

Economic Impact Study Eastern West Virginia Regional Airport



Economic Impact Analysis:

- **Employment**
- **Wage Income**
- **Economic output**

Direct impact, indirect impact and induced impact: payroll, airport commercial spending, capital investments and visitor spending attributable to the Eastern West Virginia Regional Airport and its tenants

Prepared by: Sixel Consulting Group

Data collected for Calendar Year 2017



MISSION STATEMENT

The EWVRAA will maintain, support and operate the Eastern West Virginia Regional Airport efficiently and effectively. Recognizing that the Airport is an economic driver for the region, the authority will focus its efforts on assuring that the greater Eastern Panhandle has safe and cost-effective access to aviation services. By collaborating with other agencies, the Authority will assure that the Airport and its facilities will be used to enhance and stimulate vibrant business and community development in the region.

VISION STATEMENT

By 2022, the EWVRAA will become a Regional General Aviation airport and will continue to drive economic prosperity in the Hagerstown-Martinsburg, MD-WV Metro Area by: developing a domestic commercial air cargo hub; providing cost-competitive and expanded general aviation services and facilities; and continuing support to the WV Air National Guard's global air cargo operations.





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Executive Summary

This economic impact study, conducted by Sixel Consulting Group, Inc., was commissioned by the Eastern West Virginia Regional Airport Authority and funded with a 90% reimbursement grant from the USDA Rural Business Development Program in the amount of \$22,500. The purpose of the study is to determine the impact of Airport activities upon the economies of the local region and state. Simply put, this economic impact study quantifies economic activity in the Eastern Panhandle of West Virginia that would not otherwise occur in the absence of the Airport.

Knowing and understanding the economic impact of an airport is beneficial in many ways. It allows for a better understanding by the community and its leaders of the airport's contribution to the local and state economies. It can also guide Airport Management, Community leaders and State government officials in addressing economic questions, setting state priorities and deciding airport funding levels.

This report estimates that, at its current level of economic activity, the Eastern West Virginia Regional Airport has the following local economic impact:

- The Eastern West Virginia Regional Airport is responsible, directly or indirectly, for 1,637 local FTE jobs with annual labor income of \$85.6 million.
- The Airport generates a total annual local economic output of over \$224.6 million.
- 1,424 FTE on-Airport Public Sector jobs have annual labor income of over \$74.3 million.
- 213 FTE on-Airport Private Sector jobs have annual labor income of over \$11.3 million.
- The 1,637 local FTE jobs comprise approximately 2.2% of all of the jobs in the Berkeley, Jefferson and Morgan county areas.
- While not included in the totals above, the Airport also sees Capital Expenditures and investments made in the facilities such as the airfield, buildings and hangars. The average impact on the local economy since 2004 is 170 annual jobs and \$8.5 million in annual wages.



Objective

This economic impact study estimates the annual local economic impact of the Eastern West Virginia Regional Airport. This impact is estimated in terms of job and commerce creation and the indirect and induced effects of that activity on the state and local economies.



This study quantifies local economic activity that would not otherwise occur without the existence of the Airport. This activity is measured in the following terms:

- Job creation (employment)
- Commercial spending by Airport businesses and Airport Administration
- Capital expenditures by Airport business and Airport Administration

The economic impacts include several measured types. They include impacts brought by visitors to the Martinsburg area by general aviation activities and include:

- Direct impact, economic activity occurring directly at or as a result of airport economic activity;
- Indirect impact, activity resulting indirectly from airport activity;
- Induced impact, activity driven by payroll dollars from both direct and indirect activity.





Background

The Eastern West Virginia Regional Airport is a public airport located just south of Martinsburg, West Virginia, with nearest commercial service at Hagerstown, Maryland. West Virginia's eastern panhandle region is also served by large commercial service airports including Washington-Dulles, Washington-Reagan and Baltimore-Washington. The Airport is operated by the Eastern West Virginia Regional Airport Authority. Eastern West Virginia Regional Airport covers an area of 1,020 acres. Its single runway (8/26) is 8,815 feet X 150 feet.

The Airport is the home of the West Virginia Air National Guard's 167th Airlift Wing. A total of 91 aircraft are based on the field: 72 single-engine, 9 multi-engine, 2 helicopters and 8 military jet aircraft. Between June 1, 2017 and May 31, 2018 some 29,303 aircraft takeoff and landing operations occurred as reported by the airport's DOD-contracted, part-time Air Traffic Control Tower staff.

In short, the Airport is a significant economic engine for the city and region.

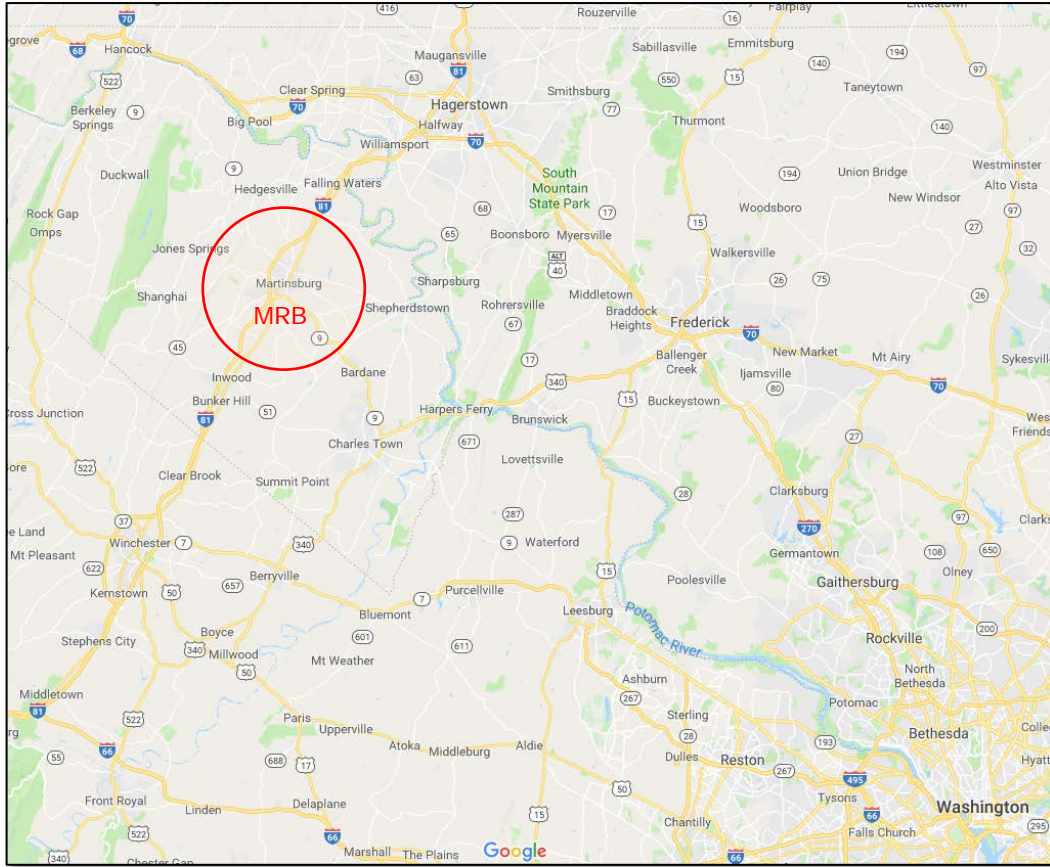
The Eastern West Virginia Regional Airport has commissioned Sixel Consulting Group to estimate the annual economic impact of this economic engine. An understanding of the Airport's annual economic impact can guide community decisions about airport and aviation service-related policies.

