



## OFFICE OF INSPECTOR GENERAL

*Catalyst for Improving the Environment*

# Multi-Year Plan Fiscal 2003 -2005



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*Cover Photo by Stephen Delaney, EPA*



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
WASHINGTON, DC 20460

**THE INSPECTOR GENERAL**

March 25, 2003

## **FOREWORD**

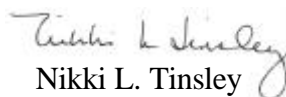
I am pleased to present the first Multi-Year Plan for the Environmental Protection Agency (EPA) Office of Inspector General (OIG). This plan covers fiscal 2003 through 2005, and is the connecting link between EPA's Strategic Goals and OIG's Strategic Goals and Annual Work Plans. It demonstrates how the concepts, direction, and priorities established in the OIG Strategic Plan will be cohesively implemented and arrayed to answer a logical sequence of questions, while addressing important management issues critical to the successful fulfilment of EPA's Statutory Mission and Goals. The questions that we will seek to answer include those of greatest interest to our clients, stakeholders, partners, and EPA management as they have been expressed to us.

This Multi-Year Plan is designed to increase the depth of our reviews by performing technical and scientific analysis of complex environmental issues, while examining the supporting management, resource, and accountability issues. We have restructured our organization into a "Matrix" of Product Line Directors responsible for the development of OIG products and services, and Resource Center Directors responsible for the development and application of staff competencies and technologies. The Matrix organization is designed to deploy multi-discipline resources across program and geographic boundaries, recognizing that environmental and management issues are generally national in scope and part of a larger, complex system.

We recognize that the responsibility for fulfilment of national environmental objectives is spread among about 29 Federal departments and agencies and cannot be realized without cross-agency collaboration, both Federal and State. Similarly, the audit, evaluation, and investigative products and services of these departments and agencies cannot attain their potential value without collaboration.

It is our expectation that this plan will not only serve as a blueprint for realizing the EPA OIG vision of being "A Catalyst for Environmental Improvement," but will encourage self review within EPA and promote opportunities for collaborative review across agencies. It is also our expectation that by building on our knowledge and experience, and with greater involvement of other stakeholders, we will refine the questions and methodology needed to recommend actions for the greatest impact on public benefit.

The success of this plan is dependent on its flexibility to reflect new information, priorities, challenges, and opportunities as presented by our clients, stakeholders, and partners. For this reason, we continuously seek input, feedback, comments, questions, or suggestions about how the OIG can be more effective.

  
Nikki L. Tinsley



## EXECUTIVE SUMMARY

### EPA Office of Inspector General Multi-Year Plan Fiscal 2003-2005

The EPA Office of Inspector General (OIG) provides independent audit, evaluation, investigative and advisory services that promote economy, efficiency, and effectiveness, and prevent and detect fraud waste and abuse in EPA programs and operations. We have further interpreted this statutory mission through our vision of being **Catalysts for Improving the Environment**, by contributing to environmental quality, human health and good government through problem prevention and cooperative solutions. The work of the Environmental Protection Agency affects the well being of all humans, flora, fauna and aquatic species in the United States through natural ecosystems that support life. Just as the natural environment is a complex system, so are the problems, solutions, activities, processes, authorities and resources to protect it.

This Multi-Year Plan, as the connecting link between EPA's Strategic Goals, OIG's Strategic Plan and Annual Work Plan, was constructed, with the input of EPA and OIG clients and stakeholders, to logically evaluate the linkage and relationships of the inputs, processes, and actions that influence environmental and operational results. The EPA OIG, will apply a variety of professional disciplines, through a progression of assignments in Product Line Tracks between fiscal 2003 and 2005, linked to EPA's Goals. These assignments will incrementally answer key questions, as described in this Plan, about the interrelationships of systems vital to EPA efficiently and effectively protecting the nation's environment.

*Below are the OIG Strategic and cumulative Annual Goals for fiscal 2003-2005, and the architecture linking them, through the Multi-Year Plan Product Line Tracks, to EPA's Strategic Goals.*

#### **OIG GOAL 1: We will contribute to improved environmental quality and human health by:**

- ▶ Identifying 270 recommendations, best practices, or risks to be implemented or resolved.
- ▶ Influencing 210 environmental or health actions, changes, or improvements.
- ▶ Reducing or eliminating 75 environmental risks.

#### **OIG GOAL 2: We will contribute to improved management, program operations and integrity by:**

- ▶ Identifying 480 recommendations or best practices or challenges to be implemented or resolved.
- ▶ Reducing and preventing risk of resource loss from 150 criminal, civil or administrative actions.
- ▶ Returning 200 percent of the dollar investment in the OIG from potential savings and recoveries.
- ▶ Influencing 240 management actions, changes or improvements.

On the following page is a cross-walk table linking the EPA Goals with the Multi-Year Plan media chapters, tracks, and key questions that will direct the assignments, projects and application of supporting OIG resources. Within each media chapter, these questions are described and further broken-down into component questions that will be answered sequentially over the 3-year span.

## Cross-Walk Between EPA Goals, OIG Goals and EPA OIG Multi-Year Plan

EPA Goals Multi-Year Plan Chapter	OIG Multi-Year Plan Product Line Tracks and Key Questions
<b>Cleaner Air</b>  <b>Air</b> <b>Chapter 2</b>	<ul style="list-style-type: none"> <li>▶ <b>Particulate Matter:</b> How can EPA maximize the effectiveness of its fine particulate matter (PM 2.5) ambient monitoring and emissions control strategies?</li> <li>▶ <b>Ozone:</b> How can EPA better execute its ozone reduction strategies?</li> <li>▶ <b>Air Toxics:</b> How can EPA improve the effectiveness of its efforts to assess, monitor, control, and reduce the risks from toxics air pollutants to human health &amp; environment?</li> <li>▶ <b>Challenges to Progress:</b> How can EPA maximize the contributions of state and local entities in continuing progress toward meeting clean air goals?</li> </ul>
<b>Purer Water</b>  <b>Water</b> <b>Chapter 3</b>	<ul style="list-style-type: none"> <li>▶ <b>Safe Drinking Water:</b> How can EPA effectively implement the Safe Drinking Water Amendments of 1996?</li> <li>▶ <b>Watershed Protection:</b> How can EPA effectively control, protect and monitor watersheds and water quality?</li> <li>▶ <b>Reducing Pollutant Loadings:</b> How can EPA effectively use and improve policy tools to reduce water pollutant loadings?</li> </ul>
<b>Safer Land</b>  <b>Land</b> <b>Chapter 4</b>	<ul style="list-style-type: none"> <li>▶ <b>Superfund:</b> Is EPA making progress toward effective risk reduction and waste cleanup?</li> <li>▶ <b>Brownfields:</b> Is EPA making progress toward effective risk reduction, cleanup, and restoring previously polluted sites to appropriate uses?</li> <li>▶ <b>Resource Conservation &amp; Recovery Act (RCRA):</b> Is EPA making progress toward effective waste management, hazardous material management, and risk reduction?</li> </ul>
<b>Ecosystems &amp; Communities</b>  <b>Compliance &amp; Environmental Stewardship</b>  <b>Cross Media</b> <b>Chapter 5</b>	<ul style="list-style-type: none"> <li>▶ <b>Homeland Security:</b> How can EPA better execute its Strategic Plan to prevent, prepare for, and respond to a terrorist attack to minimize adverse impacts on human health and the environment?</li> <li>▶ <b>Environmental Stewardship:</b> Do the States and tribes use high performance concepts to deliver environmental and human health protection?</li> <li>▶ <b>Environmental Justice:</b> How well are environmental justice concerns incorporated into EPA decisionmaking; Do EPA policies and practices disproportionately contribute adverse impacts on human health and the environment in communities of concern?</li> <li>▶ <b>Compliance Assistance &amp; Enforcement:</b> Is the employment of traditional and nontraditional enforcement approaches optimized to ensure compliance with environmental rules and regulations that are designed to protect human health and the environment?</li> </ul>
<b>EPA Management Support Infrastructure</b>  <b>Good Government</b> <b>Chapter 6</b>	<ul style="list-style-type: none"> <li>▶ <b>Financial Management:</b> Does EPA have the people, processes, and systems needed to efficiently provide timely accurate, complete and useful financial information for decisionmaking and accountability?</li> <li>▶ <b>Information Resources Management:</b> Does EPA have systems, processes, and controls in place to ensure timely, reliable, and complete information is available to manage EPA's programs and report on environmental results?</li> <li>▶ <b>Program Management:</b> Does EPA have the system and processes in place to plan, budget for, and manage its programs, and human capital needed to carry out its mission?</li> <li>▶ <b>Assistance Agreements:</b> Is EPA using assistance agreements to efficiently and effectively accomplish its mission?</li> <li>▶ <b>Contracts:</b> Is EPA using contracts to efficiently &amp; effectively accomplish its mission?</li> <li>▶ <b>Energy Conservation- Green Power:</b> Will EPA's strategies enable it to reduce overall energy usage by 20 percent from fiscal 1990 to 2005 and by 25 percent by fiscal 2010?</li> </ul>

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## CHAPTER 1: Introduction

### OIG Performance Planning Process

The OIG planning process is continuously carried out at three levels, starting with the 5-year Strategic Plan, implemented through the 3-year Multi-Year Plan, and specifically updated in each Annual Work Plan. This section briefly describes the relationship between each stage in the planning process, while the next section provides exhibits that demonstrate the linkages between EPA's Strategic Goals, OIG's Strategic and Annual Goals, and this Multi-Year Plan.

**Strategic Planning** - Strategic planning, involves establishing the long-term goals, objectives, measures, priorities, and direction to guide the activities described in the Multi-Year Plan. OIG's Strategic Plan covers a 5-year period and is updated every 3 years, as required by the Government Performance and Results Act (GPRA). The strategic plan is developed based upon the OIG vision, mission, and values. Research and input from stakeholders and partners on current and emerging areas of strengths, weaknesses, opportunities, and threats within EPA and OIG help determine priorities and direction in terms of *what strategic areas of emphasis and types of products and services* will lead to the highest level of performance in fulfilling OIG's and EPA's mission.

**Multi-Year Action Plan for Goal Areas** - The Multi-Year Plan is developed to demonstrate *how the OIG Strategic Plan will be implemented* to achieve the OIG strategic goals. Product Line Directors develop 3-year action plans describing how the identification of problems and opportunities for improvement within each strategic area of emphasis support the achievement of EPA's Strategic Goals. This Multi-Year Plan translates EPA's Strategic Goals into component media areas, or "tracks" (Air, Water, Land, Cross-Media, and Good Government), which are presented in Chapters 2 through 6, respectively. These chapters present subject matter background, issues, and key interrelated questions whose answers are critical to the success of EPA's mission and goals. A progression of linked questions about EPA programs and operations are sequentially aligned in tables of prospective assignments and projects designed to cumulatively answer those questions.

#### Questions OIG Will Seek to Answer in Providing Professional Services to EPA, Fiscal 2003-2005

- ✓ How can EPA programs, operations, grants, and contracts be managed with greater economy, efficiency, effectiveness, and accountability? Is EPA using the best available practices, fulfilling its legal obligations, and getting its money's worth?
- ✓ How are EPA programs and operations contributing to intended environmental results?
- ✓ Do EPA programs, operations, grants, and contracts have financial, scientific, legal, performance, and informational integrity to detect or prevent risk and loss of resources, public confidence, and human health?
- ✓ Is EPA addressing its "major management challenges," GPRA, and the President's Management Agenda?
- ✓ Is EPA coordinating its plans and operations with its partners, customers, and stakeholders?

**Consolidated Annual Work Planning** - At the start of each fiscal year, the Inspector General issues a consolidated annual plan that includes the annual planning perspectives for the performance of multi-discipline products and services. Each year's plan considers how the latest input from stakeholders and partners about risks, needs, and opportunities translates into priorities or adjustment in implementing the OIG Multi-Year Plan to best meet OIG Annual Goals.

## Criteria for Selection of Strategic Areas, and Specific Assignments/Projects

Criteria for evaluating and selecting strategic areas of emphasis, and specific products, services, and assignments, are consistently applied throughout all of the OIG planning processes. These include risk and potential environmental benefits. Information about these factors comes from the results of past work in the area, employee and customer surveys, feedback from stakeholders and partners, and Agency goals and investments. OIG plans, performs, and evaluates its work dynamically and continuously based upon the following principles of higher performance:

- ▶ **Customer Focused and Driven** - Knowing the market, demand, and opportunities.
- ▶ **Starting With the End in Mind** - Results orientation.
- ▶ **Developing Partnerships** - Leveraging resources and interest for greater change and results.
- ▶ **What Gets Measured Gets Done** - How do you know and according to whom?
- ▶ **Seeking the Best Return on Investment** - Greatest public benefit with available resources.

OIG performs Strategic Customer Value Analysis as the preliminary step to incorporate each of the principles listed above by determining current and potential customers, stakeholders, and partners. The process then determines what are the most current issues, the emerging long-term issues, the problems associated with these issues, the opportunities these issues present, questions that need to be answered to help EPA achieve its goals, and how we can address them. We also identify opportunities for collaboration that can increase efficiency, leverage resources, and expand the value of results. Customer input helps us focus on expectations and value of our work that can be measured to evaluate our own progress, performance, and results for accountability. We continuously prioritize our work to obtain the greatest return in public benefit with the available staff and financial resources.

**The Planning Process should always consider: (1) availability of staff and resources; (2) the need for effective followup to ensure Agency accountability for agreed-to actions and to identify or validate subsequent results and impacts from OIG advice and recommendations; and (3) contingencies for emerging issues of extreme importance requiring immediate attention. Details on each follow:**

**Human Capital, Integrated Information Systems, and Resources - Tools for Success:** Fulfillment of the Multi-Year Plan is dependent upon the availability and application of specific staff skills, information systems, and financial resources. Therefore, we continuously research efficient means and alternatives for developing and acquiring the technology and competencies that support this Plan.

**Followup - The Key to a Results-Oriented Culture:** Implicit in the OIG “results oriented” culture, and as demonstrated through the Logic Model, is the expectation that we will perform followup to determine and account for the subsequent chain of actions leading to environmental improvements and impacts influenced by our work. Followup is also required by the *Government Auditing Standards* for both financial and performance audits, which note that “Much of the benefit from audit work is not in the findings reported or the recommendations, but in their effective resolution,” and continued attention is needed to ensure that benefits are realized. Therefore, as part of our Multi-Year Plan, we will regularly follow up and report on previous work to determine the extent of Agency action taken and all subsequent results and impacts. This acknowledges that significant results may require a lengthy time lag until they come to fruition and can be reported.

**Flexibility and Contingency Planning - Anticipating a Changing Environment:** This Multi-Year Plan represents a progression of prospective assignments designed to answer a series of questions for improved systemic effectiveness and efficiency of EPA’s most critical or vulnerable program operations. As these assignments progress, and the Agency is subject to new requirements, threats, risks, and public concerns, this plan will also change. This Multi-Year Plan is designed as a flexible document recognizing the probability of rapidly changing conditions and the need for contingency actions that make the best public use of available resources. By anticipating change, we will adjust instead of just react.

