2011

ECONOMIC IMPACT ANALYSIS



Wright-Patterson
Air Force Base

Dayton, Ohio

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PREFACE

Commander's Foreword

The 88th Air Base Wing (88 ABW) is the host unit for Wright-Patterson Air Force Base with more than 5,300 personnel assigned to the wing. All of our military, civilians and contractors play a key role in helping our tenant units achieve their mission objectives. This internal partnership enhances our strength on the base, and in Ohio's Miami Valley.

Whether we are providing vital infrastructure and services to operate the base or training and processing the 1,000 Airmen we deploy annually to all corners of the world, the 88 ABW is the cornerstone of the base's mission success. Our many mission partners – such as the Aeronautical Systems Center, Air Force Research Laboratory and Air Force Materiel Command



Headquarters (AFMC) – provide critical advanced research, acquisition, intelligence and combat support, enabling the Air Force to fly, fight and win in the air, space, and cyberspace.

The 88 ABW also has the lead responsibility to liaise with the surrounding community. Numerous private and public organizations along with 20-plus cities, towns, and villages in the 16-county Miami-Valley region provide Wright-Patt outstanding community support. The Miami Valley shows its support in countless ways; among them, the special "Hometown Heroes" baseball games at the Dayton Dragon's Fifth Third Field, and welcoming home our Airmen at "Heroes-Welcoming-Heroes" events. As a good community partner, we return their support by hosting the annual AFMC "Freedom's Call TATTOO", a gratis night of entertainment, aircraft fly-overs, and the best fireworks display in southwest Ohio. We also host the United States Air Force Marathon every September to celebrate our service's birth, September 17, 1947. The 88 ABW hosts many other events throughout the year that reach out to our wonderful community neighbors.

In addition to being a community partner, Wright-Patterson is also an economic powerhouse for Ohio. In 2011, the installation economic impact was estimated at approximately \$4.7 billion with more than 29, 000 people working on the installation at any given time. We continue to reach into the community and provide information on how to partner with our Air Force team. The future remains bright for Wright-Patterson AFB and the Miami Valley as we continue to educate and develop the next generation of Wright-Patterson and community leaders!

CASSIE B. BARLOW, Colonel, USAF Commander, 88th Air Base Wing

Wright-Patterson's Heritage

Wright-Patterson AFB near Dayton, Ohio, traces its origin directly from the Wright brothers' pioneering flights in 1904 and 1905 at the Huffman Prairie Flying Field located in the middle of the installation. Its past, present and future are all inextricably linked with the Wright brothers' legacy. Dayton was the Wright brothers' home and Daytonians consider their city the "Birthplace of Aviation". The Wrights' early years, their bicycle shops, their printing business, and their early aviation efforts are evident throughout the greater Dayton area. Just off the end of Wright-Patterson's active runway, a replica of the Wright brothers' 1905 hangar overlooks the Huffman Prairie Flying Field. Here they established their first flying field, developed the first practical airplane, and in their own words, "really learned to fly". The Flying Field has been designated a National Historic Landmark and is part of the Dayton Aviation Heritage National Historical Park.

The installation itself has been a leader in military aviation since World War I. Aviation research and development began to flourish at Wright-Patterson when the U.S. entered World War I. Wilbur Wright Field was established in the summer of 1917 as a pilot training school at the site of Wright-Patterson's present flight line. In the fall of 1917, McCook Field was established as an Air Service engineering center. McCook Field was located near downtown Dayton at what is now the intersection of State Route 4 and Interstate 75. In 1927, a new aerodrome and research complex were constructed on land donated by the citizens of Dayton to replace the overcrowded McCook Field. Named Wright Field in honor of both brothers, it is now part of Area B.

Wright-Patterson's logistics heritage also dates from World War I. The Fairfield Aviation General Supply Depot was established in 1917 adjacent to Wilbur Wright Field. The Fairfield Air Depot, as it became known, was a major Army Air Corps depot through the end of World War II. In 1931, the area encompassing the Fairfield Air Depot, Wilbur Wright Field, and the Huffman Prairie Flying Field, was renamed Patterson Field in honor of Lt. Frank Stuart Patterson who died in 1918 when his DH-4 crashed on the airfield during a flight test.