Economic impact from job creation and increased economic activity near an airport typically has the most impact on the local host county of a given area.

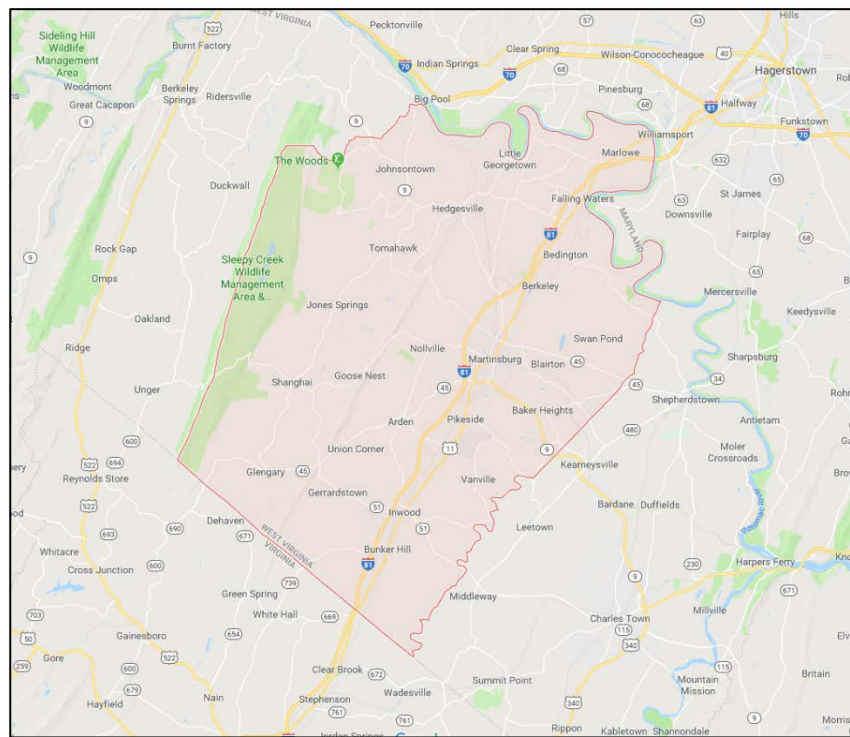
For this study Airport related economic impact is calculated for Berkeley County, Jefferson County and Morgan County only. These counties have an estimated population of over 187,000 residents. The map on the next page shows the Berkeley, Jefferson and Morgan County study area. Small portions of Airport economic activity certainly spill into the neighboring counties and states. In that sense economic impact studies are not exact, however it is a well-established norm that Airport economic impact is measured in the county, municipality or area closest to the airport. Thus this study will focus on Berkeley County, Jefferson County and Morgan County only.



Martinsburg, West Virginia and Surrounding Area



Berkeley County, West Virginia





Jefferson County, West Virginia



Morgan County, West Virginia





Methodology, Terms, Definitions and Assumptions

Major Research Activities

Several steps are involved in the economic impact estimation process. Among the most important are survey data collection, visitor traffic and spending pattern estimates, and computer modeling.

Survey Data

Estimated total direct employment, ongoing business spending patterns and payroll and related tax estimates associated with the Airport and all of its economic functions were estimated by surveying Airport tenants. This survey was completed in September of 2018.

General Aviation Traffic

Sixel Consulting Group, through the results of an FAA report, has estimated the portion of air traffic that is inbound and that is visiting the Martinsburg region for business or pleasure. Coupled with per visitor spending estimates, a total visitor spending pattern related to the Airport's general aviation activity and services is then possible to calculate.





| ACTIVITY | AVIATION STATISTICS | | | |
|-----------------------|---------------------------------|----------------------------------|-------------------------|----------------|
| | Number of Airports ¹ | Aircraft Operations ² | Commercial ³ | |
| | | | Freight (Tons) | Passengers |
| Commercial Aviation | 7 | 61,122 | 12,115 | 790,183 |
| General Aviation | 15 | 259,158 | — | — |
| Reliever Airports | 1 | — | — | — |
| Total Aviation | 23 | 320,280 | 12,115 | 790,183 |

| AVIATION ACTIVITY | TOTAL ECONOMIC IMPACT ⁷ | | |
|--|------------------------------------|----------------------|--------------|
| | Economic Activity | Earnings (Payroll) | Jobs |
| Direct | | | |
| ▶ Airlines | \$111,637,667 | \$22,605,911 | 457 |
| ▶ Airport Operations | \$54,841,041 | \$16,618,858 | 396 |
| ▶ General Aviation | \$98,473,741 | \$19,940,300 | 403 |
| ▶ Aircraft, Aircraft Engine, and Parts Manufacturing | \$644,258,742 | \$58,079,569 | 1,199 |
| ▶ Avionics Manufacturing | \$0 | \$0 | 0 |
| ▶ Research & Development | \$7,845,118 | \$2,445,142 | 50 |
| ▶ Air Courier | \$93,520,199 | \$27,319,305 | 830 |
| Indirect | | | |
| ▶ Visitor Expenditures — Commercial | \$584,573,698 | \$157,562,077 | 4,930 |
| ▶ Visitor Expenditures — General Aviation | \$30,734,875 | \$8,284,072 | 259 |
| ▶ Travel Arrangements | \$8,553,275 | \$2,276,645 | 67 |
| Total Aviation | \$1,634,438,358 | \$315,131,879 | 8,591 |

| TOTAL FAA SPENDING (FY 2014) | TOTAL ECONOMIC IMPACT ⁷ | | |
|------------------------------|------------------------------------|---------------------|------------|
| | Economic Activity | Earnings (Payroll) | Jobs |
| Total FAA Spending | \$73,340,887 | \$22,065,478 | 559 |

The Economic Impact of Civil Aviation on the U.S. Economy - Economic Impact of Civil Aviation by State
 October 2017 – The U.S. Department of Transportation, Federal Aviation Administration.