## **Linking EPA's and OIG's Strategic Goals to the Multi-Year Plan**

**This section describes several exhibits that demonstrate how the OIG Multi-Year Plan is linked to, and supports, EPA's Strategic Goals, OIG's Strategic Goals, and OIG's Annual Performance Goals, as reported to Congress and the Office of Management and Budget (OMB) under GPRA. This section also describes additional exhibits, displayed in appendices, that address OMB's specific evaluation concerns, EPA's Major Management Challenges, and OIG's plan for integrating Human Capital initiatives into the planning process.**

### **Draft EPA Strategic Plan Architecture Fiscal 2004-2008: Exhibit**

We have provided a prospective architecture of EPA's Draft Strategic Plan for fiscal 2004-2008. This Plan provides five goals that closely link to the Media Tracks presented in Chapters 2-6 of our Multi-Year Plan.

### **OIG Strategic Plan Architecture: Exhibit**

Since the Multi-Year Plan is a description of how we will implement the OIG Strategic Plan incrementally between fiscal 2003 and 2005, we have included a "map" of the OIG Strategic Plan Architecture showing the relationship between OIG goals, objectives, and strategic areas that direct link to the media tracks in this Multi-Year Plan.

### **Logic Model: Exhibit**

Included is a general Logic Model incorporating the OIG Strategic Goals, to demonstrate the progression and linkage of inputs, outputs, and actions as catalysts, leading to expected outcomes and impacts. This Logic Model is the general systems approach that our work will follow within each of the media tracks to determine the efficiency and effectiveness of EPA program areas as well as the linkages and gaps between the application of resources and intended program results.

### **Annual Performance Goals thru Fiscal 2005: Exhibit**

This chart shows how the OIG Business Line Strategic Goals are translated into specific annual performance goal projections, cumulatively and incrementally for fiscal 2003-2005. This also demonstrates the measures we will use to define achievement of our goals, and how we account for planned performance and progress in our Annual Performance Budgets and Annual Performance Reports.

### **Historical Perspective of EPA Management Challenges Reported by OIG: Appendix 1**

As required by the Reports Consolidation Act of 2000, OIG reports on the Major Management Challenges that can significantly prevent the successful implementation or integrity of EPA programs or operations. Many of these challenges, along with management weaknesses identified from the Federal Managers' Financial Integrity Act reviews, OMB assessments, and Major Management Challenges and Program Risks identified by the General Accounting Office, have been long standing in EPA and need to be continually addressed through the work of the Multi-Year Plan. We have included a Historical Perspective of the OIG-reported Management Challenges in Appendix 1.

### **OMB Evaluation Interests of EPA: Appendix 2**

OMB is using a new approach to integrating performance with budgeting by conducting evaluations of all Federal programs, including EPA's using a Program Assessment Review Tool (PART). A description of the PART and EPA's program review schedule is presented in Appendix 2.

### **Integration of Human Capital into the OIG Planning Process: Appendix 3**

OIG is implementing a number Human Capital actions as part of its strategy to integrate the staff skills, competencies, and accountability needed to support this Multi-Year Plan, as described in Appendix 3.

# DRAFT EPA Strategic Plan Architecture Fiscal 2004 - 2008

EPA Goal	Program Activity/Office	
<b>Air</b>	<ul style="list-style-type: none"> <li>• Ozone, particulates, and other criteria air pollutants/NAAQS</li> <li>• Air toxics/hazardous air pollutants</li> <li>• Air program assistance grants</li> <li>• Atmospheric change (<i>with transportation &amp; other programs</i>)</li> <li>• Indoor Air</li> </ul>	<ul style="list-style-type: none"> <li>• Acid rain program implementation (<i>CASTNet</i>) (CAA)</li> <li>• Research for air programs</li> <li>• Radiation programs (emergency response, assessing risks, monitoring, and providing guidance and training)(<i>not including drinking water</i>) (CAA)</li> <li>• Visibility</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>• Drinking water protection</li> <li>• Source water/ground water protection</li> <li>• State Revolving Funds (drinking and clean water)</li> <li>• Drinking water program grants (PWS, UIC)</li> <li>• Surface water program grants</li> <li>• Surface water protection</li> </ul>	<ul style="list-style-type: none"> <li>Coastal/marine waters (CWA, MPRSA)</li> <li>Water infrastructure for Alaska native villages</li> <li>Drinking water and clean water research</li> <li>Air deposition to water</li> <li>Pesticide contamination of water (FIFRA)</li> <li>Beach Act Grants &amp; Fish/shellfish consumption</li> </ul>
<b>Land</b>	<ul style="list-style-type: none"> <li>• Waste management</li> <li>• Superfund (SF)</li> <li>• Underground Storage Tanks/LUST</li> <li>• Waste management grants</li> <li>• RCRA enforcement grants</li> <li>• Oil spill prevention &amp; response (Oil Pollution Act)</li> </ul>	<ul style="list-style-type: none"> <li>Superfund enforcement</li> <li>Waste program research</li> <li>Waste minimization and recycling</li> <li>Land application of sewage-treatment sludge</li> <li>Removal aspects of Homeland Security</li> </ul>
<b>Communities &amp; Ecosystems</b>	<p>Smart Growth</p> <p>National chemicals (<i>e.g., lead, PBTs</i>) (TSCA)</p> <p>New and existing chemical testing/screening</p> <ul style="list-style-type: none"> <li>• Lead-abatement grants</li> </ul> <p>Chemical facility planning/preparedness (EPCRA)</p> <p>Pesticides endangered species protection (FIFRA/ESA)</p> <p>Pesticides certification &amp; training/worker protection</p> <p>Community Right-to-Know/Toxics Release Inventory</p> <p>Children and other sensitive populations</p> <p>Environmental justice</p> <p>Pesticides management (registration/re-registration, integrated pesticide management, pesticide environmental stewardship program, strategic agriculture initiative)</p> <p>Pesticide program implementation grants (FIFRA)</p> <p>Brownfields</p> <p>Pesticides program research (FIFRA/FDCA)</p> <p>Global climate research (ORD)</p>	<p>“Core” research on human health, ecosystems, anticipating and understanding emerging problems, etc. (<i>e.g., new “computational toxicology” approaches, ecosystem indicator development and monitoring</i>)</p> <p>Endocrine disruptor screening program (OPPTS)</p> <p>Minority academic institutions (ORD)</p> <p>International capacity building (OIA)</p> <p>Homeland Security (except OSWER removal aspects)</p> <p>Watershed Initiatives</p> <p>National Estuary Program</p> <p>Chesapeake Bay</p> <p>Great Lakes</p> <p>Gulf of Mexico</p> <p>Wetlands</p> <p>Mexico Border</p> <p>Caribbean Basin</p> <p>Gulf of Mexico</p> <p>South Florida/Everglades</p>
<b>Compliance &amp; Environmental Stewardship</b>	<ul style="list-style-type: none"> <li>Civil enforcement</li> <li>Compliance incentives</li> <li>Compliance assistance</li> <li>Compliance monitoring</li> <li>Criminal enforcement</li> <li>Enforcement training</li> <li>Multi-media enforcement grants</li> <li>Pesticides enforcement grants</li> <li>Toxics substance compliance monitoring grants (TSCA)</li> <li>Pollution prevention (<i>including Design for the Environment, green chemistry/engineering, but excluding waste minimization and recycling</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• Pollution prevention incentive grants</li> <li>Pollution prevention research &amp; development (<i>Environ. Technology Verification and risk management research</i>)</li> <li>Sector program</li> <li>Innovation programs (<i>e.g., performance track, environmental management systems</i>)</li> <li>National Center for Environmental Economics (OPEI)</li> <li>Social science and economics research (ORD)</li> <li>General tribal capacity-building for environmental protection (<i>non-media specific</i>), <i>including AIEO</i></li> <li>NEPA implementation</li> <li>Environmental education</li> </ul>
<b>Supporting Infrastructure</b>	<ul style="list-style-type: none"> <li>Information Technology/Data Management/Data Standards; information exchange network; system modernization</li> <li>Administrative &amp; financial management (<i>OARM, OCFO</i>)</li> <li>Buildings and facilities</li> <li>Judicial functions (<i>administrative law judges, Environmental Appeals Board</i>)</li> <li>• Regulatory review and development (<i>including SBREFA compliance</i>)</li> <li>• Legal services</li> <li>• Office of Inspector General</li> </ul>	<ul style="list-style-type: none"> <li>• Small business ombudsman; small, minority business assistance</li> <li>• Program management</li> <li>Regional management</li> <li>Congressional, intergovernmental/external relations</li> <li>Immediate Office of the Administrator</li> <li>Civil Rights/Title VI compliance</li> <li>Science Advisory Board</li> <li>Science Coordination, Communication (<i>e.g., State of the Environment Report</i>)</li> <li>Regional science &amp; technology (<i>laboratory</i>) support</li> </ul>

# OIG Strategic Plan Architecture Fiscal 2001 - 2005

## EPA OIG Vision

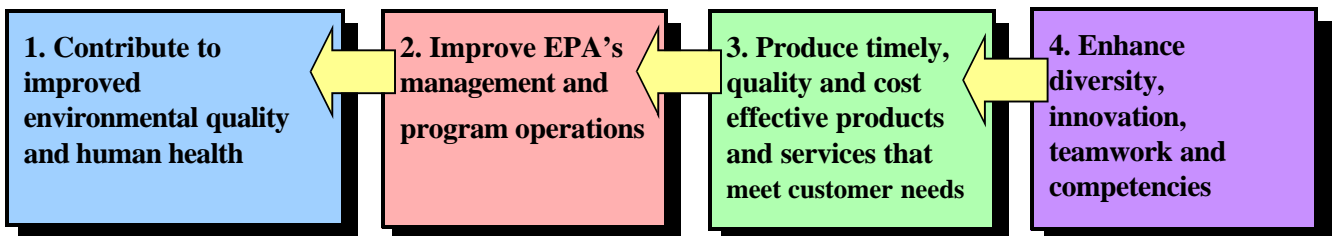
**We are catalysts for improving the Environment.  
We contribute to environmental quality, human health, and good government through problem prevention and cooperative solutions.**

## Mission

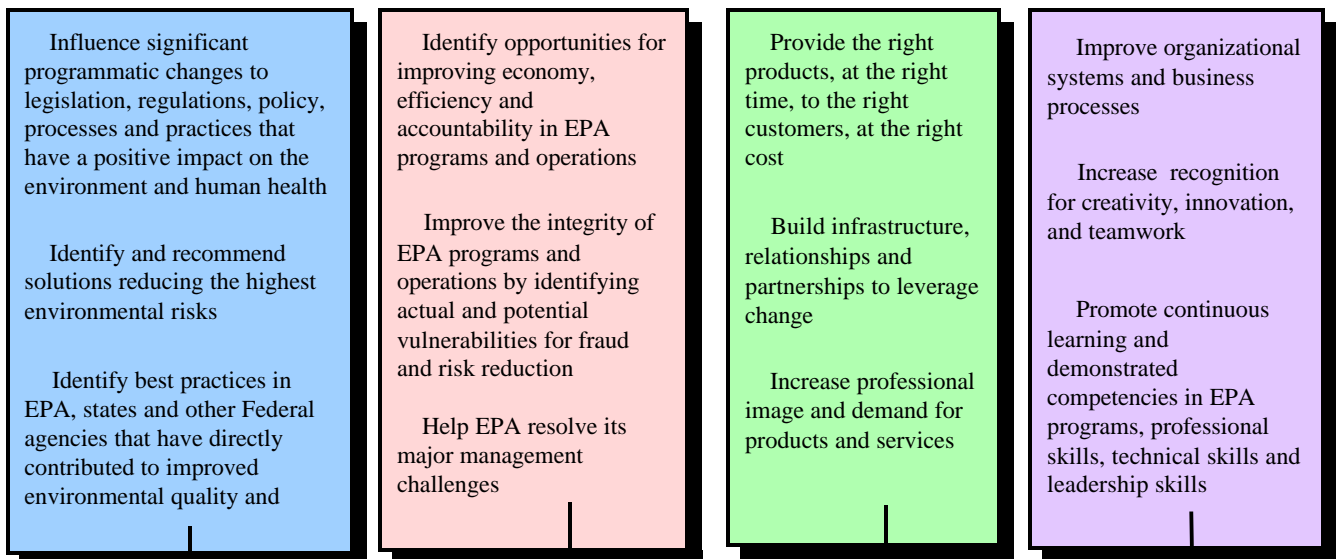
Promote economy, effectiveness and efficiency within the Agency  
Prevent and detect fraud, waste, and abuse in Agency programs and operations

## Business Line Goals

## Corporate Goals



## Objectives



## Strategic Areas of Emphasis

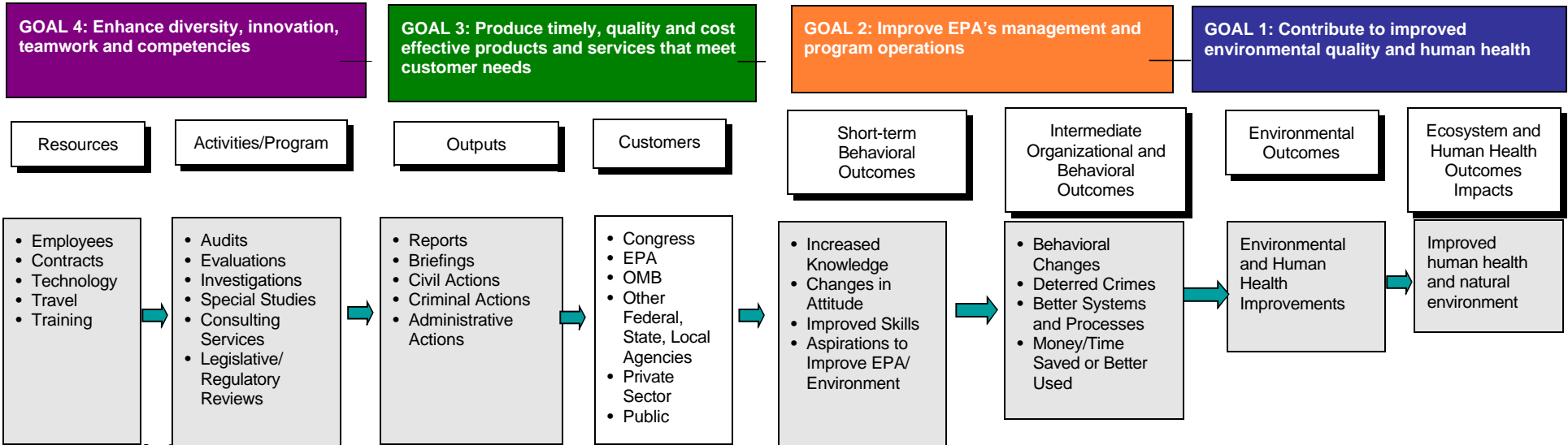
**Air**  
**Water**  
**Waste Management (Land)**  
**Safe Food**  
**International Issues**  
**Environmental Data**  
**Scientific Research**  
**Enforcement &**  
**Compliance Assistance**

**Financial Management & Cost Accounting**  
**Assistance Agreements**  
**Contracts**  
**Computer Security**  
**Human Capital**  
**Systems**  
**Homeland Security**