In 1948, Wright and Patterson Fields merged to create Wright-Patterson AFB. The 88 ABW has been the host organization most of the period since the merger. It has provided base operating support for the installation since 1944.

Wright-Patterson is one of the largest, most diverse, and organizationally complex bases in the Air Force. Its missions range from acquisition and logistics management, to research and development, education, flight operations, and an assortment of other defense and non-defense activities. Wright-Patterson is home to the Air Force Materiel Command (AFMC), the Aeronautical Systems Center (ASC), the Air Force Research Laboratory (AFRL), the Air Force Security Assistance Center (AFSAC), the Air Force Institute of Technology (AFIT), the National Air and Space Intelligence Center (NASIC), the National Museum of the United States Air Force

(NMUSAF), the 445 Airlift Wing (AW), a regional DoD medical center, and numerous other Air Force, DoD, and government agencies. Bringing it all together is the 88 ABW, which operates, maintains and defends the installation.

Today, as in the first century of flight, the nation's aeronautical weapon systems are conceived, tested, modified, and acquired at Wright-Patterson AFB. The installation's legendary heritage spurs modern aerospace scientists and logisticians in their quest to keep man flying higher, faster, farther, and safer than ever before. The installation also serves as an aerial port of embarkation and plays a continuing role in Overseas Contingency Operations, to include OPERATION ENDURING FREEDOM, NOBLE EAGLE, and OPERATION NEW DAWN.

The excellent community spirit and cooperation of the installation and its personnel is another hallmark of Wright-Patterson's heritage. Base personnel contribute hundreds of volunteer hours to community projects. They support the annual Vectren Dayton Air Show, offer special events at the NMUSAF, host the Air Force Marathon, conduct education outreach programs, and work with the Dayton Aviation Heritage National Historical Park to enhance the Miami Valley's legacy as the Birthplace of Aviation.

The creativity and professionalism of our Airmen and civilian employees combined with the vitality of the Miami Valley's citizens continue to make Wright-Patterson AFB the birthplace, home, and future of aerospace.



ECONOMIC IMPACT TABLES

Table 1

Personnel by Classification and Housing Location

| CLASSIFICATION | LIVING ON BASE | LIVING OFF BASE | TOTAL |
|--|----------------|-----------------|-------|
| 1. APPROPRIATED FUND MILITARY | | | |
| Active Duty | | | |
| Air Force | 517 | 6,615 | 7,132 |
| Army | 43 | 0 | 43 |
| Navy/Marine | 14 | 8 | 22 |
| Air Force Reserve (AFR)/Air National Guard (ANG) | 0 | 2,047 | 2,047 |
| Non-Extended Active Duty AFR/ANG | 0 | 20 | 20 |
| Trainees/Cadets | 122 | 0 | 122 |
| TOTAL: | 696 | 8,690 | 9,386 |

| ACTIVE DUTY MILITARY DEPENDENTS | | | |
|--|-------|--------|--------|
| Air Force | 2,008 | 15,215 | 17,223 |
| Army | 109 | 0 | 109 |
| Navy/Marine | 41 | 18 | 59 |
| Air Force Reserve (AFR)/Air National Guard (ANG) | 0 | 4,708 | 4,708 |
| Non-Extended Active Duty AFR/ANG | 0 | 46 | 46 |
| Trainees/Cadets | 0 | 0 | 0 |
| TOTAL: | 2,158 | 19,987 | 22,145 |

