.2 |
| 1993 | Annual | 115345 | 107857 | 7488 | 6.5 |
| 1994 | Annual | 120112 | 114203 | 5909 | 4.9 |
| 1995 | Annual | 127168 | 121958 | 5210 | 4.1 |
| 1996 | Annual | 131681 | 126226 | 5455 | 4.1 |
| 1997 | Annual | 132883 | 127815 | 5068 | 3.8 |
| 1998 | Annual | 135571 | 130629 | 4942 | 3.6 |
| 1999 | Annual | 140673 | 135748 | 4925 | 3.5 |
| 2000 | Annual | 151359 | 145929 | 5430 | 3.6 |

| | | | | |
|--------------------|-----------|-----------|---------|--------|
| 2001 Annual | 155137 | 147904 | 7233 | 4.7 |
| 2002 Annual | 156134 | 147426 | 8708 | 5.6 |
| 2003 Annual | 160033(e) | 150600(e) | 9433(e) | 5.9(e) |
| 2004 Annual | 163528(e) | 154987(e) | 8541(e) | 5.2(e) |
| 2005 Annual | 167731(e) | 159223(e) | 8508(e) | 5.1(e) |
| 2006 Annual | 174762(e) | 168246(e) | 6516(e) | 3.7(e) |
| 2007 Annual | 178460(e) | 170822(e) | 7638(e) | 4.3(e) |

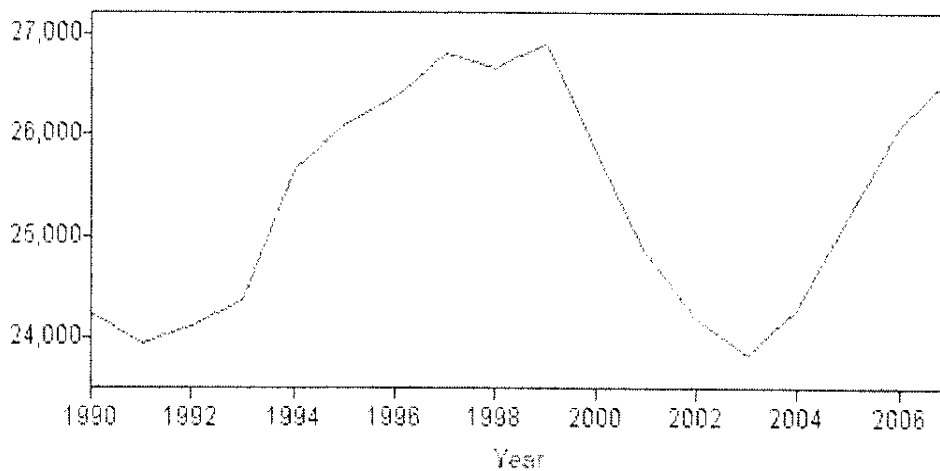
e : Reflects revised inputs, reestimation, and new statewide controls.

Series Id: LAUCN17141003, LAUCN17141004, LAUCN17141005, LAUCN17141006
 Not Seasonally Adjusted
 Area: Ogle County, IL
 Area Type: Counties and equivalents
 State/Region/Division: Illinois

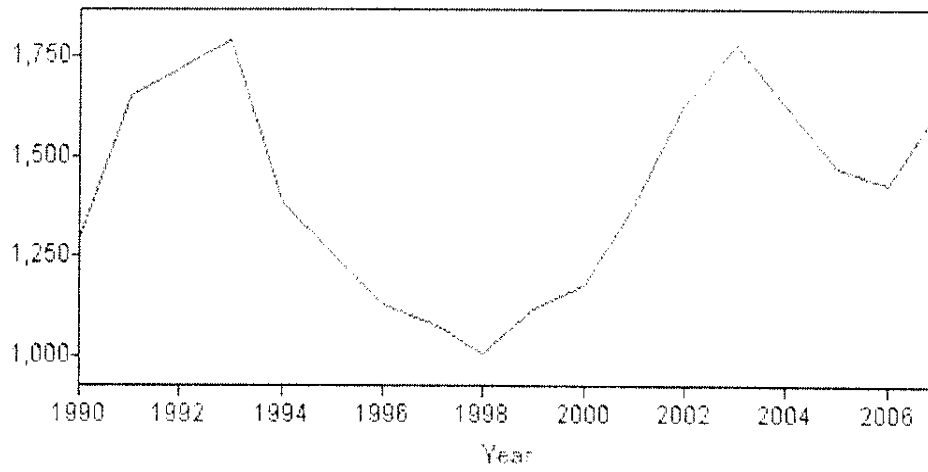
labor force



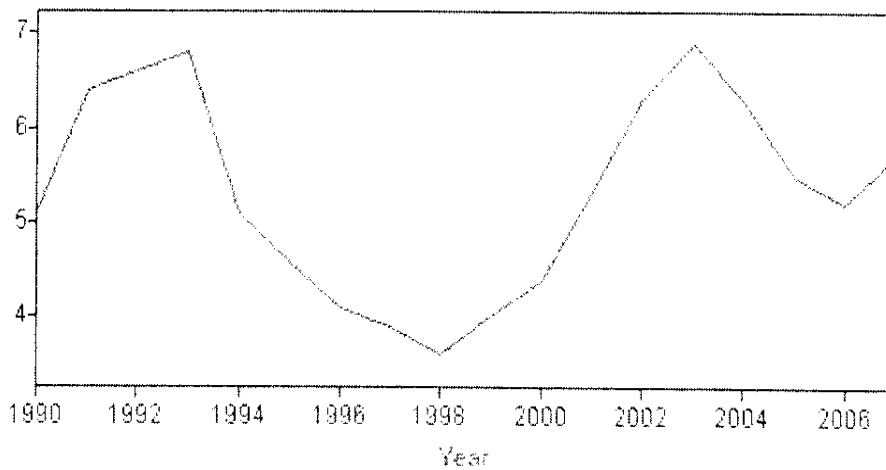
employment



unemployment



unemployment rate



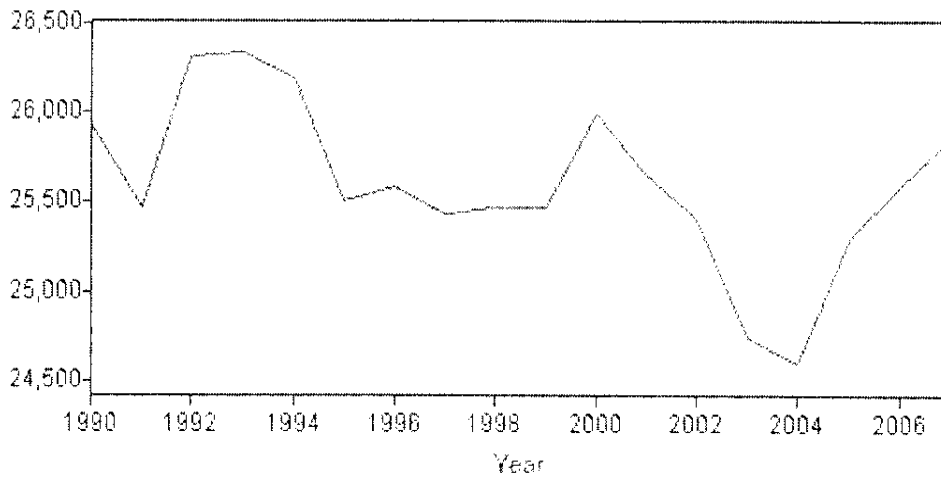
| Year | Period | labor force | employment | unemployment | unemployment rate |
|------|--------|-------------|------------|--------------|-------------------|
| 1990 | Annual | 25537 | 24243 | 1294 | 5.1 |
| 1991 | Annual | 25599 | 23950 | 1649 | 6.4 |
| 1992 | Annual | 25826 | 24110 | 1716 | 6.6 |
| 1993 | Annual | 26161 | 24370 | 1791 | 6.8 |
| 1994 | Annual | 27020 | 25636 | 1384 | 5.1 |
| 1995 | Annual | 27349 | 26090 | 1259 | 4.6 |
| 1996 | Annual | 27482 | 26354 | 1128 | 4.1 |
| 1997 | Annual | 27871 | 26792 | 1079 | 3.9 |
| 1998 | Annual | 27657 | 26653 | 1004 | 3.6 |
| 1999 | Annual | 28027 | 26910 | 1117 | 4.0 |
| 2000 | Annual | 26995 | 25819 | 1176 | 4.4 |

| | | | | |
|--------------------|----------|----------|---------|--------|
| 2001 Annual | 26224 | 24846 | 1378 | 5.3 |
| 2002 Annual | 25827 | 24196 | 1631 | 6.3 |
| 2003 Annual | 25610(e) | 23832(e) | 1778(e) | 6.9(e) |
| 2004 Annual | 25917(e) | 24287(e) | 1630(e) | 6.3(e) |
| 2005 Annual | 26668(e) | 25196(e) | 1472(e) | 5.5(e) |
| 2006 Annual | 27505(e) | 26075(e) | 1430(e) | 5.2(e) |
| 2007 Annual | 28182(e) | 26565(e) | 1617(e) | 5.7(e) |

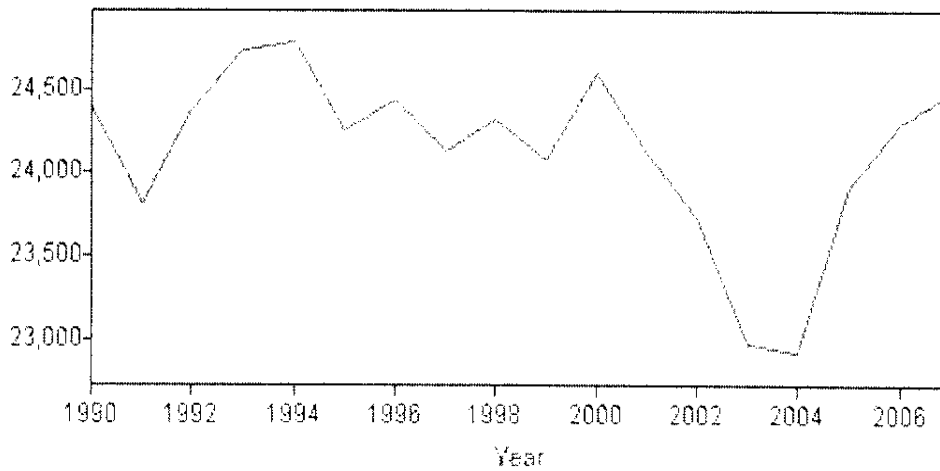
e : Reflects revised inputs, reestimation, and new statewide controls.

Series Id: LAUCN17177003, LAUCN17177004, LAUCN17177005, LAUCN17177006
 Not Seasonally Adjusted
 Area: Stephenson County, IL
 Area Type: Counties and equivalents
 State/Region/Division: Illinois

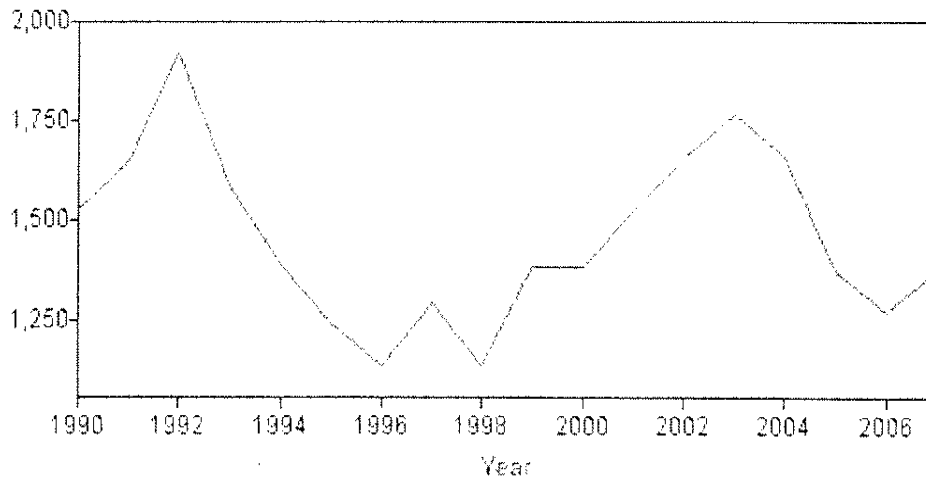
labor force



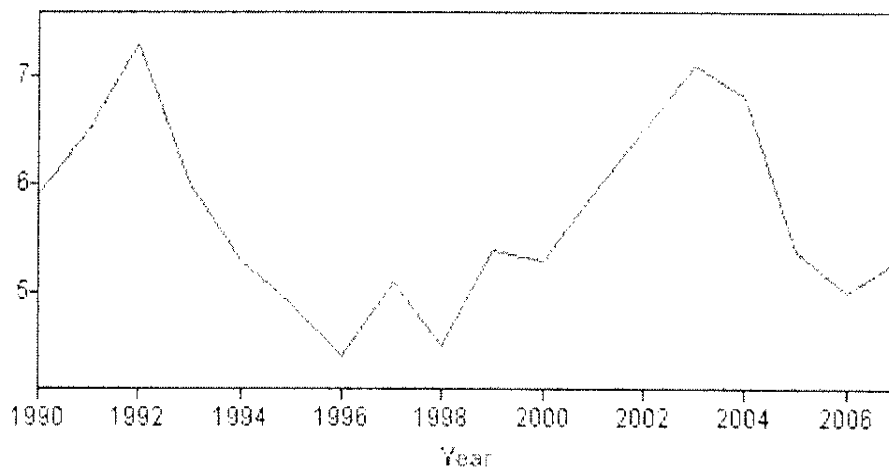
employment



unemployment



unemployment rate



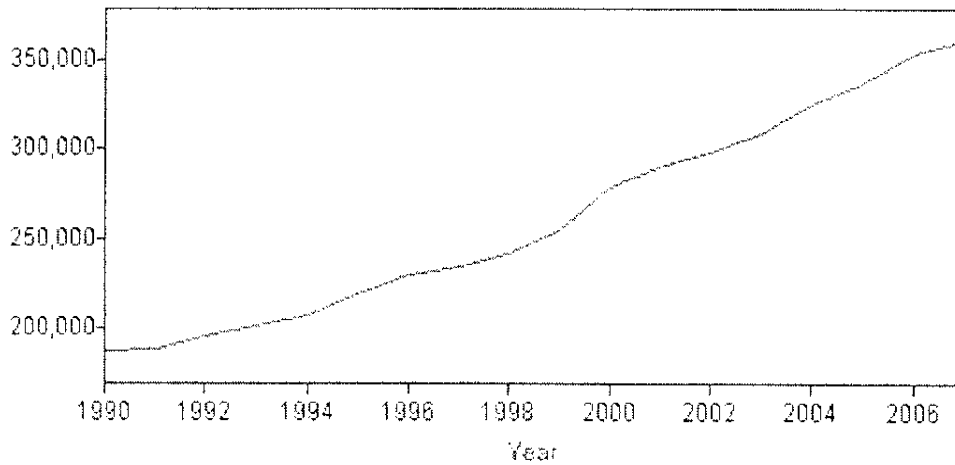
| Year | Period | labor force | employment | unemployment | unemployment rate |
|------|--------|-------------|------------|--------------|-------------------|
| 1990 | Annual | 25922 | 24397 | 1525 | 5.9 |
| 1991 | Annual | 25456 | 23806 | 1650 | 6.5 |
| 1992 | Annual | 26303 | 24381 | 1922 | 7.3 |
| 1993 | Annual | 26335 | 24747 | 1588 | 6.0 |
| 1994 | Annual | 26191 | 24805 | 1386 | 5.3 |
| 1995 | Annual | 25501 | 24260 | 1241 | 4.9 |
| 1996 | Annual | 25573 | 24436 | 1137 | 4.4 |
| 1997 | Annual | 25424 | 24131 | 1293 | 5.1 |
| 1998 | Annual | 25465 | 24331 | 1134 | 4.5 |
| 1999 | Annual | 25457 | 24075 | 1382 | 5.4 |
| 2000 | Annual | 25989 | 24604 | 1385 | 5.3 |

| | | | | |
|--------------------|----------|----------|---------|--------|
| 2001 Annual | 25648 | 24128 | 1520 | 5.9 |
| 2002 Annual | 25398 | 23740 | 1658 | 6.5 |
| 2003 Annual | 24745(e) | 22983(e) | 1762(e) | 7.1(e) |
| 2004 Annual | 24587(e) | 22925(e) | 1662(e) | 6.8(e) |
| 2005 Annual | 25282(e) | 23910(e) | 1372(e) | 5.4(e) |
| 2006 Annual | 25574(e) | 24304(e) | 1270(e) | 5.0(e) |
| 2007 Annual | 25846(e) | 24476(e) | 1370(e) | 5.3(e) |

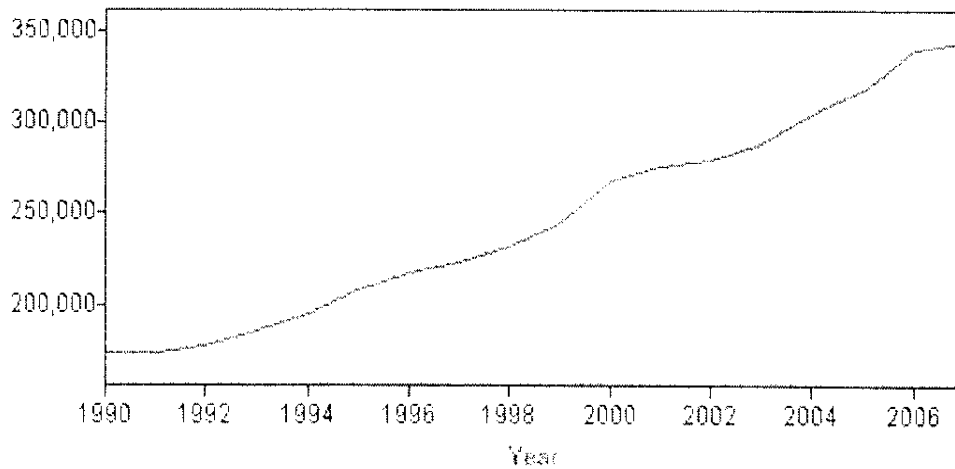
e : Reflects revised inputs, reestimation, and new statewide controls.

Series Id: LAUCN17197003, LAUCN17197004, LAUCN17197005, LAUCN17197006
 Not Seasonally Adjusted
 Area: Will County, IL
 Area Type: Counties and equivalents
 State/Region/Division: Illinois

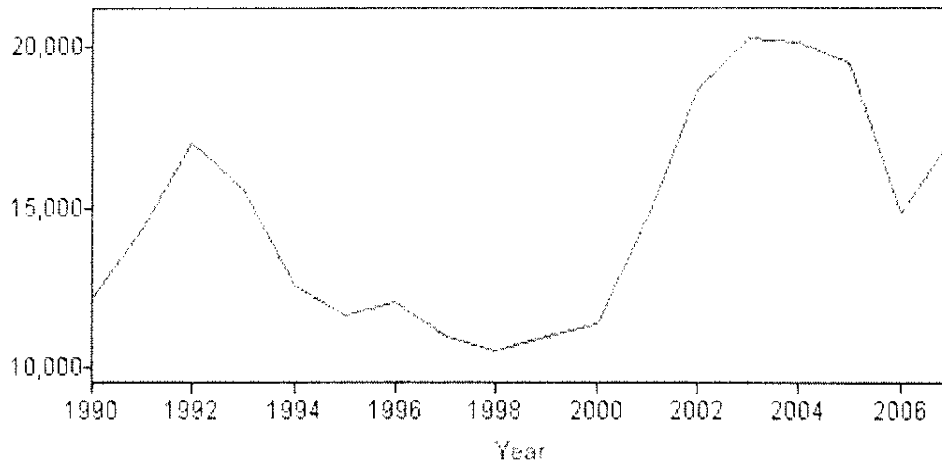
labor force



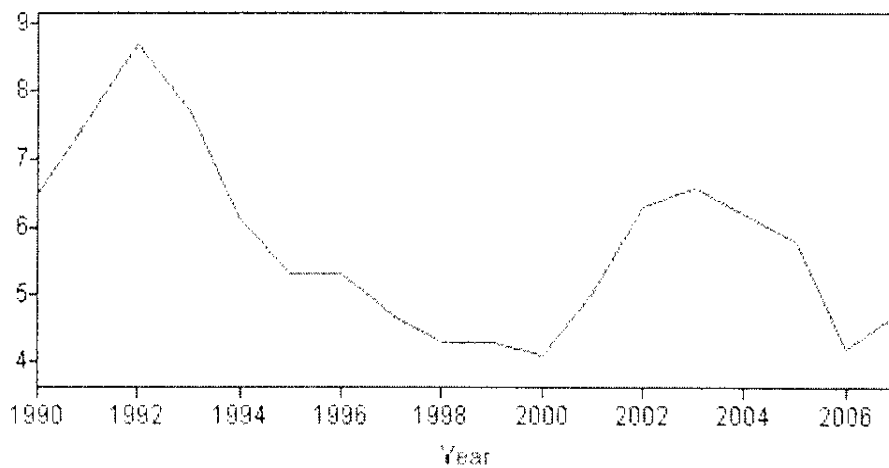
employment



unemployment



unemployment rate



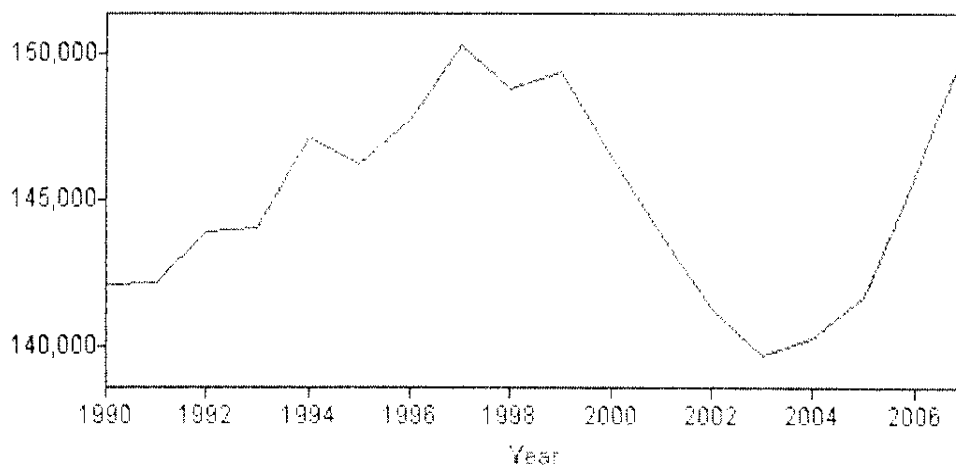
| Year | Period | labor force | employment | unemployment | unemployment rate |
|------|--------|-------------|------------|--------------|-------------------|
| 1990 | Annual | 186649 | 174505 | 12144 | 6.5 |
| 1991 | Annual | 188583 | 174199 | 14384 | 7.6 |
| 1992 | Annual | 195509 | 178476 | 17033 | 8.7 |
| 1993 | Annual | 201284 | 185714 | 15570 | 7.7 |
| 1994 | Annual | 207817 | 195216 | 12601 | 6.1 |
| 1995 | Annual | 219638 | 207973 | 11665 | 5.3 |
| 1996 | Annual | 229714 | 217643 | 12071 | 5.3 |
| 1997 | Annual | 234127 | 223124 | 11003 | 4.7 |
| 1998 | Annual | 241696 | 231208 | 10488 | 4.3 |
| 1999 | Annual | 254872 | 243920 | 10952 | 4.3 |
| 2000 | Annual | 278796 | 267410 | 11386 | 4.1 |

| | | | | |
|--------------------|-----------|-----------|----------|--------|
| 2001 Annual | 290036 | 275457 | 14579 | 5.0 |
| 2002 Annual | 297492 | 278816 | 18676 | 6.3 |
| 2003 Annual | 308603(e) | 288311(e) | 20292(e) | 6.6(e) |
| 2004 Annual | 324856(e) | 304734(e) | 20122(e) | 6.2(e) |
| 2005 Annual | 337039(e) | 317611(e) | 19428(e) | 5.8(e) |
| 2006 Annual | 354386(e) | 339511(e) | 14875(e) | 4.2(e) |
| 2007 Annual | 361801(e) | 344708(e) | 17093(e) | 4.7(e) |

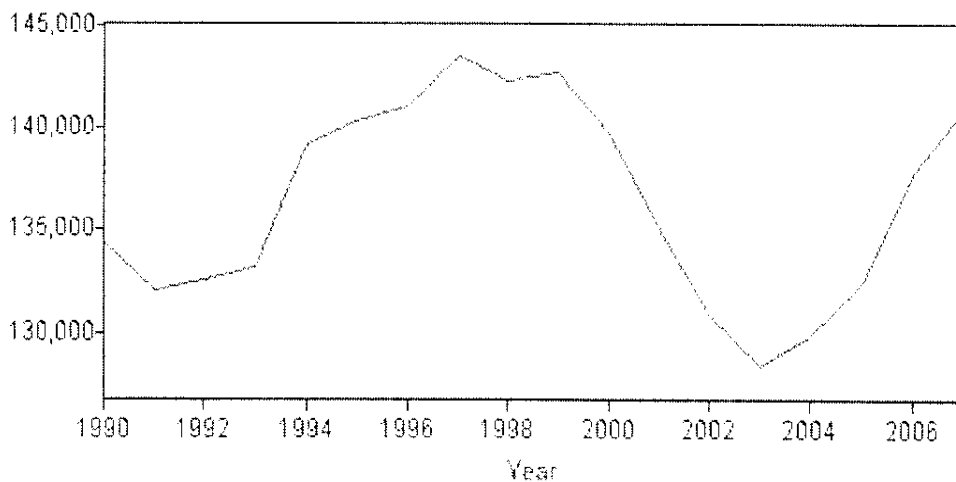
e : Reflects revised inputs, reestimation, and new statewide controls.

Series Id: LAUCN17201003, LAUCN17201004, LAUCN17201005, LAUCN17201006
 Not Seasonally Adjusted
 Area: Winnebago County, IL
 Area Type: Counties and equivalents
 State/Region/Division: Illinois

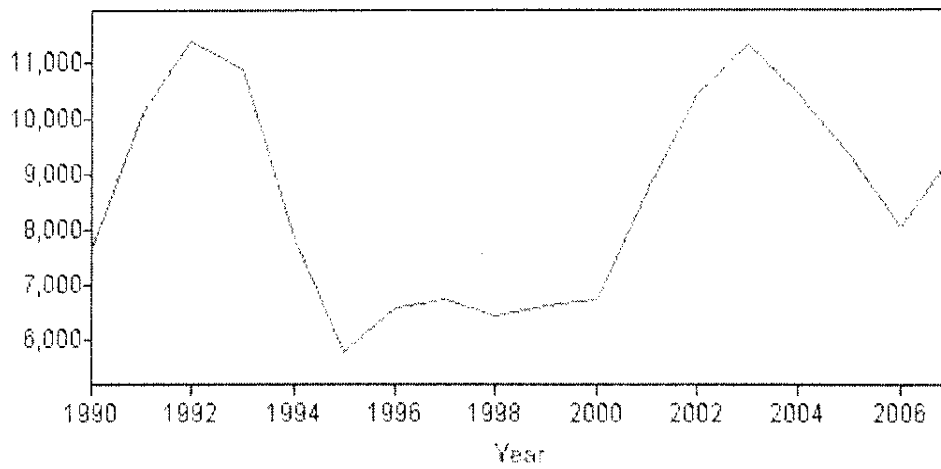
labor force



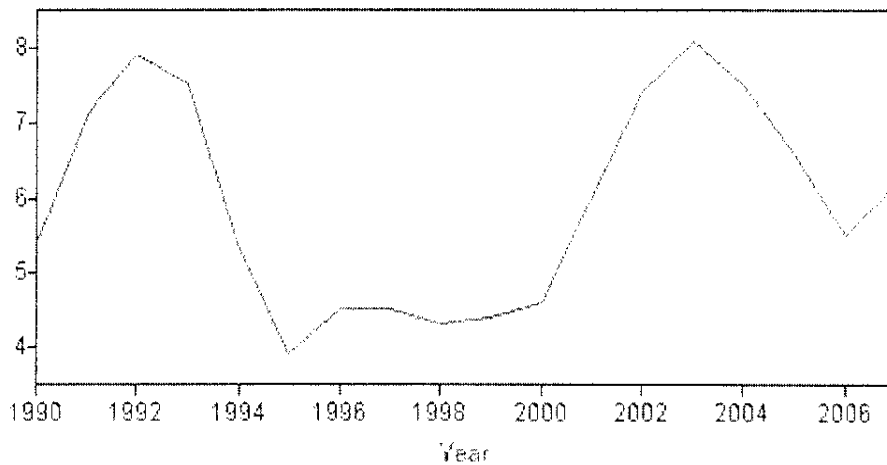
employment



unemployment



unemployment rate



| Year | Period | labor force | employment | unemployment | unemployment rate |
|------|--------|-------------|------------|--------------|-------------------|
| 1990 | Annual | 142120 | 134450 | 7670 | 5.4 |
| 1991 | Annual | 142137 | 132040 | 10097 | 7.1 |
| 1992 | Annual | 143911 | 132525 | 11386 | 7.9 |
| 1993 | Annual | 144012 | 133156 | 10856 | 7.5 |
| 1994 | Annual | 147057 | 139200 | 7857 | 5.3 |
| 1995 | Annual | 146126 | 140357 | 5769 | 3.9 |
| 1996 | Annual | 147684 | 141084 | 6600 | 4.5 |
| 1997 | Annual | 150300 | 143580 | 6720 | 4.5 |
| 1998 | Annual | 148737 | 142309 | 6428 | 4.3 |
| 1999 | Annual | 149344 | 142704 | 6640 | 4.4 |
| 2000 | Annual | 146466 | 139718 | 6748 | 4.6 |

| | | | | |
|--------------------|-----------|-----------|----------|--------|
| 2001 Annual | 143916 | 135273 | 8643 | 6.0 |
| 2002 Annual | 141289 | 130897 | 10392 | 7.4 |
| 2003 Annual | 139687(e) | 128380(e) | 11307(e) | 8.1(e) |
| 2004 Annual | 140294(e) | 129839(e) | 10455(e) | 7.5(e) |
| 2005 Annual | 141643(e) | 132317(e) | 9326(e) | 6.6(e) |
| 2006 Annual | 145783(e) | 137758(e) | 8025(e) | 5.5(e) |
| 2007 Annual | 150118(e) | 140839(e) | 9279(e) | 6.2(e) |

e : Reflects revised inputs, reestimation, and new statewide controls.

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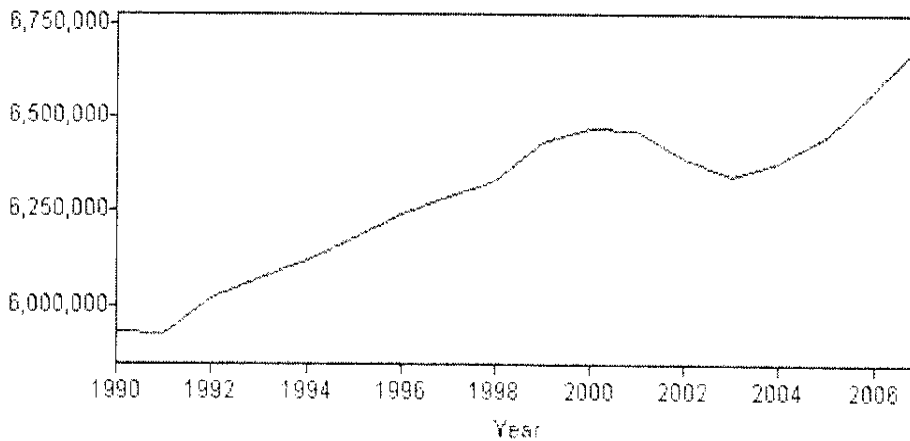
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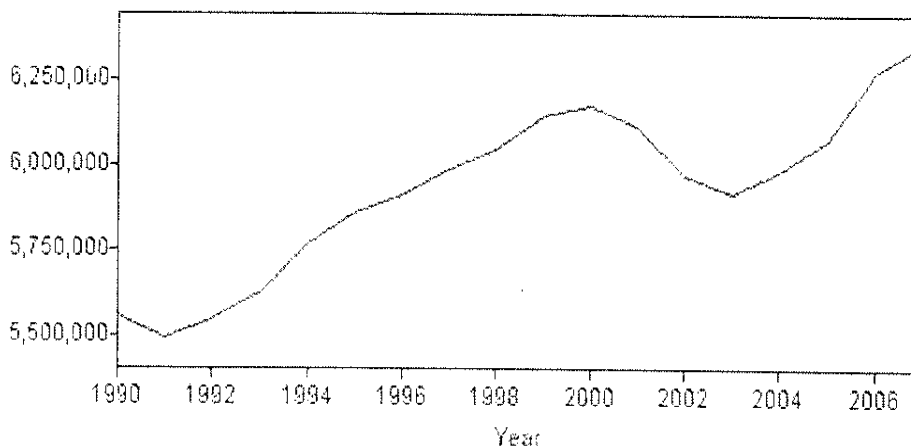
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Not Seasonally Adjusted
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Area Type: Statewide
State/Region/Division: Illinois

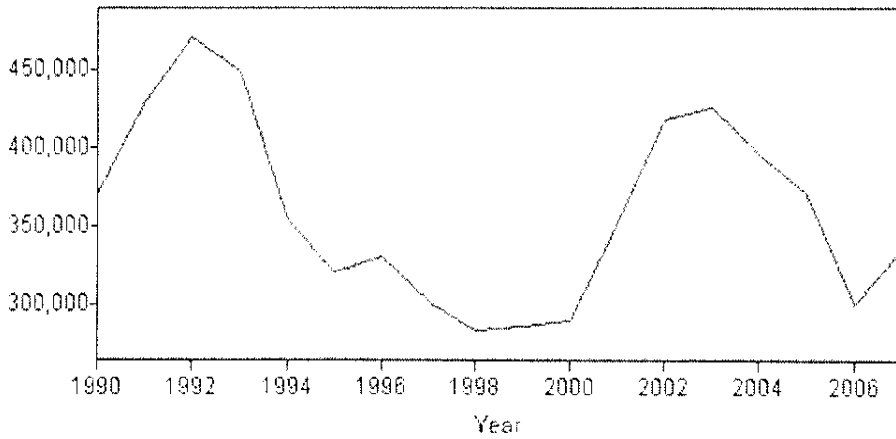
labor force



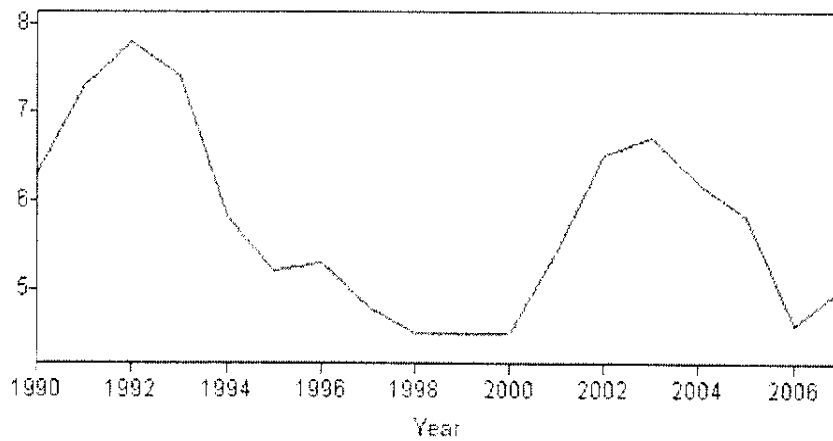
employment



unemployment




unemployment rate



| Year | Period | labor force | employment | unemployment | unemployment rate |
|------|--------|-------------|------------|--------------|-------------------|
| 1990 | Annual | 5931619 | 5560548 | 371071 | 6.3 |
| 1991 | Annual | 5923409 | 5493554 | 429855 | 7.3 |
| 1992 | Annual | 6018149 | 5546722 | 471427 | 7.8 |
| 1993 | Annual | 6073634 | 5625103 | 448531 | 7.4 |
| 1994 | Annual | 6121285 | 5766671 | 354614 | 5.8 |
| 1995 | Annual | 6178774 | 5857677 | 321097 | 5.2 |
| 1996 | Annual | 6239028 | 5907278 | 331750 | 5.3 |
| 1997 | Annual | 6290774 | 5988296 | 302478 | 4.8 |
| 1998 | Annual | 6330665 | 6047050 | 283615 | 4.5 |
| 1999 | Annual | 6429466 | 6143130 | 286336 | 4.5 |
| 2000 | Annual | 6467692 | 6176837 | 290855 | 4.5 |
| 2001 | Annual | 6464511 | 6113536 | 350975 | 5.4 |
| 2002 | Annual | 6387086 | 5969393 | 417693 | 6.5 |
| 2003 | Annual | 6343273(d) | 5916830(d) | 426443(d) | 6.7(d) |
| 2004 | Annual | 6376343(d) | 5979684(d) | 396659(d) | 6.2(d) |
| 2005 | Annual | 6447000(d) | 6075978(d) | 371022(d) | 5.8(d) |
| 2006 | Annual | 6574137(d) | 6273162(d) | 300975(d) | 4.6(d) |
| 2007 | Annual | 6697382(d) | 6361750(d) | 335632(d) | 5.0(d) |

d : Reflects revised population controls and model reestimation for 2003-07.

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Sports

Officials Unveil Olympic Stadium Plan

POSTED: 8:21 am CST January 23, 2007
UPDATED: 7:26 pm CST January 23, 2007

CHICAGO -- Chicago's Olympic bid organizers on Tuesday divulged more of their plans to try to lure the 2016 Games to the city.

Related Content: [Video](#) | [Images](#)

Part of the city's proposal submitted to the U.S. Olympic Committee includes building a \$1 billion athletes' village on the lakefront, south of downtown.

It also calls for a \$366 million temporary Olympic stadium in a historic park on Chicago's South Side. The 85,000-seat venue would reside in Washington Park.

With a 458-page bid book in the U.S. Olympic Committee's hands, Ryan took the wraps off architectural renderings of the stadium, which would have roughly 10,000 fewer seats than originally planned.

Los Angeles is the other American city competing for the U.S. bid. One of the two cities will be advanced to an international competition expected to include Rio de Janeiro; Tokyo; Madrid; Istanbul; Doha, Qatar; and, possibly, New Delhi.

Patrick Ryan, head of Chicago's Olympic movement, said that developers would pay to build the Olympic village. After the games, the developers could sell off the space for use as condos, hotels and retail.

The money for the stadium would come primarily from corporate sponsorships.

On Monday, the USOC announced that its team will visit Chicago March 5-7 to conduct a "technical evaluation." It's not a wine-and-dine, schmoozing session. It's a chance to ask detailed questions about the city's bid book and tour the proposed venues or the sites where facilities would be built.

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In the domestic bid books, Chicago and Los Angeles were asked to address 19 themes, ranging from security and transportation to media operations and marketing.

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Olympic gold: Price tag for Chicago games at \$2 billion

January 16, 2008

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BY FRAN SPIELMAN

AND ANDREW HERRMANN Staff Reporters

Chicago Olympics officials today revealed that a 2016 Summer Games held here would require some \$900 million in venue construction, most of it, they said, paid for with private funds and games revenues.

That number does not include the \$1.1 billion previously estimated as the cost to build an Olympic Village for housing athletes near McCormick Place

Officials said they expect \$2.5 billion in revenues from such sources as sponsorships and ticket sales but did not reveal what the total cost of staging the games would be.

The data was included in a questionnaire sent to the International Olympic Committee — the group that will decide if Chicago wins the right to host the games.

That decision will be announced in October of 2009. Chicago is competing against Tokyo; Rio de Janeiro, Brazil; Baku, Azerbaijan; Doha, Qatar; Madrid, Spain; and Prague, Czech Republic.

Five permanent competition venues need to be built, making Chicago 2016's plan "fiscally responsible and one that will leave a positive legacy for the city and the Olympic Movement," the committee said in a written statement. Eleven venues already exist.

"We have reached a groundbreaking point in Chicago's mission to host the 2016 Olympic and Paralympic Games," said Chicago 2016 Chairman and CEO Patrick G. Ryan. "We are one step closer to bringing our bid's vision to life and are eager to reveal Chicago's plans to welcome the world to our great city should we receive the honor."

The Olympic Village, to be built near McCormick Place, is at the heart of the plan. Ninety-one percent of the athletes will be within 15 minutes of their competition venues, the Chicago committee said.

Games would be held from July 22 to Aug. 7, with the Paralympic Games for handicapped athletes from Aug. 18 to Aug. 28.

The average ticket would be "less than" \$75, with 45 percent of the tickets less than \$50. Some 500,000 tickets would be set aside for children as part of "Chicago's youth outreach." Total ticket revenue was pegged at \$705 million.

The committee cites a 2007 Zogby poll that showed 76 percent of Chicago area public supported hosting a games. The committee told the IOC there is "no organized opposition" to the bid but said it is talking with groups that have "expressed concerns."

The IOC executive board will cut the field in June. In Madrid, bid leader Mercedes Cogen told reporters she expects that shortlist to include four cities, hers included.

Cogen called Chicago's bid "a little general," adding, "I think it's the little things that [the IOC] really wants spelled out."

Tokyo was also doing a bit of boasting today. "Only Tokyo can do it, I believe," said Ichiro Kono, head of the 2016 Tokyo Olympics Campaign Office.

Japanese officials touted a compact Olympics with 95 percent of its venues within five miles of central Tokyo, with a main stadium to be built on the waterfront in downtown Tokyo. It estimates a cost of \$2.7 billion.

In Doha, Qatar, which borders Saudi Arabia and the Persian Gulf, officials proposed holding the Olympics in October to avoid summer heat.

2016 Olympics In Chicago? Surely You Jest!
From CRIME, GUNS, AND VIDEOTAPE

London's advice: Be clear on costs U.K.'s Olympic bill: \$18.5 bil.; But officials here play it close to their vests for now; Caption Only [Photo: British Olympics Minister Tessa Jowell offered some...]

From: Chicago Sun-Times
Date: November 30, 2007
Author: Andrew Herrmann
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Battling backlash from a skyrocketing Olympic bill back home, a top figure with **London's** 2012 Games advised Chicago bid officials Thursday to be "transparent and explicit as possible" in revealing costs.

Chicago officials acknowledged the **advice**, promised to be forthcoming, but held fast in their refusal to reveal an estimated price tag for staging a Chicago 2016 Games.

U.K. GAMES COST \$18.5 BIL.

Officials say releasing a detailed tally before submitting their bid plan in February 2009 for the Games would put it at a competitive disadvantage with other cities also vying. Chicago officials said they would make the bid book public only after it is submitted to the International Olympic.

Illinois Transportation Infrastructure

Illinois' modern transportation system utilizes air, ground transportation, rail and waterways to provide direct routes to every U.S. market and also international ports.

Illinois Interstate Highways

Illinois lies at the heart of the nation's interstate highway system. Three coast-to-coast interstates (I-70, I-80, and I-90) pass through Illinois. These are joined by major north-south interstates, including I-39, I-55, and I-57; major east-west interstates that include I-24, I-64, and I-74; as well as I-72, I-94, I-88 and I-155. In all, 2,169 miles of interstate highway serve Illinois. Only two states have more interstate miles. Illinois also benefits from major east/west/north/south interchanges located in more than a dozen communities around the state. Augmenting the interstates are over 16,000 miles of state highways, making the interstate routes accessible from every region of Illinois. It's no wonder that Illinois is home to more than 6,300 trucking companies.

Illinois Railroads

Illinois is the center of the nation's rail network. Chicago is the largest U.S. rail gateway, and another major rail center is located in East St. Louis. In all 52 railroads are able to provide service from Illinois to every part of the United States.

The recent addition of the Union Pacific's new Global III Intermodal Facility in Rochelle is the industry's finest state-of-the-art terminal. This new facility offers customers multiple business advantages, including direct interstate highway routes with easy access to major east-west and north-south markets, the efficient interchange of shipments to and from rail connections, and expedited operations of over 25 trains and 3,000 containers daily.

The Illinois Air Transport System

Illinois' central location makes it a natural hub for air travel. Home to Chicago's O'Hare International Airport (one of the world's busiest airports), as well as a major commuter hub at Midway Airport and with more than 137 public use airports, 270 heliports and over 840 aviation facilities, Illinois is a convenient location for

those needing air transport. In fact, an airport with commercial airline service or the capability to handle business jets serves virtually every Illinois city with a population exceeding 30,000. With over 1.7 million tons of cargo and approximately 76.3 million travelers passing through O'Hare in 2006, and more than one arrival or departure every minute, it's obvious that travelers have maximum scheduling flexibility in Illinois.

Illinois Waterways

Illinois has 1,118 miles of navigable waterways bordering or passing through the state. These waterways provide Illinois with a link between the Atlantic Ocean (through the St. Lawrence Seaway and Great Lakes) and the Gulf of Mexico. The significance of the Illinois waterways cannot be underestimated. They function as cost-effective highways to move Illinois's products to consumers around the globe.

The Port of Chicago offers terminals that handle ocean and lake vessels, as well as barges. Owned by the Illinois International Port District, the Lake Michigan port is served by 12 railroads and has direct access to Interstates 90 and 94. There are also 12 other port districts in Illinois. Both the Illinois International Port District and the Tri-City Regional Port District near St. Louis are Foreign Trade Zones, providing low-cost production and warehousing facilities for imported and export-bound products. (Foreign trade zones also are located in Peoria, Lawrenceville, Rockford and the Quad Cities.)

Data Transport

Illinois is a leader in telecommunications technology. The state is the birthplace and testing ground for many telecommunications systems; in fact, the first electronic switching system in the United States was introduced in 1960 in Morris, Illinois and the first commercial installation of an Integrated Services Digital Network (ISDN) was implemented in Oak Brook in 1986. Since then, Illinois has continued to lead the way in fiber optics, digital switching and cellular service.

Today, virtually the entire state has digital switching. Digital switching allows information to travel as digital signals between the originating and receiving

Illinois Infrastructure Transportation

exchanges, thus providing high quality, high speed, secure voice, data and image communications at lower operating costs, as well as making possible services such as digital Centrex and switched video conferencing. Hundreds of thousands of miles of fiber optic cable have already been installed. These hair-thin filaments of glass, which use light instead of electricity to transmit voice, video and data at high speeds, make it possible to send broadband transmissions of television images and help ensure clear, high-speed, secure and reliable service. Furthermore, all of the major inter-exchange carriers have points of presence in the state, which ensures that businesses from rural communities as well as metropolitan areas can access their services. Yet even with these state-of-the-art services, Illinois offers some of the lowest phone rates in the nation -- a point not lost on businesses looking at the bottom line. Illinois has the transportation and telecommunication infrastructure to help businesses continue to grow and prosper in the future.

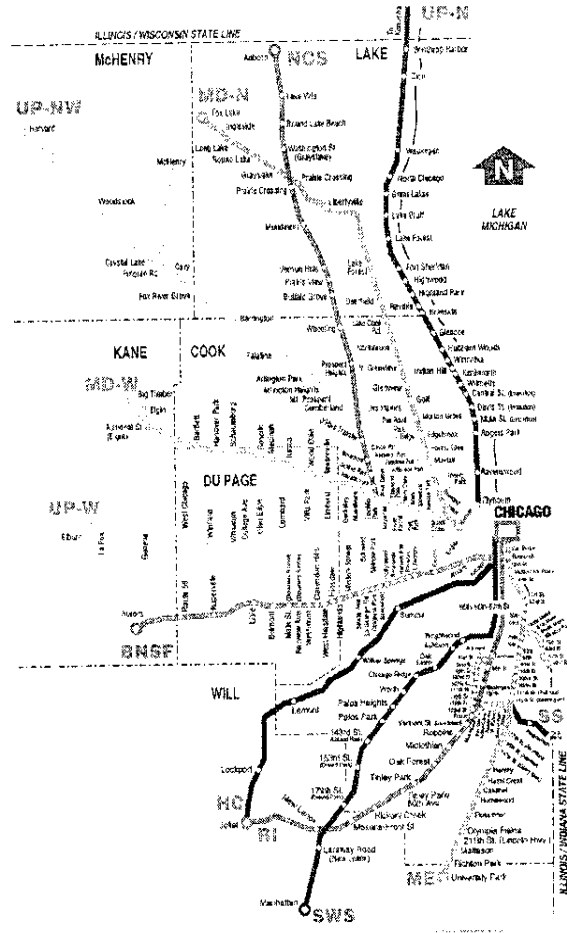
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Metra System Map

see index

Click on the line for which you would like to find station facts, fares via Metra's Farecheck function and connecting transit information.



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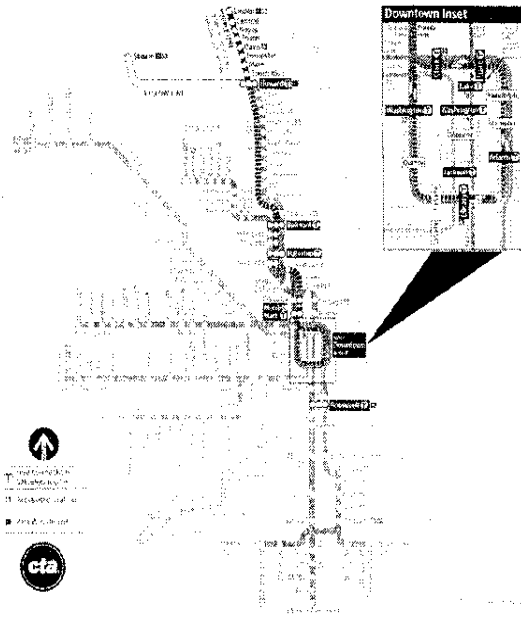
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Markets and Resources in Illinois

Located at the industrial and geographic heart of the nation, Illinois companies are able to ship and receive finished goods, semi-finished products or resources without high transport fees and expenses or costly delays. One-fifth of the Gross National Product is produced in the Midwest and nearly half of all the goods and services created in the U.S. are produced within one day's drive of the state line. In short, Illinois is a convenient and cost-effective location for growing companies.

Illinois has the resources needed to help manufacturers achieve their goals. In 2005*, over 16,000 manufacturing companies operated in the state, generating a gross output of \$77.6 billion and 13.2 percent of the gross state product. Major industries concentrated in Illinois include chemicals, primary metals, industrial and farm equipment, electric equipment and appliances, electronic components, food processing, and printing. Illinois is a leader among the states in the production of construction machinery, cookies, candy, service industry machines and environmental controls. The state is also a leader in the production of farm machinery, cereals, plastic products and machine tool products. For manufacturers, it's important to know that Illinois companies can supply almost any sub-assembly component or finished product.

According to the Annual Survey of Manufactures, Illinois companies purchased \$126 billion in materials in 2005* -- 5.0 percent of such purchases nationwide. The five Great Lakes region states as a whole accounted for nearly 25 percent of the purchases nationwide.

The survey ranks Illinois as number four among the states -- second among the Great Lakes states -- in terms of value of manufacturing shipments.

Illinois is also a retailer's dream. According to the most recent Economic Census approximately 16.0 percent of all U.S. retail sales are made in Illinois and its neighboring states. Illinois ranks third among the

states in percent of national retail sales (5.3 percent). The Chicago area, where 4.1 percent of all U.S. retail sales are made, is ranked third among metropolitan statistical areas in this category and has sales larger than 28 states.

Illinois personal income grew by 2.5 percent in first quarter of 2007*, surpassing \$513 billion, representing 4.5 percent of the U.S. total. 2006* Per capita income of \$38,215 exceeded the U.S. per capita income of \$36,276.

* Most recent statistics available as of Update.

Updated: September 2007

Markets and Resources in Illinois

ILLINOIS GROSS STATE PRODUCT: 2006

| | |
|--|--------|
| Real Gross State Product | 100.0% |
| Manufacturing | 13.2% |
| Real estate, rental, and leasing | 13.2% |
| Finance and insurance | 9.3% |
| Government | 9.6% |
| Professional and technical services | 8.4% |
| Wholesale trade | 7.2% |
| Retail trade | 5.7% |
| Health care and social assistance | 6.5% |
| Information | 3.6% |
| Construction | 4.8% |
| Transportation and warehousing, excluding Postal Service | 3.5% |
| Administrative and waste services | 3.1% |
| Management of companies and enterprises | 2.3% |
| Accommodation and food services | 2.3% |
| Other services, except government | 2.4% |
| Utilities | 2.2% |
| Arts, entertainment, and recreation | 0.9% |
| Educational services | 1.0% |
| Agriculture, forestry, fishing, and hunting | 0.3% |
| Mining | 0.3% |

Source: Bureau of Economic Analysis

The Illinois Workforce

Illinois has an impressive workforce with the skills needed to help businesses succeed. Nearly one-half of the state's 6 million workers are professionals, skilled technicians, craftspeople or machine operators. Almost 12 percent are employed in manufacturing. And Illinois workers are well educated – 56.2 percent have gained education beyond high school.

The Chicago metropolitan area is home to more than 4 million of the state's workers. The top five occupations in the area are office and administrative support; sales; service workers; management; and professional workers.

There are 14 Community Colleges in the Chicago area that offer customized job training, professional continuing education and entrepreneurship training.

Five other metropolitan areas include labor forces in the 100,000 to 300,000 ranges. An additional 4 metropolitan regions have labor forces between 30,000 and 99,000.

Illinois workers are known for their productivity. Illinois' manufacturing value added of \$109.35 per hour of labor is among the best in the Midwest.

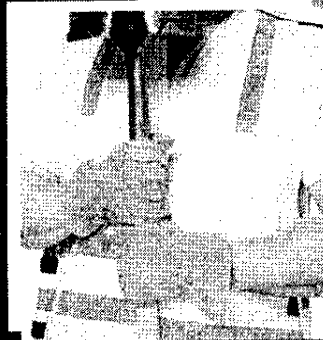
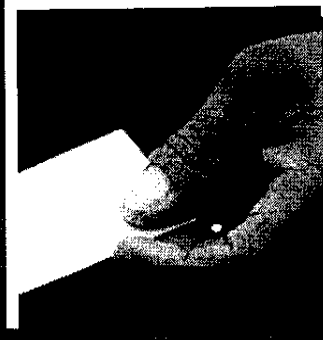
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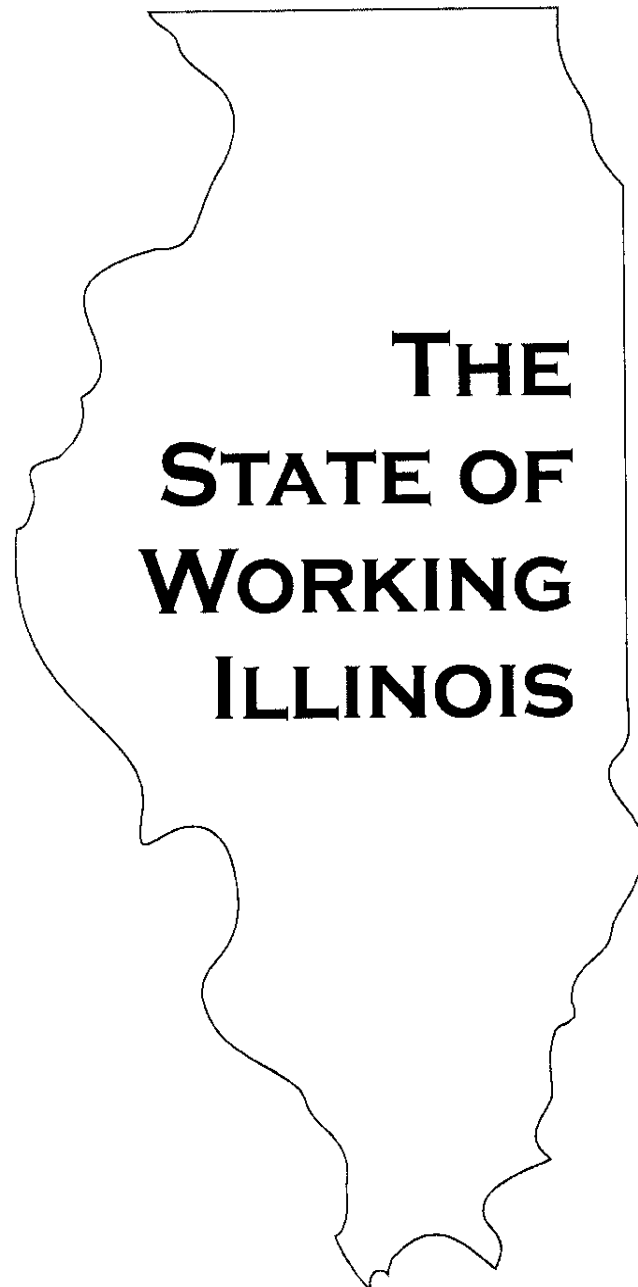
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Before the last two decades, the state had consistently been one of the leaders in the nation in job growth and median income

INTRODUCTION

The Illinois economy is experiencing a major transformation. Before the last two decades, the state had consistently been one of the leaders in the nation in job growth and median income. During the last twenty years, however, as global competition bears increasingly on state and regional economics, the results have been more mixed. Job creation in Illinois now lags the nation, and while the state's median income remains greater than most states, it too is on the decline. On the positive side, the recent growth rate of the Illinois economy has rebounded. Although Illinois lagged the entire Midwest Region in economic growth from 1990-2004, from 2005-2006 Illinois fared better than the average Midwest Regional growth rate. Yet, even as Illinois' overall economy appears to be rebounding, most workers have seen their real, inflation adjusted wages decline from 2001 through 2007.

A number of factors are working simultaneously to produce the complex patterns that are changing the Illinois economy. One primary factor has been the continued economic restructuring that has yielded many new jobs, but often replaces higher-paying jobs with lower-paying ones. Another factor is the significant portion of population growth fueled by the arrival of immigrants. Accelerating economic globalization creates an additional set of factors, the full impact of which are not yet clearly understood. These changing dynamics touch virtually every community across the state, regardless of whether it is a center-city urban neighborhood, a well-established wealthy suburban enclave, a fast-growing community on the edge of urban sprawl, or a small town struggling to cope with rural decline.

The complex interactions among these and other factors create challenges for Illinois workers, their dependents and policy makers that are increasingly different than the ones faced prior to the turn of the 21st century. This report does not attempt to explain the underlying causes of these changes. Nor does it suggest specific solutions to problems those changes have caused. Rather, the annual State of Working Illinois report provides reliable data to describe the major changes that have occurred in the state's labor markets and to chart the effects of these changes on different groups of workers and in different regions throughout the state. In this way, this report builds on our 2005 and 2006 studies.

This data will hopefully inform the public debate that must occur to develop policies that help workers, their families and communities navigate paths through the fast-changing Illinois labor market.

The first part of this report examines statewide trends related to economic growth, workforce growth, job creation, wage and salary income, and work-related benefits. The second part provides comparative data describing how these trends are impacting every county in Illinois and provides regional comparisons of these trends by combining counties into the 10 economic development regions used by policy makers at the Illinois Department of Community and Economic Opportunity.

This report is produced collaboratively by two applied research groups within Northern Illinois University (the Center for Governmental Studies and the Office for Social Policy Research) and the independent, bipartisan, non-profit Center for Tax

and Budget Accountability. Financial support for this ongoing project is provided by The Joyce Foundation and the Woods Fund of Chicago. The study's major findings are listed below.

ILLINOIS LABOR FORCE: GROWTH AND CHANGE

The Illinois Economy

- Expressed in dollars adjusted for inflation, the total value of all goods and services produced in Illinois (the state's gross domestic product, or GDP) was approximately \$507 billion¹ in 2006, which ranked Illinois fifth in the nation.
- Despite having the fifth largest GDP of any state, the 2005-06 GDP growth rate for Illinois ranked only 26th in the nation, although it was nearly double the rate for the Midwest as a whole.
- Taking a longer view, from 2000 through 2006, Illinois' economic growth rate of 9.2% ranked third out of the five Midwestern states (behind Indiana and Wisconsin, ahead of Michigan and Ohio), but fell significantly below the national growth rate of 15.8% over this period.

Changes in the Illinois Labor Force

- The Illinois civilian labor force grew over the last 17 years, reaching over 6.7 million individuals eligible for work by June 2007. This meant that the state added 121,164 workers since 2006, and 807,875 since 1990.
- The number of employed workers reached an all-time high of 6.4 million in June 2007, pushing the state's unemployment rate down to 5.1%, better than the unemployment rate in the Midwest (5.7%) but worse than the national rate (4.5%).

Changing Employment Patterns

- Between 1990 and 2007, Illinois lost 239,000 manufacturing jobs. This loss of 26.0% of its in-state manufacturing jobs over 17 years was worse than both the Midwest as a whole (20.8%) or the nation generally (20.9%).
- In 1990, Manufacturing in Illinois employed more workers than any other sector, 20.4% of the total. By 2007, only 13.2% of the state's workers were employed in Manufacturing, and that sector ranked behind Professional and Business Services (17%) and Education and Health Services (15.1%), and was only marginally ahead of Retail Trade (12.2%).

Loss of Good Paying Jobs

- Although the pace of job loss in Manufacturing slowed after 2003, and even showed a slight uptick in late 2006, otherwise lower-wage job creation has continued to dominate the Illinois labor market. In the last six years, Illinois lost 142,200 jobs in Manufacturing, or 17.3% of its 2001 base. Over the same period, Illinois added 1,580,600 lower-wage service jobs, a 9.6% growth rate.

¹ This figure was measured in chained dollars which are annual measures of real gross domestic product that have been adjusted with the use of an index that attempts to account for relative price changes and changes in output over time. These annual measures are considered to provide more accurate estimates of year-to-year changes in gross domestic product than measures published before 1996.

-
- By mid-2007, lower-wage service sectors accounted for 30.7% of all, non-agricultural, private-sector employment, significantly more than the 20.4% of total employment that Manufacturing had accounted for in 1990.
 - With the exception of Construction, the sectors with the largest gains in employment between 1990 and 2007 paid average weekly wages lower than those associated with the Manufacturing jobs that the state lost.
 - In other words, good-paying jobs are increasingly being replaced by lower-paying ones, with obviously negative consequences for the state's economy and its working families.

Declining Real Wages

- When wages are adjusted for inflation, most Illinois workers have actually experienced declining average weekly earnings since 2001.
- Measured in "real dollars," i.e., dollars adjusted for the effect of inflation, only four sectors registered gains in earnings since 2001 – Construction, Education and Health Services, Financial Activities, and Transportation and Utilities. The other seven sectors experienced declines in real average weekly earnings. The size of these declines ranged from a high of \$118 (or -13.6%) in Information Services, to a low of \$9 (or -3.5%) in Leisure and Hospitality.
- As inflation-adjusted earnings of most Illinois workers have been declining, the cost of items that collectively constitute most of their family budgets have been increasing. Significant increases in the cost of essentials like food (+23.5%), housing (+38.3%), health care (+44.7%), gas (+83.3%), and utilities (+43.0%) make it easy to appreciate how declining real wages have negatively impacted the standard of living for most working families.
- While median household income in Illinois is higher than the rest of the Midwest and the nation as a whole, it is on the decline. Measured in 2006 dollars, Illinois median household income peaked during 1999-2000. Since then it dropped almost 11 percent by 2002-2003, and has since rebounded by only 1.3 percent, leaving it about 10 percent below the earlier peak. .

Growing Income Inequality

- Nationally, the post-1980 economic trends worked to worsen income inequality in the country. The share of income held by the vast majority of American households, literally eight out of every ten, declined over the last quarter century. Only those fortunate enough to be in the wealthiest 20% of all households actually realized an increase in overall income during this period.
- Currently, income inequality in Illinois is just as severe as it is nationally. In Illinois, as in the nation, the highest-earning quintile accounts for over 50% of total household income, while the bottom three quintiles (i.e., 60% of the households) together account for only 26.6% of total household income, which is barely larger than the income share earned by the state's top 5% of households (22.7%).

THE ILLINOIS LABOR FORCE: COMPOSITION AND CHARACTERISTICS

- The Illinois labor force has become much more diverse in the last 25 years.
 - The share of women in the labor force has grown sharply since 1980, although the growth peaked in 2000-02 and has fallen off slightly since then.
- There has also been a substantial increase in the ethnic and racial diversity of the state's labor force, with minorities growing from about 18% in 1980 to over 29% in 2006. The greatest part of this growth has been contributed by Hispanics, whose share nearly tripled to 11.2% in 2006.
- The state's labor force has also become better educated. In 2006, 33.8% had a college degree, while only 10.9% lacked a high school diploma.,

Ethnic/Racial Differences in Skills and Experiences

- On average, Hispanics are the state's youngest and least-educated workers. Over one third (38.6%) of Hispanics in the workforce have not even completed high school, while another 31.4% have only a high school diploma. At the other extreme, only 11.4% of Hispanics have a college degree or better.
- African-Americans had a 10% unemployment rate in 2006, nearly triple that of Whites and almost double the Hispanic rate. Since at least 1980, unemployment among African-Americans has been higher than the state's overall rate, which suggests that race plays a role in labor market outcomes.
- A pattern of high unemployment rates among the youngest cohorts characterizes all of the state's major ethnic and racial categories. Moreover, among those unemployed in the 16-to-25 cohort, half the Whites, over three-quarters of the African-Americans, and virtually all Hispanics are both unemployed and out of school. This leaves them especially vulnerable to long-term detachment from employment and to the resulting social problems.

Education a Key Factor in Employment

- In the globalized labor market of the twenty-first century, education is strongly associated with upward mobility and higher earnings. Nationally, regionally, and in Illinois, steeply higher unemployment rates are associated with lower levels of education.
- On the other hand, among all major demographic groups, higher levels of education are associated with sharply lower unemployment rates. The unemployment rate for Whites fell from 9.5% for those with less than a high school diploma to 3.5% for those with a college degree or better. Similar declines occur among African-Americans – from 22.7% to 4.5% -- and Hispanics – from 8.3% to 1.5%.

Variations in Sectoral Employment, Ethnicity and Race

- Disproportionate concentrations of women and/or minorities in some sectors, combined with comparatively low employment rates in others, indicate that diversity, while increasing in the workforce generally, has not been spread evenly across industries.
- While women predominate in some sectors, like Education and Health Services, they comprise only a minuscule proportion of the workers in Construction, and are significantly underrepresented in other higher-paying sectors, like Manufacturing and Transportation and Utilities.

- Patterns of disproportionate employment – although with more access to higher-paying sectors – also appear in Illinois when analyzing workers across major ethnic and racial groups. For example, Hispanics now comprise 22.0% of the Manufacturing workforce and 16.4% of the total number of workers in Construction, a sector in which African-Americans have had particular difficulty in gaining employment over time, and in which they currently account for only 5.4% of the workers.
- Compared to women as a group, somewhat higher proportions of African-Americans and Hispanics have found employment in higher-paying sectors like Construction and manufacturing. Nevertheless, over one quarter of the state's Hispanics (28.0%) and 38.5% of its African-Americans are employed in lower-paying service jobs.

CHANGES IN EARNINGS AND JOB SECURITY

Poverty and Household Income

- By 2006, only 10.6% of Illinois households fell below the poverty line, just slightly above the low-point of 10.1% reached five years earlier. The proportion of Illinois children below the poverty line has been dropping annually since 2004, and in 2006 it reached 14.9%, even below the 2001 level.
- Adjusted for inflation, the state's median household income in 2005-06 was \$49,328, a decline of about 10% from the 1999-2000 high point of \$54,900, but better than the recent low reached in 2002-03, during the height of the recession. Even so, median household income in Illinois in 2005-06 is still higher than in any other Midwestern state.

Changes in Real Wages and Persisting Wage Gaps

- Median hourly wages for women have increased, reaching a high of \$13.85 in 2006. This represented a 19.0% gain since 1980 and has helped to reduce the male-female wage gap.
- While the male-female wage gap declined between 1980 and 2006, those between Whites, on the one hand, and African-Americans and Hispanics, on the other, have worsened. Measured in dollars adjusted for inflation, the gap between the median hourly wages of Whites and African-Americans increased by \$.92 per hour (or 62.1%) since 1980. The White-Hispanic gap during the same period grew by \$.54 per hour (or 14.5%).

Education Boosts Wages and Incomes

- Median wages over time have consistently varied directly with education levels, and the relationship is growing more pronounced. In 1980 the median hourly wage for those with a college degree was \$7.01 more than that for workers who had not completed high school. By 2006 the gap between these two categories of wage earners had grown to \$13.67, a 95.0% increase over 1980.

Minorities Behind in Education and Income

- Since African-Americans and Hispanics in Illinois generally have lower levels of education than Whites, it is not surprising that their incomes lag. Among African-Americans, 56.2% earned less than \$50,000, as did 55.5% of Hispanics, but only 34.5% of Whites and 25.8% of Asians earn less than \$50,000.

- While African-American and Hispanic household incomes lag behind their White and Asian counterparts, increased education works powerfully to boost the incomes of these groups. Moreover, within each of these groups, households incomes for those with college degrees is substantially higher than for those without that post-secondary credential.
- Education does not erase all disparities between Whites and minorities. Only 27.7% of the African-Americans with college degrees earn over \$100,000 per year, only slightly better than half the 51.4% rate for Whites. Among Hispanics who are college educated, 38.2% achieve the \$100,000 annual income level, only about three-quarters of the corresponding rate for Whites.

Union Membership Increases Wages


- In addition to education, one other factor works to boost the earnings of Illinois workers – membership in labor unions. Overall, the average weekly earnings of union members in the state are \$110 per week, or 14.2%, higher than non-union members.
- The earnings premium that derives from union membership also works to boost the wages of women and some minority groups. For women, union membership yields a wage premium of about 21.5% compared to women who are not union members. African-Americans who are union members have average weekly wages that are 11.6% higher than their non-union counterparts, and the boost for Hispanic workers is 40.1%. White workers derive about a 16.3% premium in average weekly wages from union membership.

Growing Economic Insecurity: Health Insurance and Pensions

- The proportion of workers who benefit from work-based health insurance programs continues to fall. By 2004-2005, over 40 percent of Illinois workers lacked access to an employer-provided health insurance program. The proportion of Illinois residents lacking any kind of health insurance has increased from 10.9% in 1990 to 14.0% in 2006.
- The drop in private sector health insurance has left Hispanic workers and their families especially vulnerable, since only 42.3% of them have employer-provided coverage.
- Similar drops have occurred in employer-provided pensions. By the 2004-2006 period, only 48.6 percent of workers in Illinois benefited from any employer-provided pension plan, down from 55.6 percent in 1980.

Summary of Regional Trends

- In 2005, 91.6% of the state's GDP was produced within the boundaries of its nine metropolitan areas. These same metropolitan areas comprise 92.1% of the state's population.
- In 2005, the total GDP of the state's non-metropolitan rural counties totaled \$46.7 billion, or 8.4% of the state's total GDP. These counties comprised 7.9% of the state's population.
- The portions of the Chicago metropolitan region that lie within the state of Illinois (about 91% of the metro region) comprised an estimated 75.6% of the state's total GDP in 2005.
- The remainder of Illinois' eight metropolitan areas combined (counting only the portions that are within Illinois) produce a GDP of about \$90.0 billion. The largest among them is the group of Illinois



counties that make up the eastern portion of the St. Louis metropolitan area, with a combined GDP of \$28.7 billion. The Peoria region, with \$14.4 billion, and the Rockford region, with \$10.9 billion, are the next two largest.

THE ILLINOIS LABOR FORCE: GROWTH AND CHANGE

The State of Working Illinois 2007 provides a detailed summary of the job, wage, benefit, and industry trends in the state over the last 17 years. As Illinois responds to global competition and changing demographics, the picture of the state's economy is predictably mixed. On the one hand, Illinois has experienced considerable growth in both its economy and in the net number of jobs created by that economy. But these positive developments do not, by themselves, capture completely the complex set of economic and workforce trends that have been operating in the state. To depict these trends, this report draws on a wide range of employment and workforce data to better understand the opportunities, problems, and challenges faced by the state's workers and their families.¹

The Illinois Economy

In 2006 Illinois ranked fifth nationally with a Gross Domestic Product (GDP) of \$507 billion, over \$100 billion greater than the second-biggest state economy in the Midwest.² In fact, the Illinois GDP represented 30.6% of the total GDP of the five Midwestern states.³ The 2005-06 GDP growth rate for Illinois of 3.0% was nearly double the regional rate (1.6%), although it lagged behind the national rate (3.4%) and ranked only 26th in the country.

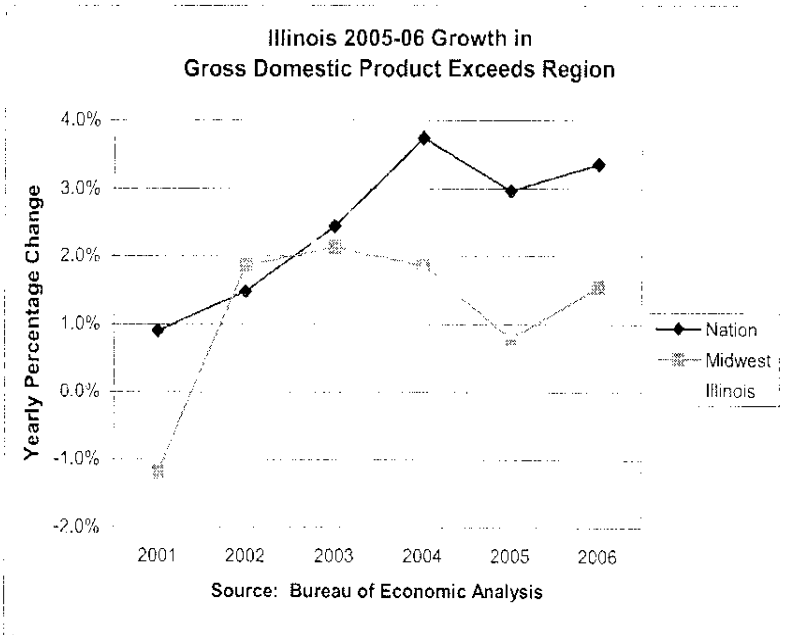
Viewed over a slightly longer time span, the picture of Illinois economic growth is more mixed. From 2000 to 2006, the state's 9.2% real GDP growth rate did exceed the region's 7.1%, but both Indiana (10.6%) and Wisconsin (11.9%) experienced higher rates of growth than Illinois, and the nation's real growth rate of 15.8% far outpaced Illinois. And over the longer 1990 to 2006 period, while real GDP in Illinois increased by more than \$170 billion, a 50.7% rate of growth, even this robust increase lagged somewhat behind the national rate of 58.7%.

Viewed over a longer time span, the picture of Illinois' economic growth is mixed

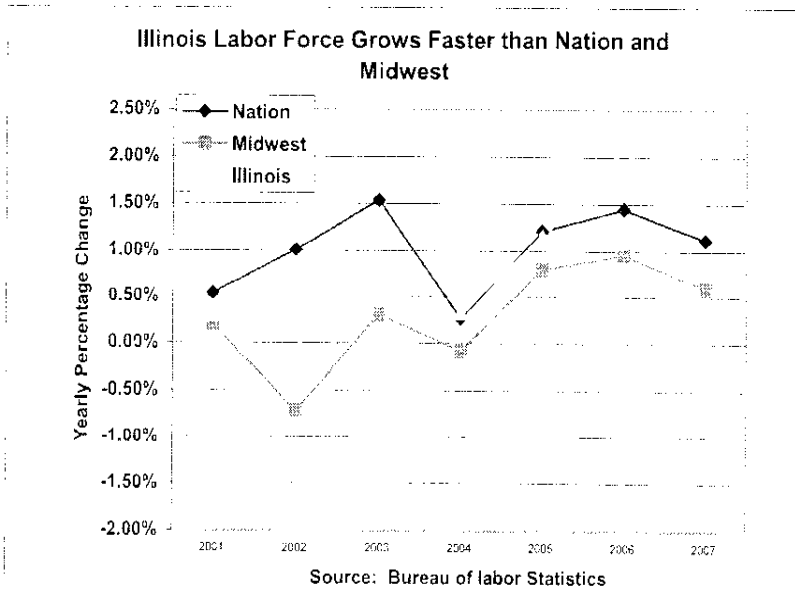
1 For the earlier reports in this series, see *The State of Working Illinois 2005* and *The State of Working Illinois 2006*. Both of these reports and the complete data series are available at www.stateofworkingillinois.niu.edu.

2 Real Gross Domestic Product expressed in millions of chained (2000) dollars. Ohio ranked second in the Midwest with a GDP of \$397.2 billion. The Bureau of Economic analysis formerly designated this as Gross State Product (GSP), but altered its nomenclature in late 2006. A recent report issued by the Commission on Government Forecasting and Analysis reported the Illinois GDP for 2006 at \$589 billion, but this figure is for a single year and is expressed in 2006 dollars.

3 The Midwest used throughout this report consists of the five states that the Census Bureau designates as the East North Central Division: Illinois, Indiana, Michigan, Ohio, and Wisconsin.



Change in the Illinois Labor Force

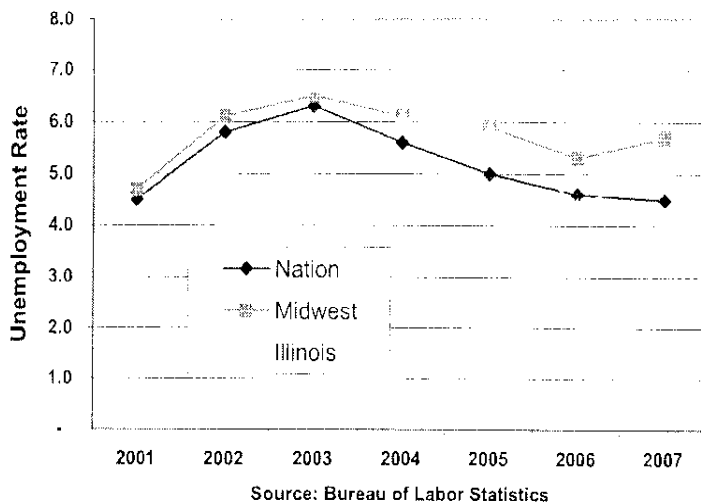


The Illinois civilian labor force also grew over the last 17 years, reaching over 6.7 million by June 2007.⁴ This meant that the state added 121,164 workers since 2006, and 807,875 since 1990, for an average annual increase of about 40,372 workers per year.⁵ The 1990-2007 growth rate of 13.6% in the state's labor force exceeded the 12.2% rate in the state's population, although it lagged behind the country's total population growth of 20.3%. But since 2005, the year-to-year rate of labor force growth in Illinois has been higher than that in the region or the nation.

4 Here and throughout, unless otherwise indicated, all year-to-year comparisons use seasonally adjusted data for the mid-year month of June.

5 Since arithmetic averages can easily be distorted by extreme values, this estimate of the annual average derives from fitting the linear trend ($Y = a + bX$) to the 1990-2007 time series. The slope of the regression line (b in the formula) represents the numerical increase per year (X in the formula). The extent to which a straight line fits the data can be assessed by how scattered the data points are: the better the fit, the higher the value of the measurement metric, r^2 -- which has a maximum value of +1.0. In this instance, the trend is strongly linear, with $r^2 = .891$.

Illinois Unemployment Rate Below Regional Rate



Of course, a growing labor force needs jobs. Fortunately, as the Illinois civilian labor force grew since 1990, the total number of jobs in both the non-farm sector as a whole and the private sector in particular also grew at similar paces – 13.3% and 13.7%, respectively. As a result, the total number of employed workers in the state also increased, reaching a high of just under 6.4 million in June 2007. Since 1990, Illinois has added an annual average of 43,201 workers to the ranks of the employed.⁶

The state's unemployment level has moved less regularly over time. It hit a peak of 492,048 in 1992, and then dropped through the mid-1990s to a low of 282,059 in 1998. Thereafter, it turned upward, reaching a post-1990s high of 428,196 in 2003. The number of unemployed fell after that, and by June 2007 stood at 344,852.⁷ While not quite matching the state's lowest unemployment level realized in 1998, the current unemployment level is 147,196 (or 29.9%) below the 1992 high point for state unemployment. The state's unemployment rate has generally followed a corresponding trajectory. From 2001 through 2003, inclusive, Illinois' unemployment rate was worse than the national and regional rates, reached parity with the Midwestern unemployment rate in 2004 and 2005, and then fell below the regional unemployment rate in 2006 and 2007. By June 2007 the Illinois unemployment rate stood at 5.1%, which is better than the regional unemployment rate (5.7%) but slightly worse than the national unemployment rate (4.5%).

However, any analysis of labor force participation must also account for what are referred to as "discouraged workers," i.e., those unemployed persons who either have given up looking for jobs or are no longer able to work. The labor force participation rate – the percentage of the total number of individuals eligible for work that are either working or actively looking for work – offers some insight into the number discouraged workers and those unable to work.⁸

Table 1 shows that the overall labor force participation rate for Illinois is marginally higher than the corresponding national and regional rates. Participation rates for Illinois females and those aged 16-to-24 are lower than their regional counterparts, but otherwise the patterns for the categories do not vary much across these geographies. Participation rates are weakest for the youngest and least educated cohorts. Indeed, viewed over time, the declining participation rate of individuals aged 16-to-24 in Illinois appears especially troubling. After holding relatively steady between 67% and 68% through 2000, this youthful

⁶ This estimate derives from fitting the linear trend to the 1990-2007 time series, and the resulting $r^2 = .776$.

⁷ As this description indicates, the fit between the unemployment series and linearity is quite weak, with $r^2 = .054$.

⁸ As the definition of the labor force participation rate implies, being counted in the labor force does not necessarily mean having a job. Four separate components comprise the labor force: persons who are working; persons who have a job but are not at work; persons unemployed but looking for work; persons unemployed on layoff from a job.

cohort's participation rate dropped 9 percentage points by 2006.⁹ This suggests an increasing risk of long-term labor market detachment and resulting connections to a larger set of social problems.

TABLE 1

| Labor Force Participation by Demographic Characteristics 2006 | | | |
|--|---------------|----------------|-----------------|
| | Nation | Midwest | Illinois |
| ALL | 66.2% | 67.3% | 67.4% |
| GENDER | | | |
| Male | 73.5% | 73.9% | 75.4% |
| Female | 59.4% | 61.0% | 59.8% |
| AGE | | | |
| 16-24 yrs | 60.6% | 63.4% | 58.8% |
| 25-54 yrs | 82.9% | 84.0% | 84.1% |
| 55 yrs and older | 38.0% | 37.5% | 38.2% |
| RACE / ETHNICITY | | | |
| White | 66.1% | 67.5% | 67.6% |
| African-American | 64.0% | 63.1% | 62.0% |
| Hispanic | 68.7% | 71.9% | 72.3% |
| Asian/Pacific islander | 66.1% | 69.7% | 68.8% |
| EDUCATION | | | |
| Less than high school | 44.7% | 42.6% | 44.8% |
| High school | 64.5% | 65.0% | 63.6% |
| Some college | 71.7% | 73.6% | 71.7% |
| Bachelor's or higher | 78.1% | 80.0% | 80.0% |
| Source: EPI Analysis of CPS Data | | | |

Changing Employment Patterns

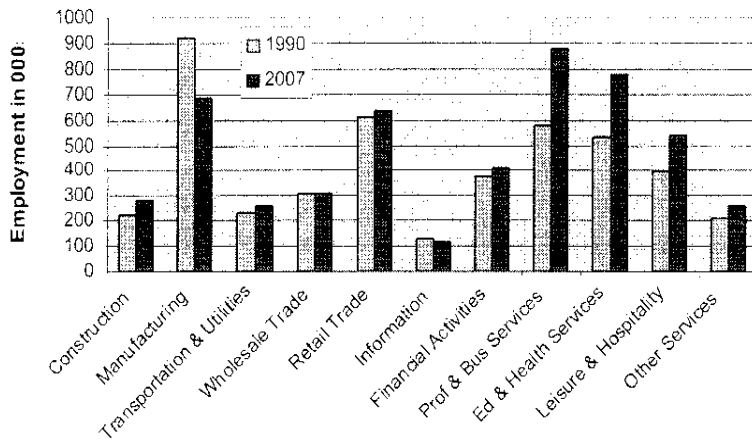
More workers, more jobs, a larger GDP, and a smaller pool of unemployed persons – these are the positive dimensions of the longer-term and recent trends in the Illinois economy. But other changes over time in the state's economy and in the employment patterns of its labor force have been less beneficial to the state's workers and their families.

Between 1990 and 2007, the nation lost slightly more than 3.7 million jobs in Manufacturing. The Midwest lost 825,200 of those jobs. Illinois accounted for 28.9% of the Midwest region's loss, or 239,000 jobs over this period. As a percentage of total manufacturing jobs in the state, however, Illinois lost 26.0% of its manufacturing jobs over the past 17 years, worse than both the Midwest as a whole (20.8%) or the nation generally (20.9%).¹⁰ Illinois' losses in Manufacturing employment combined with rapid job creation in other industries – especially in service activities – both altered the way the state's workforce

⁹ The larger portion of the decline was apparent by 2004; see the data from 1990 through 2004 in *The State of Working Illinois 2005*, Table 1, p. 12.

¹⁰ Both Michigan and Ohio experienced higher rates of decline in Manufacturing: Michigan's was 26.1% (a loss of 221,500 jobs) and Ohio's was 26.8% (a loss of 286,700 jobs).

Illinois Employment Patterns 1990 and 2007



Source: Bureau of Labor Statistics

was distributed across major industrial sectors and had consequences for the wages paid to and the benefits received by the state's workers.

The data in Table 2 show the scope of the change that occurred. In 1990 Manufacturing employed more workers than any other industry sector in Illinois, but by 2007 it ranked only third in total employment. Professional and Business Services and Education and Health Services, which had

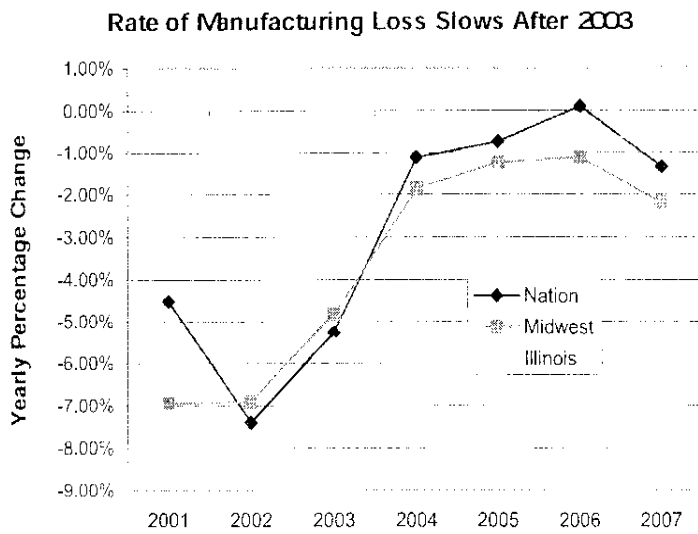
ranked 3rd and 4th in 1990, grew rapidly during the intervening years (53.3% and 45.4%, respectively) and moved into 1st and 2nd place, respectively, by 2007. Retail Trade grew only marginally (3.5%) during the period and dropped to 4th in total state employment by 2007, while the Leisure and Hospitality (36.9% growth) and Financial Activities (9.9% growth) sectors retained their earlier 5th and 6th place rankings, respectively.

TABLE 2

| Illinois Employment Change by Industry Sector 1990-2007 | | | | |
|---|----------------------|----------------|-----------------------|---------------|
| | Employment (in 000s) | | % of Total Employment | |
| | 1990 | 2007 | 1990 | 2007 |
| Construction | 223.7 | 279.8 | 5.0% | 5.4% |
| Manufacturing | 919 | 680 | 20.4% | 13.2% |
| Transportation and Utilities | 232.2 | 261.5 | 5.2% | 5.1% |
| Wholesale Trade | 310.8 | 312.2 | 6.9% | 6.1% |
| Retail Trade | 608.5 | 629.6 | 13.5% | 12.2% |
| Information | 131.8 | 116 | 2.9% | 2.3% |
| Financial Activities | 373.6 | 410.7 | 8.3% | 8.0% |
| Prof and Bus Services | 572.3 | 877.2 | 12.7% | 17.0% |
| Ed and Health Services | 535.1 | 778 | 11.9% | 15.1% |
| Leisure and Hospitality | 394.9 | 540.5 | 8.8% | 10.5% |
| Other Services | 206.1 | 260 | 4.6% | 5.1% |
| TOTAL | 4,508 | 5,145.5 | 100.0% | 100.0% |

Source: Bureau of Labor Statistics

The greatest change in the Illinois workforce and economy clearly is the declining significance of Manufacturing. In 1990, slightly more than one of every five workers in the state—20.4% of the total—were employed in Manufacturing. By 2007 only 13.2% of the state's workers were employed in Manufacturing. As a result, Manufacturing employed a smaller proportion of the state's workforce than Professional



Source: Bureau of Labor Statistics

and Business Services (17%) and Education and Health Services (15.1%), and was only marginally ahead of Retail Trade (12.2%).

Other states in the Midwest and the nation as a whole also experienced losses of manufacturing jobs. Moreover, the pattern of employment change in Manufacturing over the past 17 years in Illinois showed both upward and downward movement.¹¹ After sagging in the early years of the 1990s,

Manufacturing employment rebounded, and by 1998 it was only 10,600 below its 1990 level. But with the economic downturn in the early years of the new century, Manufacturing employment resumed its downward slide. However, the year-to-year rate of job loss in Manufacturing has slowed in very recent years. Apparently propelled by a vibrant export market, durable goods manufacturing experienced a net increase of approximately 3,500 jobs during the second-half of 2006, offsetting continued declines in non-durable manufacturing and boosting overall employment in the entire sector by about 1,600.¹²

Employment growth in other sectors after 1990 offset the job losses in Manufacturing. The three that grew at the fastest pace – Professional and Business Services (53.3%), Education and Health Services (45.4%), and Leisure and Hospitality (36.9%) – were also three of the state’s largest employers by 2007. Retail Trade, which grew at a meager 3.5%, was also among the state’s top-five employers.¹³ Table 3 provides detail on the job growth for these largest employers.

