



Montana Airports 2016
ECONOMIC IMPACT STUDY

Final Presentation

Study Overview



- Sponsored by the Montana Department of Transportation (MDT) Research Programs
- Study Purpose
 - Understand and communicate the wide range of impacts and benefits derived from airport operations
 - Provide an economic framework to help MDT evaluate airport investments in the context of economic activity and development
- Qualitative and quantitative economic analysis of Montana airport system

Research Team

Kimley»»Horn

Expect More. Experience Better.

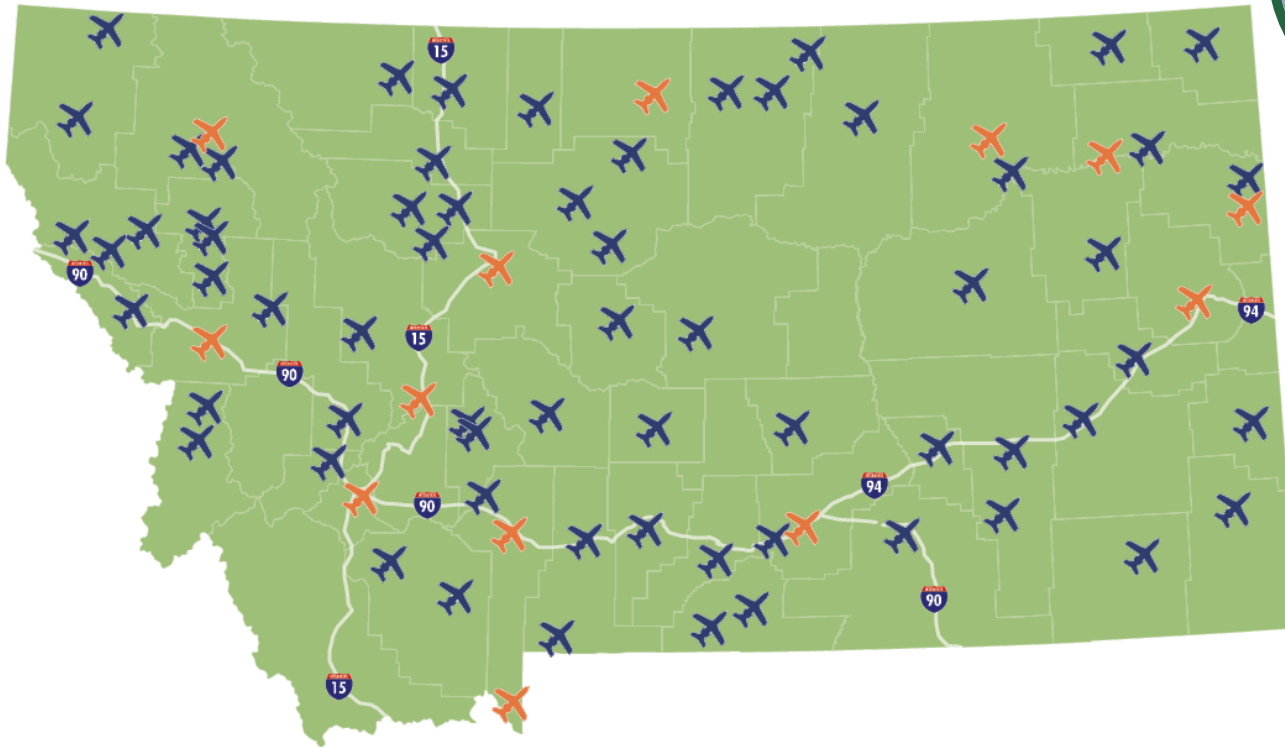


Montana Airport System





- Comprised of:
 - Commercial service
 - General aviation
- Serve 1.9 million visitors per year for leisure and business travel
- 77 airports included in study
 - Airports included due to specific economic measurables
 - Exclusion of airports did not significantly impact the total statewide impact

Montana Airport System



Airport Classifications

-  General aviation
-  Commercial service

Methodology: Inputs

On-Airport

Construction

Visitor Spending

A circular diagram with two blue arrows forming a clockwise loop. The text "Spin-off" is written in orange in the center of the loop.