| General Schedule (GS) | | 9,936 |
|---|--------|--------|
| National Security Personnel System (NSPS) | | 187 |
| Federal Wage Board (FWS) | | 546 |
| Defense Civilian Intelligence Personnel System (DCIPS), NASIC | | 2,439 |
| Laboratory Demonstration Project (Lab Demo) | | 1,834 |
| Senior Executive Service (SEC)/Senior Scientist (ST) | | 23 |
| Defense Commissary Agency (DeCA) | | 123 |
| GS Physicians and Denists (GP) | | 3 |
| Defense Civilian Intelligence (IA) | | 2 |
| Other (SES, Scientific and Professional Positions) | | 1,483 |
| | TOTAL: | 16,576 |

| 4. NON-APPROPRIATED FUND, CONTRACT CIVILIANS AND PRIVATE BUSINESS | |
|---|-------|
| Air Force Civilian Non-appropriated fund employees (NAF) | - 672 |
| Army & Air Force Exchange Service civilian employees (AAFES) | 241 |
| Contract Civilians (not elsewhere included) | 2,760 |
| Private Businesses On Base, By Type: | 102 |
| Branch Banks/Credit Union | 26 |
| Office Runway (Cincinnati Association for the Blind) | 8 |
| Hope Hotel | 50 |
| National Aviation Hall of Fame | 4 |
| Other Civilian Vendors | 14 |
| TOTAL: | 3,775 |

TOTAL ASSIGNED PERSONNEL: 29,737

TOTAL PERSONNEL INCLUDING DEPENDENTS: 51,882

Table 2 Annual Payroll by Classification and Housing Location

| CLASSIFICATION | LIV | ING ON BASE (\$) | LIN | /ING OFF BASE (\$) | TOTAL (\$) |
|--|-----|---------------------|-----|-----------------------|---------------|
| 1. APPROPRIATED FUND MILITARY | | | | | |
| Active Duty | | | | | |
| Air Force | \$ | 22,249,588 | \$ | 503,214,283 | \$525,463,871 |
| Army | \$ | 2,365,000 | | | \$2,365,000 |
| Navy/Marine | \$ | 770,000 | \$ | 440,000 | \$1,210,000 |
| Air Force Reserve (AFR)/Air National Guard (ANG) | \$ | = | \$ | 33,700,000 | \$33,700,000 |
| Non-Extended Active Duty AFR/ANG | \$ | | \$ | 800,000 | \$800,000 |
| Trainees/Cadets | \$ | 4,880,000 | \$ | - | \$4,880,000 |
| TOTAL | \$ | 30,264,588 | \$ | 538,154,283 | \$568,418,871 |

| 2. APPROPRIATED FUND CIVILIANS | | |
|---|--------|-----------------|
| General Schedule (GS) | | \$ 932,778,910 |
| National Security Personnel System (NSPS) | | \$ 18,218,787 |
| Federal Wage Board (FWS) | | \$ 29,954,985 |
| Defense Commissary Agency (DeCA) | | \$ 5,151,700 |
| Defense Civilian Intelligence Personnel System (DCIPS), NASIC | | \$ 216,789,799 |
| Other (SES, Scientific and Professional Positions) | | \$ 172,205,076 |
| Laboratory Demostration Project (Lab Demo) | | \$ 95,000,000 |
| Senior Executive Service (SEC)/Senior Scentist (ST) | 18 | \$ 25,936,843 |
| GS Physicans and Dentists | | \$ 375,000 |
| Defense Civilian Intelligence (IA) | | \$ 260,000 |
| | TOTAL: | \$1,496,671,100 |

| . NON-APPROPRIATED, FUND CONTRACT CIVILIANS AND PRIVATE BUSINESS | | |
|--|-----------|-------------|
| Air Force Civilian Non-appropriated fund employees (NAF) | \$ | 850,153 |
| Army & Air Force Exchange Service civilian employees (AAFES) | \$ | 5,763,153 |
| Contract Civilians (not elsewhere included) | \$ | 377,766,468 |
| Private Businesses On Base, By Type: | \$ | 2,736,005 |
| Branch Banks/Credit Union | \$ | 880,859 |
| Office Runway (Cincinnati Association for the Blind) | \$ | 334,258 |
| Hope Hotel | \$ | 800,000 |
| National Aviation Hall of Fame | \$ | 115,444 |
| Other Civilian Vendors | \$ | 605,444 |
| | TOTAL: \$ | 387,115,779 |