Computer Modeling

To compile all economic activity related to the Airport's many economic activities, and to project its overall economic impact, Sixel Consulting Group used the Impact Analysis for Planning (IMPLAN) computer program. Developed and produced by the Minnesota IMPLAN Group, Inc., this computer program is recognized as the industry standard for economic impact analysis. It is commonly used by consultants (in and beyond the airline industry), city planners, academics, and other researchers. The model draws on US Bureau of Economic Analysis data and the survey data inputs discussed above to forecast the impact of any measureable economic activity or change, within a defined community.

IMPLAN computer modeling considers three types of economic impacts with each measured as a combination of sales, employment, and wages. The three types or layers of economic impact are: direct, indirect and induced.



Terms and Definitions

Terms and definitions commonly used in this report include:

Airport Economy – Economic activity at the airport including, jobs, business purchasing and consumer spending.

Full-Time Jobs (Full-Time Equivalents FTE) – A full-time job is typically considered to be year-round and 40 hours per week. Survey respondents were asked to report employment in FTE equivalents to compensate for part-time employees.

Labor Income – The sum of payroll and benefits paid to workers.

Value Added – The incremental increase(s) in economic production or dollars with each stage of production or round of spending.

Output – The quantity of goods and services created in an economic cycle.

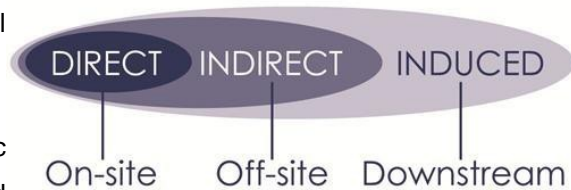




Direct impact refers to the economic impact generated on-site. This includes, for example, employment, payroll, and local expenditures of all organizations located at the Airport.

Indirect impact refers to the off-Airport economic activities and impacts that are driven by on-Airport dollars; the payroll driven local spending of people who work at the airport, the commercial spending of airport business and the Airport administration and the off-Airport spending of Martinsburg area visitors brought to the area by Eastern West Virginia Regional Airport's general aviation activity.

The Airport's Economic Impact



Induced impact relates to the off-Airport economic benefit derived downstream and beyond the combined direct and indirect impacts. Put simply, induced impact is the income generated by subsequent spending downstream and therefore is generally known as the “multiplier effect.” It could refer to the employment and expenditures generated by industries supplying services or goods to organizations that derive business from Airport on-site businesses; for example, jet fuel providers, office supply companies, local restaurants adding employees because airport job holders are dining out.

State and Local Taxes – The sum of sales, property, motor vehicle, severance, corporate, corporate profit, income and other state and local taxes.

Federal Taxes – The sum of social, excise, custom, corporate, corporate profit and personal income and other federal taxes.

Assumptions

This economic impact study is based on a number of assumptions. Core assumptions include the following:

- 1) If the Airport did not exist all the economic activity currently associated with the airport would either not occur or would take place at nearby airports. In the case of general aviation and business aviation - these activities would occur at a variety of existing private airports in the eastern panhandle and chiefly the public airports of neighboring states.
- 2) This analysis is a snapshot of Airport driven economic activity. Economic activity is not static. Air service changes and general and business aviation activity expands and contracts as the national and regional economies change over time.
- 3) The economic impact of the Airport is assumed to occur in Berkeley County, Jefferson County and Morgan County. Certainly modest portions occur in neighboring counties. Airport economic impact analysis for a general aviation airport like Eastern West Virginia Regional is typically



assigned to the immediate area around the airport, in this case, Berkeley County.

- 4) An economic impact study is only as good as the local economic activity survey data that forms the basis for the economic impact modeling. Some Eastern West Virginia Regional Airport employers did not respond, or provided limited response to the Economic Impact Survey used to generate this economic impact study. In some instances the report has extrapolated some data based upon other data from similar employers or business enterprises.
- 5) The economic database used for this report is for the year 2017, the most current annual data available. The IMPLAN economic impact software takes the 2016 economic data of Berkeley County, Jefferson County and Morgan County and extrapolates it to 2017 data for the generation of the economic impact projections of this report.





EWVRA Area Economic and Demographic Snapshot

In 2016, the study area for this report, Berkeley, Jefferson and Morgan counties, West Virginia, had an estimated population of 187,525. Total employment was estimated at 74,934. Government and government enterprises was the largest component of employment with 14,356 employees, followed by 8,653 employees involved in retail trade and 7,354 in accommodation and food services.