TABLE 3

| Job Growth in Largest Illinois Sectors 1990-2007 | | | | |
|--|----------------------------|------------------------------------|----------------------|-------------------|
| | Total Job Growth (in 000s) | Leading Component of Sector Growth | | |
| | | Identification | Job Growth (in 000s) | % of Total Growth |
| Prof and Business Services | 304.9 | Admin and Support Services | 181.1 | 59.4% |
| Ed and Health Services | 242.9 | Health Care and Social Assistance | 203.6 | 83.8% |

The table reveals no great surprises. Varied types of Administrative Support activities made the largest numerical and proportionate contribution to the growth rate of Professional and Business Services. Within the Administrative Support component, the largest contributors to growth were Employment Services

11 The 1990-2007 linear regression indicates a average annual rate of job loss of -14,264, but with $r^2 = .715$.

12 Data for these subparts of the Manufacturing sector are from the Bureau of Labor Statistics.

13 Despite its employment losses, Manufacturing was still the third-largest employer in 2007.

(+122,500 jobs) and Services to Buildings and Dwellings (+39,800 jobs). The only categories within the Professional and Business Services sector that realized net job losses over this period were: Waste Management and Remediation Services (-3,600 jobs), Travel Arrangement and Reservation Services (-3,100 jobs), and Other Support Services (-2,100 jobs).

The boost in employment in Education and Health Services was driven principally by growth in Health Care and Social Assistance activities, which accounted for 83.8% of all jobs created in this sector. Within that component, employment in Ambulatory Health Care Services (+84,600 jobs) and in various medical offices (+59,100 jobs) made the largest numerical contributions.¹⁴ No component of the Health Care and Social Assistance sector registered a decline in employment between 1990 and 2007.

The major driver of employment growth in the Leisure and Hospitality sector was Accommodation and Food Services. Employment growth in Food Service (+106,000 jobs) accounted for most of that increase, with Full-Service Restaurants (+56,200 jobs) and Limited-Service Eating Places (+49,600 jobs) contributing roughly equivalent shares to overall growth in Food Service employment. With the exception of Special Food Service (-300 jobs) no component of the Leisure and Hospitality sector experienced a loss of employment, although the increase in Drinking Places (alcoholic beverages) was only 500 employees.

Retail employment is typically presented as one of the lower-paying activities that have replaced better-paying jobs in Manufacturing. In fact, employment levels in Retail Trade were quite volatile over the years from 1990 through 2007, and the overall employment increase over those years was merely 21,100.¹⁵ General Merchandise Stores accounted for most of this modest employment growth. Increased employment in Electronics and Appliance Stores (+7,200 jobs) and in Building Material and Garden Equipment and Supplies Dealers (+9,500 jobs) suggests the increased presence and popularity of the so-called "big-box" outlets. Food and Beverage Stores (-14,200 jobs), Gasoline Stations (-3,700 jobs), and Clothing and Clothing Accessories (-3,400 jobs) registered declines in employment.

Finally, while not one of the largest or fastest-growing sectors, the average weekly wages associated with the Financial Activities sector topped those in Manufacturing (although by only about \$14). Between 1990 and 2007, employment in this sector increased at a rate of 9.9%, peaking at 410,700 in 2007. While Insurance Carriers and Related Activities lost employment during the period, all of the other components of the sector gained. Credit Intermediation and Related Activities and Real Estate and Rental and Leasing were among the largest gainers, adding 18,500 and 12,000 in employment, respectively. However, recent banking acquisitions, the collapse of the sub-prime mortgage market specifically and the housing bubble generally and the attendant ripple effect, may threaten employment levels in this good-paying sector.¹⁶

Loss of Good-Paying Jobs

Since overall employment is increasing and even outstripping growth in the size of the labor force, why should we care about shifts in employment patterns? What difference does it make to workers, their families, and to the state? The answer is simple – changes in Illinois employment patterns have had significant

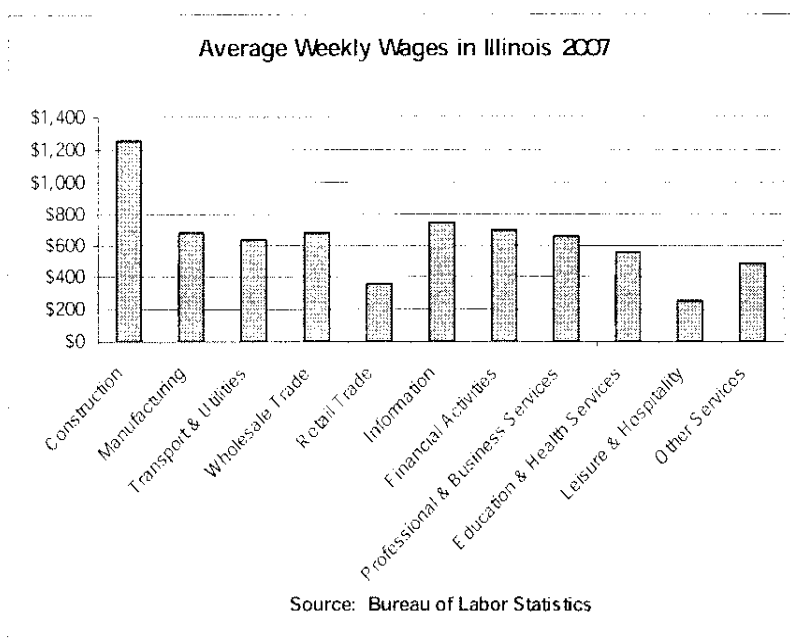
14 This is the sum of growth in three separately reported categories: Offices of Physicians, Office of Dentists, and Offices of Other Health Care Practitioners.

15 The 1990-2007 linear regression has an $r^2 = .384$, which indicates the up-and-down movement of employment over the period. Employment in Retail Trade peaked in 2000 at 649,800, which is 20,200 above the 2007 level.

16 The acquisition of LaSalle Bank Corp. by the Bank of America threatens as many as 10,500 jobs, and the credit, housing, and employment markets are just beginning to feel effects of the sub-prime collapse; see *Chicago Tribune*, 4 and 23 August 2007, reports in Business Section.

economic implications for the state, its economy, and its working families. For the most part, these changes have involved replacing good-paying jobs with ones that provide lower wages and fewer benefits.

Of course, not all jobs in the service sector, or in other sectors that are growing rapidly, pay lower wages than Manufacturing. In June 2007, average weekly earnings for Illinois' Manufacturing sector jobs were \$682, or \$573 less than weekly earnings in Construction, the state's highest-paying sector.¹⁷ Moreover, the average weekly earnings in Information Services and in Financial Activities also topped those in Manufacturing, by \$65 and \$14, respectively. On the other hand, the average weekly earnings in four of the sectors of the Illinois economy that showed the largest absolute job growth between 1990 and 2007 ran behind the earnings in Manufacturing: Professional and Business Services lagged by \$23; Education and Health Services by \$124; Leisure and Hospitality by \$429; and Other Services by \$194.¹⁸



With the exception of Construction, the sectors with the largest gains in employment between 1990 and 2007 generated average earnings lower than those associated with the Manufacturing jobs that the state lost. Good-paying jobs, in other words, were increasingly being replaced by lower-paying ones, with obviously negative consequences for the state's economy and its working families.

Recent patterns are not significantly more encouraging.

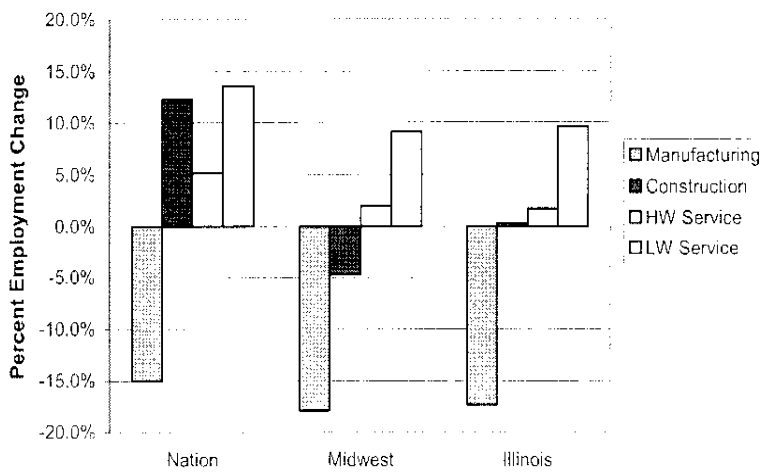
Although the pace of job loss in Manufacturing slowed after 2003 and even showed a slight uptick in late 2006, but otherwise lower-wage job creation has continued to dominate the Illinois labor market, as well as in those of the Midwest and the nation.

In the last six years alone, Illinois lost 142,200 jobs in Manufacturing, or 17.3% of its 2001 base. This proportionate loss was greater than the national rate (-15.0%) and only slightly below the Midwest's rate (-17.9%). Over the same period, the state added 1,580,600 lower-wage service jobs, a 9.6% growth rate that exceeded the region's growth rate for lower-wage service jobs (9.1%) but fell below the national

17 All BLS weekly wages are for June 2007 and have been rounded to the nearest dollar. For most sectors, the June wage figures are modestly higher than for the other months of 2007, but we have used them since the employment data are from that month. However, even using the January through June mean of the average wages for each sector would not alter the patterns reported here, although the specific numbers would differ slightly.

18 Other Services is a category reported by the Bureau of Labor Statistics. It includes Repair and Maintenance, Personal and Laundry Services, and Religious, Grantmaking, Civic, Professional, and Similar Organizations. Employment in Other Services increased by 53,900 between 1990 and 2007, for a growth rate of 26.2%, the state's fourth-fastest rate.

Lower-Wage Jobs Dominate 2001-07 Growth



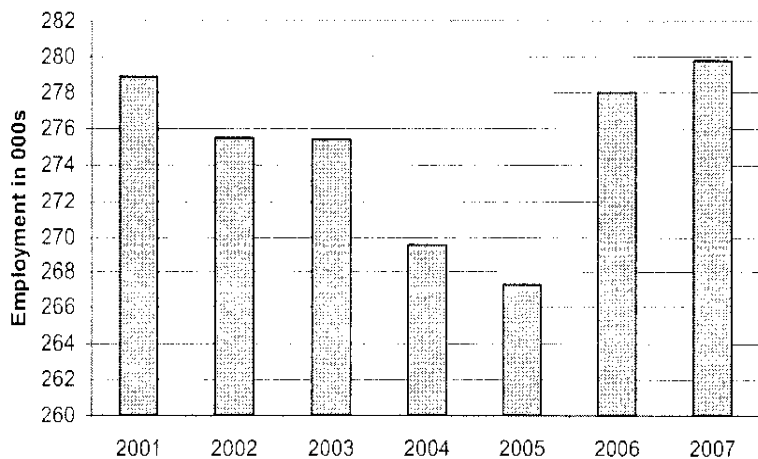
Source: Bureau of Labor Statistics

rate (13.6%).¹⁹ Meanwhile, Illinois is failing behind both the Midwest and the nation in adding higher-wage service jobs. Since 2001 higher-wage service jobs in Illinois increased by 1,405,500, a 1.7% growth rate. This lagged both the Midwest's growth rate for higher-wage service jobs (2.0%) and the nation's (5.1%).

As a result, by mid-2007 the number of persons employed in lower-wage service jobs in Illinois was 12.4% higher than the number working in

higher-wage service jobs. Of course, the state has likely always had more persons employed in lower-wage service industries than in higher-paying ones, but the current margin is considerably greater than the 5.4% in 1990 and 4.4% in 2001. Viewed another way, by mid-2007 lower-wage service activities comprised 30.7% of non-agricultural, private-sector employment in the state, much more than the 20.4% share that Manufacturing had accounted for in 1990.

IL Construction Industry Employment 2001-07



Source: Bureau of Labor Statistics

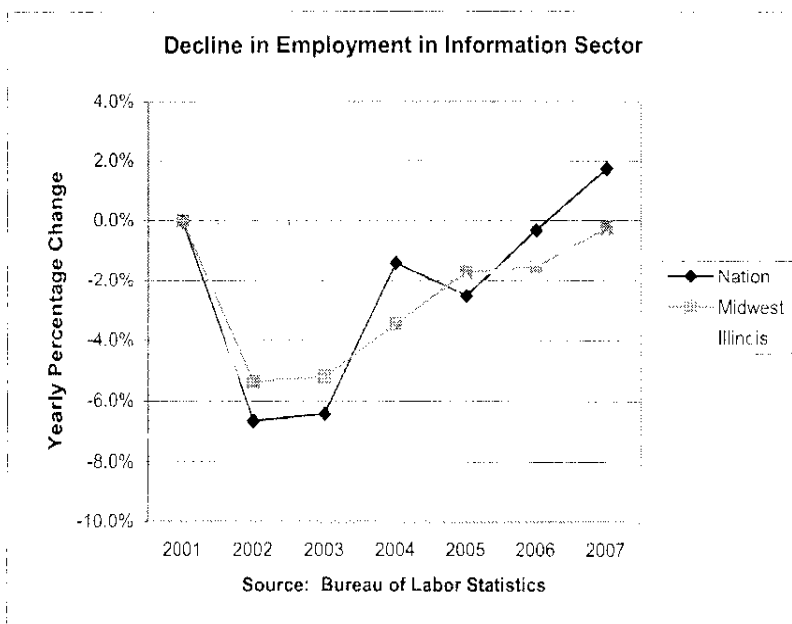
But what of employment in Construction? Measured by average weekly earnings, it is the highest-paying sector in Illinois and experienced net growth between 1990 and 2007. Employment in Construction, however, is highly volatile, because it is so sensitive to changes in the larger economy. The large post-1997 employment gains in Construction were mainly concentrated between 1997 and 2001; after that employment dropped sharply, and recent gains have only brought the total back to its

2001 level. Measured as a share of the workforce, employment in Construction has not increased

¹⁹ Lower-wage service jobs are those in Education and Health Services, Leisure and Hospitality, and Other Services. Higher-wage service jobs are those in Information Services, Financial Activities, and Professional and Business Services. For discussion and empirical evidence, see Matt Eskew and Paul Kleppner, "The Future of High-Wage Jobs in Illinois" (State of Working Illinois Policy Brief, August 2006).

appreciably in the past 17 years – it was 5.0% in 1990 and is now 5.4%. If recent developments in mortgage and financial markets result in the expected reduction in credit availability, construction projects and related jobs will likely be negatively impacted.

With average weekly earnings of \$747, Information Services rank as the second-highest paying sector behind Construction. But, consistent with national and regional patterns, Illinois has also begun losing jobs in this higher-paying sector. After gaining 20,900 Information Services jobs between 1990 and 1998, the trend changed and Illinois lost 36,700 higher-paying jobs in this sector between 1998 and 2007, wiping out the gains registered in the prior growth period.²⁰ By 2007 the state's employment in this sector had dropped to 116,000, 12.0% below 1990 and 24.0% below the 1998 peak.



Within the large industrial sectors, the picture is generally more troubling. For example, of the 239,000 jobs lost in Manufacturing since 1990, 176,100 have been in durable goods manufacturing. The average weekly earnings in that industry in 2007 were \$716, or \$88 more than in non-durable goods manufacturing.

Professional and Business Services is generally a higher-wage service activity, with weekly earnings that averaged only \$23 less than in

Manufacturing. But not all activities within this sector pay high wages. In both Administrative and Support and Waste Management and Remediation Services the average weekly earnings were only \$458, which was \$201 less than the average in the industry as a whole. This is significant because these subsectors were responsible for 53.6% of the total number of new jobs created in the Professional and Business Services sector between 1997 and 2007.²¹

Jobs in the Leisure and Hospitality sector averaged weekly earnings of \$253, only 37.1% of the average weekly earnings in Manufacturing. The largest single component within this sector is Accommodation and Food Service, which accounted for 86.6% of the entire sector's growth between 1997 and 2007. But the weekly earnings in Accommodation and Food Service averaged only \$237, even below the sector-wide average.

Ironically, given the stereotypes associated with the sector, the changes in employment in Retail Trade appear somewhat more promising. The average weekly earnings in General Merchandise Stores – which accounted for most of the 1990 to 2007 growth in employment—is only \$315, even below the sector's av-

20 The 1990-2007 linear trend shows a very weak fit, with $r^2 = .161$; but the 1997-2007 linear trend shows an average annual loss of 4,135 jobs and with an $r^2 = .873$.

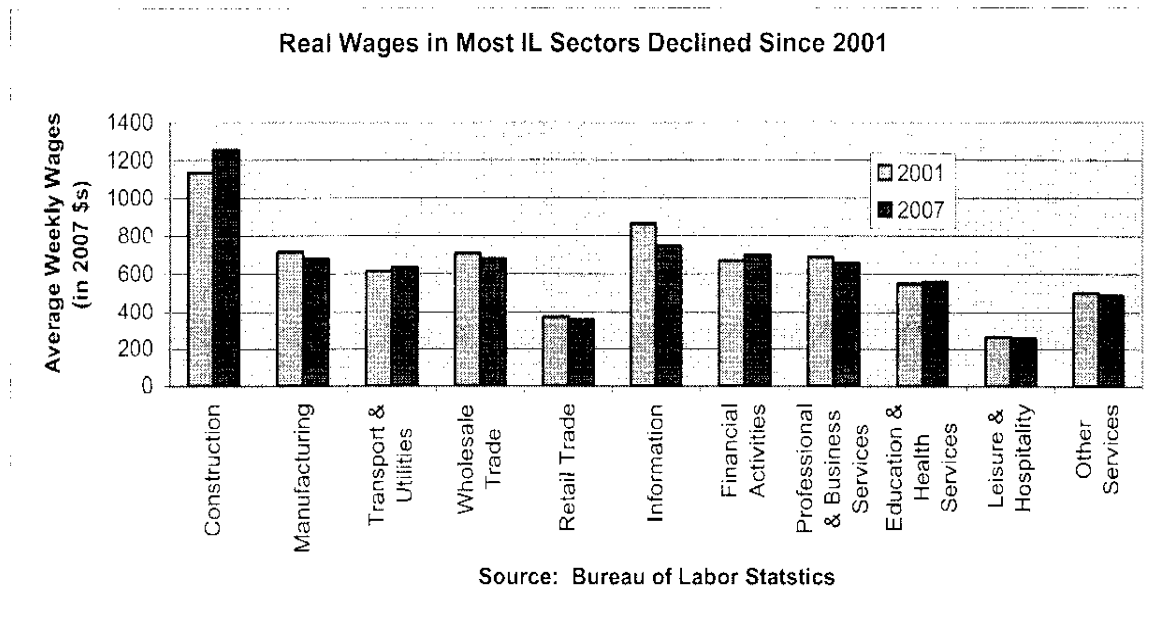
21 Unfortunately, BLS reports average earnings only for the combination of these two components -- Administrative and Support and Waste Management and Remediation Services. Combined, these two added 80,900 jobs of the total 150,900 that Professional and Business Services added between 1997 and 2007.

erage of \$357 per week. However, the average weekly earnings in Electronics and Appliance Stores – in which jobs grew at 36.4% between 1990 and 2007 – were \$617. This is well above the sector average and only \$64 below Manufacturing.

Declining Real Wages

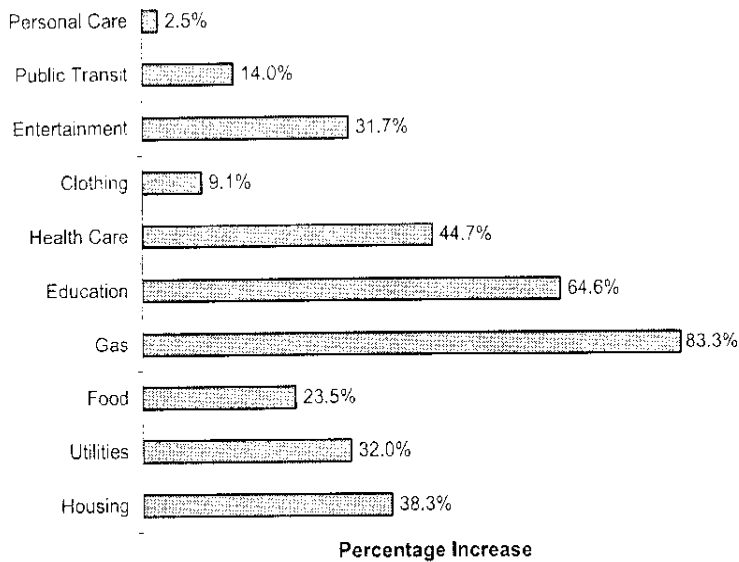
Even those workers who did not face loss of employment, or the need to shift into another sector to remain employed, faced the problems associated with shrinking earnings. Expressed in “nominal dollars,” i.e., without adjusting for the impact of inflation on purchasing power, most workers in Illinois saw their wages increase in recent years. From 2001 to 2007, the increases in nominal dollars ranged from a high of \$291 in average weekly earnings in Construction to a low of \$14 in Information Services. But when these wages expressed in nominal dollars are adjusted for the impact of the inflation that occurred during the interval, the workers in most sectors in Illinois experienced declines in their real average weekly wages.

Earnings gains from 2001 to 2007 offset the erosive effect of inflation in only four sectors, and even then by relatively modest amounts. Measured in “real dollars,” i.e., dollars adjusted for the effect of inflation, the largest gain in real earnings was still in Construction -- \$118 or 10.3% in average weekly earnings – and the smallest gain was \$10 or 1.8% in Education and Health Services. Other sectors registering gains in real average weekly earnings were Financial Activities (\$26 or 3.8%) and Transportation and Utilities (\$20 or 3.2%). All other sectors experienced declines in real average weekly earnings. The size of these declines ranged from a high of \$118 (or -13.6%) in Information Services to a low of \$9 (or -3.5%) in Leisure and Hospitality. Employees in Manufacturing lost \$32 (or -4.4%); those in Professional and Business Services lost \$32 (or -4.5%); and those in Retail Trade lost \$16 (or -4.2%).



As the real, inflation-adjusted earnings of most Illinois workers have been declining, the cost of items that collectively comprise most of their family budgets have been increasing. While there are some differences in the time frames of the wage and cost-of-living series, data from the Bureau of Labor Statistics show significant increases in the cost of essentials like food, housing, health care, gas, and utilities. These make

Increase in Cost of Consumer Purchases 1997-2005

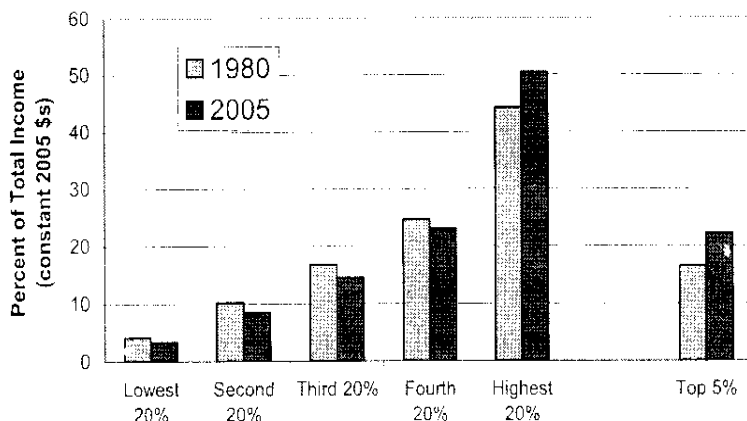


it easy to appreciate how declining real wages have negatively impacted the standard of living for most working families, and constrained or eliminated their ability to save.²²

Growing Income Inequality

The decline of employment in the Manufacturing sector combined with increased employment in lower-paying service sector jobs have contributed to the nation's growing income inequality. While data over time specific to Illinois are not readily available, the national data show how post-1980 trends have worked to worsen income inequality in the country in a dramatic fashion. The share of income held by

Shares of U.S. Household Income by Quintiles, 1980 and 2005

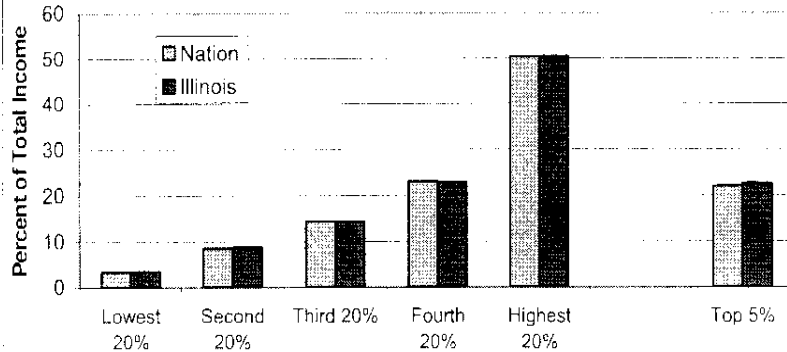


Source: U.S. Census Bureau, Historical Income Tables

the vast majority of American households, literally eight out of every ten, has declined over the last quarter century. Only those fortunate enough to be in the wealthiest 20% of all households actually realized an increase in overall income during this period. Shifting employment patterns are not the sole cause of this worsening inequality in the distribution of income, but it clearly played a significantly contributing role.

²² Ann D'Innocenzio, "Higher food bills squeezing working families," Chicago Sun-Times, 21 October 2007, p. 16A, uses reports from merchants like Wal-Mart, 7-Eleven, and Family Dollar to show that higher costs for basic budget items are now affecting middle-income working families as well as the poor.

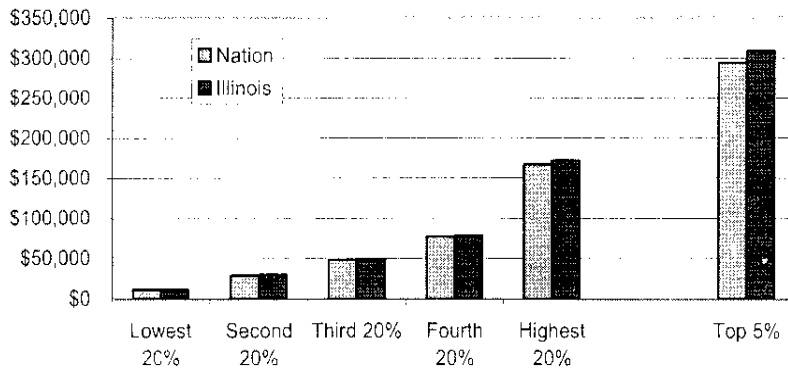
Shares of Household Income by Quintiles 2006



Source: Analysis of CPS March 2007

Income inequality in Illinois is just as severe as it is nationally

Average Household Income for Quintiles 2006



Source: Analysis of CPS March 2007

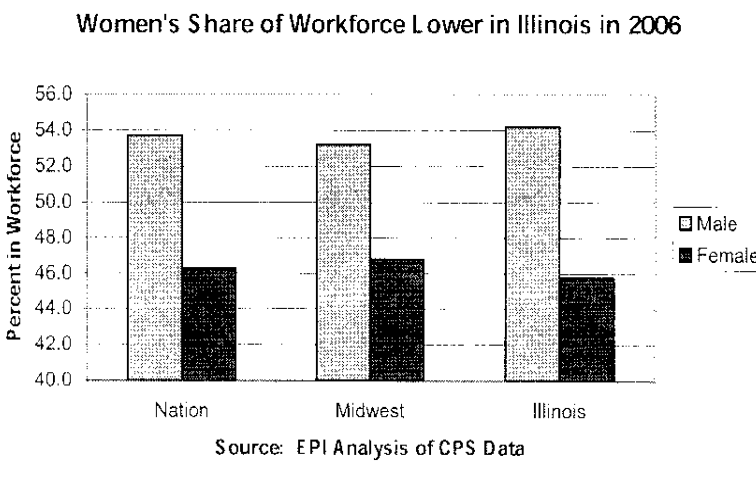
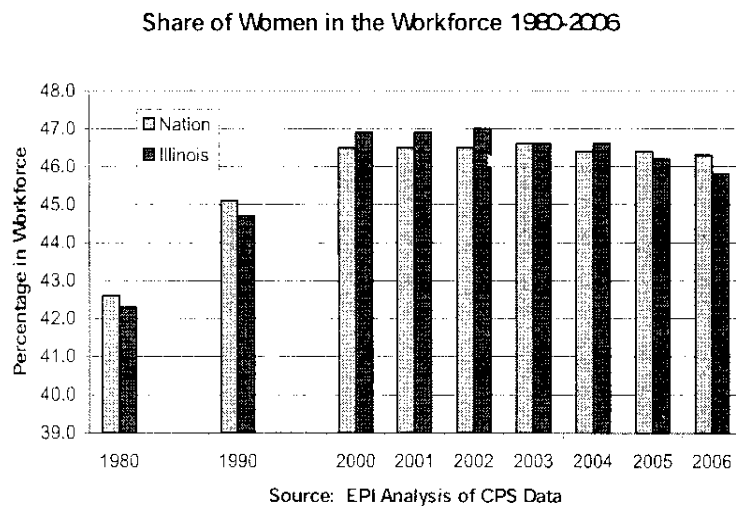
Currently, income inequality in Illinois is just as severe as it is nationally. In Illinois, as in the nation, the highest-earning quintile accounts for over 50% of the country's total household income, while the bottom three quintiles (i.e., 60% of the households) together account for only 26.6%, which is barely larger than the income share earned by the state's top 5% of households (22.7%).

The severity of this income inequality is starkly illustrated by the differences in average household incomes for each of the income quintiles and for the top 5% of earners. While the lowest income quintile in Illinois had a meager household income of only \$11,482, the highest income quintile earned \$171,514. But the disparity becomes even more dramatic when compared to the average household income of \$308,328 associated with the top 5% of Illinois households.

THE ILLINOIS LABOR FORCE: COMPOSITION AND CHARACTERISTICS

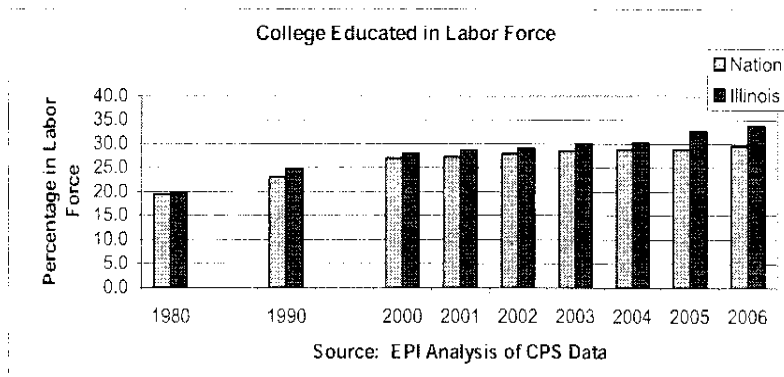
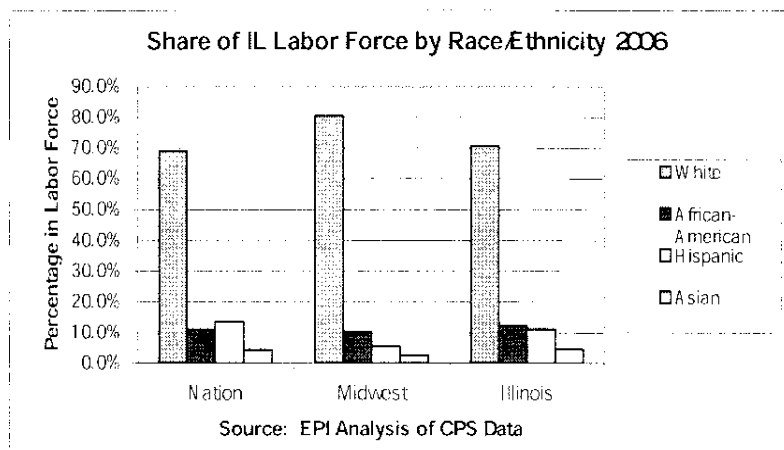
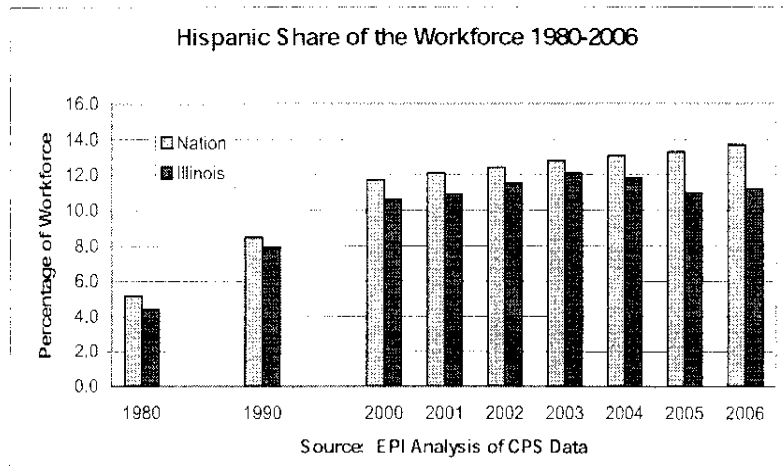
As the structure of job opportunities and the resulting employment patterns were changing in Illinois, so was the composition of the state's labor force. One of the most significant changes was that larger numbers of women moved into the workforce. As a result, the male-female balance shifted: women grew from 42.3% of the state's workforce in 1980 to a high of 47.0% in 2002. But after reaching that peak, women's share of the workforce dropped in Illinois, while remaining relatively stable at the national level. By 2006 women comprised a smaller share of the Illinois workforce (45.8%) than they did at the national (46.3%) or regional (46.8%) levels.

By 2006
women
comprised a
smaller share
of the Illinois
workforce



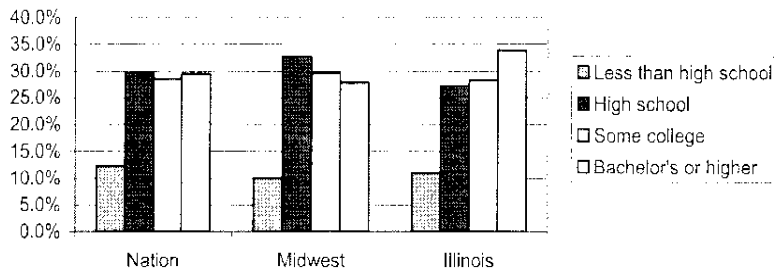
The Illinois labor force also became more ethnically and racially diverse over the last 20 years. Whites remain the dominant component, but their share of the Illinois workforce has dropped to 70.7%, a decline of 11.4 percentage points since 1980. Minority groups, which in 1980 made up only 15.7% of the workforce, grew to 28.4% in 2006. The African-American share peaked at 13.5% in 2000, but dropped to 12.5% by 2006, only 1.2 percentage points above the 1980 level. The Asian share of the workforce nearly doubled between 1990 and 2006, reaching 4.7% in the latter year. But the greatest change in the ethnic/racial mix in the workforce was

the growth of Hispanic participation, which increased from 4.4% in 1980 to 11.2% in 2006. The rate of increase in Hispanic participation in the Illinois workforce was only marginally slower than the 8.5 percentage-point gain at the national level. Moreover, the Hispanic share of the Illinois labor force was more than twice that of the Midwest's labor force (5.5%).



The Illinois labor force has also become much better educated. In 1980 only about one fifth of the state's workers (19.9%) had a college degree or more, almost mirroring the national figure (19.4%). Another 20.5% of Illinois workers in 1980 had less than a high school education. But by 2006 the share of the state's work force with a college education had grown to 33.8%, well above both the national (29.5%) and regional (27.8%) levels. Correspondingly, the proportion of the Illinois workforce with less than high school diploma shrunk to 10.9%. Since educational attainment is a good proxy for the skills required to cope with an increasingly complex and globalized labor market, Illinois seems better prepared for success than the Midwest as a whole, or even the nation.

Share of Labor Force by Education Categories 2006



Source: EPI Analysis of CPS Data

Ethnic/Racial Differences in Skills and Experiences

Access to higher-paying jobs, which are essential to upward mobility and the capacity to accumulate wealth over the course of a working career, depends on work experience and the skill sets that individuals bring to their jobs. By using age and education as reasonable proxies, we can examine differences in skill sets and experiences among the state's ethnic and racial groups (see Table 4).

TABLE 4

| IL Ethnic and Racial Differences in Age and Education | | | | |
|---|-----------|----------------------|--------------|-----------|
| | White (%) | African-American (%) | Hispanic (%) | Asian (%) |
| AGE CATEGORIES | | | | |
| 16 to 25 | 19.1 | 17.2 | 23.1 | 15.0 |
| 26 to 35 | 20.7 | 22.9 | 33.6 | 29.0 |
| 36 to 45 | 22.0 | 25.7 | 20.4 | 34.3 |
| 46 to 55 | 25.2 | 25.2 | 16.4 | 18.9 |
| 56 to 65 | 13.0 | 8.9 | 6.5 | 3.9 |
| EDUCATION CATEGORIES | | | | |
| Less than High School | 6.4 | 7.5 | 38.6 | 5.9 |
| High School Graduate | 28.1 | 29.9 | 31.4 | 12.1 |
| Some College | 21.6 | 29.1 | 14.6 | 10.4 |
| Associate's Degree | 9.0 | 8.3 | 4.0 | 7.5 |
| Bachelor's Degree or Higher | 35.0 | 25.1 | 11.4 | 64.2 |

Source: Analysis of CPS March 2007

The state's ethnic and racial groups bring widely dissimilar social characteristics into the labor market. Hispanics are by far the youngest group with 56.7% under 36 years of age and only 6.5% in the oldest age category. In contrast, only 39.8% of Whites are under 36 and 38.2% over 45 years of age. African-Americans are catching up to Whites in age – with 34.1% over 45 and 40.1% under 36. Among Asians the largest age group is 36-to-45 and only 22.8% are older than 45. These age distributions indicate that Whites have the most experienced and Hispanics the least experienced workers.

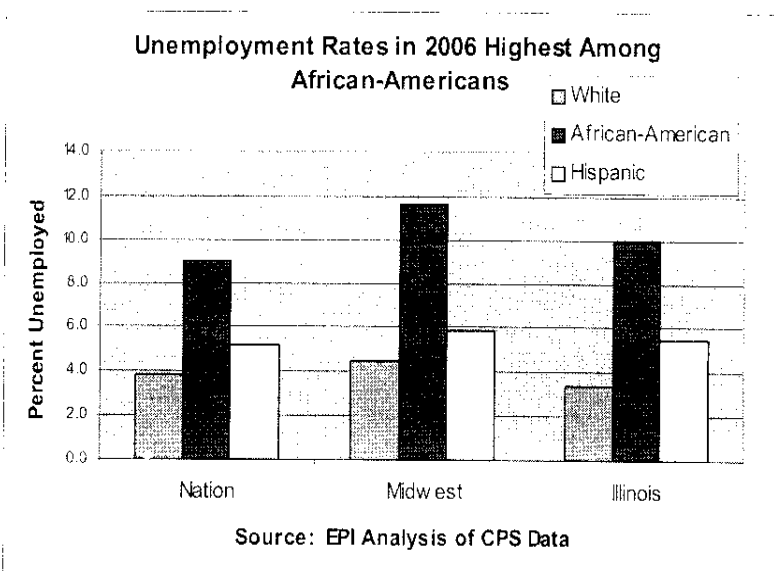
Asians are by far the best educated in the workforce – 64.2% have at least a college degree, and another 17.9% have some college or an associate degree. That means that more than eight of every ten Asians in the workforce have some education beyond high school. In sharp contrast, over one third (38.6%) of Hispanics in the workforce have not even completed high school, while another 31.4% have only a high school diploma. Taken together, this means that more than seven of ten Hispanics have no better than a high school education. Moreover, only 11.4% of Hispanics have a college degree or better, the smallest percentage of the state’s main ethnic/racial categories. At a time when post-secondary training is increasingly required for good-paying jobs, this educational profile among Hispanics represents a serious obstacle to future upward mobility and economic advancement.

The White and African-American educational profiles show higher proportions without post-secondary training and lower percentages of college graduates than Asians. The profiles for these two groups are also basically similar to each other, with the notable exception being the higher percentage of Whites with college degrees. But, as we shall see below, the narrowing education gap between Whites and African-Americans has not eliminated wage differentials. At every level of education, even among those with college degrees, Whites earn more on average than African-Americans.

A consideration of current employment status reveals dramatically how these educational differences operate to impact the Illinois labor market.

Ethnic/Racial Differences in Employment Patterns

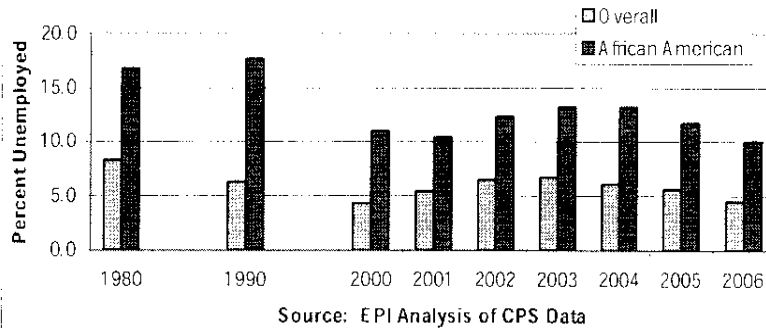
Hispanics are by far the youngest and least educated of the state’s workers, but they do not have the highest unemployment rate, although it was higher than that of Whites.²³ African-Americans in Illinois had a 10.0% unemployment rate in 2006, nearly triple that of Whites (3.4%) and almost double the Hispanic rate (5.5%). That pattern also characterized the region and the nation. However, the Illinois unemployment rate for African-Americans was worse than the national rate of 9.0% but was below that of the Midwest (11.6%) and was the lowest of the states within the region.



Relatively high unemployment has been a consistent characteristic of the African-American workforce. Through good economic times and bad, unemployment within the African-American community has been higher than the state’s overall rate. That finding by itself strongly suggests that something more than benign labor-market dynamics may have been operating to produce the high rates of unemployment.

²³ The sample numbers involved for Asians are too small to produce meaningful estimates, and so that category is excluded from the analysis that follows.

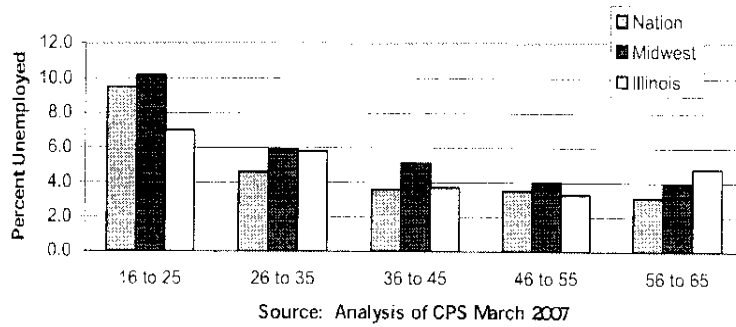
IL African-American Unemployment Consistently Higher than Total Unemployment 1980–2006



As might be expected, unemployment was highest among the youngest age cohort. That was true in

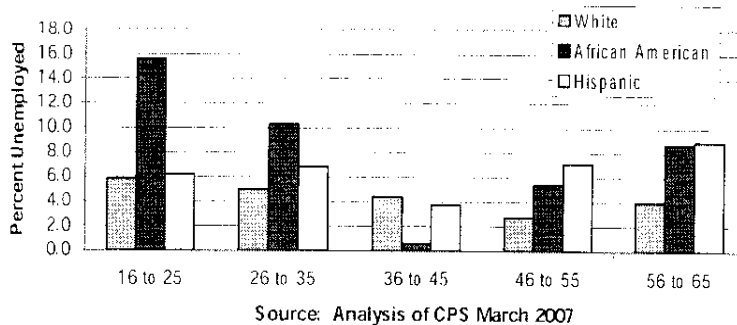
Illinois, the Midwest, and the nation. But in 2007 the Illinois unemployment rate for this youthful cohort was just 7.0%, below the national (9.5%) and the Midwestern (10.2%) rates. The unemployment rate in Illinois for youth was also considerably lower (4.9 percentage points less) than it had been in 2006.

Unemployment Highest among Youngest Workers 2007



This pattern of high unemployment among the youngest age groups also characterizes all of the state's major ethnic and racial categories. It is especially severe among younger African-Americans, with 15.6% of African-Americans aged 16 to 25 unemployed, and 10.3% of African-Americans in the 26-to-35 category unemployed. Hispanic unemployment rates are also generally higher than those for Whites, although only modestly so—except in the 46-to-55 age group.²⁴

IL Unemployment in 2007 High among Youngest Cohorts of All Groups

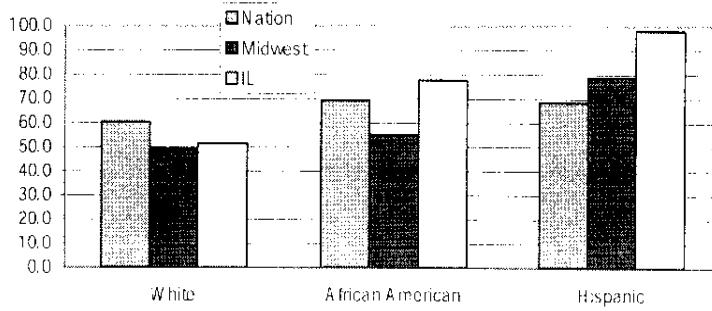


Among those unemployed in the youngest cohort, in Illinois over half the Whites (51.4%), just over three-quarters of the African-Americans (77.7%), and virtually all of the Hispanics are both out

of work and out of school. This means that an estimated 23,492 White youth, 14,362 African-American youth, and 11,241 Hispanic youth are neither working nor pursuing an education that would enhance

24 The seemingly high unemployment rate among the oldest category of Hispanics may be an anomaly resulting from the small number of cases in that age bracket.

Percent 16-25 Unemployed and Out of School 2007



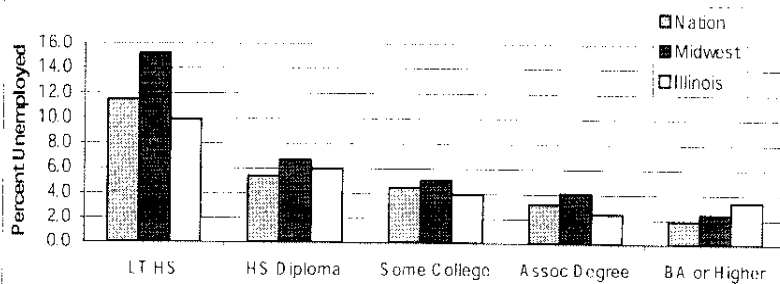
Source: Analysis of CPS March 2007

their future employment prospects. The fact that these youth are neither working nor pursuing educational opportunities leaves them especially vulnerable to long-term detachment from employment and to related social problems. These rates of “dual detachment” in Illinois are higher for both African-Americans and Hispanics than they are for the nation or the Midwest.²⁵

Education a Key Factor in Employment

In the globalized labor market of the twenty-first century, education is strongly associated with upward mobility and higher earnings. Nationally, regionally, and in Illinois, higher unemployment rates are associated with lower levels of education. Individuals in Illinois with less than a high school education are three times more likely to be unemployed than those with a B.A. or more. Both nationally and in the Midwest, persons with less than a high school diploma are six times more likely to be unemployed than those with a B.A. or higher.

Highest Unemployment Rates Occur among Least Educated 2007



Source: Analysis of CPS March 2007

This pattern holds when we look at Illinois’s main ethnic and racial categories. Among Whites, African-Americans, and Hispanics, lower unemployment rates characterize the better-educated categories.²⁶ For example, the unemployment rate for Whites fell from 9.5% for those with less than a high school diploma to 3.5% for those with

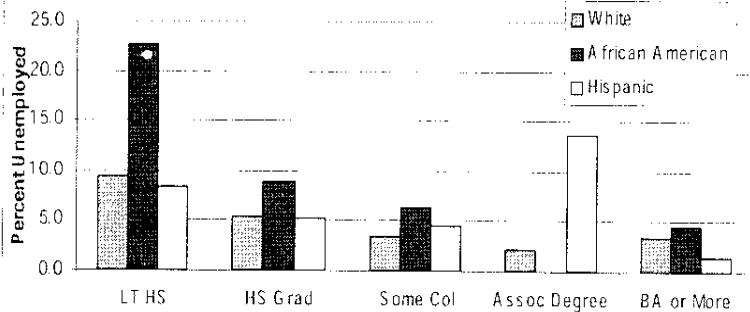
a college degree or better. Similar declines occur among African-Americans – from 22.7% to 4.5% -- and Hispanics – from 8.3% to 1.5%.

However, at every level of educational attainment, except among those with an Associate Degree, the unemployment rate is higher for African-Americans than for Whites or Hispanics. For those with less than a high school diploma, the 22.7% unemployment rate among African-Americans was more than double that for Hispanics or Whites. Moreover, even at the highest educational level, those with a college degree or more, African-American unemployment was one percentage point higher than for Whites and three

25 At the national level, 69.3% of African-American youth and 68.6% of Hispanic youth are out of work and out of school. In the Midwest, 55.0% of African-American youth and 78.9% of Hispanic youth fall into this “dual detachment” category.

26 The exception is the high unemployment rate (13.5%) among Hispanics with an Associate Degree, but that anomaly is very likely explained by the small number of cases in the category.

Education Works to Reduce Unemployment Rates for All IL Groups 2007



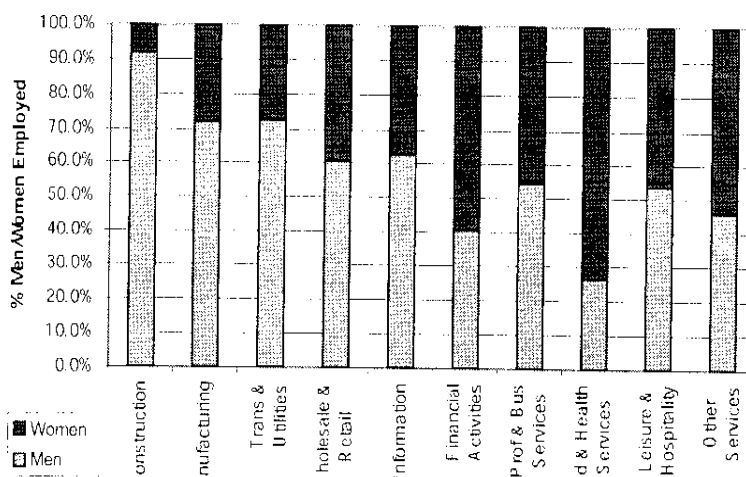
Source: Analysis of CPS March 2007

percentage points more than for Hispanics. Comparatively high unemployment rates irrespective of educational accomplishment of African-Americans suggests the operation of discrimination in access to the labor market.

Variations in Sectoral Employment by Gender, Ethnicity, and Race

Disproportionate concentrations of women and/or minorities in some sectors, combined with comparatively low employment rates in others, indicate that diversity, while increasing in the workforce generally, has not been spread evenly across industries, or even nearly so. For example, almost one third of all women in the workforce (31.6%) are in the Education and Health Services sector, where they make up nearly three-quarters (73.5%) of the total employees, but women comprise only a minuscule 7.9% of the workers in Construction. Women constitute a larger share of the workers in Manufacturing (27.9%) and Transportation and Utilities (27.3%), two other higher-paying sectors, but still represent less than one-third of the workers in either. These data suggest that employers within some sectors remain resistant to hiring female employees.

Gender Concentrations Within Illinois Industries 2007

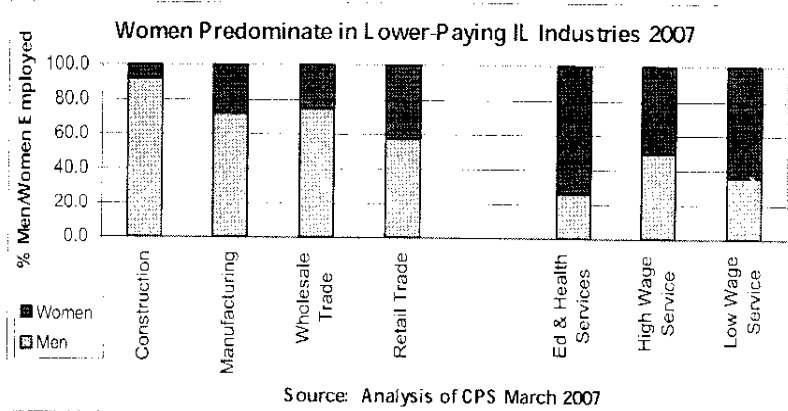


Source: Analysis of CPS March 2007

As a result, women seem to be gaining employment opportunities mainly in lower-paying sectors. Women predominate in lower-paying service activities (64.0%), but only break even with men in higher-paying service employment (50.0%). Moreover, while women make up 39.6% of the combined Wholesale and Retail sector, a detailed breakdown shows that males make up 75.0% of the employees in the Wholesale Trade sector, and women are 42.3% of the workforce in the Retail Trade sector. Since

wages in Wholesale Trade are generally higher than those in Retail Trade, these variations represent a

significant gender wage gap. Moreover, within each category of activity, men earn more on average than women. In Wholesale Trade in 2006, men earned on average \$1137 per week, and women only \$610; in Retail Trade men earned \$670 per week and women \$454.²⁷ Thus, men remain disproportionately concentrated in the better-paying activities in this and other sectors, as women gain employment mainly in lower-paying jobs.



Patterns of disproportionate employment – although with more access to higher-paying jobs – also appear in Illinois when analyzing workers across major ethnic and racial groups. Particular ethnic and racial groups concentrate in specific industries. For example, 24.4% of all Hispanics in the workforce are employed in Manufacturing.

As a result, Hispanics now comprise 22.0% of the Manufacturing workforce in Illinois, even though they constitute only 11.2% of the state's total workers. Hispanics also make up 16.4% of the total number of workers in Construction, a sector in which African-Americans have had particular difficulty in gaining employment over time.²⁸ Hispanics were also heavily employed in Leisure and Hospitality: 12.3% of all Hispanics in the workforce were in this sector, and they made up 20.2% of the sector's total workers. But Hispanics were only 6.9% of the workers in Education and Health Services, 7.0% in Information, and 7.5% in Financial Activities.

Over one quarter (28.1%) of the state's African-American workers were employed in Education and Health Services, where they constitute 18.0% of the sector's workforce. African-Americans were even more prominent in Transportation and Utilities, where they comprised 24.1% of the total workers. On the other hand, continuing patterns of under-representation, African-Americans made up only 5.4% of the workers in Construction and 8.3% in the Information Services sector.

Compared to women as a group, somewhat higher proportions of African-Americans and Hispanics in Illinois found employment in higher-paying industries like Construction, Manufacturing, and Transportation and Utilities. Nevertheless, over one quarter of the state's Hispanics (28.0%) and 38.5% of its African-Americans were employed in lower-paying service jobs.

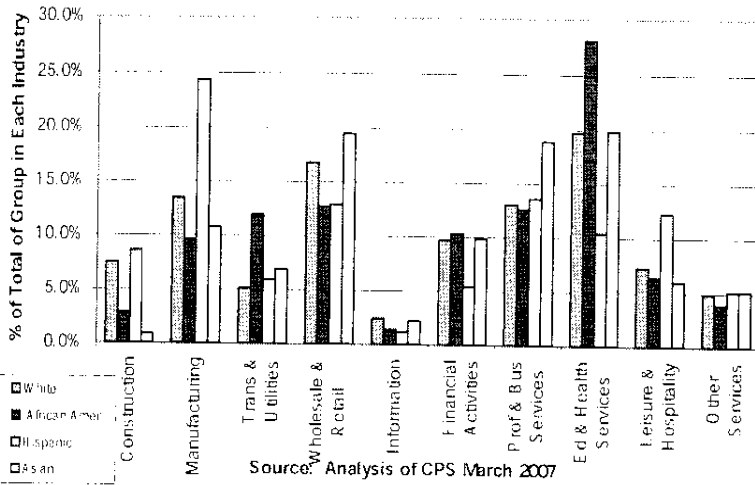
Overall Asians fared better than African-Americans and Hispanics. Of all Asians in the state's workforce, 19.8% were employed in Education and Health Services, where they constitute 5.3% of the sector's total workers. Another 18.8% of the state's Asian workers were in Professional and Business Services, and they accounted for 7.4% of the workers in that sector. Moreover, as we shall see below, in several sectors the average weekly earnings of Asians are considerably above those of other ethnic and racial groups.

Finally, since Whites account for 70.7% of the state's workforce, they also comprised a majority of workers in all industrial sectors. They exceeded their proportionate share of the workforce in three higher-paying sectors: Financial Activities (72.9%), Construction (77.5%), and Information Services (79.2%). They also

²⁷ The wage data are from an analysis of the Current Population Survey Outgoing Rotation Group (ORG) for 2006.

²⁸ In 2007 African-Americans were 12.5% of the state's total workforce, but they were only 5.4% of the employees in the Construction sector.

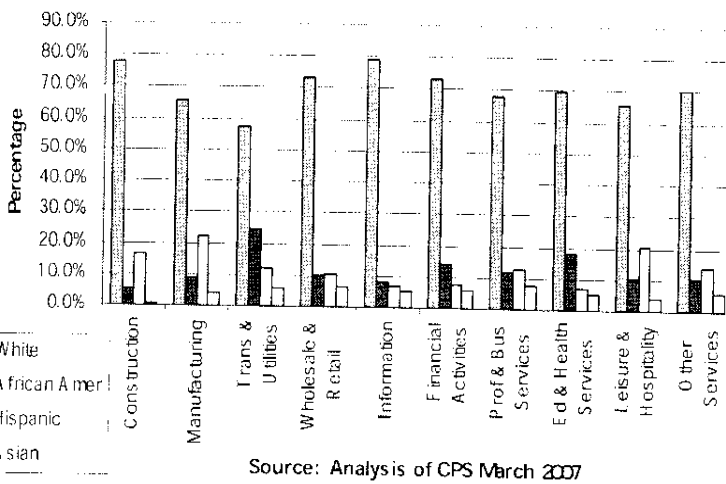
Illinois Ethnic and Racial Groups Concentrated in Particular Sectors 2007



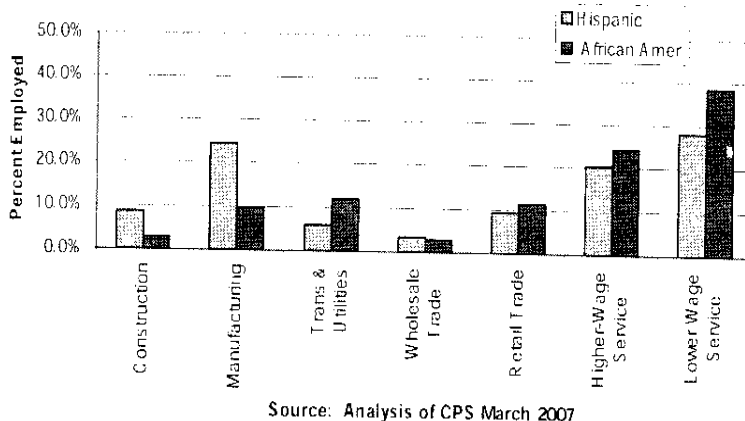
are more highly represented in the more economically mixed Wholesale and Retail Trade sector (73.2%).

One or more factors could be operating to produce these patterns of ethnic/racial concentration. The skills, experiences, and education levels that individuals bring to the labor force may limit their options. Networks of friends and relatives may provide access to sectors where employment is known to be available. Or, discriminatory employment practices may be operating. Regardless of which factors are working, the outcome is that access to job options, earnings and future economic mobility is limited

Share of IL Industry Employment Contributed by Each Ethnic/Racial Group 2007



IL African American and Hispanic Employment Heavier in Lower-Paying Industries 2007



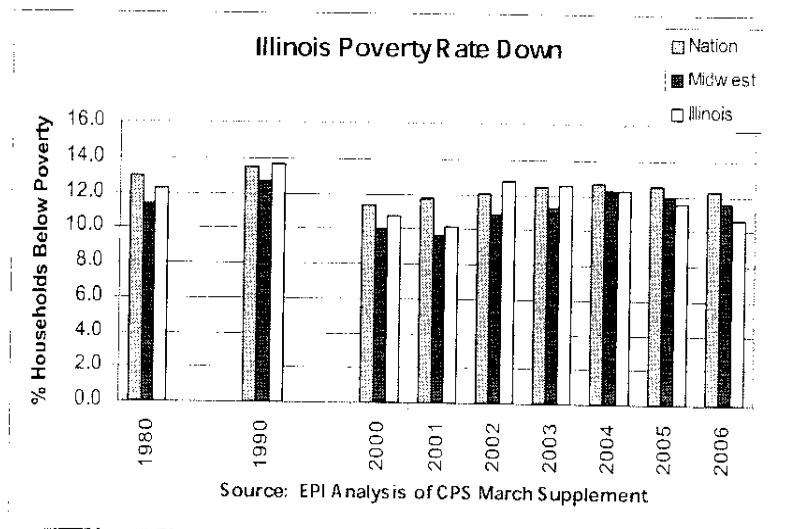
CHANGES IN EARNINGS AND JOB SECURITY

Poverty and Household Income

More jobs, more workers, and a shrinking pool of unemployed workers should translate into greatly enhanced economic security for the state's workers and their families. But the economic trends that have impacted the nation and Illinois in recent years have not always been beneficial. As a result, the economic security of the state's workers has not been materially boosted.

The proportion of Illinois households falling below the official federal poverty line dropped during the economically booming 1990s, reaching a low of 10.1% in 2001. But this and other measures of poverty worsened after that, as the effects of the 2001 recession and the terrorist attack in New York City rippled through the economy. Illinois rebounded fairly quickly, however, and the poverty indicators have been improving over the past several years. By 2006 only 10.6% of Illinois households fell below the poverty line, just slightly higher than the low-point reached five years earlier. Moreover, in 2005 and 2006 the Illinois poverty rate was lower than the national or Midwestern rates.

The economic security of the state's workers has not been materially boosted

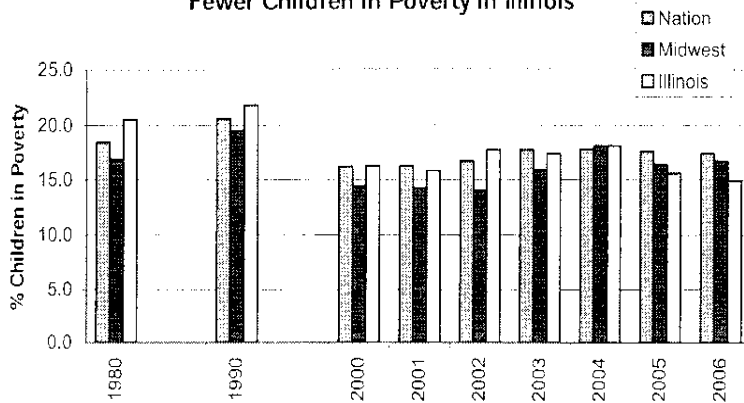


Poverty among the state's children has followed generally the same trajectory as the household poverty rate. It improved throughout the 1990s, hit a low point in 2001 (15.8%), then worsened over the following three years. But the proportion of Illinois children below the poverty line has been dropping annually since 2004. In 2006 it was 14.9% -- even below its 2001 level -- and lower than the national and regional rates.

However, analysts generally agree that the official poverty line is an unrealistically low indicator of whether a family has sufficient income to support itself. For instance, the national poverty guidelines issued by the Department of Health and Human Services establish the poverty level for a family of four at \$20,650 for 2007. Several years ago, the Economic Policy Institute (EPI) completed an analysis of the income needed to cover the bare essentials for a family of four both in rural Illinois and in Chicago.²⁹ Adjusting EPI's analysis to 2006 dollars,

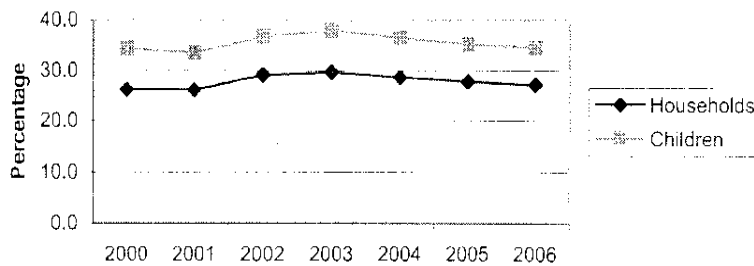
29 Sylvia Allegretto, "Basic Family Budgets" (Washington, D.C.: Economic Policy Institute, 2005).

Fewer Children in Poverty in Illinois



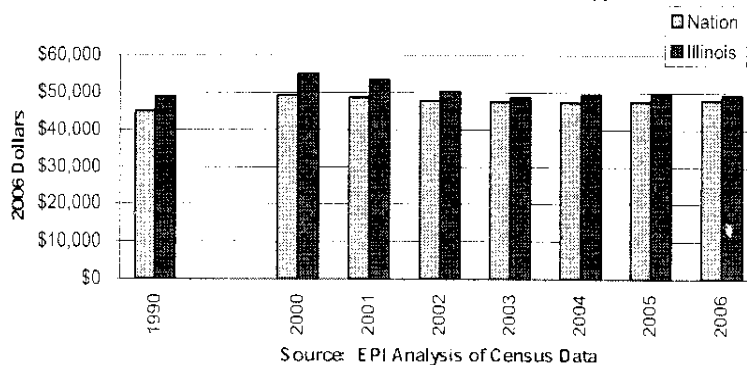
Source: EPI Analysis of CPS March Supplement

IL Households and Children Below 200% of Poverty



Source: EPI Analysis of CPS March Supplement

Illinois Median Household Income Below Peak



Source: EPI Analysis of Census Data

a subsistence budget for a family of four in rural Illinois would require \$38,956 annually, almost double the poverty level, while in Chicago it would require \$46,763, or more than double the federal poverty standard.

Given the cost of a subsistence budget in Illinois, it is far more realistic to use 200 percent of poverty (the "Subsistence Level") as the measurement for whether a family's annual income is at least adequate to cover basic living expenses. In 2006, over one quarter (27.1%) of the state's households and over one third (34.6%) of its children were below this Subsistence Level. However, both measures were below their 2003 peaks – 29.6% and 38.0%, respectively – and both were also lower than the corresponding national and regional rates.

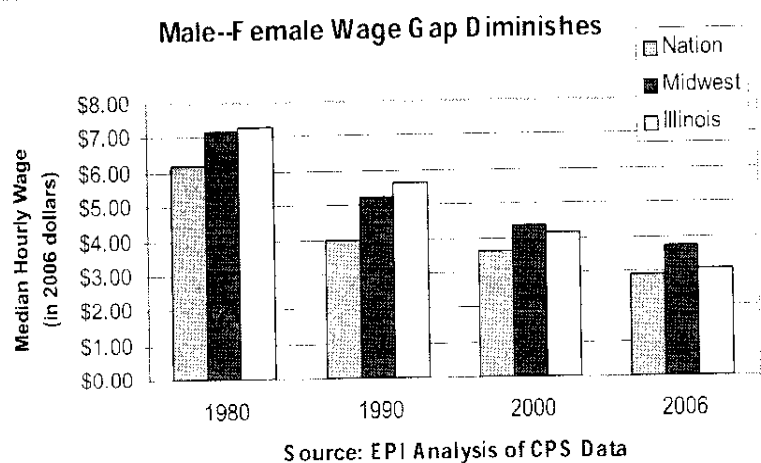
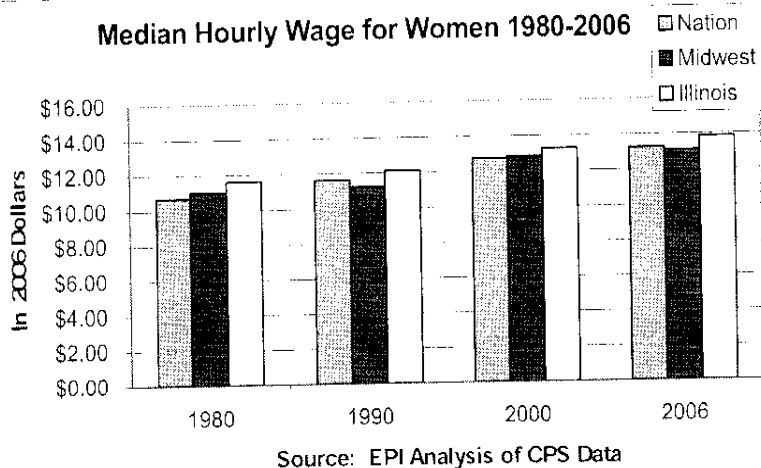
It is not just those at the bottom of the economic ladder who have felt the effects of conflicting economic trends over recent years. Measured in constant (2006) dollars, the state's median household income has declined from its 1999-2000 peak of \$54,990. However, Illinois

has remained above the national median household income and has begun to bounce back somewhat in recent years. The 2005-06 two-year moving average was \$49,328, which put the state's median household income \$642 above its recent low in 2002-03.³⁰ Median household income in Illinois in 2005-06 was also higher than that of any other state in the Midwestern region.

30 To avoid distortion caused by sudden economic changes, the measure for median household income averages the income for two years. In this case, the measure is a two-year moving average; i.e., each year is used as both the first and the second of the two years – e.g., 2000-01, 2001-02, 2002-03, etc. In the accompanying graphic, the years indicated are the second of the two; e.g., 1990 is the two-year moving average for 1989-90 and 2000 is the average for 1999-2000, and so on.

Changes in Real Wages and Persisting Wage Gaps

Viewed over time, there have been some noticeable changes in the economic standing of the state's major demographic groups. For example, median hourly wages for women have increased, reaching a high of \$13.85 in 2006.³¹ This represented growth of \$.58 (4.3%) since 2000, and an even more striking gain of \$2.22 (19.0%) since 1980. Median hourly wages for women in Illinois consistently exceeded their regional and national counterparts.



However, the incremental growth in hourly wages paid to women has not been large enough to eliminate the male-female wage gap. The differential between the median hourly wages of men and women in Illinois was \$7.26 per hour in 1980, higher than either the national or regional differences. That gap has diminished over time and dropped to \$3.05 in 2006, a 57.9% reduction over the 26-year period.

Even after this progress, however, the Illinois wage gap between men and women remained at 6.2% (or \$.18) above the national level, although it was \$.65 (or 17.5%) below the regional difference.

The increase in real hourly wages for women, although small in recent years, has been an important factor in reducing the male-female

wage gap. But almost as important has been the fact that real median hourly wages for men have dropped by \$1.99 (or 10.5%) since 1980. Measured in real (2006) dollars, the increase in women's wages since 1980 accounts for 52.7% of the total decline in the wage gap in Illinois, while the erosion of men's wages contributed 47.2%.

While it is important to acknowledge the steady decrease in the male-female wage gap over a 26-year period, women still earn on average 18.0% less than their male counterparts. Moreover, as the data in Table 5 reveal, the gap is considerably larger in several important industries in Illinois.³²

31 Here and throughout this section, hourly and weekly earnings are expressed consistently in 2006 dollars. The earlier discussion of declining real wages at the sector level used BLS data which was reported in 2007 dollars.

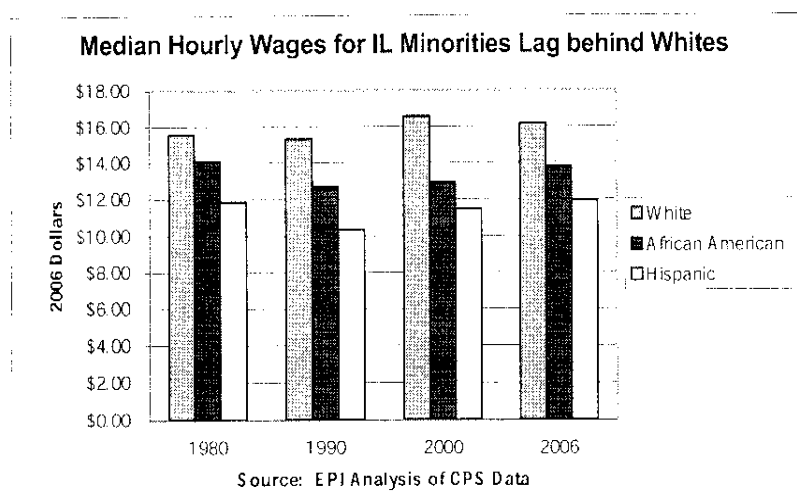
32 The data show by how much the male wage exceeded the female wage in each of the itemized industries.

TABLE 5

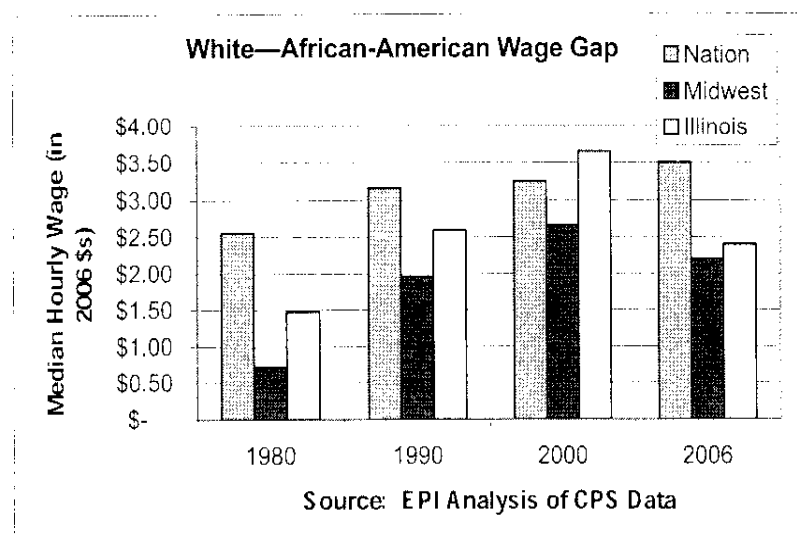
| Male-Female Wage Differences 2006 | | |
|--|---------------|----------------|
| | Median Hourly | Average Weekly |
| Finance and Insurance | \$14.53 | \$604 |
| Health Care and Social Assistance | \$4.28 | \$395 |
| Information Services | \$9.13 | \$175 |
| Prof., Scientific and Technical Services | \$9.44 | \$309 |
| Wholesale Trade | \$5.40 | \$528 |

Source: Analysis of CPS 2006 ORG Data

Examination of the wages paid to the state's major ethnic and racial groups reveals a similar pattern of unequal outcomes. But while the male-female wage gap declined between 1980 and 2006, those between Whites, on the one hand, and African-Americans and Hispanics, on the other, have worsened.



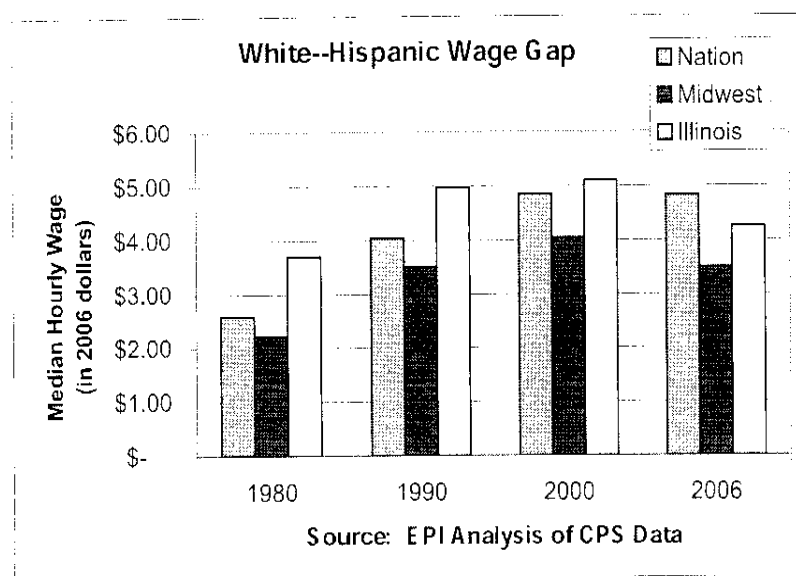
Median hourly wages for Whites in Illinois have been consistently higher over the years than those for African-Americans and Hispanics. Moreover, while real wages for Whites increased modestly between 1980 and 2006 (by \$.61 per hour, or 3.9%), those for African-Americans declined slightly (by \$.31 per hour, or 2.2%), and remained virtually unchanged for Hispanics (gaining only \$.07 or 0.5%) over the 26-years period.



As a result of this two-way movement, the wage gaps between Whites and minorities in Illinois increased. The gap between White and African-American median hourly wages grew from \$1.48 in 1980 to a high of \$3.66 in 2000. It has fallen since then and was \$2.40 in 2006, an increase of \$.92 per hour (or 62.1%) over its 1980 size. The Illinois gap in 2006 was larger than its regional counterpart, as it has

been consistently over the years, but it was still 31.4% (or \$1.10) below the national difference.

The White-Hispanic wage gap is larger. Growing from \$3.71 in 1980 to a high of \$5.10 in 2000, the difference has dropped to \$4.25 in 2006, which represents an increase of 14.5% (or \$.54) over the 1980 level. As with the White-African-American wage gap, the White-Hispanic wage gap in Illinois is larger than that of the region, but it is still \$.58 per hour (or 12.0%) lower than the national gap.



A closer analysis of earnings differences within important industries reveals additional income inequality. In each of the industries displayed in Table 6, there is a gap between the earnings of Whites, on the one hand, and African-Americans and Hispanics, on the other. Moreover, the gaps in the higher-paying activities are especially large. For example, Hispanics are increasingly finding employment in higher-paying sectors like

Construction and Durable Goods Manufacturing, yet the data in Table 6 show that their average weekly wages lag considerably behind their White counterparts.³³ In both cases, this disparity is greater than would have resulted from the general gap in hourly wages.³⁴ Thus, the data in Table 6 suggest that even when African-Americans and Hispanics are able to secure jobs in higher-paying sectors, they do not earn as much from that employment as Whites.

Finally, it is worth noting that in the service sectors itemized in Table 6, Asians have higher average weekly earnings than Whites. That pattern also occurs in other service activities that typically require higher levels of education. For instance, in Information Services the average weekly earnings of Asians are \$390 greater than Whites, and \$236 greater in Professional, Scientific and Technical Services.

³³ The data in Table 6 reflect the differences between the average (i.e., mean) weekly earnings of Whites in 2006 and those of the other specified groups. All of the earnings data were expressed in 2006 dollars. Positive numbers indicate higher White earnings; negative ones indicate that the earnings of Whites were lower.

³⁴ The overall White-Hispanic wage gap is \$4.25 per hour. Assuming a 40-hour work week, that would produce a gap in weekly earnings of \$170. But since the Hispanic average weekly earnings in Construction is \$701, and \$604 in Durable Goods Manufacturing, employment in these sectors is preferable to that in, for example, Accommodation and Food Service, when the average weekly earnings for the group is only \$397.

TABLE 6

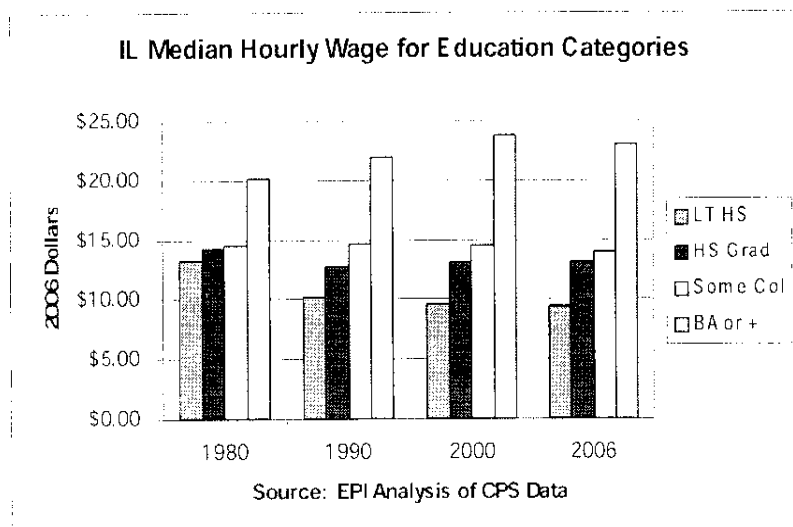
| White-Minority Differences in Average Weekly Earnings 2006 | | | |
|---|-------------------------|-----------------|--------------|
| | African-American | Hispanic | Asian |
| Construction | \$310 | \$274 | \$137 |
| Durable Goods Manufacturing | \$398 | \$382 | \$351 |
| Finance and Insurance | \$350 | \$373 | -\$78 |
| Management, Administrative, and Support | \$173 | \$241 | -\$107 |
| Educational Services | \$43 | \$102 | -\$319 |
| Health Care and Social Assistance | \$152 | \$150 | -\$175 |

Source: Analysis of CPS 2006 ORG Data

Education Boosts Wages and Incomes

As the Illinois economy has changed over the past decades, so have the requirements for good-paying jobs. The decline of manufacturing jobs and the growth of service activities have shifted the skill sets needed to access and retain good-paying jobs. As a result, wages vary ever more closely with skills – or what can proxy for them, education levels. An examination of median hourly wages by education categories illustrates this development.

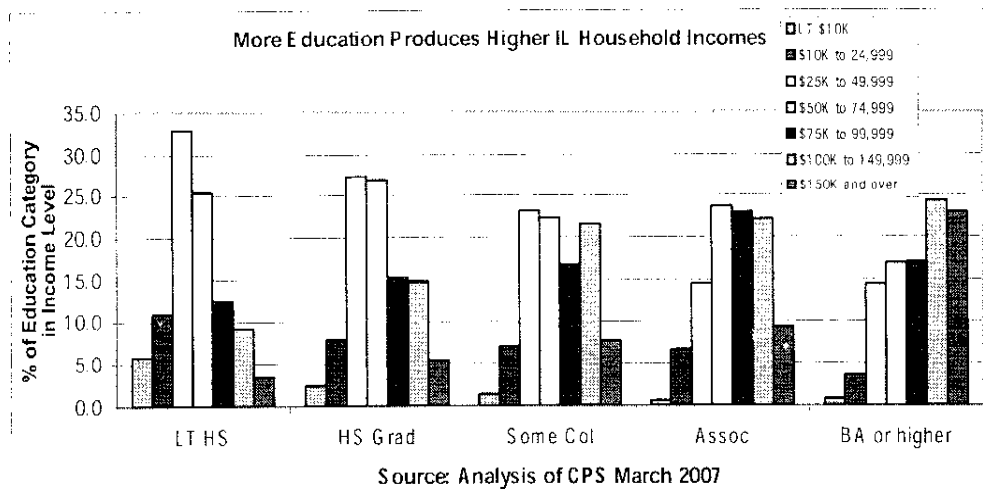
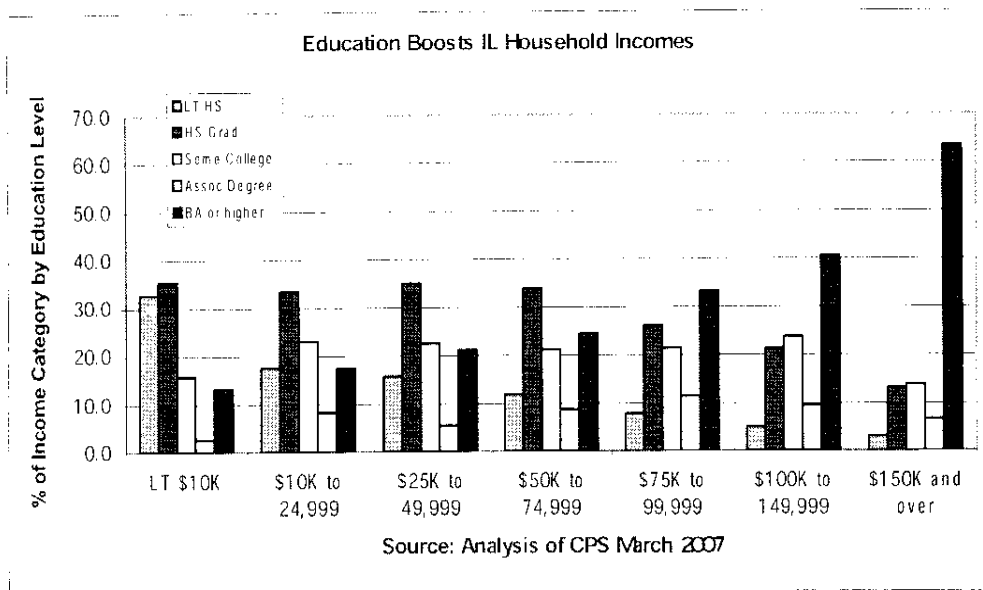
Expressed in real (2006) dollars, between 1980 and 2006, median hourly wages for those with less than a high school diploma fell by \$3.77 (-28.7%). Individuals with only a high school education experienced an 8.7% drop (-\$1.25). Workers with some college but no degree experienced a \$.64 drop (-4.3%) in median wages. On the other hand, only those with at least a college degree experienced any gains: \$2.89 per hour (14.3%)



While median wages over time have consistently varied directly with education levels, the relationship has grown more pronounced. In 1980 the median hourly wage for those with less than a high school diploma was 65.1% of the size of the corresponding wage for those with at least a college degree, and the gap between these two median hourly wages was \$7.01. By 2006 those with less than a high school diploma were

earning a median hourly wage that was only 40.5% of that earned by those in the top education category, and the gap between the two categories of wage earners had grown to \$13.67, a 95.0% increase over 1980. The deterioration in wage status for those lacking a post-secondary education demonstrates that they are more likely to be consigned to lower-paying jobs that lacked pathways for significant upward economic mobility.

In light of these changes, it is not surprising that household income in Illinois is strongly linked to education levels. Workers with low levels of education clustered in the lower-income categories. Of those with less than a high school diploma, 49.6% earned under \$50,000, as did 37.6% of those who had only graduated from high school. Indeed, the income category into which the largest percentage of both of these groups fell was \$25,000 to \$49,999.³⁵ It was only as workers moved up the education ladder -- and especially as they attained a post-secondary credential -- that the household incomes they reported improved appreciably. Of those who had earned an associate degree, 54.5% earned \$75,000 or more. And among those with at least a B.A. degree, 66.4% earned \$75,000 or more, and 23.0% of them -- better than the proportion of any of the other educational levels -- were in the top category of income earners, making \$150,000 per year and over.



³⁵ Of those with less than a high school diploma, 32.9% fell into this category, as did 27.4% of those who had only graduated from high school.

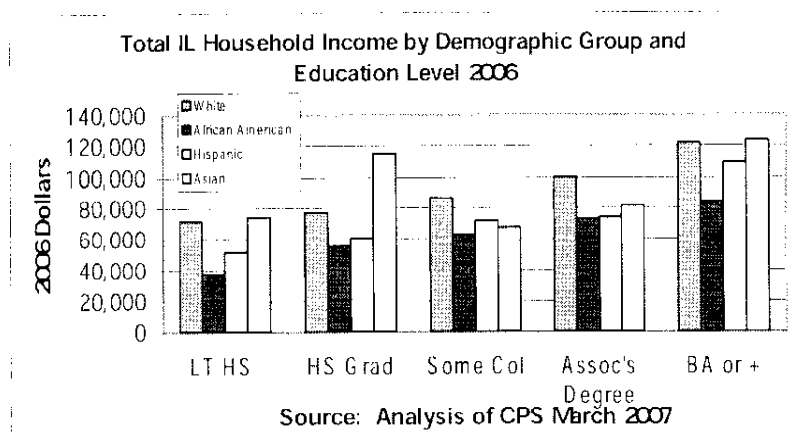
Minorities Behind in Education and Income

The state's largest minority groups – African-Americans and Hispanics – generally have lower levels of education than Whites, so it is not surprising that their household incomes cluster toward the lower categories. Among African-Americans, 56.2% earned less than \$50,000, as did 55.5% of Hispanics.³⁶ Only 34.5% of Whites and 25.8% of Asians fall into the three lower income categories. At the other end of the income ladder, while in recent years African-Americans and Hispanics have improved their respective shares, they still lag considerably behind Whites and Asians. For example, only 26.5% of African-Americans and 22.8% of Hispanics earn \$75,000 or more, while 42.9% of Whites and 51.4% of Asians earn at that level. Moreover, only very small proportions of African-American and Hispanic workers fall into the top earnings category -- \$150,000 and over; but 11.8% of the Whites and 22.3% of the Asians reported earnings at this level.

TABLE 7

| Percent of Each Group in Illinois Within Each Income Category | | | | |
|---|-----------|----------------------|--------------|-----------|
| Income Category | White (%) | African-American (%) | Hispanic (%) | Asian (%) |
| LT \$10K | 2.6 | 7.2 | 5.9 | 2.6 |
| \$10K to 24,999 | 8.1 | 16.4 | 10.8 | 5.7 |
| \$25K to 49,999 | 23.8 | 32.6 | 38.8 | 17.5 |
| \$50K to 74,999 | 22.6 | 17.3 | 21.8 | 22.8 |
| \$75K to 99,999 | 14.2 | 13.7 | 9.8 | 16.3 |
| \$100K to 149,999 | 16.9 | 9.8 | 10.2 | 12.8 |
| \$150K and over | 11.8 | 3.0 | 2.8 | 22.3 |

Source: Analysis of CPS March 2007



While African-American and Hispanic household incomes lag behind their White and Asian counterparts, increased education works powerfully to boost the incomes of these groups. For all of the state's major ethnic/racial groups, with only one exception, increased education levels correlate with increased household income.³⁷ Moreover, within each of these groups, household incomes for

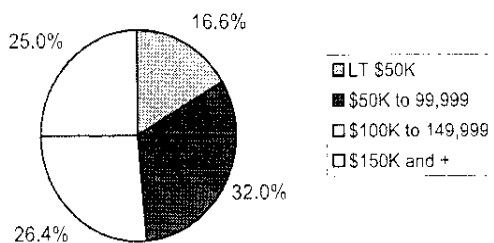
36 It is worth noting that percentages of African-Americans and Hispanics falling into the three-lowest earnings categories are smaller now than they were earlier. In the 2005 report, the respective percentages were 71.1% and 60.5%. Correspondingly, the percentages earning in the top-three categories (i.e., \$75,000 or more) in the 2005 report were 12.5% for African-Americans and 13.6% for Hispanics. See The State of Working Illinois 2005, Table 3, p. 28, for the detailed data.