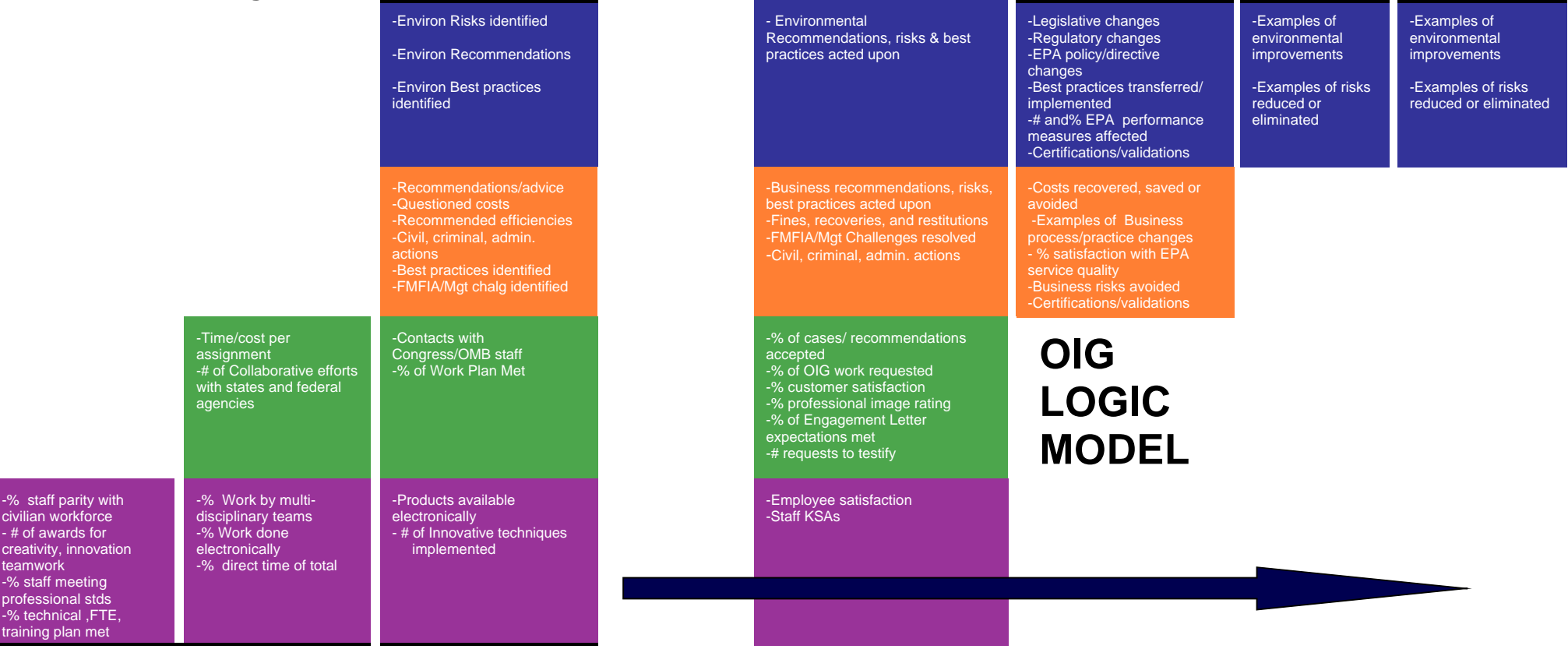
**Customer Focus**  
**Partnering**  
**Business Planning**  
**Integrated Measurements**  
**Outcome Orientation**  
**Activity Based Costing**

**Human Capital**  
**Communications**  
**Organizational**  
**Realignment**  
**Integration of High**  
**Performance Culture**  
**Integrated Knowledge**  
**Information System**

# Environmental Protection Agency - Office of Inspector General - Linking & Measuring the Office of Inspector General 's Performance



## Measures that link goals



## OIG Annual Performance Goals (APG) through Fiscal 2005 (with targets Fiscal 03 - 05)

Crosswalk between OIG Strategic Plan Objectives/Measures & OIG's EPA Annual Budget and Performance Goals

OIG STRATEGIC GOALS / EPA OIG APG	2003	2004	2005
<b>OIG GOAL 1: EPA APG 71:</b> Improve <b>environmental</b> quality and human health by identifying <b>270</b> recommendations, risks or best practices; contributing to reduction or elimination of <b>75</b> environmental risks; and <b>210</b> changes or actions influencing positive environmental or health impacts. ( <i>Cumulative Totals</i> )			
<b>Objective Measures and Targets:</b> ▶ 1. Environmental Improvements/Changes/Actions (Legislative, regulatory, policy, directives, best practices, Environmental /health improvements) <i>Intermediate Outcome &amp; Outcome Measures</i>	60	70	80
▶ 2. Environmental Risks Reduced /Eliminated; Certifications, Verifications, Validations; <i>Outcome Measures</i>	20	25	30
▶ 3. Recommendations, Risks, or Best Practices Identified; <i>Output Measures</i>	80	90	100
<b>OIG GOAL 2: EPA APG 71:</b> Improve EPA's <b>business and program operations</b> by identifying <b>480</b> recommendations/best practices and <b>150</b> criminal, civil, or admin. actions reducing risk of loss/integrity resulting in potential savings & recoveries totaling <b>200%</b> of the annual investment in the OIG, and <b>240</b> EPA actions for better business operations. ( <i>Cumulative Totals</i> )			
<b>Objective Measures and Targets:</b> ▶ 4. Potential Dollar Return on Savings, Questioned Costs, Improved Business Practices, Recoveries, Fines, Settlements <i>Outcome Measures</i>	150% ROI	150% ROI	200% ROI
▶ 5. Criminal, Civil Administrative Actions Reducing or Eliminating Risk of Loss & Operational/Data Integrity <i>Intermediate Outcome Measures</i>	50	50	50
▶ 6. Improvements in Business/Systems/Efficiency (Actions Taken on Mgt Challenges, Certifications, Best Practices, Policies, Regulations/Legislation) <i>Outcome Measures</i>	75	80	85
▶ 7. Recommendations Made on Weaknesses, Best Practices Identified <i>Output Measures</i>	155	160	165

## Chapter 2: Air

The average person breathes over 3,000 gallons of air a day, with little control over the quality of that air consumed. EPA's Clean Air goal is that the air in every community in America will be safe and healthy to breathe. However, EPA's most recent data shows that over 121 million Americans, or over 43 percent of the U.S. population, continue to live in areas with unhealthy air. Additionally, air pollution causes billions of dollars in damage annually to agriculture; forests; and buildings, monuments, and other structures.

Substantial progress has been made in cleaning up some air pollutants, but tremendous challenges confront EPA in reducing air toxics, particulate matter, and ozone. These air pollution problems are among the most pervasive, difficult, and costly to remedy. Further, the progress that has been made in reducing other air pollutants is challenged by growth in the economy; population increases; escalating highway vehicle use; fiscal pressures on State, local, and tribal agencies; and other factors. For example, the Environmental Council of the States predicted that, collectively, State agency environmental programs would be cut almost \$217 million in 2003. In addition to fiscal constraints, State/local/tribal agencies face many other challenges, such as limited training, high turnover, poor skills mix, and insufficient technologies.

Industry is also encountering challenges. Many industry sectors are faced with ever increasing costs of compliance as easier, less costly, measures have been exhausted, leaving increasingly expensive efforts to achieve incremental gains. In recognition of this, as well as political and other pressures, EPA has initiated various market-based economic incentive programs designed to provide sources with greater flexibility in meeting clean air requirements. However, unless properly designed, implemented, and overseen, such programs have the potential to exacerbate accountability and enforceability issues and further strain regulatory agency resources. In undertaking our work, OIG will help EPA move closer to its goal of ensuring that the air in every community in America is safe and healthy to breathe.

### **Proposed Areas of Work**

Four areas of work are pivotal to achieving EPA's long-term goal of making the air in every community safe and healthy to breathe. These areas comprise over 91 percent of EPA's air program resources in fiscal 2003. These four tracks are:

TRACK	DESCRIPTION
1.	Progress in establishing the baseline data needed to monitor and control particulate matter.
2.	Effectiveness of EPA's ozone reduction strategy.
3.	Effectiveness of efforts to assess, monitor, control, and reduce the risks from air toxics.
4.	Efforts to ensure continued further progress in reducing other harmful air pollutants.

Each of the above tracks is in a different phase of evolution, development, and implementation. For example, in Track 1, while some scientific questions remain about particulate matter, it is relatively more important that an effective set of measures and data be developed for use as a long-term outcome benchmark. Conversely, in Track 3, the science to make air toxics decisions is still evolving. Within each track, we plan to identify the barriers or obstacles to achieving EPA's clean air goals.



## **Track 1: Particulate Matter**

Fine particulate matter (PM-2.5) is a complex mixture of harmful particles from a variety of stationary and mobile sources. With particles about 1/30th the thickness of a human hair, PM-2.5 is very difficult to monitor and control. As many as 500,000 deaths a year may be attributable to particulate matter PM exposure, according to the World Health Organization. Over 75 million Americans live in areas believed to exceed the PM-2.5 standard.

Bringing all areas of the United States into compliance with the PM-2.5 standard is expected to cost industry in excess of \$37 billion annually by 2008. If so, this will be the air program's most expensive regulatory effort ever. It is critically important that the PM-2.5 program have accurate ambient air monitoring data before compliance funds are spent, as well as the ability to locate and control the sources of fine particles. About one-fourth of all PM-2.5 mobile source emissions come from diesel trucks and buses, but immense uncertainty surrounds this and other PM-2.5 emissions estimates. About \$195 million, or 33 percent of EPA's air program budget, is devoted to PM-2.5 issues in 2003.

OIG will evaluate EPA's progress in establishing the baseline data needed to monitor and control particulate matter by concentrating on: (1) EPA's PM-2.5 ambient air monitoring program; (2) the design of EPA's speciation monitoring network; (3) the adequacy of State/local/tribal agency PM-2.5 emissions inventories, including emissions calculation tools such as emissions factors; and (4) the opportunities, limitations, and challenges associated with less costly compliance alternatives.

***Overarching Question for Particulate Matter: How can EPA maximize the effectiveness of its PM-2.5 ambient monitoring and emissions control strategies?***

## **Track 2: Ozone Attainment Strategies**

Ozone is EPA's most formidable air pollution problem. Over 116 million Americans still live in ozone nonattainment areas, more than any other single air pollutant. While many areas are making improvements, others are getting worse. Although the Clean Air Act's mandate is that all areas be in ozone compliance no later than 2010, EPA's latest GPRA goal is for ozone attainment to take at least until 2012. Additionally, a more stringent ozone standard approved in 2002 could mean millions more people living in nonattainment areas, and significant increases in compliance costs. As many as 700 of 3,142 counties in the United States could be in ozone nonattainment, and compliance with the new standard is estimated to cost industry in excess of \$9.6 billion annually by 2010.

The key components of EPA's strategy for ozone attainment involve reducing nitrogen oxide emissions from power plants and industrial combustion sources, improving vehicle inspection programs, introducing new low-emission cars and trucks into the on-road fleet, and requiring use of cleaner gasolines. EPA requested about \$79 million for ozone activities in 2003, or about 14 percent of its air program budget.

OIG will evaluate the effectiveness of EPA's ozone reduction strategy by concentrating on EPA's policies and practices, as implemented and enforced by State/local/tribal agencies and overseen by EPA regions, for: (1) successfully reducing nitros oxide (NOx) emissions from power plants and industrial combustion sources; (2) improving vehicle inspection and maintenance programs to ensure identification and repair of poorly performing vehicles; (3) causing consumers and businesses to purchase and drive low-emission cars and trucks at expected turnover rates; and (4) achieving emissions reductions envisioned by cleaner gasolines.

***Overarching Question for Ozone: How can EPA better execute its ozone reduction strategies?***

### **Track 3: Air Toxics**

Toxic air pollution is one of the most significant health and environmental problems in the United States, causing cancer, neurological, immunological, and other serious health problems. Despite the impact of air toxics on human health and the environment, a comprehensive, national air toxics program has not been fully implemented. Accurate and reliable measurement and health assessment data is lacking for many air toxics. EPA is 2 years behind in fulfilling its statutory responsibilities for issuing Phase I air toxics standards, known as Maximum Achievable Control Technology (MACT) standards. This delay has been identified as a material weakness in the air program. Phase II residual risk standards may also be delayed. As such, the air toxics program was identified as a major management challenge by OIG in fiscal 2003.

EPA is behind in gathering emission, monitoring, human health, and ecological effects information on air toxics. The Agency relies heavily on industry for its air toxics emissions data, much of which is generated using inferior emission estimation techniques. A comprehensive national ambient air toxic monitoring network does not exist, and exposure and health risk data, as well as health effects data, is limited and uncertain. Measurement and assessment data are also lacking. Additionally, there is little health data on the synergistic impacts of exposure to multiple air toxics, such as exposures routinely occurring in urban environments. Also, improvement is needed in the accuracy of air toxics emissions data for mobile and area sources, especially as it relates to non-road contributions to pollution. Our air toxics (and particulate matter) work will also address the Agency's efforts to identify and overcome barriers to the effective control of diesel emissions, especially off-road diesel emissions. We plan to address the obstacles that have caused and contributed to these problems as well as the problems themselves.

EPA requested \$118 million for all air toxics activities for fiscal 2003, or about 20 percent of its air program budget. About one-third of EPA's air toxics budget goes to State and local agencies for implementing existing air toxics regulations. OIG will evaluate EPA's efforts to assess, monitor, control, and reduce the risks from air toxics by concentrating on: (1) emissions data (accuracy, reliability, source characterization); (2) ambient monitoring (needs, capabilities, deficiencies); (3) State and local implementation issues (people, processes, technology, data systems, infrastructure, compliance, permitting, fees, incentive structures); and (4) exposure assessments (cancer and non-cancer risks, synergistic effects).

***Overarching Question for Air Toxics: How can EPA improve its efforts to assess, monitor, control, and reduce the risks of toxic air pollutants to human health and the environment?***

### **Track 4: Challenges to Continued Further Progress**

More than 23 million people still live in nonattainment areas for carbon monoxide, sulfur dioxide, and lead. External factors such as growth in the economy; population increases; escalating highway vehicle use; urban sprawl; and fiscal pressures on State, local, and tribal agencies challenge regulators in their efforts to make progress in reducing these pollutants. According to the Environmental Council of the States, 42 State environmental programs face bleak budgets for 2002-2003. State/local/tribal agencies face other challenges, such as limited training, high turnover, poor skills mix, and insufficient technologies.

Industry is faced with ever-increasing costs of compliance for these other pollutants, in part because the easier, less costly measures have been exhausted, leaving largely expensive efforts for incremental gains. EPA has initiated various market-based economic incentive programs, such as Open Market Trading and Project XL, designed to provide greater flexibility in meeting clean air requirements. The design, implementation, and oversight of such programs is critical to EPA's ability to prevent backsliding in these programs, where such flexible approaches have the potential to exacerbate accountability and enforceability issues and further strain regulatory agency resources.

