
APPENDIX F. STUDY PRIMER

Appendix F includes the West Virginia Aviation Economic Impact Study (WV AEIS) Primer. The Study Primer is an abbreviated version of the Executive Summary that presents key study findings and provides an overview of the study purpose and methodology.

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Study Primer

West Virginia's public aviation system consists of 24 airports that support the safe transport of people and goods into and out of the state. These airports provide commercial airline and general aviation (GA) service connecting residents to thousands of destinations domestically and internationally and allowing out-of-state visitors access to the "Almost Heaven" offerings found across the Mountain State. Not only do airports provide essential connections for business and leisure travelers, but they also support key industries through the transportation of goods and materials. Airports are important economic anchors, serving as job centers and supporting top industries in West Virginia such as aerospace, tourism, mining, agriculture, manufacturing, and healthcare. Collectively, the operation of airports and spending by visitors arriving to the state via these airports generate significant economic activity.

To assess both the quantitative and qualitative impacts generated by this network of airports, the West Virginia Aeronautics Commission (WVAC) initiated the West Virginia Aviation Economic Impact Study (WV AEIS), using 2019 as the base year for assessment. This study, initiated in January 2020, identifies and documents the wide range of economic and other benefits the West Virginia aviation system annually contributes to the state.

Methodology

To capture an accurate picture of the economic activity supported by aviation in the state, a comprehensive data set was required. These data were collected in several ways: in-person meetings; online surveying; phone calls; and more. Site visits were conducted at each of the 24 system airports to collect information on airport administration and activity, as well as contact information for airport tenants and aviation-reliant businesses who were subsequently surveyed. Additionally, two surveys were developed to capture visitor spending data to develop spending profiles – one for out-of-state passengers arriving via commercial service and one for out-of-state passengers arriving via GA. These data and information from supplementary sources, when necessary, were modeled using IMPLAN, an industry leading application approved by the Federal Aviation Administration (FAA) to calculate the system's economic contribution.

State Impacts

Economic benefits are generated by on-airport activities including employment (e.g., airport administration and tenants) and capital improvements (e.g., construction). Economic impacts also are generated off-airport when money is spent by out-of-state visitors traveling to West Virginia via the state's 24 system airports, and when air cargo transported via these airports supports the operation of off-airport businesses.

This initial economic activity, known as direct impacts, generates additional impacts as money flows through the economy. These "multiplier" effects result when a portion of direct business revenues are used to purchase goods and services in West Virginia (called supplier sales) and payroll is re-spent within the state (called income re-spending).

Along with the annual impacts presented in the figure below, direct impacts from on-airport activities and visitor spending also generate \$75.5 million in tax impacts annually.

Key data points collected:

- ▲ Top airport activities
- ▲ Airport-sponsored employment
- ▲ Outsourced or contracted employment
- ▲ Capital improvements
- ▲ Other expenditures
- ▲ Revenues
- ▲ Airport visitors and spending profiles
- ▲ On-airport tenants
- ▲ Businesses that base aircraft or rely on WV airports
- ▲ Impacts of Coronavirus Disease 2019 (COVID-19)

Economic Impact Indicators

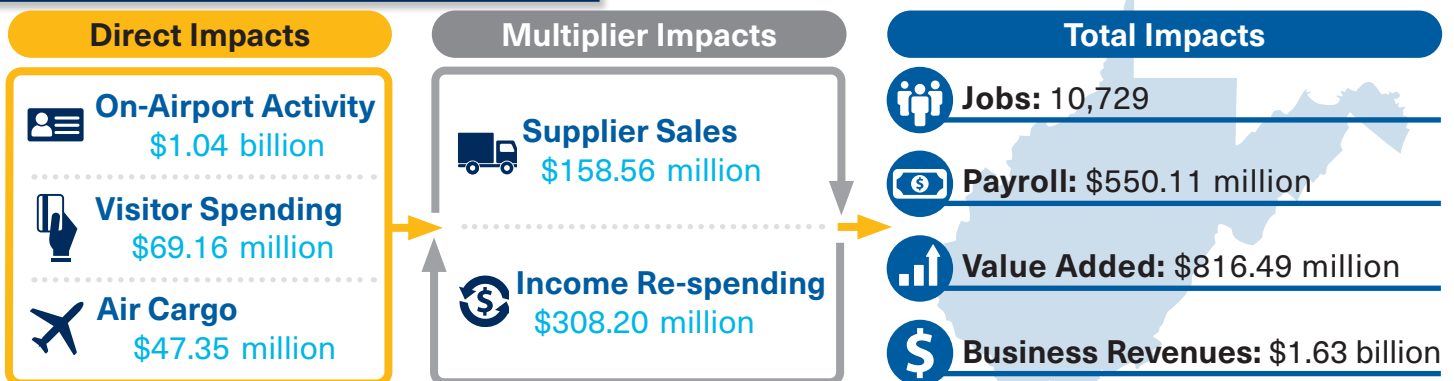
Jobs: The number of employed people

Payroll: The sum of compensation to workers (salaries, wages, and benefits) and proprietor income

Value Added: The value contributed to a product or service provided by a firm or group of firms. Value added is aviation's contribution to West Virginia's Gross State Product (GSP)

Business Revenues: An airport's total aviation-supported output including the sum of business sales and budget expenditures

Statewide Economic Impacts



Using the Results

The WV AEIS documents the economic contribution of aviation at the local (airport), regional, and statewide levels to provide a comprehensive picture in different geographic contexts. Additionally, findings are separated between direct impacts and multiplier impacts (supplier sales and income re-spending) to clearly distinguish the source of impact. Not only are the study findings useful to the WVAC and FAA, but they also can be used locally by airports in communicating their value and need for continued support from their local communities and decision makers.