37 The exception is the extremely high level of income reported for Asians with only a high school diploma, but this may be a product of the small number of cases falling into that cell.

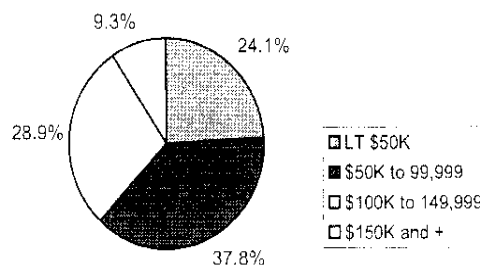
those with college degrees is substantially higher than for those without that post-secondary credential. This demonstrated importance of education to higher earnings obviously raises questions concerning access to quality K-12 education generally and the increasing costs of post-secondary training specifically, and the extent to which these factors operate to restrict opportunity for difference ethnic, racial, and income groups.

However, education does not erase all disparities between Whites and minorities. Even when education is taken into account, Whites and Asians retain their earnings advantages over African-Americans and Hispanics. For example, among Whites and Asians with at least a college degree, 51.4% and 41.6%, respectively, earn over \$100,000 per year, and 25.0% of the Whites and 33.6% of the Asians fall into the highest category of annual earnings, \$150,000 or more. Smaller proportions of African-Americans and Hispanics have at least a bachelor's degree (25.1% and 11.4%, respectively), but this level of education does not increase incomes as broadly for them as it does among Whites and Asians. For instance, only 27.7% of the African-Americans with college degrees or better earn over \$100,000 per year, which is just slightly better than half the rate for Whites. Among Hispanics who are college educated, 38.2% achieve the \$100,000 annual income level, only about three-quarters of the corresponding rate for Whites. Moreover, among African-Americans and Hispanics who are college educated only 6.6% and 9.3%, respectively, reached the top earnings category. Thus, as these data show, even at the top level of educational attainment, appreciably greater percentages of Whites and Asians than African-Americans and Hispanics realize top economic benefits. While the route to increased household incomes for these minority groups in Illinois is clearly through education, the substantial disparities in earnings that persist even within the same high level of educational attainment reinforces earlier suggestions of unequal outcomes.

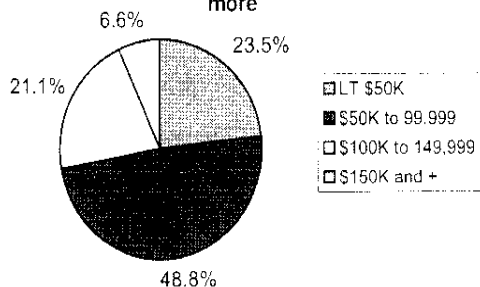
Earnings of IL Whites with BA or more



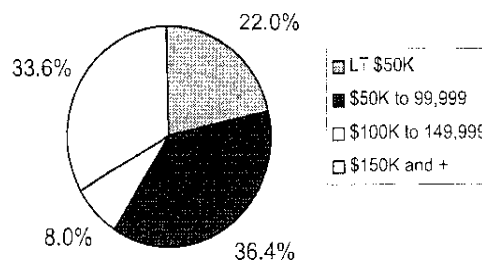
Earnings of IL Hispanics with BA or more



Earnings of IL African Americans with BA or more

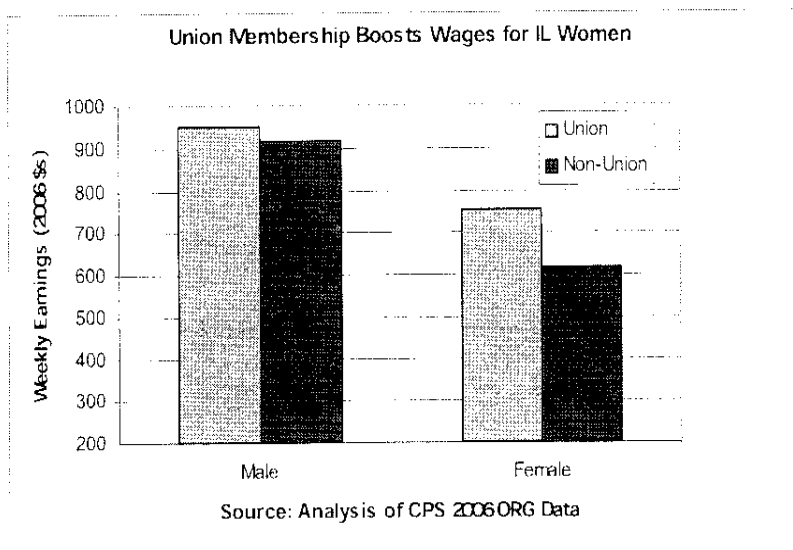


Earnings of IL Asians with BA or more

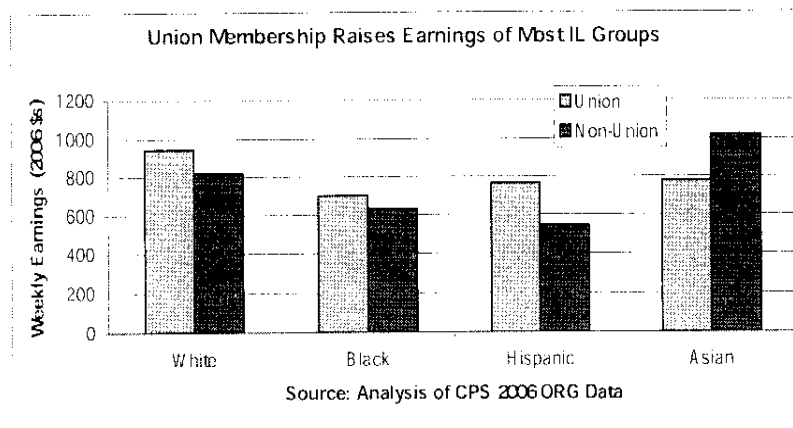


Union Membership Increases Wages

In addition to education, one other factor works to boost the earnings of Illinois workers – membership in labor unions. Overall, the average weekly earnings of union members in the state are \$110 per week, or 14.2%, higher than non-union members.³⁸ The earnings premium that derives from union membership also works to boost the wages of women and some minority groups. For women, union membership yields a wage premium of about 21.5% compared to females who are not members of unions. African-Americans who are union members have average weekly wages that are 11.6% higher than their non-union counterparts, and the boost for Hispanic workers is 40.1%. White workers derive about a 16.3% premium in average weekly wages from union membership. The single exception occurs among Asians, as those who are not union members earn a weekly average wage that is 30.8% above that of union members.³⁹



Comparatively few workers in Illinois benefit from the union boost in weekly earnings, because only 16.4% of the state's workforce were union members in 2006, a drop from 20.8% in 1990. An even smaller percentage of females – 12.1% -- were members of unions. Union membership also varied considerably across ethnic and racial groups: African-Americans and Hispanics had the highest rates, 25.0% and 26.2%, respectively, while 13.8% of Whites and only 7.3% of Asians were members of labor unions.⁴⁰



Union membership also varies considerably across industry sectors in Illinois. Of those employed in Professional, Scientific, and Technical Services only 1.2% are union members, as are only 6.2% of the workers in Management, Administrative

and Support Services. Together these are the two major components of the Professional and Business

³⁸ The average weekly earnings of union members are \$880, compared to \$770 for those who are not members. The data are from an analysis of the CPS Outgoing Rotation Group (ORG) for 2006.

³⁹ The high number of Asians in management, professional, and scientific occupations may explain this exception.

⁴⁰ The demographic breakdown of union membership rates comes from analysis of the March 2007 CPS. The over-time rates of union membership are from an EPI analysis of CPS data.

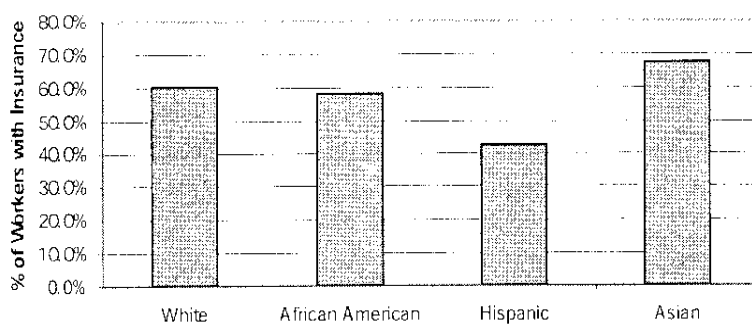
Services sector, the fastest growing sector in Illinois since 1990. Other activities with low proportions of union members include: Retail Trade (5.9%); Health Care and Social Assistance (7.9%); Finance and Insurance (1.6%); and Accommodation and Food Service (4.7%).⁴¹

Growing Economic Insecurity: Health Insurance and Pensions

In addition to the loss of higher-paying jobs and declines in real wages, Illinois workers and their families have had to cope with other aspects of heightened economic insecurity, especially the decline of employer-provided health care and pension benefits. All aspects of the costs associated with health care have been rising, and at a pace exceeding the general rate of inflation and nominal wage increments. Per capita health care costs in 2005 were \$6,697, which represented an increase of 138.1% over 1990, and 39.8% over 2000.⁴² The average annual rate of increase in per capita health care expenditures was 6.5% between 1993 and 2000, but accelerated to 7.9% between 2001 and 2005. These rapidly escalating health care costs have been accompanied by increases in private health insurance premiums, both for individuals and companies. Between 1993 and 2000, the average annual increase in health insurance premiums was 6.7%, but between 2001 and 2005 period it averaged 8.1%. Between 1993 and 2005, the overall increase in premiums for employer provided health insurance has been 134.9%.

In the face of such rapid cost increases, many employers have eliminated or drastically scaled back their health insurance plans for employees. Indeed, the National Bureau of Economic Research reported two years ago that 14.0% of small businesses were offering their employees significant incentives not to participate in company medical plans or aggressively encouraging them to enroll in a spouse's plan.⁴³ Nationally and in Illinois, private sector employer-provided health insurance began declining in the 1980s. At the beginning of that decade 69.9% of the nation's workforce and 75.4% of the state's had employer-provided coverage; but by the end of the 1980s, those percentages had dropped to 60.4% and 66.0%, respectively. Thereafter, the decline continued, although more slowly. By 2004-06, 55.3% of the workers nationally and 59.2% of the workers in Illinois had employer-provided health insurance.

IL Hispanics Lag in Access to Private Health Insurance



Source: Analysis of CPS March 2007

However, in some important subsectors, the rate of coverage is considerably lower. For example, in Management, Administrative and Support Services only 38.7% of the workers have employer-provided health insurance. In Retail Trade the coverage is only 41.7% and 40.6% in the Other Services sector. A meager 24.7% of the workers in Accommodation and Food Service have employer-provided health insurance, as do 27.3% in Art, Entertainment

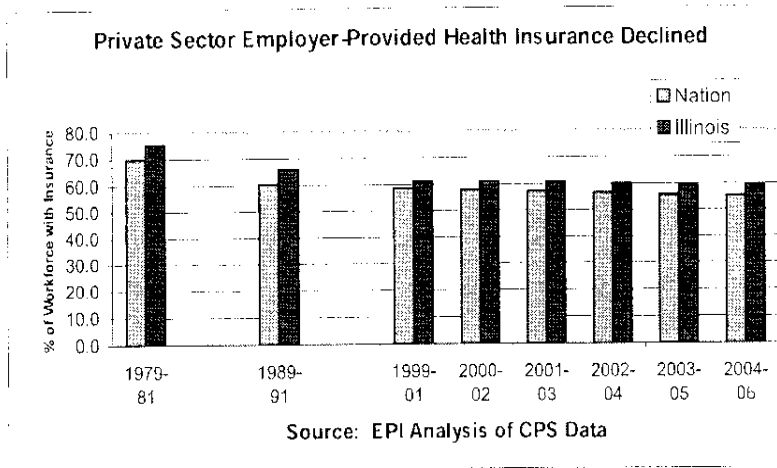
41 Analysis of the Current Population Survey Outgoing Rotation Group (ORG) for 2006.

42 Data on health care costs are from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group, at <http://www.cms.hhs.gov/NationalHealthExpendData>.

43 National Bureau of Economic Research, The NBER Digest (August 2005).

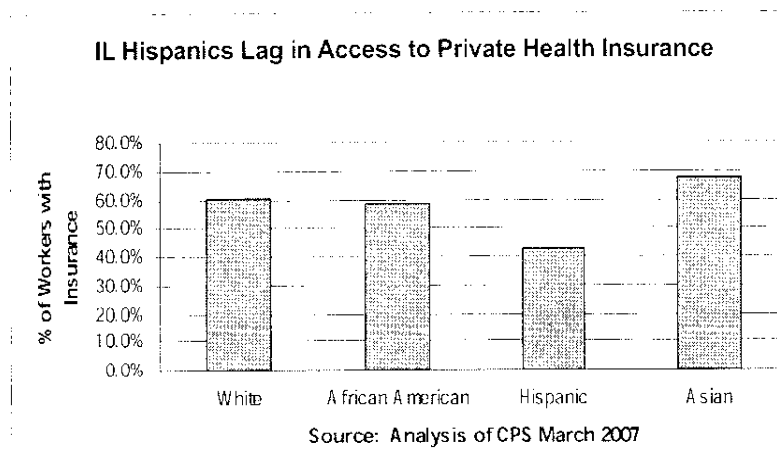
and Recreation – which includes the politically popular gambling casinos.⁴⁴

The drop in private sector health insurance has left Hispanic workers and their families especially vulnerable, since only 42.3% of them have employer-provided coverage. Among White and African-American workers only slightly better than half have health insurance through their employers, while 67.5% of the Asian workers do.



This shrinkage in employer provided health coverage means that an ever increasing number of Illinois workers and their families lack the security of access to affordable medical care. The proportion of Illinois residents lacking any health insurance has increased from 10.9% in 1990 to 14.0% in 2006. While that is below the 15.8% rate of uninsured at the national

level, it does mean that large numbers of citizens are routinely placed in medical jeopardy, unable to afford treatment for themselves and their families. Moreover, even those with health insurance have had to incur more health related costs out of their family budgets due to increases in premiums, higher co-pays, prescription drug price increases, or all three.



Changes in pension coverage – especially in reducing or eliminating employer provided programs – have also reduced the economic security of many workers in Illinois. During the 1979-81 period, 49.8% of workers nationally, along with 55.6% in Illinois, were covered by private sector employer-provided pension plans, nearly all of which were defined benefit plans. A sharp decline

in coverage began during the 1980s, and by 1989-90 national coverage had dropped to 44.0% and the Illinois coverage to 50.8%. Some small gains in coverage occurred during the 1990s, but the decline resumed after 2000. By the 2004-06 period, only 44.1% of the national workforce, and 48.6% of the state's workers, had an employer-provided pension.

Access to employer-provided pensions also varies greatly across industrial subsectors in Illinois. Of the workers in Retail Trade, 46.2% have pension plans available to them. But in other growing activities, the coverage rates are even lower: Real Estate and Leasing, 32.7%; Other Services, 30.2%; Art,

⁴⁴ Analysis of CPS March 2007.

PATTERNS OF NEW JOB CREATION

Entertainment, and Recreation, 30.4%; and Accommodation and Food Service, 25.3%.⁴⁵

Currently, only 53.7% of the Illinois workforce has an employer-provide pension plan. As might be expected, Whites (at 58.3%) and Asians (at 56.1%) were considerably more likely to have employer-provided pensions than minorities. African-American workers—at 47.3%—fall below the coverage levels of both of these groups, and the Hispanic coverage rate (35.3%) lags even further.⁴⁶ But even the highest rate of coverage—that for Whites -- means that only slightly more than half of the group had access to an employer-provided retirement plan.

PATTERNS OF NEW JOB CREATION

Projections of new job creation in Illinois over the next decade developed by the Illinois Department of Employment Security (IDES) reveal patterns that will reinforce the polarization of the workforce into high-wage and low-wage segments. One way to reveal these patterns is to sort all jobs by occupational category, and then group occupations by the level of education and/or job training that employers require.

**More than
24% of all oc-
cupations are
expected to
decline**

Table 8 compares 2004 and projected 2014 data on the distribution of all jobs in the state by the level of required education and/or job training. The data reveal that about 51.5 % of all new jobs that are expected to be created require only

TABLE 8

| The Number of Illinois Jobs in Occupations by Preparation Level 2004–2014 Projection | | | | | | |
|---|------------------|---------------|------------------|---------------|----------------|---------------|
| | 2004 | | 2014 | | Difference | |
| | Number | % of Total | Number | % of Total | Number | % of Total |
| Short Term OJT | 2,179,898 | 36.6% | 2,334,497 | 36.0% | 154,599 | 29.5% |
| Moderate Term OJT | 1,220,467 | 20.5% | 1,274,118 | 19.7% | 53,651 | 10.2% |
| Long Term OJT | 409,698 | 6.9% | 442,216 | 6.8% | 32,518 | 6.2% |
| Work Experience in related Occupation | 459,866 | 7.7% | 489,151 | 7.5% | 29,285 | 5.6% |
| Postsecondary vocational training | 231,695 | 3.9% | 258,152 | 4.0% | 26,457 | 5.0% |
| Associate's Degree | 209,541 | 3.5% | 245,988 | 3.8% | 36,447 | 7.0% |
| Bachelor's Degree | 745,365 | 12.5% | 868,170 | 13.4% | 122,805 | 23.4% |
| Bachelor's Degree or higher, plus work experience | 281,560 | 4.7% | 317,910 | 4.9% | 36,350 | 6.9% |
| Master's Degree | 84,996 | 1.4% | 97,420 | 1.5% | 12,424 | 2.4% |
| Doctoral Degree | 52,821 | 0.9% | 60,378 | 0.9% | 7,557 | 1.5% |
| First Professional Degree | 81,278 | 1.4% | 93,311 | 1.4% | 12,033 | 2.3% |
| Total | 5,957,185 | 100.0% | 6,481,311 | 100.0% | 524,126 | 100.0% |

⁴⁵ Analysis of CPS March 2007.

⁴⁶ Analysis of CPS March 2007.

on-the-job training and/or similar work experience. About 12 % of new jobs are expected to require some post-secondary vocational training or an associate degree. About 36.5% will require at least a bachelor's degree.

Table 9 uses these same definitions to categorize the number of occupations that are expected to experience growth or decline from 2004 to 2014. The data in the table reveal that a great deal of occupational churning is expected to occur over the next decade. Structural shifts in the economy that were discussed earlier in this report are shifting the skills that workers need to have. In total, more than 24% of all occupations are expected to decline. The great majority of the decline will be felt in low-skill occupations that require less formal on-the-job training while at the same time most of the growth will occur in different occupations that also require only on-the-job training. Of the 424 occupations that require only on-the-job training or some related work experience, 153 are expected to decline while 271 are expected to grow. Even occupations that require low skill levels are undergoing major shifts in response to economic restructuring. The table also reveals that very few high skill occupations are expected to decline. Of the 209 occupations that require at least a bachelors degree, only 9 are expected to experience job decline through 2014.

TABLE 9

| Occupations in Illinois by Preparation Level and Projected Job Change 2004-2014 | | | | | | |
|--|-------------------------------|---------------|-----------------------|---------------|---------------------------|---------------|
| Preparation Level | Stable or Growing Occupations | | Declining Occupations | | Overall Total Occupations | |
| | Number | % of Total | Number | % of Total | Number | % of Total |
| Short-term on-the-job training | 87 | 16.2% | 42 | 23.7% | 129 | 18.1% |
| Moderate-term on-the-job training | 86 | 16.0% | 80 | 45.2% | 166 | 23.2% |
| Long-term on-the-job training | 56 | 10.4% | 24 | 13.6% | 80 | 11.2% |
| Work experience in a related occupation | 42 | 7.8% | 7 | 4.0% | 49 | 6.9% |
| Postsecondary vocational training | 37 | 6.9% | 8 | 4.5% | 45 | 6.3% |
| Associate degree | 35 | 6.5% | 1 | 0.6% | 36 | 5.0% |
| Bachelor's degree | 87 | 16.2% | 9 | 5.1% | 96 | 13.4% |
| Bachelor's or higher degree, plus work experience | 27 | 5.0% | 3 | 1.7% | 30 | 4.2% |
| Master's degree | 34 | 6.3% | 3 | 1.7% | 37 | 5.2% |
| Doctoral degree | 30 | 5.6% | 0 | 0.0% | 30 | 4.2% |
| First professional degree | 16 | 3.0% | 0 | 0.0% | 16 | 2.2% |
| Grand Total | 537 | 100.0% | 177 | 100.0% | 714 | 100.0% |

Tables 10 and 11 provide detailed information about which occupations are expected to experience the largest scale of growth or decline across the entire state. If current trends continue, only seven of the high-growth occupations listed in Table 10 will require a formal educational degree, and only two of those seven will require a bachelors degree. The remaining occupations mostly require only very limited on-the-job training. Only one (Carpentry) requires more than one year of on-the-job training. Only one of the occupations expected to experience the largest job losses requires any formal education (Travel Agents) and it requires only some post-secondary vocational training. More than 46% of the new jobs in the 20 largest growing occupations require only short-term on-the-job training. The list of declining occupations presented in Table 11 shows clearly the power of advancing technologies to transform the nature of work and to make obsolete many routine skills that low-skilled workers once relied upon for job security.

Table 12 presents the income consequences of these patterns by showing the average wages for occupations categorized according to educational and/or experience requirements. Using these data, the median income of the largest growing occupations that require only short-term on-the-job training is only about \$1,000 higher than the poverty level for a family of four (\$19,743 vs. the poverty level of \$18,850). These occupations are expected to create 128,894 new jobs, or 46% of all new jobs in the occupations projected to experience the largest growth.

TABLE 11

| Preparation Level | 2006 Weighted Median Wage |
|---|---------------------------|
| First professional degree | \$88,939.57 |
| Bachelor's or higher degree, plus work experience | \$68,413.59 |
| Doctoral degree | \$55,948.51 |
| Bachelor's degree | \$54,709.34 |
| Master's degree | \$50,950.99 |
| Work experience in a related occupation | \$49,698.28 |
| Associate degree | \$48,341.82 |
| Long-term on-the-job training | \$43,512.51 |
| Moderate-term on-the-job training | \$33,516.18 |
| Postsecondary vocational training | \$32,724.09 |
| Short-term on-the-job training | \$20,983.16 |

TABLE 10

| Illinois Occupations with the Largest Projected Growth 2004–2014 | | | | | |
|---|-----------------------------|----------------------------------|-----------------------|---------------------------|---------------------------|
| Growing Occupations | Base Employment 2004 | Projected Employment 2014 | Numeric Growth | Median Wage (2004) | Preparation level* |
| 1. Registered Nurses | 100,053 | 119,357 | 19,304 | \$52,394 | Associate Deg. |
| 2. Retail Salespersons | 187,843 | 207,112 | 19,269 | \$19,542 | Short-term OJT |
| 3. Laborers and Freight, Stock, Material Movers | 154,242 | 171,683 | 17,441 | \$20,718 | Short-term OJT |
| 4. Janitors and Cleaners, Except Maid/Hskpr | 108,965 | 125,872 | 16,907 | \$20,792 | Short-term OJT |
| 5. Business Operations Specialists, All Other | 62,470 | 76,845 | 14,375 | \$57,791 | Bachelor Degree |
| 6. Customer Service Representatives | 93,003 | 107,118 | 14,115 | \$30,154 | Moderate OJT |
| 7. Secondary Sch Teachers, Exc Sp/VocEd | 69,645 | 81,153 | 11,508 | \$52,693 | Bachelor Degree |
| 8. Truck Drivers, Heavy and Tractor-Trailer | 75,321 | 85,661 | 10,340 | \$38,782 | Moderate OJT |
| 9. Comb Food Prep/Srv Wkrs, Fast Food | 76,923 | 87,232 | 10,309 | \$14,833 | Short-term OJT |
| 10. Waiters and Waitresses | 78,400 | 88,641 | 10,241 | \$14,401 | Short-term OJT |
| 11. Elementary School Teachers, Exc SpecEd | 52,459 | 62,464 | 10,005 | \$47,648 | Bachelor Degree |
| 12. General and Operations Managers | 76,502 | 86,279 | 9,777 | \$81,927 | BA + experience |
| 13. Accountants and Auditors | 56,181 | 65,567 | 9,386 | \$54,874 | Bachelor Degree |
| 14. Nursing Aides, Orderlies, and Attendants | 59,317 | 68,407 | 9,090 | \$20,581 | Short-term OJT |
| 15. Teacher Assistants | 45,155 | 53,327 | 8,172 | \$19,228 | Short-term OJT |
| 16. Computer Systems Analysts | 24,650 | 31,865 | 7,215 | \$73,367 | Bachelor Degree |
| 17. Receptionists and Information Clerks | 50,801 | 57,865 | 7,064 | \$23,260 | Short-term OJT |
| 18. Truck Drivers, Light or Delivery Services | 43,102 | 50,110 | 7,008 | \$29,030 | Short-term OJT |
| 19. Landscaping and Groundskeeping Workers | 45,911 | 52,455 | 6,544 | \$21,225 | Short-term OJT |
| 20. Sales Reps, Whole and Mfg, Exc Tech/Sci | 77,373 | 83,795 | 6,422 | \$51,708 | Moderate OJT |
| 21. Food Preparation Workers | 38,958 | 44,981 | 6,023 | \$17,087 | Short-term OJT |
| 22. Management Analysts | 26,998 | 32,956 | 5,958 | \$69,165 | BA + experience |
| 23. Home Health Aides | 20,225 | 25,869 | 5,644 | \$20,280 | Short-term OJT |
| 24. Carpenters | 51,126 | 56,741 | 5,615 | \$51,950 | Long-term OJT |
| 25. Computer Software Engineers, Applications | 13,597 | 19,169 | 5,572 | \$71,991 | Bachelor Degree |
| 26. Computer Software Engineers, Software | 13,600 | 19,100 | 5,500 | \$83,693 | Bachelor Degree |
| 27. Personal and Home Care Aides | 20,446 | 25,628 | 5,182 | \$16,724 | Short-term OJT |
| 28. Preschool Teachers, Except Special Education | 18,524 | 23,689 | 5,165 | \$25,806 | Post. Voc. |
| 29. Exec Secretaries and Adm Assistants | 73,774 | 78,851 | 5,077 | \$36,279 | Moderate OJT |
| 30. Team Assemblers | 63,844 | 68,826 | 4,982 | \$22,499 | Moderate OJT |

*OJT = on-the-job training

Source: Illinois Department of Employment Security; U.S. Department of Labor, Bureau of Labor Statistics

TABLE 12

| Illinois Occupations with the Largest Projected Decrease 2004 - 2014 | | | | | |
|---|-----------------------------|----------------------------------|-----------------------|---------------------------|--------------------------|
| Declining Occupations | Base Employment 2004 | Projected Employment 2014 | Numeric Growth | Median Wage (2006) | Preparation Level |
| 1. Stock Clerks and Order Fillers | 72,106 | 63,144 | -8,962 | \$19,868 | Short-term OJT |
| 2. Secretaries, Exc Legal, Medical, and Executive | 78,239 | 73,463 | -4,776 | \$26,490 | Moderate OJT |
| 3. File Clerks | 10,783 | 6,387 | -4,396 | \$22,096 | Short-term OJT |
| 4. Order Clerks | 12,350 | 8,863 | -3,487 | \$26,293 | Short-term OJT |
| 5. Mail Clerks and Machine Operators, Exc Postal | 8,721 | 5,250 | -3,471 | \$21,256 | Short-term OJT |
| 6. Cut, Punch, and Press Mach Setters, Ops and Tend | 15,755 | 12,412 | -3,343 | \$25,754 | Moderate OJT |
| 7. Cashiers | 134,187 | 130,861 | -3,326 | \$16,658 | Short-term OJT |
| 8. Computer Operators | 5,704 | 3,671 | -2,033 | \$33,394 | Moderate OJT |
| 9. Production Workers, All Other | 23,218 | 21,235 | -1,983 | \$23,230 | Moderate OJT |
| 10. Telemarketers | 13,195 | 11,271 | -1,924 | \$22,127 | Short-term OJT |
| 11. Switchboard Operators, Including Answg Svc | 10,115 | 8,650 | -1,465 | \$22,652 | Short-term OJT |
| 12. Sewing Machine Operators | 7,292 | 5,856 | -1,436 | \$19,128 | Moderate OJT |
| 13. Electrical and Electronic Equipment Assemblers | 10,287 | 8,944 | -1,343 | \$23,575 | Short-term OJT |
| 14. Machine Feeders and Offbearers | 6,261 | 4,941 | -1,320 | \$24,117 | Short-term OJT |
| 15. Meter Readers, Utilities | 2,602 | 1,341 | -1,261 | \$30,484 | Short-term OJT |
| 16. Billing and Posting Clerks and Machine Ops | 19,791 | 18,544 | -1,247 | \$28,812 | Moderate OJT |
| 17. Office Machine Operators, Except Computer | 4,316 | 3,103 | -1,213 | \$23,529 | Short-term OJT |
| 18. Credit Authorizers, Checkers, and Clerks | 2,809 | 1,671 | -1,138 | \$37,641 | Short-term OJT |
| 19. Metal Workers and Plastic Workers, All Other | 5,998 | 4,916 | -1,082 | \$26,304 | Moderate OJT |
| 20. Photographic Processing Machine Operators | 2,797 | 1,740 | -1,057 | \$20,385 | Short-term OJT |
| 21. Parts Salespersons | 10,155 | 9,160 | -995 | \$29,714 | Moderate OJT |
| 22. Inspect, Test, Sort, Sampl, and Weighers | 22,040 | 21,086 | -954 | \$28,761 | Moderate OJT |
| 23. Data Entry Keyers | 15,823 | 14,875 | -948 | \$25,080 | Moderate OJT |
| 24. Assemblers and Fabricators, All Other | 17,717 | 16,771 | -946 | \$25,879 | Moderate OJT |
| 25. Parking Lot Attendants | 6,207 | 5,313 | -894 | \$17,030 | Short-term OJT |
| 26. Travel Agents | 5,884 | 5,078 | -806 | \$25,607 | Post Vocational |
| 27. Prepress Technicians and Workers | 4,162 | 3,403 | -759 | \$35,805 | Long-term OJT |
| 28. Correctional Officers and Jailers | 15,340 | 14,586 | -754 | \$43,125 | Moderate OJT |

Regional Data

To better understand how employment and job creation trends vary across regions in the state, the following sections provide descriptive information for each of the ten Economic Development Regions (EDRs) identified by the Illinois Department of Community and Economic Opportunity (DCEO).

Data from the Illinois Department of Employment Security (IDES) identify industrial sectors and occupational growth by sector, employment, education, and income changes in each region. (Additional employment and demographic data are available on the State of Working Illinois website.) The tables for each region identify the top 20 sectors in each region that are projected to create the largest number of new jobs during the years 2004 through 2014 (the most recent period for which ten-year projections are available). These data do not project all new job growth but they provide a good estimate of the overall patterns by focusing on the larger sectors. A similar analysis was performed to identify the occupations that are expected to create the largest number of new jobs in each region through 2014. These occupational data also identify the broad patterns in job creation. In particular, occupational projections help distinguish between jobs that pay higher wages from those that pay lower wages.

Most new jobs will be created in occupations that have median wages lower than the state's median wage

New Job Creation is Not Projected to Reverse Long-Term Trend of Lower Median Wages

The drop in household income provides a key statewide trend. In addition, there has been a concurrent drop or stagnation in the median wage for men in general and for African-Americans and Hispanics in particular since 1980. The long-term erosion of the median wage for more and more groups of Illinois workers, despite some recent partial recovery, is also reflected in the growing income inequality data presented previously in this report.

To reverse these trends, the Illinois economy will need to create a new wave of "high-wage" jobs to avoid perpetuating the drop in median wages that has been experienced by many Illinois workers since 1990. IDES occupational projections of the new jobs expected to be created in Illinois between 2004 and 2014 based on current industry trends, however, indicate that Illinois will not generate enough high wage jobs to counter growing income inequality. In fact, we estimate that less than half - only 45.6% - of the new jobs expected to be created through 2014 will have wages that exceed the current median wage (\$40,217) in Illinois. Most new jobs (54.4%) will be created in occupations that have median wages lower than the state's median wage.

The imbalance between the creation of high and low wage jobs is even more striking when we look at the extremes. The bottom of the wage scale is growing much faster than the top. Only 36,827 new jobs statewide, or 6.2% of all new jobs, are expected to be created in occupations that have a median wage twice the state's median wage (twice \$40,217, or \$80,434). On the lower end of the pay scale, however, 110,464 new jobs statewide, or 18.5% of all new jobs, are expected to be created in occupations that have a median wage less than half the state's median

wage (half of \$40,217, or \$20,108). Statewide, the economy is projected to produce about three new jobs that pay less than half the state's median wage for every one job that pays more than twice the state's median wage. If these patterns stay in place, they will continue to push down the state's median wage for the foreseeable future.

Data summarized in Table 9 show that no region in Illinois is expected to create more jobs above the statewide median wage than below between 2004 and 2014. The region that comes closest to that goal is the state's largest, the Northeastern region, where about half of the jobs will be created in occupations that have median wages above the statewide median. Looking at the extremes in the Northeastern region, these data project that for every one job created in an occupation that has median wages twice the level of the statewide median, two jobs will be produced in occupations that have median wages less than half the statewide median.

The West Central region is projected to perform the worst in this regard, with only 20 % of its projected new job growth coming in occupations that have median wages above the statewide median and 80% of all new jobs in occupations with median wages below the statewide median. Looking at the extremes in the West Central region reveals that for every one job created in an occupation that has median wages twice the statewide median, almost 63 jobs are projected to be created in occupations that have median wages less than half the statewide median.

TABLE 13

| New Job Creation Is Not Projected to Reverse Long-Term Trend of Lower Median Wages | | | | |
|--|--|---|---|--|
| Region | Projected Creation of New Jobs in Region Through 2014 | Percent of new Jobs in Region with Median Wages Above State Median Wage (\$40,217) | Percent of New Jobs in Region with Current Wages Twice the State Median Wage | Percent of New Jobs in Region with Current Wages Half the State Median Wage |
| Northern Stateline | 21,705 | 35.3% | 3.4% | 46.5% |
| Northeastern | 479,142 | 49.5% | 6.5% | 13.1% |
| Northwestern | 14,218 | 37.9% | 1.9% | 25.6% |
| North Central | 34,425 | 38.8% | 1.9% | 24.3% |
| Central | 18,436 | 35.6% | 2.1% | 31.7% |
| East Central | 11,609 | 41.5% | 2.1% | 17.6% |
| West Central | 4,895 | 20.0% | 0.6% | 38.1% |
| Southeastern | 5,819 | 25.6% | 1.8% | 37.9% |
| Southern | 6,996 | 35.9% | 1.4% | 39.5% |
| Southwestern | 18,498 | 41.2% | 2.8% | 26.1% |
| Statewide | 597,815 | 45.6% | 6.2% | 18.5% |
| *Median wage for the state was calculated from statewide data provided by IDES and weighting by # jobs in each wage category. Only wage data from growing occupations was used in this analysis. | | | | |
| Source: Illinois Department of Employment Security | | | | |

CREATION OF NEW JOBS WILL BE UNEVEN ACROSS ILLINOIS

As discussed earlier in this report, the overall economy of Illinois has begun to grow in the last few years at a rate higher than the rest of the Midwest region, and even slightly above the U.S. national average. If this trend continues, it can yield important benefits for the entire state. But it is unclear how broadly this growth will be distributed within the state. In the previous section, we examined the difficulty that may emerge in using this growth to achieve further improvements in the state's median wages across the full range of occupations, and how that goal may be more easily reached in the Northeastern region than in any other part of the state. This section looks more directly at the distribution of all job growth across the state's different regions, regardless of the wages that are paid to new jobs in different occupations.

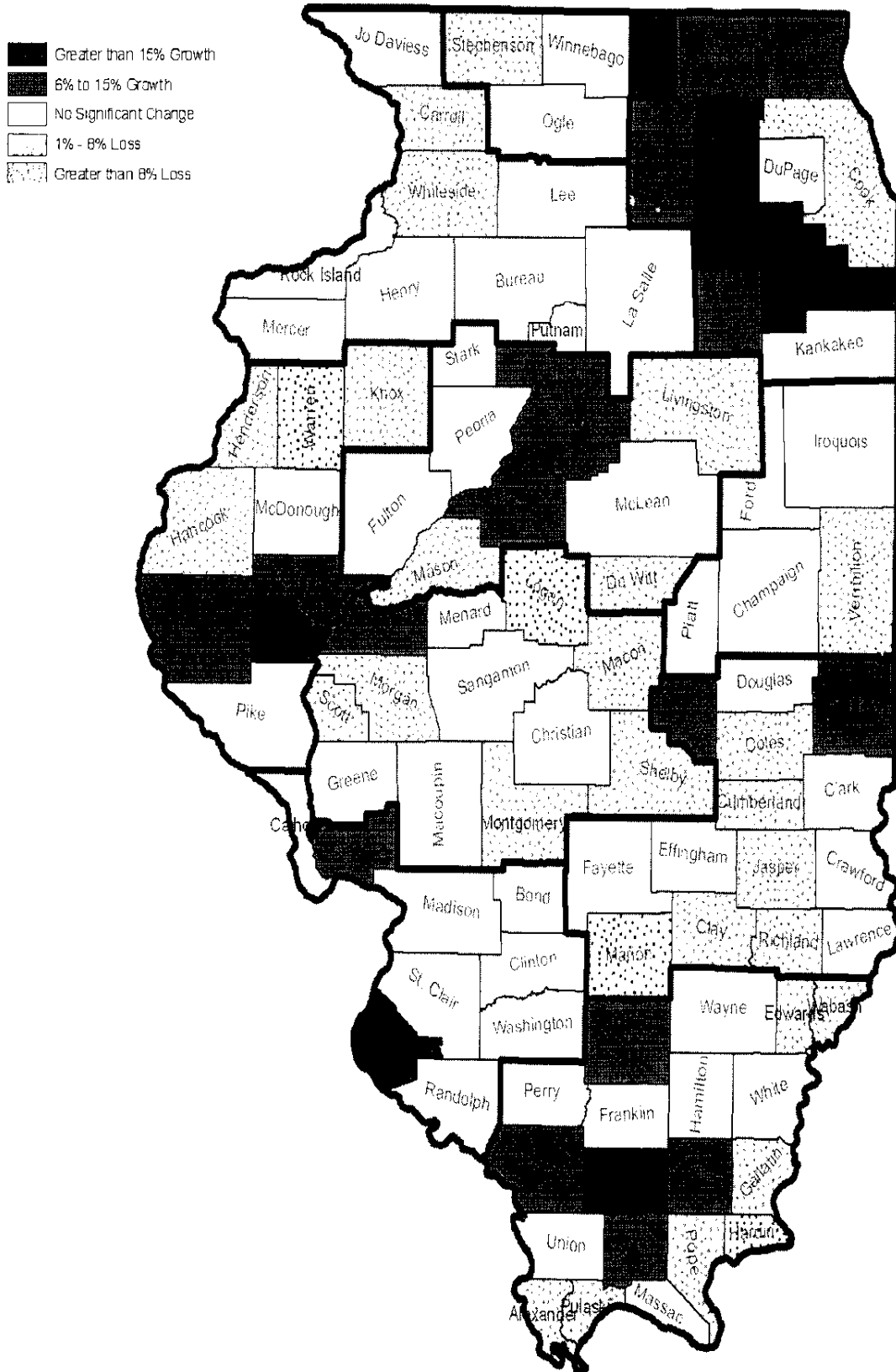
As the map below indicates, growth in total employment for the period from 2000 to 2006 was not distributed evenly across the state. Not only did the Northeastern region receive a large majority of the higher-wage growth, it also received a large majority of all job growth. This pattern is not expected to change in the projected period of 2004 to 2014. During those years, the Northeastern region is expected to be the principal engine of new job growth in the state. About 80.15 % of all new jobs are projected to be created in the Northeastern region, even though the region contains only 68.32% of all existing jobs and 68.26 % of the state's population.

The weakest region in terms of job growth is expected to be the Southern region, where only 3.09 % of new jobs are expected to be created even though 5.24 % of all jobs are there now, as well as 5.36 % of the state's population.

TABLE 14

| Percent of Projected New Job Creation by Region 2004-2014 | | | |
|--|-------------------------------|----------------------|--|
| | Percent of Population 2007 | Percent of Jobs 2007 | Percent of New Jobs Projected 2004-2014 |
| Northern Stateline | 3.5% | 3.6% | 3.6% |
| Northeastern | 68.2% | 68.3% | 80.1% |
| Northwestern | 3.9% | 3.9% | 2.3% |
| North Central | 4.8% | 5.1% | 5.7% |
| Central | 4.5% | 4.3% | 3.0% |
| East Central | 2.7% | 2.8% | 1.9% |
| West Central | 1.7% | 1.7% | 0.8% |
| Southeastern | 2.0% | 2.1% | 0.9% |
| Southern | 3.0% | 2.7% | 1.1% |
| Southwestern | 5.3% | 5.2% | 3.0% |
| Statewide | 100.00% | 100.00% | 100.00% |

County Job Gain/Loss 2000–2007

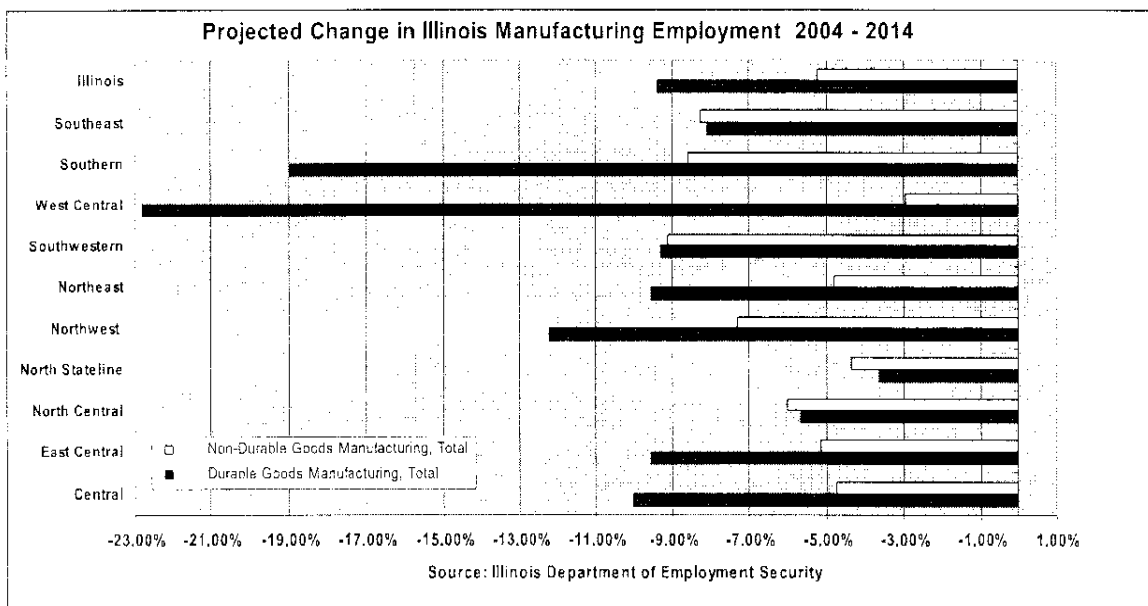


MANUFACTURING WILL CONTINUE TO BE A MAJOR SECTOR IN ILLINOIS

Workers, communities and companies continue to suffer from the loss of jobs in the manufacturing sector throughout Illinois. Although the rate of decline has slowed considerably over the last few years, the longer-term projections made by the Illinois Department of Employment Security (IDES) anticipate continued job erosion. The erosion is expected to hit the durable goods producing sectors harder than the non-durable goods sectors. The net effect of long-term erosion is expected to be a net loss of about 53,000 jobs between 2004 and 2014.

Ironically, the continued loss of overall employment in the manufacturing sector will coincide with a period of time that is expected to bring about high rates of retirement among older workers. Many of the manufacturing sectors contain large percentages of older workers (this was the subject of a previous publication in the State of Working Illinois series). The combination of these two trends (continued erosion of jobs and high retirement rates) is likely to yield an unusually high need for new workers in many otherwise declining sectors. Since many manufacturing jobs will continue to pay wages that are well above the state's averages, these sectors will continue to play an important role in providing good wages for Illinois workers. Indeed, by 2014 the manufacturing sector is expected to still provide almost 13.5 % of all jobs in the state.

These statewide trends will affect regions within Illinois differently. The West Central Region is projected to be hit the worst in terms of overall job losses. These losses are expected to be worst among the durable goods sectors within that region's network of small and medium sized towns. Durable goods producers in the Southern Region are also expected to see continued job erosion at levels higher than the state average. The least erosion among manufacturing jobs is projected in the Northern Stateline region, which has the Rockford area as its core. Even with projected losses, the Rockford region's economy is expected to maintain its traditional manufacturing strength.

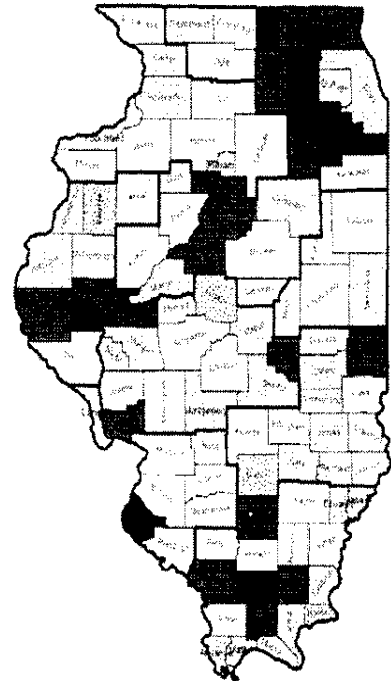


ILLINOIS SUMMARY

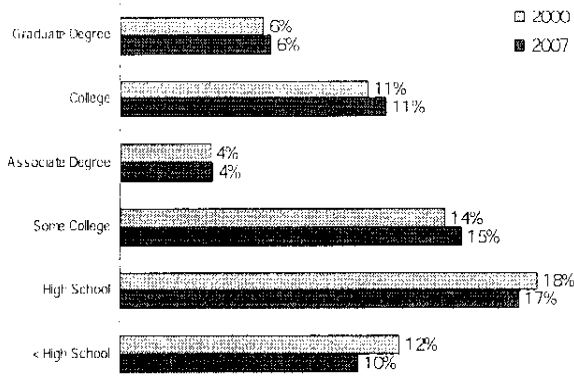
| Profile | 2000 | 2007 | % Change |
|--------------------------|------------|------------|----------|
| Population (1/1/2007): | 12,419,293 | 12,864,772 | 3.59% |
| Population, Median Age: | 34.7 | 34.7 | 0.00% |
| Percent Population 65+: | 12.08% | 11.49% | -4.85% |
| White Population, Alone: | 9,125,471 | 9,288,264 | 1.78% |
| Black Population, Alone: | 1,876,875 | 1,835,030 | -2.23% |
| Asian Population, Alone: | 428,213 | 526,898 | 23.05% |
| Other Population: | 988,734 | 1,214,580 | 22.84% |
| Hispanic Population: | 1,530,262 | 1,848,260 | 20.78% |

County Job Gain/Loss 2000-2007

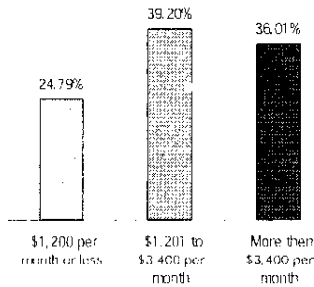
Greater than 15% Growth
 6% to 15% Growth
 No Significant Change
 1% - 5% Loss
 Greater than 8% Loss



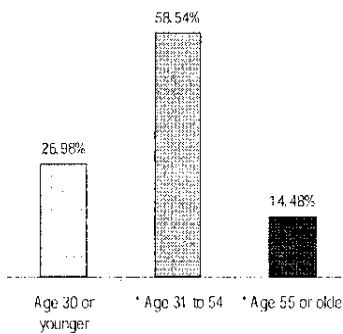
Percent of Population by Educational Attainment (Pop. Over 25)



Primary Jobs by Earnings Paid



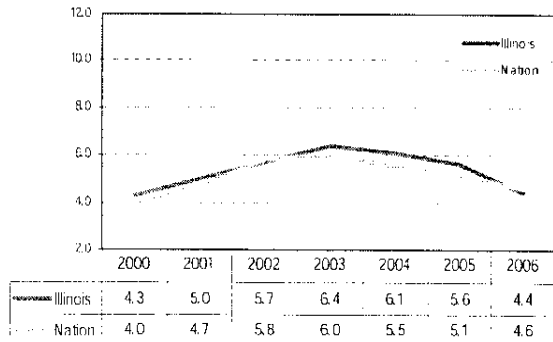
Primary Jobs by Worker Age



Total Employment 2000-2007

| Area Name | 2000 | 2007 | % Change |
|---------------------------|------------------|------------------|--------------|
| Central Region | 265,625 | 268,065 | 0.92% |
| East Central Region | 168,963 | 173,418 | 2.64% |
| North Central Region | 305,427 | 317,044 | 3.80% |
| Northwest Region | 239,572 | 241,146 | 0.66% |
| Northeast Region | 3,929,299 | 4,227,462 | 7.59% |
| Northern Stateline Region | 203,601 | 223,763 | 9.90% |
| Southeast Region | 135,579 | 134,401 | -0.87% |
| Southern Region | 167,498 | 169,600 | 1.25% |
| Southwestern Region | 307,922 | 323,938 | 5.20% |
| West Central | 111,836 | 108,897 | -2.63% |
| Statewide Total | 5,835,322 | 6,187,734 | 6.04% |

Unemployment Rate 2000-2006 Illinois and the Nation



Illinois Industry Structure Summary

- Illinois lost 15,896 manufacturing jobs (2.3%) from 2003 – 2005, a significant decrease from the previous two year period.
- The state has an annual mean wage of \$48,880 for stable manufacturing jobs.
- Manufacturing jobs make up 10.7% of total employment in Illinois in 2005.
- Higher-wage service jobs make up 21.4% of total employment in Illinois in 2005.
- Lower-wage service jobs make up 31.8% of total employment in Illinois in 2005.

| Illinois—Industry Structure | | | | | | | |
|--|------------------|------------------|-----------------------------|-------------------------------|-----------------------------|----------------------------------|--|
| Sector | Employment, 2003 | Employment, 2005 | Employment Change 2003–2005 | Separations Stable Jobs, 2005 | New Hires Stable Jobs, 2005 | Stable Jobs: Mean Earnings, 2005 | New Hires Stable Jobs: Mean Earnings, 2005 |
| Total Public/Private Employment In Sectors | 6,179,371 | 6,258,174 | 1.3% | 451,921 | 429,861 | \$44,244 | \$28,140 |
| Manufacturing Total | 685,921 | 670,025 | -2.3% | 62,445 | 56,928 | \$48,881 | \$36,076 |
| Higher-Wage Service | 1,307,877 | 1,339,638 | 2.4% | 113,164 | 136,647 | \$50,788 | \$34,281 |
| Lower-Wage Service | 1,952,310 | 1,992,865 | 2.1% | 169,605 | 129,434 | \$29,168 | \$18,646 |

Source: Illinois Department of Employment Security.
 *Total differs from the total employment data in the other tables because it excludes self-employed and agricultural workers

Illinois—Top 20 Projected Growth Industries Summary

- The State of Illinois is projected to gain 214,914 net new jobs between 2004 and 2014, an 8.6% increase.
- 50% of this net growth is projected to come from three industries: Food Services and Drinking Places, with a weighted mean wage of \$15,936; Specialty Trade Contractors, with a weighted mean wage of \$53,976; and Nursing and Residential Care Facilities, with a weighted mean wage of \$25,572. These three sectors are projected to create 108,448 of the total 214,914 new jobs statewide between 2004 and 2014.
- Mean annual wages in Illinois' top growth sectors range from a low of \$15,936 for Food Services and Drinking Places to a high of \$109,152 for Securities, Commodities and Financial Activities.
- The top 20 growth sectors make up 84.0% of the total job growth in Illinois.

¹ Includes: NAICS 31-33 Manufacturing. U.S. Census Bureau. 2007 NAICS Codes and Titles.

² Higher-wage service includes: NAICS 51 Information, NAICS 52 Finance and insurance, NAICS 53 Real estate and rental and leasing, NAICS 54 Professional and technical services, NAICS 55 Management of companies and enterprises, and NAICS 56 Administrative and waste services. U.S. Census Bureau. 2002 NAICS Codes and Titles.

³ Lower-wage service includes: NAICS 61 Educational services, NAICS 62 Health care and social assistance, NAICS 71 Arts, entertainment, and recreation, NAICS 72 Accommodation and food services, and 81 Other Services (except Public Administration). U.S. Census Bureau. 2007 NAICS Codes and Titles.

Illinois—Top 20 Projected Growth Industries

| Rank | NAICS | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Mean Wage, 2005 |
|------|--------|--|---------------------|----------------------------------|----------------------|--------------------|
| | | All Public and Private Employment | 4,232,989 | 4,447,903 | 214,914 | |
| | | Total - declining industries* | 1,057,684 | 978,139 | -79,545 | |
| | | Total - growing industries* | 3,175,305 | 3,469,764 | 294,459 | |
| 1 | 722/// | Food Services and Drinking Places | 375,618 | 425,558 | 49,940 | \$15,936.00 |
| 2 | 238/// | Specialty Trade Contractors | 181,608 | 213,019 | 31,411 | \$53,976.00 |
| 3 | 623/// | Nursing and Residential Care Facilities | 121,390 | 148,487 | 27,097 | \$25,572.00 |
| 4 | 813/// | Religious, Civic and Professional Orgs. | 146,933 | 165,462 | 18,529 | \$36,936.00 |
| 5 | 493/// | Warehousing and Storage | 37,010 | 49,507 | 12,497 | \$36,516.00 |
| 6 | 622/// | Hospitals | 246,805 | 258,843 | 12,038 | \$44,520.00 |
| 7 | 511/// | Publishing Industries (except Internet) | 220,901 | 231,015 | 10,114 | \$55,308.00 |
| 8 | 713/// | Amusements, Gambling and Recreation Ind. | 59,054 | 68,602 | 9,548 | \$20,964.00 |
| 9 | 551/// | Management of Companies and Enterprises | 88,036 | 97,310 | 9,274 | \$77,820.00 |
| 10 | 523/// | Securities, Commodities and Financial Acti. | 49,588 | 58,176 | 8,588 | \$109,152.00 |
| 11 | 441/// | Motor Vehicle and Parts Dealers | 71,770 | 79,022 | 7,252 | \$44,424.00 |
| 12 | 444/// | Building Material and Garden Equip. Stores | 50,355 | 57,129 | 6,774 | \$28,872.00 |
| 13 | 811/// | Repair and Maintenance | 56,180 | 62,947 | 6,767 | \$35,892.00 |
| 14 | 522/// | Credit Intermediation and Related Activities | 146,439 | 153,001 | 6,562 | \$55,776.00 |
| 15 | 236/// | Construction of Buildings | 57,174 | 62,815 | 5,641 | \$52,380.00 |
| 16 | 484/// | Truck Transportation | 66,301 | 71,880 | 5,579 | \$46,236.00 |
| 17 | 423/// | Merchant Wholesalers, Durable Goods | 164,408 | 169,526 | 5,118 | \$58,752.00 |
| 18 | 812/// | Personal and Laundry Services | 56,493 | 61,489 | 4,996 | \$24,084.00 |
| 19 | 443/// | Electronics and Appliance Stores | 27,260 | 32,054 | 4,794 | \$44,832.00 |
| 20 | 326/// | Plastics and Rubber Products Mfg. | 49,416 | 54,143 | 4,727 | \$44,772.00 |

Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

Illinois—Top 20 Projected Growth Occupations Summary

- The occupation of Primary/Secondary/Special Education School Teacher, with a mean wage of \$47,051, is projected to produce the highest level of growth, averaging 3,877 additional jobs annually from 2004 through 2014.
- The top five occupations, Primary/Secondary/Special Education School Teachers, Computer Specialists, Health Diagnosing/Treating Practitioners, Business Operations Specialists and Construction Trades Workers are projected to make up 28.4% of all new jobs in the state from 2004 to 2014.
- The median wage of occupations that are projected to grow in Illinois between 2004 and 2014 range from a low of \$14,797 for Food and Beverage Serving Workers to a high of \$138,899 for Air Transportation Workers.
- The top 20 growth occupations are projected to comprise 71.4% of all new jobs created in Illinois between 2004 and 2014.

Illinois—Top 20 Projected Growth Occupations

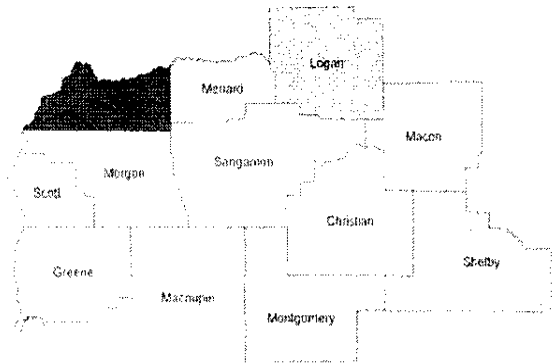
| Rank | SOC | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Annual Growth | Annual Replacements | Mean Wage, 2005 |
|------|---------|---|---------------------|----------------------------------|----------------------|---------------|------------------------|--------------------|
| | | All Public and Private Employment | 6,264,189 | 6,802,435 | 538,246 | | | |
| | | Total - Growing Occupations | 5,453,232 | 6,026,951 | 573,719 | | | |
| | | Total - Declining Occupations | 810,957 | 775,484 | -35,473 | | | |
| 1 | 25-2000 | Primary/Sec./Special Ed Sch Teachrs | 199,839 | 238,608 | 38,769 | 3,877 | 4,679 | \$47,051.92 |
| 2 | 15-1000 | Computer Specialists | 133,137 | 165,879 | 32,742 | 3,274 | 1,753 | \$65,436.01 |
| 3 | 29-1000 | Health Diagnosng/ Treatng Practitnrs | 180,787 | 213,071 | 32,284 | 3,229 | 3,603 | \$57,303.67 |
| 4 | 13-1000 | Business Operations Specialists | 175,403 | 207,678 | 32,275 | 3,228 | 3,072 | \$54,960.48 |
| 5 | 47-2000 | Construction Trades Workers | 221,886 | 248,856 | 26,970 | 2,697 | 4,076 | \$53,516.69 |
| 6 | 35-3000 | Food and Beverage Serving Workers | 205,727 | 231,563 | 25,836 | 2,584 | 9,865 | \$14,797.48 |
| 7 | 53-3000 | Motor Vehicle Operators | 173,796 | 196,615 | 22,819 | 2,282 | 2,625 | \$31,858.24 |
| 8 | 37-2000 | Bldg Cleaning and Pest Control Wrkrs | 167,360 | 189,593 | 22,233 | 2,223 | 3,284 | \$20,035.78 |
| 9 | 53-7000 | Material Moving Workers | 270,016 | 292,180 | 22,164 | 2,435 | 7,642 | \$21,921.16 |
| 10 | 41-2000 | Retail Sales Workers | 347,620 | 365,115 | 17,495 | 2,182 | | \$18,686.09 |
| 11 | 29-2000 | Health Technologists and Technicians | 108,142 | 125,213 | 17,071 | 1,747 | 1,913 | \$35,072.15 |
| 12 | 35-2000 | Cooks and Food Preparation Workers | 129,313 | 145,276 | 15,963 | 1,596 | 4,176 | \$17,317.15 |
| 13 | 13-2000 | Financial Specialists | 125,369 | 140,753 | 15,384 | 1,564 | 2,221 | \$53,998.92 |
| 14 | 31-1000 | Nursing, Psych and Home Health Aides | 80,350 | 95,252 | 14,902 | 1,490 | 1,053 | \$20,507.24 |
| 15 | 43-4000 | Information and Record Clerks | 231,450 | 245,057 | 13,607 | 2,467 | 4,737 | \$27,807.60 |
| 16 | 39-9000 | Other Personal Care/ Service Workers | 88,888 | 102,155 | 13,267 | 1,327 | 2,023 | \$19,230.55 |
| 17 | 11-1000 | Top Executives | 107,199 | 119,504 | 12,305 | 1,265 | 1,993 | \$59,112.76 |
| 18 | 25-1000 | Postsecondary Faculty | 82,099 | 93,966 | 11,867 | 1,187 | 1,854 | \$50,696.88 |
| 19 | 21-1000 | Counselors/Soc Wrkrs/ Comm Srv Specs | 66,013 | 77,292 | 11,279 | 1,128 | 1,263 | \$38,343.00 |
| 20 | 31-9000 | Other Healthcare Support Occupations | 2,431 | 2,871 | 440 | 44 | 50 | \$24,940 |

Source: Illinois Department of Employment Security

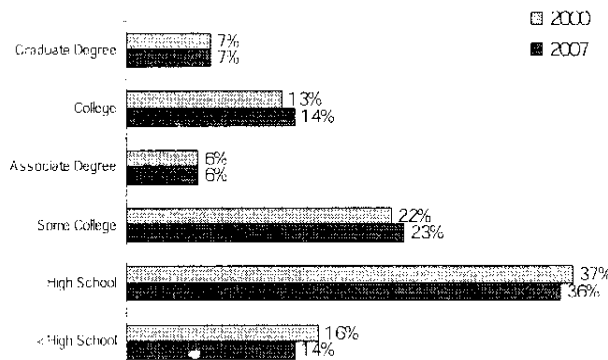
CENTRAL REGIONAL SUMMARY

| Profile | 2000 | 2007 | % Change |
|--------------------------|---------|---------|----------|
| Population (1/1/2007): | 586,956 | 581,960 | -0.85% |
| Population, Median Age: | 36.3 | 36.2 | -0.03% |
| Percent Population 65+: | 84,659 | 80,806 | -4.55% |
| White Population, Alone: | 533,041 | 527,034 | -1.13% |
| Black Population, Alone: | 41,040 | 39,359 | -4.10% |
| Asian Population, Alone: | 3,699 | 4,520 | 22.20% |
| Other Population: | 9,176 | 11,047 | 20.39% |
| Hispanic Population: | 6,829 | 10,523 | 54.09% |

County Job Gain/Loss 2000-2007



Percent of Population by Educational Attainment
(Pop. Over 25)

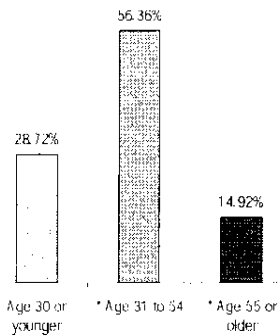


Legend for County Job Gain/Loss:
 Greater than 15% Growth (Dark Grey)
 6% to 15% Growth (Medium Grey)
 1% - 9% Loss (Light Grey)
 Greater than 9% Loss (White)
 No Significant Change (White)

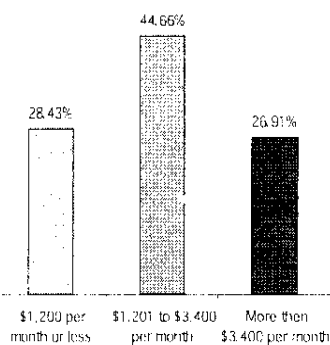
Total Employment 2000-2007

| Area Name | 2000 | 2007 | % Change |
|-------------------|----------------|----------------|--------------|
| Cass County | 6,420 | 6,543 | 1.92% |
| Christian County | 15,962 | 16,045 | 0.52% |
| Greene County | 6,311 | 6,159 | -2.41% |
| Logan County | 13,932 | 13,653 | -2.00% |
| Macon County | 52,715 | 51,243 | -2.79% |
| Macoupin County | 22,646 | 22,885 | 1.06% |
| Menard County | 6,482 | 6,624 | 2.19% |
| Montgomery County | 12,937 | 12,891 | -0.36% |
| Morgan County | 17,395 | 17,110 | -1.64% |
| Sangamon County | 97,410 | 101,760 | 4.47% |
| Scott County | 2,731 | 2,672 | -2.16% |
| Shelby County | 10,684 | 10,480 | -1.91% |
| Total | 265,625 | 268,065 | 0.92% |

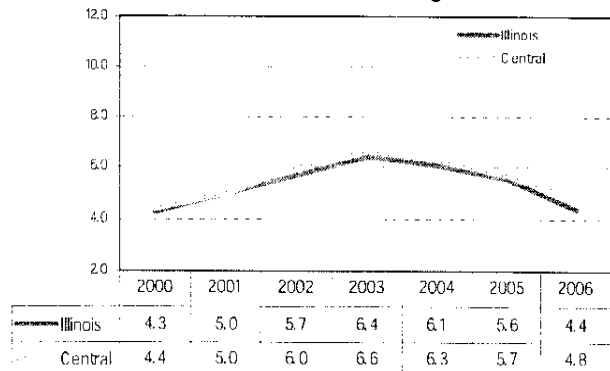
Primary Jobs by Worker Age



Primary Jobs by Earnings Paid



Unemployment Rate 2000 - 2006
Illinois and the Central Region



Central Illinois Industry Structure Summary

- The Central Illinois region gained 225 manufacturing jobs (1.1%) from 2003 – 2005, the only region that showed an increase in the manufacturing industry.
- The region has an annual mean wage of \$44,751 for stable manufacturing jobs.
- Manufacturing jobs make up 9.1% of total employment in the Central Illinois region.
- Higher-wage service jobs make up 13.8% of total employment in the Central Illinois region.
- Lower-wage service jobs make up 28.0% of total employment in the Central Illinois region.

| Central Illinois—Industry Structure | | | | | | | |
|--|------------------|------------------|-----------------------------|-------------------------------|-----------------------------|----------------------------------|--|
| Sector | Employment, 2003 | Employment, 2005 | Employment Change 2003-2005 | Separations Stable Jobs, 2005 | New Hires Stable Jobs, 2005 | Stable Jobs: Mean Earnings, 2005 | New Hires Stable Jobs: Mean Earnings, 2005 |
| Total Public/Private Employment In Sectors | 230,676 | 228,365 | -2,311 | 18,309 | 16,381 | \$37,039 | \$21,490 |
| Manufacturing Total | 20,535 | 20,760 | 225 | 1,212 | 1,031 | \$44,751 | \$31,914 |
| Higher-Wage Service | 31,924 | 31,576 | -348 | 2,844 | 3,027 | \$35,439 | \$24,038 |
| Lower-Wage Service | 63,824 | 63,968 | 144 | 6,941 | 5,821 | \$23,086 | \$14,922 |

Source: Illinois Department of Employment Security.
 *Total differs from the total employment data in the other tables because it excludes self-employed and agricultural workers

Central Illinois—Top 20 Projected Growth Industries Summary

- The Central Illinois region is projected to gain 14,387 net new jobs between 2004 and 2014, a 6.9% increase. This is less than the statewide projected net increase of 9.3%.
- 48.9% of all new jobs projected to be created between 2004 and 2014 are projected to occur within five industries: Food Services and Drinking Places with a weighted mean wage of \$12,687; Ambulatory Health Care Services with a weighted mean wage of \$63,003; Educational Services with a weighted mean wage of \$29,220; Administrative and Support Services with a weighted mean wage of \$24,980; and Nursing and Residential Care Facilities with a weighted mean wage of \$22,660. These five industries are projected to create 8,455 new jobs.
- Mean annual wages in the Central Illinois regions' top growth sectors range from a low of \$12,687 for Food Services and Drinking Places to a high of \$63,003 for Ambulatory Health Care Services.
- The top 20 growth sectors make up 88.5% of all new jobs in the Central Illinois region.
- Although manufacturing jobs are expected to decline another 6.9% by 2014, the manufacturing sector will continue to be an important source of higher-paying jobs for workers.

¹ Includes: NAICS 31-33 Manufacturing. U.S. Census Bureau. 2007 NAICS Codes and Titles.

² Higher-wage service includes: NAICS 51 Information, NAICS 52 Finance and insurance, NAICS 53 Real estate and rental and leasing, NAICS 54 Professional and technical services, NAICS 55 Management of companies and enterprises, and NAICS 56 Administrative and waste services. U.S. Census Bureau. 2002 NAICS Codes and Titles.

³ Lower-wage service includes: NAICS 61 Educational services, NAICS 62 Health care and social assistance, NAICS 71 Arts, entertainment, and recreation, NAICS 72 Accommodation and food services, and 81 Other Services (except Public Administration). U.S. Census Bureau. 2007 NAICS Codes and Titles.

Central Illinois—Top 20 Projected Growth Industries

| Rank | NAICS | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Mean Wage, 2005 |
|------|--------|--|---------------------|----------------------------------|----------------------|--------------------|
| | | All Public and Private Employment | 208,483 | 222,873 | 14,387 | |
| | | Total - Declining Industries | 39,252 | 36,349 | -2,903 | |
| | | Total - Growing Industries | 169,231 | 186,524 | 17,290 | |
| 1 | 722/// | Food Services and Drinking Places | 16,826 | 19,561 | 2,735 | \$12,687 |
| 2 | 621/// | Ambulatory Health Care Services | 8,049 | 9,807 | 1,757 | \$63,003 |
| 3 | 611/// | Educational Services | 20,196 | 21,697 | 1,501 | \$29,220 |
| 4 | 561/// | Administrative and Support Services | 7,612 | 8,941 | 1,329 | \$24,980 |
| 5 | 623/// | Nursing and Residential Care Facilities | 7,300 | 8,433 | 1,133 | \$22,660 |
| 6 | 541/// | Professional, Scientific and Tech. Services | 7,736 | 8,822 | 1,087 | \$48,557 |
| 7 | 624/// | Social Assistance | 5,116 | 6,185 | 1,069 | \$19,609 |
| 8 | 813/// | Religious, Civic and Professional Orgs. | 7,884 | 8,948 | 1,064 | \$29,795 |
| 9 | 238/// | Specialty Trade Contractors | 6,615 | 7,294 | 679 | \$42,621 |
| 10 | 622/// | Hospitals | 13,637 | 14,111 | 474 | \$35,174 |
| 11 | 444/// | Building Material and Garden Equip. Stores | 2,339 | 2,635 | 295 | \$27,256 |
| 12 | 441/// | Motor Vehicle and Parts Dealers | 3,616 | 3,894 | 278 | \$33,572 |
| 13 | 493/// | Warehousing and Storage | 742 | 1,015 | 273 | \$36,717 |
| 14 | 812/// | Personal and Laundry Services | 2,108 | 2,372 | 263 | \$22,564 |
| 15 | 811/// | Repair and Maintenance | 2,116 | 2,371 | 255 | \$29,955 |
| 16 | 551/// | Management of Companies and Enterprises | 1,654 | 1,896 | 242 | \$40,659 |
| 17 | 452/// | General Merchandise Stores | 6,730 | 6,959 | 229 | \$19,340 |
| 18 | 424/// | Merchant Wholesalers, Nondurable Goods | 4,272 | 4,496 | 224 | \$41,454 |
| 19 | 522/// | Credit Intermediation and Related Activities | 5,774 | 5,986 | 212 | \$37,321 |
| 20 | 721/// | Accommodation | 2,535 | 2,730 | 195 | \$16,549 |

Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

Central Illinois—Top 20 Projected Growth Occupations Summary

- The Food and Beverage Serving Workers occupation, with a mean wage of \$17,370, is projected to produce the highest level of job growth, averaging 133 additional jobs annually from 2004 through 2014.
- The top five growth occupations, Food and Beverage Serving Workers, Health Diagnosing/Treating Practitioners, Primary/Secondary/Special Education School Teachers, Business Operations Specialists and Cooks and Food Preparation Workers are projected to create 30.3% of all new jobs in the Central Illinois region.
- The mean wage in the Central Illinois region's top growth occupations ranges from a low of \$17,370 for Food and Beverage Serving Workers to a high of \$105,578 for Top Executives.
- The top 20 growth occupations are projected to create 75.3% of all new jobs in the Central Illinois region.

Central Illinois—Top 20 Projected Growth Occupations

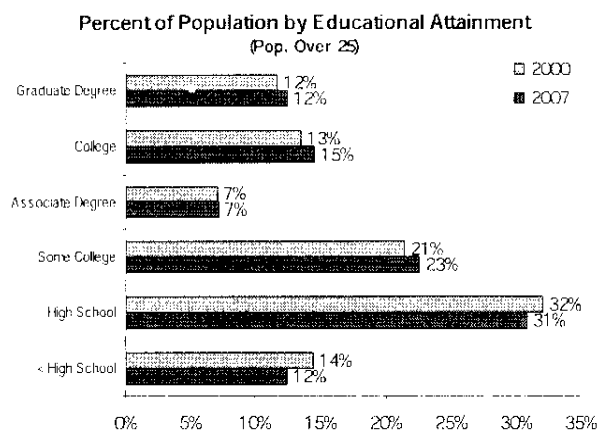
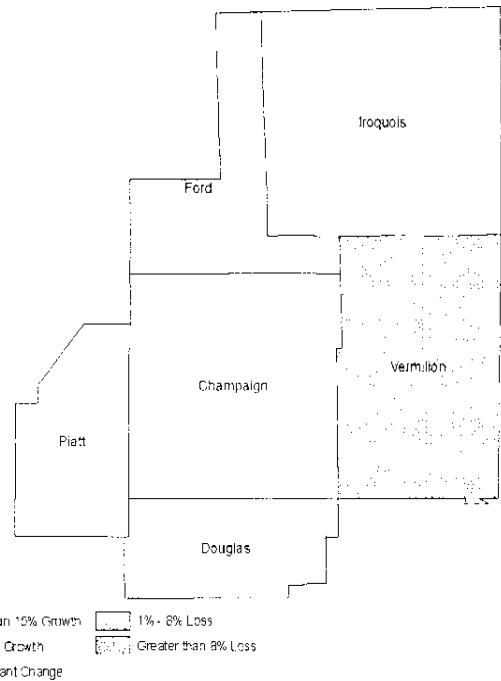
| Rank | SOC | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Annual Growth | Annual Replacements | Mean Wage, 2005 |
|------|---------|---|---------------------|----------------------------------|----------------------|---------------|------------------------|--------------------|
| | | All Public and Private Employment | 253,259 | 267,567 | 14,308 | | | |
| | | Total - Growing Occupations | 204,212 | 221,111 | 16,899 | | | |
| | | Total - Declining Occupations | 49,047 | 46,456 | -2,591 | | | |
| 1 | 35-3000 | Food and Beverage Serving Workers | 9,283 | 10,611 | 1,328 | 133 | 444 | \$17,369.89 |
| 2 | 29-1000 | Health Diagnosng/Treatng Practitnrs | 8,847 | 10,148 | 1,301 | 130 | 178 | \$63,263.49 |
| 3 | 25-2000 | Primary/Sec./Special Ed Sch Teachrs | 9,409 | 10,346 | 937 | 94 | 219 | \$44,019.15 |
| 4 | 13-1000 | Business Operations Specialists | 6,709 | 7,504 | 795 | 80 | 117 | \$63,935.61 |
| 5 | 35-2000 | Cooks and Food Preparation Workers | 5,930 | 6,694 | 764 | 76 | 192 | \$19,646.12 |
| 6 | 15-1000 | Computer Specialists | 4,352 | 5,099 | 747 | 75 | 58 | \$71,760.54 |
| 7 | 41-2000 | Retail Sales Workers | 15,229 | 15,900 | 671 | 67 | 633 | \$22,594.11 |
| 8 | 37-2000 | Bldg Cleaning and Pest Control Wrkrs | 6,854 | 7,520 | 666 | 67 | 136 | \$22,783.02 |
| 9 | 53-3000 | Motor Vehicle Operators | 7,100 | 7,744 | 644 | 64 | 110 | \$34,074.31 |
| 10 | 47-2000 | Construction Trades Workers | 9,576 | 10,212 | 636 | 64 | 173 | \$51,244.61 |
| 11 | 29-2000 | Health Technologists and Technicians | 5,380 | 5,973 | 593 | 59 | 96 | \$37,012.16 |
| 12 | 31-1000 | Nursing, Psych and Home Health Aides | 4,450 | 5,017 | 567 | 57 | 59 | \$22,828.66 |
| 13 | 39-9000 | Other Personal Care/Service Workers | 4,573 | 5,109 | 536 | 54 | 105 | \$26,604.09 |
| 14 | 21-1000 | Counselors/Soc Wrkrs/Comm Srv Specs | 5,126 | 5,652 | 526 | 53 | 97 | \$44,318.10 |
| 15 | 11-9000 | Other Management Occupations | 8,178 | 8,622 | 444 | 44 | 161 | \$39,452.35 |
| 16 | 35-9000 | Other Food Prep/Serving Workers | 2,991 | 3,369 | 378 | 38 | 99 | \$17,567.34 |
| 17 | 31-9000 | Other Healthcare Support Occupations | 2,042 | 2,375 | 333 | 33 | 42 | \$26,579.07 |
| 18 | 11-1000 | Top Executives | 4,300 | 4,629 | 329 | 33 | 79 | \$105,578.38 |
| 19 | 21-1000 | Counselors/Soc Wrkrs/Comm Srv Specs | 66,013 | 77,292 | 11,279 | 1,128 | 1,263 | \$38,343.00 |
| 20 | 31-9000 | Other Healthcare Support Occupations | 2,431 | 2,871 | 440 | 44 | 50 | \$24,940 |

Source: Illinois Department of Employment Security

EAST CENTRAL REGIONAL SUMMARY

| Profile | 2000 | 2007 | % Change |
|--------------------------|---------|---------|----------|
| Population (1/1/2007): | 345,450 | 349,106 | 1.06% |
| Population, Median Age: | 33.5 | 33.4 | -0.36% |
| Percent Population 65+: | 45,040 | 43,452 | -3.50% |
| White Population, Alone: | 293,157 | 290,719 | -0.83% |
| Black Population, Alone: | 29,284 | 30,332 | 3.58% |
| Asian Population, Alone: | 12,402 | 14,827 | 19.55% |
| Other Population: | 10,607 | 13,228 | 24.71% |
| Hispanic Population: | 9,891 | 13,180 | 33.25% |

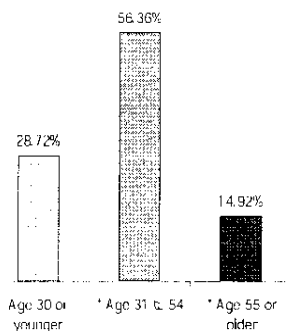
County Job Gain/Loss 2000-2007



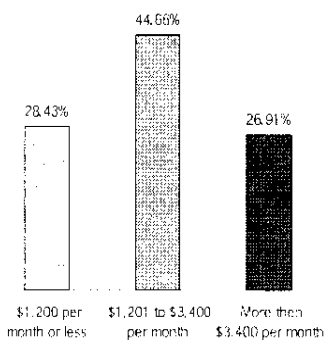
Total Employment 2000-2007

| Area Name | 2000 | 2007 | % Change |
|-----------------------|----------------|----------------|--------------|
| Champaign County | 93,373 | 98,007 | 4.96% |
| Douglas County | 9,514 | 9,540 | 0.27% |
| Ford County | 6,893 | 6,948 | 0.80% |
| Iroquois County | 14,956 | 14,756 | -1.34% |
| Piatt County | 8,507 | 8,779 | 3.20% |
| Vermilion County | 35,720 | 35,388 | -0.93% |
| Regional Total | 168,963 | 173,418 | 2.64% |

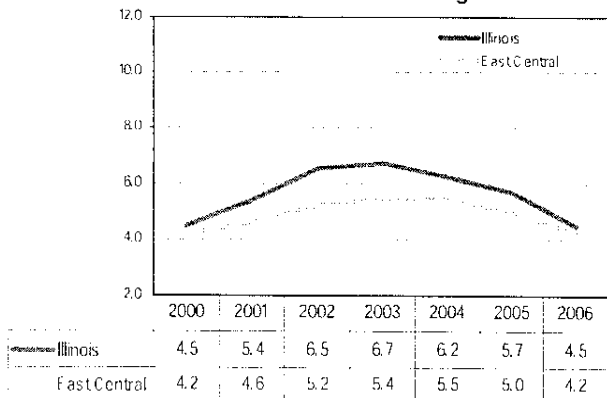
Primary Jobs by Worker Age



Primary Jobs by Earnings Paid



Unemployment Rate 2000-2006 Illinois and the East Central Region



East Central Illinois Industry Structure Summary

- The East Central Illinois region lost 303 manufacturing jobs (18.0%) from 2003 – 2005.
- The East Central Illinois region has an annual mean wage of \$37,730 for stable manufacturing jobs.
- Manufacturing jobs make up 13.9% of total employment in the East Central Illinois region.
- Higher-wage service jobs make up 14.0% of total employment in the East Central Illinois region.
- Lower-wage service jobs make up 40.3% of total employment in the East Central Illinois region.

| East Central Illinois—Industry Structure | | | | | | | |
|--|------------------|------------------|-----------------------------|-------------------------------|-----------------------------|----------------------------------|--|
| Sector | Employment, 2003 | Employment, 2005 | Employment Change 2003–2005 | Separations Stable Jobs, 2005 | New Hires Stable Jobs, 2005 | Stable Jobs: Mean Earnings, 2005 | New Hires Stable Jobs: Mean Earnings, 2005 |
| Total Public/Private Employment In Sectors | 119,545 | 118,836 | -709 | 11,250 | 9,757 | \$34,356 | \$21,490 |
| Manufacturing Total | 16,860 | 16,557 | -303 | 1,098 | 1,018 | \$37,730 | \$31,914 |
| Higher-Wage Service | 16,155 | 16,661 | 506 | 1,641 | 1,677 | \$33,348 | \$24,038 |
| Lower-Wage Service | 46,975 | 47,908 | 933 | 4,677 | 3,661 | \$24,966 | \$14,922 |

Source: Illinois Department of Employment Security.
 *Total differs from the total employment data in the other tables because it excludes self-employed and agricultural workers

East Central Illinois—Top 20 Projected Growth Occupations Summary

- The top five projected growth occupations, Postsecondary Faculty, Health Diagnosing/Teating Practitioners, Primary/Secondary/Special Education School Teachers, Computer Specialists and Business Operations Specialists make up 41.1% of all projected new jobs in the East Central Illinois region.
- The only occupation expected to grow faster in the East Central Illinois region than in the state is Postsecondary Faculty. Statewide, this occupation is expected to grow 14.5% and in the East Central Illinois region it is expected to grow 17.4%. The mean wage for this occupation is \$48,861.
- The mean wage in the East Central Illinois regions' top growth occupations ranges from a low of \$17,454 for Food and Beverage Serving Workers to a high of \$106,876 for Top Executives.
- The top 20 growth occupations projected to create 80.5% of all new jobs in the East Central Illinois region.

¹ Includes: NAICS 31-33 Manufacturing. U.S. Census Bureau. 2007 NAICS Codes and Titles.

² Higher-wage service includes: NAICS 51 Information, NAICS 52 Finance and insurance, NAICS 53 Real estate and rental and leasing, NAICS 54 Professional and technical services, NAICS 55 Management of companies and enterprises, and NAICS 56 Administrative and waste services. U.S. Census Bureau. 2002 NAICS Codes and Titles.

³ Lower-wage service includes: NAICS 61 Educational services, NAICS 62 Health care and social assistance, NAICS 71 Arts, entertainment, and recreation, NAICS 72 Accommodation and food services, and 81 Other Services (except Public Administration). U.S. Census Bureau. 2007 NAICS Codes and Titles.

East Central Illinois—Top 20 Projected Growth Industries

| Rank | NAICS | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Mean Wage, 2005 |
|------|--------|--|---------------------|----------------------------------|----------------------|--------------------|
| | | All Public and Private Employment | 209,386 | 223,680 | 14,291 | |
| | | Total - Declining Industries | 40,155 | 37,156 | -2,999 | |
| | | Total - Growing Industries | 169,231 | 186,524 | 17,290 | |
| 1 | 611/// | Educational Services | 35,314 | 39,534 | 4,220 | \$39,146 |
| 2 | 621/// | Ambulatory Health Care Services | 5,457 | 6,583 | 1,126 | \$56,678 |
| 3 | 722/// | Food Services and Drinking Places | 12,438 | 13,425 | 987 | \$12,924 |
| 4 | 541/// | Professional, Scientific and Tech. Services | 4,588 | 5,343 | 755 | \$49,193 |
| 5 | 561/// | Administrative and Support Services | 3,652 | 4,219 | 567 | \$23,374 |
| 6 | 623/// | Nursing and Residential Care Facilities | 3,565 | 4,113 | 549 | \$22,847 |
| 7 | 813/// | Religious, Civic and Professional Orgs. | 3,376 | 3,861 | 485 | \$21,042 |
| 8 | 493/// | Warehousing and Storage | 1,671 | 2,105 | 434 | \$33,819 |
| 9 | 622/// | Hospitals | 5,218 | 5,553 | 335 | \$36,000 |
| 10 | 624/// | Social Assistance | 1,943 | 2,229 | 286 | \$19,935 |
| 11 | 238/// | Specialty Trade Contractors | 3,637 | 3,901 | 264 | \$42,562 |
| 12 | 444/// | Building Material and Garden Equip. Stores | 1,395 | 1,558 | 163 | \$24,328 |
| 13 | 326/// | Plastics and Rubber Products Mfg. | 1,790 | 1,950 | 160 | \$33,708 |
| 14 | 441/// | Motor Vehicle and Parts Dealers | 1,956 | 2,090 | 134 | \$35,694 |
| 15 | 452/// | General Merchandise Stores | 3,498 | 3,631 | 133 | \$18,818 |
| 16 | 713/// | Amusements, Gambling and Recreation Ind. | 1,152 | 1,272 | 120 | \$15,147 |
| 17 | 484/// | Truck Transportation | 2,316 | 2,435 | 119 | \$39,350 |
| 18 | 423/// | Merchant Wholesalers, Durable Goods | 3,238 | 3,353 | 115 | \$40,354 |
| 19 | 522/// | Credit Intermediation and Related Activities | 3,131 | 3,239 | 108 | \$33,061 |
| 20 | 721/// | Accommodation | 1,267 | 1,365 | 98 | \$15,835 |

Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

East Central Illinois—Top 20 Projected Growth Industries Summary

- The East Central Illinois region is projected to gain 9,882 net new jobs between 2004 and 2014, a 6.6% increase. This is less than the statewide projected net increase of 9.3%.
- 63.1% of all new jobs projected to be created between 2004 and 2014 projected to occur within five sectors: Educational Services with a weighted mean wage of \$39,146; Ambulatory Health Care Services with a weighted mean wage of \$56,678; Food Services and Drinking Places with a weighted mean wage of \$12,924; Professional, Scientific and Technical Services with a weighted mean wage of \$49,193; and Administrative and Support Services with a weighted mean wage of \$23,374. These five sectors are projected to create 7,655 additional jobs.
- Mean annual wages in the East Central Illinois regions' top growth sectors range from a low of \$12,923 for Food Services and Drinking Places to a high of \$56,678 for Ambulatory Health Care Services.
- The top 20 growth sectors make up 92.0% of all new jobs in the East Central Illinois region.