OIG will assess the effectiveness of EPA’s strategy for ensuring continued progress in reducing air pollution by concentrating on: (1) the design and implementation of economic incentive programs, such as Open Market Trading; (2) the design, limitations, and advantages of alternative compliance approaches, such as Project XL; (3) the adequacy of major stationary-source Title V permits; (4) the adequacy of fee assessments, collections, and use for achieving clean air goals; and (5) the opportunities, limitations, and challenges associated with less costly compliance alternatives.

***Overarching Question for Continued Progress Issues: How can EPA maximize the contributions of State, local, and tribal agencies in continuing the progress toward meeting clean air goals?***

Issue	Planned Air Evaluation/Audit Projects	Fiscal Year Start		
		2003	2004	2005
<p><b>Track 1: Particulate Matter</b></p> <p><i>How can EPA maximize the effectiveness of its PM-2.5 ambient monitoring and emissions control strategies?</i></p>	1. <u>Assessment of PM-2.5 Federal Reference Method</u> : What are the limitations and alternatives, if any, to EPA’s filter-based PM-2.5 ambient air monitoring program?	X		
	2. <u>PM-2.5 Network Design</u> : Is EPA’s speciation monitoring network adequate for identifying PM-2.5 emission sources and developing State implementation plans to control such sources?	X		
	3. <u>Adequacy and Reliability of PM-2.5 Emissions Measures</u> : Are stationary and mobile source emissions measures and emissions calculation tools, such as emissions factors, adequate to construct State/local/tribal agency PM-2.5 emissions inventories?		X	
	4. <u>Assessment of Compliance Alternatives</u> : What are the opportunities, limitations, and challenges associated with less costly compliance alternatives for achieving compliance with PM-2.5 standards?		X	
	5. <u>Incentive-Based Efforts to Reduce PM-2.5 Risks</u> : Considering that industry PM-2.5 compliance is not required until 2008, what incentive-based programs has EPA established to reduce risks/achieve early reductions in the levels of PM-2.5?			X
<p><b>Track 2: Ozone Attainment</b></p> <p><i>How can EPA better execute its ozone reduction strategies?</i></p>	1. <u>Effectiveness of EPA - State/local agency partnerships</u> : Are EPA regions and State/local agencies successfully reducing ozone precursors (nitrogen oxide/volatile organic compound emissions from power plants/combustion sources), including effectively conducting New Source Review determinations for utilities and industries making major modifications and other capital improvements to plants and equipment?	X		
	2. <u>Effectiveness of Vehicle Inspection and Maintenance Programs in Reducing Ozone</u> : How well does EPA’s vehicle inspection and maintenance program ensure that poorly performing vehicles are not only identified but effectively repaired?	X		
	3. <u>Assessment of EPA and State/Local/Tribal Agency Ozone Permits</u> : Are EPA regions and State/local/tribal agencies ensuring that volatile organic compound and nitrogen oxide permits (Title V, FESOP, Area, and other permits) incorporate the best emissions estimation techniques when written, and are they using the resultant information to ensure State Implementation Plan (SIP) progress deadlines are met for Ozone?		X	
	4. <u>Effectiveness of Non-Road Emissions Reduction Strategies</u> : How effective have EPA’s efforts to reduce non-road mobile source emissions been, and what are the challenges and opportunities for additional reductions in such emissions?		X	
	5. <u>Cleaner Fuels Initiatives</u> : Have EPA’s expected emissions reductions for cleaner fuels been realized in actual on-road applications, including Tier I and Tier II fleets?			X

<b>Track 3: Air Toxics</b>  <i>How can EPA improve the effectiveness of its efforts to assess, monitor, control, and reduce the risks of toxic air pollutants to human health and the environment?</i>	1. <u>Air Toxics Emissions (accuracy, reliability)</u> : How do EPA, State, and local agencies ensure the accuracy and reliability of stationary and mobile source emissions?	X		
	2. <u>Ambient Air Toxics Monitoring (needs, capabilities, deficiencies)</u> : Has EPA established an adequate ambient air monitoring system for toxic air pollutants, taking into consideration short- and long-term needs for ambient air toxics data?	X		
	3. <u>State/Local/Tribal Agency Air Toxics Implementation (people, processes, technology, data systems, infrastructure, permitting, fees, incentive structures)</u> : How well are EPA and State/local/tribal agencies carrying out their roles of assessing the risks of air toxics exposure; monitoring for air toxics on a national, regional, and local basis; and mitigating risks?		X	
	4. <u>Evaluation of EPA's Air Toxics Source Characterization and Control Strategies Development</u> : What progress have EPA and State/local/tribal agencies made in characterizing air toxics sources and developing effective control strategies?		X	
	5. <u>Quality of State/Local/Tribal Agency Inspections for Air Toxics (people, processes, technology, incentives)</u> : How well are State/local/tribal agencies ensuring stationary, mobile, and area source compliance with air toxics standards and permit conditions, including ensuring that facilities report accurate, reliable emissions information?			X
	6. <u>Air Toxics Exposure Assessments/Risk Reduction Activities (cancer and non-cancer risks, synergistic effects)</u> : How well is EPA carrying out its responsibilities to assess the health and ecological impacts of toxic air pollutants and minimize health risks?			X
<b>Track 4: Challenges to Continued Further Progress</b>  <i>How can EPA maximize the contributions of State, local, and tribal agencies in continuing the progress toward meeting clean air goals?</i>	1. <u>Alternative Compliance Under Economic Incentive Programs</u> : What are the design, implementation, accountability, and enforcement issues associated with ensuring that EPA's Open Market Trading program meets clean air program goals?	X		
	2. <u>Regulatory flexibility under Project XL</u> : What are the design, methodology, assumptions, and limitations, if any, associated with EPA's proposal to approve a precedent-setting asbestos demolition and renovation project under the Project XL Program?	X		
	3. <u>Title V Permit Quality</u> : How well do issued Title V permits meet clean air goals, and what is the impact, if any, of emissions waivers and variances for start-up, shut-down, and malfunctions?	X		
	4. <u>Air Program Fee Collections</u> : Are State/local/tribal agency fee assessments, collections, and use sufficient to ensure program success, and what alternatives and best practices are available to alleviate funding shortfalls?		X	
	5. <u>Effectiveness of Alternatives</u> : What are the opportunities, limitations, and challenges associated with allowing State/local/tribal agencies to pursue less costly compliance alternatives?			X
	6. <u>Laboratory Assessment</u> : How well are EPA and State/local/tribal agencies ensuring that laboratories used by regulators and the regulated community meet EPA's quality assurance/quality control standards and data quality objectives?			X

## Chapter 3: Water

Ensuring that the water that comes out of the tap is safe to drink, and that our nation's surface and groundwater resources are protected, are among the Federal government's most important functions. EPA leads this effort, although other Federal agencies (notably U.S. Department of Agriculture's Natural Resources Conservation Service and Department of the Interior's U.S. Geological Survey) also are actively involved. EPA's budget for conducting its share of this work is approximately \$4 billion, of which more than 80 percent goes for grants to States and tribes. This constitutes 41 percent of EPA's overall budget.

The two principal laws passed by Congress to protect water resources and ensure safe drinking water are showing signs of wear. The Clean Water Act turned 30 this year, and the Safe Drinking Water Act will turn 27. In these laws, Congress provided EPA with a set of tools to move the nation toward goals of an assured supply of safe drinking and surface water. Although additional programs have been added to these laws through amendments, the basic structure created three decades ago remains intact. To some, the issues seem more complex, the relationships between Federal and State levels of government more inefficient, and governmental resources increasingly strained.

EPA's clean water program is facing challenges in several areas. One is in performance measurement and assessment. There are many unanswered questions about the environmental and health status of the nation's water resources, as well as the performance of EPA's programs and activities. In addition, many mature programs (such as water quality standards, the National Pollutant Discharge Elimination System (NPDES), and effluent guidelines) are suffering from inattention or inadequate funding, while newer programs (such as Total Maximum Daily Load (TMDL), watershed permitting, and drinking water capacity development) have uncertain futures. Moreover, recent projections of needed spending for drinking water and wastewater infrastructure is in the hundreds of billions of dollars.

### **Proposed Areas of Work**

The three key tracks we will be following in regard to water are:

TRACK	DESCRIPTION
1.	Evaluating EPA's implementation of the Safe Drinking Water Amendments of 1996.
2.	Evaluating EPA's progress toward implementing watershed protection approaches and the adequacy of information to support water quality decisions.
3.	Evaluating progress toward reducing pollutant loadings into the nation's waters.

Each track will be comprised of a progression of studies designed to answer questions such as:

- What are the Agency's plans for addressing clean and safe water needs?
- To what extent do EPA and States have reliable and cost-effective information for running the program and evaluating results?
- What environmental and institutional factors influence the effectiveness of the program? How effective and efficient has the program been in meeting program goals?
- What changes are necessary to increase the program's effectiveness and efficiency?

## **Track 1: EPA's Implementation of the Safe Drinking Water Amendments of 1996**

The nation's public water systems are facing a number of threats from unregulated contaminants and unfunded infrastructure needs. The problem is especially serious for small water systems -- those serving fewer than 10,000 people. Congress enacted major changes to the Safe Drinking Water Act (SDWA) in 1996 to address these threats. New programs were created to broaden Federal protection against contaminants, improve communication of risks to consumers, and increase the future viability of public water systems. These programs have not yet been evaluated, and a comprehensive and holistic review of the implementation of the SDWA will provide valuable information to EPA and the public.

One area of emphasis is the Drinking Water State Revolving Fund (DWSRF). The DWSRF provides Federal financial assistance to States, localities, and tribal governments for the construction of drinking water treatment facilities. Since 1996, EPA has provided \$4.4 billion in DWSRF capitalization grants. OIG is responsible for auditing DWSRFs for seven States, and our strategy is to review these States once every 3 years. For the other States, OIG reviews audit reports that States submit. At EPA's request, the OIG also provides consulting services to States. We will conduct financial audits and effectiveness evaluations of this program.

*Within Track 1, we plan to evaluate and provide information on the following questions:*

- To what extent are estimates of performance of public water supplies accurate and reliable?
- How effectively are EPA and States assisting utilities to develop capacity to address future challenges?
- How fully are States and EPA implementing SDWA tools?
- To what extent are operator certification programs successful in increasing the proficiency of public water supply operators?
- How effectively are States assessing and protecting source waters?
- Are recipients achieving the goals of their assistance agreements?
- Are the results of assistance agreements contributing to the attainment of EPA goals?
- How effective is EPA's measurement of the results of assistance agreements?
- How well are EPA and State/local/tribal agencies ensuring that laboratories used by regulators and the regulated community meet EPA quality assurance/control standards and data quality objectives?
- How complete and thorough is EPA's process for identifying new contaminants for regulatory consideration (Contaminant Candidate List under the SDWA amendments)?
- What has been the impact of recent drinking water standards?
- What is the impact of drinking water regulations and requirements on small communities?
- Do EPA and other States have systems and processes in place to ensure DWSRF financial integrity?

## **Track 2: Watershed Protection, and Effective Water Quality Monitoring**

Currently, point sources of pollution (basically publicly owned treatment works and industries) are controlled individually, and non-point sources of pollution (e.g., runoff from cities and agricultural areas) are uncontrolled. This source-by-source approach has been criticized for being inefficient and incomplete. The Office of Water announced a new approach whereby the right to discharge pollutants will be traded among sources within a watershed. Watershed planning and permitting require additional information, analytical resources, communication, and coordination with States and localities. We will monitor and evaluate the Office of Water's proposed watershed initiative to assist design and implementation.

The system for acquiring and analyzing water quality information for basing EPA's management decisions is flawed. The Clean Water Act invests primary responsibility on the States for gathering and reporting data, and in past years we issued a number of reports detailing deficiencies in this information. In addition, there are currently several management challenges relating to these activities, and Office of Water is developing new guidance and policy for State monitoring programs. We plan to assess State responses to these initiatives and consider options for these programs.

*Within Track 2, we plan to evaluate and provide information on the following questions:*

- What are the informational and analytical needs for managing pollution sources by watershed?
- What are the capabilities and needs of States, local communities, and other stakeholders to implement a watershed approach?
- How successfully have effluent trading programs resulted in environmental gains at reduced cost?
- What information does Congress, EPA, and the public need to run the clean water program?
- To what extent does EPA have the information it needs to manage the clean water program in an effective and efficient manner?
- How adequate is EPA's measurement of TMDL progress, and to what extent do TMDLs improve water quality? How will the TMDL program's progress impact the effluent trading program?

## **Track 3: Reducing Pollutant Loadings**

The core of EPA's clean water program is directed toward reducing pollutant loadings. In 2002, we began a comprehensive review of the core water programs, starting with water quality criteria and effluent guidelines. We will continue with NPDES, water quality standards, and State revolving grants, followed by non-point source issues and coordination issues in later years. One of our objectives is to assess the effectiveness and efficiency of different policy tools for reducing loadings and thereby meeting water quality goals. Findings and conclusions from these studies will help the Office of Water determine future directions for these programs, and will be provided to Congress for legislative deliberations.

One area of emphasis is the Clean Water State Revolving Fund (CWSRF). The CWSRF provides Federal financial assistance to States, localities, and tribal governments to protect the Nation's water resources by providing funds for the construction of wastewater treatment facilities. These funds are significant financial tools for achieving clean water and helping to meet the significant needs for wastewater infrastructure over the next 20 years. Since 1987, EPA has provided \$18.5 billion of capitalization grants through the CWSRF, which has resulted in 8,759 projects. We will conduct financial audits and effectiveness evaluations of this program. OIG is responsible for auditing CWSRFs for seven States, and

our strategy is to review these States once every 3 years. For the other States, OIG reviews the audit reports the States submit. At EPA's request, OIG also provides consulting services to States.

***Within Track 3, we plan to evaluate and provide information on the following questions:***

- What is the impact of the NPDES permit backlog on water quality and the effectiveness of water quality programs?
- How adequate is EPA's measurement of TMDL progress and to what extent do TMDLs result in water quality improvements?
- How adequate is EPA's measurement of the results of assistance agreements?
- Are recipients achieving the goals of their assistance agreements?
- Are the results of the assistance agreements contributing to the attainment of EPA goals?
- What approach is EPA using to reduce non-point source loadings? How effective is it?
- What, if any, is the relationship between grants to address non-point sources and improvements in water quality?
- How has the NPDES program been implemented to address high-priority point source contributors?
- What interstate and inter-regional variations exist in setting priorities for resource allocations in permit programs?
- How does the major/minor designation of a permittee impact on the effectiveness of the NPDES program in reducing loadings?
- Do EPA and the States have systems and processes in place to ensure the financial integrity of the CWSRF?
- What is the effect of EPA's compliance program on EPA's goal to achieve reduced loadings?
- What is the relative effectiveness of different approaches toward reducing pollutant loadings?