| Berkeley, Jefferson, Morgan County Economic / Demographic Profile | | | | |
|--|----------------|---------------|---------------|----------------|
| Category | Berkeley | Jefferson | Morgan | Total |
| Population (persons) | 113,525 | 56,368 | 17,632 | 187,525 |
| Wage and salary employment | 35,815 | 17,796 | 2,983 | 56,594 |
| Proprietors employment | 9,849 | 6,639 | 1,852 | 18,340 |
| Farm employment | 722 | 556 | 184 | 1,462 |
| Nonfarm employment | 44,942 | 23,879 | 4,651 | 73,472 |
| <i>Utilities</i> | 96 | - | - | 96 |
| <i>Construction</i> | 2,188 | 1,269 | 347 | 3,804 |
| <i>Manufacturing</i> | 1,612 | 929 | 247 | 2,788 |
| <i>Wholesale trade</i> | 1,619 | 459 | 63 | 2,141 |
| <i>Retail trade</i> | 5,516 | 2,555 | 582 | 8,653 |
| <i>Transportation and warehousing</i> | 3,309 | - | - | 3,309 |
| <i>Information</i> | 1,850 | 222 | 36 | 2,108 |
| <i>Finance and insurance</i> | 1,022 | 541 | 132 | 1,695 |
| <i>Real estate and rental and leasing</i> | 1,671 | 1,060 | 259 | 2,990 |
| <i>Professional, scientific, and technical services</i> | 1,948 | 1,654 | 206 | 3,808 |
| <i>Management of companies and enterprises</i> | 132 | 69 | - | 201 |
| <i>Administrative and support and waste management services</i> | 2,509 | 923 | - | 3,432 |
| <i>Educational services</i> | 521 | 1,588 | - | 2,109 |
| <i>Health care and social assistance</i> | 5,226 | 1,402 | - | 6,628 |
| <i>Arts, entertainment, and recreation</i> | 905 | 982 | 107 | 1,994 |
| <i>Accommodation and food services</i> | 3,255 | 3,756 | 343 | 7,354 |
| <i>Other services (except government and government enterprises)</i> | 2,376 | 1,400 | 376 | 4,152 |
| Government and government enterprises | 8,994 | 4,567 | 795 | 14,356 |
| <i>Federal civilian</i> | 3,403 | 1,289 | 25 | 4,717 |
| <i>Military</i> | 562 | 256 | 81 | 899 |
| <i>State government</i> | 1,017 | 1,203 | 201 | 2,421 |
| <i>Local government</i> | 4,012 | 1,819 | 488 | 6,319 |
| Total employment | 45,664 | 24,435 | 4,835 | 74,934 |



| Berkeley, Jefferson, Morgan County Gross Domestic Product (\$millions) | | | | |
|--|-----------------|-----------------|---------------|-----------------|
| Category | Berkeley | Jefferson | Morgan | Total |
| All industry total | \$ 2,927 | \$ 1,453 | \$ 455 | \$ 4,835 |
| Private industries | \$ 2,465 | \$ 1,310 | \$ 255 | \$ 4,029 |
| Utilities | \$ 63 | \$ - | \$ - | \$ 63 |
| Construction | \$ 116 | \$ 67 | \$ 18 | \$ 201 |
| Manufacturing | \$ 281 | \$ 162 | \$ 43 | \$ 485 |
| Wholesale trade | \$ 192 | \$ 54 | \$ 7 | \$ 254 |
| Retail trade | \$ 283 | \$ 131 | \$ 30 | \$ 445 |
| Transportation and warehousing | \$ 235 | \$ - | \$ - | \$ 235 |
| Information | \$ 179 | \$ 22 | \$ 3 | \$ 204 |
| Finance, insurance, real estate, rental, and leasing | \$ 554 | \$ 293 | \$ 72 | \$ 919 |
| Professional and business services | \$ 170 | \$ 144 | \$ 18 | \$ 332 |
| Management of companies and enterprises | \$ 27 | \$ 14 | \$ - | \$ 42 |
| Administrative and support and waste management services | \$ 109 | \$ 40 | \$ - | \$ 149 |
| Educational services, health care, and social assistance | \$ 127 | \$ 388 | \$ - | \$ 515 |
| Health care and social assistance | \$ 385 | \$ 103 | \$ - | \$ 488 |
| Arts, entertainment, recreation, accommodation, and food services | \$ 105 | \$ 114 | \$ 12 | \$ 231 |
| Accommodation and food services | \$ 62 | \$ 71 | \$ 6 | \$ 139 |
| Other services (except government and government enterprises) | \$ 68 | \$ 40 | \$ 11 | \$ 118 |
| Government and government enterprises | \$ 505 | \$ 256 | \$ 45 | \$ 806 |
| Federal civilian | | | | N/A |
| Military | | | | N/A |
| State and local | | | | N/A |

Gross Regional Product, the sum of commerce for the region, was estimated to be \$4.84 billion dollars for 2016 (this is the latest data available from the Bureau of Economic Analysis). This includes \$4.03 billion generated by private industries and \$806 million from government and government enterprises.

The largest private industry component of GDP is in the finance, insurance, real estate, rental and leasing category, generating \$919 million. This is followed by educational services, health care and social assistance, which generates \$515 million annually towards the study area's GDP and \$485 million generated by the manufacturing sector.

Overview of Airport Users



167th Airlift Wing

“The 167th Airlift Wing of the West Virginia Air National Guard is an airlift unit that flies the C-17 Globemaster III aircraft. For more than 60 years the wing has served the state and nation by providing outstanding capability across a variety of missions, beginning in its earliest days when it flew the F-51 Mustang and F-86 Sabre fighters. The unit has deployed to the four corners of the Earth in support of the Global War on Terrorism and continues to support this effort. The 167th's focus today, and in the future, is summed up in the unit's motto: “Mountaineer Pride Worldwide.”” - <http://www.167aw.ang.af.mil/>





HealthNet Aeromedical Services / HealthTeam Critical Care Transport

HealthNet Aeromedical Services is one of the few statewide hospital-based air medical services in the United States. In fact, the operation serves as a model for cost effective, cooperative aeromedical services in a rural environment. Their eleven helicopters serve West Virginia and significant portions of Kentucky, Ohio, Virginia, Maryland, Pennsylvania, North Carolina and Tennessee. Each helicopter base is responsible for



providing service in a 150-nautical-mile radius. The strategic locations of the bases improve HealthNet Aeromedical Services' operational capabilities by reducing response time to emergencies.

Aircraft, manufactured by Airbus are used exclusively throughout the HealthNet Aeromedical Services' system. The fleet includes one EC-145 (Morgantown, WV), eight EC-135s (Martinsburg, Buckhannon, Beckley, and Moundsville, WV) and four EC-130s (Lewisburg, Ripley and Huntington, WV; Martin County, KY, Portsmouth, Ohio and a system-wide spare). They are jet-powered and cruise at 130 mph. Agencies utilizing HealthNet Aeromedical Services have grown to rely on these aircraft and crews to respond to their call and make a difference, when minutes matter.

HealthNet Aeromedical Services is a West Virginia-based, not-for-profit critical care transport system. Cooperatively owned and operated by WVU Medicine, Charleston Area Medical Center and Cabell Huntington Hospital, the system has twelve aircraft serving from ten bases across central Appalachia. Each aircraft is staffed by a pilot, flight paramedic and flight nurse and is fully equipped as a flying intensive care unit.