East Central Illinois—Top 20 Projected Growth Occupations

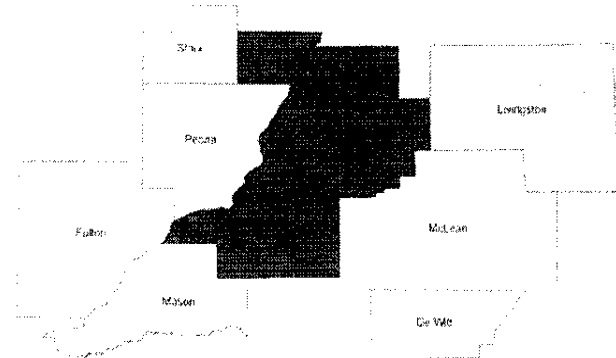
| Rank | SOC | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Annual Growth | Annual Replacements | Mean Wage, 2005 |
|------|---------|---|---------------------|----------------------------------|----------------------|---------------|------------------------|--------------------|
| | | All Public and Private Employment | 176,181 | 185,815 | 9,638 | | | |
| | | Total - Growing Occupations | 142,223 | 153,729 | 11,506 | | | |
| | | Total - Declining Occupations | 33,609 | 31,743 | -1,863 | | | |
| 1 | 25-1000 | Postsecondary Faculty | 12,156 | 14,275 | 2,119 | 212 | 275 | \$48,861 |
| 2 | 29-1000 | Health Diagnosng/Treatng Practitnrs | 4,668 | 5,457 | 789 | 79 | 90 | \$55,779 |
| 3 | 25-2000 | Primary/Sec./Special Ed Sch Teachrs | 5,256 | 5,932 | 676 | 68 | 123 | \$45,000 |
| 4 | 15-1000 | Computer Specialists | 3,021 | 3,631 | 610 | 61 | 39 | \$63,529 |
| 5 | 13-1000 | Business Operations Specialists | 3,962 | 4,498 | 535 | 54 | 70 | \$63,897 |
| 6 | 35-3000 | Food and Beverage Serving Workers | 6,509 | 7,013 | 504 | 50 | 312 | \$17,454 |
| 7 | 37-2000 | Bldg Cleaning and Pest Control Wrkrs | 4,852 | 5,305 | 453 | 45 | 95 | \$26,128 |
| 8 | 53-3000 | Motor Vehicle Operators | 4,765 | 5,172 | 407 | 41 | 72 | \$33,456 |
| 9 | 29-2000 | Health Technologists and Technicians | 2,603 | 2,949 | 346 | 35 | 45 | \$34,552 |
| 10 | 35-2000 | Cooks and Food Preparation Workers | 4,176 | 4,521 | 345 | 35 | 134 | \$20,302 |
| 11 | 47-2000 | Construction Trades Workers | 6,087 | 6,413 | 326 | 33 | 109 | \$51,123 |
| 12 | 39-9000 | Other Personal Care/Service Workers | 2,919 | 3,215 | 296 | 30 | 67 | \$22,799 |
| 13 | 41-2000 | Retail Sales Workers | 9,508 | 9,782 | 274 | 27 | 397 | \$22,748 |
| 14 | 31-1000 | Nursing, Psych and Home Health Aides | 1,996 | 2,250 | 254 | 25 | 26 | \$25,530 |
| 15 | 31-9000 | Other Healthcre Support Occupations | 1,215 | 1,458 | 243 | 24 | 25 | \$31,925 |
| 16 | 25-9000 | Other Educ. Trng and Library Occs | 1,896 | 2,132 | 237 | 24 | 34 | \$26,844 |
| 17 | 13-2000 | Financial Specialists | 2,744 | 2,978 | 235 | 23 | 49 | \$60,795 |
| 18 | 21-1000 | Counselors/Soc Wrkrs/Comm Srv Specs | 1,800 | 2,025 | 224 | 22 | 35 | \$39,776 |
| 19 | 25-3000 | Other Teachers and Instructors | 1,614 | 1,826 | 212 | 21 | 20 | \$44,593 |
| 20 | 11-1000 | Top Executives | 2,549 | 2,727 | 178 | 18 | 48 | \$106,876 |

Source: Illinois Department of Employment Security

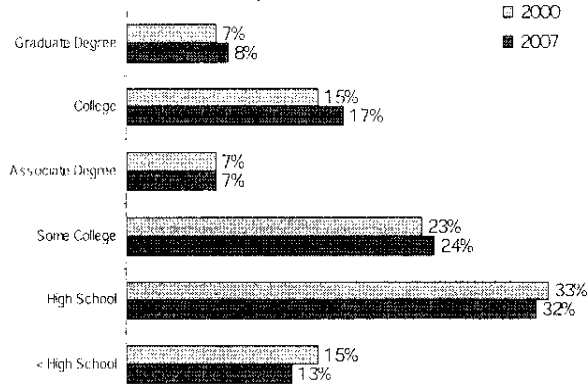
NORTH CENTRAL REGIONAL SUMMARY

| Profile | 2000 | 2007 | % Change |
|--------------------------|---------|---------|----------|
| Population (1/1/2007): | 611,298 | 623,920 | 2.06% |
| Population, Median Age: | 35.7 | 35.9 | 0.67% |
| Percent Population 65+: | 87,143 | 85,008 | -2.45% |
| White Population, Alone: | 547,890 | 554,596 | 1.22% |
| Black Population, Alone: | 43,557 | 44,021 | 1.07% |
| Asian Population, Alone: | 7,319 | 9,376 | 28.10% |
| Other Population: | 12,532 | 15,927 | 27.09% |
| Hispanic Population: | 11,038 | 15,828 | 43.40% |

County Job Gain/Loss 2000-2007



Percent of Population by Educational Attainment
(Pop. Over 25)

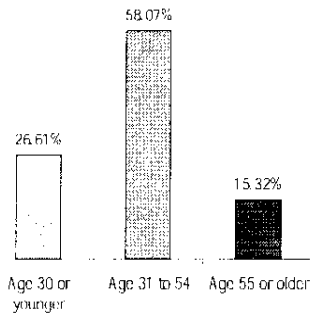


Legend for County Job Gain/Loss 2000-2007:
 Greater than 15% Growth (Dark Grey)
 6 to 15% Growth (Medium Grey)
 1% - 8% Loss (Light Grey)
 Greater than 8% Loss (White with border)
 No Significant Change (White)

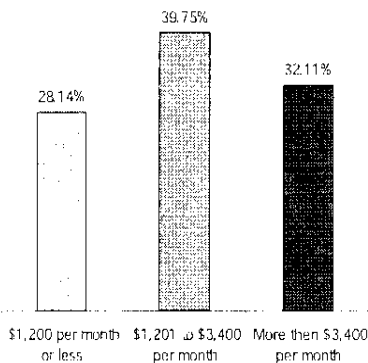
Total Employment 2000-2007

| Area Name | 2000 | 2007 | % Change |
|-------------------|----------------|----------------|--------------|
| De Witt County | 8,374 | 8,502 | 1.53% |
| Fulton County | 16,139 | 15,912 | -1.41% |
| Livingston County | 17,920 | 17,559 | -2.01% |
| Marshall County | 6,538 | 6,541 | 0.05% |
| Mason County | 7,079 | 6,942 | -1.94% |
| McLean County | 80,905 | 88,126 | 8.93% |
| Peoria County | 85,244 | 86,837 | 1.87% |
| Stark County | 2,648 | 2,651 | 0.11% |
| Tazewell County | 62,894 | 64,802 | 3.03% |
| Woodford County | 17,686 | 19,172 | 8.40% |
| Total | 305,427 | 317,044 | 3.80% |

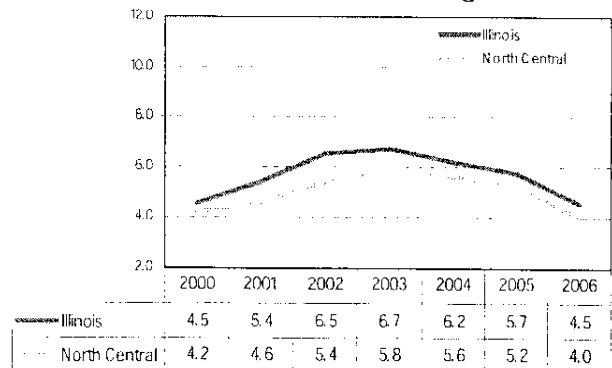
Primary Jobs by Worker Age



Primary Jobs by Earnings Paid



Unemployment Rate 2000-2006
Illinois and the North Central Region



North Central Illinois Industry Structure Summary

- The North Central Illinois region gained 2,518 manufacturing jobs (7.3%) from 2003 – 2005.
- The region has an annual mean wage of \$46,454 for stable manufacturing jobs.
- Manufacturing jobs make up 14.4% of total employment in the North Central Illinois region.
- Higher-wage service jobs make up 23.2% of total employment in the North Central Illinois region.
- Lower-wage service jobs make up 32.0% of total employment in the North Central Illinois region.

| North Central Illinois—Industry Structure | | | | | | | |
|--|------------------|------------------|-----------------------------|-------------------------------|-----------------------------|----------------------------------|--|
| Sector | Employment, 2003 | Employment, 2005 | Employment Change 2003–2005 | Separations Stable Jobs, 2005 | New Hires Stable Jobs, 2005 | Stable Jobs: Mean Earnings, 2005 | New Hires Stable Jobs: Mean Earnings, 2005 |
| Total Public/Private Employment In Sectors | 250,244 | 256,237 | 5,993 | 21,550 | 20,747 | \$40,986 | \$21,490 |
| Manufacturing Total | 34,305 | 36,823 | 2,518 | 1,915 | 2,028 | \$46,454 | \$31,914 |
| Higher-Wage Service | 59,391 | 59,494 | 103 | 4,780 | 4,631 | \$37,357 | \$24,038 |
| Lower-Wage Service | 80,010 | 82,028 | 2,018 | 8,234 | 7,177 | \$24,843 | \$14,922 |

Source: Illinois Department of Employment Security.
 *Total differs from the total employment data in the other tables because it excludes self-employed and agricultural workers

North Central Illinois—Top 20 Projected Growth Occupations Summary

- The North Central Illinois region is expected to be an important contributor to job growth in the state. Fifteen of the Top 20 growth occupations in the North Central Illinois region are projected to grow faster in the region than in the state. The three occupations in the North Central Illinois region that are projected to outpace statewide growth rates the most are: Other Healthcare Support Occupations (6.7% faster than the projected statewide average for that occupation); Food and Beverage Serving Workers (5.2% faster than the statewide average for that occupation), and Health Diagnosing/Treating Practitioners (5.1% faster than the statewide average for that occupation).
- Health Diagnosing/Treating Practitioners, an occupation with a mean annual wage of \$54,538, is projected to create the most new jobs through 2014, followed by Food and Beverage Service Workers, an occupation with a mean annual wage of \$17,278, Primary/Secondary/Special Education School Teachers, an occupation with a mean annual wage of \$49,619, Building Clean and Pest Control Workers, an occupation with a mean annual wage of \$24,042, and Computer Specialists, an occupation with a mean annual wage of \$70,249. These five occupations will make up 28.8% of all new jobs created in the region through 2014.
- The weighted mean wage in the North Central Illinois region's top 20 growth occupations ranges from a low of \$17,278 for Food and Beverage Serving Workers to a high of \$116,568 for Top Executives.
- The top 20 growth occupations are projected to create 72.4% of all new jobs in the North Central Illinois region.

¹ Includes: NAICS 31-33 Manufacturing. U.S. Census Bureau. 2007 NAICS Codes and Titles.

² Higher-wage service includes: NAICS 51 Information, NAICS 52 Finance and insurance, NAICS 53 Real estate and rental and leasing, NAICS 54 Professional and technical services, NAICS 55 Management of companies and enterprises, and NAICS 56 Administrative and waste services. U.S. Census Bureau. 2002 NAICS Codes and Titles.

³ Lower-wage service includes: NAICS 61 Educational services, NAICS 62 Health care and social assistance, NAICS 71 Arts, entertainment, and recreation, NAICS 72 Accommodation and food services, and 81 Other Services (except Public Administration). U.S. Census Bureau. 2007 NAICS Codes and Titles.

North Central Illinois—Top 20 Projected Growth Industries

| Rank | NAICS | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Mean Wage, 2005 |
|------|--------|---|---------------------|----------------------------------|----------------------|--------------------|
| | | All Public and Private Employment | 270,130 | 300,830 | 30,693 | |
| | | Total - Declining Industries | 37,376 | 34,859 | -2,516 | |
| | | Total - Growing Industries | 232,754 | 265,971 | 33,209 | |
| 1 | 722/// | Food Services and Drinking Places | 23,146 | 27,592 | 4,447 | \$13,457 |
| 2 | 611/// | Educational Services | 27,659 | 31,943 | 4,285 | \$34,935 |
| 3 | 561/// | Administrative and Support Services | 14,307 | 17,977 | 3,669 | \$26,173 |
| 4 | 621/// | Ambulatory Health Care Services | 10,326 | 13,901 | 3,575 | \$57,972 |
| 5 | 623/// | Nursing and Residential Care Facilities | 9,332 | 11,909 | 2,577 | \$23,999 |
| 6 | 541/// | Professional, Scientific and Tech. Services | 11,300 | 13,715 | 2,415 | \$53,485 |
| 7 | 622/// | Hospitals | 14,736 | 16,128 | 1,392 | \$43,968 |
| 8 | 624/// | Social Assistance | 4,946 | 6,151 | 1,205 | \$19,690 |
| 9 | 813/// | Religious, Civic and Professional Orgs. | 7,037 | 8,009 | 973 | \$22,083 |
| 10 | 238/// | Specialty Trade Contractors | 7,864 | 8,819 | 955 | \$43,713 |
| 11 | 811/// | Repair and Maintenance | 3,415 | 4,142 | 727 | \$38,943 |
| 12 | 441/// | Motor Vehicle and Parts Dealers | 4,543 | 5,076 | 533 | \$36,610 |
| 13 | 333/// | Machinery Mfg. | 14,822 | 15,322 | 500 | \$67,885 |
| 14 | 812/// | Personal and Laundry Services | 2,277 | 2,720 | 443 | \$21,447 |
| 15 | 236/// | Construction of Buildings | 3,299 | 3,731 | 432 | \$44,496 |
| 16 | 444/// | Building Material and Garden Equip. Stores | 2,588 | 3,003 | 415 | \$27,528 |
| 17 | 493/// | Warehousing and Storage | 1,214 | 1,624 | 410 | \$63,116 |
| 18 | 452/// | General Merchandise Stores | 7,703 | 8,065 | 361 | \$19,103 |
| 19 | 423/// | Merchant Wholesalers, Durable Goods | 6,301 | 6,648 | 347 | \$49,050 |
| 20 | 484/// | Truck Transportation | 4,837 | 5,182 | 345 | \$39,453 |

Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

North Central Illinois—Top 20 Projected Growth Industries Summary

- The North Central Illinois region is projected to gain 30,693 net additional jobs between 2004 and 2014, an 11.4% increase. This is greater than the statewide projected net increase of 9.3%.
- Food Services and Drinking Places, an industry with a mean annual wage of \$13,457, will have the largest growth in jobs in the region through 2014, followed by Educational Services, Administrative and Support Services, Ambulatory Health Care Services, and Nursing and Residential Care Facilities. These five industries are projected to create 55.9% of all new jobs in the North Central region through 2014.
- The weighted mean annual wages in the North Central Illinois region's top growth sectors range from a low of \$13,457 for Food Services and Drinking Places to a high of \$67,885 for Machinery Manufacturing.
- The top 20 growth sectors make up 90.4% of the total projected job growth in the North Central Illinois region.

North Central Illinois—Top 20 Projected Growth Occupations

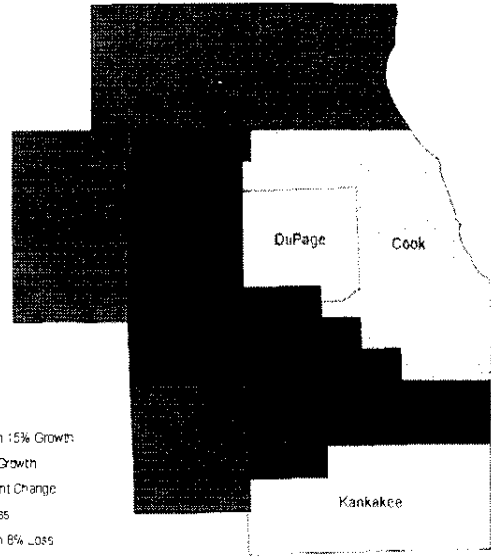
| Rank | SOC | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Annual Growth | Annual Replacements | Mean Wage, 2005 |
|------|---------|---|---------------------|----------------------------------|----------------------|---------------|------------------------|--------------------|
| | | All Public and Private Employment | 329,736 | 361,059 | 31,319 | | | |
| | | Total - Growing Occupations | 287,520 | 320,697 | 33,173 | | | |
| | | Total - Declining Occupations | 42,216 | 40,362 | -1,854 | | | |
| 1 | 29-1000 | Health Diagnosng/Treatng Practitnrs | 10,329 | 12,702 | 2,373 | 237 | 205 | \$54,538.19 |
| 2 | 35-3000 | Food and Beverage Serving Workers | 12,184 | 14,349 | 2,165 | 216 | 583 | \$17,278.14 |
| 3 | 25-2000 | Primary/Sec./Special Ed Sch Teachrs | 10,499 | 12,578 | 2,078 | 208 | 245 | \$49,618.70 |
| 4 | 37-2000 | Bldg Cleaning and Pest Control Wrkrs | 9,190 | 10,701 | 1,510 | 151 | 180 | \$24,041.97 |
| 5 | 15-1000 | Computer Specialists | 6,348 | 7,773 | 1,425 | 142 | 84 | \$70,248.90 |
| 6 | 13-1000 | Business Operations Specialists | 8,880 | 10,269 | 1,389 | 139 | 154 | \$68,834.47 |
| 7 | 35-2000 | Cooks and Food Preparation Workers | 7,770 | 9,107 | 1,337 | 134 | 251 | \$19,662.73 |
| 8 | 29-2000 | Health Technologists and Technicians | 6,300 | 7,584 | 1,284 | 128 | 111 | \$36,209.41 |
| 9 | 31-1000 | Nursing, Psych and Home Health Aides | 5,232 | 6,420 | 1,188 | 119 | 69 | \$22,067.67 |
| 10 | 41-2000 | Retail Sales Workers | 17,793 | 18,925 | 1,132 | 113 | 735 | \$22,273.03 |
| 11 | 53-3000 | Motor Vehicle Operators | 8,748 | 9,854 | 1,106 | 111 | 132 | \$34,191.23 |
| 12 | 47-2000 | Construction Trades Workers | 11,002 | 12,058 | 1,056 | 106 | 201 | \$51,745.20 |
| 13 | 25-1000 | Postsecondary Faculty | 4,778 | 5,673 | 895 | 90 | 106 | \$47,821.12 |
| 14 | 39-9000 | Other Personal Care/Service Workers | 4,980 | 5,769 | 789 | 79 | 114 | \$20,247.84 |
| 15 | 43-4000 | Information and Record Clerks | 11,205 | 11,994 | 788 | 79 | 228 | \$29,124.22 |
| 16 | 21-1000 | Counselors/Soc Wrkrs/ Comm Srv Specs | 3,698 | 4,458 | 760 | 76 | 70 | \$38,866.40 |
| 17 | 31-9000 | Other Healthcare Support Occupations | 2,551 | 3,280 | 729 | 73 | 53 | \$27,252.33 |
| 18 | 53-7000 | Material Moving Workers | 10,971 | 11,676 | 705 | 70 | 310 | \$26,927.01 |
| 19 | 35-9000 | Other Food Prep/Serving Workers | 3,883 | 4,533 | 650 | 65 | 128 | \$17,709.81 |
| 20 | 11-1000 | Top Executives | 5,460 | 6,109 | 649 | 65 | 102 | \$116,568.40 |

Source: Illinois Department of Employment Security

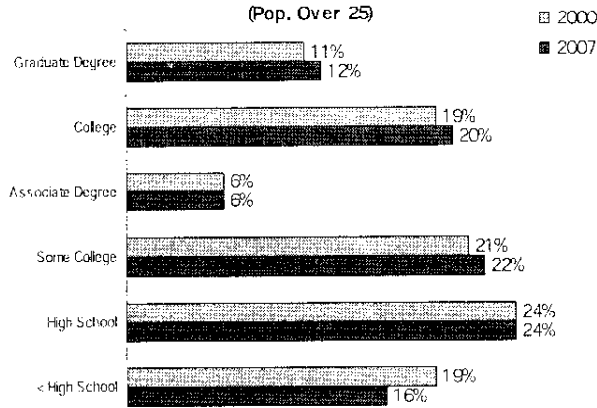
NORTHEASTERN REGIONAL SUMMARY

| Profile | 2000 | 2007 | % Change |
|--------------------------|-----------|-----------|----------|
| Population (1/1/2007): | 8,376,601 | 8,781,456 | 4.83% |
| Population, Median Age: | 33.7 | 33.7 | -0.01% |
| Percent Population 65+: | 902,089 | 898,869 | -0.36% |
| White Population, Alone: | 5,526,238 | 5,678,880 | 2.76% |
| Black Population, Alone: | 1,575,951 | 1,538,830 | -2.36% |
| Asian Population, Alone: | 385,656 | 474,594 | 23.06% |
| Other Population: | 888,756 | 1,089,152 | 22.55% |
| Hispanic Population: | 1,421,543 | 1,702,649 | 19.77% |

County Job Gain/Loss 2000-2007



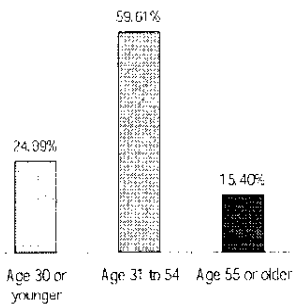
Percent of Population by Educational Attainment (Pop. Over 25)



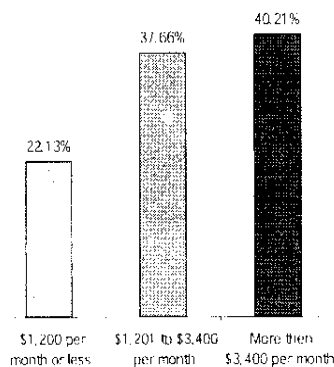
Total Employment 2000-2007

| Area Name | 2000 | 2007 | % Change |
|-----------------|------------------|------------------|--------------|
| Cook County | 2,421,199 | 2,446,744 | 1.06% |
| DeKalb County | 46,021 | 52,930 | 15.01% |
| DuPage County | 476,483 | 498,400 | 4.60% |
| Grundy County | 18,529 | 23,283 | 25.66% |
| Kane County | 196,309 | 247,268 | 25.96% |
| Kankakee County | 48,327 | 52,295 | 8.21% |
| Kendall County | 28,862 | 48,475 | 67.95% |
| Lake County | 310,967 | 352,065 | 13.22% |
| McHenry County | 135,738 | 165,628 | 22.02% |
| Will County | 246,864 | 340,374 | 37.88% |
| Total | 3,929,299 | 4,227,462 | 7.59% |

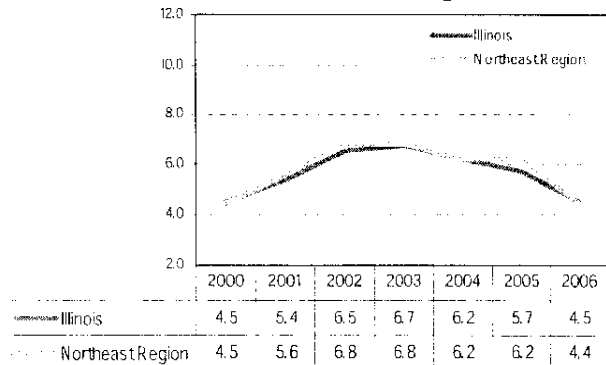
Primary Jobs by Worker Age



Primary Jobs by Earnings Paid



Unemployment Rate 2000 - 2006 Illinois and the Northeast Region



Northeastern Illinois Industry Structure Summary

- The Northeastern Illinois region lost 21,536 manufacturing jobs (5.0%) from 2003 – 2005.
- The region has an annual mean wage of \$50,267 for stable manufacturing jobs.
- Manufacturing jobs make up 12.0% of total employment in the Northeastern Illinois region.
- Higher-wage service jobs make up 27.9% of total employment in the Northeastern Illinois region.
- Lower-wage service jobs make up 33.4% of total employment in the Northeastern Illinois region.

| Northeastern Illinois—Industry Structure | | | | | | | |
|---|------------------|------------------|--------------------------------|----------------------------------|--------------------------------|-------------------------------------|---|
| Sector | Employment, 2003 | Employment, 2005 | Employment Change 2003–2005 | Separations Stable Jobs, 2005 | New Hires Stable Jobs, 2005 | Stable Jobs: Mean Earnings, 2005 | New Hires Stable Jobs: Mean Earnings, 2005 |
| Total Public/Private Employment In Sectors | 3,454,608 | 3,434,293 | -20,315 | 326,059 | 311,830 | \$47,670 | \$30,651 |
| Manufacturing Total | 433,457 | 411,921 | -21,536 | 27,538 | 22,651 | \$50,267 | \$37,938 |
| Higher-Wage Service | 927,405 | 958,778 | 31,373 | 90,865 | 112,075 | \$54,691 | \$36,910 |
| Lower-Wage Service | 1,124,122 | 1,146,884 | 22,762 | 129,840 | 96,451 | \$31,453 | \$20,385 |

Source: Illinois Department of Employment Security.
*Total differs from the total employment data in the other tables because it excludes self-employed and agricultural workers

Northeastern Illinois—Top 20 Projected Growth Occupations Summary

- The Northeastern Illinois region is projected to be the state's principal source of new job growth. All twenty occupations of the region's Top 20 growth occupations are projected to grow faster in the region than in the state. The three occupations in the Northeastern Illinois region that are projected to outpace statewide growth rates the most are: Other Management Occupations (4.7% faster than the projected statewide average for that occupation); Construction Trades Workers (2.9% faster than the projected statewide average for that occupation); and Primary/Secondary/Special Education School Teachers (2.9% faster than the projected statewide average for that occupation).
- The Primary/Secondary/Special Education School Teachers occupation, with a mean wage of \$63,382, is projected to produce the highest level of growth, averaging 2,961 additional jobs annually in Northeastern Illinois from 2004 through 2014.
- The top five projected growth occupations, Primary/Secondary/Special Education School Teachers, Computer Specialists, Business Operations Specialists, Construction Trades Workers and Health Diagnosing/Treating Practitioners, are expected to create 29.0% of all new jobs in the Northeastern Illinois region.
- The weighted mean wage in the Northeastern Illinois regions' top growth occupations ranges from a low of \$19,128 for Food and Beverage Serving Workers to a high of \$137,764 for Top Executives.
- Top 20 growth occupations are projected to create 70.9% of all new jobs in the Northeastern Illinois region.

¹ Includes: NAICS 31-33 Manufacturing. U.S. Census Bureau. 2007 NAICS Codes and Titles.

² Higher-wage service includes: NAICS 51 Information, NAICS 52 Finance and insurance, NAICS 53 Real estate and rental and leasing, NAICS 54 Professional and technical services, NAICS 55 Management of companies and enterprises, and NAICS 56 Administrative and waste services. U.S. Census Bureau. 2002 NAICS Codes and Titles.

³ Lower-wage service includes: NAICS 61 Educational services, NAICS 62 Health care and social assistance, NAICS 71 Arts, entertainment, and recreation, NAICS 72 Accommodation and food services, and 81 Other Services (except Public Administration). U.S. Census Bureau. 2007 NAICS Codes and Titles.

| Northeastern Illinois—Top 20 Projected Growth Industries | | | | | | |
|--|--------|--|---------------------|----------------------------------|----------------------|--------------------|
| Rank | NAICS | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Mean Wage, 2005 |
| | | All Public and Private Employment | 3,902,500 | 4,322,397 | 419,895 | |
| | | Total - Declining Industries | 674,044 | 629,063 | -44,982 | |
| | | Total - Growing Industries | 3,228,456 | 3,693,334 | 464,877 | |
| 1 | 561/// | Administrative and Support Services | 300,095 | 376,679 | 76,584 | \$31,092 |
| 2 | 541/// | Professional, Scientific and Tech. Services | 282,476 | 352,106 | 69,630 | \$74,260 |
| 3 | 611/// | Educational Services | 330,853 | 386,786 | 55,933 | \$38,512 |
| 4 | 621/// | Ambulatory Health Care Services | 128,090 | 165,687 | 37,596 | \$52,993 |
| 5 | 722/// | Food Services and Drinking Places | 252,584 | 286,554 | 33,970 | \$17,478 |
| 6 | 238/// | Specialty Trade Contractors | 136,272 | 163,409 | 27,137 | \$57,887 |
| 7 | 623/// | Nursing and Residential Care Facilities | 69,560 | 87,167 | 17,607 | \$27,913 |
| 8 | 624/// | Social Assistance | 58,277 | 73,428 | 15,151 | \$23,372 |
| 9 | 813/// | Religious, Civic and Professional Orgs. | 100,784 | 114,384 | 13,600 | \$42,463 |
| 10 | 493/// | Warehousing and Storage | 28,114 | 37,784 | 9,670 | \$35,870 |
| 11 | 523/// | Securities, Commodities and Financial Acti. | 46,194 | 54,259 | 8,065 | \$111,173 |
| 12 | 622/// | Hospitals | 168,561 | 176,209 | 7,648 | \$47,994 |
| 13 | 713/// | Amusements, Gambling and Recreation Ind. | 41,355 | 48,922 | 7,567 | \$21,634 |
| 14 | 551/// | Management of Companies and Enterprises | 69,788 | 76,780 | 6,992 | \$81,072 |
| 15 | 522/// | Credit Intermediation and Related Activities | 113,180 | 118,316 | 5,135 | \$61,635 |
| 16 | 441/// | Motor Vehicle and Parts Dealers | 45,715 | 50,626 | 4,911 | \$49,001 |
| 17 | 444/// | Building Material and Garden Equip. Stores | 34,377 | 39,210 | 4,833 | \$29,679 |
| 18 | 236/// | Construction of Buildings | 38,640 | 43,011 | 4,371 | \$58,473 |
| 19 | 811/// | Repair and Maintenance | 38,843 | 43,156 | 4,313 | \$37,946 |
| 20 | 484/// | Truck Transportation | 40,855 | 44,768 | 3,913 | \$49,734 |

Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

Northeastern Illinois—Top 20 Projected Growth Industries Summary

- The Northeastern Illinois region is projected to gain 419,895 additional jobs between 2004 and 2014, a 10.8% increase. This is greater than the statewide projected net increase of 9.3%.
- 58.9% of all new jobs projected to be created between 2004 and 2014 are projected to occur within the top five growth industries. Administrative and Support Services with a weighted mean wage of \$31,092, Professional, Scientific and Technical Services with a weighted mean wage of \$74,260, Educational Services with a weighted mean wage of \$38,512, Ambulatory Health Care Services with a weighted mean wage of \$52,993, and Food Services and Drinking Places with a weighted mean wage of \$17,478. These five industries are projected to create 273,713 of the total 464,877 new jobs in the Northeastern Illinois region by 2014.
- Mean annual wages in the Northeastern Illinois region's top growth sectors range from a low of \$17,478 for Food Services and Drinking Places to a high of \$111,173 for Securities, Commodities and Financial Activities.
- The top 20 growth sectors are projected to create 89.2% of all new jobs in the Northeastern Illinois region.

Northeastern Illinois—Top 20 Projected Growth Occupations

| Rank | SOC | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Annual Growth | Annual Replacements | Mean Wage, 2005 |
|------|---------|--|---------------------|----------------------------------|----------------------|---------------|------------------------|--------------------|
| | | All Public and Private Employment | 4,350,709 | 4,782,084 | 431,375 | | | |
| | | Total - Growing Occupations | 3,762,105 | 4,214,162 | 452,058 | | | |
| | | Total - Declining Occupations | 588,604 | 567,922 | -20,683 | | | |
| 1 | 25-2000 | Primary/Sec./Special Ed Sch Teachrs | 132,952 | 162,565 | 29,613 | 2,961 | 3,103 | \$63,382.45 |
| 2 | 15-1000 | Computer Specialists | 104,477 | 132,588 | 28,111 | 2,811 | 1,375 | \$81,397.33 |
| 3 | 13-1000 | Business Operations Specialists | 129,652 | 156,602 | 26,950 | 2,695 | 2,258 | \$77,147.08 |
| 4 | 47-2000 | Construction Trades Workers | 155,159 | 178,569 | 23,411 | 2,341 | 2,857 | \$65,537.42 |
| 5 | 29-1000 | Health Diagnosng/ Treating Practitnrs | 121,757 | 144,809 | 23,052 | 2,305 | 2,428 | \$78,379.07 |
| 6 | 53-7000 | Material Moving Workers | 197,080 | 216,432 | 19,352 | 1,935 | 5,598 | \$27,302.46 |
| 7 | 35-3000 | Food and Beverage Serving Workers | 139,341 | 157,204 | 17,862 | 1,786 | 6,687 | \$19,127.77 |
| 8 | 53-3000 | Motor Vehicle Operators | 120,377 | 137,808 | 17,431 | 1,743 | 1,813 | \$39,166.40 |
| 9 | 37-2000 | Bldg Cleaning and Pest Control Wrkrs | 119,954 | 137,106 | 17,151 | 1,715 | 2,355 | \$25,088.11 |
| 10 | 13-2000 | Financial Specialists | 96,174 | 109,805 | 13,631 | 1,363 | 1,698 | \$80,250.71 |
| 11 | 41-2000 | Retail Sales Workers | 240,626 | 253,657 | 13,031 | 1,303 | 9,812 | \$25,821.75 |
| 12 | 29-2000 | Health Technologists and Technicians | 73,813 | 86,174 | 12,362 | 1,236 | 1,299 | \$43,416.55 |
| 13 | 43-4000 | Information and Record Clerks | 172,177 | 183,864 | 11,687 | 1,169 | 3,509 | \$35,708.84 |
| 14 | 35-2000 | Cooks and Food Preparation Workers | 86,652 | 97,784 | 11,133 | 1,113 | 2,801 | \$20,949.96 |
| 15 | 31-1000 | Nursing, Psych and Home Health Aides | 51,238 | 61,829 | 10,592 | 1,059 | 671 | \$24,938.23 |
| 16 | 39-9000 | Other Personal Care/ Service Workers | 59,368 | 69,525 | 10,156 | 1,016 | 1,346 | \$25,215.51 |
| 17 | 11-1000 | Top Executives | 77,806 | 87,802 | 9,996 | 1,000 | 1,450 | \$137,764.24 |
| 18 | 11-9000 | Other Management Occupations | 102,608 | 111,438 | 8,829 | 883 | 1,957 | \$83,781.76 |
| 19 | 21-1000 | Counselors/Soc Wrkrs/ Comm Srv Specs | 41,662 | 49,805 | 8,143 | 814 | 796 | \$46,446.03 |
| 20 | 31-9000 | Other Healthcare Support Occupations | 33,456 | 41,327 | 7,871 | 787 | 708 | \$33,910.69 |

Source: Illinois Department of Employment Security

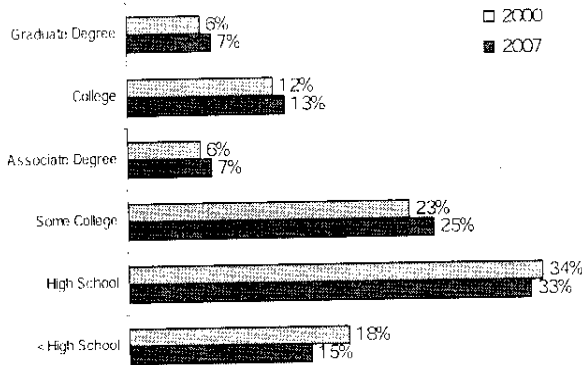
NORTHERN STATELINE REGIONAL SUMMARY

| Profile | 2000 | 2007 | % Change |
|--------------------------|---------|---------|----------|
| Population (1/1/2007): | 420,215 | 452,920 | 7.78% |
| Population, Median Age: | 36.2 | 36.3 | 0.30% |
| Percent Population 65+: | 54,794 | 55,912 | 2.04% |
| White Population, Alone: | 359,630 | 383,672 | 6.69% |
| Black Population, Alone: | 33,677 | 34,286 | 1.81% |
| Asian Population, Alone: | 5,683 | 7,474 | 31.52% |
| Other Population: | 21,225 | 27,488 | 29.51% |
| Hispanic Population: | 28,238 | 36,404 | 28.92% |

County Job Gain/Loss 2000-2007



Percent of Population by Educational Attainment (Pop. Over 25)

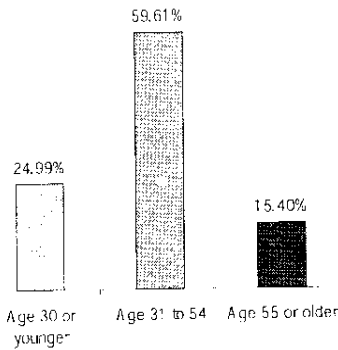


Greater than 15% Growth
 1% - 8% Loss
 6% to 15% Growth
 Greater than 8% Loss
 No Significant Change

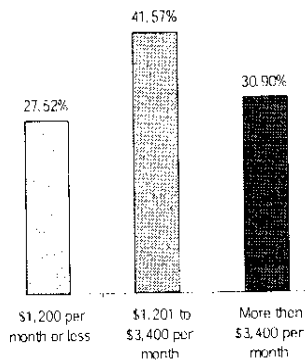
Total Employment 2000-2007

| Area Name | 2000 | 2007 | % Change |
|-------------------|----------------|----------------|--------------|
| Boone County | 20,187 | 26,081 | 29.20% |
| Ogle County | 24,823 | 27,209 | 9.61% |
| Stephenson County | 23,552 | 23,099 | -1.92% |
| Winnebago County | 135,039 | 147,374 | 9.13% |
| Total | 203,601 | 223,763 | 9.90% |

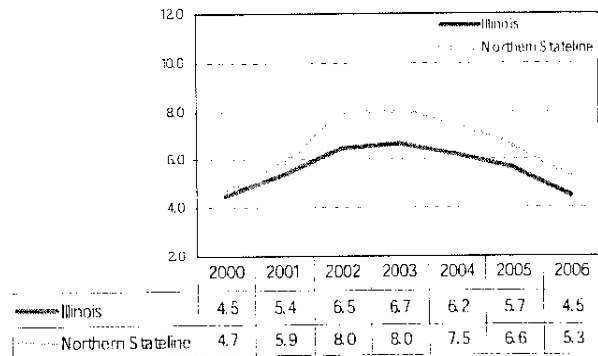
Primary Jobs by Worker Age



Primary Jobs by Earnings Paid



Unemployment Rate 2000 - 2006 Illinois and the Northern State Line Region



Northern Stateline Illinois Industry Structure Summary

- The Northern Stateline Illinois region lost 2,779 manufacturing jobs (1.8%) from 2003 – 2005.
- The region has an annual mean wage of \$46,790 for stable manufacturing jobs.
- Manufacturing jobs make up 22.8% of total employment in the Northern Stateline Illinois region.
- Higher-wage service jobs make up 16.0% of total employment in the Northern Stateline Illinois region.
- Lower-wage service jobs make up 30.6% of total employment in the Northern Stateline Illinois region.

| Northern Stateline Illinois—Industry Structure | | | | | | | |
|--|------------------|------------------|-----------------------------|-------------------------------|-----------------------------|----------------------------------|--|
| Sector | Employment, 2003 | Employment, 2005 | Employment Change 2003-2005 | Separations Stable Jobs, 2005 | New Hires Stable Jobs, 2005 | Stable Jobs: Mean Earnings, 2005 | New Hires Stable Jobs: Mean Earnings, 2005 |
| Total Public/Private Employment In Sectors | 155,085 | 154,180 | -905 | 14,427 | 13,859 | \$38,400 | \$23,782 |
| Manufacturing Total | 37,945 | 35,166 | -2,779 | 2,362 | 2,054 | \$46,790 | \$39,230 |
| Higher-Wage Service | 25,189 | 24,684 | -505 | 3,095 | 3,628 | \$33,299 | \$21,009 |
| Lower-Wage Service | 44,329 | 47,196 | 2,867 | 4,748 | 4,008 | \$66,737 | \$15,721 |

Source: Illinois Department of Employment Security.
*Total differs from the total employment data in the other tables because it excludes self-employed and agricultural workers

Northern Stateline Illinois—Top 20 Projected Growth Occupations Summary

- The Northern Stateline Illinois region is projected to be an important source of job growth for the state between 2004 and 2014. Fifteen occupations among the top twenty in the region are expected to grow faster in the Northern Stateline Illinois region than statewide. The three occupations that are expected to exceed statewide growth rates the most are: Motor Vehicle Operators (7.0% faster than the statewide average for that occupation); Vehicle and Mobile Equipment Mechanics/Installers (6.3% faster than the statewide average for that occupation); and Health Diagnosing/Treating Practitioners (4.7% faster than the statewide average for that occupation).
- Primary/Secondary/Special Education School Teachers, an occupation with a mean annual wage of \$52,578, is projected to have the highest increase of employment through 2014, followed by Health Diagnosing/Treating Practitioners, Material Moving Workers, Motor Vehicle Operators and Food and Beverage Serving Workers. These five occupations are projected to create 31.5% of all new jobs in the region.
- The mean wage in the Northern Stateline Illinois region's top growth occupations range from a low of \$17,930 for Food and Beverage Serving Workers to a high of \$134,763 for Top Executives.
- The top 20 growth occupations are projected to create 73.5% of all new jobs in the Northern Stateline Illinois region.

¹ Includes: NAICS 31-33 Manufacturing. U.S. Census Bureau. 2007 NAICS Codes and Titles.

² Higher-wage service includes: NAICS 51 Information, NAICS 52 Finance and insurance, NAICS 53 Real estate and rental and leasing, NAICS 54 Professional and technical services, NAICS 55 Management of companies and enterprises, and NAICS 56 Administrative and waste services. U.S. Census Bureau. 2002 NAICS Codes and Titles.

³ Lower-wage service includes: NAICS 61 Educational services, NAICS 62 Health care and social assistance, NAICS 71 Arts, entertainment, and recreation, NAICS 72 Accommodation and food services, and 81 Other Services (except Public Administration). U.S. Census Bureau. 2007 NAICS Codes and Titles.

Northern Stateline Illinois—Top 20 Projected Growth Industries

| Rank | NAICS | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Mean Wage, 2005 |
|------|--------|--|---------------------|----------------------------------|----------------------|--------------------|
| | | All Public and Private Employment | 182,769 | 201,563 | 18,800 | |
| | | Total - Declining Industries | 47,138 | 43,633 | -3,503 | |
| | | Total - Growing Industries | 135,631 | 157,930 | 22,303 | |
| 1 | 561/// | Administrative and Support Services | 14,978 | 19,302 | 4,324 | \$25,751.56 |
| 2 | 611/// | Educational Services | 14,052 | 16,670 | 2,618 | \$29,748.61 |
| 3 | 722/// | Food Services and Drinking Places | 11,686 | 13,650 | 1,964 | \$13,133.11 |
| 4 | 621/// | Ambulatory Health Care Services | 6,851 | 8,588 | 1,737 | \$59,892.57 |
| 5 | 623/// | Nursing and Residential Care Facilities | 5,340 | 6,724 | 1,384 | \$26,208.63 |
| 6 | 336/// | Transportation Equipment Mfg. | 4,979 | 6,155 | 1,176 | \$67,316.69 |
| 7 | 541/// | Professional, Scientific and Tech. Services | 5,126 | 6,205 | 1,079 | \$45,942.96 |
| 8 | 238/// | Specialty Trade Contractors | 6,567 | 7,537 | 970 | \$48,932.90 |
| 9 | 622/// | Hospitals | 8,681 | 9,627 | 946 | \$43,056.00 |
| 10 | 813/// | Religious, Civic and Professional Orgs. | 6,903 | 7,588 | 685 | \$19,637.19 |
| 11 | 493/// | Warehousing and Storage | 1,026 | 1,578 | 553 | \$33,487.50 |
| 12 | 624/// | Social Assistance | 2,113 | 2,558 | 445 | \$19,638.86 |
| 13 | 811/// | Repair and Maintenance | 2,123 | 2,547 | 424 | \$31,806.35 |
| 14 | 444/// | Building Material and Garden Equip. Stores | 1,911 | 2,204 | 293 | \$28,691.60 |
| 15 | 441/// | Motor Vehicle and Parts Dealers | 2,426 | 2,716 | 290 | \$41,342.31 |
| 16 | 812/// | Personal and Laundry Services | 1,980 | 2,267 | 287 | \$24,820.97 |
| 17 | 713/// | Amusements, Gambling and Recreation Ind. | 1,256 | 1,534 | 278 | \$16,402.60 |
| 18 | 236/// | Construction of Buildings | 1,695 | 1,941 | 246 | \$42,704.15 |
| 19 | 523/// | Securities, Commodities and Financial Acti. | 1,162 | 1,392 | 231 | \$88,613.98 |
| 20 | 522/// | Credit Intermediation and Related Activities | 3,491 | 3,717 | 226 | \$39,503.67 |

Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

Northern Stateline Illinois—Top 20 Projected Growth Industries Summary

- The Northern Stateline Illinois region is projected to gain 18,818 additional jobs between 2004 and 2014, a 10.3% increase. This is greater than the statewide projected net increase of 9.3%.
- 53.9% of all new jobs created between 2004 and 201 are projected to occur in five industries: Administrative and Support Services with a weighted mean of \$25,752; Educational Services with a weighted mean wage of \$29,749; Food Services and Drinking Places with a weighted mean wage of \$13,133; Ambulatory Health Care Services with a weighted mean wage of \$59,893; and Nursing and Residential Care Facilities with a weighted mean wage of \$26,209. These five industries are projected to create 12,027 new jobs within the region.
- Mean annual wages in the Northern Stateline Illinois region's top growth sectors range from a low of \$13,133 for Food Services and Drinking Places to a high of \$88,614 for Securities, Commodities and Financial Activities.
- The top 20 growth sectors are projected to create 90.4% of all new jobs in the Northern Stateline Illinois region.

Northern Stateline Illinois—Top 20 Projected Growth Occupations

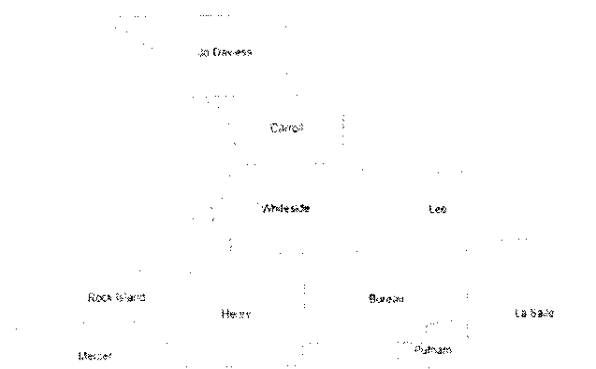
| Rank | SOC | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Annual Growth | Annual Replacements | Mean Wage, 2005 |
|------|---------|---|---------------------|----------------------------------|----------------------|---------------|------------------------|--------------------|
| | | All Public and Private Employment | 210,090 | 230,182 | 20,090 | | | |
| | | Total - Growing Occupations | 192,697 | 213,553 | 20,855 | | | |
| | | Total - Declining Occupations | 18,920 | 18,038 | -883 | | | |
| 1 | 25-2000 | Primary/Sec./Special Ed Sch Teachrs | 7,190 | 8,716 | 1,526 | 153 | 170 | \$52,578 |
| 2 | 29-1000 | Health Diagnosng/Treating Practitnrs | 6,398 | 7,840 | 1,442 | 144 | 125 | \$58,240 |
| 3 | 53-7000 | Material Moving Workers | 10,926 | 12,310 | 1,384 | 138 | 306 | \$27,509 |
| 4 | 53-3000 | Motor Vehicle Operators | 5,895 | 7,080 | 1,185 | 118 | 85 | \$33,374 |
| 5 | 35-3000 | Food and Beverage Serving Workers | 6,402 | 7,424 | 1,022 | 102 | 307 | \$17,930 |
| 6 | 47-2000 | Construction Trades Workers | 8,258 | 9,258 | 999 | 100 | 151 | \$51,779 |
| 7 | 13-1000 | Business Operations Specialists | 4,861 | 5,729 | 868 | 87 | 87 | \$64,229 |
| 8 | 37-2000 | Bldg Cleaning and Pest Control Wrkrs | 5,128 | 5,935 | 807 | 81 | 101 | \$22,604 |
| 9 | 31-1000 | Nursing, Psych and Home Health Aides | 3,063 | 3,769 | 706 | 71 | 40 | \$22,714 |
| 10 | 29-2000 | Health Technologists and Technicians | 3,691 | 4,362 | 671 | 67 | 65 | \$34,997 |
| 11 | 41-2000 | Retail Sales Workers | 11,114 | 11,744 | 630 | 63 | 461 | \$23,817 |
| 12 | 35-2000 | Cooks and Food Preparation Workers | 4,143 | 4,772 | 629 | 63 | 134 | \$19,438 |
| 13 | 43-4000 | Information and Record Clerks | 7,115 | 7,687 | 573 | 57 | 144 | \$29,741 |
| 14 | 15-1000 | Computer Specialists | 2,549 | 3,037 | 488 | 49 | 34 | \$64,550 |
| 15 | 39-9000 | Other Personal Care/Service Workers | 2,739 | 3,194 | 456 | 46 | 63 | \$22,574 |
| 16 | 21-1000 | Counselors/Soc Wrkrs/Comm Srv Specs | 2,087 | 2,533 | 445 | 45 | 40 | \$43,225 |
| 17 | 11-1000 | Top Executives | 3,469 | 3,854 | 384 | 38 | 65 | \$134,763 |
| 18 | 49-3000 | Vehicle and Mobile Eqpt Mechs/Instllrs | 2,309 | 2,688 | 379 | 38 | 58 | \$38,119 |
| 19 | 31-9000 | Other Healthcre Support Occupations | 1,690 | 2,068 | 378 | 38 | 35 | \$30,796 |
| 20 | 13-2000 | Financial Specialists | 3,028 | 3,387 | 360 | 36 | 54 | \$64,227 |

Source: Illinois Department of Employment Security

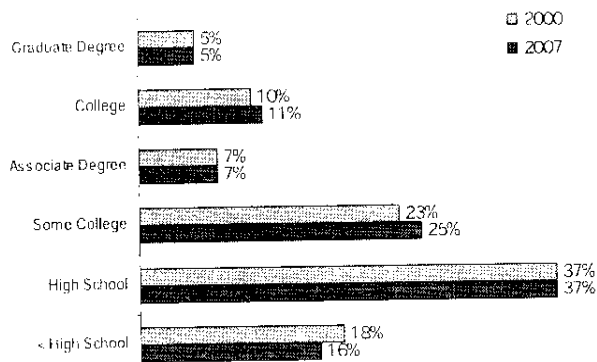
NORTHWESTERN REGIONAL SUMMARY

| Profile | 2000 | 2007 | % Change |
|--------------------------|---------|---------|----------|
| Population (1/1/2007): | 506,127 | 503,227 | -0.57% |
| Population, Median Age: | 41.1 | 41.4 | 0.71% |
| Percent Population 65+: | 81,402 | 78,049 | -4.12% |
| White Population, Alone: | 467,572 | 459,569 | -1.71% |
| Black Population, Alone: | 16,293 | 16,206 | -0.53% |
| Asian Population, Alone: | 3,142 | 3,726 | 18.59% |
| Other Population: | 19,120 | 23,726 | 24.09% |
| Hispanic Population: | 29,344 | 35,469 | 20.87% |

County Job Gain/Loss 2000-2007



Percent of Population by Educational Attainment (Pop. Over 25)

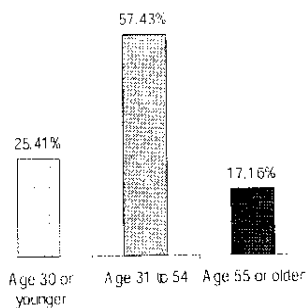


Legend for County Job Gain/Loss 2000-2007:
 Greater than 15% Growth (dark blue)
 6% to 15% Growth (medium blue)
 1% to 8% Loss (light blue)
 Greater than 8% Loss (darker blue)
 No Significant Change (white)

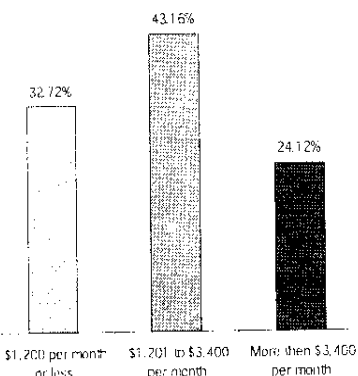
Total Employment 2000-2007

| Area Name | 2000 | 2007 | % Change |
|--------------------|----------------|----------------|--------------|
| Bureau County | 17,392 | 17,454 | 0.36% |
| Carroll County | 7,706 | 7,516 | -2.47% |
| Henry County | 25,036 | 25,025 | -0.04% |
| Jo Daviess County | 11,503 | 11,804 | 2.62% |
| La Salle County | 51,029 | 52,464 | 2.81% |
| Lee County | 16,347 | 16,321 | -0.16% |
| Mercer County | 7,988 | 8,004 | 0.20% |
| Putnam County | 2,866 | 2,868 | 0.07% |
| Rock Island County | 71,329 | 71,434 | 0.15% |
| Whiteside County | 28,376 | 28,256 | -0.42% |
| Total | 239,572 | 241,146 | 0.66% |

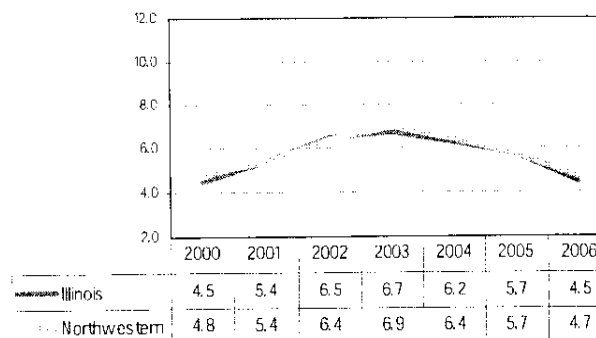
Primary Jobs by Worker Age



Primary Jobs by Earnings Paid



Unemployment Rate 2000 - 2006 Illinois and the Northwest Region



Northwestern Illinois Industry Structure Summary

- The Northwestern Illinois region gained 1,238 manufacturing jobs (4.9%) from 2003 – 2005.
- The region has an annual mean wage of \$41,339 for stable manufacturing jobs.
- Manufacturing jobs make up 16.0% of total employment in the Northwestern Illinois region.
- Higher-wage service jobs make up 16.7% of total employment in the Northwestern Illinois region.
- Lower-wage service jobs make up 29.2% of total employment in the Northwestern Illinois region.

| Northwestern Illinois—Industry Structure | | | | | | | |
|--|------------------|------------------|-----------------------------|-------------------------------|-----------------------------|----------------------------------|--|
| Sector | Employment, 2003 | Employment, 2005 | Employment Change 2003–2005 | Separations Stable Jobs, 2005 | New Hires Stable Jobs, 2005 | Stable Jobs: Mean Earnings, 2005 | New Hires Stable Jobs: Mean Earnings, 2005 |
| Total Public/Private Employment In Sectors | 161,725 | 166,913 | 5,188 | 14,891 | 15,291 | \$34,444 | \$21,184 |
| Manufacturing Total | 25,439 | 26,677 | 1,238 | 1,509 | 1,890 | \$41,339 | \$25,659 |
| Higher-Wage Service | 23,118 | 27,920 | 4,802 | 2,754 | 3,588 | \$30,196 | \$19,952 |
| Lower-Wage Service | 48,529 | 48,813 | 284 | 5,227 | 4,210 | \$21,072 | \$13,290 |

Source: Illinois Department of Employment Security.
 *Total differs from the total employment data in the other tables because it excludes self-employed and agricultural workers

Northwestern Illinois—Top 20 Projected Growth Occupations Summary

- The Primary/Secondary/Special Education School Teachers occupation, with a mean wage of \$53,068, is projected to produce the highest level of growth in the Northwestern Illinois region, averaging 121 additional jobs annually from 2004 through 2014.
- The top five occupations, Primary/Secondary/Special Education School Teachers, Health Diagnosing/Treating Practitioners, Food and Beverage Serving Workers, Motor Vehicle Operators and Business Operations Specialists are projected to create 34.5% of all new jobs in the Northwestern Illinois region.
- The mean wage in the Northwestern Illinois region's top growth occupations ranges from a low of \$16,275 for Other Food Preparations/Serving Workers to a high of \$110,679 for Top Executives.
- The top 20 growth occupations are projected to create 78.7% of all new jobs in the Northwestern Illinois region.

¹ Includes: NAICS 31-33 Manufacturing. U.S. Census Bureau. 2007 NAICS Codes and Titles.

² Higher-wage service includes: NAICS 51 Information, NAICS 52 Finance and insurance, NAICS 53 Real estate and rental and leasing, NAICS 54 Professional and technical services, NAICS 55 Management of companies and enterprises, and NAICS 56 Administrative and waste services. U.S. Census Bureau. 2002 NAICS Codes and Titles.

³ Lower-wage service includes: NAICS 61 Educational services, NAICS 62 Health care and social assistance, NAICS 71 Arts, entertainment, and recreation, NAICS 72 Accommodation and food services, and 81 Other Services (except Public Administration). U.S. Census Bureau. 2007 NAICS Codes and Titles.

| Northwestern Illinois—Top 20 Projected Growth Industries | | | | | | |
|--|--------|--|------------------|----------------------------|-------------------|-----------------|
| Rank | NAICS | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Mean Wage, 2005 |
| | | All Public and Private Employment | 184,141 | 193,868 | 9,720 | |
| | | Total - Declining Industries | 43,949 | 39,662 | -4,289 | |
| | | Total - Growing Industries | 140,192 | 154,206 | 14,009 | |
| 1 | 561/// | Administrative and Support Services | 10,809 | 12,841 | 2,032 | \$18,350.69 |
| 2 | 611/// | Educational Services | 16,399 | 18,267 | 1,868 | \$26,894.80 |
| 3 | 722/// | Food Services and Drinking Places | 14,060 | 15,620 | 1,560 | \$10,633.25 |
| 4 | 621/// | Ambulatory Health Care Services | 6,125 | 7,260 | 1,135 | \$37,306.32 |
| 5 | 623/// | Nursing and Residential Care Facilities | 5,698 | 6,644 | 946 | \$17,769.54 |
| 6 | 541/// | Professional, Scientific and Tech. Services | 4,958 | 5,766 | 808 | \$40,084.66 |
| 7 | 624/// | Social Assistance | 3,049 | 3,489 | 440 | \$17,495.93 |
| 8 | 813/// | Religious, Civic and Professional Orgs. | 4,821 | 5,261 | 440 | \$14,510.69 |
| 9 | 713/// | Amusements, Gambling and Recreation Ind. | 2,220 | 2,644 | 424 | \$15,012.91 |
| 10 | 622/// | Hospitals | 8,325 | 8,717 | 392 | \$36,292.35 |
| 11 | 238/// | Specialty Trade Contractors | 5,113 | 5,502 | 389 | \$33,231.95 |
| 12 | 551/// | Management of Companies and Enterprises | 3,396 | 3,774 | 377 | \$82,853.83 |
| 13 | 441/// | Motor Vehicle and Parts Dealers | 3,400 | 3,697 | 297 | \$33,189.17 |
| 14 | 484/// | Truck Transportation | 3,603 | 3,879 | 276 | \$37,159.91 |
| 15 | 811/// | Repair and Maintenance | 2,204 | 2,470 | 266 | \$24,062.25 |
| 16 | 522/// | Credit Intermediation and Related Activities | 4,700 | 4,909 | 209 | \$28,350.50 |
| 17 | 444/// | Building Material and Garden Equip. Stores | 1,856 | 2,045 | 189 | \$24,391.35 |
| 18 | 424/// | Merchant Wholesalers, Nondurable Goods | 5,169 | 5,357 | 188 | \$34,471.91 |
| 19 | 452/// | General Merchandise Stores | 6,010 | 6,171 | 161 | \$12,695.01 |
| 20 | 493/// | Warehousing and Storage | 341 | 498 | 156 | \$38,210.52 |

Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

Northwestern Illinois—Top 20 Projected Growth Industries Summary

- The Northwestern Illinois region is projected to gain 9,783 additional jobs between 2004 and 2014, a 5.3% increase. This is less than the statewide projected net increase of 9.3%.
- 53.8% of all new jobs projected to be created in the Northwestern Illinois region are projected to occur within five industries: Administrative and Support Services with a weighted mean wage of \$18,350; Educational Services with a weighted mean wage of \$26,895; Food Services and Drinking Places with a weighted mean wage of \$10,633; Ambulatory Health Care Services with a weighted mean wage of \$37,306; and Nursing and Residential Care Facilities with a weighted mean wage of \$17,770. These five industries are projected to create 7,541 additional jobs.
- The mean annual wages in the Northwestern Illinois regions' top growth industries range from a low of \$10,633 for Food Services and Drinking Places to a high of \$82,854 for Management of Companies and Enterprises.
- The top 20 growth sectors are projected to create 89.6% of all projected new jobs in the Northwestern Illinois region.

Northwestern Illinois—Top 20 Projected Growth Occupations

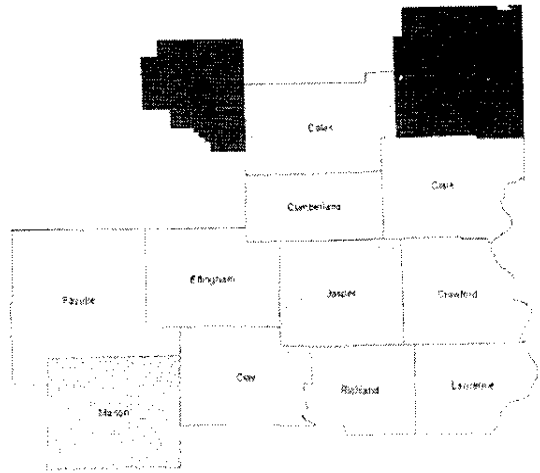
| Rank | SOC | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Annual Growth | Annual Replacements | Mean Wage, 2005 |
|------|---------|--|---------------------|----------------------------------|----------------------|---------------|------------------------|--------------------|
| | | All Public and Private Employment | 233,999 | 243,048 | 9,048 | | | |
| | | Total - Growing Occupations | 155,485 | 168,062 | 12,572 | | | |
| | | Total - Declining Occupations | 78,514 | 74,986 | -3,524 | | | |
| 1 | 25-2000 | Primary/Sec./Special Ed Sch Teachers | 8,321 | 9,528 | 1,207 | 121 | 198 | \$53,068 |
| 2 | 29-1000 | Health Diagnosng/Treatng Practitnrs | 6,669 | 7,636 | 967 | 97 | 130 | \$60,772 |
| 3 | 35-3000 | Food and Beverage Serving Workers | 7,827 | 8,635 | 809 | 81 | 375 | \$16,275 |
| 4 | 53-3000 | Motor Vehicle Operators | 7,340 | 8,038 | 698 | 70 | 111 | \$34,827 |
| 5 | 13-1000 | Business Operations Specialists | 5,906 | 6,558 | 653 | 65 | 107 | \$65,678 |
| 6 | 15-1000 | Computer Specialists | 3,423 | 4,017 | 595 | 59 | 45 | \$66,210 |
| 7 | 37-2000 | Bldg Cleaning and Pest Control Wrkrs | 5,399 | 5,920 | 521 | 52 | 106 | \$23,356 |
| 8 | 35-2000 | Cooks and Food Preparation Workers | 4,939 | 5,426 | 487 | 49 | 159 | \$18,783 |
| 9 | 29-2000 | Health Technologists and Technicians | 3,888 | 4,361 | 474 | 47 | 69 | \$34,825 |
| 10 | 31-1000 | Nursing, Psych and Home Health Aides | 3,312 | 3,765 | 454 | 45 | 43 | \$22,130 |
| 11 | 41-2000 | Retail Sales Workers | 13,582 | 14,022 | 440 | 44 | 565 | \$22,652 |
| 12 | 47-2000 | Construction Trades Workers | 7,960 | 8,334 | 374 | 37 | 145 | \$47,094 |
| 13 | 39-9000 | Other Personal Care/Service Workers | 3,446 | 3,792 | 346 | 35 | 79 | \$20,772 |
| 14 | 21-1000 | Counselors/Soc Wrkrs/Comm Srv Specs | 2,573 | 2,906 | 332 | 33 | 49 | \$38,624 |
| 15 | 31-9000 | Other Healthcre Support Occupations | 1,688 | 1,982 | 293 | 29 | 35 | \$27,849 |
| 16 | 49-3000 | Vehicle and Mobile Eqpt Mechs/Instllrs | 2,937 | 3,210 | 272 | 27 | 74 | \$36,994 |
| 17 | 53-7000 | Material Moving Workers | 9,730 | 9,988 | 258 | 26 | 271 | \$25,972 |
| 18 | 25-9000 | Other Educ. Trng and Library Occs | 2,028 | 2,281 | 253 | 25 | 38 | n/a |
| 19 | 35-9000 | Other Food Prep/Serving Workers | 2,498 | 2,736 | 237 | 24 | 82 | \$16,957 |
| 20 | 11-1000 | Top Executives | 3,686 | 3,905 | 219 | 22 | 69 | \$110,679 |

Source: Illinois Department of Employment Security

SOUTHEASTERN REGIONAL SUMMARY

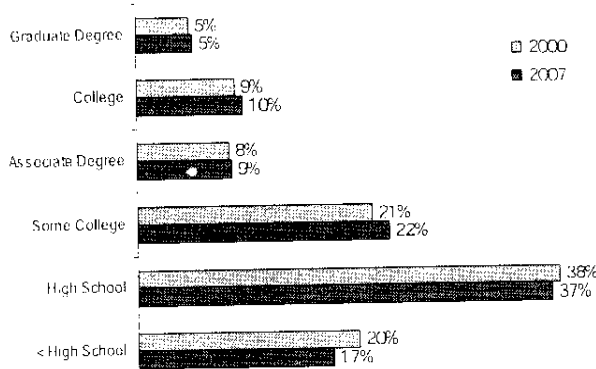
| Profile | 2000 | 2007 | % Change |
|--------------------------|---------|---------|----------|
| Population (1/1/2007): | 275,648 | 269,341 | -2.29% |
| Population, Median Age: | 36.8 | 37.1 | 0.95% |
| Percent Population 65+: | 46,395 | 44,629 | -4.77% |
| White Population, Alone: | 265,813 | 258,825 | -2.63% |
| Black Population, Alone: | 5,457 | 5,321 | -2.49% |
| Asian Population, Alone: | 1,224 | 1,388 | 13.40% |
| Other Population: | 3,154 | 3,807 | 20.70% |
| Hispanic Population: | 2,565 | 4,291 | 67.29% |

County Job Gain/Loss 2000-2007



Greater than 15% Growth
 6% to 15% Growth
 1% - 5% Growth
 No Significant Change
 1% - 8% Loss
 Greater than 8% Loss

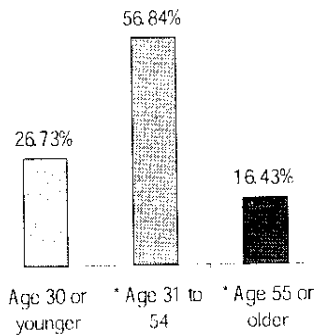
Percent of Population by Educational Attainment (Pop. Over 25)



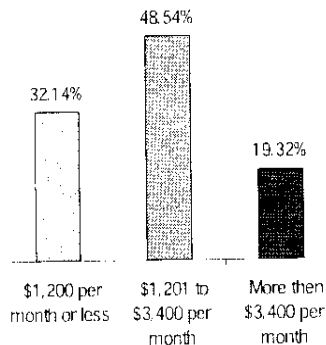
Total Employment 2000-2007

| Area Name | 2000 | 2007 | % Change |
|-------------------|----------------|----------------|---------------|
| Clark County | 7,862 | 7,953 | 1.16% |
| Clay County | 6,525 | 6,369 | -2.39% |
| Coles County | 26,406 | 25,538 | -3.29% |
| Crawford County | 8,623 | 8,413 | -2.44% |
| Cumberland County | 5,427 | 5,373 | -1.00% |
| Edgar County | 8,926 | 8,729 | -2.21% |
| Effingham County | 17,314 | 17,577 | 1.52% |
| Fayette County | 9,396 | 9,520 | 1.32% |
| Jasper County | 4,906 | 4,838 | -1.39% |
| Lawrence County | 7,069 | 7,390 | 4.54% |
| Marion County | 18,957 | 18,507 | -2.37% |
| Moultrie County | 6,913 | 7,019 | 1.53% |
| Richland County | 7,255 | 7,175 | -1.10% |
| Total | 135,579 | 134,401 | -0.87% |

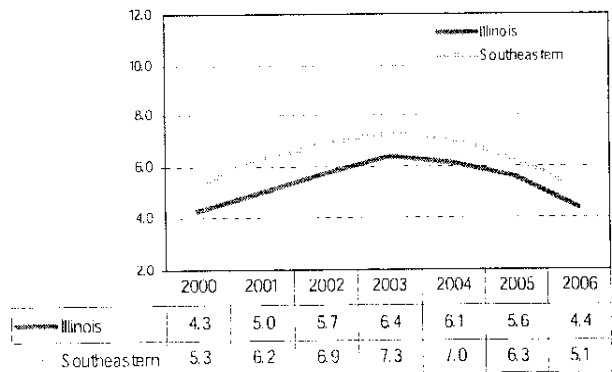
Primary Jobs by Worker Age



Primary Jobs by Earnings Paid



Unemployment Rate 2000 - 2006 Illinois and the Southeastern Central Region



Southeastern Illinois Industry Structure Summary

- The Southeastern Illinois region gained 706 manufacturing jobs (4.5%) from 2003 – 2005.
- The region has an annual mean wage of \$37,656 for stable manufacturing jobs.
- Manufacturing jobs make up 17.4% of total employment in the Southeastern Illinois region.
- Higher-wage service jobs make up 11.7% of total employment in the Southeastern Illinois region.
- Lower-wage service jobs make up 28.4% of total employment in the Southeastern Illinois region.

| Southeastern Illinois—Industry Structure | | | | | | | |
|--|------------------|------------------|-----------------------------|-------------------------------|-----------------------------|----------------------------------|--|
| Sector | Employment, 2003 | Employment, 2005 | Employment Change 2003–2005 | Separations Stable Jobs, 2005 | New Hires Stable Jobs, 2005 | Stable Jobs: Mean Earnings, 2005 | New Hires Stable Jobs: Mean Earnings, 2005 |
| Total Public/Private Employment In Sectors | 96,124 | 94,303 | -1,821 | 8,676 | 7,974 | \$30,264 | \$18,052 |
| Manufacturing Total | 15,699 | 16,405 | 706 | 744 | 764 | \$37,656 | \$28,762 |
| Higher-Wage Service | 11,121 | 11,031 | -90 | 1,445 | 1,739 | \$21,306 | \$13,327 |
| Lower-Wage Service | 26,565 | 26,812 | 247 | 3,098 | 2,360 | \$19,989 | \$13,068 |

Source: Illinois Department of Employment Security.
 *Total differs from the total employment data in the other tables because it excludes self-employed and agricultural workers

Southeastern Illinois—Top 20 Projected Growth Industries Summary

- The Southeastern Illinois region is projected to gain 3,713 additional jobs between 2004 and 2014, a 3.5% increase. This is less than the statewide projected net increase of 9.3%.
- 64.6% of all new jobs projected to be created in the Southeastern Illinois region are projected to occur within five industries: Administrative and Support Services with a weighted mean wage of \$15,534; Educational Services with a weighted mean wage of \$30,794; Food Services and Drinking Places with a weighted mean wage of \$10,978; Nursing and Residential Care Facilities with a weighted mean wage of \$20,176; and Ambulatory Health Care Services with a weighted mean of \$42,934. These five industries are projected to create 6,069 new jobs.
- The mean annual wages in the Southeastern Illinois region's top growth sectors range from a low of \$10,978 for Food Services and Drinking Places to a high of \$42,934 for Ambulatory Health Care Services.
- The top 20 growth sectors make up 92.8% of the projected new jobs in the Southeastern Illinois region.

¹ Includes: NAICS 31-33 Manufacturing. U.S. Census Bureau. 2007 NAICS Codes and Titles.

² Higher-wage service includes: NAICS 51 Information, NAICS 52 Finance and insurance, NAICS 53 Real estate and rental and leasing, NAICS 54 Professional and technical services, NAICS 55 Management of companies and enterprises, and NAICS 56 Administrative and waste services. U.S. Census Bureau. 2002 NAICS Codes and Titles.

³ Lower-wage service includes: NAICS 61 Educational services, NAICS 62 Health care and social assistance, NAICS 71 Arts, entertainment, and recreation, NAICS 72 Accommodation and food services, and 81 Other Services (except Public Administration). U.S. Census Bureau. 2007 NAICS Codes and Titles.

Southeastern Illinois—Top 20 Projected Growth Industries

| Rank | NAICS | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Mean Wage, 2005 |
|------|--------|---|---------------------|----------------------------------|----------------------|--------------------|
| | | All Public and Private Employment | 105,830 | 109,519 | 3,683 | |
| | | Total - Declining Industries | 27,876 | 25,494 | -2,386 | |
| | | Total - Growing Industries | 77,954 | 84,025 | 6,069 | |
| 1 | 561/// | Administrative and Support Services | 4,891 | 5,882 | 991 | \$1,294.53 |
| 2 | 611/// | Educational Services | 12,864 | 13,849 | 985 | \$2,566.18 |
| 3 | 722/// | Food Services and Drinking Places | 7,765 | 8,533 | 768 | \$914.86 |
| 4 | 623/// | Nursing and Residential Care Facilities | 4,996 | 5,629 | 632 | \$1,681.31 |
| 5 | 621/// | Ambulatory Health Care Services | 3,700 | 4,246 | 546 | \$3,577.79 |
| 6 | 624/// | Social Assistance | 2,199 | 2,451 | 252 | \$1,552.60 |
| 7 | 493/// | Warehousing and Storage | 1,030 | 1,278 | 248 | \$3,510.00 |
| 8 | 541/// | Professional, Scientific and Tech. Services | 1,803 | 2,005 | 202 | \$2,933.91 |
| 9 | 813/// | Religious, Civic and Professional Orgs. | 2,528 | 2,659 | 131 | \$1,058.22 |
| 10 | 444/// | Building Material and Garden Equip. Stores | 1,161 | 1,273 | 112 | \$1,881.84 |
| 11 | 441/// | Motor Vehicle and Parts Dealers | 1,927 | 2,025 | 98 | \$2,653.19 |
| 12 | 423/// | Merchant Wholesalers, Durable Goods | 1,873 | 1,968 | 95 | \$3,187.39 |
| 13 | 452/// | General Merchandise Stores | 3,526 | 3,612 | 86 | \$1,713.74 |
| 14 | 811/// | Repair and Maintenance | 1,156 | 1,239 | 83 | \$2,197.00 |
| 15 | 622/// | Hospitals | 4,428 | 4,507 | 79 | n/a |
| 16 | 484/// | Truck Transportation | 1,955 | 2,026 | 71 | \$3,242.88 |
| 17 | 238/// | Specialty Trade Contractors | 2,559 | 2,627 | 68 | \$2,807.11 |
| 18 | 326/// | Plastics and Rubber Products Mfg. | 2,275 | 2,339 | 64 | \$3,168.80 |
| 19 | 713/// | Amusements, Gambling and Recreation Ind. | 710 | 772 | 62 | \$1,167.68 |
| 20 | 424/// | Merchant Wholesalers, Nondurable Goods | 2,422 | 2,483 | 61 | \$2,658.16 |

Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

Southeastern Illinois—Top 20 Projected Growth Occupations Summary

- The Health Diagnosing/Treating Practitioners occupation, with a mean wage of \$54,741, is projected to produce the highest level of growth averaging 44 jobs annually from 2004 through 2014.
- The top five occupations, Health Diagnosing/Treating Practitioners, Food and Beverage Serving Workers, Primary/Secondary/Special Education School Teachers, Postsecondary Faculty, and Motor Vehicle Operators make up 34.9% of the total projected job growth in the Southeastern Illinois region.
- The mean wage in the Southeastern Illinois regions' top growth occupations range from a low of \$15,844 for Other Food Preparations/Serving Workers to a high of \$97,928 for Top Executives.
- The top 20 growth occupations are projected to create 81.5% of new jobs in the Southeastern Illinois region.

Southeastern Illinois—Top 20 Projected Growth Occupations

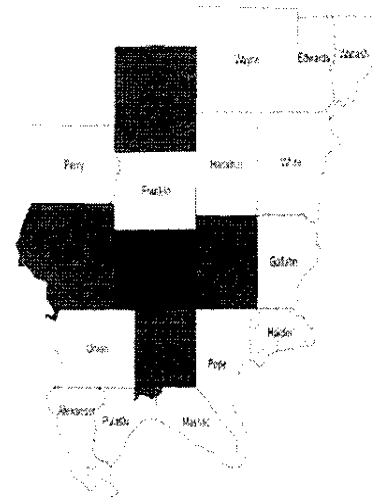
| Rank | SOC | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Annual Growth | Annual Replacements | Mean Wage, 2005 |
|------|---------|---|---------------------|----------------------------------|----------------------|---------------|------------------------|--------------------|
| | | All Public and Private Employment | 135,362 | 137,769 | 2,401 | | | |
| | | Total - Growing Occupations | 85,628 | 90,962 | 5,332 | | | |
| | | Total - Declining Occupations | 49,734 | 46,807 | -2,931 | | | |
| 1 | 29-1000 | Health Diagnosng/Treatng Practitnrs | 3,662 | 4,106 | 444 | 44 | 70 | \$54,741 |
| 2 | 35-3000 | Food and Beverage Serving Workers | 4,198 | 4,586 | 387 | 39 | 201 | \$16,980 |
| 3 | 25-2000 | Primary/Sec./Special Ed Sch Teachrs | 4,893 | 5,260 | 367 | 37 | 116 | \$45,393 |
| 4 | 25-1000 | Postsecondary Faculty | 2,043 | 2,403 | 360 | 36 | 43 | \$23,827 |
| 5 | 53-3000 | Motor Vehicle Operators | 3,969 | 4,270 | 301 | 30 | 59 | \$33,759 |
| 6 | 13-1000 | Business Operations Specialists | 2,560 | 2,820 | 261 | 26 | 46 | \$55,966 |
| 7 | 31-1000 | Nursing, Psych and Home Health Aides | 2,402 | 2,652 | 250 | 25 | 31 | \$19,575 |
| 8 | 29-2000 | Health Technologists and Technicians | 2,216 | 2,428 | 213 | 21 | 38 | \$31,143 |
| 9 | 35-2000 | Cooks and Food Preparation Workers | 2,778 | 2,991 | 213 | 21 | 89 | \$18,540 |
| 10 | 37-2000 | Bldg Cleaning and Pest Control Wrkrs | 2,944 | 3,139 | 195 | 20 | 57 | \$22,106 |
| 11 | 39-9000 | Other Personal Care/ Service Workers | 2,053 | 2,243 | 189 | 19 | 47 | \$16,888 |
| 12 | 15-1000 | Computer Specialists | 1,449 | 1,631 | 182 | 18 | 19 | \$54,583 |
| 13 | 21-1000 | Counselors/Soc Wrkrs/ Comm Srv Specs | 1,675 | 1,854 | 178 | 18 | 32 | \$38,652 |
| 14 | 41-2000 | Retail Sales Workers | 6,883 | 7,051 | 168 | 17 | 286 | \$21,984 |
| 15 | 31-9000 | Other Healthcare Support Occupations | 1,000 | 1,150 | 150 | 15 | 22 | \$27,246 |
| 16 | 35-9000 | Other Food Prep/Serving Workers | 1,379 | 1,489 | 110 | 11 | 45 | \$15,844 |
| 17 | 49-3000 | Vehicle and Mobile Eqpt Mechs/Instllrs | 1,643 | 1,748 | 105 | 11 | 39 | \$29,427 |
| 18 | 25-9000 | Other Educ. Trng and Library Occs | 1,275 | 1,370 | 95 | 10 | 24 | \$24,653 |
| 19 | 47-2000 | Construction Trades Workers | 4,508 | 4,601 | 93 | 9 | 80 | \$38,565 |
| 20 | 11-1000 | Top Executives | 1,913 | 1,997 | 84 | 8 | 36 | \$97,928 |

Source: Illinois Department of Employment Security

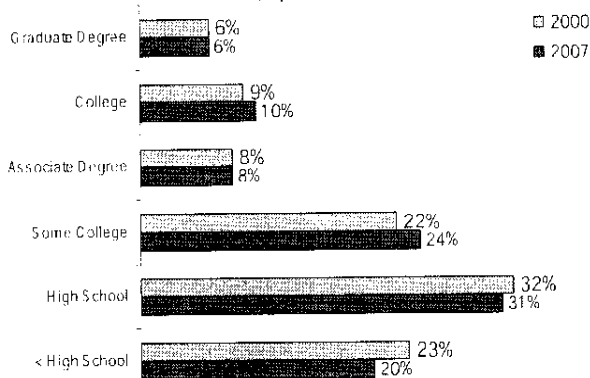
SOUTHERN REGIONAL SUMMARY

| Profile | 2000 | 2007 | % Change |
|--------------------------|---------|---------|----------|
| Population (1/1/2007): | 389,777 | 386,795 | -0.77% |
| Population, Median Age: | 37.5 | 38.2 | 1.79% |
| Percent Population 65+: | 63,843 | 61,309 | -3.97% |
| White Population, Alone: | 355,337 | 351,648 | -1.04% |
| Black Population, Alone: | 24,346 | 23,090 | -5.16% |
| Asian Population, Alone: | 3,026 | 3,418 | 12.95% |
| Other Population: | 7,068 | 8,639 | 22.23% |
| Hispanic Population: | 5,402 | 7,983 | 47.78% |

County Job Gain/Loss 2000-2007



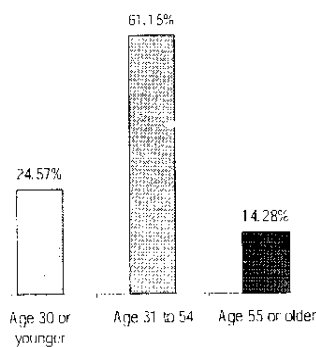
Percent of Population by Educational Attainment (Pop. Over 25)



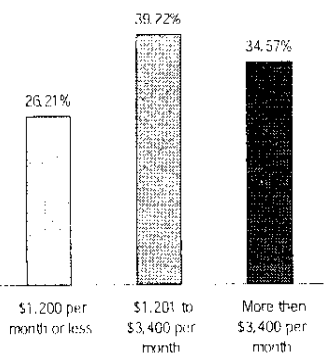
Total Employment 2000-2007

| Area Name | 2000 | 2007 | % Change |
|-------------------|----------------|----------------|--------------|
| Alexander County | 3,281 | 3,014 | -8.14% |
| Edwards County | 3,281 | 3,137 | -4.39% |
| Franklin County | 16,077 | 16,781 | 4.38% |
| Gallatin County | 2,590 | 2,511 | -3.05% |
| Hamilton County | 3,706 | 3,630 | -2.05% |
| Hardin County | 1,773 | 1,695 | -4.40% |
| Jackson County | 28,131 | 27,688 | -1.57% |
| Jefferson County | 17,618 | 18,183 | 3.21% |
| Johnson County | 4,405 | 4,794 | 8.83% |
| Massac County | 6,721 | 6,868 | 2.19% |
| Perry County | 9,181 | 9,278 | 1.06% |
| Pope County | 1,883 | 1,815 | -3.61% |
| Pulaski County | 2,883 | 2,688 | -6.76% |
| Saline County | 10,543 | 10,445 | -0.93% |
| Union County | 7,573 | 7,753 | 2.38% |
| Wabash County | 6,253 | 6,135 | -1.89% |
| Wayne County | 7,653 | 7,522 | -1.71% |
| White County | 6,734 | 6,718 | -0.24% |
| Williamson County | 27,212 | 28,945 | 6.37% |
| Total | 167,498 | 169,600 | 1.25% |

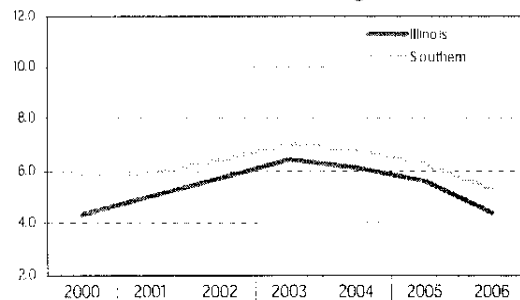
Primary Jobs by Worker Age



Primary Jobs by Earnings Paid



Unemployment Rate 2000 - 2006 Illinois and the Southern Region



| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|----------|------|------|------|------|------|------|------|
| Illinois | 4.3 | 5.0 | 5.7 | 6.4 | 6.1 | 5.6 | 4.4 |
| Southern | 5.9 | 5.9 | 6.4 | 7.0 | 6.8 | 6.2 | 5.3 |

Southern Illinois Industry Structure Summary

- The Southern Illinois region lost 775 manufacturing jobs (9.5%) from 2003 – 2005.
- The region has an annual mean wage of \$39,044 for stable manufacturing jobs.
- Manufacturing jobs make up 6.6% of total employment in the Southern Illinois region.
- Higher-wage service jobs make up 10.7% of total employment in the Southern Illinois region.
- Lower-wage service jobs make up 36.2% of total employment in the Southern Illinois region.

| Southern Illinois—Industry Structure | | | | | | | |
|--|------------------|------------------|-----------------------------|-------------------------------|-----------------------------|----------------------------------|--|
| Sector | Employment, 2003 | Employment, 2005 | Employment Change 2003–2005 | Separations Stable Jobs, 2005 | New Hires Stable Jobs, 2005 | Stable Jobs: Mean Earnings, 2005 | New Hires Stable Jobs: Mean Earnings, 2005 |
| Total Public/Private Employment In Sectors | 110,477 | 111,300 | 823 | 10,628 | 10,038 | \$31,346 | \$21,471 |
| Manufacturing Total | 8,138 | 7,363 | -775 | 416 | 249 | \$39,044 | \$30,721 |
| Higher-Wage Service | 11,557 | 11,881 | 324 | 1,194 | 1,490 | \$26,413 | \$18,287 |
| Lower-Wage Service | 39,469 | 40,315 | 846 | 4,468 | 3,426 | \$22,780 | \$15,026 |

Source: Illinois Department of Employment Security.
 *Total differs from the total employment data in the other tables because it excludes self-employed and agricultural workers

Southern Illinois—Top 20 Projected Growth Occupations Summary

- The Postsecondary Faculty occupation, with a mean wage of \$27,336, is projected to produce the highest level of growth averaging 122 jobs annually from 2004 through 2014.
- The top five growth occupations, Postsecondary Faculty, Health Diagnosing/Treating Practitioners, Primary/Secondary/Special Education School Teachers, Food and Beverage Serving Workers and Motor Vehicle Operators are projected to create 40.0% of all new jobs in the Southern Illinois region.
- The weighted mean wage in the Southern Illinois regions' top growth occupations range from a low of \$15,447 for Food and Beverage Serving Workers to a high of \$57,620 for Health Diagnosing/Treating Practitioners.
- The top 20 growth occupations are projected to create 84.3% of all new jobs in the Southern Illinois region.

¹ Includes: NAICS 31-33 Manufacturing. U.S. Census Bureau. 2007 NAICS Codes and Titles.

² Higher-wage service includes: NAICS 51 Information, NAICS 52 Finance and insurance, NAICS 53 Real estate and rental and leasing, NAICS 54 Professional and technical services, NAICS 55 Management of companies and enterprises, and NAICS 56 Administrative and waste services. U.S. Census Bureau. 2002 NAICS Codes and Titles.

³ Lower-wage service includes: NAICS 61 Educational services, NAICS 62 Health care and social assistance, NAICS 71 Arts, entertainment, and recreation, NAICS 72 Accommodation and food services, and 81 Other Services (except Public Administration). U.S. Census Bureau. 2007 NAICS Codes and Titles.

Southern Illinois—Top 20 Projected Growth Industries

| Rank | NAICS | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Mean Wage, 2005 |
|------|--------|---|---------------------|----------------------------------|----------------------|--------------------|
| | | All Public and Private Employment | 117,380 | 122,547 | 5,167 | |
| | | Total - Declining Industries | 15,424 | 13,461 | -1,963 | |
| | | Total - Growing Industries | 101,956 | 109,086 | 7,130 | |
| 1 | 611/// | Educational Services | 22,438 | 24,063 | 1,625 | \$31,758.13 |
| 2 | 722/// | Food Services and Drinking Places | 10,447 | 11,242 | 795 | \$12,224.28 |
| 3 | 621/// | Ambulatory Health Care Services | 5,051 | 5,844 | 793 | \$44,284.44 |
| 4 | 623/// | Nursing and Residential Care Facilities | 4,704 | 5,274 | 570 | \$19,361.84 |
| 5 | 561/// | Administrative and Support Services | 3,668 | 4,090 | 422 | \$21,042.41 |
| 6 | 541/// | Professional, Scientific and Tech. Services | 2,865 | 3,264 | 399 | \$33,882.72 |
| 7 | 624/// | Social Assistance | 2,353 | 2,655 | 302 | \$18,341.23 |
| 8 | 238/// | Specialty Trade Contractors | 2,995 | 3,213 | 218 | \$36,180.66 |
| 9 | 813/// | Religious, Civic and Professional Orgs. | 3,681 | 3,883 | 202 | \$18,359.06 |
| 10 | 622/// | Hospitals | 7,084 | 7,260 | 176 | \$36,908.28 |
| 11 | 336/// | Transportation Equipment Mfg. | 4,541 | 4,705 | 164 | \$38,074.77 |
| 12 | 441/// | Motor Vehicle and Parts Dealers | 2,297 | 2,458 | 161 | \$32,273.68 |
| 13 | 713/// | Amusements, Gambling and Recreation Ind. | 1,519 | 1,633 | 114 | \$21,679.07 |
| 14 | 444/// | Building Material and Garden Equip. Stores | 1,293 | 1,396 | 103 | \$24,085.05 |
| 15 | 452/// | General Merchandise Stores | 4,297 | 4,398 | 101 | \$20,262.51 |
| 16 | 721/// | Accommodation | 915 | 1,010 | 95 | \$14,970.48 |
| 17 | 423/// | Merchant Wholesalers, Durable Goods | 1,616 | 1,706 | 90 | \$38,238.03 |
| 18 | 484/// | Truck Transportation | 1,645 | 1,735 | 90 | \$33,316.50 |
| 19 | 443/// | Electronics and Appliance Stores | 588 | 662 | 74 | \$26,124.12 |
| 20 | 811/// | Repair and Maintenance | 1,116 | 1,190 | 74 | \$26,293.77 |

Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

Southern Illinois—Top 20 Projected Growth Industries Summary

- The Southern Illinois region is projected to gain 5,215 net new jobs between 2004 and 2014, a 4.5% increase. This is less than the statewide projected net increase of 9.3%.
- 59.0% of all new jobs between 2004 and 2014 are projected to be created by five industries: Educational Services with a weighted mean wage of \$31,758; Food Services and Drinking Places with a weighted mean wage of \$12,224; Ambulatory Health Care Services with a weighted mean wage of \$44,284; Nursing and Residential Care Facilities with a weighted mean wage of \$19,362; and Administrative and Support Services with a weighted mean wage of \$21,042. These five industries are projected to create 4,205 new jobs between 2004 and 2014.
- Mean annual wages in the Southern Illinois region's top growth sectors range from a low of \$12,224 for Food Services and Drinking Places to a high of \$44,284 for Ambulatory Health Care Services.
- The top 20 growth sectors are projected to create 92.1% of all new jobs in the Southern Illinois region.