Issue	Planned Water Evaluation/Audit Projects	Fiscal Year Start		
		2003	2004	2005
<b>Track 1: Drinking Water</b>  <i>How can EPA effectively implement the Safe Drinking Water Amendments of 1996?</i>	1. Capacity Development	X		
	2. Safe Drinking Water Information System as a GPRA Measure	X		
	3. Operator Certification	X		
	4. Implementation of SDWA Tools by EPA and States	X	X	
	5. Implementation of the Contaminant Candidate List process		X	
	6. DWSRF Results		X	
	7. Financial Audit of DWSRF	X	X	X
	8. Erroneous DWSRF Payments	X	X	X
	9. Impacts of Regulations on Small Community Systems		X	
	10. Source Water Assessment			X
	11. Costs and Benefits of Drinking Water Regulations			X
	12. Laboratory Assessments			X
<b>Track 2: Watershed Protection</b>  <i>How can EPA effectively control, protect and monitor watersheds and water quality?</i>	1. Watershed Capacity	X		
	2. Monitoring and Assessment		X	
	3. TMDLs		X	
	4. Effluent Trading			X
<b>Track 3: Reduced Loadings</b>  <i>How can EPA effectively use and improve policy tools to reduce water pollutant loadings?</i>	1. Effluent Guidelines	X		
	2. Permit Compliance System	X		
	3. Pretreatment	X		
	4. Permit Backlog	X		
	5. Grants and Other Tools for Controlling Non-Point Sources of Pollution	X		
	6. Non-Point Source Grant Effectiveness		X	
	7. NPDES Effectiveness		X	
	8. CWSRF Results		X	
	9. Financial Audit of CWSRF	X	X	X
	10. Erroneous CWSRF Payments	X	X	X
	11. Clean Water Compliance Issues			X
	12. Relative Effectiveness of Policy Tools			X

## Chapter 4: Land

EPA addresses vast and complex environmental issues in its waste management and cleanup programs. There are approximately 1,234 national priority hazardous waste sites throughout the United States and an estimated 60 million Americans live within 4 miles of one. Some of the most common contaminants at hazardous waste sites are also the most difficult to clean up, and cleanup may take up to 30 years. There are an estimated 450,000-650,000 Brownfields properties across the nation, where property use is complicated by the presence or potential presence of a hazardous substance. In addition, uncertainty about environmental contamination contributes to abandoned or underutilized properties that can create major obstacles to social or economic vitality and growth in communities. In 2000, U.S. residents, businesses, and institutions produced nearly 232 million tons of municipal solid waste, or approximately 4.5 pounds per person per day. Part of this waste is stored in one of approximately 3,500 municipal landfills in the United States. Further, industrial facilities generate about 7.6 billion tons of non-hazardous industrial waste.

EPA addresses these broad challenges and issues through its major Better Waste Management programs. These programs include Superfund, Brownfields, and the Resource Conservation and Recovery Act (RCRA). In fiscal 2002, these programs absorbed almost 25 percent of EPA's total budget and workforce, and together accounted for over 70 percent of EPA's waste management program dollars. Over the years, these programs have made progress toward their goals. The Superfund program continues to make progress in implementing cleanup actions and contaminant removal, and deleting waste sites from the National Priorities List (NPL). In its pilot stage, Brownfields achieved success in conducting site assessments and leveraging community redevelopment dollars to help revitalize underutilized or abandoned properties. RCRA has achieved success in controlling human exposure to contaminants and in migration of contaminated groundwater from RCRA facilities, and in ensuring that facilities are better managed. However, despite this progress, as these programs have matured, challenges and questions have emerged.

### Proposed Areas of Work

The three key tracks we will be following in regard to land are:

TRACK	DESCRIPTION
1.	Superfund progress toward effective risk reduction and waste cleanup.
2.	Brownfields progress toward effective risk reduction, cleanup, & restoring previously polluted sites.
3.	RCRA progress toward effective waste and hazardous material management, and risk reduction.

For Superfund, EPA may face significant challenges in paying for cleanups, based on current Trust Fund balances and expected cleanup needs. An EPA Superfund official acknowledged at a National Advisory Committee meeting that, in 2002, EPA had seen a Superfund budget shortfall for the first time which, according to media accounts of the official's statement, totaled \$200 million. Concern about Superfund's financial situation has generated suggestions for running the program more efficiently, as well as legislation to reauthorize taxes on industry, which forms the basis of the Superfund. The challenges facing Superfund have also prompted EPA to establish a national committee of experts to study and provide recommendations on the future structure and direction of the program. The committee has been asked to look at the role and purpose of the NPL, how to address potentially complex and expensive contaminated sediment and mining sites (mega-sites), and how to measure Superfund program progress.

Key challenges in the Brownfields program are largely related to EPA's ability to implement the newly authorized nationwide Brownfields program. The Small Business Liability Relief and Brownfields Revitalization Act was signed in January 2002. Although the Office of Brownfields Cleanup and Redevelopment has since taken important steps to develop guidelines and made progress in developing new performance measures, challenges remain.

Regarding RCRA, it is anticipated that RCRA will need to change in order to meet the environmental challenges of the coming decades. Changes would be necessary to accommodate and respond to continuing trends in the use of more chemicals and new chemical risks; improved methods for measuring and managing chemical risks; a more global and integrated world economy; and new technologies and industries affecting how resources are used and disposed of, among others. For example, consumers now acquire and dispose of large quantities of computers that were not widely available almost 27 years ago, when RCRA was enacted.

## **Track 1: Superfund**

**Overall Objective:** Produce results toward ensuring that EPA can, and is, making progress toward effective risk reduction and waste cleanup.

### **Scope and Questions**

In fiscal 2002, the Superfund program budget was approximately \$827 million, more than half (54 percent) of EPA's waste management dollars. In addition to planning criteria discussed in Chapter 1, the scope of our efforts in this area are influenced by EPA's ongoing efforts in formulating potential new policies related to specific Superfund components, including the role of the NPL and the nature of potential Superfund mega-sites. Consistent with OIG evaluation principles focused on assessing program/organization systems, we will also address human capital issues in the Superfund program.

### ***Role of the Superfund NPL***

We will evaluate the capacity and effectiveness of State hazardous waste cleanup programs. Unlike other major environmental programs (e.g., Clean Air, RCRA, Clean Water), the Superfund program is not delegated to States. However, some States serve as the lead agency on Superfund cleanups, and States have a responsibility to oversee and complete Superfund cleanups that require long-term response actions. Also, because of the current Superfund financial problems, EPA may place fewer sites on the NPL, thus placing more cleanup responsibility on the States. We anticipate that our work will produce results that indicate the potential viability of such an approach. We also anticipate that this work will also allow us to provide information related to Superfund reauthorization discussions. Questions we anticipate addressing are:

- How effective have States been at hazardous waste cleanup, and what is their capacity (financial, human capital, technical) to accommodate future actions?
- Are there key performance factors, characteristics, or best State hazardous waste cleanup programs that distinguish some programs from others?

Our mega-sites work will initially focus on collecting information to determine the potential nature of the mega-site problem, including types of mega-sites (e.g., contaminated sediment sites), potential cleanup costs, and potential human health and environmental risks. We will report on costs and risks associated with known sites, as well as estimated costs and risk associated with potential EPA-funded sites. This work contributes to EPA's need for program management information in this area. This is particularly important since EPA currently has a need to better understand the nature of the mega-site problem and evaluate policy options in light of this. In addition, we have developed a methodology for collecting information on potential and existing hardrock mining mega-sites, which we are currently using. Questions we anticipate addressing are:

- What types or categories of mega-sites have been identified to date and what types or categories do we expect to address in the future?
- What is the known or estimated financial impact (to States and EPA) and environmental impact of these mega-sites?

Continued or increased reliance on obtaining cleanup services from the U.S. Army Corps of Engineers (USACE), through the use of Interagency Agreements, is anticipated given the expected costs associated with mega-site cleanups (i.e., greater than \$50 million) and the level of USACE involvement in Superfund

cleanups. USACE services are used on any cleanup action in excess of \$15 million. Earlier OIG work found that EPA was not always aware of the qualifications of servicing agencies or their contractors and that, in one case, contractors obtained through the Interagency Agreement process could not deliver services they said they could. A question related to cleanup of mega-sites we plan to address is:

- Given the generally expected higher costs and complexities of mega-site cleanups, and expected use of Interagency Agreements and USACE involvement, what is the increased risk of fraud, waste, or abuse in mega-site cleanup activities and management of contracts?

Awarding and managing contracts are major activities in the cleanup of Superfund NPL sites. We also plan to address the following global questions regarding Superfund contracts and costs:

- How does the Agency decide what to buy and when to buy products or services involved in Superfund cleanup activities? (procurement planning)
- How does the Agency decide how and from whom to buy products or services involved in Superfund cleanup activities? (preaward management)
- Does the Agency ensure delivery of goods and services purchased for Superfund cleanup activities? (post award management)
- Does the Agency ensure that it is paying reasonable prices for products or services involved in Superfund cleanup activities? (post award management)
- Does the Agency use lessons learned in subsequent acquisitions for products or services involved in Superfund cleanup activities? (post award management)
- What actions does the Agency need to take so managers have an appropriate level of cost data to make sound decisions that can ultimately improve the effectiveness and efficiency of Superfund cleanup operations? (managerial cost accounting issues)

### ***Superfund Human Capital***

In its July 2001 report on the costs of Superfund, Resources for the Future (a non-profit organization that conducts independent research on economic issues related to the environment) raised questions about the costs to manage the Superfund program. However, the report was unable to include evaluation of the level of Superfund program resources going to program management, policy, and administrative support functions. The Agency suggested that we address these issues. In fiscal 1999, staffing activities accounted for just over a third of all EPA's Superfund expenditures. Decisionmakers need information on Superfund staffing costs and deployment in evaluating the program's structure. We anticipate that this work will also allow us to provide information related to Superfund reauthorization discussions, and will support EPA's program management capabilities by providing key information on a major expenditure area. In addition, OIG has designated EPA's human capital management as an Agency-level weakness for fiscal 2002. Within the Superfund program, we plan to assess and provide information on:

- What is the makeup of the Superfund program workforce at headquarters and regions (i.e., number and type of Full-Time Equivalents (FTEs))?
- How is this workforce deployed throughout the organization to achieve the Agency's goals for the Superfund program?
- What are the trends in FTEs, skills, and organizational deployment of the Superfund workforce?
- What changes have occurred in the skill mix or deployment of Superfund staff to reflect major programmatic changes or budgetary changes?

## **Track 2: Brownfields**

**Overall Objective:** Respond to Congressional mandate and produce results toward ensuring that EPA can, and is, making progress toward effective risk reduction, cleanup, and restoring of previously polluted sites to appropriate uses.

### **Scope and Questions**

A primary goal of Brownfields is the assessment, cleanup, and reuse of properties with perceived or actual environmental contamination. In fiscal 2002, the Brownfields program budget was \$97.6 million, accounting for approximately 6 percent of EPA's waste management program dollars. But the 2002 Brownfields Act authorized \$200 million, or more than twice the fiscal 2002 appropriated amount. Under this Act, OIG has a mandate to report on the management of the Brownfields program no later than 2005. In addition, the law allows OIG to conduct audits of Brownfields grants. We plan to conduct work over the next several years that will allow us to be responsive to the mandate and address our overall objective. We anticipate that we will focus and tailor our work to specific sections of the new law, given that Brownfields is comprised of several subprograms focusing on different program activities (i.e., assessment grants, cleanup grants, and enhancing State response programs). We expect that our work will identify and discuss results of the Brownfields program, factors that facilitate and present obstacles to results, and relevant options to address limitations.

Our review will incorporate key components of environmental management reviews, including use of organizational systems theories to evaluate program performance. This work will provide us with the framework and plan for carrying out our mandated review. Questions we anticipate addressing include:

- What are the program's environmental objectives, performance measures, and performance data?
- What are the program's costs?
- Have there been identified regulatory noncompliance, violations, and/or enforcement actions?
- What are the expectations/concerns associated with Brownfields activities or support expressed by internal or external stakeholders?
- What are the trends in performance, cycle time, cost, and customer satisfaction?
- What are the implications of performance results and trend analysis, and how are they factored into the systems (leadership, strategic planning, budget, information analysis, human capital, and process management)?
- What data systems does the Brownfields office use to collect and control performance data?
- What is the quality of the data used to manage the Brownfields program?
- Who collects the data and how is it aggregated to the organizational level?
- Has a Brownfields program workforce planning strategy been developed?
- What types of education, training, and developmental opportunities does the program office provide to help build the employee competencies needed to achieve the office's shared vision?
- Are best practices used in delivering products and obtaining the desired results?
- Has the office changed its skill mix and structure to reflect increased emphasis on e-government and competitive sourcing?

EPA plans to use grants and revolving loan funds as primary vehicles for Brownfields assessments and cleanups. As a result, we plan to perform grant audits to answer questions such as:

- Is EPA efficiently managing and overseeing the grants and revolving loan funds?
- Were grants awarded to eligible entities that had the highest rankings?
- Is EPA adequately monitoring grantee performance?
- Is EPA effectively using grants and revolving loan funds for assessment, cleanup, and reuse of properties with perceived or actual environmental contamination?
- Are recipients achieving the goals of their assistance grants?
- Are the results of the grants contributing to attainment of EPA goals?
- Is EPA measuring results of grants?

### **Track 3: Resource Conservation and Recovery Act**

**Overall Objective:** Produce results toward ensuring that EPA can, and is, making progress toward effective waste management, hazardous material management, and risk reduction in relation to RCRA.

#### **Scope and Questions**

In fiscal 2002, RCRA program budgets were \$159 million, accounting for approximately 10 percent of EPA's waste management program dollars. According to EPA, there are over 6,500 sites that are subject to RCRA waste management laws and regulations. We are proposing work to evaluate EPA's progress and information on the need for planned changes to RCRA regulations based on future challenges and opportunities concerning waste and materials management.

In a recent paper on the future of the RCRA program, the EPA-State RCRA Vision Workgroup indicated that the current system for waste management in the United States (i.e., RCRA) will need to change in order to meet the environmental challenges of the coming decades. For example, they suggest changes would be necessary to accommodate and respond to continuing trends in the use of more chemicals and new chemical risks; improved methods for measuring and managing chemical risks; a more global and integrated world economy; and new technologies and industries affecting how resources are used and disposed of. Recent initiatives by the White House Environmental Executive to address the growing problem of computer waste (not a major issue when RCRA was enacted almost 27 years ago) is evidence of the need to consider future challenges and priorities in waste and materials management and EPA's capacity to identify and address these issues.

We believe our work will produce information that contributes to helping EPA improve human health and sustain environmental quality in the future through potentially more effective, relevant RCRA program components and management information. Specifically, we plan to evaluate and provide information on:

- What are the future challenges and opportunities that will require changes, modifications, or innovations in our current waste management programs and regulations?
- What type of management information and data is needed to evaluate and track the adequacy of current RCRA regulations as they pertain to addressing future waste management challenges and opportunities?
- Are EPA or other Federal agencies monitoring or collecting the type of program management information needed to make possible adjustments to the RCRA program?