The Eastern West Virginia Regional Airport Base #8 has twenty employees assigned to it serving in both clinical and aviation roles.



Aero-Smith, Inc. is an aviation services company that was created to provide premium support services to the owners of the rapidly growing fleet of corporate and private aircraft.

The company is operated by experienced aviation professionals who have devoted their aviation careers to service, continuing education and safety.

Aero-Smith manages and maintains aircraft, train new pilots and provide aircraft charter services while always searching for new ideas and products to serve a constantly changing industry.

Aero-Smith offers a state-of-the-art Part 135 operation with an Air Carrier Certificate that has been active since 1993. During the past twenty years the company has performed services for Fortune 500 companies and small single owner companies involving a wide variety of jet and turbo-prop aircraft.

Aero-Smith's Flight Training department is moving toward becoming a Part 141 provider using a fleet of impeccably maintained Cessna 172's. After attaining their licenses and ratings, many of our students have chosen a career in Aviation in both civilian and government flying positions.

The company's Aircraft Management services deliver the oversight and insight necessary to enable their clients to efficiently use their capital and to allow company management to make timely and accurate decisions with regard to their flight operations. Aero-Smith has operated both domestically and internationally, with experience in both fixed and rotor wing operations. Their General Operations Manual, Safety Management System, Emergency Response Manual have met Argus and IS-BAO requirements.

Aero-Smith has aligned itself with Industry leaders such as The National Business Aircraft Association, Helicopter International Association, NATA, Flight Safety International, USAIG, Starr Aviation and many others.



On-Airport Jobs and Labor Income

On-Airport Tenants

| EWVRA Surveyed Tenants | |
|--|--|
| Public | Private |
| Civil Air Patrol | Aero-Smith |
| Eastern WV Regional Airport | Air Methods |
| Federal Aviation Administration | Air Photographics |
| South Berkeley Volunteer Fire Company | Arcadia Aviation |
| WV Air National Guard 167th Air Wing | Burlington United Methodist Family Services |
| WV Army National Guard | Crosswinds Café |
| WV Army National Guard 157th Military Police | Dynamic Science |
| | Eastern Technical Corp. |
| | Experimental Aircraft Association Chapter 1071 |
| | Flight Safety Service |
| | HealthNet Aeromedical |
| | Howard Aircraft |
| | Jamie Davis CPA |
| | Panhandle Real Estate Trust |
| | Pikeside Flying Club |
| | Steeley Foundation |
| | Steven David Entertainment |
| | Triumph Property Group |

Estimated Employment Impact of the Airport

The Eastern West Virginia Regional Airport supports 1,127 permanent full-time (FTE) jobs directly at the Airport. Airport employment is across a broad spectrum of aviation related sectors including: the military, one Fixed Base Operation (FBO), the Federal Aviation Administration (FAA), the West Virginia Army & Air National Guard and Airport Administration. The 1,127 on-Airport jobs generate over \$59.0 million in annual gross wages.

On-Airport Public Sector Jobs and Labor Income

Airport and Federal and State employment sectors make up the Public Sector of the Airport economy. For the purposes of this analysis this includes employees of the Airport Administration, the Federal Aviation Administration, the West Virginia Air National Guard's 167th Air Wing (and its private civilian contractors), and the West Virginia Army National Guard operations including the 157th Military Police unit.

The West Virginia Air National Guard's 167th Air Wing is the largest driver of employment at the airport, employing 992 military and civilian FTEs at the Airport. Annual labor income for this group is estimated at \$51.7 million.



| Public Sector - Airport Administration | | | | |
|---|----------------------|----------------------|-----------------------|-----------------------|
| Output | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 3.0 | \$192,857 | \$308,735 | \$501,592 |
| Indirect Effect | 0.9 | \$56,512 | \$91,035 | \$147,547 |
| Induced Effect | 0.3 | \$21,528 | \$40,015 | \$61,543 |
| Total | 4.2 | \$ 270,897 | \$ 439,785 | \$ 710,682 |
| State & Local Tax | | | | \$15,329 |
| Federal Tax | | | | \$40,247 |
| Civil Air Patrol - Federal Aviation Administration - 157th Military Police | | | | |
| Output Equivalents | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 9.0 | \$540,000 | \$864,459 | \$1,404,459 |
| Indirect Effect | 2.6 | \$158,233 | \$254,898 | \$413,131 |
| Induced Effect | 1.0 | \$60,279 | \$112,042 | \$172,321 |
| Total | 12.6 | \$ 758,512 | \$ 1,231,399 | \$ 1,989,911 |
| State & Local Tax | | | | \$42,921 |
| Federal Tax | | | | \$112,692 |
| West Virginia Air National Guard 167th Air Wing | | | | |
| Output Equivalents | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 992.0 | \$51,694,796 | \$82,755,607 | \$134,450,403 |
| Indirect Effect | 290.7 | \$15,147,777 | \$24,401,700 | \$39,549,477 |
| Induced Effect | 110.7 | \$5,770,582 | \$10,725,889 | \$16,496,471 |
| Total | 1,393.4 | \$ 72,613,155 | \$ 117,883,196 | \$ 190,496,351 |
| State & Local Tax | | | | \$4,108,895 |
| Federal Tax | | | | \$10,788,168 |
| On Airport Public Sector Employment Economic Impact | | | | |
| | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 1,014.0 | \$52,927,653 | \$84,729,226 | \$137,656,879 |
| Indirect Effect | 297.1 | \$15,509,033 | \$24,983,650 | \$40,492,683 |
| Induced Effect | 113.2 | \$5,908,203 | \$10,981,689 | \$16,889,892 |
| Total | 1,424.3 | \$ 74,344,889 | \$ 120,694,565 | \$ 195,039,454 |
| State & Local Tax | | | | \$4,206,887 |
| Federal Tax | | | | \$11,045,453 |