Spin-off

- Direct impacts
 - On-airport businesses
 - Capital expenditures on construction
 - Visitor spending
- Spin-off effects
 - Indirect effects
 - 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

Methodology: Outputs

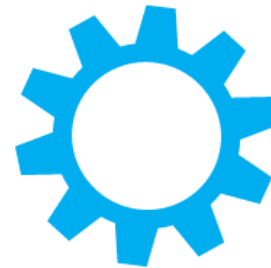
- Jobs (headcount)
- Payroll
- Total impact



JOBS



PAYROLL

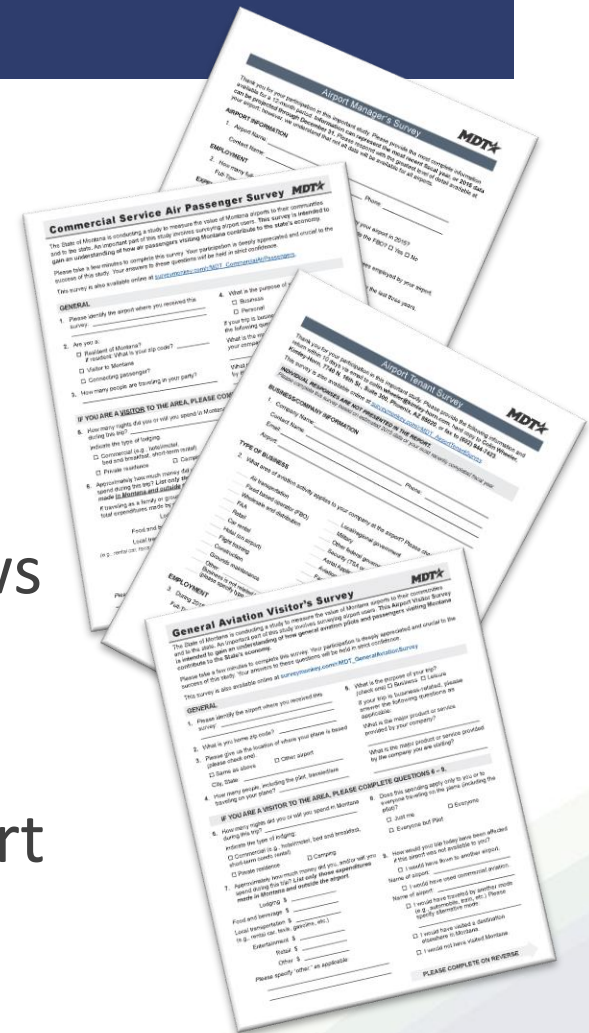


TOTAL IMPACT

*Total statewide impacts are summed to determine
Montana Airports Total Statewide Impacts*

Methodology: Data Collection

- Surveys
 - ➔ Airport managers
 - ➔ Tenants
 - ➔ Commercial service passengers
 - ➔ General aviation passengers
- In-person inventories and interviews
- Secondary sources to complete data gaps
- Direct impacts validated with airport managers before spin-off effects modeled



Methodology: Modeling

- IMPLAN modeling software
 - Complete data gaps
 - Estimate jobs and payroll generated from visitor spending
 - Determine spin-off effects
- vFreight™
 - Evaluate contribution of air cargo
- Assumptions
 - Headcount methodology
 - Results rounded to the nearest thousand to account for false precision

Statewide Summary of Impacts



Results

On-Airport

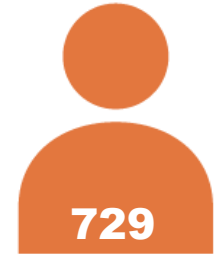
Impact Type	Jobs	Payroll (\$)	Economic Impacts (\$)
On-airport tenants	4,984	\$255,461	\$874,364,000
Airport operations and employees	276	\$16,070,000	\$36,780,000
Spin-off effects (indirect and induced)	4,403	\$181,197,000	\$553,346,000
Total contribution	9,663	\$452,728,000	\$1,464,490,000



Results

Construction

Impact Type	Jobs	Payroll (\$)	Economic Impacts (\$)
Capital expenditures on construction	413	\$18,365,000	\$61,147,000
Spin-off effects: Supplier and income re-spending	316	\$11,923,000	\$38,168,000
Total contribution	729	\$30,288,000	\$99,315,000



729



\$30M



\$99M

Results

Visitor Spending

Impact Type	Jobs	Payroll (\$)	Economic Impacts (\$)
<i>Commercial service</i>			
Direct impacts	8,035	\$168,852,000	\$622,456,000
Spin-off effects	3,567	\$136,479,000	\$432,318,000
<i>Sub-total, commercial service</i>	<i>11,602</i>	<i>\$305,331,000</i>	<i>\$1,054,774,000</i>
<i>General aviation</i>			
Direct impacts	1,325	\$29,456,000	\$95,329,000
Spin-off effects	533	\$20,705,000	\$65,209,000
<i>Sub-total, general aviation</i>	<i>1,858</i>	<i>\$50,161,000</i>	<i>\$160,538,000</i>
Total contribution	13,460	\$355,492,000	\$1,215,312,000



