

# RESEARCH PROGRAMS

**Project Summary Report:** 8240-001

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# **Montana Airport Economic Impact Study**

http://www.mdt.mt.gov/research/projects/aer/econ\_impact.shtml

## Introduction

Montana's airports play an integral role in the transportation system by providing access to destinations within the state, throughout the country, and across the globe. Airports also offer significant economic benefits to Montana communities by supporting jobs; generating payroll; paying taxes; and triggering spending at local, regional, and state levels. The importance of airports goes beyond transportation and economics. Airports offer access, services, and other valuable attributes for Montanans that cannot always be easily measured in dollars and cents. Residents and visitors use airports for leisure and business travel and airports serve as the base for a wide range of critical activities for Montana's communities

including medical evacuation services and wildland fire fighting (Figure 1).

The Montana Airports 2016
Economic Impact Study analyzed the qualitative and quantitative contributions of Montana's airports to determine the benefits that airports provide throughout the state. The resulting airport-specific and statewide impacts help airport managers, legislators, state officials, and

other stakeholders understand and communicate the wide range of impacts and benefits derived from airport operations. This information also serves as an economic framework for the Montana Department of Transportation (MDT) to evaluate airport investments in the context of economic activity and development.

### What We Did

This project was a comprehensive study of the contributions of the Montana airport system to the state economy. The analysis quantified the total economic



Figure 1: DC-10 Fire Bomber



Figure 2: Bozeman Yellowstone International Airport

impact of each airport created by on-airport businesses, visitor spending, and capital expenditures on construction.

The IMPLAN economic modeling package was applied to these direct economic impacts to calculate additional spin-off (or "multiplier") effects or benefits. These spin-off effects are caused when a portion of direct business revenues are used to purchase goods and services in Montana (i.e., indirect effects) and when the portion of revenues paid as wages to workers are spent within the state (i.e., induced effects). Combined, direct impacts and spin-off effects compose the contribution of an individual airport and determine the total statewide impact of Montana's airport system.

The economic impacts analysis was primarily based on data collected by surveying airport managers, airport tenants, and visitors who traveled to Montana by commercial service (Figure 2) and general aviation aircraft. Onsite inventories and interviews were also conducted at 50 airports across the state. To supplement primary data, missing values and

industry-specific information were assembled using secondary data sources including the U.S. Department of Agriculture (USDA) and the University of Montana's Institute for Tourism and Recreation Research. On-airport employment and tenant data, as well as the number of visitors that arrived in Montana via

commercial service and general aviation, were validated with each airport manager for accuracy before calculating spin-off effects.

The study also identified the qualitative aspects of airports to provide a holistic view of the importance of airports to the economy, transportation system, and livability of the state and its communities. Airport managers were asked to indicate the types of aviation and non-aviation activity that occurs at their facilities, and the airport tenant survey gathered important data about the services provided by on-airport businesses. Specific analyses on aviation's impacts to the state's hospitals, business and agricultural communities, and wildland fire fighting operations were also conducted.

#### What We Found

Analysis of on-airport businesses, off-airport businesses serving airport visitors, and capital expenditures on construction, Montana's aviation system provides an overall net

contribution to the state's economy of nearly \$2.8 billion in business sales and approximately 24,000 jobs. Nearly 4% of the jobs in Montana are supported by the aviation industry, generating \$839 million in payroll for residents.

To determine statewide impact, the study determined the contribution of each form of direct impact and spin-off effect (Figure 3):



Figure 3: Statewide Summary of Impacts

- **On-Airport:** Montana's airports function as regional and statewide centers for on-airport employment by providing services to airlines, airline passengers, and general aviation pilots and their aircraft. Additionally, some airport properties host aviation and non-aviation tenants that rely on the facility's infrastructure to conduct business operations. On-airport activities result in a direct economic impact of \$911 million and support 9,663 jobs that generate \$453 million in payroll.
- expenditures on construction are necessary to support continuous operations, safe working conditions, and, in some cases, expanded operational capacity (Figure 4). Capital expenditures at Montana's airports resulted in a \$61.2 million economic impact. When spin-off effects are added, that contribution increases to \$99.3 million, generating 729 jobs and \$30 million of annual payroll.
- Visitor Spending: In 2015, 1.9 million visitors utilized Montana's commercial and general aviation airports and spent \$717.8 million across a variety of hospitality industries. In total, visitor spending supports over 13,500 jobs, \$356 million in payroll, and \$1.22 billion in business sales within the state.

Air service also supports Montana businesses by facilitating the time-efficient movement of goods over long distances for incoming commodities and outgoing products. More than \$621 million in air cargo was shipped to and from Montana domestically and internationally.

Approximately 28 percent of the value of these goods was produced by Montana industries and sold to external markets. About 71 percent of the value was shipped to Montana and consisted of produced goods ready for purchase (both durables and non-durables) and commodities used as inputs to production.

The qualitative analysis provides valuable details about how commercial service and general aviation airports provide vital services to residents and visitors—particularly in the most remote corners of the state. The surveys indicated that agricultural spraying (i.e., crop dusting), medical flights, corporate and business activity, wildland fire fighting, military exercises and training, and law enforcement are the most common activities that occur at aviation facilities.

The study shows that nearly 90 percent of hospitals and many businesses in the state depend on airports. The agricultural sector is also heavily reliant on aviation activity: airports contribute more than \$671 million of total business revenues and more than 3,300 jobs to the state resulting from aviation-

related employment and business revenues generated by crop-dusting services and the value of agriculture preserved from trampling that would occur during ground application. Together, these qualitative and quantitative

benefits make Montana safer, more accessible, and a richer place to visit and call home.

# What the Researchers Recommend

Montana depends on its airports to connect people and goods to locations within the state, throughout the U.S. and across the globe. Along the way, benefits arise in concentric, ever-expanding ways that significantly impact the livability of the state's communities. The full extent of these impacts cannot always be discerned through a cursory analysis. Instead, it is critical for elected officials, policy makers, and other stakeholders to consider the far-reaching impacts of Montana's airports when making decisions that affect them or the communities that they support. Supporting airports directly sustains the contributions they make to the state's economy by serving as jobs centers, facilitating business travel, supporting the long-distance sale of goods, and bolstering the state's hospitality sectors.



Figure 4: Construction at Bozeman Yellowstone International Airport

### For More Details ...

The research is documented in Report FHWA/FHWA/MT-17-002/8240-001, <a href="http://www.mdt.mt.gov/research/projects/aer/econ\_impact.shtml">http://www.mdt.mt.gov/research/projects/aer/econ\_impact.shtml</a>

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# **MDT Implementation Status:** January 2017

Information from this research provides MDT Aeronautics Division and Montana's local governments information to assist in capital improvement planning to meet the future airport needs of communities. Brochures of economic impacts of select individual airports in Montana and a Statewide Executive Summary were also developed and available by contacting MDT Aeronautics Division.

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