| Private Contractors of 167th Air Wing | |
|--|---------------------------------|
| Company | Company |
| AAR Mobility, INC. | Jack Knelly's Office Furniture |
| Acorn Office Products, LLC | Jefferson Asphalt |
| Aikens Corporation | Larson Lightning Protection |
| Assa Abloy Entrance Systems | MicroTechnologies LLC |
| AT&T | National Door Services, Inc. |
| AT&T Mobility LLC | Noble Sales and Logistics |
| Atkins North America, Inc. | Ortega Enterprises Incorporated |
| Atlantic Diving Supply Incorporated | Parts Hangar |
| Beatty's Services | Pauli Systems |
| Caprice Electronics, Inc. | PCMG, INC. |
| Chemtek, Inc. | Pelican Sales Inc. |
| Complete Packaging & Shipping Supplies, Inc. | Phillips Corp. |
| Compressed Air Services Inc. | Prudential Overall Supply |
| Cooper Building Services, LLC | Range Systems, Inc. |
| Coronado Distribution Company | Roncelli Plastics, Inc. |
| Desbuild Inc. | Ruby Tuesday |
| Desbuild Incorporated | SAF, Inc. |
| Desktop Alert Inc. | Salone, LLC |
| Environamics | Samtech LLC |
| FCN, Inc. | San Miguel Contracting LLC |
| Fire-X Sales & Service Corp. | Sarasota Avionics |
| Fyve Star Inc | Service Care of America |
| Garrett Container Systems, Inc. | Solar Screen Company Inc. |
| Gateway Gettysburg Hotel Partners, L.P. | Spokane Industries, Inc. |
| Global Med Industries | Tetra Tech Mead Hunt JV |
| Greenway Engineering | The Matthews Group |
| GRW | Trifecta Energy, Inc. |
| GRW Engineers, Inc. | US PATRIOT LLC |
| Huntsville Tractor & Equipment | Westcarb Enterprises, Inc. |
| Hydro Engineering, Inc. | Winchester Hospitality |
| Intelligent Decisions | Wycliffe Enterprises, Inc. |
| ITM4G | |

The on-airport public sector employment totals 1,014 FTEs. Indirect and induced effect generates another 410 FTEs, making total employment impact from on-airport public sector employment 1,424 FTEs. Annual labor income from the total employment is \$74.3 million, economic value added is \$120.7 million and total annual economic output is \$195.0 million.

Nearly \$4.2 million in annual state and local taxes are generated, along with \$11.0 million in annual federal taxes.

On-Airport Private Sector Jobs and Labor Income

Direct private sector employment at the Airport is 152 FTEs. For the purpose of measuring economic impact this private sector employment was analyzed in four categories; FBO's and Maintenance Service, Medical Services, General Aviation Impact and Other Businesses.



| Aircraft Maintenance and Service - FBO's - Flying Clubs | | | | |
|--|----------------------|----------------------|----------------------|----------------------|
| Output | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 16.0 | \$1,280,000 | \$2,049,088 | \$3,329,088 |
| Indirect Effect | 4.7 | \$375,070 | \$604,203 | \$979,273 |
| Induced Effect | 1.8 | \$142,884 | \$265,581 | \$408,464 |
| Total | 22.5 | \$ 1,797,953 | \$ 2,918,872 | \$ 4,716,825 |
| State & Local Tax | | | | \$101,739 |
| Federal Tax | | | | \$267,123 |
| Medical Services | | | | |
| Output | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 64.0 | \$3,380,000 | \$5,410,873 | \$8,790,873 |
| Indirect Effect | 18.8 | \$990,419 | \$1,595,475 | \$2,585,893 |
| Induced Effect | 7.1 | \$377,302 | \$701,299 | \$1,078,601 |
| Total | 89.9 | \$ 4,747,721 | \$ 7,707,646 | \$ 12,455,367 |
| State & Local Tax | | | | \$268,655 |
| Federal Tax | | | | \$705,371 |
| Other Businesses | | | | |
| Output | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 33.0 | \$1,459,000 | \$2,335,640 | \$3,794,640 |
| Indirect Effect | 9.7 | \$427,521 | \$688,698 | \$1,116,218 |
| Induced Effect | 3.7 | \$162,865 | \$302,720 | \$465,586 |
| Total | 46.4 | \$ 2,049,386 | \$ 3,327,058 | \$ 5,376,444 |
| State & Local Tax | | | | \$115,967 |
| Federal Tax | | | | \$304,478 |
| General Aviation | | | | |
| Output | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 38.5 | \$1,907,235 | \$3,053,198 | \$4,960,433 |
| Indirect Effect | 11.3 | \$558,864 | \$900,280 | \$1,459,144 |
| Induced Effect | 4.3 | \$212,901 | \$395,723 | \$608,623 |
| Total | 54.1 | \$ 2,679,000 | \$ 4,349,200 | \$ 7,028,201 |
| State & Local Tax | | | | \$151,594 |
| Federal Tax | | | | \$398,020 |
| On Airport Private Sector Employment Economic Impact | | | | |
| Output | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 151.5 | \$8,026,235 | \$12,848,798 | \$20,875,033 |
| Indirect Effect | 44.4 | \$2,351,874 | \$3,788,656 | \$6,140,529 |
| Induced Effect | 16.9 | \$895,952 | \$1,665,323 | \$2,561,274 |
| Total | 212.9 | \$ 11,274,061 | \$ 18,302,776 | \$ 29,576,837 |
| State & Local Tax | | | | \$637,955 |
| Federal Tax | | | | \$1,674,992 |

The on-airport private sector employment totals 152 FTEs. Indirect and induced effect generates another 61 FTEs, making total employment impact from the on-airport private sector 213 FTEs. Annual labor income from the total employment is \$11.3 million, economic value added is \$18.3 million and total annual economic output is \$29.6 million dollars.

\$0.6 million in annual state and local taxes are generated, along with \$1.7 million in annual federal taxes.



Total Airport Public and Private Sector Jobs and Labor Income

The combined Public and Private Sectors of the on-airport economy creates 1,166 on-airport FTEs which, in turn, create 472 full-time off-airport jobs either through indirect or induced economic effect in the local region.