The table below presents total annual impacts by airport in descending order of business revenues.

Associated City	Airport Name	FAA ID	Jobs	Payroll	Value Added	Business Revenues
Clarksburg	North Central West Virginia	CKB	2,345	\$168,177,000	\$295,704,000	\$775,448,000
Charleston	Yeager	CRW	2,940	\$106,150,000	\$146,871,000	\$225,306,000
Parkersburg	Mid-Ohio Valley Regional	PKB	1,050	\$80,400,000	\$102,191,000	\$153,963,000
Martinsburg	Eastern West Virginia Regional/Shepherd Field	MRB	2,142	\$90,623,000	\$110,211,000	\$153,809,000
Huntington	Tri-State/Milton J. Ferguson Field	HTS	471	\$21,614,000	\$32,459,000	\$61,927,000
Lewisburg	Greenbrier Valley	LWB	365	\$15,260,000	\$26,652,000	\$50,505,000
Morgantown	Morgantown Municipal - Walter L. Bill Hart Field	MGW	293	\$13,184,000	\$20,226,000	\$41,782,000
Beckley	Raleigh County Memorial	BKW	141	\$6,452,000	\$9,352,000	\$18,033,000
Elkins	Elkins-Randolph County - Jennings Randolph Field	EKN	122	\$5,561,000	\$8,192,000	\$14,709,000
Cumberland	Greater Cumberland Regional	CBE	81	\$2,978,000	\$4,409,000	\$8,996,000
Wheeling	Wheeling Ohio County	HLG	74	\$2,914,000	\$4,183,000	\$8,273,000
Buckhannon	Upshur County Regional	W22	48	\$2,781,000	\$3,908,000	\$8,012,000
Ravenswood	Jackson County	I18	53	\$2,896,000	\$3,857,000	\$7,658,000
Moundsville	Marshall County	MPG	51	\$3,279,000	\$4,226,000	\$7,645,000
Bluefield	Mercer County	BLF	74	\$2,545,000	\$3,881,000	\$7,564,000
Logan	Logan County	6L4	29	\$1,231,000	\$1,839,000	\$3,650,000
Fairmont	Fairmont Municipal - Frankman Field	4G7	13	\$549,000	\$924,000	\$2,447,000
Petersburg	Grant County	W99	17	\$435,000	\$667,000	\$1,466,000
Philippi	Philippi/Barbour County Regional	79D	9	\$408,000	\$542,000	\$876,000
Point Pleasant	Mason County	3I2	6	\$274,000	\$420,000	\$711,000
Sutton	Braxton County	48I	4	\$61,000	\$87,000	\$253,000
Williamson	Appalachian Regional	EBD	2	\$37,000	\$52,000	\$168,000
Pineville	Kee Field	I16	2	\$64,000	\$85,000	\$141,000
Summersville	Summersville	SXL	-	\$7,000	\$19,000	\$43,000

Notes: Totals may not add due to rounding. Metrics (jobs, payroll, value added, and business revenues) represent various components of an airport's economic impact and are not additive. Where the table indicates no jobs but includes estimates for payroll, value added, and business revenues, individuals worked less than half-time on airport-related activities. To maintain consistency among airports in this study, activity considered "on-airport" is defined by what is on/at each airport and does not account for off-airport businesses. Sources: Calculations by EBP US using IMPLAN V.3 2018, 2021; WV AEIS Airport Manager Survey; Airport Tenant Survey; Commercial Air Passenger Survey; Transient GA Pilot & Passenger Survey, 2020; FAA 5010 Airport Master Record, FAA Terminal Area Forecast, Airline Data, Inc., 2019; Longwoods International, 2018

Qualitative Impacts

The total value and contribution of West Virginia's airports exceeds the monetary impact presented here. To better understand the ways in which West Virginians rely or benefit from air transportation, the WV AEIS includes a collection of real-life stories and experiences from a wide range of perspectives – a few of which are summarized here.

Medical

Emergency and non-emergency aviation medical operations occur daily, providing essential health services to communities across the state. Medical operations include emergency patient transport, organ donation transport, and transportation of doctors or medical supplies. Almost all system airports experience these activities, and some are home to aeromedical companies who base staff and aircraft at their facilities, ready to take flight at a moment's notice.



Military

West Virginia's Air National Guard and Army National Guard rely on airports in the state to conduct necessary training, provide cargo and freight shipment services, and for transporting service men and women to and from their missions. These military entities respond to natural and man-made disasters and protect the residents of West Virginia. Some members of the guard spend over 1,200 hours annually piloting Black Hawk helicopters on various missions.



Industry Advancement

Airports, post-secondary education institutions, and other entities like the Mid-Atlantic Aerospace Complex (MAAC) support a strong aviation industry through a variety of educational and employment opportunities. As an example, multiple FAA-certified pilot and mechanic programs are offered at West Virginia airports, creating a pipeline of aviation professionals needed to support industry advancement.