Issue	Planned Land Evaluation/Audit Projects	Fiscal Year Start		
		2003	2004	2005
<b>Track 1</b> <b>SUPERFUND</b> <b>-Role of the NPL</b> <b>-Human capital</b>  <i>Is EPA making progress toward effective risk reduction and waste cleanup?</i>	1. State Capacity Assessments	X	X	
	2. Effectiveness of State Programs/Best Practices	X	X	X
	3. Contracting Issues/Interagency Agreements	X	X	
	4. Information Collection and Analysis	X	X	
<b>Track 2</b> <b>BROWNFIELDS</b>  <i>Is EPA making progress toward effective risk reduction, cleanup, and restoring previously polluted sites to appropriate uses?</i>	1. Program Implementation–Workgroup Activities	X		
	2. Development of Management Review Framework	X		
	3. Management Review	X	X	X
	4. Assistance Agreement Audits		X	
<b>Track 3</b> <b>RCRA</b>  <i>Is EPA making progress toward effective waste management, hazardous material management, and risk reduction?</i>	1. Waste Management Trends and Future Challenges	X	X	
	2. Management Information Needs and Federal Government Tracking Capacity		X	X

## Chapter 5: Cross-Media

EPA is responsible for acting on numerous environmental threats to our communities and ecosystems that transcend air, water, and land. The significance and complexity of these cross-media challenges was tragically demonstrated by the events of September 11 and subsequent anthrax attacks in 2001. The National Strategy for Homeland Security designates EPA as the lead agency for 2 of the nation's 14 critical infrastructure sectors: the water sector, and the chemical industry and hazardous materials sector. In 2002, additional funds were allocated to assist those assessing infrastructure vulnerabilities, and to enhance the Agency's response capabilities (i.e., research and development of new technologies to detect, monitor, and neutralize environmental threats). EPA is also applying its knowledge and experience to support other Federal agencies' efforts to secure the nation's food, transportation, and energy infrastructure. Funding for these lead and support activities is projected to dramatically increase in the near term, and the outcomes of these new EPA initiatives will have material impacts on human health and the environment in the event of a terrorist attack. OIG will oversee the efficiency and effectiveness of the Agency's external grants and internal enhancements to address cyber, chemical, biological, and radiological threats. Moreover, OIG is responsible for assessing cyber threat information that specifically targets EPA's computer infrastructure.

OIG will also assess and report on several additional Agency programs that have important cross-media implications for human health and the environment. We selected several key areas to evaluate based on several criteria, including congressional concern and EPA priorities. Specifically, we will evaluate:

- Environmental justice, which is a continuing Agency priority and community concern that has implications for air, water, and land programs. Measuring and monitoring environmental justice is a heightened concern when environmental enhancement tools incorporate market-based incentives (e.g., air emission credit trading, water discharge credit trading) to promote regulatory compliance and environmental quality.
- Environmental stewardship by States and tribes, which is crucial for EPA to achieve its goals and objectives because these governments execute significant portions of EPA's regulatory mandate. How well States and tribes use EPA funds and implement EPA guidance may strongly impact human health and environmental quality both locally and nationally.
- Compliance assurance and enforcement practices and procedures, which have seen considerable innovation in recent years, and exhibit considerable variation among locations and commercial sectors. There are potential benefits for human health and the environment through enhanced compliance consensus on the most effective techniques.

This body of work will enable OIG to determine the effectiveness, accountability, and equity of selected key environmental programs. OIG's planned work in these areas will substantially enhance the Agency's understanding of the quality of EPA partnerships, the effectiveness of regulatory compliance alternatives, and the equity implications, if any, of selected Agency programs and policies.

### **Proposed Areas of Work**

The four key tracks we will be following in regard to cross-media issues are:

<b>TRACK</b>	<b>DESCRIPTION</b>
1.	Homeland Security
2.	Environmental Stewardship
3.	Environmental Justice
4.	Compliance Assurance and Enforcement



## **Track 1: Homeland Security**

***Key Question: How can EPA better execute its Strategic Plan to prevent, prepare for, and respond to a terrorist attack to minimize adverse impacts on human health and the environment?***

In support of the Administration's Homeland Security strategy, EPA has developed a strategic plan to execute its primary mission of protecting human health and safeguarding the environment. EPA is the key agency for crisis and consequence management responsibilities under various Federal preparedness and response plans, and must be ready to deploy this expertise and capability to help to detect, prevent, protect against, respond to, and recover from a terrorist attack. The goals of EPA's strategic plan are comprised of four mission-critical areas: Critical Infrastructure Protection; Preparedness, Response, and Recovery; Communication and Information; and Protection of EPA Personnel and Infrastructure. The Public Health Security and Bio-terrorism Response Act of 2002 reinforces the Agency's role in assessing and responding to water system vulnerabilities. OIG will help ensure that additional EPA appropriations supporting homeland security are spent efficiently and effectively.

Moreover, OIG is responsible for assessing cyber threat information that affects EPA's computer infrastructure, and will initiate appropriate investigative responses as needed. OIG will be prepared to work with EPA to help detect, prevent, protect against, and respond to and recover from a terrorist attack.

OIG will organize its assessment of EPA homeland security along topical responsibilities: water and wastewater security, chemical facility security, food safety, and safe buildings. EPA is already engaged in water and wastewater security, and received supplemental funds in fiscal 2002 to fund water utility vulnerability assessments for the nation's largest drinking water systems. The Agency will develop and provide guidance, training, and technical and financial assistance to aid water systems. The Agency has established a goal of significantly reducing unacceptable security risks at water utilities by 2005. This is to be achieved through the completion of vulnerability assessments, the design of security enhancements, the development of emergency response plans, and the implementation of security enhancements.

Many of the concerns that apply to water security will be applicable to the other Agency priorities as well. Therefore, OIG will construct an assessment template in its review of the water program that can be applied to chemicals, food, and buildings. The template will encompass assessments of threat, capabilities and deficiencies, readiness, management, and effectiveness. The mix of questions can include – but is not limited to – the following:

- **Threats, Risks, and Vulnerabilities:** How are threats and risks identified and validated? How are threat assessments to be conducted? What criteria and process will be used to determine whether vulnerability assessments are satisfactory? How are assessments disseminated, accessed, and stored?
- **Preparedness:** Do emergency response plans reflect the findings of the vulnerability assessments? What is the emergency response concept of operations and how are the roles, responsibilities, and activities of the respective stakeholders identified, coordinated, and exercised?
- **Capabilities:** What capabilities are required by each stakeholder to implement the emergency response plans? What is EPA's role in identifying and addressing challenges that may impede implementation of emergency response plans? How will stakeholders compensate for challenges (in the short term) and resolve them (in the long term)?
- **Research and Technology Assessment:** How will EPA identify and prioritize goals in its homeland security research plan? How will the Agency's research and development complement work in other agencies and the private sector? How will the Agency select the technologies to initiate its technology verification program?
- **Financial Assistance:** Are current and planned security grants sufficient to achieve the Agency's security goals? Are the grants effective in achieving the Agency's goals? Are grants awarded directly to utilities more or less efficient than those administered through the States?

- Oversight and Effectiveness: Are management and financial controls in place to prevent waste, fraud, and abuse by contractors? Are agreements and understandings in place to ensure coordination of functional activities contracted by operators and government agencies? Are measurable goals and objectives established? To what extent will vulnerability assessments and emergency response plans minimize the potential adverse effects of terrorist actions on human health and the environment?

## **Track 2: Environmental Stewardship**

### ***Key Question: Do the States and tribes use high performance concepts to deliver environmental and human health protection?***

The extensive delegation of authority and responsibilities for the implementation of environmental laws and regulations is unique within the Federal Government. EPA's ability to enhance human health and the environment is directly dependent upon the success of individual State and tribal environmental programs. The same factors that impact EPA's ability to be successful (resources, practices, expertise, etc.) impact the States as well. The application of High Performance Organization (HPO) principles and the President's Management Scorecard (e.g., for "getting to green") can provide us with an opportunity to influence the States to correct management problems that prevent EPA from accomplishing its mission.

OIG will assess composite State capacities, capabilities, and effectiveness in environmental stewardship across media and EPA goals. This work will complement the human capital work focusing on EPA outlined in Chapter 6 of this plan. State assessments will encompass systems theories questions and address:

- Personnel: Does the State employ sufficient numbers of staff, with the appropriate skills and necessary authority, to plan, implement, manage, and evaluate the work?
- Oversight: Does the State have a system to deter, detect, and eliminate waste, fraud, abuse, and conflicts of interest?
- Efficiency: What is the efficiency of permitting? How do timeliness and outputs compare with similar States? Are reports to EPA comprehensive, timely, and accurate?
- Planning: Does the State have a system to collect, assess, and track data on environmental needs and trends? Has the State developed innovative means to improve processes or outputs?
- Effectiveness: Are State and tribal goals compatible with EPA's goals? How have environmental indicators changed under State management?
- Funding: Is the plan sufficiently funded? What is the value-added to EPA of not implementing the program itself?

The issue will be addressed in three phases. First, we will assess the use of HPO principles in State environmental programs as a pilot to determine the feasibility of collecting HPO data on planning, management, and data systems. Second, we will determine the indicators of environmental stewardship, again using a pilot that will develop and apply measures of stewardship. If the pilot proves successful, the OIG will develop a "report card" of environmental stewardship by linking HPO conditions with stewardship indicators to identify correlations and develop best practices. The ultimate goal would be to report to the Agency and Congress the pros and cons, cost and benefits, and lessons learned with this decentralized model – as it is practiced in the execution of environmental legislation.

This line of effort will incorporate ongoing OIG work assessing the effectiveness of assistance agreements – specifically addressing State self-assessments, General Assistance Grants to Indian tribes, and the Louisiana Department of Environmental Quality – to establish benchmarks for State and tribal practices and to guide evaluation priorities.

### **Track 3: Environmental Justice**

***Key Questions: How well are environmental justice concerns incorporated into EPA decision making? Do EPA policies and practices disproportionately contribute to adverse impacts on human health and the environment in communities of concern?***

Administrator Whitman has affirmed EPA's commitment to environmental justice. Environmental justice means the fair treatment of people of all races, cultures, and incomes with respect to the development, implementation, and enforcement of all environmental laws and policies and their meaningful involvement in the government's decisionmaking processes. The Administrator recommended that EPA ensure greater public participation in EPA's development and implementation of environmental regulations and policies.

In December 2001, the National Academy of Public Administration issued a report, "Environmental Justice in EPA Permitting: Reducing Pollution in High-Risk Communities Is Integral to the Agency's Mission," that found that the EPA's environmental justice efforts need to be better integrated into its programs and implemented as part of the Agency's core mission. The Academy recommended that EPA establish clear accountability for results and use appropriate public administration techniques to ensure managers and staff are willing to execute their responsibilities for achieving environmental justice.

OIG will answer whether: (1) environmental justice concerns are appropriately incorporated in EPA decision making policies and practices, and (2) Agency policies and practices enhance or exacerbate environmental impacts in communities of concern. To answer these overarching questions, OIG will answer a series of programmatic questions:

- Descriptive questions will address: How is it operationally measured? Are measures consistent across program offices, regions, and Federal agencies? Are measurement data reliable and valid?
- We will then assess the impact of selected media programs on environmental justice: Does air emission credit trading create or exacerbate environmental justice? Does water emission credit trading result in disproportionate concentrations of adverse impacts? Are communities of concern disproportionately targeted for new hazardous waste disposal facilities?
- Finally, OIG will assess EPA procedures and practices to ensure that public participation in Agency decision making by community representatives is informed, timely, and effective.

### **Track 4: Compliance Assurance and Enforcement**

***Key Question: Is the employment of traditional and nontraditional enforcement approaches optimized to ensure compliance with environmental rules and regulations that are designed to protect human health and the environment?***

The enforcement of environmental regulations has become a source of both controversy and innovation in recent years. Stakeholders share divergent views on the most cost-effective means to ensure that environmental regulations are adhered to and result in improvements in the environment and human health. A study by the National Academy of Public Administration in 2000, "Transforming Environmental Protection for the 21<sup>st</sup> Century," was critical of the Agency's ability to develop and apply innovative compliance assurance and enforcement techniques. For the last few years the Administration and some members of Congress have debated the effectiveness of appropriations for Agency versus State-level enforcement personnel. Nevertheless, the Agency is conducting a multi-year grants program to foster enforcement innovation by the States.

The goals of EPA's traditional enforcement approach include a credible deterrence to pollution and greater compliance with the law. A debate exists between EPA and the States over deterrence versus cooperation as the optimal means for achieving compliance with environmental laws. In recent years, EPA has started to include compliance assurance and alternative enforcement as complements to the Agency's existing traditional enforcement approach of penalty assessments and legal action. The question remains as to whether nontraditional enforcement approaches are as effective and efficient as traditional ones.

This work will be conducted in four phases. First, OIG will conduct a descriptive study characterizing the nature and extent of the regulated universe. Second, OIG will assess whether the Office of Enforcement and Compliance Assurance (OECA) and its partners (EPA program offices, regions, States, and tribes) have established a well-coordinated process to identify and fund compliance assurance and enforcement priorities. Next, work will focus on whether OECA and its partners have effectively developed and implemented integrated strategies (compliance assistance, compliance incentives, inspections, and enforcement actions) to address priority non-compliance problems. Finally, the OIG will assess whether EPA’s performance measurement and reporting approach provides the information necessary to effectively manage and improve the national enforcement and compliance assurance program. This approach will be piloted in a single sector to ensure that the design is feasible and will answer whether employment of traditional and nontraditional enforcement approaches are optimized to ensure compliance with environmental rules and regulations that are designed to protect human health and the environment.