| On Airport Public Sector | | | | |
|---------------------------|--------------------------|----------------------|-----------------------|-----------------------|
| Output | Full Time Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 1,014.0 | \$52,927,653 | \$84,729,226 | \$137,656,879 |
| Indirect Effect | 297.1 | \$15,509,033 | \$24,983,650 | \$40,492,683 |
| Induced Effect | 113.2 | \$5,908,203 | \$10,981,689 | \$16,889,892 |
| Total | 1,424.3 | \$ 74,344,889 | \$ 120,694,565 | \$ 195,039,454 |
| State & Local Tax | | | | \$4,206,887 |
| Federal Tax | | | | \$11,045,453 |
| On Airport Private Sector | | | | |
| Output | Full Time Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 151.5 | \$8,026,235 | \$12,848,798 | \$20,875,033 |
| Indirect Effect | 44.4 | \$2,351,874 | \$3,788,656 | \$6,140,529 |
| Induced Effect | 16.9 | \$895,952 | \$1,665,323 | \$2,561,274 |
| Total | 212.9 | \$ 11,274,061 | \$ 18,302,776 | \$ 29,576,837 |
| State & Local Tax | | | | \$637,955 |
| Federal Tax | | | | \$1,674,992 |
| Total | | | | |
| Output | Full Time Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 1,165.5 | \$60,953,888 | \$97,578,024 | \$158,531,912 |
| Indirect Effect | 341.5 | \$17,860,907 | \$28,772,306 | \$46,633,213 |
| Induced Effect | 130.1 | \$6,804,155 | \$12,647,011 | \$19,451,166 |
| Total | 1,637.2 | \$ 85,618,950 | \$ 138,997,341 | \$ 224,616,291 |
| State & Local Tax | | | | \$4,844,842 |
| Federal Tax | | | | \$12,720,445 |

Combined public/private annual labor income from the 1,637 on-airport FTEs is \$61.0 million. Total labor income, including that of indirect and induced job creation, totals over \$85.6 million.

Total annual economic output as a result of the on-Airport jobs and the indirect and induced job creation is \$224.6 million dollars, driven primarily by the presence of the Air National Guard's 167th Air Wing located on the field.

Over \$4.8 million in annual state and local taxes are generated by the 1,637 FTEs associated with the airport's operation. About \$12.7 million in annual federal taxes are also generated.



Airport Operations

Airport Operations

The runway was used for 29,303 aircraft operations during the year ended in May 2018, an average of 80 operations per day. Aircraft operations are generated by Airport based aircraft and by visiting or transient aircraft.

| EWVRA BASED AIRCRAFT AND OPERATIONS SUMMARY: YE May 2018 | | | |
|--|----------------|---------------------|---------------|
| Airport Based Aircraft | | Aircraft Operations | |
| Type | Based Aircraft | Type | Number |
| Single-engine | 72 | Commuter | 0 |
| Multi-engine | 9 | Air-taxi | 104 |
| Civilian Jet | 0 | Military | 4,008 |
| Civilian Helio | 2 | GA Local | 21,764 |
| Military | 8 | GA itinerant | 3,427 |
| Total | 91 | Total | 29,303 |

| EWVRA BASED AIRCRAFT AND OPERATIONS SUMMARY: YE May 2018 | | | |
|--|----------------|---------------------------|--|
| Airport Based Aircraft | | Aircraft Operations: 2017 | |
| Type | Based Aircraft | Number | |
| EWVRA | 91 | 29,303 | |
| West Virginia Total | 887 | 330,355 | |
| | 10.3% | 8.9% | |
| EWVRA Average | | 9.6% | |

| GENERAL AVIATION IMPACT ON WEST VIRGINIA: FAA 2017 | | | |
|--|---------------|------|--------------|
| Type | West Virginia | | EWVRA |
| Jobs | 403 | 9.6% | 38.5 |
| Wages | \$ 19,940,300 | 9.6% | \$ 1,907,235 |
| Economic Activity | \$ 98,473,741 | 9.6% | \$ 9,418,745 |

The Airport's facilities and infrastructure currently supports and make possible the basing of 72 single-engine aircraft, 9 multi-engine aircraft, 8 military aircraft and two helicopters – a total of 91 aircraft. Martinsburg is the only airport in West Virginia holding "general aviation reliever" status with the FAA and has the largest count of based aircraft in the state.



Airport Fuel Sales

| AIRPORT FACILITY FUEL SALES (GALLONS) | | | | |
|--|----------------|-----------------|--------------|----------------|
| Year | GA Jet | GA AvGas | Other | Total |
| 2014 | 111,527 | 39,935 | 0 | 151,462 |
| 2015 | 97,264 | 37,015 | 0 | 134,279 |
| 2016 | 97,095 | 33,862 | 0 | 130,957 |
| 2017 | 94,992 | 35,713 | 0 | 130,705 |

The Airport's infrastructure facilitates the sale of aviation fuels to both military and general aviation users. In 2017, Aero-Smith sold 94,992 gallons of Jet fuel and 35,713 gallons of Aviation Gasoline to its customers. These figures do not include the self-fueling operations performed by the 167th Airlift Wing, estimated to be in excess of 1,500,000 gallons annually.



On-Airport Capital Spending

Both public and private sector employers at the Airport spend money day-to-day on materials and services necessary to continue operations. Both public and private sector employers at the Airport have capital expenditures, typically for new or additional equipment or for new or expanded building space.

All of these expenditures have economic impact. One challenge is determining the portion of commercial (material or services) or capital expenditure that is spent in the local area, as opposed to an equipment purchase from a vendor hundreds of miles away for a piece of equipment built at that location.

Economic impact surveying of Airport tenants for commercial (material or services) and capital spending is also challenging in that survey respondents sometimes do not know or do not want to share expenditure levels and also must often estimate the portion of an expenditure that is local in nature.

Only about one half the Airport tenant group responded to survey questions about commercial (material or services) and capital spending patterns. Among those who did respond, most did not provide an estimate of spending that was local vs. spending that was global.

Based on spending patterns for survey respondents that did provide data plus data from other economic impact analyses, and based on accepted rules of thumb for local vs. global portions, Sixel Consulting Group has estimated the economic impact of Airport public and private commercial and capital expenditures for 2017. Note that capital expenditures can vary widely up or down by year, depending on what capital projects are ongoing.