TOTAL ANNUAL PAYROLL: \$2,452,205,750

Table 3Expenditures for Construction, Services, and Procurement of Materials, Equipment, and Supplies

| CLASSIFICATION | 30.00 | TUAL ANNUAL |
|--|-------|---------------------|
| 1. CONSTRUCTION | | TO SHARE WAS ARREST |
| Military Construction Program (MILCON) | \$ | 116,328,461 |
| Non-Appropriated Fund Construction (NAF) | \$ | 967,000 |
| Military Family Housing (MFH) | \$ | - |
| Military Family Housing Operations and Maintenance (O&M) | \$ | * |
| Construction Related Operations and Maintenance (O&M) | \$ | 57,366,066 |
| TOTAL: | \$ | 174,661,527 |

| 2. SERVICES | |
|--|-------------------|
| Operations and Maintenance Service Contracts (O&M) | \$ 172,729,450 |
| Medical Service Contracts | \$ 36,765,152 |
| Non-Appropriated Fund Service Contracts (NAF) | \$ 14,498 |
| Other Service Contracts | \$ 219,614,069 |
| TOTAL: | \$ 429,123,169 |

| 3. PROCUREMENT OF MATERIALS, EQUIPMENT, AND SUPPLIES | |
|--|------------------|
| Commissary (DeCA) | \$ 33,263 |
| Base Exchange (AAFES) | \$ 400,000 |
| DoDEA | \$ (¥) |
| Health (Tri-Care, Government cost only) | \$ 37,093,707 |
| Non-Appropriated Fund (NAF) | \$ 967,000 |
| Education (Impact aid and Tuition Assistance) | \$ 4,783,417 |
| TDY (Military and civilian) | \$ 7,276,326 |
| GPC/Other Materials Equipment & Supplies | \$ 43,359,754 |
| TOTAL: | \$ 93,913,467 |

TOTAL ANNUAL EXPENDITURES: \$ 697,698,163

Table 4 Estimate of Number and Dollar Value of Indirect Jobs Created

| TYPE OF PERSONNEL | NUMBER OF BASE JOBS | MULTIPLIER | NUMBER OF INDIRECT JOBS |
|-----------------------------|------------------------|------------|-------------------------|
| ACTIVE DUTY MILITARY | 9,386 | 0.41 | 3,848 |
| APPROPRIATED FUND CIVILIANS | 16,576 | 1.57 | 26,024 |
| OTHER CIVILIANS | 3,775 | 1.57 | 5,927 |
| TOTAL: | 29,737 | | 35,799 |
| ESTIMATED NUMBE | 35,799 | | |
| AVERAGE ANNUAL PAY | \$42,410 | | |
| ESTIMATED ANNUAL DOL | \$1,518,235,590 | | |

DATA SOURCES:

Multiplier: LMI Economic Impact Database, Installations and Indirect/Induced Job Multipliers, Feb 95 Avg Annual Pay: Current tables for Average Annual Pay Levels in Metropolitan Areas and Average Annual Pay by city/state are accessible at www.bls.gov.

Table 5 **Total Annual Economic Impact Statement**

| ANNUAL PAYROLL: | |
|--|---------------------|
| Military | \$ 568,418,871 |
| Federal Civilian | \$ 1,496,671,100 |
| Other Civilian | \$ 387,115,779 |
| Total | \$ 2,452,205,750 |
| ANNUAL EXPENDITURES: | \$ 697,698,163 |
| ESTIMATED ANNUAL DOLLAR VALUE OF JOBS CREATED: | KA E STATE |
| Estimated Indirect Jobs Created | 35,799 |
| Average Annual Pay | \$42,410 |
| Total | \$ 1,518,235,590 |
| TOTAL ECONOMIC IMPACT: | \$ 4,668,139,503 |

APPENDICES

Analysis Methodology

The objective of this Economic Impact Analysis is to quantify Wright-Patterson AFB's local economic activity within fiscal year 2011 (FY11). FY11 covers the time period of October 1, 2010 – September 30, 2011. The local area is defined by the U.S Office of Management and Budget and is called a Metropolitan Statistical Area (MSA). The definition of Wright-Patterson AFB's MSA has varied throughout past analyses, but remained the same between FY07 and FY11. The MSA consists of five surrounding counties: Clark, Greene, Miami, Montgomery and Preble. The MSA is illustrated in Figure 1 below.