Southern Illinois—Top 20 Projected Growth Occupations

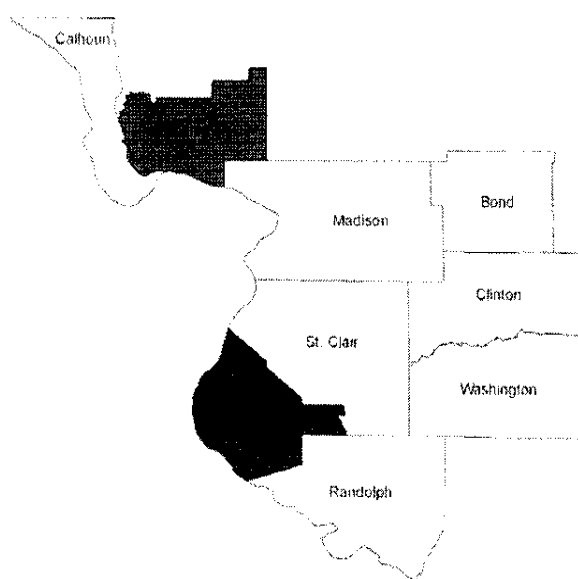
| Rank | SOC | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Annual Growth | Annual Replacements | Mean Wage, 2005 |
|------|---------|---|---------------------|----------------------------------|----------------------|---------------|------------------------|--------------------|
| | | All Public and Private Employment | 164,579 | 168,120 | 3,542 | | | |
| | | Total - Growing Occupations | 98,336 | 104,987 | 6,652 | | | |
| | | Total - Declining Occupations | 60,170 | 57,067 | -3,102 | | | |
| 1 | 25-1000 | Postsecondary Faculty | 5,387 | 6,111 | 723 | 72 | 122 | \$27,336 |
| 2 | 29-1000 | Health Diagnosng/ Treating Practitnrs | 5,260 | 5,907 | 647 | 65 | 102 | \$57,620 |
| 3 | 25-2000 | Primary/Sec./Special Ed Sch Teachrs | 6,301 | 6,841 | 540 | 54 | 149 | \$50,160 |
| 4 | 35-3000 | Food and Beverage Serving Workers | 5,560 | 5,967 | 407 | 41 | 266 | \$15,447 |
| 5 | 53-3000 | Motor Vehicle Operators | 4,302 | 4,644 | 342 | 34 | 66 | \$30,812 |
| 6 | 13-1000 | Business Operations Specialists | 3,395 | 3,695 | 300 | 30 | 60 | \$56,827 |
| 7 | 29-2000 | Health Technologists and Technicians | 3,027 | 3,295 | 267 | 27 | 53 | \$30,861 |
| 8 | 37-2000 | Bldg Cleaning and Pest Control Wrkrs | 4,053 | 4,292 | 239 | 24 | 79 | \$20,694 |
| 9 | 35-2000 | Cooks and Food Preparation Workers | 3,690 | 3,928 | 238 | 24 | 119 | \$17,732 |
| 10 | 31-1000 | Nursing, Psych and Home Health Aides | 2,567 | 2,802 | 235 | 23 | 33 | \$18,622 |
| 11 | 15-1000 | Computer Specialists | 1,896 | 2,126 | 230 | 23 | 25 | \$47,490 |
| 12 | 47-2000 | Construction Trades Workers | 5,266 | 5,482 | 216 | 22 | 95 | \$45,154 |
| 13 | 41-2000 | Retail Sales Workers | 9,214 | 9,405 | 191 | 19 | 384 | \$21,588 |
| 14 | 39-9000 | Other Personal Care/ Service Workers | 2,639 | 2,824 | 185 | 19 | 61 | \$19,056 |
| 15 | 31-9000 | Other Healthcre Support Occupations | 1,227 | 1,408 | 181 | 18 | 25 | \$27,088 |
| 16 | 21-1000 | Counselors/Soc Wrkrs/ Comm Srv Specs | 2,432 | 2,610 | 178 | 18 | 46 | \$42,438 |
| 17 | 25-9000 | Other Educ. Trng and Library Occs | 1,806 | 1,948 | 142 | 14 | 33 | \$21,198 |
| 18 | 49-3000 | Vehicle and Mobile Eqpt Mechs/Instllrs | 1,865 | 1,995 | 130 | 13 | 46 | \$31,549 |
| 19 | 35-9000 | Other Food Prep/ Serving Workers | 1,814 | 1,931 | 118 | 12 | 60 | \$18,454 |
| 20 | 13-2000 | Financial Specialists | 2,288 | 2,385 | 98 | 10 | 42 | \$48,709 |

Source: Illinois Department of Employment Security

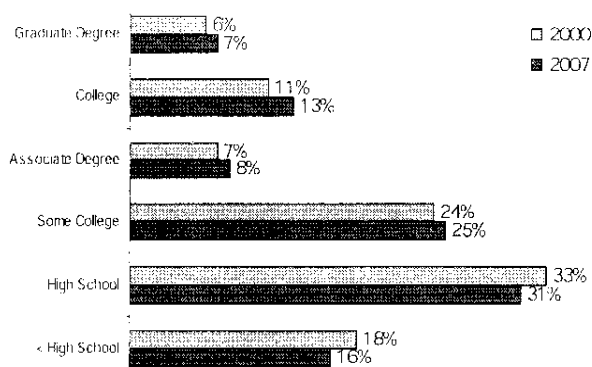
SOUTHWESTERN REGIONAL SUMMARY

| Profile | 2000 | 2007 | % Change |
|--------------------------|---------|---------|----------|
| Population (1/1/2007): | 671,603 | 690,062 | 2.75% |
| Population, Median Age: | 36.4 | 36.7 | 0.87% |
| Percent Population 65+: | 93,977 | 92,803 | -1.25% |
| White Population, Alone: | 555,651 | 572,228 | 2.98% |
| Black Population, Alone: | 98,625 | 95,421 | -3.25% |
| Asian Population, Alone: | 4,502 | 5,841 | 29.74% |
| Other Population: | 12,825 | 16,572 | 29.22% |
| Hispanic Population: | 11,378 | 16,426 | 44.37% |

County Job Gain/Loss 2000-2007



Percent of Population by Educational Attainment (Pop. Over 25)

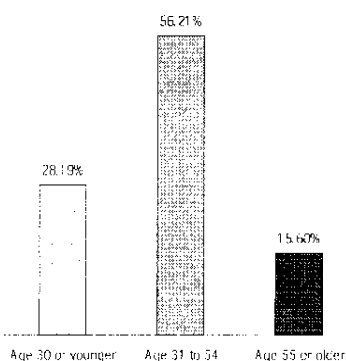


Legend for County Job Gain/Loss 2000-2007:
 Greater than 15% Growth (Solid Black)
 6% to 15% Growth (Dark Grey)
 1% - 6% Loss (Light Grey)
 Greater than 8% Loss (Checkered)
 No Significant Change (White)

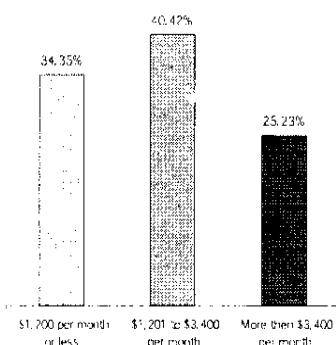
Total Employment 2000-2007

| Area Name | 2000 | 2007 | % Change |
|-------------------|----------------|----------------|--------------|
| Bond County | 7,711 | 8,055 | 4.46% |
| Calhoun County | 2,335 | 2,416 | 3.47% |
| Clinton County | 17,153 | 17,935 | 4.56% |
| Jersey County | 10,340 | 11,041 | 6.78% |
| Madison County | 123,641 | 129,694 | 4.90% |
| Monroe County | 14,502 | 16,959 | 16.94% |
| Randolph County | 14,031 | 13,864 | -1.19% |
| St. Clair County | 110,540 | 116,357 | 5.26% |
| Washington County | 7,669 | 7,617 | -0.68% |
| Total | 307,922 | 323,938 | 5.20% |

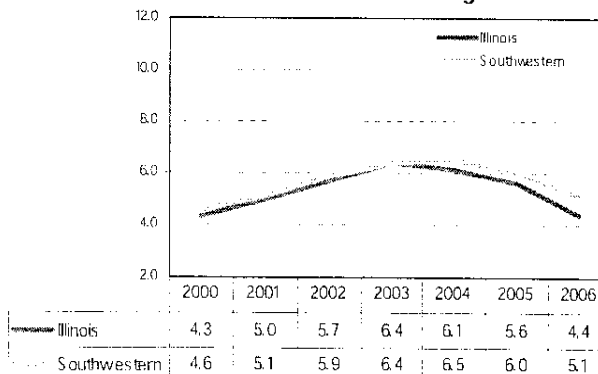
Primary Jobs by Worker Age



Primary Jobs by Earnings Paid



Unemployment Rate 2000 - 2006 Illinois and the Southwestern Region



Southwestern Illinois Industry Structure Summary

- The Southwestern Illinois region lost 24,861 manufacturing jobs (51.4%) from 2003 – 2005, the only region that showed a dramatic decrease in the manufacturing industry.
- The region has an annual mean wage of \$45,161 for stable manufacturing jobs.
- Manufacturing jobs make up 11.6% of total employment in the Southwestern Illinois region.
- Higher-wage service jobs make up 13.8% of total employment in the Southwestern Illinois region.
- Lower-wage service jobs make up 36.9% of total employment in the Southwestern Illinois region.

| Southwestern Illinois—Industry Structure | | | | | | | |
|--|------------------|------------------|-----------------------------|-------------------------------|-----------------------------|----------------------------------|--|
| Sector | Employment, 2003 | Employment, 2005 | Employment Change 2003–2005 | Separations Stable Jobs, 2005 | New Hires Stable Jobs, 2005 | Stable Jobs: Mean Earnings, 2005 | New Hires Stable Jobs: Mean Earnings, 2005 |
| Total Public/Private Employment In Sectors | 202,345 | 202,520 | 175 | 19,380 | 18,002 | \$34,183 | \$21,751 |
| Manufacturing Total | 48,329 | 23,468 | -24,861 | 1,108 | 996 | \$45,161 | \$28,402 |
| Higher-Wage Service | 26,690 | 27,907 | 1,217 | 2,814 | 3,213 | \$36,183 | \$26,239 |
| Lower-Wage Service | 74,520 | 74,659 | 139 | 8,474 | 6,677 | \$23,070 | \$14,474 |

Source: Illinois Department of Employment Security.
 *Total differs from the total employment data in the other tables because it excludes self-employed and agricultural workers

Southwestern Illinois—Top 20 Projected Growth Occupations Summary

- Two occupations of the top twenty in the region are expected to grow faster in the region than in the state: Postsecondary Faculty (1.2% faster than the state average for this occupation) and Lawyers, Judges and Related Workers (0.7% faster than the state average for this occupation).
- The occupation of Primary/Secondary/Special Education School Teachers, with a mean wage of \$52,495, is projected to produce the highest level of growth averaging 138 jobs annually from 2004 through 2014.
- The top five growth occupations, Primary/Secondary/Special Education School Teachers, Health Diagnosing/Treating Practitioners, Food and Beverage Serving Workers, Motor Vehicle Operators, and Business Operations Specialists are projected to create 31.1% of all new jobs in the Southwestern Illinois region.
- The weighted mean wage in the Southwestern Illinois region's top growth occupations range from a low of \$16,653 for Other Food Preparation/Serving Workers to a high of \$112,127 for Top Executives.
- The top 20 growth occupations are projected to create 75.5% of all new jobs in the Southwestern Illinois region.

¹ Includes: NAICS 31-33 Manufacturing. U.S. Census Bureau. 2007 NAICS Codes and Titles.

² Higher-wage service includes: NAICS 51 Information, NAICS 52 Finance and insurance, NAICS 53 Real estate and rental and leasing, NAICS 54 Professional and technical services, NAICS 55 Management of companies and enterprises, and NAICS 56 Administrative and waste services. U.S. Census Bureau. 2002 NAICS Codes and Titles.

³ Lower-wage service includes: NAICS 61 Educational services, NAICS 62 Health care and social assistance, NAICS 71 Arts, entertainment, and recreation, NAICS 72 Accommodation and food services, and 81 Other Services (except Public Administration). U.S. Census Bureau. 2007 NAICS Codes and Titles.

Southwestern Illinois—Top 20 Projected Growth Industries

| Rank | NAICS | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Mean Wage, 2005 |
|------|--------|--|---------------------|----------------------------------|----------------------|--------------------|
| | | All Public and Private Employment | 223,609 | 238,523 | 14,914 | |
| | | Total - Declining Industries | 43,667 | 40,244 | -3,423 | |
| | | Total - Growing Industries | 179,942 | 198,279 | 18,337 | |
| 1 | 611/// | Educational Services | 24,905 | 27,472 | 2,567 | \$31,476.22 |
| 2 | 722/// | Food Services and Drinking Places | 20,420 | 22,504 | 2,084 | \$12,797.62 |
| 3 | 621/// | Ambulatory Health Care Services | 8,901 | 10,901 | 2,000 | \$48,474.75 |
| 4 | 541/// | Professional, Scientific and Tech. Services | 9,272 | 10,919 | 1,647 | \$55,681.85 |
| 5 | 561/// | Administrative and Support Services | 7,452 | 8,785 | 1,333 | \$24,359.99 |
| 6 | 623/// | Nursing and Residential Care Facilities | 6,699 | 7,760 | 1,061 | \$22,685.83 |
| 7 | 813/// | Religious, Civic and Professional Orgs. | 7,518 | 8,292 | 774 | \$17,742.08 |
| 8 | 624/// | Social Assistance | 4,723 | 5,424 | 701 | \$20,237.84 |
| 9 | 238/// | Specialty Trade Contractors | 8,240 | 8,848 | 608 | \$41,516.14 |
| 10 | 811/// | Repair and Maintenance | 3,272 | 3,763 | 491 | \$30,915.07 |
| 11 | 622/// | Hospitals | 11,653 | 12,120 | 467 | \$32,783.59 |
| 12 | 441/// | Motor Vehicle and Parts Dealers | 4,218 | 4,635 | 418 | \$42,659.29 |
| 13 | 713/// | Amusements, Gambling and Recreation Ind. | 4,707 | 5,122 | 414 | \$28,116.64 |
| 14 | 493/// | Warehousing and Storage | 1,137 | 1,490 | 353 | \$31,273.56 |
| 15 | 484/// | Truck Transportation | 3,928 | 4,229 | 301 | \$39,525.02 |
| 16 | 452/// | General Merchandise Stores | 8,118 | 8,409 | 291 | \$19,414.33 |
| 17 | 444/// | Building Material and Garden Equip. Stores | 2,690 | 2,980 | 290 | \$29,936.98 |
| 18 | 236/// | Construction of Buildings | 3,847 | 4,120 | 273 | \$41,164.12 |
| 19 | 812/// | Personal and Laundry Services | 2,151 | 2,372 | 221 | \$19,294.94 |
| 20 | 522/// | Credit Intermediation and Related Activities | 4,477 | 4,677 | 200 | \$35,077.37 |

Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

Southwestern Illinois—Top 20 Projected Growth Industries Summary

- The Southwestern Illinois region is projected to gain 14,914 additional jobs between 2004 and 2014, a 6.7% increase. This is less than the statewide projected net increase of 9.3%.
- 52.5% of all new jobs projected to be created between 2004 and 2014 are expected to occur within five industries: Educational Services with a weighted mean wage of \$31,476; Food Services and Drinking Places with a weighted mean wage of \$12,797; Ambulatory Health Care Services with a weighted mean wage of \$48,474; Professional, Scientific and Technical Services with a weighted mean wage of \$55,682; and Administrative and Support Services with a weighted mean wage of \$24,359. These five industries are projected to create 9,631 new jobs.
- Mean annual wages in the Southwestern Illinois regions' top growth sectors range from a low of \$12,798 for Food Services and Drinking Places to a high of \$55,682 for Professional, Scientific and Technical Services.
- The top 20 growth sectors are projected to create 89.9% of all new jobs in the Southwestern Illinois region.

Southwestern Illinois—Top 20 Projected Growth Occupations

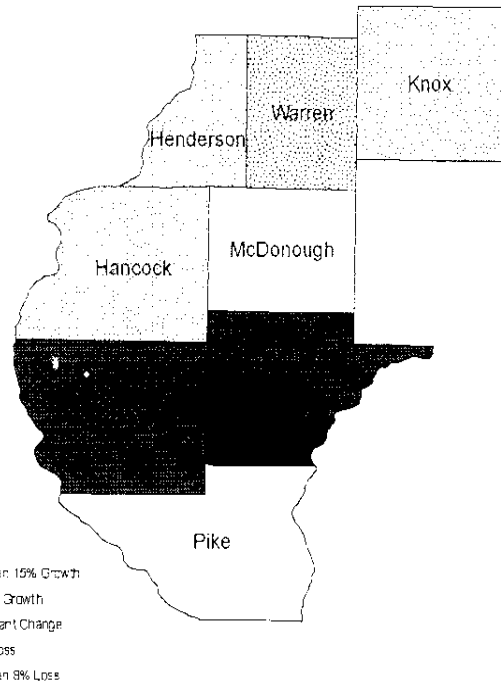
| Rank | SOC | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Annual Growth | Annual Replacements | Mean Wage, 2005 |
|------|---------|--|---------------------|----------------------------------|----------------------|---------------|------------------------|--------------------|
| | | All Public and Private Employment | 273,011 | 287,608 | 14,602 | | | |
| | | Total - Growing Occupations | 226,002 | 243,467 | 17,467 | | | |
| | | Total - Declining Occupations | 46,709 | 43,842 | -2,864 | | | |
| 1 | 25-2000 | Primary/Sec./Special Ed Sch Teachrs | 10,647 | 12,031 | 1,384 | 138 | 250 | \$52,495 |
| 2 | 29-1000 | Health Diagnosng/ Treating Practitnrs | 8,696 | 10,036 | 1,340 | 134 | 171 | \$59,673 |
| 3 | 35-3000 | Food and Beverage Serving Workers | 10,942 | 11,984 | 1,043 | 104 | 524 | \$16,961 |
| 4 | 53-3000 | Motor Vehicle Operators | 8,849 | 9,696 | 847 | 85 | 139 | \$32,541 |
| 5 | 13-1000 | Business Operations Specialists | 6,180 | 6,992 | 812 | 81 | 111 | \$63,394 |
| 6 | 15-1000 | Computer Specialists | 3,644 | 4,398 | 754 | 75 | 48 | \$66,436 |
| 7 | 41-2000 | Retail Sales Workers | 17,136 | 17,808 | 672 | 67 | 713 | \$23,500 |
| 8 | 47-2000 | Construction Trades Workers | 12,237 | 12,896 | 659 | 66 | 222 | \$50,393 |
| 9 | 29-2000 | Health Technologists and Technicians | 5,130 | 5,778 | 648 | 65 | 91 | \$35,184 |
| 10 | 35-2000 | Cooks and Food Preparation Workers | 6,877 | 7,518 | 641 | 64 | 222 | \$19,381 |
| 11 | 37-2000 | Bldg Cleaning and Pest Control Wrkrs | 6,685 | 7,324 | 639 | 64 | 131 | \$23,379 |
| 12 | 31-1000 | Nursing, Psych and Home Health Aides | 4,041 | 4,567 | 526 | 53 | 53 | \$22,547 |
| 13 | 25-1000 | Postsecondary Faculty | 3,232 | 3,737 | 506 | 51 | 70 | \$41,225 |
| 14 | 39-9000 | Other Personal Care/ Service Workers | 4,491 | 4,956 | 465 | 47 | 103 | \$21,587 |
| 15 | 49-3000 | Vehcle and Mobile Eqpt Mechs/Instllrs | 3,775 | 4,215 | 441 | 44 | 96 | \$35,765 |
| 16 | 21-1000 | Counselors/Soc Wrkrs/ Comm Srv Specs | 3,587 | 4,025 | 438 | 44 | 69 | \$46,079 |
| 17 | 31-9000 | Other Healthcre Support Occupations | 2,263 | 2,676 | 413 | 41 | 47 | \$25,831 |
| 18 | 11-1000 | Top Executives | 4,082 | 4,412 | 330 | 33 | 76 | \$112,127 |
| 19 | 25-9000 | Other Educ. Trng and Library Occs | 2,816 | 3,146 | 330 | 33 | 52 | \$25,605 |
| 20 | 35-9000 | Other Food Prep/ Serving Workers | 3,422 | 3,724 | 302 | 30 | 113 | \$16,653 |

Source: Illinois Department of Employment Security

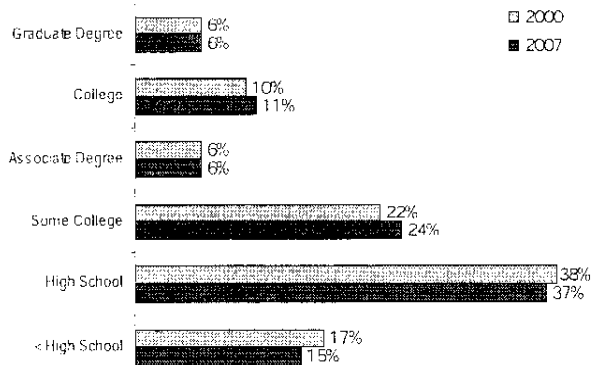
WEST CENTRAL REGIONAL SUMMARY

| Profile | 2000 | 2007 | % Change |
|--------------------------|---------|---------|----------|
| Population (1/1/2007): | 235,618 | 225,985 | -4.09% |
| Population, Median Age: | 37.5 | 38.1 | 1.46% |
| Percent Population 65+: | 40,183 | 37,654 | -6.29% |
| White Population, Alone: | 221,142 | 211,093 | -4.54% |
| Black Population, Alone: | 8,645 | 8,164 | -5.56% |
| Asian Population, Alone: | 1,560 | 1,734 | 11.15% |
| Other Population: | 4,271 | 4,994 | 16.93% |
| Hispanic Population: | 4,034 | 5,507 | 36.51% |

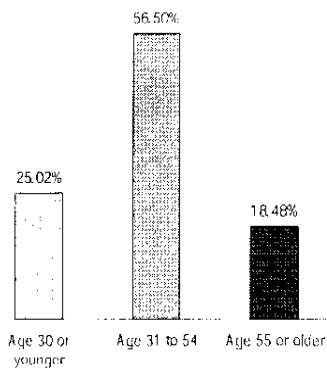
County Job Gain/Loss 2000-2007



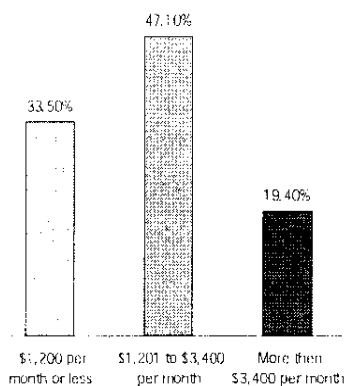
Percent of Population by Educational Attainment (Pop. Over 25)



Primary Jobs by Worker Age



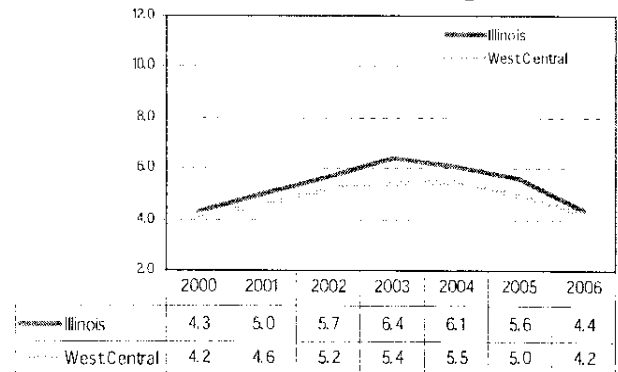
Primary Jobs by Earnings Paid



Total Employment 2000-2007

| Area Name | 2000 | 2007 | % Change |
|------------------|----------------|----------------|---------------|
| Adams County | 33,339 | 33,257 | -0.25% |
| Brown County | 2,554 | 2,514 | -1.57% |
| Hancock County | 10,018 | 9,566 | -4.51% |
| Henderson County | 3,994 | 3,815 | -4.48% |
| Knox County | 25,435 | 24,282 | -4.53% |
| McDonough County | 15,962 | 15,699 | -1.65% |
| Pike County | 7,735 | 7,577 | -2.04% |
| Schuyler County | 3,596 | 3,526 | -1.95% |
| Warren County | 9,203 | 8,661 | -5.89% |
| Total | 111,836 | 108,897 | -2.63% |

Unemployment Rate 2000-2006 Illinois and the West Central Region



West Central Illinois Industry Structure Summary

- The West Central Illinois region lost 1,671 manufacturing jobs (16.6%) from 2003 – 2005.
- The region has an annual mean wage of \$39,942 for stable manufacturing jobs.
- Manufacturing jobs make up 11.2% of total employment in the West Central Illinois region.
- Higher-wage service jobs make up 12.1% of total employment in the West Central Illinois region.
- Lower-wage service jobs make up 36.8% of total employment in the West Central Illinois region.

| West Central Illinois—Industry Structure | | | | | | | |
|--|------------------|------------------|-----------------------------|-------------------------------|-----------------------------|----------------------------------|--|
| Sector | Employment, 2003 | Employment, 2005 | Employment Change 2003-2005 | Separations Stable Jobs, 2005 | New Hires Stable Jobs, 2005 | Stable Jobs: Mean Earnings, 2005 | New Hires Stable Jobs: Mean Earnings, 2005 |
| Total Public/Private Employment In Sectors | 75,978 | 74,512 | -1,466 | 6,749 | 5,979 | \$29,828 | \$21,471 |
| Manufacturing Total | 10,041 | 8,370 | -1,671 | 359 | 476 | \$39,942 | \$30,721 |
| Higher-Wage Service | 9,029 | 9,016 | -13 | 934 | 895 | \$28,497 | \$18,287 |
| Lower-Wage Service | 23,382 | 27,394 | 4,012 | 2,816 | 2,416 | \$20,579 | \$15,026 |

Source: Illinois Department of Employment Security.
 *Total differs from the total employment data in the other tables because it excludes self-employed and agricultural workers

West Central Illinois—Top 20 Projected Growth Industries Summary

- The West Central Illinois region is projected to gain 4,080 additional jobs between 2004 and 2014, a 5.1% increase. This is less than the statewide projected net increase of 9.3%.
- 60.3% of all new jobs projected to be created between 2004 and 2014 are projected to occur within five industries: Educational Services with a weighted mean wage of \$31,476; Food Services and Drinking Places with a weighted mean wage of \$12,797; Ambulatory Health Care Services with a weighted mean wage of \$48,474; Professional, Scientific and Technical Services with a weighted mean wage of \$55,682; and Administrative and Support Services with a weighted mean wage of \$24,359. These five industries are projected to create 3,336 new jobs.
- Mean annual wages in the West Central Illinois region's top growth industries range from a low of \$12,798 for Food Services and Drinking Places to a high of \$55,682 for Professional, Scientific and Technical Services.
- The top 20 growth sectors are projected to create 89.9% of all new jobs in the West Central Illinois region.

¹ Includes: NAICS 31-33 Manufacturing. U.S. Census Bureau. 2007 NAICS Codes and Titles.

² Higher-wage service includes: NAICS 51 Information, NAICS 52 Finance and insurance, NAICS 53 Real estate and rental and leasing, NAICS 54 Professional and technical services, NAICS 55 Management of companies and enterprises, and NAICS 56 Administrative and waste services. U.S. Census Bureau. 2002 NAICS Codes and Titles.

³ Lower-wage service includes: NAICS 61 Educational services, NAICS 62 Health care and social assistance, NAICS 71 Arts, entertainment, and recreation, NAICS 72 Accommodation and food services, and 81 Other Services (except Public Administration). U.S. Census Bureau. 2007 NAICS Codes and Titles.

West Central Illinois—Top 20 Projected Growth Industries

| Rank | NAICS | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Mean Wage, 2005 |
|------|--------|--|---------------------|----------------------------------|----------------------|--------------------|
| | | All Public and Private Employment | 81,125 | 85,173 | 4,048 | |
| | | Total - Declining Industries | 16,925 | 15,444 | -1,481 | |
| | | Total - Growing Industries | 64,200 | 69,729 | 5,529 | |
| 1 | 611/// | Educational Services | 11,888 | 13,071 | 1,183 | \$30,640.35 |
| 2 | 623/// | Nursing and Residential Care Facilities | 4,198 | 4,834 | 636 | \$20,194.90 |
| 3 | 722/// | Food Services and Drinking Places | 6,246 | 6,877 | 631 | \$11,214.96 |
| 4 | 621/// | Ambulatory Health Care Services | 2,765 | 3,231 | 466 | \$43,457.42 |
| 5 | 561/// | Administrative and Support Services | 2,605 | 3,025 | 420 | \$24,065.52 |
| 6 | 321/// | Wood Product Manufacturing | 165 | 369 | 204 | \$17,357.05 |
| 7 | 624/// | Social Assistance | 1,670 | 1,864 | 194 | \$21,465.68 |
| 8 | 541/// | Professional, Scientific and Tech. Services | 1,736 | 1,915 | 179 | \$37,264.59 |
| 9 | 813/// | Religious, Civic and Professional Orgs. | 2,404 | 2,577 | 173 | \$16,195.87 |
| 10 | 424/// | Merchant Wholesalers, Nondurable Goods | 3,582 | 3,744 | 162 | \$38,441.01 |
| 11 | 622/// | Hospitals | 4,482 | 4,611 | 129 | \$44,141.97 |
| 12 | 441/// | Motor Vehicle and Parts Dealers | 1,675 | 1,804 | 129 | \$32,287.71 |
| 13 | 238/// | Specialty Trade Contractors | 1,747 | 1,869 | 122 | \$33,831.82 |
| 14 | 484/// | Truck Transportation | 1,937 | 2,029 | 92 | \$41,200.81 |
| 15 | 444/// | Building Material and Garden Equip. Stores | 745 | 826 | 81 | \$26,965.46 |
| 16 | 713/// | Amusements, Gambling and Recreation Ind. | 636 | 708 | 72 | \$14,909.92 |
| 17 | 452/// | General Merchandise Stores | 2,744 | 2,816 | 72 | \$18,750.69 |
| 18 | 443/// | Electronics and Appliance Stores | 356 | 419 | 63 | \$27,053.48 |
| 19 | 492/// | Couriers and Messengers | 164 | 221 | 57 | \$35,796.00 |
| 20 | 522/// | Credit Intermediation and Related Activities | 1,974 | 2,027 | 53 | \$32,005.91 |

Source: Illinois Department of Employment Security.
Totals in declining and growing industry do not include government industries (9-----).

West Central Illinois—Top 20 Projected Growth Occupations Summary

- Only one of the region's Top 20 growth occupations is projected to grow faster than the state average: Postsecondary Faculty (2.2% faster than the state average for this occupation).
- The occupation of Primary/Secondary/Special Education School Teachers, with a mean wage of \$43,115, is projected to produce the highest level of growth, averaging 45 new jobs annually from 2004 through 2014.
- The top five growth occupations, Primary/Secondary/Special Education School Teachers, Health Diagnosing/Treating Practitioners, Postsecondary Faculty, Food and Beverage Serving Workers, and Motor Vehicle Operators are expected to create 38.7% of all new jobs in the West Central Illinois region.
- The weighted mean wage in the West Central Illinois regions' top growth occupations ranges from a low of \$16,003 for Other Food Preparation/Serving Workers to a high of \$56,845 for Postsecondary Faculty.
- The top 20 growth occupations are projected to create 84.6% of all new jobs in the West Central Illinois region.

West Central Illinois—Top 20 Projected Growth Occupations

| Rank | SOC | Title | Employment, 2004 | Projected Employment, 2014 | Employment Change | Annual Growth | Annual Replacements | Mean Wage, 2005 |
|------|---------|---|---------------------|----------------------------------|----------------------|---------------|------------------------|--------------------|
| | | All Public and Private Employment | 111,927 | 114,280 | 2,353 | | | |
| | | Total - Growing Occupations | 63,715 | 68,580 | 4,865 | | | |
| | | Total - Declining Occupations | 49,154 | 46,639 | -2,515 | | | |
| 1 | 25-2000 | Primary/Sec./Special Ed Sch Teachrs | 4,015 | 4,467 | 452 | 45 | 94 | \$43,115 |
| 2 | 29-1000 | Health Diagnosng/Treatng Practitnrs | 3,390 | 3,829 | 439 | 44 | 65 | \$58,899 |
| 3 | 25-1000 | Postsecondary Faculty | 2,427 | 2,831 | 404 | 40 | 52 | \$56,845 |
| 4 | 35-3000 | Food and Beverage Serving Workers | 3,486 | 3,814 | 328 | 33 | 167 | \$16,003 |
| 5 | 53-3000 | Motor Vehicle Operators | 3,473 | 3,735 | 262 | 26 | 52 | \$37,954 |
| 6 | 31-1000 | Nursing, Psych and Home Health Aides | 2,049 | 2,291 | 242 | 24 | 27 | \$19,959 |
| 7 | 29-2000 | Health Technologists and Technicians | 2,004 | 2,210 | 206 | 21 | 34 | \$35,203 |
| 8 | 35-2000 | Cooks and Food Preparation Workers | 2,370 | 2,562 | 192 | 19 | 76 | \$17,389 |
| 9 | 37-2000 | Bldg Cleaning and Pest Control Wrkrs | 2,682 | 2,872 | 190 | 19 | 53 | \$21,786 |
| 10 | 13-1000 | Business Operations Specialists | 2,151 | 2,330 | 179 | 18 | 38 | \$54,617 |
| 11 | 39-9000 | Other Personal Care/Service Workers | 2,009 | 2,184 | 175 | 18 | 47 | \$19,716 |
| 12 | 41-2000 | Retail Sales Workers | 6,388 | 6,547 | 159 | 16 | 267 | \$20,319 |
| 13 | 21-1000 | Counselors/Soc Wrkrs/ Comm Srv Specs | 1,454 | 1,601 | 147 | 15 | 27 | \$39,236 |
| 14 | 15-1000 | Computer Specialists | 1,290 | 1,424 | 134 | 13 | 17 | \$54,547 |
| 15 | 47-2000 | Construction Trades Workers | 3,271 | 3,396 | 125 | 13 | 57 | \$46,226 |
| 16 | 31-9000 | Other Healthcre Support Occupations | 816 | 934 | 118 | 12 | 16 | \$26,486 |
| 17 | 25-9000 | Other Educ. Trng and Library Occs | 1,069 | 1,177 | 108 | 11 | 20 | \$20,815 |
| 18 | 35-9000 | Other Food Prep/Serving Workers | 1,146 | 1,242 | 96 | 10 | 38 | \$15,659 |
| 19 | 49-3000 | Vehicle and Mobile Eqpt Mechs/Instllrs | 1,358 | 1,447 | 89 | 9 | 32 | \$34,103 |
| 20 | 25-3000 | Other Teachers and Instructors | 837 | 908 | 71 | 7 | 10 | \$42,306 |

Source: Illinois Department of Employment Security

GLOSSARY

DEFINITIONS OF TECHNICAL TERMS REFERRED TO IN THE TEXT

African-American

Defined by the U.S. Census Bureau as a person having origins in any of the Black racial groups of Africa.

Hispanic

People of Hispanic origin, in particular, were those who indicated to the Census Bureau that their origin was Mexican, Puerto Rican, Cuban, Central or South American, or some other Hispanic origin. Persons of Hispanic origin may be of any race.

Median Income

Median income is the amount which divides the income distribution into two equal groups, half having incomes above the median, half having incomes below the median. The median-incomes for households, families, and unrelated individuals are based on all households, families, and unrelated individuals, respectively. The median-incomes for people are based on those 15 years old and over with income.

NAICS

The North American Industry Classification System (NAICS) has replaced the U.S. Standard Industrial Classification (SIC) system.

Poverty Line

Varies by family size and is geographically sensitive. There is one set of figures for the 48 contiguous states and D.C., one set for Alaska, and one set for Hawaii. It is calculated by the Department of Health and Human Services to assist in determining eligibility for federal programs.

Poverty Threshold

Following the Office of Management and Budget's (OMB's) Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If a family's total income is less than that family's threshold, then that family, and every individual in it, is considered poor for statistical purposes. The poverty thresholds do not vary geographically, but they are updated annually for inflation with the Consumer Price Index (CPI-U).

SOC

The 2000 Standard Occupational Classification (SOC) system is used by Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of over 820 occupations according to their occupational definition.

DEFINITIONS OF TECHNICAL TERMS USED IN REGIONAL DATA TABLES¹

Employment

Annual mean of the total number of workers employed by a given employer on the first calendar day of the reference quarter.

Separations Stable Jobs

Annual mean of quarterly total number of workers who were hired by a given employer, worked for three consecutive quarters, but were not employed by that employer in the next quarter.

New Hires Stable Jobs

Annual mean of quarterly number of workers who were hired by a given employer and worked for three consecutive quarters, but had not been employed by that employer within the past year.

Employment: Stable Jobs

All workers employed by a given employer in the reference, subsequent, and previous quarters.

Stable Jobs: Mean Earnings

Annual mean of mean monthly earnings for all workers employed by a given employer for three consecutive quarters. Only the mean of the earnings for workers who fit the definition of Employment Stable Jobs are included in this definition.

Hires All Stable Jobs

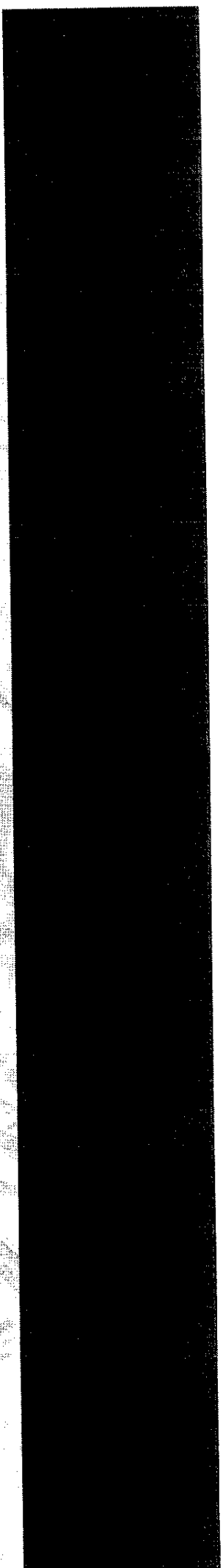
All workers who were first employed at a firm for only the last three consecutive quarters (e.g. in the current quarter and the two preceding quarters but not in the quarter before those.)

Hires New Stable Jobs: Mean Earnings

Annual mean of average monthly earnings for all workers who were hired by a given employer and worked for three consecutive quarters. Only the average of the earnings for workers who fit the definition of Hires All Stable Jobs are included in this definition.

¹ Illinois Department of Employment Security is the source for these definitions.

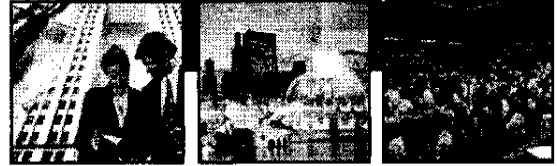
NOTES





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State Government in one place.
No lines. No hassle.



Grants, Loans, and Incentives

Below are links to show you the many ways that the State can help your business succeed. If you need more information, please visit the [Illinois Department of Commerce and Economic Opportunity web site](#) or feel free to [ask them a question online](#).

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- [Illinois EDGE Program](#)
- [Start-Up Incentives](#)
- [Small Business Assistance](#)
- [Women and Minority Business Assistance](#)
- [Tax Incentives](#)
- [Other Incentives](#)
- [Business Incentives](#)

Federal Assistance

- [Start-up Cost Checklist](#)
- [Small Business Loan Checklist](#)
- [Financing Your Business](#)
- [Federal Grant Resources](#)
- [Small Business Innovation Research Program \(SBIR\)](#)
- [Loan Information References](#)
- [Financing Resources](#)
- [The Financing Options: All You Should Know Workbook](#)
- [Investment Companies Program](#)





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Grants

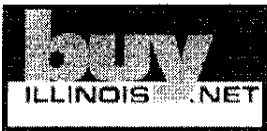
Illinois offers a large number of grants for eligible recipients. These grants can be used for several programs, including research, conservation, business and many others.

- [Agriculture](#)
- [Coal](#)
- [Community](#)
- [Energy](#)
- [General Grantee Forms](#)
- [Grant Closeouts](#)
- [Large Biz](#)
- [Low Income](#)
- [Recycling](#)
- [Small Biz](#)
- [Technology](#)
- [Tourism](#)

Loans

DCEO can provide eligible applicants with loan assistance for their organization, community, business, or home. Check out the following lists to find out how to receive these benefits.

- [Community](#)
- [Large Biz](#)
- [Small Biz](#)
- [Technology](#)



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Illinois EDGE Program

The Illinois EDGE (Economic Development for a Growing Economy) program is intended to help level the playing field between Illinois and its neighboring Midwestern states when competing for the location of large job creation projects.

Program Description

The Illinois EDGE program is administered by the Illinois Department of Commerce and Economic Opportunity (DCEO). A Business Investment Committee of the Illinois Economic Development Board (IEDB) makes recommendations regarding the types of projects that may seek this tax credit. DCEO's review will be based on written applications submitted by interested firms.

The amount of the Tax Credit is calculated on a case-by-case basis. The tax credits could be as high as the amount of tax receipts collected from the Illinois income taxes paid by newly hired and/or retained employees of the firm as pertaining to the project.

As a tax credit, the EDGE program allows a firm to reduce the costs of doing business in Illinois when compared with similar costs in other states where it could have located its operation.

The credits would be available to the firm for up to a total of 10 years for each project.

While each annual tax credit amount cannot be larger than the firm's state income tax liability (the income tax credits would not be refundable), the credit can be carried forward for up to five years.

Each firm receiving competitive credits would have to maintain the jobs created and/or retained along with the capital investment concurrent with the period in which it claims the credits.

Eligibility

The development project must add to the export potential of Illinois; for example, manufacturing or services exported out of state would be acceptable, but not retail trade and personal services.

The project must be an expansion of an existing operation or a new location. Plant relocations within Illinois are eligible for consideration only if there is a documented and substantiated business reason why their current location is inadequate.

Each project must commit to make a capital investment in the state of at least \$5 million and must create a minimum of 25 new jobs (excluding recalls, transfers, etc.), or the project must meet the investment and job creation, and/or retention requirements as set forth by DCEO.

The Applicant must demonstrate that if not for the Credit, the Project would not occur in Illinois by providing documentation evidencing that:

- 1) the Applicant has multi-state location options and could reasonably and efficiently locate outside of the state; or
- 2) at least one other state is being considered for the project; or
- 3) receipt of the Credit is a major factor in the Applicant's decision and that, without the Credit, the Applicant likely would not create and/or retain jobs in Illinois; or
- 4) the Credit is essential to the Applicant's decision to create and/or retain jobs in the state.

The cost differential should be identified, using the best available data, in the projected costs for the Applicant's project compared to the projected costs in the competing state, including the impact of the competing state's incentive programs. The cost differential should, for example, demonstrate the following:

- 1) specific costs of labor, utilities, taxes and other costs of an out-of-state site or the industry's cost structure in the competing region; or

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Start-Up Incentives

Giving Business the Advantage

By providing entrepreneurs with a wealth of incentives to open their businesses here, Illinois enjoys a diverse and potent economy. With small business tax incentives such as Enterprise Zones and other programs, Illinois is devoted to giving its businesses the advantage in today's competitive marketplace.

Learn more about the incentives and programs offered to business owners right here in Illinois.

Illinois Entrepreneurship Network Business Information Center

Assistance

Provides individuals and businesses with access to information and referral assistance to guide them through the permitting, licensing and regulatory processes. First-Stop also can link them to other available resources that can help them comply with government regulations and enhance their competitiveness.

- [Step-by-Step Guide to Starting a Business](#)
- ceo.support@illinois.gov
- For information call 800-252-2923.

High Impact Business Program

Tax Incentive

The purpose of the High Impact Business Program is to provide tax incentives that will stimulate large-scale investment and job creation or retention projects.

- [More about the High Impact Business Program](#)

Illinois Business and Industry Data Center

Resource

The Illinois Business and Industry Data Center (BIDC) is a network of 28 local and regional affiliates, many from colleges and universities, regional planning commissions, public libraries and small business development centers, that works to help entrepreneurs and small businesses easily access statistical data. Local affiliates deal directly with small businesses and other end users of data, while regional affiliates collect and disseminate information to both end users and local affiliates. Regional affiliates also prepare quarterly regional analyses for statewide distribution.

- [More about the Illinois Business and Industry Data Center](#)
- For information call 217-785-6117.

Illinois Enterprise Zone Program

Tax Incentive

The purpose of the Illinois Enterprise Zone Program is to stimulate economic growth and neighborhood revitalization at the local level. This is accomplished through state and local tax incentives, regulatory relief, and improved governmental services.

- [More about the Illinois Enterprise Zone Program](#)

Illinois Technology Enterprise Centers Program (ITECs)

Assistance

Illinois Technology Enterprise Centers serve technology-based

entrepreneurs, innovators and small businesses by assisting them with critical business startup and marketing needs. The regional centers, supported by DCEO, help entrepreneurs locate pre-seed and early stage financing; help innovators in high growth and high technology sectors further their technical and/or managerial skills, and assist with new product development and marketing, thus nurturing new venture development in Illinois.

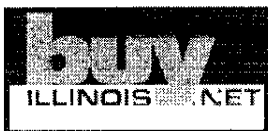
- [More about the Illinois Technology Enterprise Centers](#)
- For Information call 312-814-4849.

Tax Increment Financing (TIF)

Tax Incentive

Link to the Department of Revenue website to learn more about the tax increment financing program. This program distributes state sales tax collections to municipalities that have TIF districts for state sales tax, state utility tax, or both and produced an incremental growth in retail sales or gas and electricity consumption.

- [Tax Increment Financing \(TIF\)](#)
- [Illinois Tax Increment Association](#)

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Business Assistance



In partnership with:



Funded in part through a cooperative agreement with the U. S. Small Business Administration

Small Business Owners: [Please click here to complete our brief Small Business Needs Assessment Survey.](#)

Small Business Development Centers

Small Business Development Centers located throughout the state provide assistance to new and existing small businesses.

Services include:

- One-on-one business counseling and management assistance.
- Assistance with the development of business plans.
- Help accessing marketing information and the development of business plans.
- Business Financing Programs
- Assistance with financial analysis and planning.
- Access to business education and training opportunities.

[Find the SBDC nearest you.](#)

Procurement Technical Assistance Centers (PTAC)

The PTACs provide one-on-one counseling, technical information, marketing assistance and training to existing Illinois businesses that are interested in selling their products and/or services to local, state, or federal government agencies. The services are offered through PTACs located at community colleges, universities, chambers of commerce, and business development organizations.

[Find the PTAC nearest you.](#)

International Trade Centers (ITC)/NAFTA Opportunity Centers (NOC)

The ITCs provide information, counseling and training to existing, new-to-export Illinois companies interested in pursuing international trade opportunities. The NOCs provide specialized assistance to those firms seeking to take advantage of the trade opportunities in Mexico and Canada made possible by the North American Free Trade Agreement.

[Find the ITC/NOC nearest you.](#)

Small Business Environmental Assistance Program

(See our 60 second video)

Located in the non-regulatory agency, the Program provides FREE, confidential information to help small businesses comply with environmental regulations. We can be reached at **1-800-252-3998** or at dceo.sbep@illinois.gov.

- For More Information on the [Small Business Environmental Assistance Program](#)
- For More Information on [Environmental Assistance Resources For Your Small Business](#)

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Women and Minority Business Assistance

In Illinois, entrepreneurs who wish to register as a minority or women-owned business must meet the following criteria:

- A minority or women-owned business is one that is 51% or more owned, operated and controlled, on a daily basis by a minority or female.
- Minority categories included: African-American, Hispanic, Asian, or Native American.

Other criteria such as corporation board composition, origin of start-up funds and knowledge of the business operations are also factors. Certification is granted through the Illinois Department of Central Management Services' Business Enterprise Program.

- [Illinois Department of Central Management Services' Business Enterprise Program](#)

Other Resources

- [Childcare Programs](#)
- [Resource Directory for Minorities, Women, Veterans and Disabled Persons \(PDF 146 KB\)](#)

Women's Business Development Center

- [Office of Women's Business Ownership, US Small Business Administration](#)
- [The National Association of Women Business Owners](#)
- [The National Education Center for Women in Business](#)
- [The National Foundation for Women Business Owners](#)
- [The National Women's Business Council](#)

Illinois Capital Access Program

Loan

The Illinois Capital Access Program (CAP) is designed to encourage financial institutions to make loans to small and new businesses that do not qualify under conventional lending policies. CAP is a form of loan portfolio insurance which provides additional reserve coverage to the lender on loan defaults. By participating in CAP, lenders have available to them a proven financing mechanism to meet the needs of financial institutions and Illinois small businesses.

- [More information on Illinois Capital Access Program](#)
- For information call 217/782-3891 or 312/814-9303.

Office of Minority Business Development

Assistance

Provides Illinois minority entrepreneurs preparing to start or expand a business with liaisons to state government programs and resources. Advocates work with individual companies and professional associations to find answers to the wide range of questions that arise from business ownership.

- For information call 800-252-2923.

Office of Women's Business Development

Assistance

Works with individual companies and women's professional associations to help women entrepreneurs tackle problems. Provides information, referral and procurement assistance and serves as an information conduit to business resources throughout the state. Through the ISBDCN, provides educational workshops and professional assistance.

- For information call 312-814-4069.

Minority, Women and Disabled Participation Loan Program

Loan

DCEO works with banks and other conventional lenders to provide financial assistance to small businesses that will employ Illinois workers. The state will participate in loans up to 25 percent of the total amount of a project, but not less than \$10,000 nor more than \$750,000.

- [More information on Participation Loan Program](#)
- For information call 217/782-3891 or 312/814-9303.

Surety Bond Guaranty Program

Assistance

The Surety Bond Guaranty Program provides Illinois' small, minority and women contractors with technical assistance and outreach services, helps them receive experience in the industry, and assists them, through bond guaranties, in obtaining bid, performance and payment bonds for government, public utility and private contracts.

- For information call 217/524-0165.

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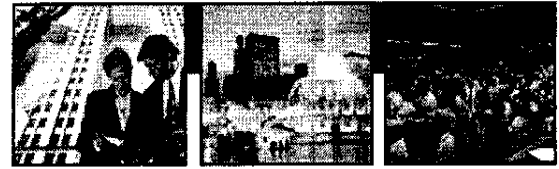
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Governor Rod Blagojevich

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Tax Incentives

Enterprise Zone Program

Enterprise Zones offer a number of state and local tax incentives to businesses that make investments to create or retain jobs in any of the 95 certified zones located in communities throughout the state. Eligibility varies according to specific incentive requirements.

- [More information on Enterprise Zone Program](#)
- For information call 217-785-6145.

High Impact Business Program

Provides investment tax credits, a state sales tax exemption on building materials, an exemption from state tax on utilities and an expanded state sales tax exemption on purchases of personal property used or consumed in the manufacturing or assembly process or in the operation of a pollution control facility. Businesses located within Enterprise Zones are not eligible for this program.

- [More information on High Impact Business Program](#)
- For information call 217-785-6145.

Illinois EDGE (Economic Development for a Growing Economy)

EDGE provides tax credits to qualifying businesses that create new jobs and make capital investments in Illinois. Credits are calculated from the personal income tax collected on salaries paid to employees in the new jobs created, which may be taken as a non-refundable tax credit against corporate income taxes over a period not to exceed 10 taxable years. To qualify, firms must make an investment of at least \$5 million in capital improvements and create a minimum of 25 new jobs, although demonstrated public benefit may result in waiver of these requirements.

- [More information on Illinois EDGE](#)
- For information call 877-221-4403.

Illinois Tax Increment Association

Visit the website of the Illinois Tax Increment Association to learn more about the organization and the Illinois communities it services.

- [Illinois Tax Increment Association](#)

Tax Increment Financing (TIF)

Link to the Department of Revenue website to learn more about the tax increment financing program. This program distributes state sales tax collections to municipalities that have TIF districts for state sales tax, state utility tax, or both and produced an incremental growth in retail sales, or gas and electricity consumption.

- [Tax Increment Financing \(TIF\)](#)

Manufacturer's Purchase Credit

This tax incentive was reinstated in 2004 and allows manufacturer's to earn a credit on exempt purchases of manufacturing machinery and equipment and graphic arts machinery and equipment.

- [Tax Manufacturer's Purchase Credit](#)

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Other Incentives

Illinois offers a number of innovative programs to augment conventional sources of financing and help with business locations, relocations, and expansions. If you want more information about these programs, please feel free to [ask us a question](#).

Participation Loan Program

The program works through banks and other conventional lenders to generally provide subordinated financial assistance to small businesses that will employ Illinois workers. The state will participate in loans up to 25 percent of the total amount of a project, but not less than \$10,000 nor more than \$750,000.

Minority, Women and Disabled Participation Loan Program

This program is similar to the Participation Loan Program, except that participation may not exceed 50 percent of the project, subject to a maximum of \$50,000.

Enterprise Zone Financing Program

Similar to the Participation Loan Program, except that DCEO will generally provide favorable interest rates to businesses either locating in or expanding in one of the 93 certified enterprise zones located throughout the state.

Development Corporation Participation Loan Program

This program provides financial assistance through a Development Corporation to small businesses that provide jobs to workers in the region served by the Development Corporation. The state will participate in loans up to 25 percent of the total amount of a project, but not less than \$10,000 nor more than \$750,000.

Capital Access Program (CAP)

The Capital Access Program is designed to encourage financial institutions to make loans to new and small businesses that do not qualify for conventional financing. A reserve fund is established at the lending bank and is available to draw upon should any of the bank's CAP loans default. There is a maximum loan amount of \$100,000.

The Technology Venture Investment Program (TVIP)

The Technology Venture Investment Program was created to provide seed and early stage capital, in the form of a qualified security investment, to Illinois entrepreneurs that are developing an advanced technological device or process commercially exploitable by Illinois businesses. DCEO may invest up to \$500,000, but no more than 50 percent of the equity financing of the project. A qualified co-investor(s) with expertise in the related field of technology must assume at least 50 percent of the additional equity contribution.

Surety Bond Guaranty Program

The program is designed to assist Illinois' small, minority and women contractors with technical assistance; help them receive experience in the industry; and assist in obtaining bid, performance and payment funds for government, public utility and private contracts.

Business Development Public Infrastructure Program

The Business Development Public Infrastructure Program provides low-interest financing to units of local government for public improvements on behalf of businesses undertaking expansion or relocation projects that meet the program criteria and demonstrate great potential for creating and retaining jobs. The infrastructure improvements must be made on public property and must directly result in the creation or retention of private-sector jobs. The local government must demonstrate clear need for the financial assistance to undertake the improvements.

Affordable Financing of Public Infrastructure Program

This program provides financial assistance to, or on behalf of local governments, public entities, medical facilities and public health clinics for the purpose of making affordable the financing of public infrastructure improvements needed to insure health, safety and economic development in a community.

Community Development Assistance Program (CDAP)

CDAP is a federally funded program that assists smaller Illinois local governments in financing public facilities, housing rehabilitation projects or economic development needs. Grants are made to units of local government and may be loaned to businesses for projects that will create or retain jobs in the community. Grant funds may also be

used by the local government for improvements to public infrastructure that directly support economic development. The program is limited to communities with populations under 50,000 that are not located within one of the eight large urban counties that receive funds directly from the federal government. Funds are targeted toward projects that primarily benefit low- and moderate-income people.

Community Services Block Grant Loan Program (CSBG)

This program provides long-term, fixed-rate financing to new or expanding businesses that create jobs and employment opportunities for low-income individuals. The program links federal, state and private financing by using CSBG funds at low interest rates in combination with bank funds and equity.

Large Business Development Program

The Illinois Large Business Development Program (LBDP) provides incentive financing to encourage large out-of-state companies to locate in Illinois or existing large companies to undertake substantial job expansion or retention projects. Funds available through the program can be used by large businesses (500 or more employees) for typical business activities, including financing the purchase of land and buildings, construction or renovation of fixed assets, site preparation and purchase of machinery and equipment. LBDP funds are targeted to extraordinary economic development opportunities; that is, projects that will result in substantial private investment and the creation and/or retention of 300 or more jobs.

Employer Training Investment Program (ETIP)

This state-funded program assists Illinois companies in training new workers or upgrading the skills of their existing workers. ETIP grants may be awarded to individual companies, multi-company efforts and intermediary organizations offering multi-company training.

Illinois Technology Enterprise Center (ITEC) Program

The ITEC program provides operational support for regional centers that serve technology entrepreneurs, innovators and small businesses and provide investments to or on behalf of young or growing companies in cooperation with private sector investments. Centers assist entrepreneurs to locate critical pre-seed and early stage financing, help entrepreneurs in high growth, high technology fields to further their technical and/or managerial skills, and assist with new product development and marketing in support of new venture formation within Illinois.

Illinois Technology Enterprise Development and Investment Program

Provides investment, loans or qualified security investments to or on behalf of young or growing businesses in cooperation with private investment companies, private investors or conventional lending institutions. Investors assume a portion of the investment loan or financing for a business project. New or emerging businesses also are eligible through financial intermediaries as they commercialize advanced technology projects.

Recycling Industry Modernization (RIM) Program

The Recycling Industry Modernization Program provides grants to manufacturers to encourage them to modernize their operations and divert materials from the solid waste stream. RIM projects require the use of recycled materials and/or solid waste reduction activities. Grants of \$30,000 are available for modernization assessments, with grants up to \$150,000 available for modernization implementation projects. Grants require an applicant investment.

Recycling Market Development Program

Provides grants to encourage private-sector investment in the manufacture, marketing and procurement/demonstration of products containing recycled commodities. These funds may be used for capital equipment, certain marketing expenses, and to offset costs to procure and demonstrate the use of recycled-content products. The Recycling Market Development Program provides grants up to \$250,000. Grants require an applicant investment.



Rod Blagojevich, Governor Jack Lavin, Director

BUSINESS ASSISTANCE

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DCEO's Bureau of Business Development administers a wide array of programs and services designed to help Illinois businesses thrive in today's economy. We offer expansion incentives, technology support services, access to capital, global marketing expertise, and job training and education for workers. Our trained staff is committed to forging partnerships with the private sector in an effort to build upon Illinois' reputation as a world class center for business and industry. This includes a strong emphasis on programs designed to provide small businesses -- particularly minority and female entrepreneurs -- with the resources they need to succeed and grow their business opportunities.

Coal

Community Development

Energy & Recycling

Entrepreneurship and Small Business

Film

Homeland Security Market Development

Technology

Tourism

Trade

Workforce Development

Facts & Figures

Grantee Support

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About DCEO

State Links

Business Development

Springfield Office
620 E. Adams
Springfield, IL 62701
Phone: 877-221-4403
TDD: 800-875-6055

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information system
Sites and Buildings
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Exposition: September 23-25, 2008
Conference: September 22-25, 2008
Donald E. Stephens Convention Center
Rosemont (Chicago), IL

Chicago Office of Tourism 2006 Statistical Information



| | |
|--|---------------|
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HIGHLIGHTS OF THE UNITED STATES TRAVEL MARKET

- Expenditures by travelers reached \$700 billion in 2006
- In 2006, the U.S. hosted 51 million international visitors, a 4% increase from 2005
 - Both Canada and Mexico contributed significantly to the overall growth in international arrivals in 2006
- The top two countries generating visitors to the U.S., Mexico and Canada, are forecasted to grow by 19 and 15 percent, respectively, from 2006 through 2011.
- Visitors from Europe are expected to generate a 25% growth rate from 2006 to 2011 to reach 12.6 million visitors.
- The People's Republic of China is forecasted to grow 81%, India 66% and Japan 17% over the forecast period to 2011.

HIGHLIGHTS OF THE 2006 ILLINOIS TRAVEL MARKET

- Illinois remained a popular destination for domestic travelers in 2006:
 - Illinois' total number of visitors increased 6.4% to 91 million:
 - 71.8 million domestic leisure visitors.
 - 19.2 million domestic business travelers.
 - Illinois is the 7th most popular U.S. state destination for overseas travelers, with an estimated 1,083,000 visitors in 2006.
 - Travelers in Illinois spent nearly \$28.3 billion on transportation, lodging, food, entertainment, recreation and incidentals during 2006.
 - In 2006, the top markets for international visitors to Illinois were: Canada, United Kingdom, Mexico, Germany and Japan
 - Travel expenditures of international visitors to Illinois reached \$1.72 billion in 2006
 - International travel expenditures generated 20,200 jobs
 - Direct payroll for international travel generated jobs reached \$475 million
 - Tax revenue generated from international travelers (federal, state and local) reached \$333 million

HIGHLIGHTS OF THE 2006 CHICAGO TRAVEL MARKET

- Chicago continued to be a premier travel destination in 2006.
 - Over 44 million people visited, including 32.8 million domestic leisure travelers, a 9% increase from 2005, and a record high for the city. This increase was nearly fifteen times higher than the national percentage change increase in person-stays for the year.
 - Chicago leads all other top destination cities in terms of overall growth of domestic leisure visitation. Chicago shows the greatest single-year percentage point increase of the total U.S. travel market, increasing its share by 13% over the previous year.
 - Chicago was the 8th most popular U.S. city destination for overseas visitors, with an estimated 1,062,000 visitors in 2006.
 - In 2006, travel expenditures by domestic and international visitors totaled \$10.9 billion.

| Chicago and Illinois Domestic Travel Volume, 2000-2006 (millions of visitors, <i>leisure and business</i> combined) | | |
|---|----------------|-----------------|
| Year | Chicago | Illinois |
| 2006 | 44.17 | 91 |
| 2005 | 40.18 | 85.53 |
| 2004 | 37.94 | 76.18 |
| 2003 | 34.49 | 77.85 |
| 2002 | 34.85 | 70.73 |
| 2001 | 33.74 | 69.36 |
| 2000 | 36.95 | 68.87 |

Source for above & below: D.K. Shifflet & Associates, Ltd., 2007

| Top Activities at the Destination | | |
|--|----------------|-------------|
| | Chicago | U.S. |
| Dining | 38% | 29% |
| Sightseeing | 34% | 19% |
| Shopping | 33% | 27% |
| Entertainment | 31% | 23% |
| Night Life | 19% | 7% |
| Museum, Art Exhibit | 18% | 5% |
| Festival, Craft Fair | 8% | 5% |
| Concert, Play, Dance | 11% | 6% |
| Watch Sports | 7% | 5% |
| National or State Parks | 7% | 6% |

CHICAGO'S DOMESTIC LEISURE TRAVEL MARKET

- Travel to Chicago is spread evenly throughout the year. 25% of trips to the city originated in Winter, 23% in Spring, 29% in Summer and 22% in Fall.
- The top reasons for leisure visits to Chicago in 2006 were: visiting friends and relatives (26%), getaway weekends (13%), special events (19%), and general vacations (10%).

| Chicago and Illinois Domestic Leisure Travel Volume, 2000-2006 (millions of visitors) | | |
|---|----------------|-----------------|
| Year | Chicago | Illinois |
| 2006 | 32.8 | 71.8 |
| 2005 | 28.95 | 65.86 |
| 2004 | 26.87 | 58 |
| 2003 | 22.09 | 56.6 |
| 2002 | 22.86 | 50.68 |
| 2001 | 22.12 | 49.95 |
| 2000 | 22.84 | 48.47 |

Source: D.K. Shifflet & Associates, Ltd., 2007

- Chicago was a top regional vacation destination in 2006, with more than 65% of all overnight leisure travel coming from within Illinois or from the surrounding states of Michigan, Indiana, and Wisconsin.

| | |
|-----------|-------|
| Illinois | 32.7% |
| Indiana | 11.7% |
| Wisconsin | 10.5% |
| Michigan | 10.5% |
| Iowa | 3.8% |

| | |
|------------|-----|
| 1-3 nights | 34% |
| 4-7 nights | 9% |
| 8+ nights | 4% |

| | |
|-----------|-----|
| One Adult | 17% |
| Couples | 27% |
| Families | 35% |
| MM/FF | 8% |
| 3+ Adults | 13% |

| | |
|----------------|-----|
| Under \$50K | 31% |
| \$50-\$74,999K | 22% |
| \$75-99,999K | 16% |
| \$100K + | 31% |

For all above tables: Source: D.K. Shifflet & Associates, Ltd., 2007

CHICAGO'S DOMESTIC BUSINESS TRAVEL MARKET

| Year | Chicago | Illinois |
|------|---------|----------|
| 2006 | 11.32 | 19.2 |
| 2005 | 11.23 | 19.66 |
| 2004 | 11.07 | 18.18 |
| 2003 | 12.40 | 21.24 |
| 2002 | 11.99 | 20.05 |
| 2001 | 11.62 | 19.41 |
| 2000 | 14.11 | 21.41 |

Source: D.K. Shifflet & Associates, Ltd., 2007

| | 2006 | 2005 | 2004 | 2003 | 2002 |
|---------------------------------------|------------|------------|------------|------------|------------|
| Total Day-Trip | 4,980,000 | 4,480,000 | 4,490,000 | 4,900,000 | 4,780,000 |
| Total Overnight | 6,290,000 | 6,750,000 | 6,560,000 | 7,470,000 | 7,190,000 |
| Total Group Meetings Travelers | 11,272,006 | 11,232,005 | 11,052,004 | 12,372,003 | 11,972,002 |

Group Meetings include Conventions, Trade Shows, Corporate and other "group-style" meetings.
Source: http://www.choosechicago.com/Document%20Resource%20Gallery/travel_stats_2006.pdf

INTERNATIONAL VISITORS TO CHICAGO

- In 2006, Chicago was ranked the 8th most visited city in the U.S. by overseas travelers with an estimated 1,062,000 overseas visitors.

| Top 10 International Arrivals to Chicago, 2006 |
|--|
| Canada |
| United Kingdom |
| Mexico |
| Germany |
| Japan |
| France |
| South Korea |
| Ireland |
| India |
| Australia |

| Top 10 Overseas Arrivals to Chicago, 2006 |
|---|
| United Kingdom |
| Germany |
| Japan |
| France |
| South Korea |
| Ireland |
| India |
| Australia |
| People's Republic of China |
| Poland |

Source: Office of Travel and Tourism Industries,
International Trade Administration, United States Department of Commerce

ECONOMIC IMPACT OF TRAVELERS TO CHICAGO

- In 2006, travel spending in Chicago, including both U.S. resident and international visitors, registered nearly \$10.9 billion.
 - U.S. resident travelers spent \$9.7 billion in Chicago during 2006.
- Total traveler expenditures directly generated 129,700 jobs within Chicago.
- Domestic and international traveler spending in Chicago directly generated over \$616 million in tax revenue for state and local governments in 2006.
 - The current hotel/motel tax for Chicago is 15.39%.

| Economic Impact of Tourism in Chicago, 2000-2006 | | |
|--|----------------------|-----------------------|
| | Domestic | International |
| 2006 | \$9.7 billion | \$1.16 billion |
| 2005 | \$8.8 billion | \$1.14 billion |
| 2004 | \$8.3 billion | \$1 billion |
| 2003 | \$7.8 billion | \$900 million |
| 2002 | \$7.5 billion | \$1 billion |
| 2001 | \$7.7 billion | \$1 billion |
| 2000 | \$8.5 billion | \$1.3 billion |

Source: CCTB/Travel Industry Association of America
http://www.choosechicago.com/Document%20Resource%20Gallery/travel_stats_2006.pdf

TRANSPORTATION IN CHICAGO

- Getting to and around Chicago is easy because of the variety of quality and affordable modes of transportation that exist.
 - The Chicago Transit Authority (CTA) offers train and bus service in Chicago, and Metra (metropolitan railway) serves Chicago and its suburbs. Taxis, limousines and car services, car rentals, charter buses, and water taxis meet the transportation needs of residents and visitors. The city's two international airports and the Amtrak passenger railroad allow easy access to Chicago from nearly anywhere in the world.
- The majority of visitors to Chicago arrive by car in 2006 – 80% of visitors arrive by automobile, and 14% fly in with the rest using other modes of transport. Similarly, almost 9 in 10 Illinois leisure visitors arrive by auto to their destination and about 7% arrive by air.

| Chicago Airport Activity, 2006 | | |
|--------------------------------|------------|------------|
| | O'Hare | Midway |
| Domestic Flights | 865,889 | 297,076 |
| International Flights | 92,754 | 1,472 |
| Total Flights | 958,643 | 298,548 |
| Average Flights/Day | 2626 | 817 |
| Domestic Passengers | 64,576,289 | 18,680,663 |
| International Passengers | 11,705,923 | 187,725 |
| Total Passengers | 76,282,212 | 18,868,388 |

Source: <http://www.flychicago.com/statistics/airportstatistics.shtm>

ACCOMMODATIONS IN CHICAGO

- After a record year in 2000, the travel and tourism industry experienced a decline in business, as a result of a declining economy and the changing attitudes towards travel after the September 11 terrorist attacks. For the first time in 2006, downtown hotel occupancy rates exceeded pre-9/11 levels.

| Chicago Hotel Occupancy Rates, 1998-2006 (annual averages) | | |
|--|----------|--------------|
| Year | Downtown | Metropolitan |
| 2006 | 75.6%* | 69.4%* |
| 2005 | 72.2% | 64% |
| 2004 | 70.6% | 62% |
| 2003 | 70.0% | 60.6% |
| 2002 | 66.2% | 59.3% |
| 2001 | 66.1% | 62.7% |
| 2000 | 74.7% | 70.4% |
| 1999 | 73.7% | 69.2% |
| 1998 | 72.8% | 69.9% |

Source: Chicago Convention and Tourism Bureau, Smith Travel Research
<http://www.choosechicago.com/media/statistics/Pages/default.aspx>
<http://www.chicagobusiness.com/cgi-bin/news.pl?id=23285>
 *2006, Jan-Oct only

| Chicago Hotel Average Daily Room Rates, 1998-2006 (annual averages) | | |
|---|-----------|--------------|
| Year | Downtown | Metropolitan |
| 2006 | \$179.36* | \$121.97* |
| 2005 | \$164.63 | \$107.87 |
| 2004 | \$154.71 | \$102.57 |
| 2003 | \$155.57 | \$102.21 |
| 2002 | \$155.42 | \$103.39 |
| 2001 | \$162.85 | \$107.78 |
| 2000 | \$169.71 | \$118.28 |
| 1999 | \$158.85 | \$111.30 |
| 1998 | \$155.71 | \$107.04 |

Source: Chicago Convention and Tourism Bureau, Smith Travel Research
<http://www.choosechicago.com/media/statistics/Pages/default.aspx>
<http://www.chicagobusiness.com/cgi-bin/news.pl?id=23285>
 *2006, Jan-Oct only

CHICAGO SPORTS

- Chicago is home to several major sports teams, including six major league professional franchises.

| Chicago Sports Attendance, 2006 | | | |
|---------------------------------|---------------------------------|---------------------|------------|
| Team | League | Home Location | Attendance |
| Chicago Bears | National Football League | Soldier Field | 497,786 |
| Chicago Blackhawks | National Hockey League | United Center | 519,809 |
| Chicago Bulls | National Basketball Association | United Center | 912,373 |
| Chicago Cubs | National Baseball League | Wrigley Field | 3,123,215 |
| Chicago White Sox | American Baseball League | U.S. Cellular Field | 2,957,414 |
| Chicago Fire | Major League Soccer | Soldier Field | 297,426 |

Source: Chicago Bears, Chicago Blackhawks, Chicago Bulls, Chicago Cubs, Chicago White Sox, Chicago Fire
http://chicagobusiness.datajoe.com/app/ecom/pub_viewhtml.php?listid=2507&year=2007&htmlkey=maOoZwRQSNzdo

CHICAGO FESTIVALS AND ATTRACTIONS

- Chicago, a year-round destination, is home to a variety of world-renowned festivals and special events. And while the many city-sponsored special events continue to grow in popularity, they remain free of charge to the millions of people each year that come to enjoy.

| Chicago Festival/Event Attendance, 2006 | | |
|--|-----------------------|------------------------|
| Event | Date(s) | Attendance (estimated) |
| Chicago Blues Festival | June 8-11 | 640,000 |
| Chicago Gospel Festival | June 2-4 | 280,000 |
| Taste of Chicago (includes Country Music Festival) | June 30-July 9 | 3,600,000 |
| Chicago Air & Water Show | August 19-20 | 2,000,000 |
| Viva! Chicago Latin Music | August 26-27 | 160,000 |
| Chicago Jazz Festival | August 31-September 3 | 310,000 |
| Celtic Festival Chicago | September 16-17 | 185,000 |

Source: Mayor's Office of Special Events, 2007 & Crain's Chicago Business

| Chicago Attraction Attendance, 2006 | |
|--|------------------------|
| Attraction | Attendance (estimated) |
| Navy Pier | 8,775,000 |
| Lincoln Park Zoo | 3,000,000 |
| Millennium Park | 3,000,000 |
| John G. Shedd Aquarium | 2,076,063 |
| The Art Institute of Chicago | 1,236,274 |
| The Field Museum | 2,130,052 |
| Museum of Science and Industry | 1,375,226 |
| Sears Tower Skydeck | 1,300,000 |
| Chicago Cultural Center | 839,000 |
| Chicago Children's Museum | 766,497 |
| Chicago Symphony Orchestra | 550,000 |
| Adler Planetarium and Astronomy Museum | 400,637 |
| Museum of Contemporary Art | 274,830 |
| Chicago History Museum | 76,948 |
| DuSable Museum of African American History | 149,939 |

Sources: Attractions, Museums in the Park

CHICAGO FUN FACTS

Chicago is home to...

- An estimated 2,896,016 residents
- Over 50 cultural institutions, historical sites and museums
- More than 200 theaters
- Nearly 225 art galleries
- More than 7,300 restaurants
- 77 neighborhoods
- 26 miles of lakefront
- 33 beaches, 15 miles of which are along the lake
- 35 annual parades
- 19 miles of lakefront bicycle paths
- 552 parks covering 7300 acres

Did you know...

- The Art Institute of Chicago holds one of the largest and most extensive collections of Impressionist and Post-Impressionist paintings outside of the Musée d'Orsay in Paris.
- The Adler Planetarium was the first planetarium in the Western Hemisphere.
- Chicago was one of the first and largest municipalities to include public art funding in its requirements for the renovation or construction of municipal buildings, with the passage of the Percentage-for-Arts ordinance in 1978.
- The Chicago Cultural Center is the first free municipal cultural center in the U.S. and home to the world's largest stained glass Tiffany dome.
- The Harold Washington Library Center, with approximately 6.5 million books available, is the world's largest municipal building.
- The John G. Shedd Aquarium's and Oceanarium is the world's largest indoor aquarium.
- The Lincoln Park Zoo, one of only three free major zoos in the country, is the country's oldest public zoo with an estimated annual attendance of three million people.

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Hotels a bright spot in Chicago-area construction

By Eddie Baeb, Oct. 29, 2007

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(Crain's) — Hotel construction is booming in the Chicago area, as project starts through the first three quarters almost doubled compared with the same period last year while the larger office and multifamily sectors slowed, according to a report released last week.

The hotel industry was one bright spot in an otherwise bleak landscape.

Nationwide, the dollar volume of construction starts — including single-family homes, commercial buildings, public works and utilities — is expected to drop 8% this year to \$626.7 billion. That would be the largest percentage decline since 1990, according to the 2008 Construction Outlook report by McGraw-Hill Construction, a unit of McGraw-Hill Cos.

In the Chicago area, hotel construction starts totaled 1.7 million square feet in the first three quarters, up 86% from the year-ago period.

The biggest decline in that period in the Chicago area came in the multifamily sector, which includes townhomes, condominiums and apartments. Construction starts of those properties fell 34% to 12,872 dwelling units. Office construction also was down, falling 10% to 4.77 million square feet, according to McGraw-Hill.

"Hotel is the hottest product in the market," says Steve Smith, a vice-president with Hoffman Estates-based Leopardo Cos. who heads retail, hospitality, office and industrial construction. "A major part of our business the last 12 months has been hospitality."

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Mr. Smith says Leopardo had little hotel experience several years ago, but made a push into that area to diversify and be better-positioned for the housing slowdown. The company is now working on a renovation of the Millennium Knickerbocker hotel downtown, the Hyatt Woodfield in Schaumburg and the Hilton O'Hare as well as two proposed water parks, in Hoffman Estates and Bridgeview.

Leopardo and other commercial builders here also have benefited from the continued development of retailing, as retail construction starts climbed 12% in the first three quarters to 8.84 million square feet even as the housing market slowed.

The Chicago trends were pretty much in line with the national picture, says Kim Kennedy, manager of forecasting with McGraw-Hill Construction Research & Analytics in Bedford, Mass. The biggest surprise was the increase in retail construction activity even as the housing market plummeted.

"We expected a pullback in retail construction, and it really hasn't materialized," Ms. Kennedy says. "We're now calling for it to happen in 2008."

McGraw-Hill is predicting construction starts will fall again next year by 2% to \$614.1 billion due to tighter lending standards, continued weakness in the housing sector and slow economic growth.

UPS AND DOWNS

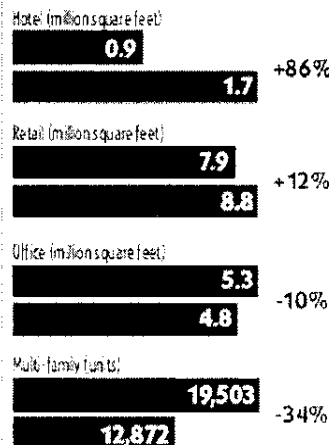
Construction starts of hotels in the Chicago area almost doubled through the first three quarters of the year.

Construction of retail stores also rose, while multi-family and office construction declined.

CONSTRUCTION STARTS

January through September

■ 2006 ■ 2007



Source: McGraw-Hill Construction

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Who Will Buy the Condos?

Since 2000, developers have flooded downtown Chicago with more than 20,000 new condos and townhouses—yet at the end of 2007, nearly 8,000 of them sat unsold. Will that glut drag down the local economy even further, or will the lure of city living and an influx of international buyers rescue a failing market?

By Dennis Rodkin



If you were shopping for a Chicago condo over the last few months, the deals were coming fast and furious. At 30 West Erie in River North, developers were offering buyers a free parking space—a year earlier, that handy asset would have cost \$50,000. At the Rotunda, at 2741 North Sheffield Avenue in Lincoln Park, you'd get a \$15,000 "furniture allowance" if you bought by March 31st. At VB1224 Lofts, in the West Loop at 1224 West Van Buren Street, the developers at one point promised a \$35,000 allowance that could be used towards a free parking space, appliances, or other upgrades; at another point, they offered to pick up a year of condo fees.

The escalating incentives tell an obvious story: Chicago's condo boom has stalled—caught in a perfect storm, with a flood of new units landing in a sinking real-estate market. And though the tough economy affects sales of single-family homes, too, the condo market draws some of the most fretful attention. After all, if a subdivision stops selling new homes, the builder doesn't build the next phase. If a family can't sell their home, there may be the choice to stay put. But a

developer putting up a condominium high-rise has a mechanism in motion that doesn't stop so easily.

"Trump can't say, 'I've only got the first 60 stories sold, so I'm not going to build the next 30 stories,'" says Chris Huecksteadt, Chicago market director for Metrostudy, which tracks the statistics of the housing market. "Once they start building them, they're stuck with those units."

And, boy, did they start building. Between 2000 and 2006, some 22,650 new condos and townhouses came on line in the downtown neighborhoods alone, according to Appraisal Research Counselors, the independent analysts of the condo market. In most of those years, buyers seemed insatiably hungry, snapping up most of the units built. In 2005, the downtown market's best year, about 9,000 came on line and 8,000 of them sold. Hints of trouble appeared in 2006 when a surge in new deliveries left about 2,500 condos unsold at the end of the year. That contributed to the logjam that was 2007. The year ended with about 7,700 new and rehabbed condos and townhouses standing unsold (not all were finished or under construction, but all were actively for sale), according to Appraisal Research—and that was in a year when only about 4,300 new units were completed.

The proliferation will continue: Appraisal Research estimates that at least 5,900 units will be completed this year, with another 4,200 due in 2009—more, if all the proposed units get built (which is doubtful, in light of the excessive overhang).

Given that the bottom of the housing market has not been marked, the question is, how long will builders be stuck with what they've built? Or worse, will there be thousands of condos left empty, banks left unpaid, high-rise developers belly-up, neighborhoods black-eyed?

In late winter, signs of a big shakout started to appear. In the first few days of March alone, two stories in *Crain's Chicago Business* reported that the developer of a proposed 80-story condo tower in the South Loop faced foreclosure on a preconstruction loan, and two top condo developers, Related Midwest and Magellan, were in talks to merge as a result of slow sales on Related's properties. The *Sun-Times* reported that another condo developer may have fled the country after seriously overextending his business credit. And in mid-March, *Crain's* reported that foreclosures had hit 25 percent of the condos in the Sterling, the 50-story tower at 345 North LaSalle Street. Those foreclosures were on individual owners, not developers, but even so, they were another sign of trauma in the condo market.

Is there a condo apocalypse looming? Most likely, no. Huecksteadt and other analysts think the new condos will be bought up—but slowly. "This will work itself out," says Huecksteadt (who is not in the business of selling real estate, so he can't be accused of wishful thinking). "It's going to take a long time to work through the inventory. There's five to six years' worth of condos to get through" in the larger Chicago region. "But it will correct itself."

The fundamentals are still in place, Huecksteadt and others say. The categories of buyers who fueled the boom a few years ago—empty nesters, urban-minded singles, affluent Midwesterners who want a Chicago roost—are still interested in buying. Chicago and its suburbs remain strong job markets and cultural centers. For the most part, the new condos are good properties

appealingly priced. Condo living may even be growing more attractive. Steven Hovany of Strategy Planning Associates, a consultant to developers, points out that the latest generation of adults are "more downtown-prone than other generations; they're not going to run to the suburbs to buy their first home." And the number of nonwhite buyers, many of whom come from cultures where multifamily housing is more typical, is growing fast. Then there are the baby boomers, who are just entering retirement age. "They've just started buying the second homes," says Alan Lev, the president of the development firm Belgravia Group and president of the Home Builders Association of Greater Chicago.

"There's nothing that has changed about the buyers," says Gail Lissner, a vice president of Appraisal Research. "All these target market groups are all still out there, but they're all more hesitant. They don't have any sense of urgency right now. They'll take longer to decide to purchase."

Ron Shipka Jr. has witnessed the hesitancy at his sales centers. As the chief of The Enterprise Cos., Shipka has built a few thousand townhouses and condos in Chicago since the 1990s, including about 1,500 so far in Central Station, the area immediately south of Grant Park (he's got another 1,100 under construction or planned there). "The process of buying has become certainly less emotional and more diligent, and it takes an awful long time," Shipka says. "At our sales centers, we're getting the same amount of traffic that we have ever gotten, but people come back and come back and come back."

Not only are there numerous choices out there, but no one knows when the price slippage will end. "They want to buy when they're convinced the market is at the rock bottom," Lissner says.

Meanwhile, it looks as if the speculators have pulled back. They're the people and firms who buy early in bulk and plan to sell off their units at later, higher prices. (They differ from investors, who may buy in hopes of reaping a profit but who plan to use the condo along the way.) While no solid figures exist on how much of Chicago's condo crop has been bought up by speculators, Lissner suggests that the peak year for those deals was 2005, when an enormous share of just-announced condos were purchased. Speculators can afford to buy a few years before the building is ready, because they are not looking for housing, just an investment. The proportion of early sales and pre-sales—condos bought when a new project is announced or when the first stages of construction have begun—dropped by almost half between 2005 and 2007, which tells Lissner that many speculators have moved on to some other investment class.

The developers left holding unsold inventory have to decide if they can wait it out. Those with deep pockets probably can. But many have turned to incentives, such as free parking spaces or kitchen upgrades, to sweeten the deal. Of course, there's danger that way, because buyers can smell the desperation. If the developer is offering a free parking space this month, what more will he offer next month? Some developers will turn unsold units into rentals, but that's a tough proposition, too: When the market improves later and they want to sell the apartments, they will be selling used, not new—and they probably won't get the price they targeted while building.

How bad will it get? None of the people I talked to predicted a significant number of bankruptcies. Shipka, for one, says the immediate condo future looks painful but not fatal.

"Developers will leave some profit on the table," he says. "They're not going to have what they hoped for, but they'll have enough [money] to pay the bank." Those who can change course, will. In February, the developers of a planned condo tower at 535 North St. Clair Street in Streeterville announced they wanted to make the building a hotel instead, because of slow sales at a sister condo tower, across the street at 550 North St. Clair.

Some metaluxury buildings, including the Spire and Trump, are aggressively marketing their apartments to a new crowd of potential owners—the sexy "international buyer," the sophisticate from Russia or another European or Asian country who already has several homes and now wants one in Chicago. (For more on the Spire, see *Towering Ambition*, page 106.) Lissner has heard the logic: "The dollar is cheap; they've seen huge appreciation in their own countries; they want to bring their money here." In particular, the Irish are thought to be likely buyers because of the long-running boom in Ireland and, perhaps, because many of their countrymen have landed in Chicago over the past century and a half.

But don't bank on the globetrotters for a wholesale rescue from our condo glut. After all, this is Chicago, not South Beach or Park Avenue. If you were jetting in from Dubai, would you come here or go to Miami?

Lissner thinks the internationals are looking primarily for a payoff and likely don't feel a particular loyalty to Chicago. "If things change, they can walk away from this market in no time," she says. "They're a volatile market segment." And it will probably take more than a free parking space to pull them in.

For the more typical condo shoppers, though, that incentive might do the trick—unless they hold out to see if later on they might get two parking spaces.

Illustration: Michelle Thompson/Agoodson.com

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So why should Chicago want to host the 2016 Olympic Games? There are countless reasons, but let's start with the top 16...

Top 16 reasons why hosting the 2016 Olympic and Paralympic Games would be a great opportunity for Chicago:

1) Unite the world in our city for a celebration of sport

With its pageantry, sport and celebration on a global scale, this will be the biggest event in our city in our lifetime. This is our generation's World's Columbian Exposition or 1933 World's Fair.

2) Celebrate our love of sport

There is no question that Chicagoans are passionate about sport. This event will bring the best in sport to our city. Over 200 countries will be sending their best athletes into our city to perform at the highest levels of competition in our stadiums and in our parks.

3) Share Chicago with the world and raise our international reputation

We will have the opportunity to share Chicago and what makes our hometown so special with the worlds' athletes, guests and over 3.6 billion people who will see our City through the global television broadcast. Newspapers, magazines and television from around the world will create profiles of this beautiful Olympic city. This is our chance to inspire the world - to Stir the Soul™ of the world!

4) Create a global sporting legacy for Chicago

Already a professional sport powerhouse, Chicago will become known as one of the world centers of all sport. New venues will allow us to experience sports, like track and field, swimming and rowing among many others, before and after the games through participation and by hosting events.

5) Act as catalyst for widespread urban revitalization

Situating the temporary stadium Washington Park will help revitalize a beautiful part of the City. The Athletes' Village will create mixed-use community right on the lake front, again acting as a central point for improvement of an entire neighborhood on the South Side. It will also act as a magnet for attracting more people to live in the Loop.

6) Generate economic benefits before the Games

The construction of new venues and infrastructure improvements means new jobs. Being an Olympic host city will attract domestic and international companies to open offices or even possibly move their headquarters here. This wave of new businesses means economic development and new jobs.

7) Generate economic benefits during the games

Over six million incremental tourists from around the world staying in our hotels, eating in our restaurants, taking rides in our cabs. Employers in the service industry will need to hire additional help to service the guests thereby creating new jobs.

8) Generate economic benefits after the Games

Tourists will come to our Olympic City in increasing numbers years after the Games to remember and relive the 2016 spectacle, see the venues, and experience Chicago firsthand.

9) Accelerate planned infrastructure improvements

Hosting the Games will fast track key capital projects, especially transportation related initiatives, to coincide with the Olympiad.

10) Experience world-class athletics and the values of Olympic sport – in our own backyard

This is our chance to see the best athletes in the world compete in our parks and stadiums, demonstrating not only the most amazing level of competition the world has to offer, but also the values that make the Olympic movement singular – fair play, friendship, hope, inspiration, and joy in effort.

11) Capitalize on the educational benefits

Our children will be exposed to the athletes and cultures of the world. This global Olympic Movement is a great educational tool for geography, culture, history etc. The City and Chicago 2016 will create many programs focused on our youth that will enrich our children and broaden their understanding of sport and the world.

12) Enjoy great cultural events

Beyond sport, this event will bring world class singers, actors, dance, theatre, etc. into our city. The Games will be a cultural celebration with events throughout the city - many of them free to the public.

13) Get motivated to get in shape

The Games will be inspiration for Chicagoans to live healthier lives by embracing fitness and wellness activities.

14) Appreciate Chicago's distinctiveness even more

You will learn surprising and amazing things about Chicago and Chicagoans you never knew before that will make you even prouder that you live here.

15) Meet new extraordinary people

By hosting the Games, we will attract broad range of domestic and international visitors to the Windy City who we can learn from and share experiences. Chicago will become the World's second home.

16) Have fun and show your pride

This will be a great time, the streets will be alive, and our people will be a big part of the experience. This will be an incredible source of pride for everyone who lives here. And, more fun than you can imagine!

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updated 12:11 p.m. EST, Fri November 30, 2007

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Congress close to raising fuel economy standards

STORY HIGHLIGHTS

- Negotiators close to a deal that would raise fleet fuel economy standards
- Bill would raise fleet-wide standard to 35 miles per gallon by 2020
- Large "work trucks" would be exempt from standard

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WASHINGTON (CNN) -- Congress is finalizing a deal that would raise the fuel economy standards for most U.S. cars and trucks for the first time in more than 30 years.

Automakers hope all-electric cars like the Chevy Volt will raise fleet-wide fuel standards. But the bill also contains several significant loopholes that would allow auto companies to get around the new limits.

The centerpiece of the bill is a requirement that would raise the corporate average fuel economy standard, known as CAFE, from 27.5 miles per gallon for cars and 22.2 mpg for trucks to 35 mpg fleet-wide by 2020.

The Senate passed the mandate in June, but the House has not yet voted. Congressional aides familiar with the negotiations said House leaders are hoping to work out final language this week and vote next week.

Large "work trucks" like the Dodge Ram 3500, the Ford F-350 and the Chevrolet Silverado 3500 would be exempt from the new 35 mpg standard, according to sources involved in the negotiations.

Automakers will get credits to count against their fleet-wide average for selling "flex fuel" cars that are able to use alternative fuels or gasoline. Although U.S. manufacturers have built millions of flex fuel cars, ethanol is actually used in only about 1.5 percent of them, according to the Union of Concerned Scientists. Most continue to run on gasoline, the group found. Ethanol is not widely available to car owners.