Issue	Planned Cross-Media Evaluation/Audit Projects	Fiscal Year Start		
		2003	2004	2005
<b>Track 1 Homeland Security</b>  <i>How can the Agency better execute its Strategic Plan?</i>	1. <u>Water Security</u> : How well is EPA carrying out its responsibilities to protect drinking water and wastewater infrastructures?	X		
	1a. <u>Water Security Grants</u> : Is EPA adequately monitoring grantee performance? Are the grants resulting in improvements in security of large drinking water systems?	X		
	2. <u>Chemical Facility Security</u> : How well is EPA carrying out its responsibilities as the lead for the chemical sector in terms of infrastructure protection and hazardous materials preparedness and response?		X	
	3. <u>Food Supply Safety</u> : How well is EPA carrying out its responsibilities assisting other Federal agencies in protecting the nation’s food supply?			X
	4. <u>Safe Buildings</u> : How well is EPA carrying out its responsibilities to protect indoor air from chemical and biological threats as well as toxic industrial materials and chemicals?	X		
	4a. <u>Equipment Purchases for Counter Terrorism Preparedness</u> : Should EPA stockpile normal response equipment and supplies? How did EPA determine needed quantities? Does EPA know that contractors do not have or cannot get needed quantities quickly? Have other ways to address the quantity concerns, such as setting up purchase agreements, been pursued? Will contractors receive Government-furnished equipment instead of buying equipment themselves? How will EPA track this equipment?	X		
<b>Track 2 State Environmental Stewardship</b>  <i>Do the States use high performance concepts to deliver environmental and human health protection?</i>	1. <u>Use of HPO Principles in State Environmental Programs</u> : Pilot the ability to collect HPO data on planning, management, and data systems.	X		
	1a. <u>State Self-Assessments</u> : Are EPA and States successfully using self assessments to promote achievement of environmental goals?	X		
	1b. <u>Oversight of Environmental Quality</u> : Is the region’s oversight of State environmental programs effective?	X		
	1c. <u>General Assistance Program Grants to Indian Tribes</u> : Have these grants resulted in core tribal environmental protection programs that are protecting human health and the environment on tribal lands?			X
	2. <u>Indicators of Environmental Stewardship</u> : Pilot the ability to develop and apply measures of stewardship to State environmental programs.		X	
	3. <u>Report Card of Environmental Stewardship</u> : Link HPO conditions with stewardship indicators to identify correlations and develop best practice.			X

<b>Track 3 Environmental Justice</b>  <i>How well are environmental justice concerns incorporated into EPA decisionmaking? Do EPA policies and practices disproportionately contribute to adverse impacts on human health and the environment in communities of concern?</i>	1. <u>Operation of Environmental Justice</u> : How is Environmental Justice defined and measured across media, regions, and States?	X		
	2. <u>Air Emissions Trading and Environmental Justice</u> : Does air emissions trading have disproportionate implications for communities of concern?	X		
	3. <u>Water Emissions Trading and Environmental Justice</u> : Does water emissions trading have disproportionate implications for communities of concern?		X	
	4. <u>Hazardous Waste Facility Siting and Environmental Justice</u> : Does the siting of hazardous waste facilities have disproportionate implications for communities of concern?			X
	5. <u>Effectiveness of Environmental Justice Tools in Agency Decision making</u> : Are Agency policies to facilitate Environmental Justice community participation in environmental decisionmaking effective?			X
<b>Track 4 Compliance Assurance and Enforcement</b>  <i>Is the employment of traditional and nontraditional enforcement approaches optimized to ensure compliance?</i>	1. <u>Characterization of Regulated Universe</u> : What is the nature and extent of the regulated universe and the compliance status of the priority categories (e.g., programs or sources), and what strategies have OECA and its partners (EPA program offices, regions, States, and tribes) applied to each priority category (e.g., program or source) in the universe?		X	
	2. <u>Coordination and Prioritization</u> : Have OECA and its partners (EPA program offices, regions, States, and tribes) established a well-coordinated process to identify and fund compliance assurance and enforcement priorities?		X	
	3. <u>Coordination of Strategies</u> : Have OECA and its partners (EPA program offices, regions, States, and tribes) effectively developed and implemented integrated strategies (compliance assurance, compliance incentives, inspections, and enforcement actions) to address priority non-compliance problems?			X
	4. <u>Effectiveness Measurement and Data Quality</u> : Does EPA's performance measurement and reporting approach provide the information necessary to effectively manage and improve the national enforcement and compliance assurance program?			X
	5. <u>Compliance Assurance and Enforcement Pilot</u> : The four questions described above will first be applied to a single sector to validate the design and confirm that sufficient reliable and valid data are available to evaluate the effectiveness of compliance assurance and enforcement strategies.	X		

## Chapter 6: Good Government

EPA delivers its environmental programs through a number of interrelated organizational systems. Having the right people, processes, systems, and information in place is essential to the Agency efficiently and effectively carrying out its mission. Having effective management systems in place also provides a strong deterrent to fraud, waste, and abuse.

For years, we have reported management challenges in a number of key management areas, such as: Information Resources Management and Data Quality, Employee Competencies, Assistance Agreements, Critical Infrastructure Protection, and Information Systems Security. Many of these management challenges mirror the President's Management Agenda items of Human Capital, Competitive Sourcing, Financial Performance, E-Government, and Budget/Performance Integration.

The Agency has made substantial progress in addressing some of its management challenges, such as integration of budget and performance information. In other areas, such as human capital, the Agency has only recently begun to address the issues. When we conduct each audit and evaluation, we will include assessing the organizational systems in place for Leadership, Strategic Planning, Customer/Stakeholder and Market Focus, Information and Analysis, Human Capital, Process Management, and Performance Results. We plan to help the Agency continue to strengthen its management infrastructure by performing projects that will answer these key questions:

- Do EPA's business systems and processes support efficient and effective accomplishment of environmental goals and help prevent and detect the existence of fraud, waste, and abuse?
- Does EPA manage its assistance agreements and contracts in a manner that supports efficient and effective accomplishment of environmental goals and helps detect and prevent the existence of fraud, waste, and abuse?

### Proposed Areas of Work

The five key tracks we will follow to answer those two key questions are:

TRACK	DESCRIPTION
1.	<b>Financial Management</b> - efforts to improve financial information available to manage programs and strengthen accountability.
2.	<b>Information Resources Management</b> - completeness, accuracy, timeliness, and usefulness of information for decisionmaking and accountability.
3.	<b>Program Management</b> - capability to plan, budget for, manage, and evaluate programs, including the human capital needed to support the Agency's mission.
4.	<b>Assistance Agreements</b> - use of assistance agreements to efficiently and effectively accomplish EPA's mission.
5.	<b>Contracts</b> - use of contracts to efficiently and effectively accomplish EPA's mission.

Some of the planned work will be performed to provide timely feedback to anticipated OMB and Congressional inquiries, and to address congressional mandates (financial statements, security program). All of our "Good Government" work is designed to strengthen the Agency's management systems and improve accountability for results.

## **Track 1: Financial Management**

The Chief Financial Officers Act and Government Management Reform Act, as well as the President's Management Agenda, recognize the significant role good financial management plays in managing programs and ensuring accountability to the American people. The following work is designed to support the Agency's activities to improve financial management of its \$8 billion budget and \$18 billion in assets. In doing this work, we will answer the following overarching question:

*Does EPA have the people, processes, and systems needed to efficiently provide timely, accurate, complete, and useful financial information for decisionmaking and accountability?*

### **Financial Statement Audits**

Our annual financial statement audits, carried out in accordance with the Government Management Reform Act, are intended to help bring about improvements in financial management practices, systems, and controls, so that timely, reliable information is available for managing Federal programs. We are required to answer the following questions:

- Are the financial statements fairly presented?
- Has EPA implemented adequate controls (including controls over computer operations) to ensure the integrity and reliability of financial data?
- Does management comply with applicable laws and regulations?
- Do Agency financial management systems comply with Federal accounting standards, the Standard General Ledger at the transaction level, and system requirements specified under the Federal Financial Management Improvement Act?

### **Efficiency and Effectiveness of Financial Management Functions**

To maximize environmental results with EPA's limited resources, it is critical for Agency financial managers to have the skills and systems to provide accurate and timely financial information and analyses to the Agency's program managers in an efficient manner. EPA has a decentralized financial management function, with financial management activities performed at EPA's 10 regions, Headquarters, and several other locations. Decentralization increases the risk of inefficiencies and inconsistencies. While EPA has consolidated several of its functions, opportunities exist to further streamline and integrate financial processes and systems, thereby driving down costs. Questions we will answer are:

- Is EPA using a human capital strategy that ensures financial management staff across the Agency have the skills needed to provide meaningful financial information and analyses to EPA program managers?
- Is EPA using e-business solutions (such as financial data warehousing and enterprise resource planning applications) whenever possible to provide more efficient, lower-cost operations?
- Are there opportunities for EPA to use best practices, both from within EPA as well as from other agencies, to improve its financial management processes?
- Has EPA taken or planned actions to expedite the issuance of its financial statements and to provide timely, useful financial information to program managers?

### **Managerial Cost Accounting**

The Administration and Congress have emphasized improving cost information to increase accountability and help ensure programs are carried out cost effectively. Program managers need cost information to compare the cost and benefits of various strategies, and to compare the cost of performing services in-house versus contracting out. Lack of detailed cost information can adversely impact every facet of operations, from budget

formulation and planning to program execution and the recovery of the costs of providing services to others. EPA recently selected an approach to enable program and regional offices to aggregate relevant cost information. We will evaluate the success of this approach and opportunities for improvement by examining cost accounting for key areas in EPA's achievement of its strategic goals. In particular, we will determine:

- Does EPA's cost accounting approach provide managers with timely, accurate, and relevant information on the cost of carrying out programs, enabling sound decisions that can ultimately improve program operations?

## **Track 2: Information Resources Management**

The reliability of information systems and data is key to successfully executing EPA's mission, business processes, and ongoing initiatives. Data is a fundamental link between metrics used to gauge progress in business systems, processes, and results, and the formulation of new strategic plans to better define and accomplish mission goals. We will address the following overarching question and key areas:

*Does EPA have systems, processes, and controls in place to ensure timely, reliable, and complete information is available to manage EPA's programs and report on environmental results?*

### **Information Technology Capital Planning and Investment Management**

EPA still has much to accomplish in planning for and developing an Information Technology (IT) infrastructure to manage an integrated investment portfolio of environmental information. EPA reported investments totaling more than \$449 million for the fiscal 2002 budget, and weaknesses could result in millions being invested in IT projects that do not advance EPA's target enterprise architecture. To assess the Agency's progress in this area, we will reassess the following questions:

- Is EPA's IT Capital Planning and Investment Control process well structured and effectively applied to ensure the Agency can produce and manage an integrated and balanced investment portfolio of environmental and business information that supports the Agency's mission and goals?
- Do managers use a consistent set of tools to produce reliable and comparable data for monitoring and managing system development and enhancement projects, thereby ensuring timely and cost-effective delivery of systems that will meet defined needs and anticipated results?

### **Data Quality and Gaps**

Data reliability and data gaps are two major aspects of data management that need further attention. Recent audits indicate systems used by EPA's Enforcement, Superfund, and Water programs have inconsistent, incomplete, and obsolete data. While the Agency has been tackling data accuracy, it has not finalized a strategic plan to address the fact that managers may not have the right environmental data to make sound decisions.

Environmental data of questionable authenticity can lead to concerns about the soundness of EPA decisions on protecting the environment and public health. In particular, the quality of laboratory data supplied to the EPA for regulatory compliance purposes continues to be a pressing issue. Data integrity issues lead to additional costs and unnecessary delays when EPA has to identify and assess the impact of the fraudulent data and undertake additional sampling. Lab fraud investigations indicate that despite Agency efforts to ensure data quality, manipulated data continues to be supplied to the Agency.

Problems also exist in EPA's administrative systems. For example, the systems used for contract management are known to contain and report inaccurate and incomplete data. EPA estimates that contracts account for 25 percent of its total budget. However, no single system, or combination of systems, reliably captures and reports all contract activity.



Due to the various issues involving data quality and gaps, we will address the following questions in EPA's key program and, as applicable, administrative areas:

- Has EPA developed and implemented a plan for improving data quality in its systems and in the data it provides to Congress and the public?
- Has EPA formulated a comprehensive methodology for addressing environmental data gaps?
- Does EPA ensure providers of environmental data use comparable scientific methods to collect critical data elements, thereby ensuring that both management and the public have the necessary foundation to monitor and compare progress across the nation?

### **Data Integration and Standards**

Data standards establish common definitions for essential elements of data, and provide the fundamental means for integrating systems, enabling data sharing, and ensuring appropriate use across environmental programs. Such standards will provide the underlying framework for implementing EPA's National Environmental Information Exchange Network to exchange information between EPA and the States, and for implementing other e-government initiatives. Although EPA has developed approaches to increase sharing of environmental data, less emphasis has been placed on standardization of administrative systems data. Projects will be conducted to determine:

- Is EPA effectively using data registries to ensure the implementation of approved environmental data standards in its programs and with State partners?
- Does EPA have an efficient strategy for standardizing data in administrative systems?

### **Computer Security**

The success of environmental programs and initiatives depends on the integrity of EPA's IT infrastructure. Consequently, it is essential that the Agency prevent intrusion, protect the integrity of its data, and provide incident response capability. The dynamic nature of security requires continued emphasis and vigilance. As such, computer security has been and continues to be a top management challenge and Integrity Act weakness for the Agency. The *Federal Information Security Management Act* requires us to perform an annual evaluation of EPA's security program and practices.

We must answer several questions to determine whether the level of security applied to EPA's information resources and mission-essential data is commensurate with the risk of disclosure, manipulation, or loss:

- Is EPA's Computer Security Program comprehensive and actively implemented throughout the Agency to balance risk and mission requirements and provide reasonable protection against security threats?
- Are major aspects of EPA's networks implemented in a manner that limits risk to an acceptable level and allows prompt detection and response to threats?
- Is EPA able to respond by investigating possible attacks on its network from external sources, including cyber-terrorists and nation-states, and protect the network from attack or misuse from within?

Answers to these questions, especially those concerning network security, also will impact the reliability of EPA's e-government and homeland security activities, as well as data integrity and quality.

Complementing planned audit work, investigations will focus on computer incidents that have a potential, significant adverse impact on EPA operations. OIG will work in a consultative role with Agency computer security personnel and all interested parties to improve Agency security and computer incident awareness. In addition, we will maintain liaison and close working relationships with other law enforcement agencies and participate in efforts of mutual interest and national security.

## **E-Government**

The Federal Government is committed to accelerating the use of e-commerce in business practices, a campaign reinforced by the fact that “Expanding E-Government” is an integral part of the President’s Management Agenda. EPA and other agencies will be evaluated and ranked as to how well they are using digital technologies to transform essential business operations and make them more citizen-centered.

Numerous Government-wide initiatives are underway to integrate agencies’ operations and IT investments. These initiatives will impact EPA’s on-going and planned activities. The initiative on One-Stop Geospatial Information, for example, will impact EPA’s core business processes and be particularly important to its planned Exchange Network. EPA’s success will be measured on its ability to reconcile and unify its internal geospatial activities while simultaneously supporting the new Government-wide standards.

EPA must also find ways to simplify, integrate, and electronically expedite its dealings with the public, its partners, and private industry, including how it provides environmental data. EPA should be accountable for ensuring the public can easily access information and reach conclusions regarding environmental threats or progress in their respective communities.

E-government work will address these questions:

- Has EPA planned and implemented appropriate, timely actions to reduce geospatial redundancies in its systems and respond to new, Government-wide standards?
- Does EPA use reasonable methods to ensure the integrity, reliability, and authenticity of data exchanged through electronic means (e.g., use of certificate authorities and public key infrastructure technology)?
- Have EPA’s internal e-government processes reduced the burden on reporting entities, improved data quality through public involvement, and been used to set strategic goals?

## **Track 3: Program Management**

To successfully implement programs, EPA needs to have systems and processes in place to link its planning, budgeting, and accountability systems. Two areas vital to ensuring successful program management are: (1) the integration of cost and performance information, and (2) having EPA employees with the necessary competencies to successfully carry out its programs. Our overarching question is:

***Does EPA have the systems and processes in place to plan, budget for, and manage programs, including the human capital needed to carry out its mission?***

### **Budget to Performance**

The availability and reliability of information play a pivotal role in how EPA sets its goals and annual performance measures under the GPRA, and how well it can budget for and target its resources to maximize environmental results. EPA continues to have difficulty developing and obtaining the information necessary for measuring, evaluating, and reporting on its programs. The majority of EPA’s information is collected by States, and the incompatibility and inconsistency of this data makes measurement difficult. Currently, EPA is in the process of redefining its strategic goals. Among other things, we will evaluate EPA’s key media goals, objectives, and measures to determine:

- Does EPA have accurate, timely, and relevant performance information to manage its programs?
- Does EPA have processes and systems for analyzing cost and performance information? Is this information being used to plan, budget, manage, and evaluate EPA’s programs?
- Do EPA’s performance indicators clearly identify how EPA and its State, local, and tribal partners are achieving their goals, and how activities and measures link or translate to environmental outcomes?