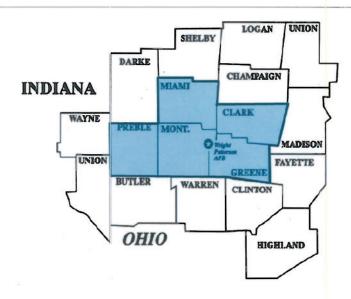


Figure 1: Economic Area for Wright-Patterson AFB

Table 1: Personnel by Classification and Housing Location

The headcount of military personnel was derived from an Economic Resource Impact Statement (ERIS) from the Defense Joint Military Pay System (DJMS) report furnished by the 88 CPTS. The number of military personnel dependents living on base was provided by the 88 ABW Civil Engineering Office for Housing (88 ABW/CEH). The number of Air Force off base dependents was provided by the Base Military Personnel Flight (MPF). The Air National Guard and Reserve numbers were collected from the 445 FSS/FSO. The numbers of dependents for the other branches of services were calculated based upon an average ratio of active duty personnel to dependents. Civilian headcount was collected from the Civilian Personnel Flight (88 FSF/FSMC) and various tenant organizations. Contract civilian headcount was derived from various tenant organizations.

Table 2: Annual Payroll by Classification and Housing Location

The payroll of military personnel was derived from the ERIS report furnished by the 88 CPTS and the Navel Health Research Center. The Air National Guard and Reserve payrolls were collected from the 445 FSS/FSO. The majority of the appropriated fund civilian input was provided by the 88 FSF/FFMM office. The personnel and payroll for civilian contractors were provided by various tenant organizations.

Table 3: Expenditures for Construction, Services, and Procurement

Military construction spending was collected from the 88 ABW/CE, US Army Corps of Engineers (USACoE) and various tenant organizations. The USACoE was the only base organization with NAF spending in FY11. Several organizations provided FY11 totals for O&M Construction spending. Other construction expenditures were provided by ASC/PK, USACoE and Government Accountability Office (GAO). The amount for Service Contracts was calculated by ASC/PK, and several tenant organizations. The amount for Other Services contracts consists of input from the ASC/PK and Enterprise Logistics Directorate (ELD). Education spending was a combination of the Education and Training Flight and Federal Government Impact Aid. Data for the GPC and other spending came from ASC/PK.

Table 4: Estimate of Number and Dollar Value of Indirect Jobs Created

The multipliers in this table were taken from the Economic Impact Database owned by the Logistics Management Institute. The average annual pay was taken from the Bureau of Labor and Statistics website. This methodology is required according to Chapter 8 of AFMAN 65-506.

Table 5: Total Annual Economic Impact Estimate

This table is simply a summary of Tables 1-4. Wright-Patterson AFB's total economic impact upon the Dayton MSA is \$4,668,139,503.

Summary

This Economic Impact Analysis was prepared by the Center of Expertise (CoE), Buckley AFB and coordinated with the 88 CPTS/FMA, Wright-Patterson AFB, Ohio. Questions or comments concerning the statistics or data contained in this analysis may be addressed to Mr. Ken Charles, (937-522-2537), kenneth.charles@wpafb.af.mil).