Despite these loopholes, backers of the bill say it brings a significant change that will benefit consumers. Rep. Ed Markey, D-Massachusetts, chairman of the House Select Committee on Global Warming, said in an interview that the higher standard "will be a huge victory. It won't be something, however, that will stop us in the years ahead continuing to look at ways to continue upon that further."

Don't Miss House Energy and Commerce Chairman Jonn Dingell, D-Michigan, who has been a key negotiator on the compromise bill and defender of auto industry interests, is pushing for some significant changes to the Senate version.

In an interview Wednesday with a Detroit television station, Dingell said he's supportive of the new standard, but stressed "we've got to do it in a way that doesn't destroy our industry or manufacturing."

Dingell would like to include a provision that would build in job protections for U.S. autoworkers, requiring U.S. auto companies to continue to manufacture a certain percentage of their vehicles in the United States.

Dingell also wants to create separate standards for car and truck fleets.

"We have to address the Senate bill to make sure we don't combine light trucks and automobiles in a way that will destroy them," he said.

According to a recent analysis by the Union of Concerned Scientists, a nonprofit environmental group, if the 35 mpg limit was implemented, it would translate into a savings for consumers of \$25 billion at the pump in 2020.

The bill will also include a requirement to increase the production of biofuels like ethanol to 36 billion gallons by 2022. According to the Department of Energy, the United States produced 4 billion gallons of biofuels in 2005.

"Our goal is over the next 10 to 15 years [to] see a revolution that results in a dramatic increase in SUVs and automobiles that can use these new fuels and the number of Americans that can use them," Markey said, "so that we can back out more millions of barrels of oil that come from OPEC every day."

Congressional Republicans point out the proposal will do nothing to lower gas prices in the short term.

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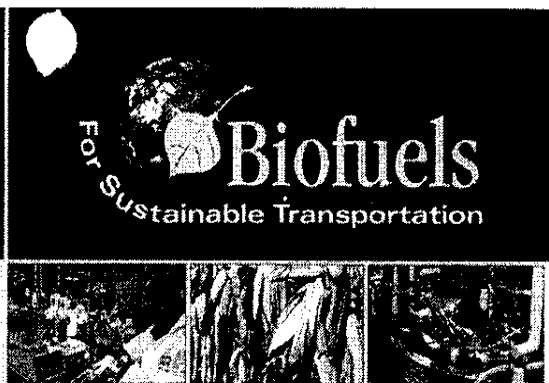
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Biofuels and Agriculture

A Factsheet for Farmers



What are biofuels?

Biofuels (short for "biomass fuels") are liquid transportation fuels that substitute for petroleum products such as gasoline or diesel. They include ethanol and biodiesel (a vegetable oil product) made from agricultural crops and residues, forest residues, or other kinds of plant-based "biomass feedstocks".

Ethanol is typically made from plant biomass by pretreatment, fermentation and distillation, in much the same way that beer and liquors are produced. Many vegetable oils, such as soybean oil, as well as animal fats, and recycled cooking greases can be chemically converted to diesel-like fuel called biodiesel. These fuels can be used in conventional engines with little or no modification.

Did you know that Henry Ford expected the first Model T automobile to run on ethanol, and Rudolf Diesel designed his prototype engine to run on peanut oil?

American farmers have a great opportunity, now and in the coming years, to help make the nation more self-sufficient in energy, and to reduce air pollution, including emissions of "greenhouse gases". Advances in technologies for making "biofuels" like ethanol and biodiesel mean that new markets are opening up. These can provide extra farm income, help to revitalize rural communities, and improve the environment at the same time. Corn ethanol has been around since the 1970s, but national production is going up fast and costs are coming down – and now there are new ways to make ethanol from a variety of agricultural raw materials, as well as growing markets for other biofuels like biodiesel.

Raw materials for making biofuels, now and in the future

A range of raw materials are available, some already in use and others which will supplement them in the near-term and longer-term future. For example, fuel ethanol is currently produced from the easily fermented sugars and starches in grain and food processing wastes. Biodiesel is made from oil-seed crops such as soybean and canola.

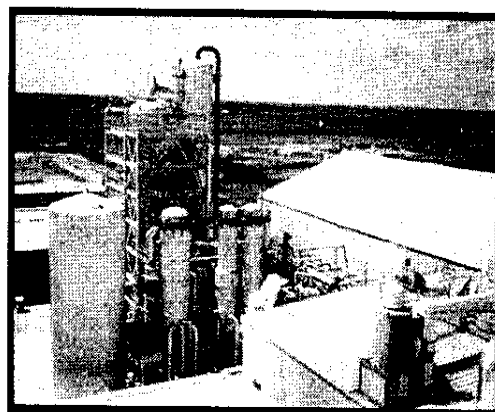
Soon, new technologies will be economically viable for converting plant fiber to ethanol. A portion of the agricultural and forestry residues (stalks, leaves, branches) which are presently burned or left in the field may therefore be harvested for biofuel production. Residues such as corn stover may represent a very large resource – over 100 million tons nationwide. The U.S. Departments of Energy and Agriculture are cooperating on research to determine how much corn stover can be removed sustainably.

New crops may be grown specifically for biofuel production, including native grasses and trees, as well as new high-yielding varieties of oil-seed crops. In time, these energy crops may be planted in place of millions of acres of surplus arable crops, surpassing even corn stover as an energy resource. Switchgrass is a high-yielding perennial grass that grows well over most of the central and eastern United States. Fast-growing trees, which are usually

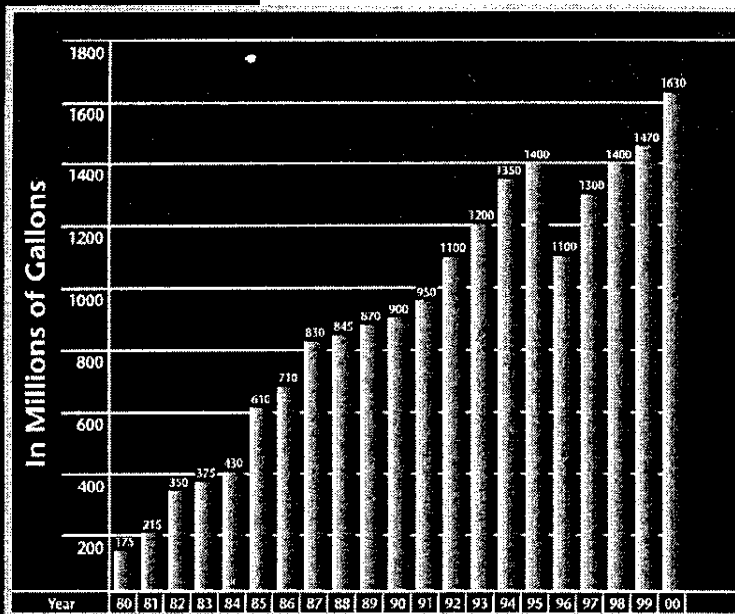
harvested every 3-10 years and can be harvested repeatedly, include poplar and willow in cooler regions, and sycamore and sweetgum in warmer regions.

Current biofuel production and growth opportunities

The ethanol industry currently employs about 200,000 people (directly and indirectly), and saves \$2 billion a year in terms of oil imports. However, America's present trade deficit in crude oil is over \$50 billion, so there is plenty of room for growth. Ethanol's total benefits in terms of farm incomes are greater – about \$4.5 billion. There are over 60 ethanol production plants in operation or under construction,



Ethanol production plant, Nebraska.



*Growth in U.S. fuel ethanol production.
(source: Energy Information Administration/
Renewable Fuels Association)*

with the capacity to produce more than 2 billion gallons (7.6 billion liters) a year. Ethanol plants are found in 20 states, mostly concentrated in the corn-growing region of the Midwest. 22 of these plants are farmer-owned facilities, representing one-quarter of total capacity.

Today, about 12% of US gasoline contains ethanol as a fuel additive, which boosts octane and reduces carbon monoxide and other emissions. Another 25% of US gasoline contains an additive called MTBE which has caused concerns about water pollution. State legislation in California and nine other states to ban MTBE in reformulated gasoline by 2003/2004 is likely to generate a significant new demand for ethanol. USDA has estimated that this would result in an extra \$1 billion in farm cash receipts annually, while ethanol production could more than double within the next 5 years. An estimated one billion gallons of new ethanol production capacity is already on the drawing board, about 35% of this based on non-grain feedstocks such as agricultural and forestry residues. Doubling ethanol production would create a demand for an additional 800 million bushels of corn, or 20-25,000 tons of corn stover, other residues, or switchgrass.

With good planning and sufficient research and development, the first commercial plants producing ethanol from stover could begin operation as early as 2010. However, there are important reasons for farmers to be thinking about collecting stover today. Depending on your own particular conditions, this may require significant changes to your harvesting and tilling practices. Some small-scale markets for stover already exist, e.g. mulch production, so it may be worth while experimenting with an eye to future markets. Farmers are likely to play a key role in making cellulose-to-ethanol technology a success. For obvious reasons, corn stover is already available in the same areas where corn-to-ethanol plants are located, and this may enable the development of more cooperatively-owned ethanol plants.

The biodiesel industry is much smaller, but growing fast. Enabling legislation to promote biodiesel use is advancing rapidly, and more state and federal vehicle fleets (e.g. the U.S. Postal Service) are starting to use this fuel. About 20 million gallons (76 million liters) of biodiesel were actually produced in 2001, but U.S. capacity is already 50 million gallons (190 million liters) per year, and growing.

Biodiesel can now be used in blends of 20% and higher to meet federal and state alternative fuel vehicle fleet requirements, due to legislation under the Energy Policy Act. A number of city bus fleets, such as Cincinnati and St. Louis, are beginning to use biodiesel on a large scale, and legisla-





Environmental Benefits

Biofuels, when blended with conventional fuels, reduce air pollutant emissions such as sulfur, particulates, carbon monoxide and hydrocarbons. Ethanol and biodiesel are also less of a hazard if they spill or leak, since they are rapidly biodegradable in water. Substituting biofuels for one gallon of

gasoline or diesel saves up to 20 pounds of carbon dioxide emissions to the atmosphere, since they are made from carbon "recycled" by plants instead of carbon dug out of the ground in the form of fossil fuels.

Growing perennial energy crops in place of surplus annual crops can reduce soil erosion and compaction, as permanent deep root systems develop and enrich the soil. Perennial crops need less tilling and less agrochemical inputs, so they may help to improve the quality of waterways. Their sturdy root systems and more permanent canopies offer a wider variety of habitats for birds and beneficial insects, compared with annual row crops. Levels of soil carbon may increase under perennial crops, helping to offset some fossil-fuel carbon dioxide emissions. Soil carbon sequestration may even occur under intensively-managed annual crops with limited residue removal, such as the harvest of about half the available corn stover. However, the optimal sustainable level of stover removal will depend on many factors, including erosion control, moisture retention and planned tillage reduction, and will be highly specific to local conditions and topography.

In the future, there may even be financial opportunities for farmers through rewards for good stewardship of the land in terms of "carbon credits". A number of US electricity utilities are already showing an interest in future trading of carbon emissions and offsets.

tion requiring statewide use of a 2% biodiesel blend have been proposed by the legislatures of Minnesota and North Dakota. These two states alone would create a market for 20 million gallons (76 million liters) per year. The ultimate market for biodiesel over the next few years could reach as much as 2 billion gallons (7.6 billion liters) per year, or about 8% of highway diesel consumption.

Overall Economic Benefits

Establishment of major new biofuel industries in rural areas is likely to have substantial economic impacts. Preliminary estimates by Oak Ridge National Laboratory suggest that ethanol production from corn stover alone could result in \$8.9 billion in industrial output and \$3.8 billion in value added, creating about 76,000 permanent jobs. Another study, for switchgrass production, found that total US farm income could increase by \$6 billion. At the local level, a USDA study estimated that a 100 million gallons/year (380 million liters/year) ethanol production facility would create 2,250 local jobs for a single community. The National Biodiesel Board estimates that inclusion of just 1% biodiesel (partly replacing sulfur as a lubricity additive) in all road diesel fuel would generate demand for 300 million gallons (1.1 billion liters) of biodiesel adding more than \$800 million to gross farm incomes.



Conversion factors for biofuels

Great times ahead for biofuels

So next time you hear your neighbors complaining about fuel prices, tell them what U.S. farmers can do! American agriculture can help not only to reduce our dependence on imported oil - a growing domestic biofuels industry will also assist in ironing out the ups and downs of energy costs, and can also contribute to storing carbon in the soil. In a few years your neighbors will probably be using biofuels themselves, or will know someone who does!

For more information:

U.S. Department of Energy's
National Biofuels Program,
<http://www.ott.doc.gov/biofuels> or
Bioenergy Feedstock Development Program
Oak Ridge National Laboratory
bfdp@ornl.gov, <http://bioenergy.ornl.gov>
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- A bushel of soybeans (60 lb or 27 kg) yields about 11 pounds (5 kg) of soybean oil, making 1.5 US gallons (5.7 liters) of biodiesel

- A bushel of corn (56 lb or 25 kg) yields about 2.5 US gallons (9.5 liters) of ethanol


- A ton (2000 lb or 980 kg) of corn stover will yield about 80-90 US gallons (300-340 liters) of ethanol, and a ton of switchgrass will yield in the range 75-100 US gallons (285-380 liters)

America needs farmers.
America needs biofuels.

Produced for the U.S. Department of Energy by Oak Ridge National Laboratory, a U.S. Department of Energy national laboratory.

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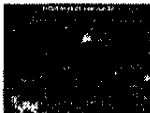
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It's not a choice between food and fuel—we'll need more of both

By Theresa Schmalshof
July 14, 2008

So now we're being told we have to choose between food and fuel. At least that's what people who should know better would have you believe as they ponder the problems of rising costs for both.

This didn't seem possible when policymakers were putting the finishing touches on a new energy bill just six months ago. Meant to curb our nation's thirst for gasoline through greater efficiency in vehicles and expanded use of ethanol as an alternative fuel, the legislation was shaped by a Democratic-led Congress and enthusiastically embraced by a Republican president. And based on what's happened to fuel prices since then, it would seem such an approach was long overdue.

Yet the forces of status quo are now suggesting we should stop dead in our tracks and restrict the use of ethanol. They do so by pointing to rising food costs and blaming biofuels for the problem. It's one or the other, they say, and farmers are meant to provide food. As someone who works in the agriculture industry, I would strongly suggest we don't have the luxury of such a choice.

The fact is global food demands will double in the next 40 years and world energy demand will grow at least 40 percent in the next 25 years. That's what happens when you add 3 billion people to the planet while also happily experiencing rapid economic growth and higher standards of living in countries once left behind in desolate poverty.

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FatLoss4idiots.com

We could spend a lot of time here refuting the notion that our policies to expand ethanol use are a problem by pointing out that fossil fuel costs are having a far greater impact on food prices than increased corn production, and that production shortfalls in wheat and rice are the real reason behind lower surplus stocks and higher food prices. There's plenty of bad policy driving the food shortage, not the least of which are short-sighted attempts to hoard grain by curbing or eliminating exports. But ethanol-friendly incentives aren't the culprit.

The real threat is to remain caught up in the blame game while actually buying into the misguided notion that farmers are forced to choose between delivering food or fuel. Much more of both will be needed. The critical choices have to do with

how we can provide more food and energy while using fewer resources. And in the spirit of the current campaign season, part of the answer can be framed by modifying a sage piece of political counsel: It's the yield, stupid.

Here's where there's good news. In the last 50 years, through technology breakthroughs and seed improvements, we have doubled yields of corn in the United States from 75 bushels an acre to 150. And we think we can double yield again to 300 bushels an acre in another couple of decades.

We're now feeding twice as many people using 20 percent less acreage, while reducing

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the amount of pesticides used. The elimination of fuel associated with less spraying and plowing is also keeping about 20 billion pounds of carbon tied up in the ground, which is equivalent to taking 4 million automobiles off the road for a year.

Rather than limiting farmers to the false choice of providing either food or fuel, we should instead place our priorities on areas that enable agriculture to do both more productively and with less strain on our environment.

Whether it's improved seed, the use of fertilizers, practices like conservation tillage or the use of biotech crops, when all the rhetoric has faded and people honestly look at the landscape, it's all about increasing yields and doing it in a way that uses less of the world's precious resources.

Theresa Schmalshof and her husband, Gary, raise corn and soybeans on their farm near Adair, Ill. She serves on the board of the National Corn Growers Association.

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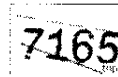
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July 1, 2008, 8:40 am

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Tomatoes, Salmonella and the 21st-Century Food Chain

Posted by Jacob Goldstein



The life of a 21st-century tomato is complicated — picked in one place, packed in another, shipped off to a third. A tomato might, for example, be grown in Florida, shipped to Mexico, sorted with tomatoes from lots of other places, repackaged and sent off to the U.S. for somebody to eat.

So when people start coming down with salmonella, how do you figure out where the tomatoes are coming from? The answer so far: You don't.

The whole thing reminds us of contamination problems earlier this year with Baxter's heparin. But even that [could be traced back](#), albeit not precisely, to Chinese manufacturers early in the supply chain.

In the case of the tomatoes, [this morning's WSJ reports](#) in a page 1 story, there may never be a clear answer.

"It's important to control expectations, and it's possible that this investigation will not ultimately provide a smoking gun," David Acheson, the FDA's associate commissioner for foods, said at a recent news conference. "That's not that unusual with tomato outbreaks."

Talk Tomatoes: [Grade the FDA's effort](#) to keep food safe.

Photo: AP

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Comments

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If the FDA does not find the source, in this widely publicized and costly outbreak, their credibility is going to be damaged severely.

I know it is complicated, but could they, at least, narrow down the region. Did it come from Florida or Mexico?

James Hubbard, M.D., M.P.H.
www.familydoctormag.com

Comment by James Hubbard, M.D., M.P.H - July 1, 2008 at [10:04 am](#)

Why was it assumed that tomatoes were the source of the Salmonella, rather than cilantro or some other ingredient common to pico de gallo, salsa and guacamole?

Comment by L. Ireland - July 1, 2008 at [11:00 am](#)

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Maybe the FDA should require better traceability, or less "sorting together" of produce which makes it impossible to trace where produce is grown, washed or packaged.

Comment by RichL - July 1, 2008 at [11:19 am](#)

The one food common to all who have been infected with this strain of Salmonella is tomatoes, not pico de gallo, salsa or guacamole.

James Hubbard, M.D., M.P.H.
www.familydoctormag.com

Comment by James Hubbard, M.D., M.P.H - July 1, 2008 at [11:24 am](#)

According to numerous sources, health officials in Texas and New Mexico are now trying to determine if peppers, cilantro or other ingredients in pico de gallo, salsa and guacamole might be responsible for the outbreak.

Comment by L. Ireland - July 1, 2008 at [12:14 pm](#)

Its very unlikely any receiver would ship tomatoes from Florida to Mexico. Never heard of anyone having reason to do that in my 20+ years in the industry...I don't understand why the FDA cant find the source. If they have not done so yet, they need to hire people who work in the industry and understand the supply chain process.I don't see the genetic footprint process working here. Find the field/grower before the source is cleaned up or destroyed.

Feel free to contact me anytime.

ls40095@gmail.com

<http://poisionvegetablescankillyou.blogspot.com/>

Comment by Michael R. Machi - July 1, 2008 at [3:07 pm](#)

The first step with any research is to make sure you've asked the right question. Was it even the tomatoes?

Comment by Sandy - July 2, 2008 at [10:04 am](#)

? Are we now to STOP eating & buying tomatoes ?

Comment by Laura - July 5, 2008 at [7:36 am](#)

is the salmonella on the west coast. where are these people who have contracted it. i live in oregon and dont know is i should be eating tomatoes or not. i normally eat a lot of them. thank you

Comment by mabelle - July 9, 2008 at [10:22 pm](#)

There are lines of investigation that have no tomatoes getting people sick, only chili, so the good doctors statement about tomatoes being the common denominator isn't accurate. tomatoes get front and center attention because in the questionnaire it is the food that most people ate before becoming ill. Since 85% of the people in the southwest eat tomatoes daily it is no wonder they show up the most.

Comment by Jim C - July 14, 2008 at [4:36 pm](#)

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Agricultural and Food Scientists

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Significant Points

About 14 percent of agricultural and food scientists work for Federal, State, or local governments. A bachelor's degree in agricultural science is sufficient for some jobs in product development; a master's or Ph.D. degree is required for research or teaching. Opportunities for agricultural and food scientists are expected to be good over the next decade, particularly for those holding a master's or Ph.D. degree.

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Nature of the Work

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The work of agricultural and food scientists plays an important part in maintaining the Nation's food supply by ensuring agricultural productivity and food safety. Agricultural scientists study farm crops and animals and develop ways of improving their quantity and quality. They look for ways to improve crop yield with less labor, control pests and weeds more safely and effectively, and conserve soil and water. They research methods of converting raw agricultural commodities into attractive and healthy food products for consumers. Some agricultural scientists look for ways to use agricultural products for fuels.

In the past two decades, rapid advances in the study of genetics have spurred the growth of biotechnology. Some agricultural and food scientists use biotechnology to manipulate the genetic material of plants and crops, attempting to make these organisms more productive or resistant to disease. Advances in biotechnology have opened up research opportunities in many areas of agricultural and food science, including commercial applications in agriculture, environmental remediation, and the food industry. Interest in the production of biofuels, or fuels manufactured from agricultural derivatives, has also increased. Some agricultural scientists work with biologists and chemists to develop processes for turning crops into energy sources, such as ethanol produced from corn.

Another emerging technology expected to affect agriculture is nanotechnology—a molecular manufacturing technology which promises to revolutionize methods of testing agricultural and food products for contamination or spoilage. Some food scientists are using nanotechnology to develop sensors that can quickly and accurately detect contaminant molecules in food.

Many agricultural scientists work in basic or applied research and development. Basic research seeks to understand the biological and chemical processes by which crops and livestock grow, such as determining the role of a particular gene in plant growth. Applied research uses this knowledge to discover mechanisms to improve the quality, quantity, or safety of agricultural products. Other agricultural scientists manage or administer research and development programs, or manage marketing or production operations in companies that produce food products or agricultural chemicals, supplies, and machinery. Some agricultural scientists are consultants to business firms, private clients, or

government.

Depending on the agricultural or food scientist's area of specialization, the nature of the work performed varies.

Food scientists and technologists usually work in the food processing industry, universities, or the Federal Government to create and improve food products. They use their knowledge of chemistry, physics, engineering, microbiology, biotechnology, and other sciences to develop new or better ways of preserving, processing, packaging, storing, and delivering foods. Some food scientists engage in basic research, discovering new food sources; analyzing food content to determine levels of vitamins, fat, sugar, or protein; or searching for substitutes for harmful or undesirable additives, such as nitrites. Others engage in applied research, finding ways to improve the content of food or to remove harmful additives. They also develop ways to process, preserve, package, or store food according to industry and government regulations. Traditional food processing research into baking, blanching, canning, drying, evaporation, and pasteurization also continues. Other food scientists enforce government regulations, inspecting food processing areas and ensuring that sanitation, safety, quality, and waste management standards are met.

Food technologists generally work in product development, applying the findings from food science research to improve the selection, preservation, processing, packaging, and distribution of food.

Plant scientists study plants, helping producers of food, feed, and fiber crops to feed a growing population and conserve natural resources. *Agronomists* and *crop scientists* not only help increase productivity, but also study ways to improve the nutritional value of crops and the quality of seed, often through biotechnology. Some crop scientists study the breeding, physiology, and management of crops and use genetic engineering to develop crops resistant to pests and drought. Some plant scientists develop new technologies to control or eliminate pests and prevent their spread in ways appropriate to the specific environment. They also conduct research or oversee activities to halt the spread of insect-borne disease.


Soil scientists study the chemical, physical, biological, and mineralogical composition of soils as it relates to plant growth. They also study the responses of various soil types to fertilizers, tillage practices, and crop rotation. Many soil scientists who work for the Federal Government conduct soil surveys, classifying and mapping soils. They provide information and recommendations to farmers and other landowners regarding the best use of land and plants to avoid or correct problems, such as erosion. They may also consult with engineers and other technical personnel working on construction projects about the effects of, and solutions to, soil problems. Because soil science is closely related to environmental science, persons trained in soil science also work to ensure environmental quality and effective land use.

Animal scientists work to develop better, more efficient ways of producing and processing meat, poultry, eggs, and milk. Dairy scientists, poultry scientists, animal breeders, and other scientists in related fields study the genetics, nutrition, reproduction, and growth of domestic farm animals. Some animal scientists inspect and grade livestock food products, purchase livestock, or work in technical sales or marketing. As extension agents or consultants, animal scientists advise agricultural producers on how to upgrade animal housing facilities properly, lower mortality rates, handle waste matter, or increase production of animal products, such as milk or eggs.

Work environment. Agricultural scientists involved in management or basic research tend to work regular hours in offices and laboratories. The work environment for those engaged in applied research or product development varies, depending on specialty and on type of employer. For example, food scientists in private industry may work in test kitchens while investigating new processing techniques. Animal scientists working for Federal, State, or university research stations may spend part of their time at dairies, farrowing houses, feedlots, farm animal facilities, or outdoors conducting research. Soil and crop scientists also spend time outdoors conducting research on farms and agricultural research stations.

Training, Other Qualifications, and Advancement

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Most agricultural and food scientists need at least a master's degree to work in basic or applied research, whereas a bachelor's degree is sufficient for some jobs in applied research or product development, or jobs in other occupations related to agricultural science.

Education and training. Training requirements for agricultural scientists depend on the type of work they perform. A bachelor's degree in agricultural science is sufficient for some jobs in product development or assisting in applied research, but a master's or doctoral degree is generally required for basic research or for jobs directing applied

research. A Ph.D. in agricultural science usually is needed for college teaching and for advancement to senior research positions. Degrees in related sciences such as biology, chemistry, or physics or in related engineering specialties also may qualify people for many agricultural science jobs.

All States have a land-grant college that offers agricultural science degrees. Many other colleges and universities also offer agricultural science degrees or agricultural science courses. However, not every school offers all specialties. A typical undergraduate agricultural science curriculum includes communications, mathematics, economics, business, and physical and life sciences courses, in addition to a wide variety of technical agricultural science courses. For prospective animal scientists, these technical agricultural science courses might include animal breeding, reproductive physiology, nutrition, and meats and muscle biology. Graduate students usually specialize in a subfield of agricultural science, such as animal breeding and genetics, crop science, or horticulture science, depending on their interests. For example, those interested in doing genetic and biotechnological research in the food industry need a strong background in life and physical sciences, such as cell and molecular biology, microbiology, and inorganic and organic chemistry. Undergraduate students, however, need not specialize. In fact, undergraduates who are broadly trained often have greater career flexibility.

Students preparing to be food scientists take courses such as food chemistry, food analysis, food microbiology, food engineering, and food processing operations. Those preparing as soil and plant scientists take courses in plant pathology, soil chemistry, entomology, plant physiology, and biochemistry, among others. Advanced degree programs include classroom and fieldwork, laboratory research, and a thesis or dissertation based on independent research.

Other qualifications. Agricultural and food scientists should be able to work independently or as part of a team and be able to communicate clearly and concisely, both orally and in writing. Most of these scientists also need an understanding of basic business principles, the ability to apply statistical techniques, and the ability to use computers to analyze data and to control biological and chemical processing.

Certification and advancement. Agricultural scientists who have advanced degrees usually begin in research or teaching. With experience, they may advance to jobs as supervisors of research programs or managers of other agriculture-related activities.

The American Society of Agronomy certifies agronomists and crop advisors, and the Soil Science Society of America certifies soil scientists and soil classifiers. To become certified in soil science or soil classification, applicants must have a bachelor's degree in soil science and 5 years of experience or a graduate degree and 3 years experience. Certification in agronomy requires a bachelor's degree in agronomy or a related field and 5 years experience or a graduate degree and 3 years. Crop advising certification requires either 4 years of experience or a bachelor's degree in agriculture and 2 years of experience. To receive any of these certifications, applicants must also pass designated examinations and agree to adhere to a code of ethics. Each certification is maintained through continuing education.

Employment

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Agricultural and food scientists held about 33,000 jobs in 2006. In addition, many people trained in these sciences held faculty positions in colleges and universities. (See the statement on [postsecondary teachers](#) elsewhere in the *Handbook*.)

About 14 percent of agricultural and food scientists work for Federal, State, or local governments. State and local governments employed about 5 percent, while the Federal Government employed another 9 percent in 2006, mostly in the U.S. Department of Agriculture. Educational services accounted for another 18 percent of jobs. Other agricultural and food scientists worked for agricultural service companies, commercial research and development laboratories, seed companies, wholesale distributors, and food products companies. About 5,500 agricultural scientists were self-employed in 2006, mainly as consultants.

Job Outlook

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Job growth among agricultural and food scientists should be about as fast as the average for all occupations. Opportunities are expected to be good over the next decade, particularly for those holding a master's or Ph.D. degree.

Employment change. Employment of agricultural and food scientists is expected to grow 9 percent between 2006

and 2016, about as fast as the average for all occupations. Past agricultural research has created higher yielding crops, crops with better resistance to pests and plant pathogens, and more effective fertilizers and pesticides. Research is still necessary, however, particularly as insects and diseases continue to adapt to pesticides and as soil fertility and water quality continue to need improvement. This creates more jobs for agricultural scientists.

Emerging biotechnologies will play an ever larger role in agricultural research. Scientists will be needed to apply these technologies to the creation of new food products and other advances. Moreover, increasing demand is expected for biofuels and other agricultural products used in industrial processes. Agricultural scientists will be needed to find ways to increase the output of crops used in these products.

Agricultural scientists will also be needed to balance increased agricultural output with protection and preservation of soil, water, and ecosystems. They increasingly encourage the practice of sustainable agriculture by developing and implementing plans to manage pests, crops, soil fertility and erosion, and animal waste in ways that reduce the use of harmful chemicals and do little damage to farms and the natural environment.

Job growth for food scientists and technologists will be driven by the demand for new food products and food safety measures. Food research is expected to increase because of heightened public awareness of diet, health, food safety, and biosecurity—preventing the introduction of infectious agents into herds of animals. Advances in biotechnology and nanotechnology should also spur demand, as food scientists and technologists apply these technologies to testing and monitoring food safety.

Fewer new jobs for agricultural and food scientists are expected in the Federal Government, mostly because of budgetary constraints at the U.S. Department of Agriculture.

Job prospects. Opportunities should be good for agricultural and food scientists with a master's degree, particularly those seeking applied research positions in a laboratory. Master's degree candidates also can seek to become certified crop advisors, helping farmers better manage their crops. Those with a Ph.D. in agricultural and food science will experience the best opportunities, especially in basic research and teaching positions at colleges and universities.


Graduates with a bachelor's degree in agricultural or food science can sometimes work in applied research and product development positions under the guidance of a Ph.D. scientist, but usually only in certain subfields, such as food science and technology. The Federal Government also hires bachelor's degree holders to work as soil scientists.

Most people with bachelor's degrees find work in positions related to agricultural or food science rather than in jobs as agricultural or food scientists. A bachelor's degree in agricultural science is useful for managerial jobs in farm-related or ranch-related businesses, such as farm credit institutions or companies that manufacture or sell feed, fertilizer, seed, and farm equipment. In some cases, people with a bachelor's degree can provide consulting services or work in sales and marketing—promoting high-demand products such as organic foods. Bachelor's degrees also may help people become farmers, ranchers, and agricultural managers; agricultural inspectors; or purchasing agents for agricultural commodity or farm supply companies.

Employment of agricultural and food scientists is relatively stable during periods of economic recession. Layoffs are less likely among agricultural and food scientists than in some other occupations because food is a staple item and its demand fluctuates very little with economic activity.

Projections Data

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Projections data from the National Employment Matrix

| Occupational title | SOC Code | Employment, 2006 | Projected employment, 2016 | Change, 2006-16 | | Detailed statistics | |
|--|----------|------------------|----------------------------|-----------------|---------|---------------------|----------------------------|
| | | | | Number | Percent | PDF | zipped XLS |
| Agricultural and food scientists | 19-1010 | 33,000 | 36,000 | 3,100 | 9 | PDF | zipped XLS |
| Animal scientists | 19-1011 | 5,400 | 5,900 | 500 | 10 | PDF | zipped XLS |
| Food scientists and technologists | 19-1012 | 12,000 | 13,000 | 1,200 | 10 | PDF | zipped XLS |
| Soil and plant Scientists | 19-1013 | 16,000 | 17,000 | 1,300 | 8 | PDF | zipped XLS |

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on [Occupational Information Included in the Handbook](#).

Earnings

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Median annual earnings of food scientists and technologists were \$53,810 in May 2006. The middle 50 percent earned between \$37,740 and \$76,960. The lowest 10 percent earned less than \$29,620, and the highest 10 percent earned more than \$97,350. Median annual earnings of soil and plant scientists were \$56,080 in May 2006. The middle 50 percent earned between \$42,410 and \$72,020. The lowest 10 percent earned less than \$33,650, and the highest 10 percent earned more than \$93,460. In May 2006, median annual earnings of animal scientists were \$47,800.

The average Federal salary in 2007 was \$91,491 in animal science and \$79,051 in agronomy.

According to the National Association of Colleges and Employers, beginning salary offers in 2007 for graduates with a bachelor's degree in animal sciences averaged \$35,035 a year; plant sciences, \$31,291 a year; and in other agricultural sciences, \$37,908 a year.


FOR THE LATEST WAGE INFORMATION:

THE ABOVE WAGE DATA ARE FROM THE [OCCUPATIONAL EMPLOYMENT STATISTICS \(OES\)](#) SURVEY PROGRAM, UNLESS OTHERWISE NOTED. FOR THE LATEST NATIONAL, STATE, AND LOCAL EARNINGS DATA, VISIT THE FOLLOWING PAGES:

- [ANIMAL SCIENTISTS](#)
- [FOOD SCIENTISTS AND TECHNOLOGISTS](#)
- [SOIL AND PLANT SCIENTISTS](#)

Related Occupations

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The work of agricultural scientists is closely related to that of other scientists, including [biological scientists](#), [chemists](#), and [conservation scientists and foresters](#). It also is related to the work of managers of agricultural production, such as [farmers, ranchers, and agricultural managers](#). Certain specialties of agricultural science also are related to other occupations. For example, the work of animal scientists is related to the work of [veterinarians](#).

Sources of Additional Information

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DISCLAIMER:

LINKS TO NON-BLS INTERNET SITES ARE PROVIDED FOR YOUR CONVENIENCE AND DO NOT CONSTITUTE AN ENDORSEMENT.

Information on careers in agricultural science is available from:

American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, 677 S. Segoe Rd., Madison, WI 53711-1086. Internet: <http://www.agronomy.org>
Living Science, Purdue University, 1140 Agricultural Administration Bldg., West Lafayette, IN 47907-1140.
Internet: <http://www.agriculture.purdue.edu/USDA/careers>

Information on careers in food science and technology is available from:


Institute of Food Technologists, 525 W. Van Buren, Suite 1000, Chicago, IL 60607. Internet: <http://www.ift.org>

Information on getting a job as an agricultural scientist with the Federal Government is available from the Office of Personnel Management through USAJOBS, the Federal Government's official employment information system. This resource for locating and applying for job opportunities can be accessed through the Internet at <http://www.usajobs.opm.gov> or through an interactive voice response telephone system at (703) 724-1850 or TDD

(978) 461-8404. These numbers are not toll free, and charges may result.

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19-1011.00, 19-1012.00, 19-1013 19-1013.00

Suggested citation: Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2008-09 Edition*, Agricultural and Food Scientists, on the Internet at <http://www.bls.gov/oco/ocos046.htm> (visited July 22, 2008).

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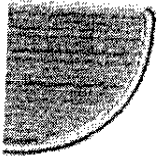
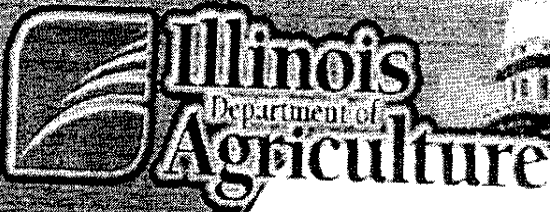
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U.S. Bureau of Labor Statistics Division of Information Services Suite 2860, 2 Massachusetts Avenue, NE Washington, DC 20212-0001
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Rod R. Blagojevich
Governor

FACTS ABOUT ILLINOIS AGRICULTURE

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- Grants
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What agricultural goods are produced in Illinois?

Illinois is a leading producer of soybeans, corn and swine. The state's climate and varied soil types enable farmers to grow and raise many other agricultural commodities, including cattle, wheat, oats, sorghum, hay, sheep, poultry, fruits and vegetables. Illinois also produces several specialty crops, such as buckwheat, horseradish, ostriches, fish and Christmas trees.

What are the characteristics of a typical Illinois farm?

Illinois' 76,000 farms cover more than 28 million acres -- nearly 80 percent of the state's total land area. The large number of farms, coupled with the diversity of commodities produced, makes it difficult to describe a typical operation. However, statistics provide some indication about what it means to farm in Illinois.

The average size of an Illinois farm including hobby farms is 368 acres. Most farm acreage is devoted to grain, mainly corn and soybeans. Nearly 10 percent of Illinois farms have swine. Beef cows are found on about 23 percent of farms, while about 3 percent have dairy cows. Some farms produce specialty crops and livestock, including alfalfa, canola, nursery products, emus and fish. Many farming operations also support recreational activities such as hunting and fishing.

How does agriculture benefit Illinois' economy?

Marketing of Illinois' agricultural commodities generates more than \$9 billion annually. Corn accounts for nearly 40 percent of that total. Marketing of soybeans contributes about one-third, with the combined marketings of livestock, dairy and poultry generating about 23 percent.

Billions more dollars flow into the state's economy from ag-related industries, such as farm machinery manufacturing, agricultural real estate, and production and sale of value-added food products. Rural Illinois benefits principally from agricultural production, while agricultural processing and manufacturing strengthen urban economies.

How are Illinois' agricultural commodities used?

With more than 950 food manufacturing companies, Illinois is well-equipped to turn the state's crops and livestock into food and industrial products. Food processing is the state's number-one manufacturing activity, adding almost \$13.4 billion annually to the value of Illinois' raw agricultural commodities.

Illinois' agricultural commodities also provide the base for such products as animal feed, ink, paint, adhesives, clothing, soap, wax, cosmetics, medicines, furniture, paper and lumber. Each year, 274 million bushels of Illinois corn are used to produce more ethanol than any other state -- about 678 million gallons. Illinois also markets other renewable fuels, including soybean-based biodiesel.

How does agriculture benefit from the state's geography and climate?



Illinois measures about 400 miles from its northern border to its southernmost tip. Temperatures generally vary by 10 to 12 degrees from one end of the state to the other. Cold, fairly dry winters and warm, humid summers with ample rainfall allow the land to support many kinds of crops and livestock.

Much of Illinois is comprised of fertile flat loess, left behind by glaciers and wind millions of years ago. About 89 percent of the state's cropland is considered prime farmland, ranking the state third nationally in total prime farmland acreage. Prime farmland is important because it provides an environmentally sound base for crop production. The central three-fourths of the state are especially well suited for growing crops, while hilly areas in the northwest and south provide excellent pasture for livestock.

Who farms?

Although Illinois' food and fiber industry employs nearly 1 million people, there are only 76,000 farm operators, down from 164,000 in 1959. During the same time period, the average farm size more than doubled as sophisticated technology made many aspects of the industry less labor-intensive. Illinois farmers are generally more than 50 years old. About 39 percent hold jobs off the farm and consider farming their secondary occupation. Family farms still dominate, though some of these have incorporated.

What are other reasons for Illinois' agricultural success?

Illinois has a competitive edge over many other states due to its central location and superior transportation system. More than 2,000 miles of interstate highway and 34,500 miles of other state highway make trucking of goods fast and efficient. Chicago is home to the largest rail gateway in the nation, connecting eastern and western United States. The state boasts some 1,100 airports, landing areas and heliports, including Chicago's O'Hare International, through which more than 65 million travelers pass annually. Illinois' 1,118 miles of navigable waterways, including the Illinois and Mississippi rivers, make barge traffic an excellent option for shipment of grain to the Gulf of Mexico.

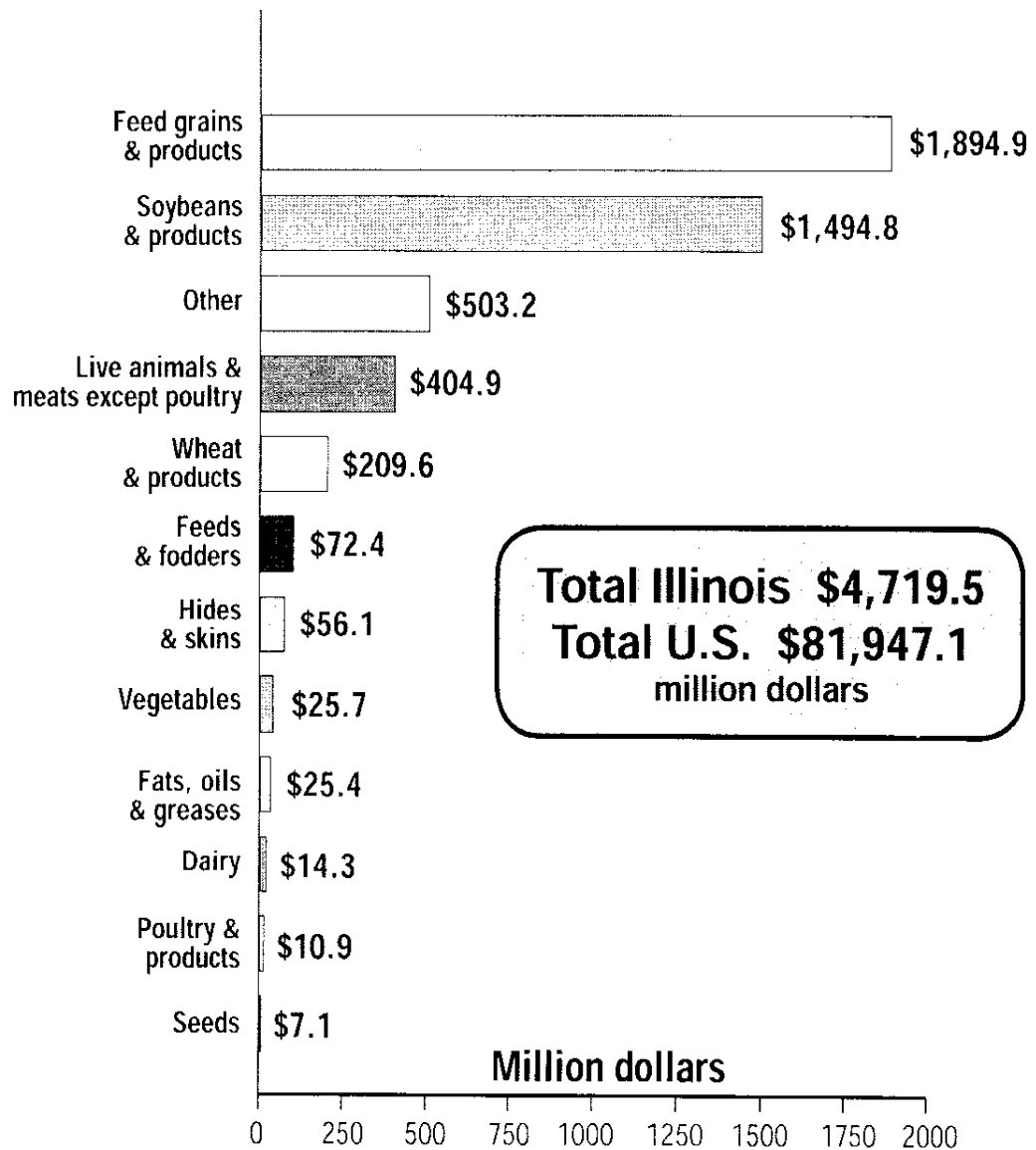
Are many of Illinois' agricultural products exported to other nations?

Illinois ranks second nationally in the export of agricultural commodities with nearly \$4 billion worth of goods shipped to other countries each year. Exports from Illinois account for nearly 7 percent of all U.S. agricultural exports. Illinois is the nation's second leading exporter of both soybeans and feed grains and related products. More than 44 percent of grain produced in Illinois is sold for export. The Illinois Department of Agriculture promotes items produced, processed or packaged in Illinois through international and domestic marketing exhibits, trade missions, industry tours, publications, the Illinois Product Logo program and an electronic database for trade leads. Illinois ranks second in food processing. Most processors are located in the Chicago metropolitan area, which contains one of the largest concentrations of food-related businesses in the world.

Questions or comments.

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Illinois Ag Exports* FY 2007

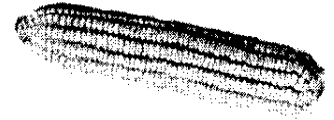


*Goods leaving the State of Illinois

Source: ERS/USDA State Export Data – www.ers.usda.gov/data/stateexports/

Illinois Leading Counties - Crops

Counties Leading in Production of Selected Crops



Com 2007

| County | Bushels |
|------------|------------|
| McLean | 77,224,000 |
| Iroquois | 67,996,000 |
| La Salle | 64,170,000 |
| Livingston | 64,071,000 |
| Bureau | 60,157,500 |
| Champaign | 59,408,000 |
| Sangamon | 53,829,500 |
| Lee | 51,051,000 |
| Christian | 48,636,000 |
| De Kalb | 48,560,500 |

Soybeans 2007

| County | Bushels |
|------------|------------|
| Livingston | 12,561,000 |
| McLean | 11,826,000 |
| Champaign | 11,124,000 |
| Iroquois | 11,067,000 |
| Vermilion | 9,687,600 |
| La Salle | 9,384,000 |
| Henry | 6,997,200 |
| Edgar | 6,858,200 |
| Shelby | 6,451,200 |
| Christian | 6,089,400 |

Wheat 2007

| County | Bushels |
|------------|-----------|
| Washington | 3,140,800 |
| Clinton | 2,299,000 |
| Madison | 1,927,800 |
| Randolph | 1,809,600 |
| Bond | 1,715,700 |
| St. Clair | 1,622,400 |
| Monroe | 1,534,500 |
| Fayette | 1,496,400 |
| Marion | 1,376,400 |
| Adams | 1,274,000 |

Sorghum 2007

| County | Bushels |
|-----------|---------|
| Wayne | 885,500 |
| White | 474,300 |
| Jackson | 386,100 |
| Jefferson | 360,400 |
| Marion | 331,200 |
| Monroe | 323,400 |
| Clay | 307,100 |
| Hamilton | 289,800 |
| St. Clair | 254,800 |
| Randolph | 233,200 |

Oats 2006

| County | Bushels |
|------------|---------|
| Stephenson | 252,000 |
| Jo Daviess | 196,000 |
| De Kalb | 176,700 |
| Henry | 144,500 |
| Will | 142,500 |
| Ogle | 139,400 |
| Kane | 120,900 |
| LaSalle | 109,200 |
| Iroquois | 97,500 |
| Bureau | 84,000 |

Alfalfa hay 2006

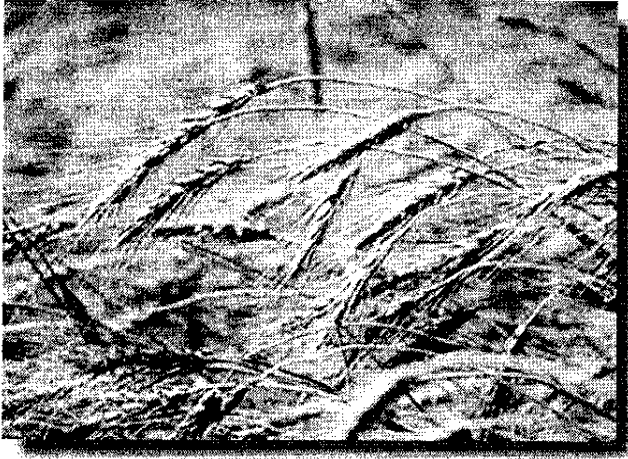
| County | Tons |
|-------------|---------|
| Jo Daviess | 165,150 |
| Stephenson | 130,080 |
| McHenry | 62,220 |
| Mercer | 50,000 |
| Pike | 47,970 |
| Henry | 47,560 |
| Carroll | 46,060 |
| Ogle | 44,020 |
| Clinton | 36,000 |
| Rock Island | 34,030 |

Source: USDA/NASS Illinois County Statistics
USDA/NASS Quick Stats Database

Exhibit Volume 2 of 3

Chicagoland Foreign Investment Group

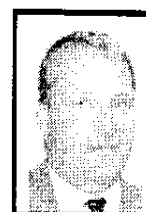
ILLINOIS DEPARTMENT OF AGRICULTURE 2007 ANNUAL REPORT



“To protect, promote and preserve . . .”



Rod Blagojevich
Governor



Thomas Jennings, Acting Director
Illinois Department of Agriculture

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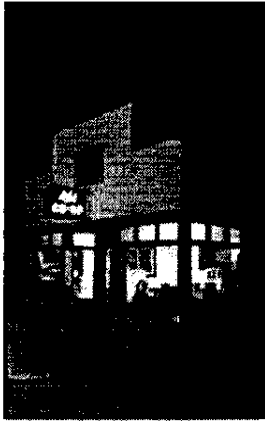
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Introduction

Illinois' food and agriculture industry continues its pace of rapid change.

Advances in technology make it possible for domestic producers to provide our international trading partners some of the safest food and agricultural products in the world. Additionally, because Illinois farmers have access to a strong transportation infrastructure and, thereby, a strong production distribution system, they are uniquely positioned to compete in the global marketplace.

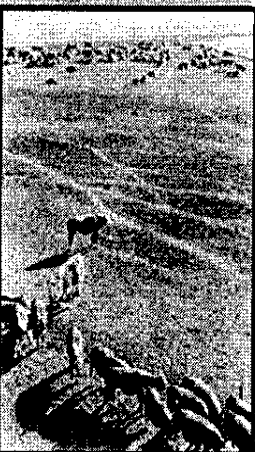
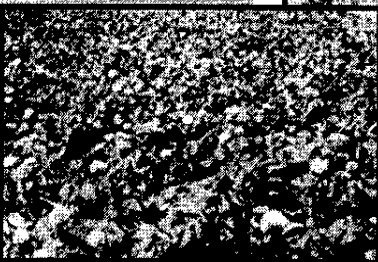
The Illinois Department of Agriculture (IDOA) works with state and national agriculture constituent groups to cultivate markets by bringing buyers right to producers and products. These marketing activities help increase demand for Illinois agricultural products which, in turn, aids in job creation and retention.



In 2007, IDOA continued fulfilling its three-pronged mission 1) to promote the industry to new markets, 2) to ensure that food is safe and 3) to encourage resource conservation and preservation. These activities have helped the department meet the Administration's directive to assist with rural economic stabilization while at the same time giving local residents and companies the tools to find and create new jobs as well as retain existing ones.



This report summarizes ways in which Illinois' citizens are benefiting from the Department of Agriculture's programs and services and highlights the Department's achievements in 2007.



ILLINOIS AGRICULTURE HIGHLIGHTS 2007

Agriculture is vital to the cultural and economic life of Illinoisans. Agricultural product manufacturing and processing contribute significantly to Illinois' economy. Nationally, Illinois is a leader in food processing, corn, soybean and ethanol production, meat packing, dairy manufacturing, feed milling, vegetable processing and other agriculture related endeavors.

Diversity in soil types allows farmers to grow many well known crops and lesser known specialty crops including alfalfa, amaranth, apples, bell peppers, blueberries, broccoli, buckwheat, canola, Christmas trees, clover, cucumbers, field corn, ginseng, grain sorghum, grass seed, herbs, horseradish, mushrooms, nursery products, oats, peaches, popcorn, potatoes, potted plants, pumpkins, rye, seed corn, snap beans, sod, soybeans, strawberries, sweet corn, tomatoes, winter wheat and others.

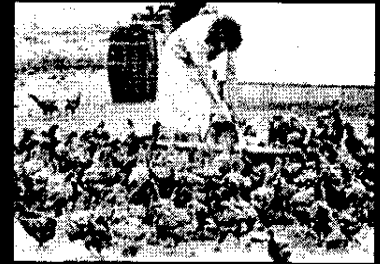
IN 2006, THERE WERE 72,400 FARMS IN ILLINOIS THAT CONTAINED 27.3 MILLION ACRES OF LAND.

In Illinois, livestock is produced using a wide variety of methods, ranging from the raising of one ostrich in a pen to the mass production of thousands of hogs in a total confinement. Agriculture producers in Illinois raise beef cattle, bees, bison, broilers, buffalo, catfish, crayfish, dairy cattle, deer, elk, emus, goats, horses, hybrid striped bass, layers, llamas, mink, minnows, rabbits, sheep, tilapia, turkeys and others.

In 2006, there were 72,400 farms in Illinois that contained 27.3 million acres of land. The average farm in 2006 was 377 acres. The average per acre value of farm real estate as of January 1, 2007, was \$4,330 per acre, compared to \$3,800 per acre on January 1, 2006. The average per acre value of cropland increased 16 percent from \$3,850 to \$4,460 in 2007. Solid corn prices brought on by the demand for ethanol led to increased land values in 2006. Other factors influencing the price of land came from the IRS 1031 Tax-Free Exchange and the fact that farmland returns competed well with stocks, bonds and money markets in 2006.

Illinois ranked second among all states in corn and soybean production in 2006. Production of corn for grain during 2006 totaled 1.82 billion bushels, 6 percent more than produced in 2005. The corn yield averaged 163 bushels per acre, 20 bushels per acre more than in 2005. Soybean production in 2006 totaled 482 million bushels, 10 percent more than in 2005. The soybean yield in 2006 was 48 bushels per acre, 1.5 bushels above 2005. In 2006, Illinois pork producers marketed 1.47 billion pounds of pork, ranking Illinois fifth among all states. Cash receipts from pork sales declined 7 percent from the previous year. Cattle and calf marketings during 2006 totaled 682 million pounds, one percent less than in 2005. Illinois ranked 18th in the United States in marketings of cattle and calves.

Total cash receipts from farm marketings in Illinois for 2006 totaled \$8.64 billion, 2 percent below 2005. Illinois ranked 7th among all states in total cash receipts in 2006. Crop cash receipts in Illinois in 2006



totaled \$6.84 billion, down 2 percent from 2005 and placed Illinois third among all states in total crop cash receipts in 2006. Livestock and livestock products cash receipts in Illinois in 2006 totaled \$1.79 billion, which was down 10 percent from 2005 and placed Illinois 25th among all states in total livestock and livestock products cash receipts.

In 2006, corn accounted for 41.6 percent of the total cash receipts in Illinois and soybeans accounted for 29.1 percent. All other crops combined accounted for 8.5 percent of the total cash receipts in Illinois. Compared to 2005, cash receipts for corn increased 1 percent and cash receipts for soybeans decreased less than one percent. In 2006, hogs accounted for 9.3 percent of the total cash receipts in Illinois while cattle and calves accounted for 6.9 percent and dairy products accounted for 3.2 percent. All other livestock combined accounted for 1.4 percent of the total cash receipts in Illinois in 2006. Compared to 2005, cash receipts for all livestock categories declined.



2007 ILLINOIS ACCOMPLISHMENTS

In an effort to provide Illinois farmers and agribusiness companies with information on various market development activities, IDOA has created new online communications tools. This includes a new page on the Department's website (www.agr.state.il.us) that is devoted to farmers markets.

IDOA has created new online communications tools, including its new website, www.agr.state.il.us. This includes a new page on the website devoted to farmers' markets.

The Department has also worked with the USDA and various local units of government to detect, control, and eradicate the Emerald Ash Borer (EAB), another invasive species that has been discovered in Illinois. Infestations have been discovered in several counties in the northeastern portion of the state, including Kane, DuPage, Cook, and LaSalle counties. Detection surveys and control/eradication strategies are being conducted regularly. Three pieces of legislation were signed in 2007 assisting the department with managing the EAB efforts in Illinois:



PA 95-0183 allows municipalities to revoke EAB-infested ash trees from property not owned by a municipality when owner refuses to remove infested tree;

PA 95-0309 mandates administrative rules regarding the importation of firewood; and

PA 95-0588 that established a revolving loan program through the Illinois Finance Authority (IFA) to assist in replanting of trees in EAB quarantined areas.



Legislation initiated by the Bureau of Agriculture Products Inspection which became law on July 1, 2007 requires fertilizer businesses to keep a record of ammonium nitrate sales.

In 2006 and 2007, the Illinois State Fairgrounds hosted the National High School Rodeo Finals. The event brought more than 1,500 contestants to Springfield in both 2006 and 2007. There were approximately 5,000 people on the grounds for the duration of the event providing a positive impact on city and state revenue.

Through federal cooperative agreements with the United States Department of Agriculture, the IDOA increased Avian Influenza (AI) surveillance efforts. The Department was able to provide reimbursement funding for these and other Low Pathogenic Avian Influenza (LPAI) and High Pathogenic Avian Influenza (HPAI) surveillance activities within the poultry industry throughout Illinois through a Cooperative Agreement with USDA/APHIS/VS.

Animal Health staff continued to enroll livestock premises to the voluntary National

Animal Identification System (NAIS). At the close of fiscal year 2007, there were 7,138 accounts that had been established in Illinois, covering 7,851 individual premises.

In 2007, the **Bureau of Land and Water Resources** distributed nearly \$11 million in funds to Illinois' 98 Soil and Water Conservation Districts (Districts) for programs aimed at reducing soil loss, enhancing agricultural productivity and protecting water quality.

The Department spearheaded changes to the Illinois Diseased Animals Act to allow for quarantines based on suspicion of disease or contamination, which would bolster livestock industry safeguards should a foreign animal disease outbreak occur.

Numerous other **accomplishments related to emergency response and preparedness have been made:** training 35 staff (including some field inspectors) in the Incident Command System (ICS), a nationally recognized system used during all emergency response events; opening a Bio-Security Level 3 (BSL3) laboratory at the animal disease lab in Galesburg (a designation that allows IDOA to safely test for potential zoonotic and foreign animal diseases); revising testing requirements for animals entering Illinois; and the hiring of 10 meat inspectors and 3 consumer safety officers to implement the Governor's initiative to provide further safeguards against BSE.

The Department established the Anhydrous Ammonia Security Grant Program designed to provide funds to help deter the theft of anhydrous, which is a key component in the illegal production of methamphetamine. More than \$600,000 in grants were awarded to 89 companies. Grantees used funding to obtain more than 6,019 locking devices for anhydrous ammonia tanks, five added marking agents (GloTell) to their anhydrous ammonia tanks, 19 installed security cameras, and 24 increased lighting at their anhydrous ammonia storage locations.

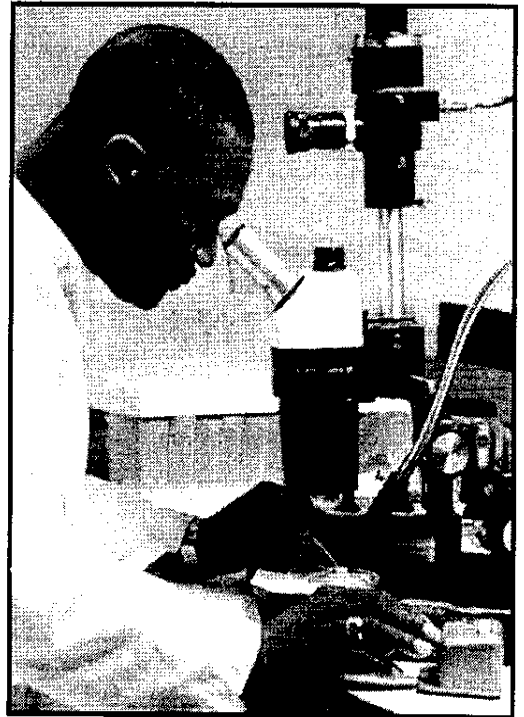
The **DuQuoin State Fair** has increased non-fair income from \$33,312 in 2003 to \$568,500--a 360% increase. That equates to an average increase per year of about \$107,037. The Southern Illinois Tourism Council has estimated the economic impact for the DuQuoin State Fair has increased from between \$8-10,000,000 annually, and non-fair events impact has increased from \$1 million in 2003 to \$8 million in 2007.

Agency legal staff worked with the Attorney General's Office to defend a statewide ban on horse slaughter for human consumption. The successful litigation resulted in a halt to processing horse meat in Illinois for human consumption.

Various agency **staff worked closely with the Muslim community** to help implement rules for disclosure requirements of Halal food under the Consumer Fraud and Deceptive Business Practices Act.

IDOA Bureau of County Fairs and Horse Racing **implemented a random drug testing program** to protect the integrity of racing at fairs in Illinois.

Beginning in 2005, IDOA funded a project to verify the financial health of grain warehouse licensees. The





model created identifies licensees with potential financial problems and dictates whether greater IDOA scrutiny is warranted. As a result, the number of exams being conducted has increased. To further complement the computer modeling tool, the Bureau of Warehouses funded an actuarial study, which found that the Grain Insurance Fund (GFI) should have a minimum balance of \$10 million at all times to prevent catastrophic losses.

Since 2003, and through the end of the 3rd quarter of 2007, the Illinois Department of Agriculture's Bureau of Marketing & Promotion has participated in 67 domestic and international trade shows, hosted 23 foreign buyers' missions and industry tours, facilitated 22,941 buyer-seller introductions and disseminated 33,790 trade leads to Illinois companies.

The combination of these has resulted in \$132 million in actual sales and \$188 million in projected sales. For small and medium-sized Illinois agribusiness and food processing companies, staff also organized and participated in 620 outreach and educational events reaching 305,725 consumers.

There are currently 56 Agricultural Areas (AA) in 23 counties totaling 121,405 acres. A new law now authorizes counties with populations greater than 600,000 to establish AA's of no greater than 100 acres. All other counties will be authorized to establish a minimum of 350 acres as AAs.

AGRICULTURE PRODUCTS INSPECTION

The Bureau of Agriculture Products Inspection (BAPI) works to protect manufacturers, distributors, producers, consumers and the environment through inspecting, sampling, and analyzing feed, seed and fertilizer products and facilities throughout Illinois. The combination of inspections performed by the bureau ensures that consumers and producers get what they pay for.

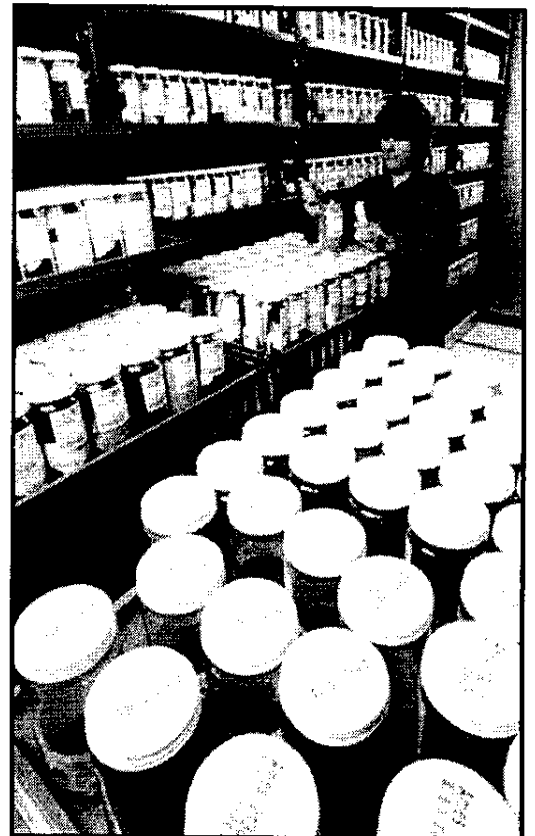
BAPI has five key functions:

1) Truth-in-labeling. BAPI reviews feed, fertilizer, seed and soil labels for accuracy and truthful labeling. In FY07 3,222 feed labels, 747 fertilizer labels, and 41 soil amendment labels were reviewed.

2) Seed testing. BAPI tests seed samples for purity, germination and weed content. In FY07 1,551 official seed samples were collected by state inspectors, a 5-percent increase from FY06. The seed laboratory also analyzes seed samples sent in by customers (service samples). This year the bureau received and analyzed 3,032 service samples. The seed lab also performed a noxious weed survey on 275 wheat samples collected by inspectors.

3. Fertilizer oversight. During FY07 a total of 1,623 fertilizer samples were collected and analyzed to make sure the end user was receiving what they paid for. There were 730 firms licensed and 6,793 products registered in the state.

License and registration fees brought in \$96,677 and inspection tonnage fees brought in more than \$1 million. Half of these fees go to general revenue and half to the fertilizer control fund. Out of the fertilizer control fund, the bureau administers the Fertilize Research and Education Council. This council funds fertilizer research projects and education outreach programs. The chemistry lab works with the Illinois





Department of Transportation (IDOT) on the annual Illinois Limestone Program. The lab analyzes 173 limestone samples for coarseness and breakdown ability. The results are reported in the Illinois Voluntary Limestone Producer Information booklet and are important to anyone who uses concrete or road rock, who needs to know the coarseness of the rock, and to ag producers who want to know the release rate of the limestone they apply to corn and soybean fields so they can maintain the proper Ph level.

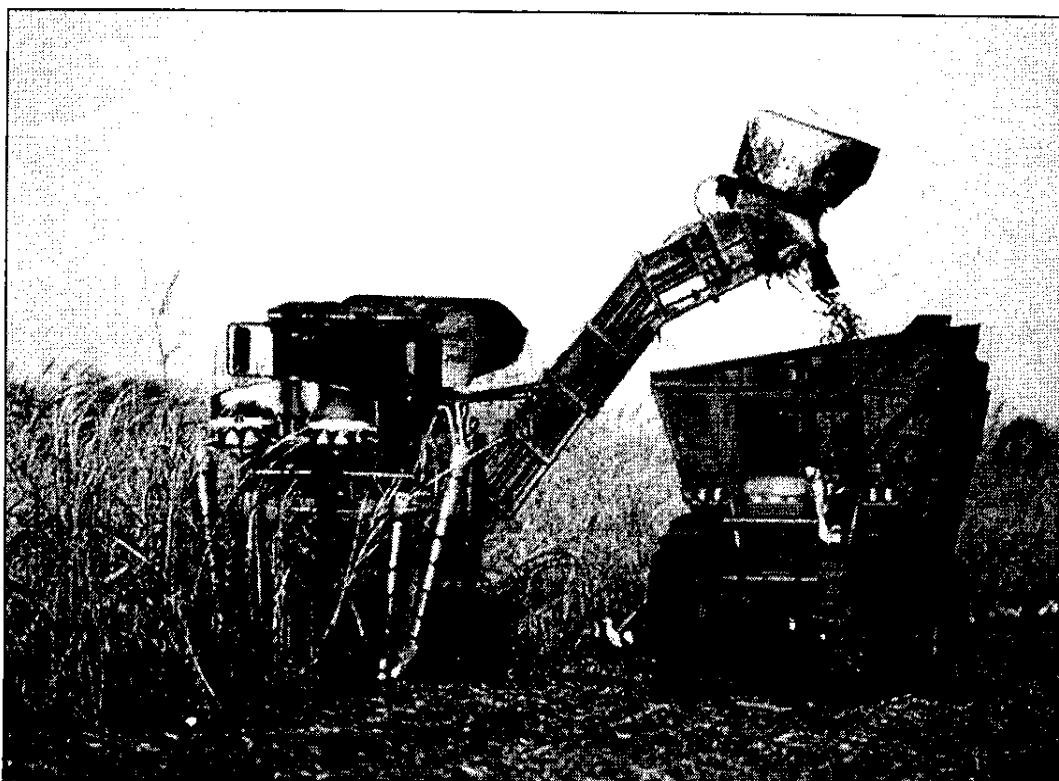
4) Anhydrous ammonia oversight. The bureau's inspectors conducted 842 inspections of anhydrous ammonia facilities and examined 24,503 nurse tanks in FY07. Inspections are carried out as required by the rules and regulations relating to the handling of anhydrous ammonia and low pressure nitrogen solutions, equipment, containers and storage facilities.

Anhydrous ammonia is the most dangerous material handled by farmers and dealers. Inspectors provide an important consumer protection function by verifying that storage tanks, applicators and nurse-tank wagons are in safe operating condition. Inspectors also confirm that tanks have the proper safety relief valves, excess flow valves and break-away couplings on load out platforms. Inspectors also verify the hoses on the applicators are in good condition. The bureau, in cooperation with the Illinois Fertilizer and Chemical Association, puts on safety

training classes for employees of the anhydrous ammonia facilities in the state. This attendant training is required under the 2003 Anhydrous Ammonia Rules and Regulations. In FY07, 744 attended these training sessions, an increase from 2006 when 515 attended. There have been 3,462 people pass the bureau's safety training class and be certified as a competent attendant since 2003.

5) Feed oversight. The bureau collected and analyzed 3,066 feed samples in FY07. This was an 8.8 percent increase from 2006. These samples are tested for label guarantees to make sure the end user is receiving what they are paying for and to make sure the feed is safe for animal consumption. License fees produced \$31,575, inspection tonnage fees \$654,405, and pet food registration \$517,688. Half of these fees go to general revenue and half to the feed control fund which the bureau

uses to finance its feed program. The bureau performed 246 Good Manufacturing Practice (GMP) and Bovine Spongiform Encephalopathy (BSE) inspections at the state feed mills and rendering facilities. The bureau also performed 13 GMP and 100 BSE inspections at feed mills under contract for the Food and Drug Administration (FDA) in FY07. The bureau also is involved in a cooperative agreement with FDA to perform 200 BSE on-farm inspections





and collect and analyze 500 cattle feed samples to make sure cattle are not being fed ruminant protein in Illinois. The bureau is in its third year of a three year cooperative agreement. The FDA feed mill contract in FY07 brought in \$54,865 and the FDA cooperative agreement brings in \$233,528 per year.

Additional AGPI Duties

Anhydrous Ammonia Security Grant Program

This program was designed to help prevent the theft of anhydrous for use in the "cooking" of methamphetamine. A total of \$1.6 million was appropriated to the program to make grants for this purpose. Eighty-nine companies participated in this program, and \$617,620 was awarded. The grantees obtained 6,019 locking devices for anhydrous ammonia tanks, five companies requested funds for marking agents, nineteen companies installed security cameras, and twenty-four companies increased lighting at their anhydrous ammonia locations.

Illinois Soybean Rust Program

Bureau personnel were instrumental in putting together the Illinois Soybean Rust Program. The program is responsible for detecting if rust is in Illinois or appears to be heading to Illinois and reporting it to proper authorities and alerting soybean producers of proper steps that can be used to control this disease and cause as little damage as possible to the soybean crop. Soybean rust has been detected in Illinois in 2005, 2006, and 2007, fortunately each year the rust arrived too late in the growing season to damage the soybean crop.

Mycotoxin Surveys

API Bureau conducts a mycotoxin survey each year to make sure grain in Illinois does not contain high levels of mycotoxins that could be harmful to animals that the grain is fed. The bureau conducts a wheat survey that tests for vomitoxin in wheat. In FY07, the bureau collected and analyzed 320 wheat samples. In the fall, the bureau inspectors collect, and the Chemistry Lab analyzes corn samples collected throughout the state for aflatoxin and fumonisin. In FY07 (fall 2006), 392 samples were collected and analyzed. Low levels of aflatoxin and moderate levels of fumonisin were found in the corn samples. The results of these surveys are sent to the grain elevators that participated in the survey and to the feed mills in Illinois. It is recommended to the feed mills if high levels of these mycotoxins are found in their area, that grain used as animal feed should be tested for vomitoxin, aflatoxin, and fumonisin.



E85 Trucks

In the last 3 years, the Bureau of API replaced nine out of eleven inspectors' state trucks with E85 trucks. In September of 2007, these trucks used 865 gallons of E85 fuel out of a total use of 1,325 gallons (65%).

Changes in Legislation

The bureau worked with members of the Illinois Legislature to help write the ammonium nitrate bill that became law on July 1, 2007. This bill requires fertilizer businesses to make a record of who they sell ammonium nitrate to. This law was created because ammonium nitrate was used in the first attack on the

World Trade Center and the bombing of the Murrah Federal Building in Oklahoma City.

Fertilizer Research and Education Council

The Fertilizer Research and Education Program was established to provide funds for research or educational projects relating to fertilizer utilization. Since the first approval of projects in 1990, the Department has provided funds in the amount of \$7.9 million for research and education projects concerning fertilizer. A summary of the information and data for each project has been published yearly in the Illinois Fertilizer Conference Proceedings. At the conclusion of each project, the information obtained will be distributed so that utilization of the research findings may be implemented. The program has provided funding for 94 separate projects.



BUREAU OF ANIMAL DISEASE LABORATORY

The Bureau of Animal Disease Laboratory-Centralia and the Bureau of Animal Disease Laboratory Galesburg, via the practicing veterinarian, provide assistance to livestock and/or pet owners experiencing problems relative to animal diseases. They also provide support for various disease control and eradication programs.

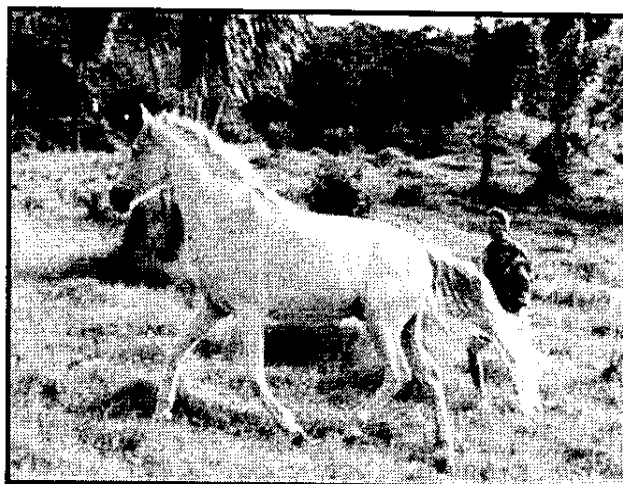
Both the Centralia and Galesburg labs are better described as the Illinois Department of Agriculture Animal Health Surveillance – Food and Water Safety Laboratories. In addition to being full service animal diagnostic laboratories accredited by the American Association of Veterinary Laboratory Diagnosticians (AAVLD), the Centralia Laboratory maintains accredited food and water safety departments while the pathology services and the molecular biology departments at Galesburg provide continuous surveillance for disease of zoonotic (transferred from animal-to-human or human-to-animal) importance such as West Nile and avian influenza viruses.

In cooperation with the United States Department of Agriculture, the State-Federal Serology Laboratory is operated in Springfield. The principal activity of this laboratory is the testing of blood and milk for specific disease antibodies. These three laboratories comprise the AAVLD accredited Illinois Department of Agriculture Laboratory System. By statute, the primary purpose of the Diagnostic Laboratories is to monitor the health of both domestic animals and wildlife, and to provide diagnostic and regulatory services to Illinois consumers.

The objective of the laboratories is to be constantly alert for diseases of significance, whether naturally occurring or the result of bioterrorist introduction of a foreign animal disease or poisonous chemicals. The laboratories are the first line of defense against the economic catastrophe that would result from an undetected foreign animal disease such as classical swine fever or foot and mouth disease. They have highly trained and dedicated staff who serve a critical purpose to all residents of Illinois.

Animal Disease Laboratory-Centralia

The Centralia Animal Laboratory (CADL) provides



bacteriological and toxicological food safety testing for the Illinois Department of Agriculture Meat and Poultry Inspection Service. The lab routinely receives samples from the state meat inspectors and processing facilities to monitor for bacteriological and/or chemical contamination.

The food safety department is accredited by the U.S. Department of Agriculture Food Safety Inspection Service (USDA/FSIS) to perform these analyses. The CADL is a member of the Food Emergency Response Network (FERN), linking the laboratory directly to FSIS via the LEXNET, allowing for continual monitoring of the safety of our nation's food supply by the USDA. The water potability department is accredited by the Illinois Department of Public Health to analyze samples from private and municipal drinking water supplies for harmful bacteria.

The toxicology department is unique in that it provides diagnostic support not only for CADL, but also for the Galesburg Animal Disease Laboratory and, to a limited extent, the University of Illinois Veterinary Diagnostic Laboratory's Toxicology Department. The Centralia laboratory's toxicology department is one of only two laboratories in the United States accredited by FSIS to perform arsenic analysis on food samples.

The laboratory routinely tests samples of chicken tissue to meet export requirements to Russia. The department is also FSIS accredited to analyze food samples for chlorinated hydrocarbons and polychlorinated biphenyls (PCBs). In addition to testing animal samples to confirm disease, the CADL performs thousands of regulatory tests each year to fulfill intrastate, interstate and international export requirements for domestic livestock. The CADL is the only laboratory in Illinois that performs many of the tests required for livestock export.

THE CADL is a member of the USDA's National Animal Health Laboratory Network (NAHLN) providing surveillance for scrapie in sheep and goats and chronic wasting disease in deer and elk. The CADL processes 50 to 100 sheep brain samples per week submitted by the USDA for scrapie analysis. These samples are collected at a slaughter plant near Chicago. The laboratory received \$25 per sample from the USDA to perform this service.

Animal Disease Laboratory-Galesburg

The Galesburg Animal Disease Laboratory (GADL) provides service to various state agencies (Illinois Department of Natural Resources (IDNR), Illinois Department of Public Health (IDPH), Illinois Natural

| STATE-FEDERAL SEROLOGY LABORATORY SUMMARY | |
|---|-------------------------------------|
| Brucella | Caprine.....51 |
| Blood Samples | Equine.....0 |
| Bovine | Llama.....27 |
| Regular (sale, show, area).....730 | Bison.....1 |
| Slaughter est. (MCI).....1,200 | Deer.....24 |
| Auction market25,823 | Ovine.....1 |
| Problem herd (BPH)0 | Elk.....1 |
| TOTAL27,753 | Misc.....0 |
| | TOTAL: 98 |
| Porcine | Milk Samples (BRTs).....0 |
| Regular.....32 | BRT Elisa.....3,234 |
| Market swine (MST).....230 | Equine infectious anemia.....52,923 |
| TOTAL.....262 | |
| TOTAL Brucella Testing..... 31,354 | GRAND TOTAL.....84,277 |





Animal Health.

History Survey (INHS)), federal agencies (National Veterinary Services Laboratory (NVSL), National Animal Health Laboratory Network (NAHLN), USDA APHIS Veterinary Services), practicing veterinarians, and livestock owners. Virtually all citizens throughout the state benefit from the activities of the laboratory. The laboratory performs both regulatory (monitoring of diseases specified by law—pseudorabies, brucellosis, foreign animal diseases, etc.) and general diagnostic work for all of these entities. Foreign animal disease diagnosis and surveillance is also an important activity of the laboratory. The laboratory has two trained foreign animal disease diagnosticians and the capability to screen for several important foreign animal diseases. The laboratory now has the ability to test for a number of foreign animal diseases, including avian influenza (matrix protein, hemagglutinins 5 and 7), classical swine fever (hog cholera), foot and mouth disease, and avian Newcastle disease by real-time polymerase chain reaction (RT-PCR) testing. Real-time PCR testing for bovine virus diarrhea (types 1 and 2) and bovine paratuberculosis (Johne's disease) are also now available.

BUREAU OF ANIMAL HEALTH

Animal Health is responsible for programs aimed at control or eradication of swine and bovine brucellosis, bovine tuberculosis, pseudorabies in swine, cattle scabies, equine infectious anemia, equine viral encephalitides, pullo rumtyphoid, *Mycoplasma gallisepticum*, and *Mycoplasma synoviae* in poultry and/or turkeys, and a number of other animal diseases when occurrence of a disease warrants regulatory action. Five licensing and/or registration Acts relating to animal health are administered by personnel in

BOVINE BRUCELLOSIS — There were no new brucellosis infected herds disclosed during the year and Illinois maintained its Brucellosis Free status. Under the joint State-Federal indemnity program, funding is available to pay indemnity for brucellosis. There were no indemnity claims paid during the year.

BRUCELLOSIS RING TEST (BRT) — This test is conducted on samples of milk collected at dairy plants throughout the state. Samples are collected four times per year as one of the requirements for a Class Free state. A total of 2,661 samples were collected during the year.

CERTIFIED BRUCELLOSIS-FREE CATTLE AND GOAT HERDS

There were 12 cattle herds, with a total of 1,311 cattle, certified as brucellosis-free as of June 30. There was one goat herd, with a total of 32 goats, certified as brucellosis-free as of June 30.

TUBERCULOSIS

Illinois maintained its Bovine Tuberculosis Accredited Free State status throughout the year. There was one goat herd with a total of 32 head accredited as tuberculosis-free as of June 30.

JOHNE'S DISEASE

Seven herds are operating under a cooperative vaccination agreement. Certificates of vaccination were filed for 313 calves during the year. A Voluntary Paratuberculosis (Johne's disease) Certification Program is offered to owners of cattle, bison, buffalo, sheep, goats, llamas and members of the cervid family giving them the opportunity to test and certify their herds or flocks based on the probability of the herd or flock being free of Johne's disease. For cattle, the program consists of annual tests alternating between a serum test and a fecal culture test of the entire herd annually. For all other species, an annual complete herd negative fecal culture is required. As of June 30, three elk herds, two goat herds, 19

beef herds and seven dairy herds had been tested and certified under the program. A Risk Management Program for infected cattle, bison, cervid and goat herds is available. The program enables producers to determine the incident rate, if any, of Johne's disease in their herds, and use the herd level as a marketing tool. Enrollment in the program also removes movement restrictions on herds with culture positive animals. As of June 30, 110 cattle herds and three goat herds were enrolled in the program. On June 30, 2007, 113 cattle herds, one bison herd, three deer or elk herds, eight goat herds and one sheep flock were under restriction due to Johne's disease.



CATTLE AND SWINE DISEASE RESEARCH

Funds for cattle and swine disease research projects at the College of Veterinary Medicine, University of Illinois, were again a part of the Department's budget. Cattle disease research received \$16,800, and more than \$35,000 was allocated for swine disease research.

PSEUDORABIES

Illinois retained its Pseudorabies Stage V-Free status. Testing of breeding animals at slaughter continued. Samples were collected from all identified sows and boars slaughtered at state inspected slaughtering facilities and at the Bob Evans plants at Galva, Johnsonville, Momence, and at Pork King, Marengo. Reports on positive animals were also received from Alabama, Arkansas, Iowa, Kansas, Kentucky, Michigan, North Carolina, Ohio, Pennsylvania, Tennessee, and Wisconsin. There was one positive sample out of 72,327 samples reported. Testing was done in the traced back-herd with no positive animals disclosed. Tracing of negative slaughter samples was performed during the year to show that the entire state is being sampled through slaughter surveillance. A total of 32,678 negative samples were traced, primarily from the Illinois slaughter facilities. These samples traced back to 94 out of 102 counties in the state. Statewide, there were no cases of pseudorabies confirmed by laboratory diagnosis in FY07.

SWINE BRUCELLOSIS

Illinois continued as a validated brucellosis-free state. There were 168 validated Brucellosisfree swine herds as of June 30. Identification of slaughter swine continued and 181,796 tags were applied to 163,075 sows, 6,417 boars and 12,304 swine of unknown sex.



REPORTABLE DISEASES

According to the regulations pertaining to the Illinois Diseased Animals Act, all suspect cases of many diseases shall be reported to the Division. No confirmed cases of the following reportable diseases were received during FY07: avian influenza; anthrax; cattle scabies; Mycoplasma gallisepticum; and Mycoplasma synoviae (turkeys). Animal Health continues to participate in the National Animal Health Reporting System, in which the incidence of many diseases is being tracked nationwide.

WEST NILE VIRUS

The first equine case of West Nile virus



was reported in Marion County on August 22, and by the time the threat ended with the killing frost, 21 confirmed cases had been counted in Illinois, in 17 out of 102 counties. The outcome was known in all of the cases – in seven cases (33.3%), the animal either died or was euthanized. None of the animals had been vaccinated.

CHRONIC WASTING DISEASE (CWD)

Two chronic wasting disease (CWD) herd monitoring programs are available for deer and elk herds; the certified and the contained monitored herd programs. Herds are required to submit an annual herd inventory to the Department, submit the brains of any animals that die or are slaughtered for CWD examination and either uniquely identify each animal, or uniquely identify each animal entering or leaving the herd. Chronic wasting disease is a fatal, neurological disease found in deer and elk. The disease attacks the brains of infected animals, causing them to become emaciated, display abnormal behavior, lose coordination and eventually die. CWD continued to be diagnosed in wild deer in Illinois. A total of 51 native whitetail deer in Boone, De Kalb, Mc Henry, Ogle and Winnebago counties had been diagnosed with CWD during the fiscal year.

HEALTH CERTIFICATES

During FY07, 3,660,699 animals were approved and shipped out of state. This involved 20,872 shipments containing 81,779 cattle, 10,411 horses and mules, 3,524,932 swine, 7,696 sheep and goats, 3,655 dogs, 818 cats, 160 deer, 10 bison, 133 elk, and 31,105 miscellaneous animals.

AVIAN INFLUENZA

Funding assistance from the United States Department of Agriculture was made available to increase the surveillance for avian influenza (AI). The goal of the project was to help ensure that eggs and poultry that are raised for the dressed-bird market, sold in retail markets or restaurants are free of avian influenza. Importance was placed on maintaining consumer confidence in Illinois poultry and poultry products. To enhance the ability to detect high pathogenic avian influenza (HPAI) in the U.S., the voluntary program enabled the Department to pay for necropsies (autopsies) of poultry and appropriate testing for surveillance of Avian Influenza.

Flock owners could submit up to 10 birds per flock every 6 months for necropsy, with no charge if the birds were submitted to the Animal Disease Laboratory in Centralia or Galesburg or the University of Illinois, College of Veterinary Medicine's Diagnostic Laboratory. In addition, the agreement also included blood sampling for AI. The flock owner was reimbursed for the trip charge for a licensed veterinarian to travel to the farm. In addition, \$3 was paid per bird tested, with the blood sample submitted for testing at the Animal Disease Laboratory in Galesburg.

The flock owner could submit up to 30 blood samples per flock every six months. The Department was able to provide reimbursement funding for these and other Low Pathogenic Avian Influenza (LPAI) and High Pathogenic Avian Influenza (HPAI) surveillance activities within the poultry industry throughout Illinois through a Cooperative Agreement with USDA/APHIS/Vs. A total of 1,105 birds were tested for avian influenza.

NATIONAL ANIMAL IDENTIFICATION SYSTEM (NAIS)

Animal Health continued to enroll livestock premises and related industries in the voluntary National Animal Identification System (NAIS). The goal of the NAIS is to have the capability to identify all animals and premises that

have had direct contact with a foreign animal disease or a domestic disease of concern within 48 hours after discovery. Identifying premises that allow commingling of animals (production points) is the foundation of the NAIS and must be established before animals can be tracked. As of June 30, 2007, 7,138 accounts had been established in Illinois, covering 7,851 individual premises.

SCRAPIE

There were 45 flocks enrolled in the Voluntary Scrapie Certification Program at the end of the year. There were no source or infected flocks located in the state. Illinois is a "consistent state" under the Scrapie Uniform Methods and Rules.

VETERINARY ACCREDITATION

During the year, 156 veterinarians received their accreditation under the cooperative veterinary accreditation program of the United States and Illinois Departments of Agriculture.

BUREAU OF ANIMAL WELFARE

Animal Welfare is responsible for the administration of program activities relating to the Animal Welfare Act, Humane Care for Animals Act, Dead Animal Disposal Act, Horse Meat Act, Brand Act, Domestic Animals Running at Large Act, Dangerous Animals Act, and an Act to Prohibit the Feeding of Garbage to Swine, other Animals or Poultry. Animal Welfare is also responsible for the general supervision of county animal control programs as required by the Animal Control Act.

ANIMAL WELFARE INVESTIGATIONS

During the fiscal year, the seven animal health and welfare inspectors investigated 538 complaints pertaining to the Animal Welfare Act and 1,141 complaints pertaining to the Humane Care for Animals Act. These inspections resulted in 184 Notices of Violation being written, and 14 cases presented to local State's Attorneys for prosecution. Three impoundments were also issued.

ILLINOIS APPROVED HUMANE INVESTIGATORS

Under the Humane Care for Animals Act, the Department approves of qualified persons to perform investigative activities pertaining to suspected violations of this Act. These individuals must be affiliated with a humane society or governmental agency and must pass a test issued by the Department every other year regarding their qualifications. Qualifications to become an approved humane investigator include knowledge of the provisions of the Act and expertise in the investigation of complaints relating to the care and treatment of animals. At the close of the fiscal year, there were 244 Illinois Approved Humane Investigators.

INSPECTION OF LICENSED FACILITIES

A total of 1676 inspections were performed during the fiscal year for the facilities licensed under the Animal Welfare Act, the Dead Animal Disposal Act, and the Horse Meat Act. Thirteen establishments were refused licensing



LICENSES AND/OR REGISTRATIONS ISSUED BY ANIMAL WELFARE

| | |
|---|------|
| Animal control facilities, animal shelters, catteries, dog dealers kennel operators, pet shop operators, guard dog services, foster homes..... | 2867 |
| Dead Animal Disposal Trucks..... | 578 |
| Class A license (dead animals only)..... | 1 |
| Class B license (parts of bodies of animals, scrap or grease)..... | 14 |
| Class C license (poultry or parts of poultry)..... | 0 |
| Class D license (fish or parts of fish)..... | 0 |
| Class E license (biender)..... | 3 |
| Class F license (docks for collection of carcasses, scrap and grease, etc.)..... | 15 |
| Class G license (animal collection service)..... | 10 |
| Class A and B license (combining two types of operations)..... | 1 |
| Class A and F license (combining two types of operations)..... | 1 |
| Class B and C license (combining two type of operations)..... | 1 |
| Class B and E license (combining two types of operations)..... | 2 |
| Class F and G license (combining two types of operations)..... | 3 |
| Class A, F & G (combining three types of operations)..... | 2 |
| Class A, B, E, & F (combining four types of operations)..... | 1 |
| Class A, B, C, D & E license (combining five types of operations)..... | 1 |
| Class A, B, C, D, E, F & G) license (combining seven types of operations)..... | 1 |
| Total..... | 56 |
| Horse Meat Slaughterers, Processors, or Wholesale Distributors | 11 |
| Livestock Brands (registrations issued) Number of brands renewed..... | 65 |
| New brands registered..... | 13 |
| Total Active..... | 438 |

during the year.