Airport Located Capital Expenditures

Because capital expenditures can change so much from year to year as construction projects start or finish, they were not included in the total economic output of this report. However, they are an important component of spending and itinerant job creation over the years, so an estimate was made in this section of the “average” impact of capital expenditures over the past few years from Airport Administration, the 167th Airlift Wing and Private Sector businesses. On the next two pages it is shown that airport located capital expenditures have resulted in an average of 170 jobs and \$8.5 million in wages since 2004.



| EWVRA Capital Spending / 2014 - 2019 | | | |
|--------------------------------------|-------------|---------------|------------------|
| Fiscal Year | Spend | Percent Local | Local Spend |
| 2014 | \$785,000 | 80.0% | \$628,000 |
| 2015 | \$81,500 | 80.0% | \$65,200 |
| 2016 | \$396,000 | 80.0% | \$316,800 |
| 2018 - 219 | \$1,910,000 | 80.0% | \$1,528,000 |
| | \$3,172,500 | | \$2,538,000 |
| Average | | | \$634,500 |

| Private Capital Spending / 2014 - 2017 | | | |
|--|-------------|---------------|------------------|
| Fiscal Year | Spend | Percent Local | Local Spend |
| 2014 | \$500,000 | 80.0% | \$400,000 |
| 2015 | \$500,000 | 80.0% | \$400,000 |
| 2016 | \$500,000 | 80.0% | \$400,000 |
| 2017 | \$934,000 | 80.0% | \$747,200 |
| | \$2,434,000 | | \$1,947,200 |
| Average | | | \$486,800 |

| Military Capital Spending / 2004 - 2017 | | | |
|---|---------------|---------------|---------------------|
| Fiscal Year | Spend | Percent Local | Local Spend |
| 2004 | \$22,561,783 | 80.0% | \$18,049,426 |
| 2005 | \$80,700,000 | 80.0% | \$64,560,000 |
| 2006 | \$63,971,900 | 80.0% | \$51,177,520 |
| 2007 | \$33,882,400 | 80.0% | \$27,105,920 |
| 2008 | \$47,900,600 | 80.0% | \$38,320,480 |
| 2009 | \$3,730,311 | 80.0% | \$2,984,249 |
| 2010 | \$8,872,900 | 80.0% | \$7,098,320 |
| 2011 | \$1,176,300 | 80.0% | \$941,040 |
| 2012 | \$6,399,800 | 80.0% | \$5,119,840 |
| 2013 | \$1,145,400 | 80.0% | \$916,320 |
| 2014 | \$0 | 80.0% | \$0 |
| 2015 | \$0 | 80.0% | \$0 |
| 2016 | \$0 | 80.0% | \$0 |
| 2017 | \$0 | 80.0% | \$0 |
| | \$270,341,394 | | \$216,273,115 |
| Average | | | \$15,448,080 |



| EWVRA Capital Spending (2014 - 2017 average) | | | | |
|--|------------------------------|-------------------------|------------------------|----------------------|
| Output | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 4.6 | \$231,237 | \$370,176 | \$601,414 |
| Indirect Effect | 1.4 | \$67,758 | \$109,152 | \$176,910 |
| Induced Effect | 0.5 | \$25,813 | \$47,978 | \$73,791 |
| Total | 6.5 | \$ 324,808 | \$ 527,307 | \$ 852,115 |
| State & Local Tax | | | | \$18,380 |
| Federal Tax | | | | \$48,257 |
| On Airport Private Capital Spending (2014 - 2017 average) | | | | |
| Output | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 3.5 | \$177,410 | \$284,006 | \$461,416 |
| Indirect Effect | 1.0 | \$51,985 | \$83,743 | \$135,729 |
| Induced Effect | 0.4 | \$19,804 | \$36,810 | \$56,614 |
| Total | 5.0 | \$ 249,199 | \$ 404,559 | \$ 653,758 |
| State & Local Tax | | | | \$14,101 |
| Federal Tax | | | | \$37,024 |
| West Virginia Air National Guard Capital Spending (2004 - 2017 average) | | | | |
| Output | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 112.6 | \$5,629,905 | \$9,012,633 | \$14,642,539 |
| Indirect Effect | 33.0 | \$1,649,693 | \$2,657,507 | \$4,307,200 |
| Induced Effect | 12.6 | \$628,455 | \$1,168,120 | \$1,796,575 |
| Total | 158.2 | \$ 7,908,053 | \$ 12,838,260 | \$ 20,746,313 |
| State & Local Tax | | | | \$447,486 |
| Federal Tax | | | | \$1,174,903 |
| Average Capital Spending | | | | |
| Output | Labor Equivalents | Labor Income | Value Added | Output |
| Direct Effect | 120.8 | \$6,038,553 | \$9,666,816 | \$15,705,368 |
| Indirect Effect | 35.4 | \$1,769,436 | \$2,850,402 | \$4,619,838 |
| Induced Effect | 13.5 | \$674,071 | \$1,252,908 | \$1,926,979 |
| Total | 169.6 | \$ 8,482,060 | \$ 13,770,126 | \$ 22,252,186 |
| State & Local Tax | | | | \$479,967 |
| Federal Tax | | | | \$1,260,183 |



Total Eastern West Virginia Regional Airport Economic Impacts

The Eastern West Virginia Regional Airport supports 1,166 FTE jobs directly at the airport across a broad spectrum of public and private aviation related sectors.

These jobs and the economic activity they generate are responsible, after direct, indirect and induced economic effect, for a total of 1,637 jobs in Berkeley County, Jefferson County and Morgan County, 2.2% of the area's total employment. These 1,637 jobs have an annual labor income of \$85.6 million. Annual state and local tax generation from these jobs is \$4.8 million and annual federal tax generation is \$12.7 million.

These jobs and related Airport commercial and capital spending result in an annual total economic output of \$224.6 million dollars in Berkeley County, Jefferson County and Morgan County, 4.6% of the area's total gross domestic product.

Some 91 aircraft are based at the Airport and 29,303 aircraft movements were recorded in from the period June 1, 2017 through May 31, 2018.

Beyond the job creation, labor income, Airport driven local spending and visitor spending economic impacts of the Eastern West Virginia Regional Airport, there is another significant but intangible economic impact created by the Airport.

The Eastern West Virginia Regional Airport is important to many local area businesses, giving them the flexibility of a local access point to the national air transportation system, either via chartered or general aviation aircraft.

The Eastern West Virginia Regional Airport is a local economic asset that benefits from and returns to the community local, state and federal investments. Beyond the documented jobs, labor income and economic output it generates, it also serves the local business community, making it possible for some local firms to compete on the national and global stage by providing those firms various air transportation options. The presence of a large, modern and well-equipped airport also greatly enhances the Eastern Panhandle's ability to attract and retain corporate investment.



The Eastern West Virginia Regional Airport is a significant economic engine for Berkeley County, the City of Martinsburg, Jefferson County, Morgan County, the state of West Virginia and even the counties of neighboring states.

As the Eastern Panhandle counties continue to grow economically, the importance of the Airport to that growth should not be understated or underestimated. The quality of the facility, the support infrastructure on it and around it, and the costs at which the airport provides its services are all critical to preserving and increasing military, general and business aviation activity.