Summary of Capital Assets

CAPITAL ASSETS

(As of: 30 September 2011)

| Building Category | Square Feet |
|---|--------------|
| Housing | |
| (Includes detached garages and storage buildings) | 276,389 |
| Community | |
| (Includes commissary, BX, BAQ, VAQ/VOQ, and recreation) | 2,640,41 |
| Research and Development | 5,788,02 |
| Hospital | 1,127,07 |
| All Other Buildings | |
| (Includes Operations & Training, Supply, | R 1 |
| Maintenance & Production, and Administration) | 8,736,21 |
| Other Structures and Facilities | |
| Utilities and Ground Improvement | |
| TOTAL: | 18,568,11 |

| Dormitory/Temporary Quarters | Number of Units | Bed Capacity | | |
|----------------------------------|-----------------|--------------|--|--|
| Airman/NCO | 6 | 592 | | |
| Visiting Officer/Airman Quarters | 8 | 441 | | |
| Temporary Lodging Facilities | 21 | 132 | | |
| Compassionate Care Facilities | 2 | 32 | | |
| TOTAL: | 51 | 1,197 | | |

| Land | Acres |
|--------------|-------------|
| Fee Owned | 7,629 |
| Easements | . 431 |
| Right of Way | 83 |
| Leased | 2 |
| T | OTAL: 8,145 |

| Runways | Linear Feet |
|-------------------|-------------|
| Area A | 19,600 |
| Area B (inactive) | 7,147 |
| TOTAL: | 26,747 |

| Facilities Data | Number of Buildings |
|-----------------|---------------------|
| Buildings | 595 |
| Family Housing | 127 |
| TOTAL: | 722 |