HORSE

MEAT SLAUGHTER

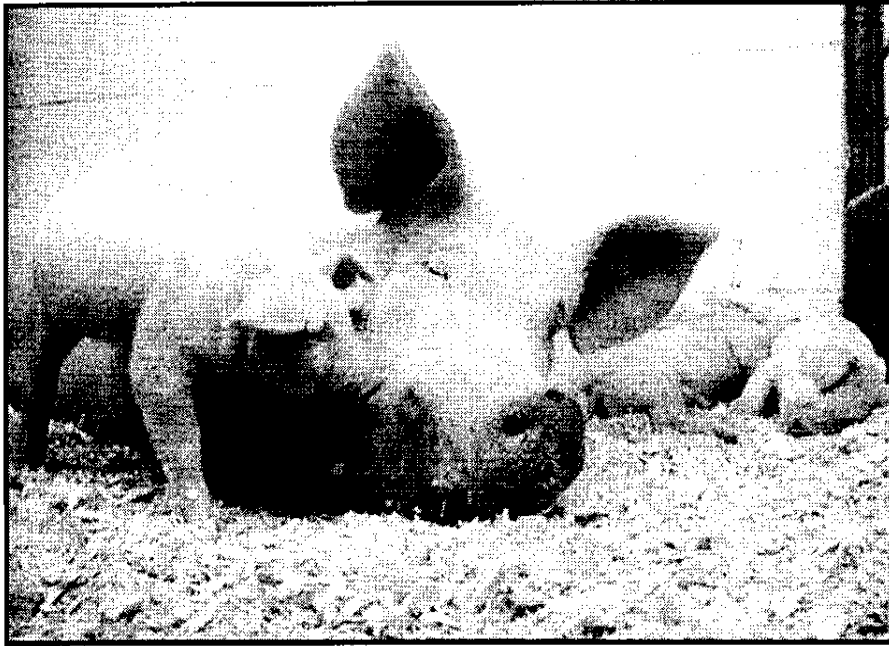
ACT – On May 24, 2007, Governor Rod R. Blagojevich signed legislation that banned the slaughter of horses in Illinois for consumption. The legislation also banned the importing or exporting of horse meat for human consumption.

COUNTY FAIRS AND HORSE RACING

The Bureau of County Fairs and Horse Racing administers and distributes almost \$8.1 million in funds to 104 county fairs, 100 4-H Clubs and 25 vocational agriculture sections (Ag.Ed.).

The program funds are for premium and/or rehabilitation reimbursement. About 400,000 entries at county fairs are eligible for premium reimbursement annually. In addition, approximately 30,000 4-H club members and about 300 high schools benefit from the agricultural education program for premium reimbursement. About 4,400 acres in the state are eligible to receive rehabilitation reimbursement for maintenance and/or construction at county fair sites. The following are all considered eligible projects under the rehabilitation program: equipment purchases and repairs, fuel, racetrack maintenance, casualty and liability insurance (not including personal liability), construction or purchase of permanent facilities and systems stored on fairgrounds, labor, interest on building/construction/real estate loans, building materials and supplies, and





World Trotting Derby held at the DuQuoin State Fair and attracting the world's best trotters for an estimated purse of \$550,000. The 2007 World Trotting Derby winner, Donato Hanover, was chosen the 2007 Horse of the Year.

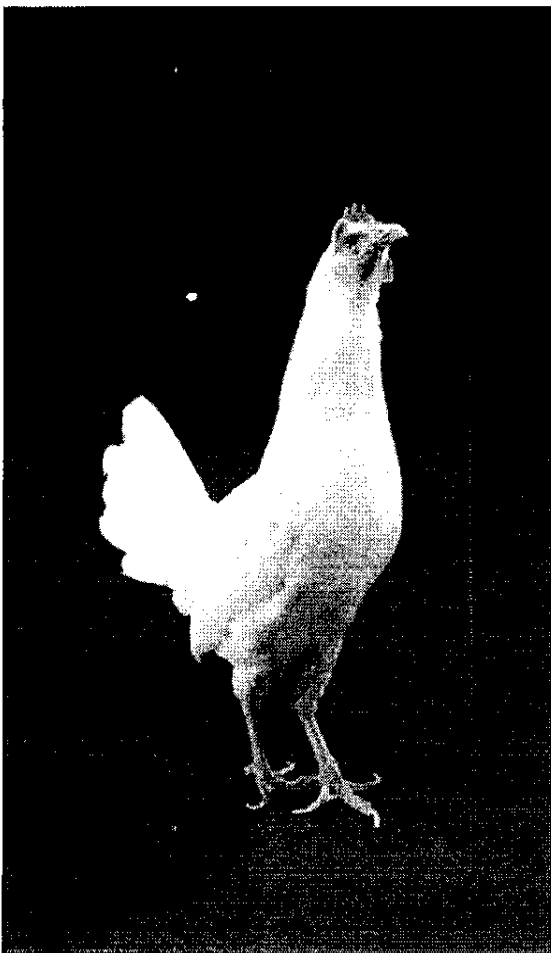
initial "one-time" purchases of computers and accessories.

The Department's horse racing and breeding are known throughout the country. Illinois' standardbred, quarter horse, and thoroughbred breeding and racing programs are among the top incentive programs in the Nation returning more than \$26 million to horse racing participants through horse racing purses and awards. IDOA registers nearly 2,000 foals, 3,500 mares and 300 stallions annually that participate in the Bureau's racing and breeding programs. Illinois-bred races occur at five Illinois pari-mutuel racetracks, two state fairs and 38 county fairs.

One of the best known races is the

EGG AND EGG PRODUCTS INSPECTIONS

Division inspectors perform inspections and quality grading of eggs and egg products sold in Illinois in accordance to the Illinois Egg and Egg Products Act, ILCS, Ch. 410, Par. 615/1 et seq. The Act requires anyone who grades, packs, sells or barter eggs to be licensed with the Illinois Department of Agriculture. Eggs sold for human consumption must be candled, graded, and refrigerated. Egg cartons must be labeled to identify day of pack, grade, size, name, address, and identification of the packer. Inspectors perform inspections at all points of the distribution channel including packing plants, distribution centers, delivery trucks, grocery stores, schools, hospitals, nursing homes, restaurants and bakeries.



The Department provides assistance to the United States Department of Agriculture (USDA) under a cooperative agreement to perform Federal Shell Egg Surveillance on a quarterly basis as mandated by federal law. Inspectors perform grading service on a fee or resident basis as requested under the USDA voluntary program. Four inspectors have achieved USDA certification as Federal Egg Graders. The Illinois Department of Agriculture cooperates with the Food and Drug Administration, the Food Safety and Inspection Service, and the Illinois Department of Public Health to provide uniform enforcement of temperature requirements for eggs at all locations. Eggs are checked in the display case and storage areas. Eggs must be kept below 45 degrees F. Eggs are weighed, checked for damage, candled for quality. Eggs not meeting Weights and Measures standards are taken off sale.

BUREAU OF ENVIRONMENTAL PROGRAMS

The Bureau of Environmental Programs is responsible for executing several state and federal programs for the protection of our environment.

Pesticide Applicator/Operator Certification and Licensing:
Pursuant to the Illinois Pesticide Act, individuals wishing to

purchase and/or apply restricted use pesticides in Illinois are required to successfully complete appropriate competency examination(s) and receive a license from the Illinois Department of Agriculture. Currently, the Department licenses approximately 17,000 private applicators and 17,000 commercial applicators or operators.



Economic Poison Registrations:

All products offered for sale within the State of Illinois that include a "pesticidal" claim must be registered with the State of Illinois. In 2007, 12,417 products and 1,101 companies were registered with the Department of Agriculture as part of the economic poison program.

Nursery Inspection Program:

Pursuant to the Insect Pest and Plant Disease Act, nursery stock products within the State must be annually inspected to aid in the control of various injurious pests and diseases. The Department's staff annually inspects nursery stock (38,683 acres of nursery stock from 809 nurseries were inspected in 2007) and annually licenses more than 3,500 nursery dealers,

allowing them to sell nursery stock on a commercial basis. The Department's personnel also make inspections and issue phytosanitary certificates (10,326 issued in 2007) to allow the shipment of nursery stock to other states as well as other nations. The Department's efforts relative to the detection and eradication or control of exotic pests are conducted under this program as well. The Department currently works to control the spread of the Gypsy Moth through an annual trapping detection program and limited treatment control program in cooperation with the USDA. The Department has worked cooperatively with local units of government and the USDA in efforts to detect and eradicate the Asian Longhorned Beetle that was found in northeastern Illinois in 1998. Most recently, the Department is working with the USDA and various local units of government to detect, control, and eradicate the Emerald Ash Borer, another invasive species that has been discovered in Illinois. Infestations have been discovered in several counties in the northeastern portion of the state, including Kane, DuPage, Cook, and LaSalle counties. Detection surveys and control/eradication strategies are currently being conducted.

Agrichemical Facility and Lawncare Containment Programs:

Pursuant to the Illinois Pesticide Act and the Lawncare Products Application and Notice Act, the Department reviews applications and issues permits for the design, construction, and operation of containment structures and systems intended to prevent the release of pesticides and fertilizers at retail agrichemical and lawncare facilities across the state. Over 1,400 permitted facilities currently operate within Illinois under this program. In addition, facilities are annually inspected to insure that permitted structures are properly constructed and maintained.

Pesticide Container Recycling Program:

The Department annually cooperates with various segments of the agrichemical industry to operate a plastic pesticide container-recycling program. Single-day collection sites at agrichemical facilities are scheduled near the end of the traditional application season. Pesticide users can bring containers for granulation and shipment to a national contractor that utilizes the plastic for the manufacture of other agrichemical-related products. In addition, the Department has established 4 permanent collection sites that are open throughout the year for the collection and granulation of plastic containers. In 2007, the Department collected and recycled approximately 61,400 small containers and 229 mini-bulk containers at single-day collections through the program.





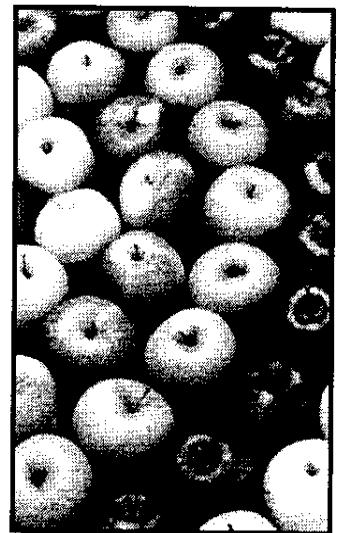
Agrichemical Facilities Response Action Program (AFRAP)

The Department, in cooperation with a governor-appointed board, has developed and implemented a remediation program specifically designed for retail agrichemical facilities. The Department also administers a review and approval program for the land application of pesticide and fertilizer contaminated soil and water resulting from remediation activities at agrichemical facilities or spills during the transport of such products from the agrichemical facility to the site of application.

Livestock Management Facilities Program

The Department administers a certified livestock manager training and testing program pursuant to the Livestock

Management Facilities Act, reviews setback compliance for proposed new facilities, processes lagoon registrations and final certifications, reviews waste management plans, and reviews construction plans for waste handling facilities. In addition, amendments to the Act require that the Department annually inspect anaerobic lagoons that have been registered and certified, as well as conduct informational meetings at the county level for certain proposed facilities. As of the end of 2007, the Department had received and evaluated 1,163 proposed projects including 85 that qualified for a public informational meeting, and conducted 33 such meetings since the inception of the program in 1996.



THE BUREAU OF LAND AND WATER RESOURCES

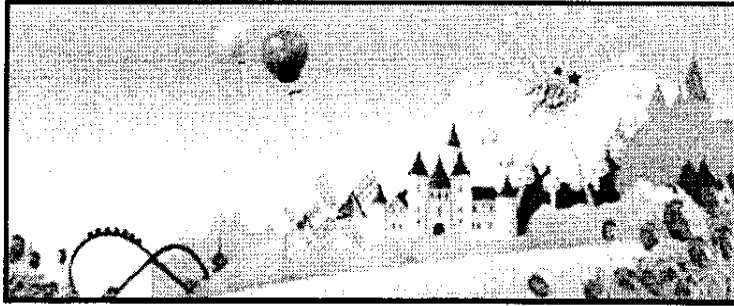
(BLWR) implements the Department's natural resource conservation programs, including the Erosion and Sediment Control Program, the Soil and Water Conservation Districts' Grants-In-Aid Program, the Conservation-2000 Program, the Farmland Protection Program and the Mined Land Reclamation Program.

In 2007, the BLWR distributed nearly \$11 million in funds to Illinois' 98 Soil and Water Conservation Districts (Districts) for programs aimed at reducing soil loss, enhancing agricultural productivity and protecting water quality. Districts provide valuable technical assistance to rural and urban landowners/customers on a variety of natural resource issues.

These Districts offer help on any of the following topics: soil conservation, water quality protection, wetlands management, flood control, soil erosion control at urban construction sites, stream bank stabilization, land use, site suitability and conservation education.



Conservation 2000 (C-2000) is a long-term, state-supported initiative to protect natural resources and enhance outdoor recreational opportunities in Illinois. Several state agencies share responsibility for administering Conservation 2000 funds. The Illinois Department of Agriculture oversees the agriculture resource enhancement portion C-2000, which includes: the sustainable agriculture grant program, the conservation practices costshare program, the stream bank stabilization and restoration program, the water well decommissioning program and the nutrient management program.



The following conservation projects were completed in 2007 under C-2000:

- 1496 Conservation Structures**
- 19 Sustainable Agriculture Projects**
- 108 Water Well Decommissioning Projects**
- 282 Nutrient Management Plans**

The BLWR also administers Illinois' Farmland Protection Program under the auspices of the Illinois Farmland Preservation Act. In accordance

with the Act, when state agency development projects (e.g., highways, airports, facility planning areas, enterprise zones, wildlife habitat acquisition proposals) will lead to the conversion of farmland to non agricultural uses, the sponsoring agency is required to provide written notice to the Department of Agriculture. The Department works with the sponsoring agency to minimize the anticipated farmland conversion impacts that will be generated by the proposed project. In 2007, 316 projects were reviewed for compliance with the Farmland Preservation Act.

Much of the BLWR's effort in 2007 was devoted to working with various utility companies on plans to construct large crude oil and natural gas pipelines across agricultural land. Specifically, the Department worked with these utility companies to ensure that the Department's standards for pipeline construction are followed to protect farming operations and agricultural land from unnecessary damage. Aside from the BLWR working with the utility companies on these projects, the Department also participated in numerous meetings to help acquaint landowners with issues related to pipeline construction. Armed with this information, landowners will be better positioned to negotiate their own easement agreements with the utility companies.

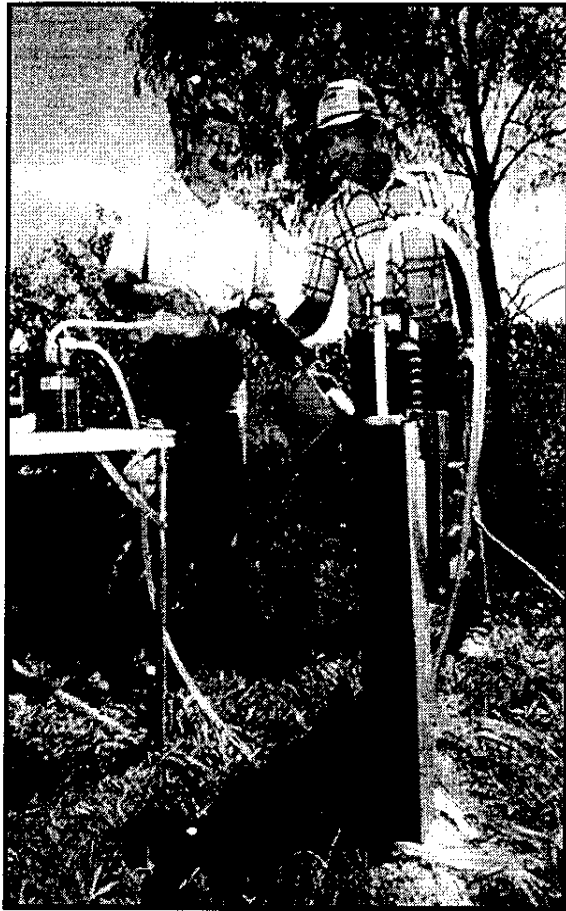
Bureau personnel also provide technical assistance to landowners and local units of government wishing to develop farmland protection programs. Since most projects that convert agricultural land are private sector actions, local farmland protection programs are critical to farmland protection success across Illinois. Specifically, the Department helps on the development of Land Evaluation and Site Assessment Systems (LESA) and Agricultural Areas under the Agricultural Areas Conservation and Protection Act, both of which can help to guide non agricultural development in a manner that protects farmland from needless conversion. As of 2007, there were a total of 37 county LESA Systems and 56 Agricultural Areas in 23 counties throughout Illinois.

As provided by an agreement with the Illinois Department of Natural Resources-Office of Mines and Minerals, the BLWR reviews coal mining permit applications to help facilitate the reclamation of agricultural land affected by coal mining operations. The Department also tests crop yields at reclaimed agricultural land sites to ensure that pre-mining productivity levels have been restored. In 2007, 17 coal mine permit applications were reviewed and 4,025 acres of reclaimed ground were tested for crop yield success.

Education is an important component to all of the Department's programs and the services offered to constituents. When discussing education, it is often assumed it is in regard to educational programs designed for youth. Actually, the Department offers programs to all Illinois citizens.

The Department's Henry White Experimental Farm, near Belleville, offers numerous education opportunities. The farm essentially serves as an outdoor laboratory for sustainable agriculture and the conservation of natural resources in general. The farm has 94 acres containing agricultural crops, wetlands, evergreen and deciduous groves, and restored prairie





and wildlife habitat. Research conducted on the farm involves conservation projects for corn and soybeans, prairie, wetlands and woodlands. Sixty-five of the farm's 94 acres are devoted to the cultivation of crops, mainly corn and soybeans, which demonstrate various sustainable agriculture practices. In addition to providing valuable research information for farmers, the site also hosts an annual field day where specialists explain how practices showcased at the farm benefits the environment. At the September 8, 2007 annual field day, roughly 175 individuals attended the event.

The Department also provides public educational opportunities at Watershed Park, located at the Illinois State Fairgrounds. Watershed Park is an interactive educational exhibit on water quality protection. Featured in the park are numerous exhibit stations where the public learns about water quality issues in a watershed. Watershed Park is open during the Illinois State Fair and by appointment at other times during the year. In 2007, roughly 8,000 individuals visited Watershed Park.

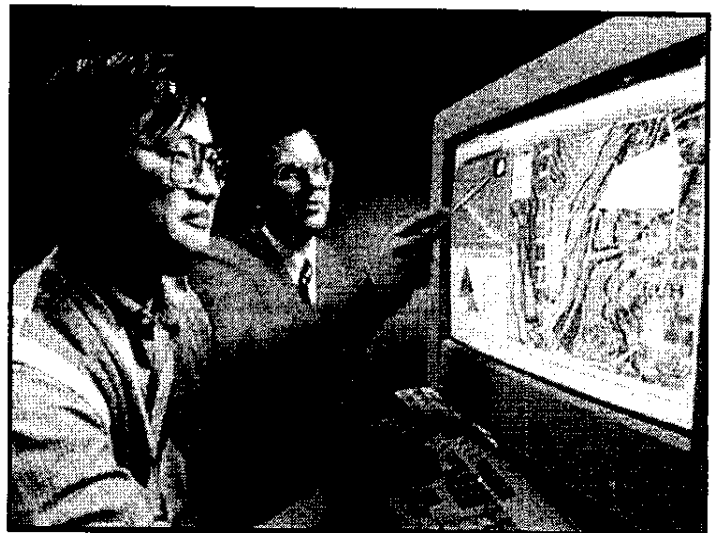
The Bureau of Environmental Programs administers the Illinois Bees and Apiaries Program, designed to assist beekeepers throughout Illinois with the management and protection of honeybee colonies. Under the Illinois Bees and Apiaries Act, the Illinois Department of Agriculture (IDOA) inspects honeybee colonies as a service to the beekeeping industry. The purpose of the inspections is to determine the general health of honeybee colonies and to detect any diseases and pests. Treatment options are offered to the respective beekeeper for combating the diseases and pests. Inspections are provided free of charge. During 2007,

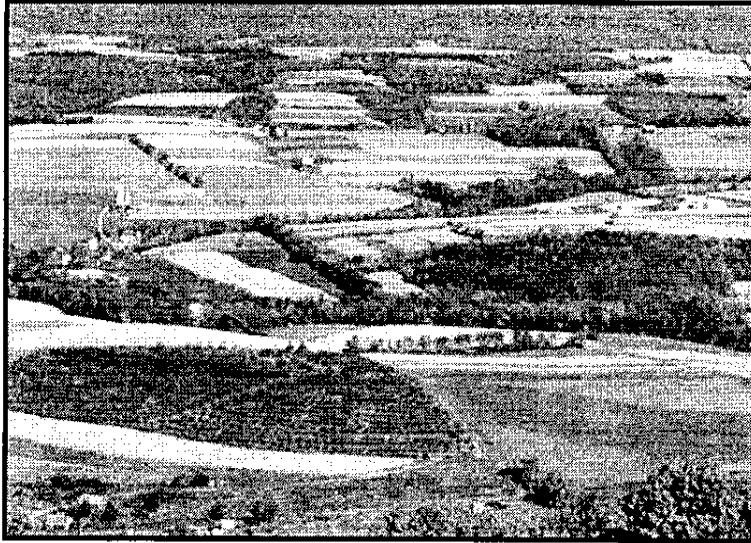
the IDOA inspected 1824 honeybee colonies. The Act also requires beekeepers to register their colonies with the IDOA. Registration is as simple as completing a brief one-page form and mailing it to the IDOA. A registration certificate is provided to beekeepers that register with the IDOA. There is also no charge for registering honeybee colonies with the IDOA.

Colony Collapse Disorder (CCD) is a problem that affected mostly large commercial beekeeping operations in some parts of the United States in 2007. With CCD, most of the adult bees in the colony actually disappear, oftentimes leaving behind the queen, bee brood and large honey stores. With this disorder, there are no signs of the traditional diseases and pests of the honeybee that can cause significant damage to colonies. CCD gained a high level of media attention at the national level during 2007, due to its devastating affects on honeybee colonies and due to the overall importance of honeybees for plant and crop pollination. The cause(s) of CCD is currently unknown and the scientific community is conducting a great deal of research on the problem. There were no confirmed cases of CCD in Illinois in 2007. The IDOA is closely monitoring for CCD symptoms in honeybee colonies as part of all apiary inspections.

MARKETING AND PROMOTIONS

Technological advances, improvements to efficiency and increased competition continue expanding the boundaries impacting Illinois agriculture. Headquartered in Springfield, with trade directors in Mexico City and Hong Kong, Illinois Department of Agriculture Bureau of Marketing & Promotion staff provide daily assistance to Illinois farmers, food processing and agribusiness companies, commodity organizations, foreign buyers looking for new product suppliers, agritourism partners, farmers markets and ag education professionals.





The Bureau has strong working relationships with the U.S. Department of Agriculture's Foreign Agriculture Service (USDA-FAS), Food Export Midwest and the U.S. Livestock Genetics Export (USLGE) organizations which help staff leverage federal dollars to assist Illinois companies with export promotion activities. IDOA also partners with the American Egg Board to promote the egg industry in Illinois through trade shows, informational workshops, advertising, distribution of educational resources and cooking demonstrations. Stakeholders involved in the state's food, feed and fiber industry work closely with Bureau staff to educate consumers about Illinois agriculture's contributions to every day life from food safety measures implemented to safeguard the state's

food supply to the implementation of numerous domestic and international marketing activities to help increase access to new markets for agricultural products produced in Illinois.

In an effort to provide Illinois farmers and food and agribusiness companies with information on various

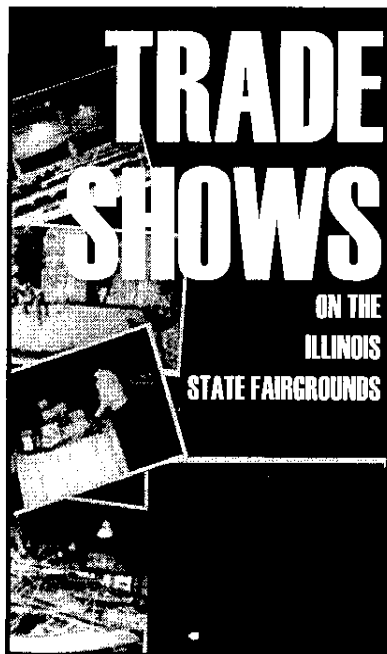


market development activities, IDOA has created new online communications tools. This includes a new page on the Department's website that is devoted to farmers markets. Over the course of the Marketing and Promotions last year staff has also been involved in the organization of buyers' events for Illinois food companies. Companies are given the opportunity in a unique showcase format to share company information and products with buyers. This format has proven successful as participating companies have reported gaining access to new stores and business opportunities. Marketing staff is also responsible for oversight of the Centennial and Sesquicentennial Farm Programs and the Illinois Product Logo Program.

The Centennial and Sesquicentennial Farm Programs honor generations of farmers that have maintained ownership of farms for 100 and 150 years respectively. More than 8,300 Illinois Farms have been designated as Centennial Farms since the program began in 1972. There is at least one Centennial Farm in each county in Illinois. The Illinois Product Logo Program helps consumers quickly identify Illinois products in their retail establishments whether it is a major grocery store or a local farmers' market. This registered trademark is being used by nearly 500 food and agribusiness companies in Illinois. In addition to domestic marketing activities, the Bureau is actively involved in assisting Illinois food companies, farms and agribusinesses in promoting and selling their products abroad. Industry tours, trade missions, buyers' missions and 22 trade shows are just some of the ways the Bureau accomplishes this. Industry tours are broad-based tours in which the Department brings buyers from around the globe to Illinois

in order to showcase a specific agricultural industry, primarily livestock, dairy, grains, oilseeds, feed ingredients and equipment.

The Department of Agriculture's foreign trade offices recruit buyers. Buyer's Missions are usually smaller groups that are focused on specific products for a specific purchase, i.e. processed or value-added food products, food grade soybeans, breeding swine, cattle, sheep etc. Buyers' missions are sometimes a result of previous industry tours or trade missions,



and are sometimes requested by USDA-FAS personnel or foreign posts.

The Bureau of Marketing & Promotion also organizes and participates in both domestic and international trade shows. Staff recruits Illinois food and agribusiness companies to participate in the Illinois Products Expo, a consumer-focused food show in Springfield, IL, and international food and agribusiness shows in Chicago and around the world.

As a result of staff's efforts to facilitate marketing events both in Illinois and internationally, the Bureau hosted more than forty industry tours, buyers' missions and trade shows; facilitated more than 9,000 buyer-seller introductions; thirty companies were approved to use the Illinois Product logo; and nearly 600 small and medium-sized food and agribusiness companies accessed the Bureau's

programs and activities. Nearly 300 farms were certified as Centennial Farms and 88 were certified as Sesquicentennial Farms.



THE BUREAU OF MEAT AND POULTRY INSPECTION

BMPI is responsible for administration of the Meat and Poultry Inspection Act which protects consumers when it comes to ensuring the quality of meat and poultry products and making sure labels are written truthfully. Inspection coverage includes all aspects of intrastate slaughter and processing from antemortem (before death) inspection through slaughter and processing and to the retail level. Inspection personnel

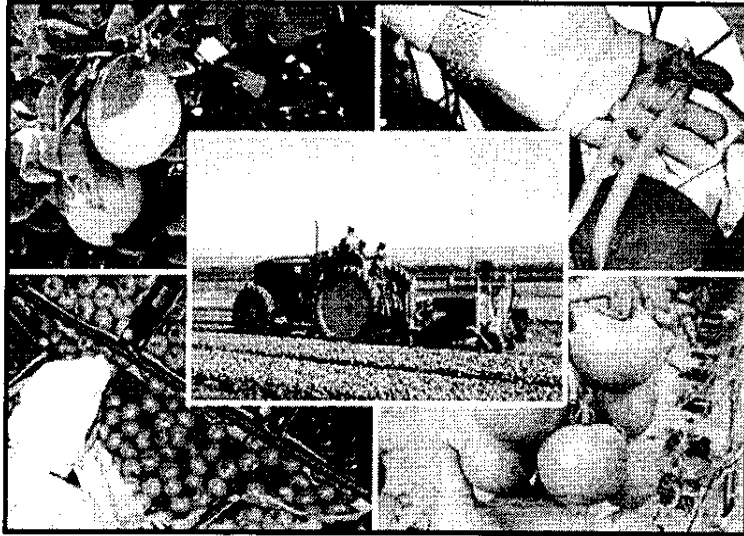
assure each licensed plant complies with Sanitation Performance Standard Operating Procedures (SSOP) and Hazard Analysis Critical Control Points (HACCP). This Bureau provided slaughter and/or processing inspection for 261 establishments and 37 exempt poultry raisers during the fiscal year.

The Meats Chemistry Laboratory in Centralia analyzes meat and poultry samples to determine compliance of the products with the Illinois Meat and Poultry Inspection Act and Regulations. The tests include analyses for the presence of water, fat, antibiotic residues and bacterial contamination. Pathologic exams are also performed on tissues submitted. The Animal Disease Laboratory in Galesburg performs pathologic examinations of formalized tissue sent by IDOA employees and contract veterinarians.

COMPLIANCE PROGRAM

The function of the Compliance Section, as its name implies, involves ensuring compliance with meat and poultry regulations when the meat product leaves the licensed plant. Compliance officers visit warehouses, restaurants, and brokerage firms to inspect meat products used or stored there. They inspect labeling of the products and do follow-up investigations concerning consumer complaints. The compliance section is also in charge of licensing activities for exempt poultry raisers, brokers, and refrigerated warehouses.





In fiscal year 2007 the following was accomplished: 5,899 Reviews 628 Broker Reviews 186 Warning letters and hearings written 110 Seizures resulting in 32,423 pounds of meat product seized, 22,774 pounds destroyed and 1,879 pounds of product released

TRAINING

Training of inspection personnel is carried out on a continuing basis as needed. Training is provided by designated management personnel, by one of three Consumer Safety Officers, or online/CD's provided by USDA/FSIS. Three new meat and poultry inspectors were trained in slaughter and processing in 2007.

BUREAU OF WEIGHTS AND MEASURES

The Bureau of Weights and Measures provides a valuable consumer and commercial protection function by ensuring accurate measurement and delivery of wholesale and retail commodities, monitoring the quality of motor fuel products, and maintain laboratories for metrology standards and grain moisture measurement.

The Bureau's 26 field inspectors are responsible for the annual inspection of more than 127,000 weighing and measuring devices used commercially within the state. Devices that do not meet the specifications and tolerances for the state are rejected and cannot be used until repaired and placed back into service by a registered service company. Retail motor fuel dispensers (gas pumps) account for approximately 94,000 of the devices inspected. Other devices inspected include small scales, livestock scales, vehicle scales, law enforcement scales, LPG meters, moisture meters and fuel meters at petroleum terminals. A device-inspection-fee is charged to support this program.

The Metrology laboratory maintains custody of the Illinois primary standards for Mass and volume. The laboratory is recognized by the United States Department of Commerce's National Institute of Standards and Technology (NIST) by maintaining standards that are traceable to test and calibrates standards used by inspection staff, registered services companies and private industry. The Bureau's Moisture Meter Laboratory prepares grain samples for the inspection of moisture meters.

The Bureau licenses companies who sell, install or repair commercially-used weighing and measuring devices.



Service persons must pass an examination before becoming certified as a registered service technician. There are approximately 1,328 service companies and technicians registered by the Bureau of Weights and Measures. Motor fuel quality is regulated through the analysis of motor fuel samples collected by inspectors. Samples are analyzed to ensure that the product meets the specifications of the American Society for Testing and Materials. Inspectors also ensure that proper labels for octane and ethanol (if present) are posted on the motor fuel dispensers. In addition to annual device inspections, the Bureau also investigates consumer complaints regarding weighing and measuring devices.

SUMMARY OF WORK COMPLETED AT THE MEATS CHEMISTRY LABORATORY

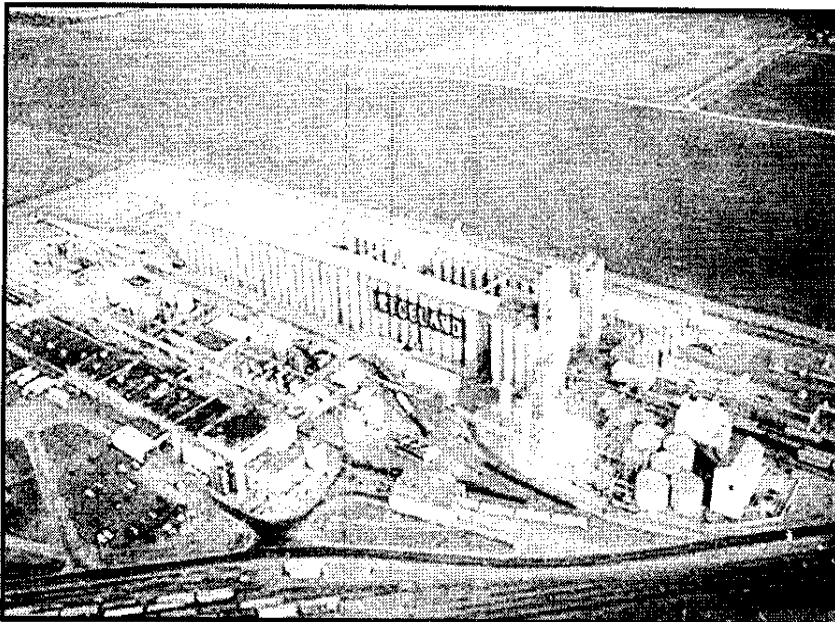
July 1, 2006-June 30, 2007

| Test | Samples | Tests | Number of Violations | Percent Specimens Non-Compliant |
|---|-------------|-------|----------------------|---------------------------------|
| Bacterial inhibitors | 153 | 609 | 0 | |
| Blocks, necropsy multiple tissue | 1 | 3 | 0 | |
| Culture, bact., E. coli | 4 | 13 | 0 | |
| Culture, bact., Listeria | 3 | 28 | 0 | |
| Culture, bact., Salmonella | 7 | 87 | 0 | |
| E. coli quantitative | 2 | 12 | 0 | |
| E. coli 0157:H7 | 275 | 3289 | 0 | |
| Fat | 82 | 82 | 0 | |
| Listeria (M.M.) | 231 | 2772 | 0 | |
| Listeria Mono. Environmental | 214 | 2568 | 0 | |
| Moisture | 12 | 12 | 0 | |
| Nitrite (Q) | 2 | 2 | 0 | |
| Protein | 12 | 12 | 0 | |
| Salmonella (HACCP) | 507 | 6084 | 4 | 0.79% |
| Salmonella (M.M.) | 209 | 2508 | 0 | |
| Salt | 1 | 1 | 0 | |
| Staphylococcus Ent. | 3 | 36 | 0 | |
| Stain H & E | 1 | 7 | 0 | |
| Stain, special histo Masson's trichrome | 1 | 1 | 1 | 100% |
| Trichina | 11 | 33 | 0 | |
| Total | 1731 | | 5 | |

BUREAU OF WAREHOUSES

(BOW) administers both the Illinois Grain Code and the Personal Property Warehouse Act and also manages the Illinois Grain Insurance Fund (GIF).

The Bureau of Warehouses is the licensing and regulatory authority for all grain dealers and state licensed grain warehouses operating in Illinois. The bureau's regulation of the Illinois grain trade provides protection to the industry's direct customers including farmers and bankers. During FY2007, the department paid 237 grain claims against foiled grain dealers and warehouseman in excess of \$16.5 million. IDOA's Bureau of Warehouses also provides protection to all indirect parties that have a beneficial interest in the farmer's ability to receive payment for grain.



The financial security of grain transactions is guaranteed with licensees through the administration of the state's Grain Insurance Fund. Another function of the BOW is to license and regulate personal property warehouses. These storage warehouses include companies storing household goods or business records and commercial distribution warehouses.



The bureau's twenty-three field examiners are responsible for the annual examination of the 349 grain licensees with a combined total of 1,057 locations, which represents the largest grain handling infrastructure in the United States. The 349 companies hold 342 Grain Dealer licenses, 298 State Warehouse license and 24 Federal Warehouse licenses with a storage capacity of 1,176,871 bushels. A licensee that violates any provisions of the Grain Code may be subject to suspension or revocation of their license, and/or a hearing, which may result in the licensee posting collateral if found guilty of the alleged violation.

The bureau also regulates the state's 433 licensed companies that have 639 locations

under the Personal Property Storage Act. The 433 companies are comprised of 383 commercial and 56 governmental fairs.

Besides performing routine examinations, bureau employees are also charged with the responsibility of investigating complaints regarding unlicensed grain dealers and warehouses that store grain and/or warehouses that store personal property.

ILLINOIS AND DUQUOIN STATE FAIRS

The Illinois State Fair is a ten-day event held annually on the Department of Agriculture's 366-acre fairgrounds in Springfield, Illinois. This event has been in existence since 1853 and continues to focus on the State's rich agricultural history. The State Fair has made significant progress under

the Blagojevich administration. The Governor's Sale of Champions – the State's premier livestock event that supports our top young livestock producers – broke 3 records in 2007. The Grand Champion Steer was sold for a record-high of \$45,000.



The DuQuoin State Fair is held on 750 acres of ground in DuQuoin, Illinois. In 2007, the fairgrounds utilized a newly built multi-purpose facility to help positively impact the Southern Illinois economy and provide a new venue to host local, regional and national events. During 2007, DuQuoin State Fair personnel have worked hard to increase the number of non-fair events held on the grounds in order to increase the revenue generating potential of the grounds. The fair annually holds the World Trotting Derby on the mile track.

The Illinois State Fair has the lowest admission price in the entire nation and the entertainment value is outstanding. Families can enjoy over 16 free entertainment stages, continuous livestock shows and competitions, and a cultural experience in our ethnic village. Grandstand entertainment continues to be a big draw with almost 45,000 people in attendance in 2007. Artists as diverse as country music star Martina McBride, Disney artist Corbin Bleu and American Idol icon Daughtry have performed at the fair. ARCA and USAC races on the last weekend of the fair continue to be a large draw for racing fans throughout the country. Truck and Tractor pulls, located in the Multi-Purpose Arena, are another attraction that draws thousands to the fair



each year. In spite of record breaking heat, attendance at the 2007 Illinois State Fair remained strong with over 700,000 people present for the 10-day fair and preview night.

NON-FAIR EVENTS

The Illinois State Fairgrounds is host to a variety of non-fair events. The fairgrounds is the home of the world's fastest dirt track, more than 150 buildings, a grandstand, four indoor arenas, a covered outdoor arena, and over 1,000 stalls for livestock or horses. Events that take place on the fairgrounds include: festivals, meetings, concerts, weddings, galas, trade shows, car shows, athletic events, and horse and livestock shows. Non-fair event participants have the opportunity to camp on the Illinois State Fairgrounds from April-October. The campground can accommodate up to 301 RV's and approximately 35-40 tents. Campground amenities include water, electricity, limited sewer spots, three comfort stations, and one dump station available to all campers.

In 2006 and 2007, the Illinois State Fairgrounds hosted the National High School Rodeo Finals. The event consisted of ten days including 1,589 contestants in 2006 and 1,577 in 2007. The Illinois Department of Agriculture estimates that each contestant brought with them approximately three family members. There

were approximately 5,000 people on the grounds for the duration of the event. The Illinois State Fairgrounds offered 900 camping spots for 2006 and 2007. The National High School Rodeo Finals also positively impacted revenues for the City of Springfield and the State of Illinois.

SUMMARY

The Illinois Department of Agriculture has maintained a high standard of performance and has streamlined itself as part of the governor's overall plan to make government more efficient and responsive to taxpayers, while at the same time making sure consumers are confident in the safety of the food they eat. All divisions and bureaus have worked collectively to meet the agency's core mission and corresponding objectives, while at the same time reducing total expenditures in an effort to do more with less.

Department of Agriculture staff continues to address the agency's objectives and key initiatives while providing superior services to our constituency. In the last year, IDOA has improved our animal disease surveillance programs by increasing inspections. The Department remains vigilant in protecting the state's agricultural resources while at the same time preserving our natural resources. IDOA continues to maintain a strong working relationship with small to medium food and agribusiness companies. The Department provides various domestic and international marketing opportunities, which help companies interested in accessing new markets for their food and agricultural products. The Department of Agriculture also maintains a close working relationship with several other state agencies in an effort to increase cooperation among state agencies, enhance services and programs provided and eliminate duplication while streamlining state government.

In an effort to further expand the Department's services while at the same time capturing revenue, the Department is searching for and implementing new revenue-generating opportunities for the fairgrounds. The economic impact of attracting new events will not only help make the fairgrounds self-sustaining (a major goal of the administration), but will also provide additional revenue for the city, county and other surrounding areas. IDOA continues to search for new partnerships and revenue-generating opportunities to help promote, preserve and protect Illinois' #1 industry.

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Education Investment in

Illinois

By [Ralph Marjorie \(/archive/author/ralphmarjorie\)](#)Posted in [Our Columns \(/archive/our-columns\)](#) on [December 17, 2007 \(/archive/date/2007/12/07\)](#) with [2 comments \(/archive/our-columns/education-investment-in-illinois,630#comment/101\)](#).tags: [Education \(/archive/tags/Education\)](#)

For over 20 years now, advocates have been caterwauling for Illinois to get its act together and reform how it funds schools. Inevitably, these calls for reform include both enhanced funding—statewide—coupled with additional accountability metrics covering everything from school district fiscal practices to teacher induction and mentoring. Just as inevitably, the process stalls and ultimately comes to a crashing halt over the call for enhanced funding—because that would require a tax increase. Not just any increase, but a relatively significant one approaching \$2 billion just for schools.

The magnitude of the tax increase needed to fund education statewide is such that, it begs an obvious question: Would this investment be worth it? If you're willing to strip away all the partisan and ideological rhetoric that generally surrounds school funding reform efforts, and instead consider only facts, the answer to this question is just as obvious: Yes, the investment is not only worth it, but absolutely essential. Here's why. Today in Illinois, educational attainment is the absolute key to economic security. The data on this point is beyond compelling.

Start with employability. If you don't have at least decent academic credentials, chances are you don't have a job. The unemployment rate in Illinois for whites who don't have a high school diploma is almost 10 percent. That unemployment rate drops to 3.5 percent for whites with a college degree. If you're black, the numbers are eye-opening. African Americans in the state who haven't graduated high school have an astronomical unemployment rate of almost 23 percent! But for those blacks who go on to earn a college degree, the unemployment rate drops to just 4.5 percent.

Of course, once you get a job, educational attainment works dramatically to boost wages. There was a time, in America generally and Illinois specifically, when a person could graduate high school and go get a good job. A job that paid enough to put a car or two in the garage and a kid or two through college. That time is most decidedly over. Over the last 26 years, Illinois workers who stopped their education when they got a high school diploma, saw their real, inflation adjusted incomes decline by about nine percent. In fact, from 1980 through 2006, the only workers who experienced any real increase in wages, were those that actually obtained a college degree. Everyone else saw their wages decline.

The importance of education to personal economic security could not be more evident. But the worker's perspective is only one side of the economic coin—the employer's perspective is the other. See, what business is telling policymakers in Illinois is simple, in a global economy, employers have a lot of choices when it comes to making business location and expansion decisions. The high-end businesses, those that pay good wages and provide decent benefits, like manufacturing or information technologies, demand a highly numerate and literate workforce. If a state's public education system isn't up to snuff, high-end businesses will either locate or expand elsewhere. Specifically, in those states or countries that can provide a quality, skilled workforce.

Illinois' ongoing failure to make adequate investments in K-12 education has in fact told business to go elsewhere to find skilled workers. Again, the proof is in the data. As recently as 1990, manufacturing employed more workers than any other sector in Illinois, accounting for a little more than one out of every five workers in the state. But over the last 16 years, the state has lost 26 percent of those jobs—a rate of loss worse than the nation or Midwest.

For more information about Illinois' economy, obtain a copy of the "State of Working Illinois" report, available online at <http://www.stateofworkingillinois.org/edu/swil/index.html> (<http://www.stateofworkingillinois.org/edu/swil/index.html>).

And Illinois isn't replacing those good manufacturing jobs with high-end service jobs, like in information technologies. The state's losing those jobs as well. The reality is, most job growth in Illinois is coming in the low-wage service sector. So much so that today the low-end service sector is the state's top employer, accounting for over 30 percent of all workers.

Now, there certainly are multiple reasons for these economic changes. That said, one of the key reasons is a lack of adequate investment in public education. The state has effectively told high-end businesses that Illinois won't fund education to the point where we'll satisfy their demand for skilled workers. Not surprisingly, business has listened.

Ralph Martire is executive director of the Center for Tax and Budget Accountability, a bipartisan fiscal policy think tank. rmartire@ctbaonline.org (<mailto:rmartire@ctbaonline.org>)

Commentary:

1 (#c_1363) DK says:

High end business also relocate due to higher taxes in addition to poor public schools.

One needs only to visit Kalifornia to understand that the business boom in its neighboring states of Arizona, Nevada and Utah was being driven in part by businesses fleeing higher taxes in the Golden State.

Nowhere in Mister Martire's latest call for more taxes is there any mention of accountability. Few, if any, public schools in Illinois are doing a good job of demonstrating that they have been good stewards of the tax dollars already entrusted to them. Martire constantly recommends throwing more money to Illinois tax districts and naively assumes that better results will automatically follow. Certain public school districts waste thousands of dollars per pupil and still award diplomas to illiterates.

Literacy does not necessarily result due to higher taxes.

December 7, 2007 at 9:59 a.m.

Bruno Behrend says:

Invest in what??!!

Both Mr, Martire and I live in River Forest.

We laud the barely above standard local schools as top notch, but the former superintendent went from \$146 to 226 in compensation in 5 years. I challenge Mr, Martire to tell me how one dime of that money qualifies as "investing in education."

It doesn't. It is a waste of money on a protected class of bureaucrats who don't connect one neuron in one child's head.

River Forest is not an exception. It is the rule.

Mr. Martire's call for investment in education would be more credible if it was true investment in children. It isn't. It is an investment in bureaucratic bloat and politically protected jobs programs for the least productive sector of American Industry - the "Government-Education complex."

I challenge Mr. Martire to a debate in any venue in Illinois. Let him defend the waste fraud and abuse of the "Education Industry" in a public venue, against some one who can actually do the math behind 15-20 years of spendthrift policies.

For a critique of Mr. Martire's defintion of "investment", try

<http://www.extremewisdom.com/index.php...> (<http://www.extremewisdom.com/index.php/archives/885>)

Mr. Martire's is living in the state his policies created.

December 7, 2007 at 10:26 p.m.

Comments are closed for this entry

Story location.

Other Stories by this author

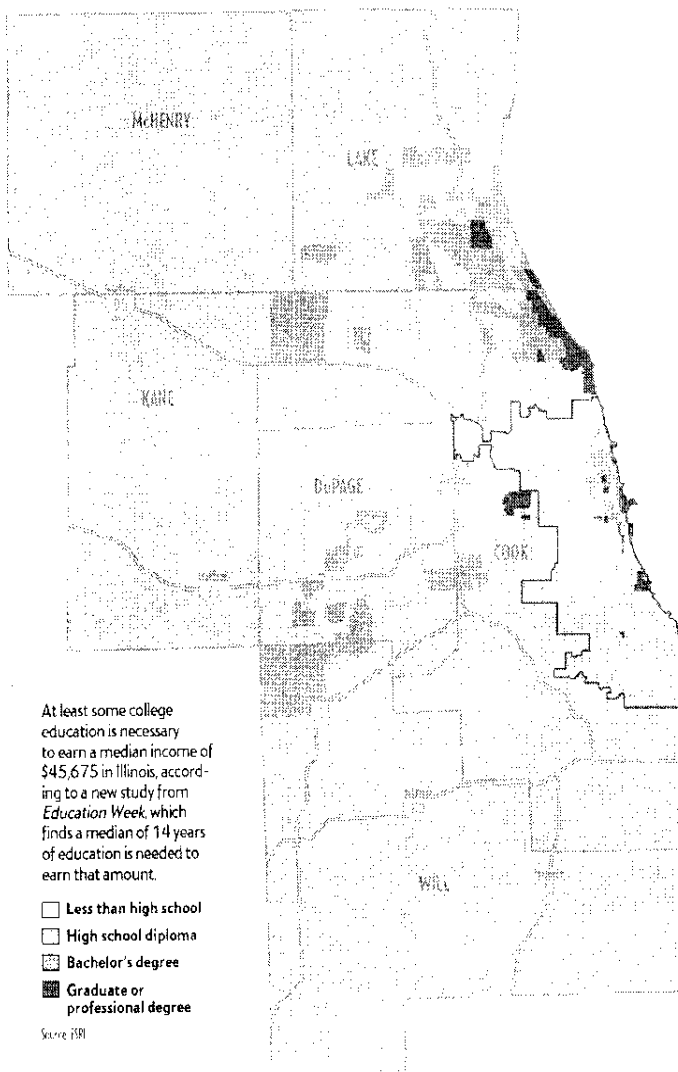
- [Oh, the Horrible Corruption in New York City!](#) (/archive/our-columns/oh-the-horrible-corruption-in-new-york-city,1099)
- [Dire Costs of Incompetence to Cook County Government.](#) (/archive/our-columns/dire-costs-of-incompetence-in-cook-county-government,898)
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EDUCATION

Not having a high school diploma means \$260,000 in lost wages over a lifetime. Chicago Public Schools' graduation rate lags that of both the state and the nation.

► DOMINANT EDUCATION LEVEL By census tract



17,089

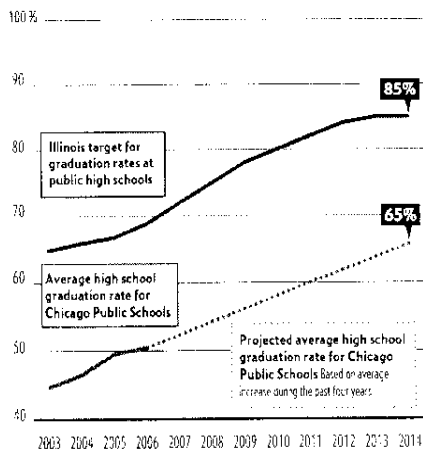
Average debt upon completion of a four-year college degree in Illinois

| AVERAGE DEBT OF GRADUATES IN 2005 | % GRADUATING WITH DEBT | % FEDERAL LOANS IN DEFAULT 2004 |
|--|------------------------|---------------------------------|
| School of the Art Institute | 83.0% | 4.0% |
| Loyola University Chicago | 78.0% | 3.3% |
| Illinois Wesleyan University | 77.0% | 1.2% |
| DePaul University | 76.0% | 2.6% |
| Northwestern University | 75.0% | 0.9% |
| Northern Illinois University | 74.0% | 3.6% |
| Illinois Institute of Technology | 73.0% | N/A |
| University of Illinois at Chicago | 72.0% | 2.3% |
| Eastern Illinois University | 71.0% | 2.0% |
| University of Illinois at Urbana-Champaign | 70.0% | 1.4% |
| University of Chicago | 69.0% | 1.3% |
| N/A | N/A | N/A |

Source: The Project on Student Debt

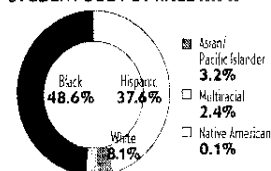
► HIGH SCHOOL GRADUATION RATES AND OBJECTIVES

Chicago Public Schools lags by almost 20 percentage points the state's annual targets for graduation rates

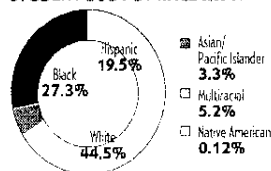


► NOT EQUAL REPRESENTATION A disproportionate percentage of private school students are white.

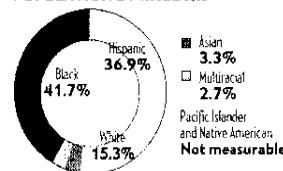
CHICAGO PUBLIC SCHOOLS' STUDENT BODY BY RACE 2005-06



CHICAGO PRIVATE SCHOOLS' STUDENT BODY BY RACE 2003-04



CHICAGO SCHOOL-AGE POPULATION BY RACE 2005

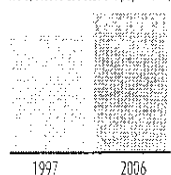


Sources: Chicago Public Schools' U.S. Census Bureau National Center for Education Statistics

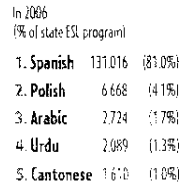
► INGLÉS COMO SEGUNDA LENGUA According to the Illinois State Board of Education

Enrollment is up in the six-county area for English-as-a-second-language programs. But in Chicago, once transitioned into English-only classes, former ESL students are underperforming their English-only peers on state reading tests.

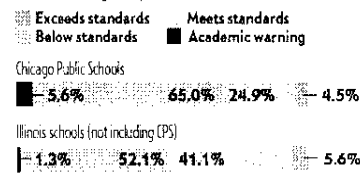
ESL ENROLLMENT Students in six-county area (% of state's ESL student population)



TOP 5 LANGUAGES SPOKEN IN PROGRAM In 2006 (% of state ESL program)



PERFORMANCE ON STATE READING TEST In 2006, for ESL students who have completed the program and transitioned into English-only classrooms



WHO KNEW?

45.2% 2006 drop-out rate for Chicago Public Schools 38.0% of dropouts leave in ninth grade 20.2:1 CPS elementary student-teacher ratio \$9,758 2006 operating expenditure per CPS student

!

44

Education

Median incomes rise with educational attainment. Yet only 59% of Chicago Public Schools graduates go to college and of those, just 35% get a degree. Chicago spends less on students and teachers than comparable cities. Do the math.

EDUCATIONAL LEVELS

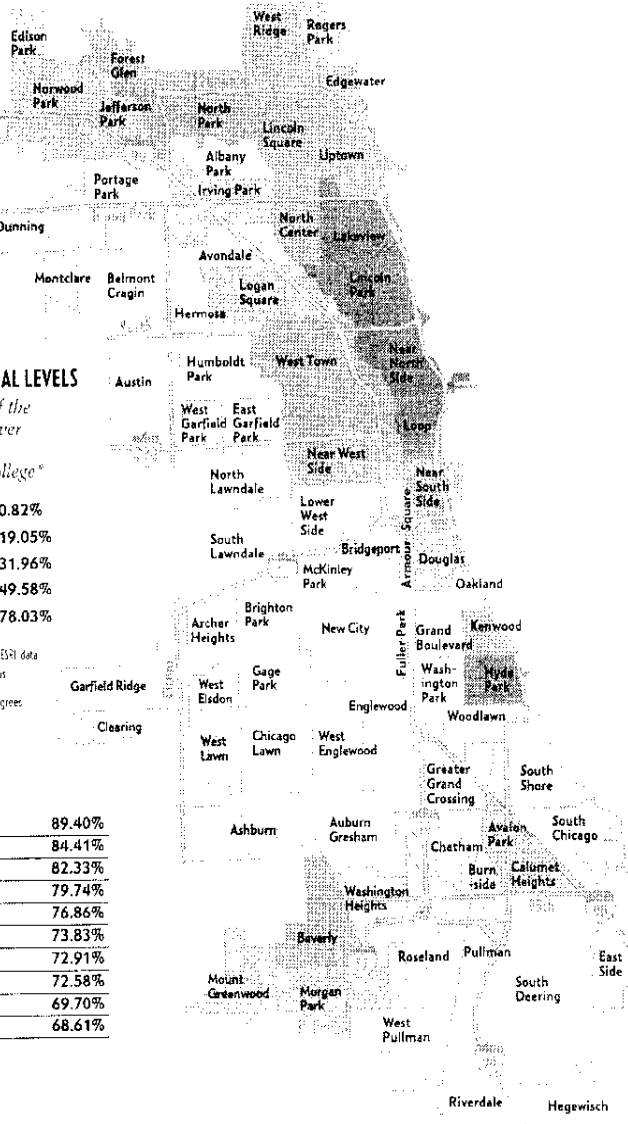
Percentage of the population over age 25 that completed college*

- 2.65% to 10.82%
- 10.83% to 19.05%
- 19.06% to 31.96%
- 31.97% to 49.58%
- 49.59% to 78.03%

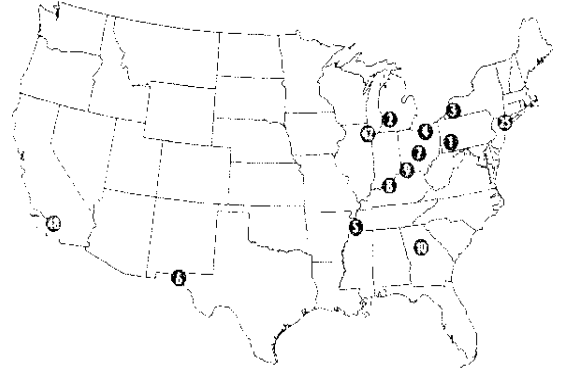
Source: Map provided by BSI data based on 2000 U.S. Census
*Excluding associate's degrees

Top suburbs

| | |
|-----------------|--------|
| 1. Kenilworth | 89.40% |
| 2. Winnetka | 84.41% |
| 3. Golf | 82.33% |
| 4. Glenview | 79.74% |
| 5. Bensenville | 76.86% |
| 6. Lake Forest | 73.83% |
| 7. Lake Bluff | 72.91% |
| 8. Wilmette | 72.58% |
| 9. River Forest | 69.70% |
| 10. Hinsdale | 68.61% |



ELEMENTARY TEACHER PAY ADJUSTED FOR COST OF LIVING



Adjusted pay Adjusted rank Unadjusted pay Unadjusted rank

| | |
|-----------------------|----------|
| 1 Pittsburgh | \$55,571 |
| 2 Grand Rapids, Mich. | \$55,648 |
| 3 Buffalo, N.Y. | \$57,041 |
| 4 Cleveland | \$57,265 |
| 5 Memphis, Tenn. | \$59,177 |
| 6 El Paso, Texas | \$59,659 |
| 7 Columbus, Ohio | \$59,721 |
| 8 Louisville, Ky. | \$48,919 |
| 9 Cincinnati | \$48,856 |
| 10 Atlanta | \$47,889 |
| New York | \$42,602 |
| Chicago | \$36,983 |
| Los Angeles | \$4,976 |

Source: National Center for Policy Analysis

NO CHILD LEFT BEHIND

| | 2003-2004 | | 2004-2005 | | Total school districts | % school districts failed to make adequate yearly progress | % school districts designated as needing improvement | Graduation rate |
|---------------|---------------|---|---|---------------|------------------------|--|--|-----------------|
| | Total schools | % schools failed to make adequate yearly progress | % schools designated as needing improvement | Total schools | | | | |
| California | 9,207 | 35.4% | 17.4% | 9,395 | 1,039 | 41.0% | 13.2% | 85.1% |
| | | | | | 1,035 | 40.3% | 14.6% | NA |
| Illinois | 3,767 | 26.3% | 17.5% | 3,767 | 886 | 37.8% | 27.3% | 86.6% |
| | | | | | 879 | 27.0% | 27.3% | 87.0% |
| New York | 4,624 | 32.2% | 10.9% | 4,499 | 730 | NA | 7.7% | 76.0% |
| | | | | | 730 | 32.2% | 7.7% | NA |
| United States | 99,237 | 24.7% | 11.4% | 89,493 | 13,959 | 28.5% | 12.8% | 74.9% |
| | | | | | 13,878 | 23.7% | 12.4% | NA |

Source: Public Education Network

EDUCATIONAL SPENDING PER STUDENT 2003-2004

| | |
|-------------------------------------|----------|
| New York City School District | \$17,644 |
| Los Angeles Unified School District | \$8,598 |
| Chicago Public Schools | \$8,356 |
| Illinois | |
| United States | \$8,287 |

Source: U.S. Census Bureau

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Autism Speaks Canada

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What is Autism?

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What is Autism? An Overview

En Español

Autism is a complex neurobiological disorder that typically lasts throughout a person's lifetime. It is part of a group of disorders known as autism spectrum disorders (ASD). Today, 1 in 150 individuals is diagnosed with autism, making it more common than pediatric cancer, diabetes, and AIDS combined. It occurs in all racial, ethnic, and social groups and is four times more likely to strike boys than girls. Autism impairs a person's ability to communicate and relate to others. It is also associated with rigid routines and repetitive behaviors, such as obsessively arranging objects or following very specific routines. Symptoms can range from very mild to quite severe.

Autism was first identified in 1943 by Dr. Leo Kanner of Johns Hopkins Hospital. At the same time, a German scientist, Dr. Hans Asperger, described a milder form of the disorder that is now known as Asperger Syndrome ([read more](#)). These two disorders are listed in the DSM IV (Diagnostic and Statistical Manual of Mental Disorders) as two of the five developmental disorders that fall under the autism spectrum disorders. The others are Rett Syndrome, PDD NOS (Pervasive Developmental Disorder), and Childhood Disintegrative Disorder. All of these disorders are characterized by varying degrees of impairment in communication skills and social abilities, and also by repetitive behaviors. For more discussion on the range of diagnoses that comprise autism spectrum disorder, [click here](#).

Autism spectrum disorders can usually be reliably diagnosed by age 3, although new research is pushing back the age of diagnosis to as early as 6 months. Parents are usually the first to notice unusual behaviors in their child or their child's failure to reach appropriate developmental milestones. Some parents describe a child that seemed different from birth, while others describe a child who was developing normally and then lost skills. Pediatricians may initially dismiss signs of autism, thinking a child will "catch up," and may advise parents to "wait and see." New research shows that when parents suspect something is wrong with their child, they are usually correct. If you have concerns about your child's development, don't wait: speak to your pediatrician about getting your child screened for autism.

If your child is diagnosed with autism, early intervention is critical to gain maximum benefit from existing therapies. Although parents may have concerns about labeling a toddler as "autistic," the earlier the diagnosis is made, the earlier interventions can begin. Currently, there are no effective means to prevent autism, no fully effective treatments, and no cure. Research indicates, however, that early intervention in an appropriate educational setting for at least two years during the preschool years can result in significant improvements for many young

Daily Herald

Big Picture - Local Focus

New plan may help expand coverage for autism

By Amber Krosel | Daily Herald Staff

Published: 4/16/2008 12:04 AM

SPRINGFIELD -- Illinois families with autistic children may soon be better able to pay the costs of diagnosing and treating the developmental disorder.

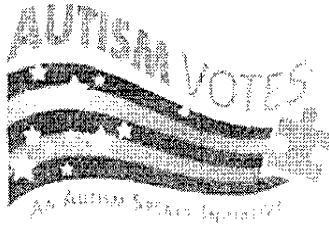
The Illinois Senate approved a plan Tuesday to require insurers to provide extended autism coverage for children up to age 21, with a maximum of \$36,000 per year. There is no current requirement.

"We've ignored this long enough," said state Sen. James DeLeo, a Chicago Democrat sponsoring the plan. "It costs people, working moms and dads, up to \$50,000 a year. They need help."

Despite the coverage cap, the proposal does not limit the amount of visits to an autism care provider. Insurers would also be required to consider autism the same as any other physical illness, charging the same co-payments or deductibles.

The plan could hurt small businesses that might "shoulder the responsibility" to provide such expansive health insurance, said state Sen. Dan Cronin, an Elmhurst Republican who nonetheless voted to move the legislation on to the House for consideration.

The measure passed the Senate 50-0. Four lawmakers, including Sen. Matt Murphy, a Palatine Republican, voted "present" on the issue.



It's time for lawmakers to listen.

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News Center

Autism Insurance Bill Introduced in Illinois State Legislature


(ILLINOIS - February 21, 2008) Illinois has become the latest state to introduce autism insurance reform legislation. Illinois Senate bill 1900 was introduced this week in committee by Senator James DeLeo, and will include coverage for therapies such as applied behavioral analysis and other evidence-based, medically-necessary treatments. A lobbying day for parents and organizations in support of SB 1900 is planned for April 15th in Springfield, Ill.

Peter DiCianni, the father of a young daughter with autism, Lee Jorwic, the Autism Speaks Chapter Advocacy Chair in Illinois, and the father of an 18 year old son diagnosed with autism, and Christopher Kennedy of Autism Society of Illinois, a long time advocate of autism legislation in Illinois and the father of a daughter with autism, are working to build a coalition of autism organizations in Illinois to help move this bill forward. Watch for updates on what you can do to help pass SB 1900 in Illinois.

[Read the Illinois bill](#)

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The Economic Impact OF THE Early Care and Education Industry *in Illinois*



A REPORT BY ACTION FOR CHILDREN, CHICAGO METROPOLIS 2020 AND ILLINOIS FACILITIES FUND

The Early Care and Education industry is important to the Illinois economy. In summary, the industry:

- Generates \$2.12 billion every year.
- Employs almost 56,000 people full-time.
- Helps prepare young children to succeed in school and to participate in the workforce as adults.
- Enables parents to work and continue their education.

Investing in Early Care and Education programs yields a *high return*.

This report on the economic impact of Early Care and Education looks at this industry through a new lens — an economic one that considers for the first time the industry's contributions to the Illinois economy. It also re-examines government savings and the workforce impact of Early Care and Education in Illinois.

Over the years, the Early Care and Education industry has changed to meet the growing needs of working families and their children. Regardless of program type or setting — child care, Head Start, family child care, preschool, or prekindergarten, for-profit or nonprofit, public or private, regulated or unregulated — the Early Care and Education industry provides economic benefits to Illinois and its businesses.

The findings in this report highlight the financial significance of the industry as well as the need to ensure access to high-quality Early Care and Education for Illinois children. By targeting the Early Care and Education industry for economic and workforce development, the business community, government and industry leaders can capitalize on the high returns to our children and our economy.

Action for Children
Chicago Metropolitan 2020
Illinois Facilities Fund

Every dollar invested in quality Early Care and Education saves up to \$17 dollars on government expenditures by reducing costs of remedial education, grade retention and crime.

What is the Early Care and Education industry?

The Early Care and Education industry consists of programs serving children under the age of six.

It includes:

Child care centers

Family child care homes

Head Start

Pre-kindergarten

Preschool





The Early Care and Education industry supports the current workforce.

- One in ten Illinois workers has a child under age six.
- Working parents play a vital role in the economy, earning a total of \$21 billion annually.
- Employer-based child care helps to keep parents working and reduces turnover.

For example, Illinois-based Abbott Laboratories offers its employees on-site early care and education and enjoys a turnover rate that is lower than industry norms.

Early Care and Education helps prepare children for opportunities in the new economy.

Long-term studies of low-income children show that children who participate in Early Care and Education have:

- Greater language development,
- Better mathematical ability; and,
- Fewer behavioral problems in kindergarten.

As adults, these children have:

- Increased high school graduation rates,
- Increased higher education attainment; and,
- Higher rates of workforce participation.

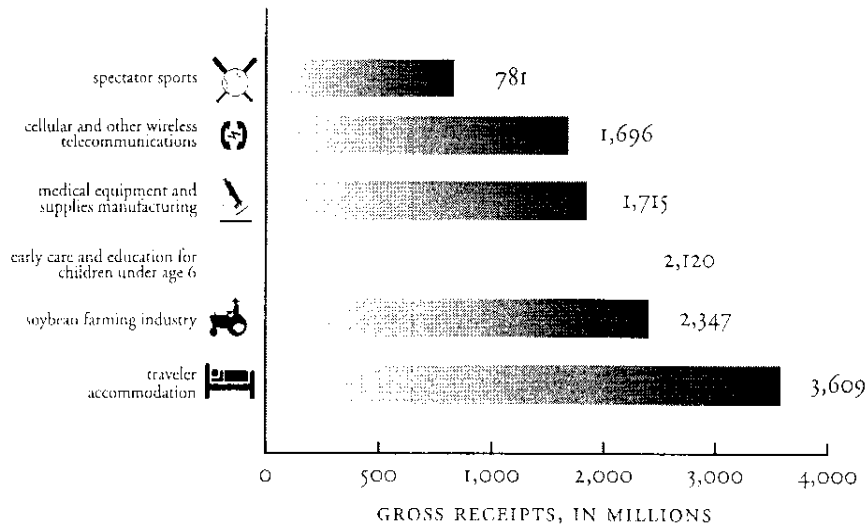
Early Care and Education is critical but costly.

- The typical Illinois family will need to pay 25 percent of its income for an infant and pre-schooler's Early Care and Education if they choose care through a center.
- In 2002, annual, full-time, center-based care for an infant cost more than resident undergraduate tuition at the University of Illinois.

“There are significant societal benefits and governmental savings from investing in early care and education. This report contains important new information about the economic benefits of early childhood care and education and provides an additional incentive for Illinois to invest in children from birth to age five.”

State Senator Don Harmon

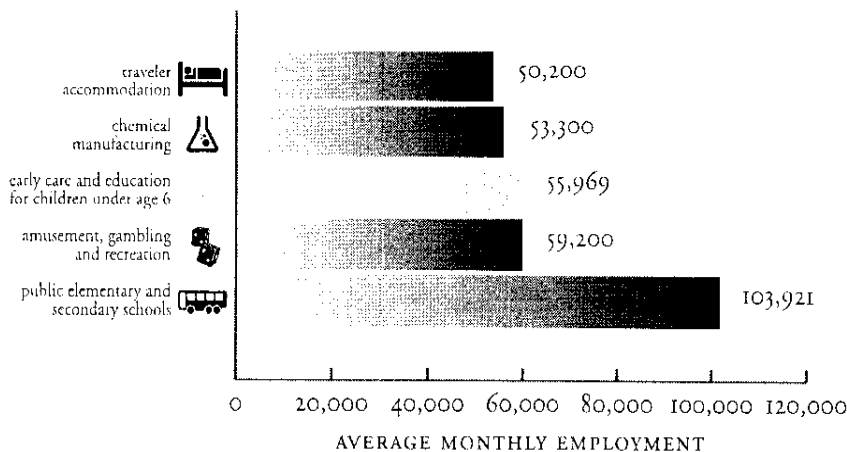
ANNUAL GROSS RECEIPTS BY INDUSTRY IN ILLINOIS³



“The returns to early childhood development programs are especially high when placed next to other spending by governments made in the name of economic development. Yet early childhood development is rarely considered as an economic development measure.”

Art Rolnick, Federal Reserve Bank of Minneapolis

EMPLOYMENT BY INDUSTRY IN ILLINOIS⁴



KEY ACTION STEPS:

BUSINESS

- 1. Support state legislation that expands access to quality Early Care and Education programs and that makes working families eligible for subsidies at higher income levels.
- 2. Leverage funds through public-private partnerships to build quality Early Care and Education facilities and develop programs that can address the shortage of infant care.
- 3. Provide resource materials to enable more businesses to help support their employees' early care and education needs.
- 4. Develop partnerships and provide resources to help the Early Care and Education industry improve its business skills and practices.
- 5. Nominate Early Care and Education industry representatives and experts to be appointed to the boards of business community organizations involved in economic development and workforce issues.

“In addition to Northern’s Early Childcare Center assisting with recruitment and retention, it helps employees feel good about working for an organization that cares enough about its employees to make the commitment of having an on-site child care center. Those positive feelings translate into improved productivity and better client service.”

Tim Moen, Executive Vice President of Human Resources and Corporate Services, The Northern Trust Company

GOVERNMENT

- 1. Pass state legislation that expands access to quality Early Care and Education programs and that makes working families eligible for subsidies at higher income levels.
- 2. Integrate Early Care and Education into statewide planning for education, housing, and workforce development.
- 3. Publicly recognize businesses that support their employees' Early Care and Education needs.
- 4. Analyze how population trends affect the demands for and geographic distribution of Early Care and Education services in Illinois.

EARLY CARE AND EDUCATION INDUSTRY

- 1. Advocate for legislation that expands access to quality Early Care and Education.
- 2. Advocate with the business community for increases in capital and program investments in Early Care and Education.
- 3. Work with government and the economic development community to market Early Care and Education as a vital multi-billion dollar state industry that employs tens of thousands of workers.
- 4. Advance an Early Care and Education industry workforce development agenda within government to improve quality through staff training and development.

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The Economic Impact of the Early Care and Education Industry in Illinois Study was funded by The Joyce Foundation. Additional funds were provided by the W.K. Kellogg Foundation, the Grand Victoria Foundation, the Illinois Department of Human Services, BUILD, and the John D. and Catherine T. MacArthur Foundation. The research was conducted by the National Economic Development and Law Center. For a full copy of the report, visit any of these websites: www.actionforchildren.org, www.chicagometropolis2020.org, www.illf.org, www.nedic.org.

¹ HighScope Perry Preschool Study

² Studies include The Abecedarian Study at the University of North Carolina at Chapel Hill, HighScope Perry Preschool Study, and Chicago Child-Parent Center Study.

³ Sources: U.S. Census Bureau's 1997 Economic Census adjusted to 2004 using CPI. Soybeans only were based on Illinois Department of Agriculture's 2002 Cash Receipts Facts adjusted to 2004 using CPI. Spectator sports data includes professional team revenue only.

⁴ Source: IDFS, 2003 CES Survey. Early Care and Education employment was calculated in full-time equivalents.



ChicagoKids.com

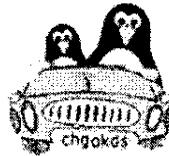
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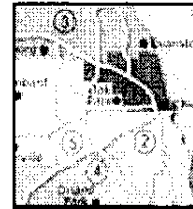
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Here are the results found within the "Amusement" category. If you see a "Details" button below, you may click for more information. Before you plan any visit, make sure to call your destination in advance - all information is subject to change without notice.

Details

Corner Playroom
2121 N. Clybourn, Chicago
(773) 388-2121

Details

Day Frog
233 East Erie Street, Chicago
(312) 642-8400

Details

ESPN Zone
43 E. Ohio St., Chicago
(312) 644-3776

Details

Fantasy Kingdom
1422 N. Kingsbury, Chicago
312/642-KIDS

Details

McDonald's-The Future at Navy Pier
600 E. Grand Ave., Chicago
(312) 832-1640

Details

Navy Pier
600 E. Grand Ave., Chicago
(312) 595-PIER

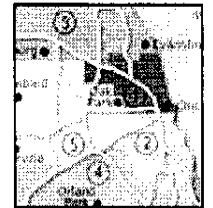
Details

Time Escape at Navy Pier
700 E. Grand Ave. South Arcade, Chicago
(312) 755-9600



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Search Results

Here are the results found within the "Mini Golf" category. If you see a "Details" button below, you may click for more information. Before you plan any visit, make sure to call your destination in advance - all information is subject to change without notice.

Anywhere Mini Golf

3416 N. Southport Ave., Chicago
(773) 763-7833

Bear Run Miniature Golf

6150 N. Caldwell Ave., Chicago
(773) 792-1930

Bubbles Academy

1504 North Fremont, Chicago
(312) 944-7677

City Golf Chicago at Navy Pier

435 E. Illinois St. 3rd Floor, Chicago
(312) 836-5936

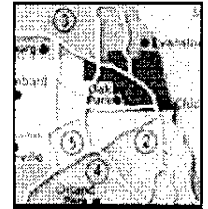
Diversey Minigolf and Driving Range

144 W. Diversey, Chicago
(312) 742-7929



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Search Results

Here are the results found within the "Water" category. If you see a "Details" button below, you may click for more information. Before you plan any visit, make sure to call your destination in advance - all information is subject to change without notice.

Adams Water Playground

1919 N. Seminary Ave., Chicago
(312) 742-7787

Archer Park Water Playground

4901 S. Kilbourn, Chicago
(312) 747-6009

Graver Park Water Playground

1518 W. 102nd Pl., Chicago
(312) 747-6163

Meyering Water Playground

7140 S. King Dr., Chicago
(312) 747-6545

Sherwood Park Water Playground

5701 S. Shields, Chicago
(312) 747-6688

West Chatham Park Water Playground

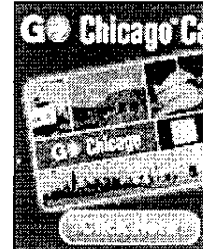
8223 S. Princeton Ave., Chicago
(312) 747-6998

Williams Water Playground

2710 S. Dearborn, Chicago
(312) 747-7107

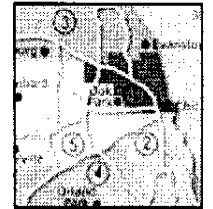
Wilson Park Water Playground

4630 N. Milwaukee Ave., Chicago
(312) 742-7616



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Search Results

Here are the results found within the "Zoo" category. If you see a "Details" button below, you may click for more information. Before you plan any visit, make sure to call your destination in advance - all information is subject to change without notice.

Details

Lincoln Park Zoo
2200 N. Cannon Dr., Chicago
(312) 742-2000

Chicago Family Trip

Read About The Top Spots To See In Chicago! Only at Family.com
www.family.com/travel

Fun Things To Do Chicago

What to do in Chicago? Free Guides. Sign Up For Our Free Newsletter!
www.DailyCandy.com

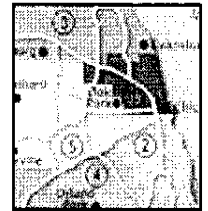
Chicago Hotel Kids

Fun Chicago Hotel Kids. Plan A Vacation Your Kid Will Love!
FamilyVacation.Kidica.com



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September



ILLINOIS. MILE AFTER MAGNIFICENT MILE

ILLINOIS TOURISM NEWS

Illinois Tourism News from the Department of Commerce and Economic Opportunity, Bureau of Tourism

IN THIS ISSUE

Home

From the State Travel Director

Industry Insider

Highlights

- September is Illinois Wine Month! Visit illinoiswine.com for more information on Illinois' growing wine industry and to find out more about wine month events and activities.
- September 9: Fall color updates begin on enjoyillinois.com.
- September 11-18: Illinois Great Rivers Ride. Visit illinoisgreatriversride.com or call 877-477-7007 (ext. 217) for more information on this exciting new event!
- September 27: Fall biannual International Program Update Meeting, Chicago, Ill. Write TMcQuillen@ildceo.net for more information.
- February 22-24, 2006: Illinois Governor's Conference on Tourism in Springfield. More details coming soon!

National News

Chicago's Navy Pier remains a favorite

Ten years after its \$187 million rebirth as an entertainment district, Chicago's Navy Pier, state's most popular tourist destination, is a bustling mix of restaurants, rides and stores, attracting nearly 9 million visitors a year. Yet despite the mass of visitors, many of the Chicago area still dismiss Navy Pier as an overpriced strip mall and a tourist trap. But Metropolitan Pier and Exposition Authority, which governs Navy Pier, estimates the attraction generates more than half a billion dollars a year in direct spending on hotels, restaurants and entertainment around Chicago. To draw more young people, officials are considering a water-based hotel and a water park.

Source: *Travel Advance*

Heritage tourism booming

Heritage tourism, the trend of transforming the annual family vacation into a cultural his lesson, is the second-fastest-growing market segment of tourism, says Rich Harrill, director of the University of South Carolina's Institute for Tourism Research. Southern states particular are promoting their historical sites as they ride a wave of black tourism. Since 2004 the Virginia Tourism Corp. has spent more than \$300,000 trying to reach the black market. Tennessee has focused on upping its appeal to African-Americans and on proving more than just the capital of country music. The state's vacation guide mentions everything from galleries to historically black Fisk University in Nashville to the National Civil Rights Museum in Memphis.

Source: *Travel Advance*

Business/leisure travel is up

A recent study commissioned by Deloitte & Touche USA LLP found that more business travelers are extending work trips. More than half (55%) of all business travelers reported taking at least one combined business/leisure trip last year. Seventy percent brought a family member or friend with them, and 54 percent had stayed at least one extra night at the same hotel or resort.

Source: *Travel Advance*

Workers travel less for business

Nearly one-half of U.S. workers are traveling less frequently for business than they did years ago, according to a survey by Robert Half Management Resources, a unit of Robert International Inc. Of 1,000 employees polled, 48 percent said they travel for work less often compared to 2000. During the economic slowdown of the past few years, corporations trimmed travel allowances, and have continued to closely monitor expenses as the economy has improved. Nonetheless, 36 percent of employees polled travel more frequently for business, while the remaining 16 percent saw no change in the level of business travel according to the survey.

Source: *Travel Advance*

Disability travel on the rise

The Open Doors Organization, in cooperation with the Travel Industry Association, recently released the findings of its 2005 research study on travel by the disabled. Over the past few years, more than 21 million adults with disabilities traveled for business and/or pleasure. The study highlights which domestic and international destinations are the most popular among

Statewide News

Illinois Great Rivers Ride shifts into high gear

Photo shoot to highlight Illinois on the silver screen

It's Fall-O-Ween in Illinois

African American fam a success

New scenic byways guide now available

Illinois attracts diverse audiences

IBOT staff member takes off

National News

Chicago's Navy Pier remains a favorite

Heritage tourism booming

Business/leisure travel is up

Workers travel less for business

Disability travel on the rise

U.S. sets new record for travel abroad

travelers with disabilities, and shows that the average number of leisure trips and hotel stays among these travelers is up 50 percent from 2002.

Source: Travel Advance

U.S. sets new record for travel abroad

Some 61.8 million Americans traveled abroad last year, the largest number of U.S. outbound travelers ever, according to figures recently released by the Commerce Department's Office of Travel and Tourism Industries. The figure represented a 10 percent increase in outbound travel over 2003. Spending by U.S. travelers abroad also set a new record in 2004, at \$8 billion, a 14 percent increase over 2003 spending. The top outbound markets were Mexico and Canada. Top overseas markets for U.S. visitors were the U.K., France, Italy, China and Germany.

Source: Travel Advance

For more information, visit www.enjoyillinois.com or call 1-800-2CONNECT.



U.S. Census Bureau

American FactFinder

FACT SHEET

Chicago city, Illinois

View a Fact Sheet for a **race, ethnic, or ancestry group**

Census 2000 Demographic Profile Highlights:

General Characteristics - show more >>

| | Number | Percent | U.S. | | |
|--|-----------|---------|-------|-----|-------|
| Total population | 2,896,016 | | | map | brief |
| Male | 1,405,107 | 48.5 | 49.1% | map | brief |
| Female | 1,490,909 | 51.5 | 50.9% | map | brief |
| Median age (years) | 31.5 | (X) | 35.3 | map | brief |
| Under 5 years | 218,522 | 7.5 | 6.8% | map | |
| 18 years and over | 2,136,176 | 73.8 | 74.3% | | |
| 65 years and over | 298,803 | 10.3 | 12.4% | map | brief |
| One race | 2,811,579 | 97.1 | 97.6% | | |
| White | 1,215,315 | 42.0 | 75.1% | map | brief |
| Black or African American | 1,065,009 | 36.8 | 12.3% | map | brief |
| American Indian and Alaska Native | 10,290 | 0.4 | 0.9% | map | brief |
| Asian | 125,974 | 4.3 | 3.6% | map | brief |
| Native Hawaiian and Other Pacific Islander | 1,788 | 0.1 | 0.1% | map | brief |
| Some other race | 393,203 | 13.6 | 5.5% | map | |
| Two or more races | 84,437 | 2.9 | 2.4% | map | brief |
| Hispanic or Latino (of any race) | 753,644 | 26.0 | 12.5% | map | brief |
| Household population | 2,836,469 | 97.9 | 97.2% | map | brief |
| Group quarters population | 59,547 | 2.1 | 2.8% | map | |
| Average household size | 2.67 | (X) | 2.59 | map | brief |
| Average family size | 3.50 | (X) | 3.14 | map | |
| Total housing units | 1,152,868 | | | map | |
| Occupied housing units | 1,061,928 | 92.1 | 91.0% | | brief |
| Owner-occupied housing units | 464,865 | 43.8 | 66.2% | map | |
| Renter-occupied housing units | 597,063 | 56.2 | 33.8% | map | brief |
| Vacant housing units | 90,940 | 7.9 | 9.0% | map | |

Social Characteristics - show more >>

| | Number | Percent | U.S. | | |
|---|-----------|---------|-------|-----|-------|
| Population 25 years and over | 1,815,896 | | | | |
| High school graduate or higher | 1,304,122 | 71.8 | 80.4% | map | brief |
| Bachelor's degree or higher | 462,783 | 25.5 | 24.4% | map | |
| Civilian veterans (civilian population 18 years and over) | 156,662 | 7.3 | 12.7% | map | brief |
| Disability status (population 5 years and over) | 604,676 | 22.8 | 19.3% | map | brief |
| Foreign born | 628,903 | 21.7 | 11.1% | map | brief |
| Male, Now married, except separated (population 15 years and over) | 459,488 | 42.7 | 56.7% | | brief |
| Female, Now married, except separated (population 15 years and over) | 440,675 | 37.4 | 52.1% | | brief |
| Speak a language other than English at home (population 5 years and over) | 952,076 | 35.5 | 17.9% | map | brief |

Economic Characteristics - show more >>

| | Number | Percent | U.S. | | |
|---|-----------|---------|--------|-----|-------|
| In labor force (population 16 years and over) | 1,358,054 | 61.3 | 63.9% | | brief |
| Mean travel time to work in minutes (workers 16 years and over) | 35.2 | (X) | 25.5 | map | brief |
| Median household income in 1999 (dollars) | 38,625 | (X) | 41,994 | map | |
| Median family income in 1999 (dollars) | 42,724 | (X) | 50,046 | map | |
| Per capita income in 1999 (dollars) | 20,175 | (X) | 21,587 | map | |
| Families below poverty level | 105,752 | 16.6 | 9.2% | map | brief |
| Individuals below poverty level | 556,791 | 19.6 | 12.4% | map | |


Housing Characteristics - show more >>

| Number | Percent | U.S. |
|--------|---------|------|
|--------|---------|------|

| | | | | | |
|--|---------|-----|---------|-----|-------|
| Single-family owner-occupied homes | 263,925 | | | | brief |
| Median value (dollars) | 132,400 | (X) | 119,600 | map | brief |
| Median of selected monthly owner costs | (X) | (X) | | | brief |
| With a mortgage (dollars) | 1,216 | (X) | 1.088 | map | |
| Not mortgaged (dollars) | 369 | (X) | 295 | | |

(X) Not applicable.

Source: U.S. Census Bureau, Summary File 1 (SF 1) and Summary File 3 (SF 3)

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U.S. Census Bureau

American FactFinder

FACT SHEET

Chicago city, Illinois

2006 American Community Survey

Data Profile Highlights:

NOTE: Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

| Social Characteristics - show more >> | Estimate | Percent | U.S. | Margin of Error |
|---|-----------|---------|---------|-----------------|
| Average household size | 2.65 | (X) | 2.61 | +/-0.02 |
| Average family size | 3.58 | (X) | 3.20 | +/-0.04 |
| Population 25 years and over | 1,771,459 | | | +/-17,414 |
| High school graduate or higher | (X) | 77.0 | 84.1% | (X) |
| Bachelor's degree or higher | (X) | 29.3 | 27.0% | (X) |
| Civilian veterans (civilian population 18 years and over) | 119,411 | 5.8 | 10.4% | +/-4,972 |
| Disability status (population 5 years and over) | 357,289 | 14.2 | 15.1% | +/-8,989 |
| Foreign born | 599,802 | 21.8 | 12.5% | +/-18,070 |
| Male, Now married, except separated (population 15 years and over) | 412,296 | 39.2 | 52.4% | +/-8,877 |
| Female, Now married, except separated (population 15 years and over) | 387,339 | 34.3 | 48.4% | +/-8,022 |
| Speak a language other than English at home (population 5 years and over) | 927,403 | 36.5 | 19.7% | +/-20,917 |
| Household population | 2,691,356 | | | +/-29,160 |
| Group quarters population | (X) | (X) | (X) | (X) |
| Economic Characteristics - show more >> | Estimate | Percent | U.S. | Margin of Error |
| In labor force (population 16 years and over) | 1,386,112 | 64.7 | 65.0% | +/-16,958 |
| Mean travel time to work in minutes (workers 16 years and over) | 33.4 | (X) | 25.0 | +/-0.4 |
| Median household income (in 2006 inflation-adjusted dollars) | 43,223 | (X) | 48,451 | +/-1,036 |
| Median family income (in 2006 inflation-adjusted dollars) | 49,113 | (X) | 58,526 | +/-1,274 |
| Per capita income (in 2006 inflation-adjusted dollars) | 24,219 | (X) | 25,267 | +/-438 |
| Families below poverty level | (X) | 17.2 | 9.8% | (X) |
| Individuals below poverty level | (X) | 21.2 | 13.3% | (X) |
| Housing Characteristics - show more >> | Estimate | Percent | U.S. | Margin of Error |
| Total housing units | 1,175,547 | | | +/-9,142 |
| Occupied housing units | 1,015,685 | 86.4 | 88.4% | +/-9,647 |
| Owner-occupied housing units | 500,638 | 49.3 | 67.3% | +/-8,731 |
| Renter-occupied housing units | 515,047 | 50.7 | 32.7% | +/-9,446 |
| Vacant housing units | 159,862 | 13.6 | 11.6% | +/-6,754 |
| Owner-occupied homes | 500,638 | | | +/-8,731 |
| Median value (dollars) | 277,900 | (X) | 185,200 | +/-4,761 |
| Median of selected monthly owner costs | | | | |
| With a mortgage (dollars) | 1,840 | (X) | 1,402 | +/-21 |
| Not mortgaged (dollars) | 559 | (X) | 399 | +/-10 |
| ACS Demographic Estimates - show more >> | Estimate | Percent | U.S. | Margin of Error |
| Total population | 2,749,283 | | | +/-29,156 |

| | | | | |
|--|-----------|------|-------|-----------|
| Male | 1,343,629 | 48.9 | 49.2% | +/-15,410 |
| Female | 1,405,654 | 51.1 | 50.8% | +/-18,239 |
| Median age (years) | 33.6 | (X) | 36.4 | +/-0.3 |
| Under 5 years | 209,747 | 7.6 | 6.8% | +/-6,760 |
| 18 years and over | 2,070,961 | 75.3 | 75.4% | +/-19,791 |
| 65 years and over | 281,613 | 10.2 | 12.4% | +/-5,996 |
| One race | 2,705,807 | 98.4 | 98.0% | +/-28,552 |
| White | 1,004,760 | 36.5 | 73.9% | +/-20,570 |
| Black or African American | 970,244 | 35.3 | 12.4% | +/-16,700 |
| American Indian and Alaska Native | 5,104 | 0.2 | 0.8% | +/-1,270 |
| Asian | 134,837 | 4.9 | 4.4% | +/-7,687 |
| Native Hawaiian and Other Pacific Islander | 1,296 | 0.0 | 0.1% | +/-851 |
| Some other race | 589,566 | 21.4 | 6.3% | +/-19,879 |
| Two or more races | 43,476 | 1.6 | 2.0% | +/-4,899 |
| Hispanic or Latino (of any race) | 774,042 | 28.2 | 14.8% | +/-16,723 |

Source: U.S. Census Bureau, 2006 American Community Survey


Explanation of Symbols:

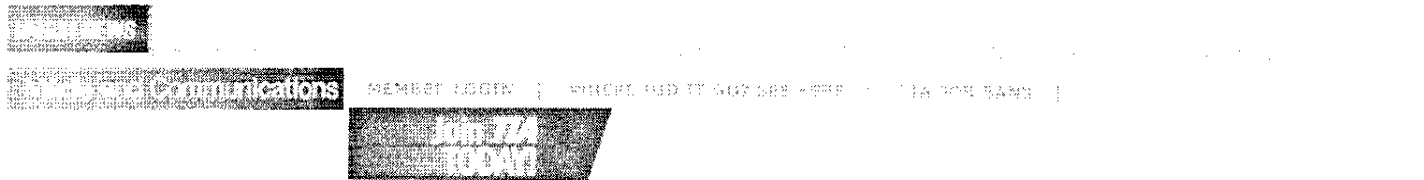
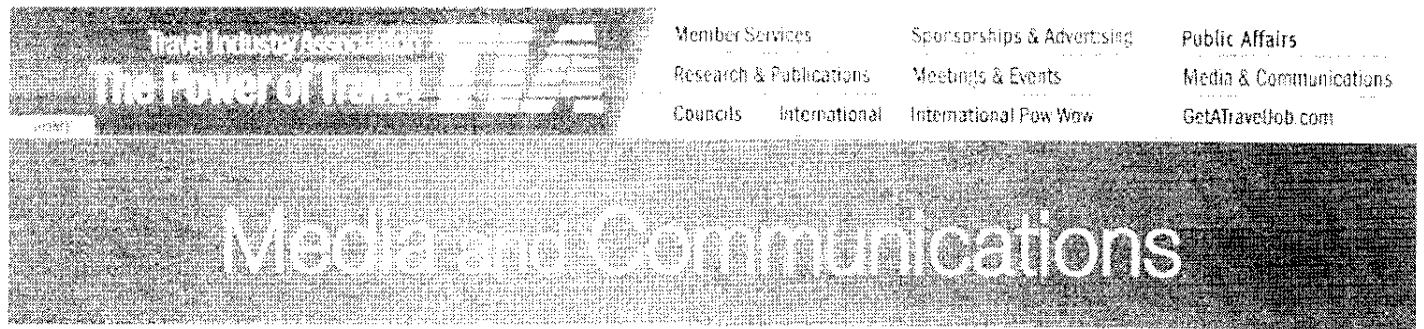
**** - The median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.