## **Human Capital**

To achieve its environmental goals and objectives, EPA must communicate its vision, mission, and goals to all employees, so that they understand how their work contributes to EPA's mission. EPA's workforce must be competent, well-trained, and motivated, with the right mix of skills and experience. Finally, EPA employees must be held accountable for results that are aligned with the Agency's mission and goals.

We have identified employee competencies as one of EPA's top management challenges. Human Capital is also a major reform issue in the President's Management Agenda. EPA will face challenges in the near future because a large proportion of its workforce will be eligible to retire and replacements will be needed for experienced personnel. To meet these challenges and ensure it has the capabilities necessary to carry out its environmental mission, EPA needs to devote sufficient resources to strategic workforce planning, strategy implementation, and measuring the results of these efforts. To tell a complete story about EPA's human capital management, we will conduct a number of separate reviews in key media areas over the span of several years. Reviews will address the following questions:

- Has EPA's leadership developed and communicated its vision and mission to all employees?
- Have EPA's key media offices identified current and future competency needs, defined reasonable action plans to fill skill gaps, and created measures to evaluate actions taken?
- Do EPA's program offices have human capital strategic plans that support mission, vision, core values, goals, and objectives, and are these plans being effectively implemented?
- Does EPA have a plan for implementing its workforce plan across program areas and monitoring program implementation and effectiveness?
- Does EPA have systems and processes in place to hold employees accountable for results that are aligned with the Agency's mission and goals?

## **Track 4 - Assistance Agreements**

When EPA transfers funds for a public purpose, it uses a legal instrument called an assistance agreement. These agreements are the primary vehicles through which EPA delivers environmental and human health protection, generally accounting for more than half of the Agency's budget. Consequently, this is a key area of interest to Congress and OMB. OIG work will be directed at answering the overarching question:

### ***Is EPA using assistance agreements to efficiently and effectively accomplish its mission?***

We will concentrate work in three areas: management of assistance agreements, financial integrity, and results from assistance agreements. The first two areas will address the "efficiency" part of the overall question. Work relating to results of assistance agreements, which addresses the "effectiveness" part of the overall question, is included in preceding media-specific chapters. In addition, we will continue our investigative work to uncover criminal and administrative misconduct in the assistance agreement area.

## **Management of Assistance Agreements**

EPA has identified management of assistance agreements as either a material or Agency-level weakness since 1996. Our work has repeatedly found problems in this area, including assistance agreement recipients having inadequate controls and EPA not competitively awarding grants. Therefore, we will answer these questions:

- Is EPA successfully managing its assistance agreement programs?
- Are EPA processes funding the projects that will best meet EPA's mission at the best price?
- Is EPA providing sufficient oversight to ensure successful projects?

- Is EPA streamlining its assistance agreement process to: (1) meet the requirements of the Federal Financial Assistance Management Improvement Act of 1999 and the President's Management Agenda for e-government, and (2) improve efficiency and effectiveness of its internal operations?

### **Financial Integrity**

With EPA providing more than \$4 billion per year in assistance agreements, it is important that EPA ensure that the funds are used in accordance with laws and regulations, and are safeguarded from fraud, waste, and misuse. We will continue our audits of grantees' costs and our investigative work to uncover criminal and administrative misconduct in the assistance agreement area. Financial integrity reviews will determine:

- Are funds used for authorized purposes?
- Are systems and controls sufficient to account for funds?
- Are controls sufficient to prevent loss from fraud and misuse?

### **Track 5 - Contracts**

EPA spends about one fourth of its budget on contractor support. Our contract work will evaluate whether EPA's contracts are being awarded and administered in a manner that supports cost-effective accomplishment of EPA's mission. In addition, we will continue our audits of contractor costs and our investigative work to uncover criminal and administrative misconduct in the award and delivery of contract services. OIG work will be directed at answering the question:

#### ***Is EPA using contracts to efficiently and effectively accomplish its mission?***

Questions pertaining to specific EPA goals are described in other chapters. Cross-cutting areas that are not goal-specific are described below:

### **Managed Service Sourcing**

EPA is moving to "Managed Service Sourcing," an IT outsourcing alternative for distributed computing services. Under this scenario, a contractor will own, manage, and operate EPA's IT infrastructure, including hardware, software, and related services. Our audit work will answer these questions:

- Has EPA defined appropriate performance-based contract measures to ensure the managed service sourcing contractor is accountable for providing required services, including security for EPA data?
- Is there a system in place to monitor contractor performance, and is the system used?

### **Managing System Development Contracts**

At the Agency's request, in fiscal 2004, we plan to conduct an audit of EPA's system development contracts. The value of this audit would be substantial to EPA, as the amount spent on systems exceeds \$100 million per year. The potential objectives of the audit would be to determine whether: (1) EPA has qualified staff planning and guiding projects, and (2) contracts are being awarded based on sound criteria (i.e., best value, price, technical skills).

### **Competitive Sourcing**

Competitive sourcing is a major initiative highlighted under the President's Management Agenda, and OMB believes that the Inspector General community should play an essential role in determining the effectiveness of agencies' efforts. EPA must meet competitive sourcing standards under the Federal Activities Inventory Reform Act. OMB expects Inspectors General to examine how cost comparisons were performed and whether in-house performance work statements were comparable to outside contracts. How EPA develops accurate cost comparisons may be an issue of major concern, because it is just beginning to implement activity-based cost accounting that allows the aggregation of costs for specific products and services. We will determine:

- Has EPA used a structured, rational approach for identifying activities for potential competitive sourcing, do cost comparisons accurately reflect the full cost of performing the commercial activity, and has the Agency met its own and OMB's goals for competitive sourcing?

### **Financial Contract Audits**

We are responsible for financial audits of two EPA contractors. In addition, we monitor audits of EPA contracts performed by the Defense Contract Audit Agency. Financial audits address whether:

- Contractor systems (e.g., accounting, purchasing, billing) and internal controls reasonably ensure reliable financial reporting, effectiveness and efficiency of operations, and compliance with applicable laws and regulations.
- Contractor incurred and proposed costs are allowable under generally accepted accounting principles and the terms of the contract.

### **Other Area**

#### **Energy Conservation - Green Power**

EPA is required to implement energy efficiency and conservation measures under the National Energy Conservation Policy Act, the Energy Policy Act, and three implementing Executive Orders. The Executive Order entitled *Greening the Government Through Efficient Energy Management* lays out specific reduction goals for EPA's 19 laboratory facilities. While EPA has made limited progress toward these goals, EPA officials are confident they have established the framework necessary to reach the fiscal 2005 reduction target. Our work will address the question:

- Will EPA's strategies enable it to reduce its overall energy usage by 20 percent from fiscal 1990 to 2005, and by 25 percent by fiscal 2010?

Issue	Planned Good Government Evaluation/Audit Projects	Fiscal Year Start		
		2003	2004	2005
<b>Track 1 Financial Management</b>  <i>Does EPA have the people, processes, and systems needed to efficiently provide timely, accurate, complete, and useful financial information for decisionmaking and accountability?</i>	1. Financial Statement Audits, Including Related Systems Work	X	X	X
	2. EPA's Implementation of Cost Accounting		X	
	3. Efficiency and Effectiveness of Financial Management Functions			X
<b>Track 2 Information Resources Management</b>  <i>Does EPA have systems, processes, and controls in place to ensure timely, reliable, and complete information is available to manage EPA's programs and report on environmental results?</i>	1. Federal Information Security Management Act	X	X	X
	2. EPA's System Security Self-Assessment Process	X		
	3. General Security Controls at Las Vegas Financial Mgmt. Center	X		
	4. EPA's Implementation of Network Firewalls	X		
	5. Internal Router Security and Configuration Management		X	
	6. EPA's Implementation of Intrusion Detection Systems		X	
	7. Remote Access Servers Configuration Management		X	
	8. Controls over Local Area Networks		X	
	9. IT Capital Planning and Investment Management ( <i>followup</i> )		X	
	10. EPA's Data Quality Strategic Plan		X	
	11. Results-Based IT Project Management ( <i>followup</i> )			X
	12. Data Integration and Standards			X
	13. Technologies for Authenticating Electronically Submitted Data			X
	14. EPA's Implementation of Geospatial Activities & E-Gov. Standards			X
	15. EPA's Electronic Records System for Electronically Submitted Data			X
	16. Assessing Results of One-Stop Reporting & Public Access Strategies			X
<b>Track 3 Program Management</b>  <i>Does EPA have the systems and processes in place to plan, budget for, and manage programs, including the human capital needed to carry out its mission?</i>	1. EPA's Human Capital Strategic Planning and Analysis	X		
	2. EPA's Managing for Results			X
	3. Implementation of Human Capital Strategies			X

Issue	Planned Good Government Evaluation/Audit Projects	Fiscal Year Start		
		2003	2004	2005
<b>Track 4 Assistance Agreements</b>  <i>Is EPA using assistance agreements to efficiently and effectively accomplish its mission?</i>	1. Awarding of Assistance Agreements	X		
	2. Region 6 Oversight of Louisiana Department of Environmental Quality	X		
	3. Followup on Previous Assistance Agreement Reports		X	X
	4. Streamlining of Grants Process			X
	5. General Assistance Program Grants to Indian Tribes			X
	6. Effectiveness of Environmental Exchange Network Grant Program			X
	7. Single Audit and Financial Audits of Grantees	X	X	X
<b>Track 5 Contracts</b>  <i>Is EPA using contracts to efficiently and effectively accomplish its mission?</i>	1. Performance Based Service Contracting	X		
	2. EPA's Use of Alternative Contracting Vehicles	X		
	3. Performance Measures for Desktop Outsourcing	X		
	4. EPA's Implementation of Competitive Sourcing		X	
	5. Review of Water Contracts		X	
	6. Managing Systems Development Contracts		X	
	7. Review of Air Contracts			X
	8. IT Contract Audits		X	X
	9. Defense Contract Audit Agency Monitoring	X	X	X
	10. ICF Financial Audits	X	X	X
	11. Ecology & Environment Inc. Financial Audits	X	X	X
<b>Other Area</b>	1. EPA's Energy Efficiency and Conservation Accomplishments (Green Power)		X	

**EPA’s Top Management Challenges as Reported by OIG (Historical Perspective)**

While EPA is making progress in resolving its Major Management Challenges, several have been longstanding problems. The following table shows which challenges have been listed from 2002 through 2002 and their relationship the **President’s Management Agenda (as numbered)**.

Management Challenge	2000	2001	2002
Environmental Data Quality (2)	**	**	**
Managerial Cost Accounting (1 & 4)		*	*
Automated Information System Security Plans/Security (2)			
Oversight/Use of Assistance Agreements (4)			
Environmental Data Information Systems	**	**	**
Accountability (1)		*	*
Backlog; National Pollutant Discharge Elimination System Permits			
Enhance Employee Competencies/Human Capital (3)			
Quality of Laboratory Data			**
Information Resources Management (2)	**	**	**
Working Relationships with States and Other Partners (1)			
Results-Based Information Technology Project Management			
Protecting Critical Infrastructure from Nontraditional Attacks			
Biosolids			
Air Toxics Program			

**President’s Management Agenda**

- 1. Budget and Performance Integration
- 2. Expanded Electronic Government
- 3. Strategic Management of Human Capital
- 4. Improving Financial Performance

\* Combined for 2001 and 2002 as “Linking Mission with Management”

\*\* Combined for 2001 and 2002 as  
“Information Resources Management & Data Quality”



## Schedule of OMB PART Assessments for the FY Budgets of 2005

To help integrate budgeting with performance management, OMB has instituted a process known as the Program Assessment Rating Tool (PART) model, used to evaluate the effectiveness of Federal programs. Each PART, which is a structured questionnaire completed by each Agency program under review and then by OMB Budget Examiners, has four sections:

- 1) Purpose/ Relevance/Federal Role;
- 2) Strategic Planning;
- 3) Program Management;
- 4) Program Results.

For fiscal 2004 the EPA Programs of Air Toxics, Civil Enforcement, Drinking Water State Revolving Fund, Existing Chemicals, Leaking Underground Storage Tanks, Nonpoint Source Grants, Pesticide Registration, Pesticide Reregistration, Superfund Removal, and Tribal General Assistance were rated as Not Demonstrating Results, with an average score of 26.5 out of 100.

The originator of the PART has stated that the OIGs have an important role in assisting their respective agencies accurately assess their programs and to help OMB ensure the quality of data. For this reason, EPA's schedule of PART reviews should be included in OIG Multi-Year Plans.

The EPA programs scheduled for PART review during fiscal 2003 through Fiscal 2005 are as follows:

In FY 03 for FY 05 Budget	In FY 04 for FY 06 Budget	In FY 05 for FY 07 Budget
RCRA Corrective Action and State Grants; Clean Water and Drinking Water Assistance Grants for Mexican Boarder/Alaskan Native Villages/Puerto Rico; Clean Water State Revolving Fund Indian Set Aside Program; Water Research; Climate Change Programs; Indoor Air; PM Implementation and Research; Brownfields; Pollution Prevention Research; High Production Volume Chemicals; Challenge Program.	Superfund Research and Development; Superfund Remedial Action and other Superfund; Clean Water State Revolving Fund; Great Water Bodies/Ecosystems (including Great Lakes, Chesapeake Bay, Gulf of Mexico, National Estuary Program, South Florida); Stratospheric Ozone Programs; Compliance Assistance Programs; Air State Grants for NAASQS.	Superfund Enforcement; Clean Water and Surface Water Program (including section 106 state pollution control grants and EPM funded program); Environmental Information; Human Health Research.

## Integration of Human Capital Results Into the OIG Strategic Operations

### 360 Feedback for Employees and Personal Accountability

The OIG began implementing 360 Degree Feedback survey instrument accessible through the Internet and hosted remotely to solicit feedback from work associates at all levels. Responses to a series of questions relating to OIG-wide standard performance agreement areas of Assignment Accomplishment, Customer Service, Personal Behavior, and Continuous Learning are aggregated to produce a report for each participant. The process used is designed to ensure anonymity of respondents and protection of confidential information. The OIG will expand the use of 360 feedback to provide personal accountability for high performance and assess specific professional and technical skills and competencies needed to successfully implement this Multi-Year Plan. Individual 360 performance measurement is used to:

- Assess an individuals strengths and weaknesses
- Foster communication between the employee and supervisor
- Identify special talents and skills
- Identify employee development needs
- Benchmark performance and track improvement.

### Knowledge and Skills Inventory System

To assess the competency and proficiency of staff and better plan for needed skills, required to fully implement the Multi-Year Plan, the OIG acquired, modified, and implemented a Knowledge and Skills Inventory System. This system produced an inventory of available skills compared to those prospectively needed, to identify skill gaps within each business line strategic areas and by each of the following professional series specialties. This gap analysis is for prospective planning purpose.

Skill Speciality/Series Title	Needed	Available	Gap
Environmental Scientist	22	11	11
Social Scientist	24	14	10
Operations Research Analyst	7	0	7
Program Analyst	95	45	50
Financial Auditor	75	127	(52)
IT Auditor	22	16	6
Computer Specialist	9	6	3
Criminal Investigator	69	51	18
<b>Total</b>	<b>323</b>	<b>270</b>	<b>53</b>