Figure 2: Wright-Patterson AFB's Capital Assets

Personnel Distribution

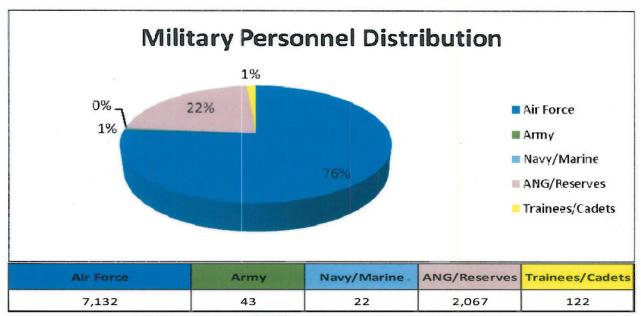


Figure 3: Distribution of Military Personnel by Branch of Service

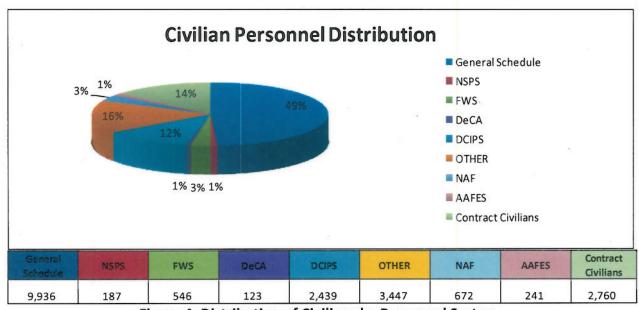


Figure 4: Distribution of Civilians by Personnel System

APF Military & Civilian Payroll and Assignment Trends

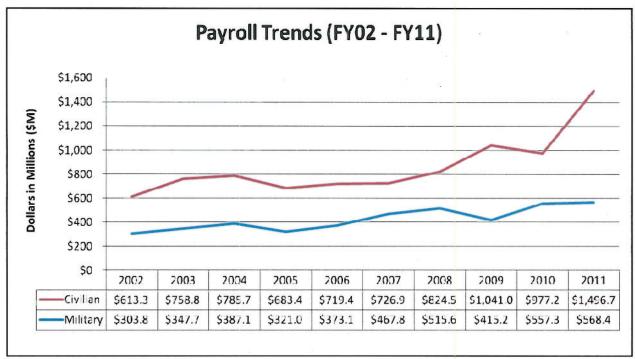


Figure 5: Total Military & Civilian Annual Payroll

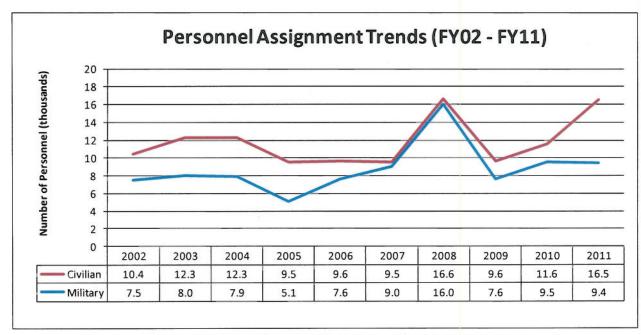
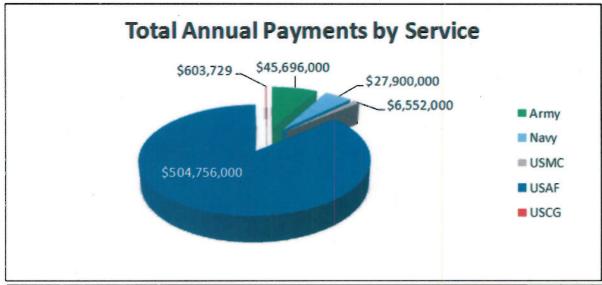


Figure 6: Total Military & Civilian Personnel Assigned

Military Retiree Payments



| Service | Army | Navy | USMC | USAF | USCG |
|-------------------------------|------------------|------------------|-----------------|-------------------|---------------|
| Number of Recipients | 2,155 | 1,324 | 308 | 16,848 | 34 |
| Annual Disbursement Amount | \$ 45,696,000 | \$ 27,900,000 | \$ 6,552,000 | \$ 504,756,000 | \$ 603,729 |

Figure 7: Total Military Retiree Payments by Branch of Service

Combined Federal Campaign Contributions

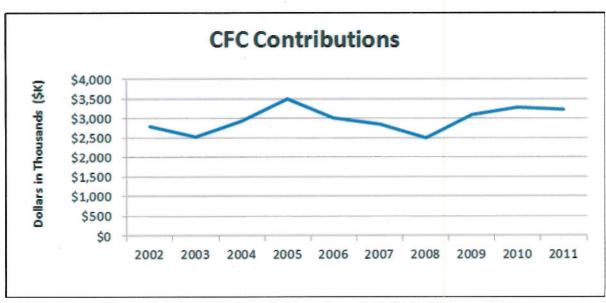


Figure 8: Total CFC Contributions from Wright-Patterson AFB

Summary of Impact Aid Payments

| IMPACT AID SUMMARY | | | | | | |
|----------------------------|-------------------------|--------|-----------|--|--|--|
| School District | County | Amount | | | | |
| Mad River Local | Montgomery | \$ | 529,378 | | | |
| Fairborn City | Greene | \$ | 273,425 | | | |
| Beavercreek Local | Greene | \$ | 386,198 | | | |
| Huber Heights City | Montgomery | \$ | 20,493 | | | |
| Bellbrook-Sugarcreek Local | Greene | \$ | 30,363 | | | |
| , | TOTAL Impact Aid | \$ | 1,239,857 | | | |

Figure 9: Summary of Dayton, OH Impact Aid Payments

NMUSAF Visitation Trends

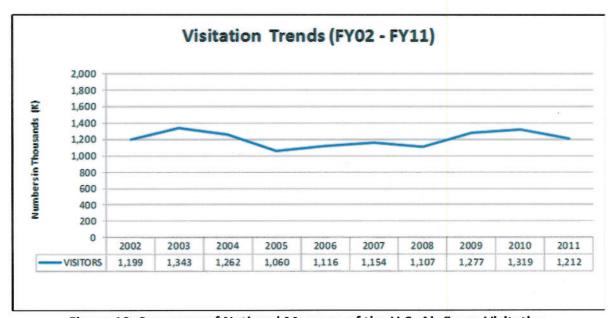


Figure 10: Summary of National Museum of the U.S. Air Force Visitation

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Wright-Patterson

Air Force Base

Dayton, Ohio