***** - The estimate is controlled. A statistical test for sampling variability is not appropriate.

'N' - Data for this geographic area cannot be displayed because the number of sample cases is too small.

'(X)' - The value is not applicable or not available.

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Date: 5/7/2008

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Gas Prices Not Likely To Affect Travel Plans of Most American Travelers

One of Six Plans To Spend Tax Rebate On Travel

Washington, DC -- Six of ten (59%) Americans who are currently planning a trip with their car, truck or SUV this summer will not change their travel plans even with additional increases in the price of gas, according to the closely watched *travelhorizons*SM survey co-authored by the Travel Industry Association (TIA) and Ypartnership.

One of six (16%) of those expecting a tax rebate as part of the economic stimulus package approved by Congress is planning to spend their rebate on an overnight or day trip for leisure purposes, according to the same nationally representative survey of 2,233 adults conducted during the month of April.

"The data confirm, once again, that vacations are a non-negotiable part of contemporary life, even in challenging economic times," said Peter Yesawich, Ypartnership's Chairman and Chief Executive Officer.

Roger Dow, TIA's President and Chief Executive Officer, said the survey results indicating \$12.1 billion of the tax rebates will be spent on trips underscores travel's importance to the overall economy.

"These survey results prove that travel is a multi-billion dollar shot into the arm of the American economy," said Dow. "It is time for policymakers to do their part by improving America's infrastructure, developing a more efficient and reliable air travel process and passing the Travel Promotion Act."

Among the 41% of respondents who stated their plans would change if gas prices rise further, the greatest percentage would simply drive a shorter distance to their vacation destination. Other expected outcomes include people taking fewer trips and spending less money on other aspects of vacations as revealed below:

- 38% would drive a shorter distance;
- 36% would take fewer trips and/or cancel a trip;
- 30% would spend less on souvenirs and shopping;
- 27% would spend less money on meals/restaurants and/or less on entertainment;
- 23% would spend less on hotels;
- 21% would spend fewer nights away from home;
- 20% would select another vacation destination.

The survey revealed that 74% of households are expecting to receive a tax rebate check as part of the economic stimulus package approved by Congress. Among those planning to use the money to take a trip, just under half (46%) plan to stay in a hotel, motel or bed and breakfast, one out of four (25%) plans to take a trip by air, 11% plan to visit a theme park, 5% plan to stay in a timeshare and 3% plan to take an international trip.

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Among adults not planning to use their tax rebate to take an overnight or day trip, the most frequently mentioned uses include:

- Put in savings account, mutual fund or otherwise invest (29%);
- Spend on home necessities such as food, utility bills, etc. (24%);
- Pay down a credit card balance (23%);
- Pay down debt other than a credit card balance (18%);
- Spend on dining out or other forms of entertainment (6%).

Only 4% indicated they would use the rebate to make a home mortgage payment and/or home or apartment rental payment.

travelhorizons™ is a quarterly survey of U.S. adults co-authored by the Travel Industry Association and Ypartnership. The national survey of 2,233 U.S. adults was conducted during April 2008, and the estimated margin of error is +/-2.05 percent at the 95 percent level of confidence.

For more information on *travelhorizons™* visit www.tia.org/researchpubs/travel_horizons.html.

The Travel Industry Association is the national, non-profit organization representing all components of the \$740 billion travel industry. TIA's mission is to promote and facilitate increased travel to and within the United States. TIA is proud to be a partner in travel with American Express. For more information, visit www.tia.org.

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WHAT IS TELEMEDICINE?

Here is the definition I have used over the past ten years or so to describe Telemedicine:

"Telemedicine is the ability to provide interactive healthcare utilizing modern technology and telecommunications." Basically, Telemedicine allows patients to visit with physicians live over video for immediate care or capture video/still images and patient data are stored and sent to physicians for diagnosis and follow-up treatment at a later time. Whether you live in the center of Los Angeles or deep in the Brazilian Amazon, Telemedicine is an invaluable tool in Healthcare.

Here's an example of how Telemedicine works everyday. Say you have a horrible sore throat and visit your healthcare provider (could be a general practice physician, nurse practitioner, or unlicensed health worker in a village depending where you live), who does an examination and is concerned with what he sees. Your provider recommends a referral to an ENT specialist for a follow up diagnosis and treatment plan. Well, instead of traveling to the nearest specialist, which depending where you live could be anywhere from a 45-minute drive or an 18-hour boat ride up the Amazon River, your provider connects you directly to the ENT specialist via Telemedicine.

Here are some of the major benefits of a Telemedicine Consultation:

- The specialist actually hears your medical history and current condition directly from you and your provider instead of the specialist receiving a dictated note in the mail.
- With the use of ENT medical peripherals such as a nasopharyngoscope, your provider can pass this medical peripheral into your nasal passage which will allow your provider and the ENT specialist simultaneous crystal clear video of your throat and vocal cords. The specialist may ask you to cough, pronounce letters, etc. in order to get the best outcome for the diagnosis.
- The specialist can diagnose and recommend treatment immediately.
- Your provider has the opportunity throughout the examination to ask questions and learn from each and every consultation. The continual education of your provider via medical consultations is an immeasurable benefit to all his patients.

Telemedicine Usage Models

Real-Time

This is the most common use in Telemedicine. Like the example above, live video allows the provider, patient and specialist to all communicate together to achieve the best outcome for the patient.

- In or outpatient specialty consultation
- Physician supervision of non-MD clinician
- Generally require higher bandwidths (minimum 256kb)

Store and Forward (asynchronous)

Used when both health providers are not available or not required at the same time. The provider's voice or text dictation on the patient's history, current affliction including pictures and/or video, radiology images, etc., are attached for diagnosis. This record is either emailed or placed on a server for the specialist's access. The specialist then follows up with his diagnosis and treatment plan.

- Teleradiology
- Can be done over low or high bandwidth
- Images scanned, direct capture, or digital camera
- Other specialties consist of dermatology, ophthalmology, pathology

Home Health Telemedicine

When a patient is in the hospital and he is placed under general observation after a surgery or other medical procedure, the hospital is usually losing a valuable bed and the patient would rather not be there as well. Home health allows the remote observation and care of a patient. Home health equipment consists of vital signs capture, video conferencing capabilities, and patient stats can be reviewed and alarms can be set from the hospital nurse's station, depending

on the specific home health device.

- Usually low bandwidth analog Plain Old Telephone System (POTS). Some newer systems do support higher bandwidth capabilities.
- Disease management, post-hospital care, assisted living, etc.

Summary of Benefits of Telemedicine:

To Rural Physicians and Clinics (spoke sites)

- Receive education from the specialist/provider
- Better health outcome for their patients
- Enhanced community confidence in local healthcare
- Attend continuing medical education courses from their clinic

To Patients

- Loved ones remain in their community with family support
- Cost savings from not having to travel extensively
- Immediate urgent care
- Confidentiality of specialty examination or visit (Because the patient visits the general practice doctor, he can be seen for any specialty care without anyone else knowing)
- Patient education courses (nutrition, oncology, etc.)
- Properly stabilize patient prior to transport
- Early Diagnosis prior to escalated medical episode

Rural Patient's Community

- Dollars follow the patient
 - Patients that routinely travel to visit doctors in large urban areas tend to purchase their goods and services from those cities, Telemedicine keeps those dollars local.

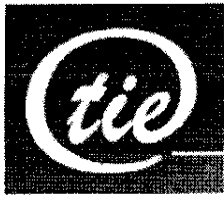
To Telemedicine Providers (hub sites)

- Expand patient outreach
- Major surgical procedures resulting from the initial telemedicine consultation
- Reduction in ER visits
- Promotion of Hospital
- Charge tuition for clinician education courses (CME, CNE, etc.)

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Telemedicine 101

Telemedicine Coming of Age

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By Nancy Brown, September 28, 1996
 * Updated on January 13, 2005

Telemedicine has been defined as the use of telecommunications to provide medical information and services (Perednia and Allen 1995). It may be as simple as two health professionals discussing a case over the telephone, or as sophisticated as using satellite technology to broadcast a consultation between providers at facilities in two countries, using videoconferencing equipment or robotic technology. The first is used daily by most health professionals, and the latter is used by the military and some large medical centers. It is the practice of telemedicine somewhere in between those two that will be described in this article.

Types of Technology

Two different kinds of technology make up most of the telemedicine applications in use today. The first, called store and forward, is used for transferring digital images from one location to another. A digital image is taken using a digital camera, ('stored') and then sent ('forwarded') by computer to another location. This is typically used for non-emergent situations, when a diagnosis or consultation may be made in the next 24 - 48 hours and sent back.

The image may be transferred within a building, between two buildings in the same city, or from one location to another anywhere in the world. Teleradiology, the sending of x-rays, CT scans, or MRIs (store-and-forward images) is the most common application of telemedicine in use today. There are hundreds of medical centers, clinics, and individual physicians who use some form of teleradiology. Many radiologists are installing appropriate computer technology in their homes, so they can have images sent directly to them for diagnosis, instead of making an off-hours trip to a hospital or clinic.

Telepathology is another common use of this technology. Images of pathology slides may be sent from one location to another for diagnostic consultation. Dermatology is also a natural for store and forward technology (although practitioners are increasingly using interactive

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technology for dermatological exams). Digital images may be taken of skin conditions, and sent to a dermatologist for diagnosis.

The other widely used technology, two-way interactive television (IATV), is used when a 'face-to-face' consultation is necessary. The patient and sometimes their provider, or more commonly a nurse practitioner or telemedicine coordinator (or any combination of the three), are at the originating site. The specialist is at the referral site, most often at an urban medical center. Videoconferencing equipment at both locations allow a 'real-time' consultation to take place. The technology has decreased in price and complexity over the past five years, and many programs now use desktop videoconferencing systems. There are many configurations of an interactive consultation, but most typically it is from an urban-to-rural location. It means that the patient does not have to travel to an urban area to see a specialist, and in many cases, provides access to specialty care when none has been available previously. Almost all specialties of medicine have been found to be conducive to this kind of consultation, including psychiatry, internal medicine, rehabilitation, cardiology, pediatrics, obstetrics and gynecology and neurology. There are also many peripheral devices which can be attached to computers which can aid in an interactive examination. For instance, an otoscope allows a physician to 'see' inside a patient's ear; a stethoscope allows the consulting physician to hear the patient's heartbeat.

Many health care professionals involved in telemedicine are becoming increasingly creative with available technology. For instance, it's not unusual to use store-and-forward, interactive, audio, and video still images in a variety of combinations and applications. Use of the Web to transfer clinical information and data is also becoming more prevalent. Wireless technology is being used for instance, in ambulances providing mobile telemedicine services.

Programs and Applications

There are many programs world-wide using a variety of technologies to provide healthcare. At the [University of Kansas Telemedicine Program](#), telemedicine technology has been used for several years for oncology, mental health care to patients in rural jails, hospice care, and most recently, to augment school health services by allowing school nurses to consult with physicians.

Several telemedicine programs are being initiated in correctional facilities, where the costs and danger of transporting prisoners to health facilities can be avoided. The University of Texas Medical Branch at Galveston [Center for Telehealth and Distance Education](#) was one of the original programs to begin providing services to inmates, and sees hundreds of patients per month.

[Home health](#) care is another booming area of telemedicine, including Japan, the UK and the US. The [Veterans Affairs Administration](#) has initiated home telehealth as part of its telehealth program. Telemedicine does not have to be a high-cost proposition. Many projects are providing

valuable services to those with no access to health care using low-end technology. The [Memorial University of Newfoundland](#) telemedicine project has been using low-cost store and forward technology to provide quality care to rural areas in under-developed countries for many years.

The military and some university research centers are involved in developing robotics equipment for [telesurgery applications](#). A surgeon in one location can remotely control a robotics arm for surgery in another location. The military has developed this technology particularly for battlefield use, and some U.S. academic medical centers and research organizations are also testing and using the technology.

Advantages of Telemedicine

Providing healthcare services via telemedicine offers many advantages. It can make specialty care more accessible to underserved rural and urban populations. Video consultations from a rural clinic to a specialist can alleviate prohibitive travel and associated costs for patients. Videoconferencing also opens up new possibilities for continuing education or training for isolated or rural health practitioners, who may not be able to leave a rural practice to take part in professional meetings or educational opportunities. While studies have yet to confirm this, it appears that the use of telemedicine can also cut costs of medical care for those in rural areas.

Barriers to Telemedicine

There are still several barriers to the practice of telemedicine. Many states will not allow out-of-state physicians to practice unless licensed in their state. The [Centers for Medicare and Medicaid \(CMS\)](#) still has several restrictions for Medicare telemedicine reimbursement. Many private insurers also will not reimburse, although some states, such as California and Kentucky, have legislated that they must reimburse the same as for face-to-face consultations. Other programs, such as Eastern Montana and Inland Health in Washington, have negotiated with payers for telemedicine reimbursement. Fear of malpractice suits is another consideration for physicians, as is acceptance of the technology and lack of 'hands-on' interaction with patients, although most patient satisfaction studies to date find patients on the whole satisfied with long distance care. ([Gustke et al 2000](#))

Many potential telemedicine projects have been hampered by the lack of appropriate telecommunications technology. Regular telephone lines do not supply adequate bandwidth for most telemedical applications. Many rural areas still do not have cable wiring or other kinds of high bandwidth telecommunications access required for more sophisticated uses, so those who could most benefit from telemedicine may not have access to it.

Many current telemedicine projects side-step these and other problems by obtaining federal funds. However, in the past three to four years, federal funding has become less available for telemedicine. In 2005, the

Technology Opportunity Program (TOP) will not receive funds for telemedicine/telehealth, and the Office for the Advancement of Telehealth (OAT) will not be able to fund any new programs. Some legislation and grant appropriations passed in response to 9/11 include the use of telehealth, but no direct funding has been made available. Some private corporations and telecommunications companies are stepping in to fill the void, however, pressure on the appropriate government and legislative agencies is needed before more funding will become available.

Technology manufacturers and telecommunications companies are vying with each other to produce the low-cost equipment and bandwidth needed. Many states are creating networks which link education, government, business and healthcare. Distance education is commonplace and most educational institutions and many companies allay travel costs for meetings by using video.

Telemedicine or Telehealth?

The term 'telehealth' was originally used to describe administrative or educational functions related to telemedicine. Now that physicians use email to communicate with patients, and drug prescriptions and other health services are being offered on the Web, 'telehealth' is generally used as an umbrella term to describe all the possible variations of healthcare services using telecommunications. The term 'telemedicine' more appropriately describes the direct provision of clinical care via telecommunications--diagnosing, treating or following up with a patient at a distance. However, stay tuned. The terminology used to describe healthcare services at a distance will likely change as fast as the technology used to perform it.

Conclusion

It's not too much of a stretch of the imagination to realize that telemedicine will soon be just another way to see a health professional, just as seeing friends and family while talking to them on the phone is becoming commonplace. Farther down the road, it has been theorized that we each could have a 'Personal Diagnosis System' as part of our home entertainment centers. This system would monitor our daily health status and automatically notify a health professional if we become ill. (Kurtz 1994)

Fifteen or twenty years ago we had no idea we would rely heavily on faxes, answering machines and e-mail, tools which are now low-tech and taken for granted. In early 2005, telemedicine still has not reached its potential. However, information about telemedicine continually increases, there are many programs in operation since 1994, and telemedicine technology is usually included in hospital remodels or new hospitals. In the mid-90's Ronald C. Merrell, from Yale University School of Medicine said, "The innovations we will encounter as we step beyond feasibility are dazzling in their potential." (Merrell 1995) In 2005, the potential of telemedicine, telehealth and e-health is still left to our imaginations.

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Revisions

May 3, 2003: checked links (N.B.)

January 13, 2005: checked links; made edits (N.B.)

About the author: Nancy Brown M.L.S., was the Research Librarian for the Telemedicine Research Center, in Portland, Oregon. She was also the Project Manager for Telemedicine Information Exchange (TIE). She has demonstrated the TIE at national and international meetings and has published several articles and a book chapter on the provision of Web-based information on telemedicine, as well as a compilation of telemedicine literature for the Medical Library Association.

Page last updated on Sunday, July 01, 2007.

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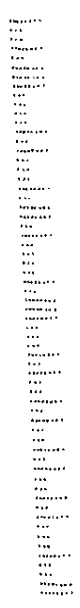
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APR 21 2009

Henry Sharfaei
Chicagoland Foreign Investment Group, LLC
111 E. Wacker Dr., Suite 555
Chicago, IL 60601

Application: Proposal for Designation as a Regional Center
Applicants: Henry Sharfaei
Proposed Enterprise: Chicagoland Foreign Investment Group (CFIG) Regional Center

RE: Amendment to a Regional Center under the Immigrant Investor Pilot Program

BACKGROUND:

Pursuant to Section 610 of the Appropriations Act of 1993, on August 9, 2008, Chicagoland Foreign Investment Group, LLC submitted a proposal seeking approval and designation by U.S. Citizenship and Immigration Services (USCIS) of the Chicagoland Foreign Investment Group (CFIG) Regional Center, with a geographic area focusing on the Illinois Counties of Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, Will, Lake, Kane, Boone, Winnebago, Ogle, and Stephenson. For EB-5 Immigrant Investor purposes CFIG sought to focus investment in the following business activity:

1. Accommodation,
2. Agriculture,
3. Education Services,
4. Entertainment,
5. Health Care, and
6. Manufacturing.

On December 5, 2008, USCIS issued a Request for Evidence (RFE). On February 13, 2009, a response to the RFE was received which satisfactorily supplied the requested evidence. The proposal and response to the RFE contained the following evidence in support of its requested designation:

- A Job Creation Analysis and Econometric Model using RIMS II prepared by a professional economic analysis firm which specifically calculates but excludes construction jobs from the detailed prediction

- A business plan reflecting the timing, scale and planned use of the alien investor capital;
- Maps;
- A sample Offering Letter;
- Articles of Organization;
- A sample Limited Liability Company Operating Agreement;
- A sample Subscription Agreement;
- A Consulting Agreement;
- An Advisory Agreement Form-LLC;
- An Escrow Agreement;
- A revised sample Escrow Agreement;
- A Marketing Agreement; and
- A Marketing/Promotional Plan and Budget.

On March 25, 2009, petitioner submitted an amendment requesting to change the industry clusters from an abbreviated form to the full RIMS II codes. The amendment is granted. Full RIMS II categories have been added below.

DECISION:

Based on its review and analysis of your proposal, and of your response to the USCIS Request For Evidence to which you provided a satisfactory response, USCIS hereby approves and designates CFIG as a Regional Center within the Immigrant Investor Pilot Program. CFIG shall have a geographic scope which includes the Illinois Counties of Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, Will, Lake, Schickler, Boone, Winnebago, Ogle, and Stephenson.

FOCUS OF INVESTMENT ACTIVITY AND CAPITAL INVESTMENT THRESHOLD:

The USCIS-approved focus of the CFIG business plan and job creation analysis and multipliers is to generate immigrant investor capital into the following commercial investment activities:

1. Accommodation and Food Service;
2. Agriculture, Forestry, Fishing, and Hunting;
3. Education Services;
4. Arts, Entertainment, and Recreation;
5. Health Care and Social Assistance; and
6. Manufacturing.

If any investment opportunities arise that are beyond the scope of the approved focus, then an amendment would be required to include that opportunity.

As such, aliens seeking immigrant visas through the Immigrant Investor Pilot Program may file individual petitions with USCIS for these commercial enterprises located within the CFIG area. The geographic focus of this area contains numerous High Unemployment Targeted Employment Areas (TEAs) to be determined by the State of Illinois on a case-by-case basis. Therefore, the minimum capital investment threshold for any individual immigrant investment into an approved commercial enterprise throughout the Regional Center shall be not less than \$500,000 if the investment target is located within a TEA, or \$1,000,000 if located outside of a TEA.

EMPLOYMENT CREATION:

Immigrant investors who file petitions for commercial enterprises located in the CFIG area must fulfill all of the requirements set forth in 8 CFR 204.6, except that the petition need not show that the new commercial enterprises created ten new jobs indirectly as a result of the immigrant investor's investment. This determination has been established by way of USCIS' acceptance of the final economic analysis that is conducted as part of the approved CFIG proposal and its indirect job creation model and multipliers contained within the final approved CFIG application package.

In addition, where job creation or preservation of existing jobs is claimed based on a multiplier rooted in underlying new "direct jobs" in support of an immigrant investor's individual I-526 petition affiliated with the CFIG, then:

- To be credited with projected creation of new "direct" jobs for "qualifying employees" upon filing the I-526 petition, a petition must be supported by a comprehensive detailed business plan and supporting financial, marketing and related data and analysis providing a reasonable basis for projecting creation of any new direct jobs for "qualifying employees" to be achieved/realized, within 180 days of issuance of 8 CFR 204.6(g)(1)(B).

An alien investor's I-829 petition to remove the conditions when was based on an I-526 petition approval that involved the creation of new direct jobs or the creation of new indirect jobs based on a multiplier tied to underlying new direct jobs needs to be properly supported by evidence of job creation. To support the full number of direct and indirect new jobs being claimed in connection with removal of conditions, the petition will need to be supported by probative evidence of the number of new direct full-time (30 hours per week) jobs for qualified employees whose positions have been created as a result of the alien's investment. Such evidence may include copies of quarterly state employment tax returns, Form 941, Form 941-a, and any other pertinent employment records sufficient to demonstrate the number of qualified employees whose jobs were created directly.

Each individual petition, in order to demonstrate that it is associated with the CFIG, in conjunction with addressing all the requirements for an individual immigrant investor petition, shall also contain as supporting evidence relating to this America's Regional Center designation, the following:

1. A copy of this letter to the CFIG, printed and signed by:

2. A copy of the USCIS approved regional center narrative proposal and business plan.
3. A copy of the job creation methodology required in 8 CFR 204.6(j)(4)(iii), as contained in the final regional center economic analysis which has been approved by USCIS, which reflects that investment by an individual immigrant investor will create not fewer than ten (10) full-time employment positions either directly or indirectly per immigrant investor.
4. A legally executed copy of the USCIS approved:
 - a. Offering Circular or equivalent;
 - b. Escrow Agreement;
 - c. Subscription Agreement; and
 - d. LLC Agreement.

DESIGNEE'S RESPONSIBILITIES INHERENT TO CONDUCT OF THE CHICAGOLAND REGIONAL CENTER (CFRG)

The law, as reflected in the regulations at 8 CFR 204.6(m)(6), requires that an approved regional center in order to maintain the validity of its approval and designation must continue to meet the statutory requirements of the Immigrant Investor Pilot Program by serving the purpose of promoting economic growth, including increased export sales (where applicable), improved regional productivity, job creation, and increased domestic capital investment. Therefore, in order for USCIS to determine whether your regional center is in compliance with the above cited regulation, and in order to continue to operate as a USCIS approved and designated regional center, your administration, oversight, and management of your regional center shall be obligated to monitor all investment activities under the ownership of your regional center and to maintain records, data and information on a quarterly basis in order to report to USCIS upon request the following year to date information for each Federal Fiscal Year¹, commencing with the initial year as follows:

1. Provide the principal and/or key official and point of contact of the regional center responsible for the normal operation, management and administration of the regional center.
2. Be prepared to explain how you will continue to assist in job creation and how you will be actively engaged in the selection and reference screening of immigrant investors' lawful source of capital, and their investor's ability to fully invest the requisite amount of capital.
3. Be prepared to explain the following

¹ A Federal Fiscal Year runs for twelve consecutive months from October 1st to September 30th.

- a. How the regional center is actively engaged in the evaluation, oversight and follow up on any proposed commercial activities that will be utilized by alien investors.
 - b. How the regional center is actively engaged in the ongoing monitoring, evaluation, oversight and follow up on an investor commercial activity affiliated through the regional center that will be utilized by alien investors in order to create direct and/or indirect jobs through qualifying 13-5 capital investments into commercial enterprises within the regional center.
4. Be prepared to provide:
- a. the name, date of birth, passport number, and alien registration number (if one has been assigned by USCIS) of each principal alien investor who has made an investment and has filed an EB-5 I-526 Petition with USCIS, specifying whether:
 - i. the petition was filed;
 - ii. was approved;
 - iii. denied; or
 - iv. withdrawn by the petitioner, together with the date(s) of such event.
 - b. The total number of visas represented in each case for the principal alien investor identified in 4.a above, plus his/her dependents (spouse and children) for whom immigrant status has not yet been granted.
 - c. The country of nationality of each alien investor who has made an investment and filed an EB-5 I-526 petition with USCIS.
 - d. The U.S. city and state of residence (or intended residence) of each alien investor who has made an investment and filed an EB-5 I-526 petition with USCIS.
 - e. For each alien investor listed in item 4.a above, identify the following:
 - i. the date(s) of investment in the commercial enterprise;
 - ii. the amount(s) of investment in the commercial enterprise; and
 - iii. the date, amount, and amount(s) of any payment (remuneration/profit/return on investment) made to the alien investor by the commercial enterprise and/or regional center (if any) when the investment was initiated to the present.
5. Be prepared to identify for each of the major industry categories of business activity within the geographic boundaries of your regional center that have:
- a. received alien investors' investment, and in what aggregate amounts;

- b. received non-EB-5 domestic capital that has been combined and invested together, specifying the separate aggregate amounts of the domestic investment capital;
 - c. of the total investor capital (alien and domestic) identified above in 5.a and 5.b, identify and list the following:
 - i. The name and address of each "direct" job creating commercial enterprise,
 - ii. The industry category for each indirect job creating investment activity.
6. Be prepared to provide:
 - a. The total aggregate number of approved EB-5 alien investor I-526 petitions per each Federal Fiscal Year to date made through your regional center.
 - b. The total aggregate number of approved EB-5 alien investor I-829 petitions per each Federal Fiscal Year to date through your regional center.
7. The total aggregate sum of EB-5 alien capital invested through your regional center for each Federal Fiscal Year to date since your approval and designation.
8. The combined total aggregate of "new" direct and/or indirect jobs created by EB-5 investors through your regional center for each Federal Fiscal Year to date since your approval and designation.
9. If applicable, the total aggregate of "preserved" or saved jobs by EB-5 alien investors into troubled businesses through your regional center for each Federal Fiscal Year to date since your approval and designation.
10. If for any given Federal Fiscal Year your regional center did or does not have investors to report, then provide:
 - a. a detailed written explanation for the inactivity,
 - b. a specific plan which specifies the budget, timelines, milestones and critical steps to:
 - i. actively promote your regional center program,
 - ii. identify and recruit legitimate and viable alien investors, and
 - iii. a strategy to invest into job creating enterprises and/or investment activities within the regional center.
11. Regarding your website, if any, please be prepared to provide a hard copy which represents fully what your regional center has posted on its website, as well as providing your web

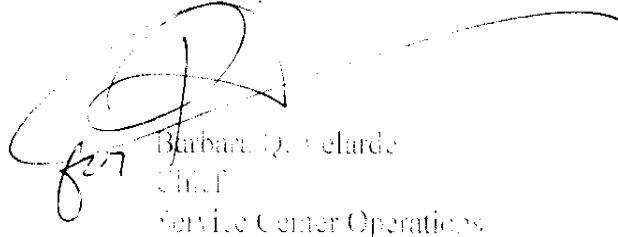
address. Additionally, please provide a packet containing all of your regional center's hard copy promotional materials such as brochures, flyers, press articles, advertisements, etc.

12. Finally, please be aware that it is incumbent on each USCIS approved and designated regional center, in order to remain in good standing, to notify the USCIS within 15 business days at USCIS Immigration Policy Forum (ipforum) of any change of address or occurrence of any material change in:

- the name and contact information of the responsible official and/or Point of Contact (POC) for the RC;
- the management and administration of the RC;
- the RC structure;
- the RC mailing address, website address, email address, phone and fax number;
- the scope of the RC operations and focus;
- the RC business plan;
- any new, reduced or expanded delegation of authority, MOU, agreement, contract, etc. with another party to represent or act on behalf of the RC;
- the economic focus of the RC; or
- any material change relating to your regional center's basis for its most recent designation and/or reaffirmation by USCIS.

If you have any questions concerning the CFG approval and designation under the Immigrant Investor Pilot Program, please contact USCIS by e-mail at USCIS.ImmigrantInvestor@uscis.gov.

Sincerely,



Barbara D. Velarde
Chief
Service Center Operations

cc: Official File

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KAMELI & ASSOCIATES
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MAR 25 2009

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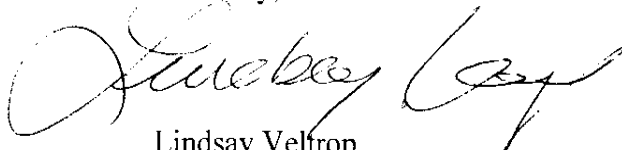
RE: Motion to Amend the Focus of Investment Activity

Petitioner: Chicagoland Foreign Investment Group Regional Center

Dear Joseph Whalen:

Enclosed please find a Motion to Amend the Focus of Investment Activity in regards to the above-captioned matter. Should you have any questions or concerns please contact our law offices.

Sincerely,



Lindsay Veltrop
Client Coordinator

**UNITED STATES DEPARTMENT OF HOMELAND SECURITY
U.S. CITIZENSHIP AND IMMIGRATION SERVICES
OFFICE OF SERVICE CENTER OPERATIONS
WASHINGTON, DC**

In the Matter of:)
)
CHICAGOLAND FOREIGN)
INVESTMENT GROUP)
REGIONAL CENTER,)
)
Petitioner.)

MOTION TO AMEND THE FOCUS OF INVESTMENT ACTIVITY

Petitioner, the CHICAGOLAND FOREIGN INVESTMENT GROUP REGIONAL CENTER (“Petitioner”), by and through its attorneys, the Law Offices of Kameli & Associates, P.C., requests that this agency grant Petitioner’s Motion to Amend the Focus of Investment Activity, and in support thereof, Petitioner states as follows:

1. That Henri Sharfaei, on behalf of Petitioner, applied for designation of Petitioner as a Regional Center under the EB-5 Pilot Program pursuant to 8 CFR § 204.6(m) on or about August 28, 2008.
2. That said application named the Regional Input-Output Modeling System (“RIMS II”) as the econometric model to be used for job creation analyses.
3. That said application requested that the geographic region to be served by Petitioner be defined as the Illinois Counties of Boone, Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, Ogle, Stephenson, Will, and Winnebago.
4. That said application requested that the focus of investment activity for Petitioner be defined as the following industry clusters: (1) Accommodations; (2) Agriculture; (3) Education; (4) Entertainment; (5) Health Care; and (6) Manufacturing.

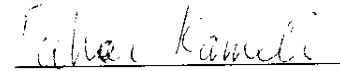
5. That the named industry clusters were chosen from the aggregated list of RIMS II Industry Groups. *Exhibit 1.*
6. That the industry clusters named in the application were abbreviations of the full names given on the RIMS II Industry Groups. The full names of the RIMS II industry group are as follows: (1) Accommodations and food services; (2) Agriculture, forestry, fishing, and hunting; (3) Educational services; (4) Arts, entertainment, and recreation; (5) Health care and social assistance; and (6) Manufacturing.
7. That although Petitioner abbreviated the names of the RIMS II Industry Groups, Petitioner intended that the focus of investment activity be open to the full scope of the named RIMS II Industry Groups.
8. That Petitioner's application supported the full scope of the named RIMS II Industry Groups.
9. That on or about December 5, 2008, Petitioner received a Request for Additional Evidence ("RFE") from the United States Citizenship and Immigration Service ("USCIS"), requesting additional documentation in support of his application.
10. That Petitioner timely responded to the RFE on February 17, 2009.
11. That on or about March 5, 2009, the USCIS approved Petitioner as a regional center. *Exhibit 2.*
12. That pursuant to the March 5, 2009 approval letter, the Petitioner's geographic area would focus on the Illinois Counties of Boone, Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, Ogle, Stephenson, Will, and Winnebago.

13. That pursuant to said approval letter, the investment focus of Petitioner would be in the following industry clusters: (1) Accommodation; (2) Agriculture; (3) Education; (4) Health Care; and (5) Manufacturing, omitting the Entertainment industry cluster.
14. That said approval letter also incorrectly named IMPLAN as the econometric model used for job creation analysis.
15. That because said approval letter omitted the industry cluster of Entertainment, and because said approval letter incorrectly named IMPLAN as the econometric model used for job creation analysis, on or about March 10, 2009 Petitioner sent an email to USCIS.ImmigrantInvestorProgram@dhs.gov to inquire if these modifications were intentional or accidental.
16. That on or about March 11, 2009, the USCIS sent Petitioner a revised approval letter with the same approval date of March 5, 2009 via email, in response to Petitioner's inquiry. *Exhibit 3.*
17. That said revised approval letter corrected the industry clusters by naming them as follows: (1) Accommodation; (2) Agriculture; (3) Education; (4) Entertainment; (5) Health Care; and (6) Manufacturing.
18. That said revised approval letter correctly named RIMS II as the econometric model used for job creation analysis, instead of IMPLAN, which had been incorrectly named in the March 5, 2009 approval letter.
19. That said revised approval letter stated that "[i]f any investment opportunities arise that are beyond the scope of the approved focus, then an amendment would be required to add that opportunity." *Id.* at 2.

20. That while beginning planning for advertisements and marketing, Petitioner became concerned about the interpretation of the scope of the named industries due to the abbreviated names used in the application.
21. That on or about March 16, 2009, Petitioner sent another email to the USCIS at USCIS.ImmigrantInvestorProgram@dhs.gov to inquire about the necessity of submitting an amendment to change the names of the industry groups without changing the industry group themselves. *Exhibit 4.*
22. That on or about March 18, 2009, Petitioner was advised by CSC Officer #1276 to submit an amendment to amend the industry clusters. *Id.*
23. That as a result of CSC Officer #1276's response, Petitioner is submitting this Motion to Amend the Focus of Investment Activity.
24. That Petitioner requests that the names of the industry clusters be changed to the RIMS II Industry Group names in order to more clearly express the full scope of each industry cluster, since businesses and investors without familiarity with RIMS II will be submitting business proposals based on the published names.
25. That by changing the names of the industry clusters, Petitioner does not wish to change its focus of investment activity.
26. That Petitioner wishes to amend the name of the industry clusters to the full names of the RIMS II Industry Categories as follows: (1) Accommodations and food services; (2) Agriculture, forestry, fishing, and hunting; (3) Educational services; (4) Arts, entertainment, and recreation; (5) Health care and social assistance; and (6) Manufacturing.

WHEREFORE, Petitioner CHICAGOLAND FOREIGN INVESTMENT GROUP REGIONAL CENTER respectfully requests that the U.S. Citizenship and Immigration Services grant its Motion to Amend the Focus of Investment Activity.

Respectfully submitted,



Taher Kameli, Esq.

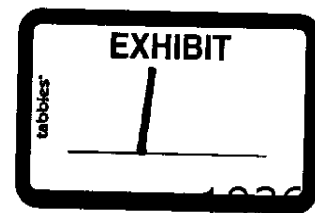
Law Offices of Kameli and Associates
111 E. Wacker Drive, Suite 555
Chicago, Illinois 60601
P 312-233-1000
F 312-233-1007

Dated: March 20, 2009

Appendix D.—RIMS II Industry Groups

| | Group industry code and title | RIMS II detailed industry codes ¹ | RIMS II aggregate industry codes ² |
|----|---|--|---|
| 1 | Agriculture, forestry, fishing, and hunting..... | 1111AC-113000 | 1-2 |
| 2 | Mining..... | 211000-21311A | 3-5 |
| 3 | Utilities*..... | 2211A0-221300 | 6 |
| 4 | Construction..... | 230000 | 7 |
| 5 | Manufacturing..... | 311111-33999A | 8-26 |
| 6 | Wholesale trade..... | 420000 | 27 |
| 7 | Retail trade..... | 4A0000 | 28 |
| 8 | Transportation and warehousing*..... | 481000-493000 | 29-36 |
| 9 | Information..... | 511110-514200 | 37-40 |
| 10 | Finance and insurance..... | 52A000-525000 | 41-44 |
| 11 | Real estate and rental and leasing..... | 531000-533000 | 45-46 |
| 12 | Professional, scientific, and technical services..... | 541100-5419A0 | 47 |
| 13 | Management of companies and enterprises..... | 550000 | 48 |
| 14 | Administrative and waste management services..... | 561300-562000 | 49-50 |
| 15 | Educational services..... | 611100-611B00 | 51 |
| 16 | Health care and social assistance..... | 621A00-624A00 | 52-54 |
| 17 | Arts, entertainment, and recreation..... | 711100-713A00 | 55-56 |
| 18 | Accommodation and food services..... | 7211A0-722000 | 57-58 |
| 19 | Other services*..... | 8111A0-813B00, S00A00 | 59 |
| 20 | Households..... | H00000 | 60 |

- * includes Federal Government enterprises
- ¹ Appendix B identifies the RIMS II detailed industry codes.
- ² Appendix C identifies the RIMS II aggregate industry codes.





U.S. Citizenship
and Immigration
Services

HQSCOPS 70/6.2.8-C

Henry Sharfaei
Chicagoland Foreign Investment Group, LLC
111 E. Wacker Dr., Suite 555
Chicago, IL 60601

MAR 05 2009

Application: Proposal for Designation as a Regional Center
Applicants: Henry Sharfaei
Proposed Enterprise: Chicagoland Foreign Investment Group (CFIG) Regional Center

RE: Designation as a Regional Center under the Immigrant Investor Pilot Program.

BACKGROUND:

Pursuant to Section 610 of the Appropriations Act of 1993, on August 9, 2008, Chicagoland Foreign Investment Group, LLC submitted a proposal seeking approval and designation by U.S. Citizenship and Immigration Services (USCIS) of the Chicagoland Foreign Investment Group (CFIG) Regional Center, with a geographic area focusing on the Illinois Counties of Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, Will, Lake, Kankakee, Boone, Winnebago, Ogle, and Stephenson. For EB-5 Immigrant Investor purposes CFGI sought to focus investment in the following business activity:

1. Accommodation,
2. Agriculture,
3. Education,
4. Health Care, and
5. Manufacturing.

On December 5, 2008, USCIS issued a Request for Evidence (RFE). On February 18, 2009, a response to the RFE was received which satisfactorily supplied the requested evidence. The proposal and response to the RFE contained the following evidence in support of its requested designation:

- A Job Creation Analysis and Econometric Model using IMPLAN prepared by a professional economic analysis firm which specifically calculates but excludes construction jobs from the detailed prediction;
- A business plan reflecting the timing, scale and planned use of the alien investor capital;



- Maps;
- A sample Offering Letter;
- Articles of Organization;
- A sample Limited Liability Company Operating Agreement;
- A sample Subscription Agreement;
- A Consulting Agreement;
- An Advisory Agreement Form-LLC;
- An Escrow Agreement;
- A revised sample Escrow Agreement;
- A Marketing Agreement; and
- A Marketing/Promotional Plan and Budget.

DECISION:

Based on its review and analysis of your proposal, and of your response to the USCIS Request For Evidence to which you provided a satisfactory response, USCIS hereby approves and designates CFIG as a Regional Center within the Immigrant Investor Pilot Program. CFIG shall have a geographic scope which includes the Illinois Counties of Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, Will, Lake, Kankakee, Boone, Winnebago, Ogle, and Stephenson.

FOCUS OF INVESTMENT ACTIVITY AND CAPITAL INVESTMENT THRESHOLD:

The USCIS-approved focus of the CFIG business plan and job creation analysis and multipliers is to generate immigrant investor capital into the following commercial investment activities:

1. Accommodation,
2. Agriculture,
3. Education,
4. Health Care, and
5. Manufacturing.

If any investment opportunities arise that are beyond the scope of the approved focus, then an amendment would be required to add that opportunity.

As such, aliens seeking immigrant visas through the Immigrant Investor Pilot Program may file individual petitions with USCIS for these commercial enterprises located within the CFIG area. The geographic focus of this area contains numerous High Unemployment Targeted Employment Areas (TEAs) to be determined by the State of Illinois on a case-by-case basis. Therefore, the minimum capital investment threshold for any individual immigrant investment into an approved commercial enterprise throughout the Regional Center shall be not less than \$500,000, if the investment target is located within a TEA or \$1,000,000 if located outside of a TEA.

EMPLOYMENT CREATION:

Immigrant investors who file petitions for commercial enterprises located in the CFIG area must fulfill all of the requirements set forth in 8 CFR 204.6, except that the petition need not show that the new commercial enterprises created ten new jobs indirectly as a result of the immigrant investor's investment. This determination has been established by way of USCIS' acceptance of the final economic analysis that is contained as part of the approved CFIG proposal and its indirect job creation model and multipliers contained within the final approved CFIG application package.

In addition, where job creation or preservation of existing jobs is claimed based on a multiplier rooted in underlying new "direct jobs" in support of an immigrant investor's individual I-526 petition affiliated with the CFIG, then:

- To be credited with projected creation of new "direct" jobs for "qualifying employees" upon filing the I-526 petition, the petition must be supported by a comprehensive detailed business plan and supporting financial, marketing and related data and analysis providing a reasonable basis for projecting creation of any new direct jobs for "qualifying employees" to be achieved/realized within two years pursuant to 8 CFR 204.6(j)(4)(B).

An alien investor's I-829 petition to remove the conditions which was based on an I-526 petition approval that involved the creation of new direct jobs or the creation of new indirect jobs based on a multiplier tied to underlying new direct jobs needs to be properly supported by evidence of job creation. To support the full number of direct and indirect new jobs being claimed in connection with removal of conditions, the petition will need to be supported by probative evidence of the number of new direct full time (35 hours per week) jobs for qualified employees whose positions have been created as a result of the alien's investment. Such evidence may include copies of quarterly state employment tax reports, Forms W-2, Forms I-9, and any other pertinent employment records sufficient to demonstrate the number of qualified employees whose jobs were created directly.

Each individual petition, in order to demonstrate that it is associated with the CFIG, in conjunction with addressing all the requirements for an individual immigrant investor petition, shall also contain as supporting evidence relating to this amended regional center designation, the following:

1. A copy of this letter for the CFIG approval and designation.
2. A copy of the USCIS approved regional center narrative proposal and business plan.
3. A copy of the job creation methodology required in 8 CFR 204.6(j)(4)(iii), as contained in the final regional center economic analysis which has been approved by USCIS, which reflects that investment by an individual immigrant investor will create not fewer than ten (10) full-time employment positions, either directly or indirectly, per immigrant investor.

4. A legally executed copy of the USCIS approved:

- a. Offering Circular or equivalent;
- b. Escrow Agreement;
- c. Subscription Agreement; and
- d. LLC Agreement.

DESIGNEE'S RESPONSIBILITIES INHERENT IN CONDUCT OF THE CHICAGOLAND REGIONAL CENTER (CFIG):

The law, as reflected in the regulations at 8 CFR 204.6(m)(6), requires that an approved regional center in order to maintain the validity of its approval and designation must continue to meet the statutory requirements of the Immigrant Investor Pilot Program by serving the purpose of promoting economic growth, including increased export sales (where applicable), improved regional productivity, job creation, and increased domestic capital investment. Therefore, in order for USCIS to determine whether your regional center is in compliance with the above cited regulation, and in order to continue to operate as a USCIS approved and designated regional center, your administration, oversight, and management of your regional center shall be such as to monitor all investment activities under the sponsorship of your regional center and to maintain records, data and information on a quarterly basis in order to report to USCIS upon request the following year to date information for each Federal Fiscal Year¹, commencing with the initial year as follows:

1. Provide the principal authorized official and point of contact of the regional center responsible for the normal operation, management and administration of the regional center.
2. Be prepared to explain how you are administering the regional center and how you will be actively engaged in supporting a due diligence screening of its alien investors' lawful source of capital and the alien investor's ability to fully invest the requisite amount of capital.
3. Be prepared to explain the following:
 - a. How the regional center is actively engaged in the evaluation, oversight and follow up on any proposed commercial activities that will be utilized by alien investors.

¹ A Federal Fiscal Year runs for twelve consecutive months from October 1st to September 30th.

- b. How the regional center is actively engaged in the ongoing monitoring, evaluation, oversight and follow up on any investor commercial activity affiliated through the regional center that will be utilized by alien investors in order to create direct and/or indirect jobs through qualifying EB-5 capital investments into commercial enterprises within the regional center.
4. Be prepared to provide:
- a. the name, date of birth, petition receipt number, and alien registration number (if one has been assigned by USCIS) of each principal alien investor who has made an investment and has filed an EB-5/I-526 Petition with USCIS, specifying whether:
 - i. the petition was filed,
 - ii. was approved,
 - iii. denied, or
 - iv. withdrawn by the petitioner, together with the date(s) of such event.
 - b. The total number of visas represented in each case for the principal alien investor identified in 4.a. above, plus his/her dependents (spouse and children) for whom immigrant status is sought or has been granted.
 - c. The country of nationality of each alien investor who has made an investment and filed an EB-5/I-526 petition with USCIS.
 - d. The U.S. city and state of residence (or intended residence) of each alien investor who has made an investment and filed an EB-5/I-526 petition with USCIS.
 - e. For each alien investor listed in item 4.a., above, identify the following:
 - i. the date(s) of investment in the commercial enterprise;
 - ii. the amount(s) of investment in the commercial enterprise; and
 - iii. the date(s), nature, and amount(s) of any payment/remuneration/profit/return on investment made to the alien investor by the commercial enterprise and/or regional center from when the investment was initiated to the present.
5. Be prepared to identify/list each of the target industry categories of business activity within the geographic boundaries of your regional center that have:
- a. received alien investors' capital, and in what aggregate amounts;
 - b. received non-EB-5 domestic capital that has been combined and invested together, specifying the separate aggregate amounts of the domestic investment capital;

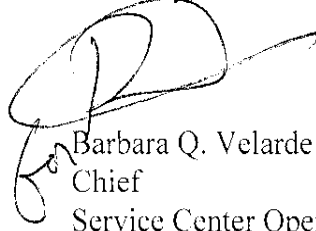
- c. of the total investor capital (alien and domestic) identified above in 5.a and 5.b, identify and list the following:
 - i. The name and address of each “direct” job creating commercial enterprise.
 - ii. The industry category for each indirect job creating investment activity.
6. Be prepared to provide:
 - a. The total aggregate number of approved EB-5 alien investor I-526 petitions per each Federal Fiscal Year to date made through your regional center.
 - b. The total aggregate number of approved EB-5 alien investor I-829 petitions per each Federal Fiscal Year to date through your regional center.
7. The total aggregate sum of EB-5 alien capital invested through your regional center for each Federal Fiscal Year to date since your approval and designation.
8. The combined total aggregate of “new” direct and/or indirect jobs created by EB-5 investors through your regional center for each Federal Fiscal Year to date since your approval and designation.
9. If applicable, the total aggregate of “preserved” or saved jobs by EB-5 alien investors into troubled businesses through your regional center for each Federal Fiscal Year to date since your approval and designation.
10. If for any given Federal Fiscal Year your regional center did or does not have investors to report, then provide:
 - a. a detailed written explanation for the inactivity,
 - b. a specific plan which specifies the budget, timelines, milestones and critical steps to:
 - i. actively promote your regional center program,
 - ii. identify and recruit legitimate and viable alien investors, and
 - iii. a strategy to invest into job creating enterprises and/or investment activities within the regional center.
11. Regarding your website, if any, please be prepared to provide a hard copy which represents fully what your regional center has posted on its website, as well as providing your web address. Additionally, please provide a packet containing all of your regional center’s hard copy promotional materials such as brochures, flyers, press articles, advertisements, etc.

12. Finally, please be aware that it is incumbent on each USCIS approved and designated regional center, in order to remain in good standing, to notify the USCIS within 15 business days at USCIS.ImmigrantInvestorProgram@dhs.gov of any change of address or occurrence of any material change in:

- the name and contact information of the responsible official and/or Point of Contact (POC) for the RC,
- the management and administration of the RC,
- the RC structure,
- the RC mailing address, website address, email address, phone and fax number,
- the scope of the RC operations and focus,
- the RC business plan,
- any new, reduced or expanded delegation of authority, MOU, agreement, contract, etc. with another party to represent or act on behalf of the RC,
- the economic focus of the RC, or
- any material change relating to your regional center's basis for its most recent designation and/or reaffirmation by USCIS.

If you have any questions concerning the CFIG approval and designation under the Immigrant Investor Pilot Program, please contact USCIS by Email at USCIS.ImmigrantInvestorProgram@dhs.gov.

Sincerely,



Barbara Q. Velarde
Chief
Service Center Operations

cc: Official File



U.S. Citizenship
and Immigration
Services

HQSCOPS 70/6.2.8-C

Henry Sharfaei
Chicagoland Foreign Investment Group, LLC
111 E. Wacker Dr., Suite 555
Chicago, IL 60601

Application: Proposal for Designation as a Regional Center
Applicants: Henry Sharfaei
Proposed Enterprise: Chicagoland Foreign Investment Group (CFIG) Regional Center

RE: Designation as a Regional Center under the Immigrant Investor Pilot Program.

BACKGROUND:

Pursuant to Section 610 of the Appropriations Act of 1993, on August 9, 2008, Chicagoland Foreign Investment Group, LLC submitted a proposal seeking approval and designation by U.S. Citizenship and Immigration Services (USCIS) of the Chicagoland Foreign Investment Group (CFIG) Regional Center, with a geographic area focusing on the Illinois Counties of Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, Will, Lake, Kankakee, Boone, Winnebago, Ogle, and Stephenson. For EB-5 Immigrant Investor purposes CFIG sought to focus investment in the following business activity:

1. Accommodation,
2. Agriculture,
3. Education,
4. Entertainment,
5. Health Care, and
6. Manufacturing.

On December 5, 2008, USCIS issued a Request for Evidence (RFE). On February 18, 2009, a response to the RFE was received which satisfactorily supplied the requested evidence. The proposal and response to the RFE contained the following evidence in support of its requested designation:

- A Job Creation Analysis and Econometric Model using RIMS II prepared by a professional economic analysis firm which specifically calculates but excludes construction jobs from the detailed prediction;



- A business plan reflecting the timing, scale and planned use of the alien investor capital;
- Maps;
- A sample Offering Letter;
- Articles of Organization;
- A sample Limited Liability Company Operating Agreement;
- A sample Subscription Agreement;
- A Consulting Agreement;
- An Advisory Agreement Form-LLC;
- An Escrow Agreement;
- A revised sample Escrow Agreement;
- A Marketing Agreement; and
- A Marketing/Promotional Plan and Budget.

DECISION:

Based on its review and analysis of your proposal, and of your response to the USCIS Request For Evidence to which you provided a satisfactory response, USCIS hereby approves and designates CFIG as a Regional Center within the Immigrant Investor Pilot Program. CFIG shall have a geographic scope which includes the Illinois Counties of Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, Will, Lake, Kankakee, Boone, Winnebago, Ogle, and Stephenson.

FOCUS OF INVESTMENT ACTIVITY AND CAPITAL INVESTMENT THRESHOLD:

The USCIS-approved focus of the CFIG business plan and job creation analysis and multipliers is to generate immigrant investor capital into the following commercial investment activities:

1. Accommodation,
2. Agriculture,
3. Education,
4. Entertainment,
5. Health Care, and
6. Manufacturing.

If any investment opportunities arise that are beyond the scope of the approved focus, then an amendment would be required to add that opportunity.

As such, aliens seeking immigrant visas through the Immigrant Investor Pilot Program may file individual petitions with USCIS for these commercial enterprises located within the CFIG area. The geographic focus of this area contains numerous High Unemployment Targeted Employment Areas (TEAs) to be determined by the State of Illinois on a case-by-case basis. Therefore, the minimum capital investment threshold for any individual immigrant investment into an approved commercial

enterprise throughout the Regional Center shall be not less than \$500,000, if the investment target is located within a TEA or \$1,000,000 if located outside of a TEA.

EMPLOYMENT CREATION:

Immigrant investors who file petitions for commercial enterprises located in the CFIG area must fulfill all of the requirements set forth in 8 CFR 204.6, except that the petition need not show that the new commercial enterprises created ten new jobs indirectly as a result of the immigrant investor's investment. This determination has been established by way of USCIS' acceptance of the final economic analysis that is contained as part of the approved CFIG proposal and its indirect job creation model and multipliers contained within the final approved CFIG application package.

In addition, where job creation or preservation of existing jobs is claimed based on a multiplier rooted in underlying new "direct jobs" in support of an immigrant investor's individual I-526 petition affiliated with the CFIG, then:

- To be credited with projected creation of new "direct" jobs for "qualifying employees" upon filing the I-526 petition, the petition must be supported by a comprehensive detailed business plan and supporting financial, marketing and related data and analysis providing a reasonable basis for projecting creation of any new direct jobs for "qualifying employees" to be achieved/realized within two years pursuant to 8 CFR 204.6(j)(4)(B).

An alien investor's I-829 petition to remove the conditions which was based on an I-526 petition approval that involved the creation of new direct jobs or the creation of new indirect jobs based on a multiplier tied to underlying new direct jobs needs to be properly supported by evidence of job creation. To support the full number of direct and indirect new jobs being claimed in connection with removal of conditions, the petition will need to be supported by probative evidence of the number of new direct full time (35 hours per week) jobs for qualified employees whose positions have been created as a result of the alien's investment. Such evidence may include copies of quarterly state employment tax reports, Forms W-2, Forms I-9, and any other pertinent employment records sufficient to demonstrate the number of qualified employees whose jobs were created directly.

Each individual petition, in order to demonstrate that it is associated with the CFIG, in conjunction with addressing all the requirements for an individual immigrant investor petition, shall also contain as supporting evidence relating to this amended regional center designation, the following:

1. A copy of this letter for the CFIG approval and designation.
2. A copy of the USCIS approved regional center narrative proposal and business plan.
3. A copy of the job creation methodology required in 8 CFR 204.6(j)(4)(iii), as contained in the final regional center economic analysis which has been approved by USCIS, which

reflects that investment by an individual immigrant investor will create not fewer than ten (10) full-time employment positions, either directly or indirectly, per immigrant investor.

4. A legally executed copy of the USCIS approved:
 - a. Offering Circular or equivalent;
 - b. Escrow Agreement;
 - c. Subscription Agreement; and
 - d. LLC Agreement.

DESIGNEE'S RESPONSIBILITIES INHERENT IN CONDUCT OF THE CHICAGOLAND REGIONAL CENTER (CFIG):

The law, as reflected in the regulations at 8 CFR 204.6(m)(6), requires that an approved regional center in order to maintain the validity of its approval and designation must continue to meet the statutory requirements of the Immigrant Investor Pilot Program by serving the purpose of promoting economic growth, including increased export sales (where applicable), improved regional productivity, job creation, and increased domestic capital investment. Therefore, in order for USCIS to determine whether your regional center is in compliance with the above cited regulation, and in order to continue to operate as a USCIS approved and designated regional center, your administration, oversight, and management of your regional center shall be such as to monitor all investment activities under the sponsorship of your regional center and to maintain records, data and information on a quarterly basis in order to report to USCIS upon request the following year to date information for each Federal Fiscal Year¹, commencing with the initial year as follows:

1. Provide the principal authorized official and point of contact of the regional center responsible for the normal operation, management and administration of the regional center.
2. Be prepared to explain how you are administering the regional center and how you will be actively engaged in supporting a due diligence screening of its alien investors' lawful source of capital and the alien investor's ability to fully invest the requisite amount of capital.
3. Be prepared to explain the following:
 - a. How the regional center is actively engaged in the evaluation, oversight and follow up on any proposed commercial activities that will be utilized by alien investors.

¹ A Federal Fiscal Year runs for twelve consecutive months from October 1st to September 30th.

RECEIVED

FEB 18 2009

SERVICE CENTER OPERATIONS



Delivered in Person

February 17, 2009

USCIS
Office of Service Center Operations, EB-5 Investor Program
20 Massachusetts Avenue, NW (Room 2123)
Washington, DC 20529

Dear Barbara Q. Valarde,

Please accept the enclosed materials as Chicagoland Foreign Investment Group's response to the Request for Additional Evidence from USCIS dated December 5, 2008.

In addition, I would like to bring your attention to false information written in the RFE from USCIS. The letter lists Henry Sharfaei and [redacted] as applicants for Designation as a Regional Center, when in fact Henry Sharfaei is the only applicant. [redacted]

(b)(6) [redacted] has no ownership interest in the company or the proposed Regional Center. Please make the appropriate changes to any and all of your records to clarify that Dr. Henry Sharfaei is the sole applicant for designation as a regional center and owner of Chicagoland Foreign Investment Group.

Sincerely,

A handwritten signature in black ink that reads "Henry Sharfaei" with a date "5/26" written below it.

Henry Sharfaei

THE LAW OFFICES OF
KAMELI & ASSOCIATES
A PROFESSIONAL CORPORATION

TAHER KAMELI
FRED A. JOSHUA
EMAD L. KHALIL
JOHN R. FLOSS
DEEHEAD RAGHIAN

OF COUNSEL
JOHN OBERT-HONG

Via US Postal Service

January 22, 2009

USCIS Chief of Service Center Operations
Attn: EB5 Investor Program
20 Massachusetts Avenue, NW (Room 2123)
Washington, DC 20529

RE: Kameli & Associates Notice of Entry of Appearance as Attorney for Dr. Henry Sharfaei, Chicagoland Foreign Investment Group

To Whom It May Concern:

Please find enclosed form G28, submitted on behalf of our client Dr. Henry Sharfaei, who is applying for regional center status under the EB5 Pilot Program for the **Chicagoland Foreign Investment Group**.

Sincerely,



Taher Kameli

**Notice of Entry of Appearance
as Attorney or Representative**

Appearances - An appearance shall be filed on this form by the attorney or representative appearing in each case. Thereafter, substitution may be permitted upon the written withdrawal of the attorney or representative of record or upon notification of the new attorney or representative. When an appearance is made by a person acting in a representative capacity, his personal appearance or signature shall constitute a representation that under the provisions of this chapter he is authorized and qualified to represent. Further proof of authority to act in a representative capacity may be required. **Availability of Records** - During the time a case is pending, and except as otherwise provided in 8 CFR 103.2(b), a party to a proceeding or his attorney or representative shall be permitted to examine the record of proceeding in a Service office. He may, in conformity with 8 CFR 103.10, obtain copies of Service records or information therefrom and copies of documents or transcripts of evidence furnished by him. Upon request, he/she may, in addition, be loaned a copy of the testimony and exhibits contained in the record of proceeding upon giving his/her receipt for such copies and pledging that it will be surrendered upon final disposition of the case or upon demand. If extra copies of exhibits do not exist, they shall not be furnished free on loan; however, they shall be made available for copying or purchase of copies as provided in 8 CFR 103.10.

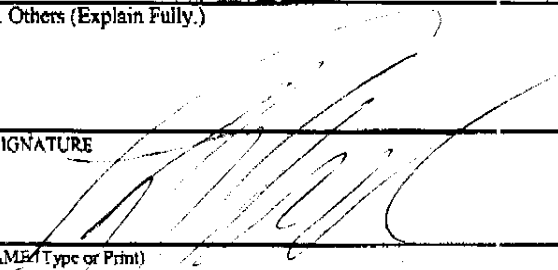
| | |
|---|------------------------------|
| In re: Chicagoland Foreign Investment Group | Date: January 7, 2009 |
| | File No. |

I hereby enter my appearance as attorney for (or representative of), and at the request of the following named person(s):

| | | |
|---------------------------------------|--------------------------------------|---|
| Name: Henry Sharfaei | <input type="checkbox"/> Petitioner | <input checked="" type="checkbox"/> Applicant |
| | <input type="checkbox"/> Beneficiary | |
| Address: (Apt. No.) (Number & Street) | (City) | (State) (Zip Code) |
| Name: | <input type="checkbox"/> Petitioner | <input type="checkbox"/> Applicant |
| | <input type="checkbox"/> Beneficiary | |
| Address: (Apt. No.) (Number & Street) | (City) | (State) (Zip Code) |

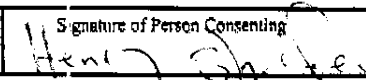
Check Applicable Item(s) below:

- 1. I am an attorney and a member in good standing of the bar of the Supreme Court of the United States or of the highest court of the following State, territory, insular possession, or District of Columbia
United States Supreme Court and am not under a court or administrative agency order suspending, enjoining, restraining, disbaring, or otherwise restricting me in practicing law.
- 2. I am an accredited representative of the following named religious, charitable, social service, or similar organization established in the United States and which is so recognized by the Board:
- 3. I am associated with
the attorney of record previously filed a notice of appearance in this case and my appearance is at his request. (If you check this item, also check item 1 or 2 whichever is appropriate.)
- 4. Others (Explain Fully.)

| | |
|--|---|
| SIGNATURE  | COMPLETE ADDRESS Law Offices of Kameli & Associates, P.C. 111 East Wacker Drive Suite 453 Chicago, IL 60601 |
| NAME (Type or Print) Taher Kameli | TELEPHONE NUMBER 312-233-1000 |

PURSUANT TO THE PRIVACY ACT OF 1974, I HEREBY CONSENT TO THE DISCLOSURE TO THE FOLLOWING NAMED ATTORNEY OR REPRESENTATIVE OF ANY RECORD PERTAINING TO ME WHICH APPEARS IN ANY IMMIGRATION AND NATURALIZATION SERVICE SYSTEM OF RECORDS:
Taher Kameli
(Name of Attorney or Representative)

THE ABOVE CONSENT TO DISCLOSURE IS IN CONNECTION WITH THE FOLLOWING MATTER:
application for designation as regional center under EB5 Pilot Program

| | | |
|--|--|-------------------------|
| Name of Person Consenting Henry Sharfaei | Signature of Person Consenting  | Date 1/3/2009 |
|--|--|-------------------------|

(NOTE: Execution of this box is required under the Privacy Act of 1974 where the person being represented is a citizen of the United States or an alien lawfully admitted for permanent residence.)

RICHARD J. DURBIN
ILLINOIS

COMMITTEE ON APPROPRIATIONS

COMMITTEE ON THE JUDICIARY

COMMITTEE ON RULES
AND ADMINISTRATION

ASSISTANT DEMOCRATIC
LEADER

United States Senate
Washington, DC 20510-1504

October 7, 2008

332 DIRKSEN SENATE OFFICE BUILDING
WASHINGTON, DC 20510-1304
(202) 224-2152
TTY (202) 224-8180

230 SOUTH DEARBORN, 38TH FLOOR
CHICAGO, IL 60604
(312) 353-4952

525 SOUTH EIGHTH STREET
SPRINGFIELD, IL 62703
(217) 492-4062

701 NORTH COURT STREET
MARION, IL 62959
(618) 998-8812

durbin.senate.gov

Chief Maurice "Morrie" Berez
Office of Service Center Operations, Business, & Trade Services
USCIS Foreign Trader, Investor & Regional Center Program
20 Massachusetts Avenue, NW (Room 2123)
Washington, DC 20529

Dear Chief Berez:

I am writing in strong support the Chicagoland Foreign Investment Group as they request to be a participant of the EB-5 program through the US Citizenship and Immigration Services office.

Illinois does not currently have an EB-5 Center and encourage the opportunity to have this program. The incentives from the EB-5 program will enhance economic development a great extent in the nine counties it would cover. Having a Regional Center would promote economic growth through increased export sales, improve regional productivity, create new jobs, and increase domestic capital investment.

Again, I would like to express my support for the Chicagoland Foreign Investment Group as they request to join the EB-5 program. I urge you to give serious consideration to this request. If you have any questions or need more information, please do not hesitate to contact my Springfield office at 217/492-4062.

Sincerely,



Richard J. Durbin
United States Senator

RJD/sb

RICHARD J. DURBIN
ILLINOIS

COMMITTEE ON APPROPRIATIONS

COMMITTEE ON THE JUDICIARY

COMMITTEE ON RULES
AND ADMINISTRATION

ASSISTANT MAJORITY
LEADER

United States Senate
Washington, DC 20510-1304

August 8, 2008

309 HART SENATE OFFICE BUILDING
WASHINGTON, DC 20510-1304
(202) 224-2157
TTY (202) 224-8180

230 SOUTH DEARBORN, 38TH FLOOR
CHICAGO, IL 60604
(312) 353-4952

626 SOUTH EIGHTH STREET
SPRINGFIELD, IL 62703
(217) 492-4062

701 NORTH COURT STREET
MARION, IL 62859
(618) 998-8812

durbin.senate.gov

Mr. Taher Kameli
Board of Directors
LaSalle County Business Development Center
111 E. Wacker Drive
Suite 555
Chicago, IL 60601

Dear Mr. Kameli:

I am writing in strong support the LaSalle County Business Development Center as they request to be a participant of the EB-5 program through the US Citizenship and Immigration Services office.

Illinois does not currently have an EB-5 Center and encourage the opportunity to have this program in LaSalle County. The incentives from the EB-5 program will enhance economic development in the area to a great extent. Having a Regional Center would promote economic growth through increased export sales, improve regional productivity, create new jobs, and increase domestic capital investment.

Again, I would like to express my support for the LaSalle County Business Development Center as they request to join the EB-5 program. I urge you to give serious consideration to this request. If you have any questions or need more information, please do not hesitate to contact my Springfield office at 217/492-4062.

Sincerely,



Richard J. Durbin
United States Senator

RJD/sb

JERRY WALLER



FRANCIS ROBERTSON WALLER

Chairman, Finance Committee

Director of Finance
Department of Finance

U.S. House of Representatives
Room 3100
Washington, D.C.

UNITED STATES
HOUSE OF REPRESENTATIVES

U.S. House of Representatives
Room 3100
Washington, D.C.

August 16, 1953

Mr. J. Edgar Hoover
Federal Bureau of Investigation
400 ...
Washington, D.C.

Dear Mr. Hoover:

My pleasure in writing you today is a simple one. It is the pleasure of a Congressman to be able to contribute to the solution of the United States' economic and financial problems as outlined in your report of July 15, 1953.

As you know, the Finance Committee has been studying the Board's report on financing government operations and the effect of the war on the national economy. It is the belief of the Finance Committee that a program would be needed to carry out the war effort and to maintain the standard of living of the people. The Finance Committee has been studying the report of the Board and is planning to report to the House on the subject.

It is the belief of the Finance Committee that the Government should not be allowed to run a deficit for the purpose of financing the war effort. It is the belief of the Finance Committee that the Government should not be allowed to run a deficit for the purpose of financing the war effort.

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JERRY WALLER
Chairman, Finance Committee
U.S. House of Representatives

Very truly yours,
Jerry Waller

cc: Mr. Hoover
Mr. Tolson
Mr. Clegg
Mr. Glavin
Mr. Ladd
Mr. Nichols
Mr. Rosen
Mr. Tracy
Mr. Egan
Mr. Gurnea
Mr. Harbo
Mr. Hendon
Mr. Pennington
Mr. Quinn
Mr. Nease
Miss Gandy

100-100000-1000



AUG 29 2008

Via FedEx # 866408453193

August 28, 2008

Chief, Office of Service Center Operations, Business & Trade Services
USCIS Foreign Trader, Investor & Regional Center Program
ATTN: Chief Foreign Trader, Investor, & Regional Center Program- Maruice Berez
20 Massachusetts Avenue, NW
Room 2123
Washington, DC 20529

Dear Mr. Berez,

It is an honor to propose, on behalf of my client Dr. Henry Sharfaei, to the United States Citizenship and Immigration Services two regional centers to be located in the state of Illinois: the LaSalle County Business Development Center, Inc., and the Chicagoland Foreign Investment Group.

The following documents and exhibits have been prepared according to USCIS guidelines for the creation of a Regional Center under the Employment Based Fifth Preference Immigrant Investor Pilot Program. Enclosed please find, for each of the above-mentioned Regional Centers, descriptions of:


- Geographic Area ;
- Target Industries;
- Statistical Data and RIMS II;
- Selecting Projects;
- Requirements of Project Applicant;
- Requirements of the Investor; and
- Legal Documents.

We have proposed two Regional Centers for the State of Illinois because some of the proposed industries to be included for acceptance of foreign investment under the EB-5 Program differ, due to the variant demographics and boundaries of these designated regions. Furthermore, the LaSalle County Business Development Center, Inc. has already located businesses and investors who wish to participate in this

financial opportunity, as it relates to the LaSalle County Business Development Center, Inc. Specifically, there are plans to expand a pre-existing water park in LaSalle County which has the advantage to bring in several new employment opportunities and revenues to the area.

We are aware of the September 30, 2008 sunset of the EB-5 Pilot Program, and thus hope that USCIS will expedite the application process. We would greatly appreciate USCIS reviewing the attached documents prior to the sunset date. Consequently, Dr. Sharfaei, his team, and his attorneys are ready to fly to Washington, D.C. at any time to meet with USCIS in order to clarify any portion of the attached proposals in order to facilitate the process.

Sincerely,



Khalil J. Khalil
General Counsel

Enc.



U.S. Citizenship
and Immigration
Services

October 16, 2009

Henry Sharfaei, Esq.
Chicagoland Foreign Investment Group Regional Center
C/O Law Offices of Kameli & Associates
111 E. Wacker Drive, Suite 555
Chicago, IL 60601

File No. W09000810

Application: Request to Amend Designation as a Regional Center
Applicant(s): Henry Sharfaei

Re: Chicagoland Foreign Investment Group Regional Center

Pursuant to Section 610 of the Appropriations Act of 1993, on March 5, 2009, the Chicagoland Foreign Investment Group Regional Center, was approved and designated as a regional center to participate in the Immigrant Investor Pilot Program. Further, on April 21, 2009, the U.S. Citizenship and Immigration Services (USCIS) approved an amendment (Amendment-I) to the CFGI Regional Center (CFGI-RC) to change the industry clusters from an abbreviated form to the full RIMS II names.

In a written request dated June 29, 2009, Chicagoland Foreign Investment Group Regional Center sought to amend its initial Regional Center designation to expand the geographic region and include additional industry clusters.

Based on its review and analysis of the request to amend the previous Chicagoland Foreign Investment Group Regional Center, business plan, and supplementary evidence, the U.S. Citizenship and Immigration Services (USCIS) amends the designation of the Regional Center as described below. In accepting the amendment, USCIS has updated its records of your Regional Center approval, designation, and business plan to encompass this amendment relative to the investment.

GEOGRAPHIC AREA:

The Chicagoland Foreign Investment Group Regional Center shall extend its geographic focus to include the Illinois counties of Boone, Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, Ogle, Stephenson, Will and Winnebago, and the Indiana counties of Jasper, Lake, La Porte, Newton and Porter.

FOCUS OF INVESTMENT ACTIVITY:

As depicted in the economic model, the general proposal and the economic analysis and the subsequent amendments to the Regional Center Proposal, the Regional Center will engage in the following economic activities: construction, transportation, assembly, retail sales, marketing, casino operation, maintenance and the provision of healthcare.

The Regional Center for EB-5 Immigrant purposes shall focus investments into new commercial enterprises in the following 9 target industry economic clusters:

1. Accommodations and Food Services
2. Agriculture, Forestry, Fishing and Hunting
3. Educational Services
4. Arts, Entertainment and Recreation
5. Manufacturing
6. Healthcare and Social Assistance
7. Transportation
8. Retail Trade
9. Utilities

If any investment opportunities arise that are beyond the scope of the approved industry clusters, then an amendment would be required to add that cluster.

Aliens seeking immigrant visas through the Immigrant Investor Pilot Program may file individual petitions with USCIS for these commercial enterprises located within the approved Regional Center area.

The geographic focus of this area may contain some High Unemployment Targeted Employment Areas (TEAs) as designated by the State of Illinois and the State of Indiana, and rural areas as defined in 8 CFR 204.6(e). Therefore, the minimum capital investment threshold for any individual immigrant investment into an approved commercial enterprise throughout the Regional Center shall be not less than \$500,000, if the investment target is located within a TEA or \$1,000,000 if it is located outside of a TEA. No debt arrangement will be acceptable unless it is secured by assets owned by the alien entrepreneur. A full capital investment must be made and placed at risk.

EMPLOYMENT CREATION

Immigrant investors who file petitions for commercial enterprises located in the Regional Center area must fulfill all of the requirements set forth in 8 CFR 204.6, except that the petition need not show that the new commercial enterprises created ten new jobs indirectly as a result of the immigrant investor's investment. This determination has been established by way of USCIS' acceptance of the final economic analysis that is contained as part of the approved Regional Center proposal and its indirect job creation model and multipliers contained within the final approved Regional Center application package. Rather, the investor must show at the time of removal of conditions that they performed the activities described in the model and on which the approved methodology is based.

In addition, where job creation or preservation of existing jobs is claimed based on a multiplier rooted in underlying new "direct jobs" in support of an immigrant investor's individual I-526 petition affiliated with your regional center, then:

- To be credited with projected creation of new “direct” jobs for “qualifying employees” upon filing the I-526 petition, then the petition must be supported by a comprehensive detailed business plan and supporting financial, marketing and related data and analysis providing a reasonable basis for projecting creation of any new direct jobs for “qualifying employees” to be achieved/realized within two years pursuant to 8 CFR 204.6(j)(4)(B).

An alien investor’s I-829 petition to remove the conditions which was based on an I-526 petition approval that involved the creation of new direct jobs or the creation of new indirect jobs based on a multiplier tied to underlying new direct jobs needs to be properly supported by evidence of job creation. To support the full number of direct and indirect new jobs being claimed in connection with removal of conditions, the petition will need to be supported by probative evidence of the number of new direct full time (35 hours per week) jobs for qualified employees whose positions have been created as a result of the alien’s investment. Such evidence may include copies of quarterly state employment tax reports, Forms W-2, Forms I-9, and any other pertinent employment records sufficient to demonstrate the number of qualified employees whose jobs were created directly.

Additional Guidelines for individual Immigrant Investors Visa Petition (I-526)

Each individual petition, in order to demonstrate that it is associated with the Regional Center, in conjunction with addressing all the requirements for an individual immigrant investor petition, shall also contain as supporting evidence relating to this Regional Center designation, the following:

1. A copy of this letter, the Regional Center approval and designation.
2. A copy of the USCIS approved Regional Center narrative proposal and business plan.
3. A copy of the job creation methodology required in 8 CFR 204.6(j)(4)(iii), as contained in the final Regional Center economic analysis which has been approved by USCIS, which reflects that investment by an individual immigrant investor will create not fewer than ten (10) full-time employment positions, either directly or indirectly, per immigrant investor.
4. A legally executed copy of the USCIS approved:
 - a. Offering Circular or equivalent (version of August 9, 2008);
 - b. Escrow Agreement (revised version of February 18, 2009);
 - c. Subscription Agreement (version of August 8, 2008); and
 - d. LLC Agreement (version of August 8, 2008).

DESIGNEE’S RESPONSIBILITIES INHERENT IN CONDUCT OF THE REGIONAL CENTER:

The law, as reflected in the regulations at 8 CFR 204.6(m)(6), requires that an approved Regional Center in order to maintain the validity of its approval and designation must continue to meet the statutory requirements of the Immigrant Investor Pilot Program by serving the purpose of promoting economic growth, including increased export sales (where applicable), improved regional productivity, job creation, and increased domestic capital investment. Therefore, in order for USCIS to determine whether your Regional Center is in compliance with the above cited regulation, and in order to continue to operate as a USCIS approved and designated Regional Center, your administration, oversight, and management of your Regional Center shall be such as to monitor all investment activities under the sponsorship of your Regional Center and to maintain records, data and information on a quarterly basis in order to report to USCIS upon request the following year to date information for each Federal Fiscal Year¹, commencing with the initial year as follows:

¹ A Federal Fiscal Year runs for twelve consecutive months from October 1st to September 30th.

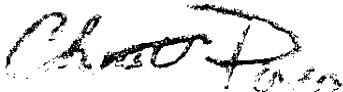
1. Provide the principal authorized official and point of contact of the Regional Center responsible for the normal operation, management and administration of the Regional Center.
2. Be prepared to explain how you are administering the Regional Center and how you will be actively engaged in supporting a due diligence screening of its alien investors' lawful source of capital and the alien investor's ability to fully invest the requisite amount of capital.
3. Be prepared to explain the following:
 - a. How the Regional Center is actively engaged in the evaluation, oversight and follow up on any proposed commercial activities that will be utilized by alien investors.
 - b. How the Regional Center is actively engaged in the ongoing monitoring, evaluation, oversight and follow up on any investor commercial activity affiliated through the Regional Center that will be utilized by alien investors in order to create direct and/or indirect jobs through qualifying EB-5 capital investments into commercial enterprises within the Regional Center.
4. Be prepared to provide:
 - a. the name, date of birth, petition receipt number, and alien registration number (if one has been assigned by USCIS) of each principal alien investor who has made an investment and has filed an EB-5/I-526 Petition with USCIS, specifying whether:
 - i. the petition was filed,
 - ii. was approved,
 - iii. denied, or
 - iv. withdrawn by the petitioner, together with the date(s) of such event.
 - b. The total number of visas represented in each case for the principal alien investor identified in 4.a. above, plus his/her dependents (spouse and children) for whom immigrant status is sought or has been granted.
 - c. The country of nationality of each alien investor who has made an investment and filed an EB-5/I-526 petition with USCIS.
 - d. The U.S. city and state of residence (or intended residence) of each alien investor who has made an investment and filed an EB-5/I-526 petition with USCIS.
 - e. For each alien investor listed in item 4.a., above, identify the following:
 - i. the date(s) of investment in the commercial enterprise;
 - ii. the amount(s) of investment in the commercial enterprise; and
 - iii. the date(s), nature, and amount(s) of any payment/remuneration/profit/return on investment made to the alien investor by the commercial enterprise and/or Regional Center from when the investment was initiated to the present.
5. Be prepared to identify/list each of the target industry categories of business activity within the geographic boundaries of your Regional Center that have:
 - a. received alien investors' capital, and in what aggregate amounts;

- b. received non-EB-5 domestic capital that has been combined and invested together, specifying the separate aggregate amounts of the domestic investment capital;
 - c. of the total investor capital (alien and domestic) identified above in 5.a and 5.b, identify and list the following:
 - i. The name and address of each “direct” job creating commercial enterprise.
 - ii. The industry category for each indirect job creating investment activity.
6. Be prepared to provide:
 - a. The total aggregate number of approved EB-5 alien investor I-526 petitions per each Federal Fiscal Year to date made through your Regional Center.
 - b. The total aggregate number of approved EB-5 alien investor I-829 petitions per each Federal Fiscal Year to date through your Regional Center.
7. The total aggregate sum of EB-5 alien capital invested through your Regional Center for each Federal Fiscal Year to date since your approval and designation.
8. The combined total aggregate of “new” direct and/or indirect jobs created by EB-5 investors through your Regional Center for each Federal Fiscal Year to date since your approval and designation.
9. If applicable, the total aggregate of “preserved” or saved jobs by EB-5 alien investors into troubled businesses through your Regional Center for each Federal Fiscal Year to date since your approval and designation.
10. If for any given Federal Fiscal Year your Regional Center did or does not have investors to report, then provide:
 - a. a detailed written explanation for the inactivity,
 - b. a specific plan which specifies the budget, timelines, milestones and critical steps to:
 - i. actively promote your Regional Center program,
 - ii. identify and recruit legitimate and viable alien investors, and
 - iii. a strategy to invest into job creating enterprises and/or investment activities within the Regional Center.
11. Regarding your website, if any, please be prepared to provide a hard copy which represents fully what your Regional Center has posted on its website, as well as providing your web address. Additionally, please provide a packet containing all of your Regional Center’s hard copy promotional materials such as brochures, flyers, press articles, advertisements, etc.
12. Finally, please be aware that it is incumbent on each USCIS approved and designated Regional Center, in order to remain in good standing, to notify the USCIS within 15 business days at USCIS.ImmigrantInvestorProgram@dhs.gov of any change of address or occurrence of any material change in:

- the name and contact information of the responsible official and/or Point of Contact (POC) for the RC
- the management and administration of the RC,
- the RC structure,
- the RC mailing address, web site address, email address, phone and fax number,
- the scope of the RC operations and focus,
- the RC business plan,
- any new, reduced or expanded delegation of authority , MOU, agreement, contract, etc. with another party to represent or act on behalf of the RC,
- the economic focus of the RC, or
- any material change relating to your Regional Center's basis for its most recent designation and/or reaffirmation by USCIS.

If you have any questions concerning the Regional Center approval and designation under the Immigrant Investor Pilot Program, please contact the USCIS by Email at USCIS.ImmigrantInvestorProgram@dhs.gov.

Sincerely,



Christina Poulos
Director
California Service Center

THE LAW OFFICES OF
KAMELI & ASSOCIATES
A PROFESSIONAL CORPORATION

TAHER KAMELI
JOHN R. FLOSS
VERONIQUE TOUSIGNANT

Sent Via Express Mail
EH 304588143 US

June 29, 2009

U.S. Citizenship and Immigration Services
California Service Center Attn: Eb-5 Processing Unit
P.O. Box 10526
Laguna Niguel, CA 92607-0526

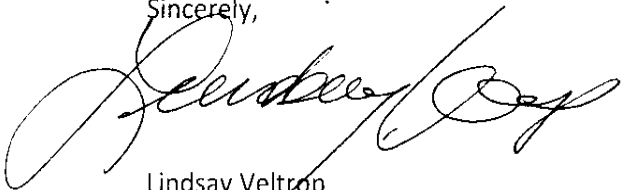
RE: Motion to Amend the Focus of Investment Activity

Petitioner: Chicagoland Foreign Investment Group Regional Center

Dear Adjudication Officer,

Enclosed please find a Motion to Amend the Focus of Investment Activity in regards to the above-captioned matter. Should you have any questions or concerns please contact our law offices.

Sincerely,



Lindsay Veltrop
Client Coordinator

REC'D CSC 09 JUL 1 7:43
AL20091071

(b)(4)

(b)(4)

RIMS II Data

Introduction

The purpose of this RIMS II study is to show how expanding the Chicagoland Foreign Investment Group to several counties in Indiana will bring a positive impact on the local economy by having evidence of employment, regional, and economic growth.

Adding these regions to the RIMS data will also portray more accurately the economic effect of placing new businesses within the Chicagoland area. Many working commuters travel to Indiana from Chicago for work or pleasure and vice versa. Therefore, having these Indiana counties within the RIMS II data will decrease the variance of the estimation to the actual effects.

Another benefit of adding the five counties of Indiana is an increased opportunity for businesses, foreign investors, and working individuals.

By expanding the Regional Center area, businesses have more options as to where they wish to locate. For business owners or for those thinking of starting a business, location can make all the difference. Increasing the area opens doors to more businesses deciding to seek investment from the Regional Center. Through an increase in the amount of approved projects, the domestic capital investment and regional productivity will increase undoubtedly.

As more businesses are approved for projects through the Regional Center, foreign investors are given more choices to where they want their investment to be placed. This gives them more freedom and control, which is appealing to all potential investors.

Increasing the diversity of business locations, decreases the unemployment levels in all the counties of the Chicagoland Foreign Investment Group. By adding projects in the five counties of Indiana, this increases the employment opportunities for not only people who live in Indiana, but also individuals who live in Illinois who commute to Indiana frequently. By increasing the employment levels in more locations, the household earnings also increase in the new additional regions.

Location

RIMS II requires the user to define the geographic boundaries in order to give accurate multiplier results. The user can set the region by county or several counties put together. The RIMS II data in this report is based on the combination of the previously approved Illinois counties of Boone, Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, Ogle, Stephenson, Will, and Winnebago, in addition to the five Indiana counties of Jasper, Lake, La Porte, Newton, and Porter.



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| | | | |
|---|--|--|--|
| RECEIPT NUMBER W09000810 | | CASE TYPE Regional Center Proposal | |
| RECEIPT DATE July 28, 2009 | | REGIONAL CENTER NAME Chicagoland Foreign Investment Group Regional Ctr (Amendment) | |
| | | PAGE 1 of 1 | |
| Taher Kameli Law Offices of Kameli & Associates 111 E. Wacker Dr., Suite 555 Chicago, IL 60601 | | Notice Type: <h2 style="text-align: center;">Receipt Notice</h2> | |
| <p>Receipt Notice - This notice confirms that USCIS received your Regional Center Proposal. If any of the above information is incorrect, send an e-mail to: USCIS.ImmigrantInvestorProgram@dhs.gov. This notice does not grant any immigration status or benefit. It is not even evidence that this case is still pending. It only shows that the application or petition was filed on the date shown.</p> <p>Processing Time - The current processing time for this case is estimated at 120 days. Unlike other case types, verification or tracking of this case is not available electronically or on our website. We will notify you by mail when we make a decision on this case or if we need something from you. If you do not receive an initial decision or update from us within our current processing time, you may send an e-mail to: USCIS.ImmigrantInvestorProgram@dhs.gov. or contact us at the address below.</p> <p>Address Change - If your mailing address changes while your case is pending, you may send an e-mail to: USCIS.ImmigrantInvestorProgram@dhs.gov. Otherwise, you might not receive notice of our action on this case.</p> <p>Please save this notice and a copy of any papers that you send to us along with proof of delivery.</p> | | | |
| U.S. CITIZENSHIP & IMMIGRATION SVC CALIFORNIA SERVICE CENTER Attn: EB-5 RC Proposal P.O. BOX 10526 LAGUNA NIGUEL CA 92607-10526 | | | |

- *Please save this notice for your records. Please enclose a copy if you have to write us or a U. S. Consulate about this case, or if you file another application based on this decision.*
- *You will be notified separately about any other applications or petitions you have filed.*

Additional Information

GENERAL.

The filing of an application or petition does not in itself allow a person to enter the United States and does not confer any other right or benefit.

INQUIRIES.

You should contact the office listed on the reverse side of this notice if you have questions about the notice, or questions about the status of your application or petition. *We recommend you call.* However, if you write us, please enclose a copy of this notice with your letter.

APPROVAL OF NONIMMIGRANT PETITION.

Approval of a nonimmigrant petition means that the person for whom it was filed has been found eligible for the requested classification. If this notice indicated we are notifying a U.S. Consulate about the approval for the purpose of visa issuance, and you or the person you filed for have questions about visa issuance, please contact the appropriate U.S. Consulate directly.

APPROVAL OF AN IMMIGRANT PETITION.

Approval of an immigrant petition does not convey any right or status. The approved petition simply establishes a basis upon which the person you filed for can apply for an immigrant or fiance(e) visa or for adjustment of status.

A person is not guaranteed issuance of a visa or a grant of adjustment simply because this petition is approved. Those processes look at additional criteria.

If this notice indicates we have approved the immigrant petition you filed, and have forwarded it to the Department of State Immigrant Visa Processing Center, that office will contact the person you filed the petition for directly with information about visa issuance.

In addition to the information on the reverse of this notice, the instructions for the petition you filed provide additional information about processing after approval of the petition.

For more information about whether a person who is already in the U.S. can apply for adjustment of status, please see Form I-485, *Application to Register Permanent Residence or Adjust Status*.