13,460



\$355M



\$1.2B

Air Cargo

- \$621 million in exports and imports
- \$156 million in total aviation dependence

Directional Flow	Tonnage (metric tons)	Value (\$)	Percent of Total by Value (%)
Domestic inbound	3,177	\$360,000,000	58%
International import	469	\$84,000,000	14%
Total air cargo received	3,646	\$444,000,000	71%
Domestic outbound	943	\$78,000,000	13%
International export	439	\$98,000,000	16%
Total air cargo shipped	1,382	\$176,000,000	28%
Total received and shipped	5,028	\$621,000,000	100%



863



\$42M



\$156M

Qualitative Benefits

- Provides holistic understanding of the value of airports
- Gathered data thru airport manager and tenant surveys
- Conducted specific analyses of impacts to agriculture, hospitals, wildland firefighting, and business community



These quality of life benefits make Montana safer, more accessible, and a richer place to visit and call home



Agriculture

- 221,500 acres of farmland treated with aerial spraying

Crop	Harvested (acres)	All Methods of Application		Aerial Application	
		Share of Area Treated (%)	Estimate Area Treated (acres)	Share of Treated Acreage (%)	Estimate Area Treated (acres)
Corn	50,000	97%	48,500	25%	12,125
Oat (small grains)	22,000	51%	11,220		2,805
Barley (wheat)	850,000	96%	816,000		204,000
Potato	10,900	96%	10,464		2,616
Totals	932,900	95%	886,184	25%	221,546

3,300

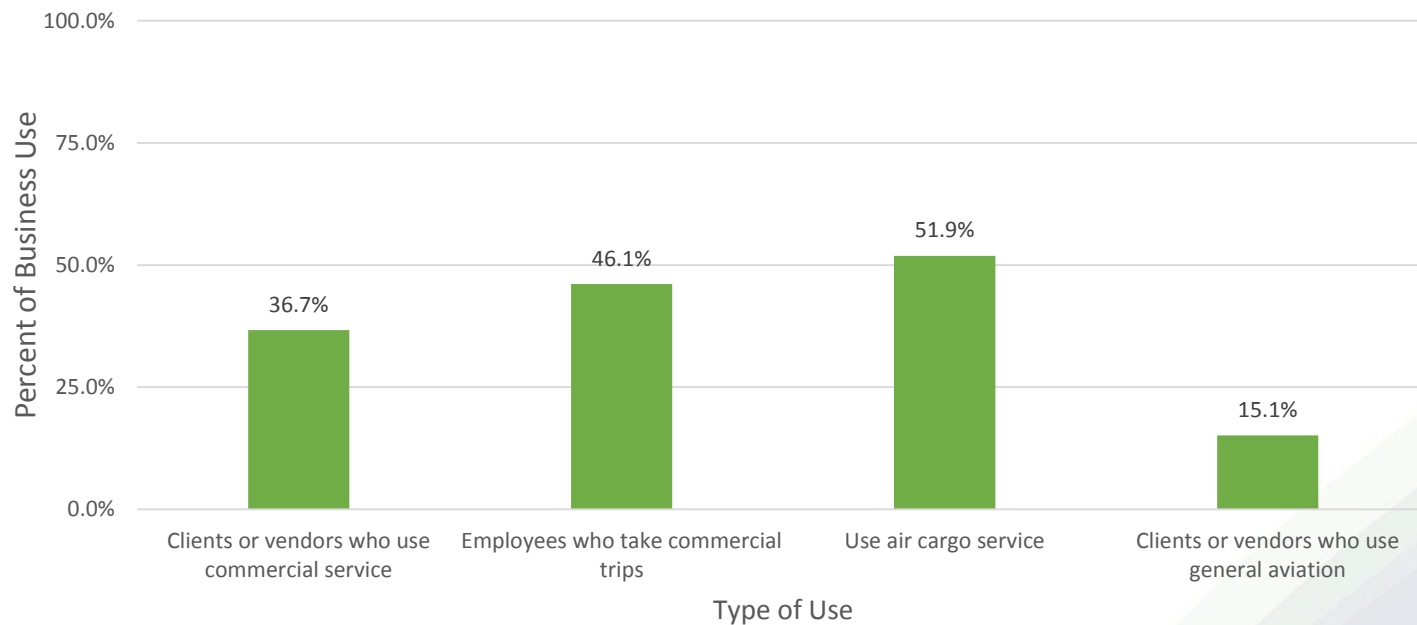
\$118M

\$671M



Business Survey

- More than 600 responses representing all sectors
- Businesses with more than 21 employees or those in the manufacturing industry most likely to rely on airports to conduct business



Medical Flights

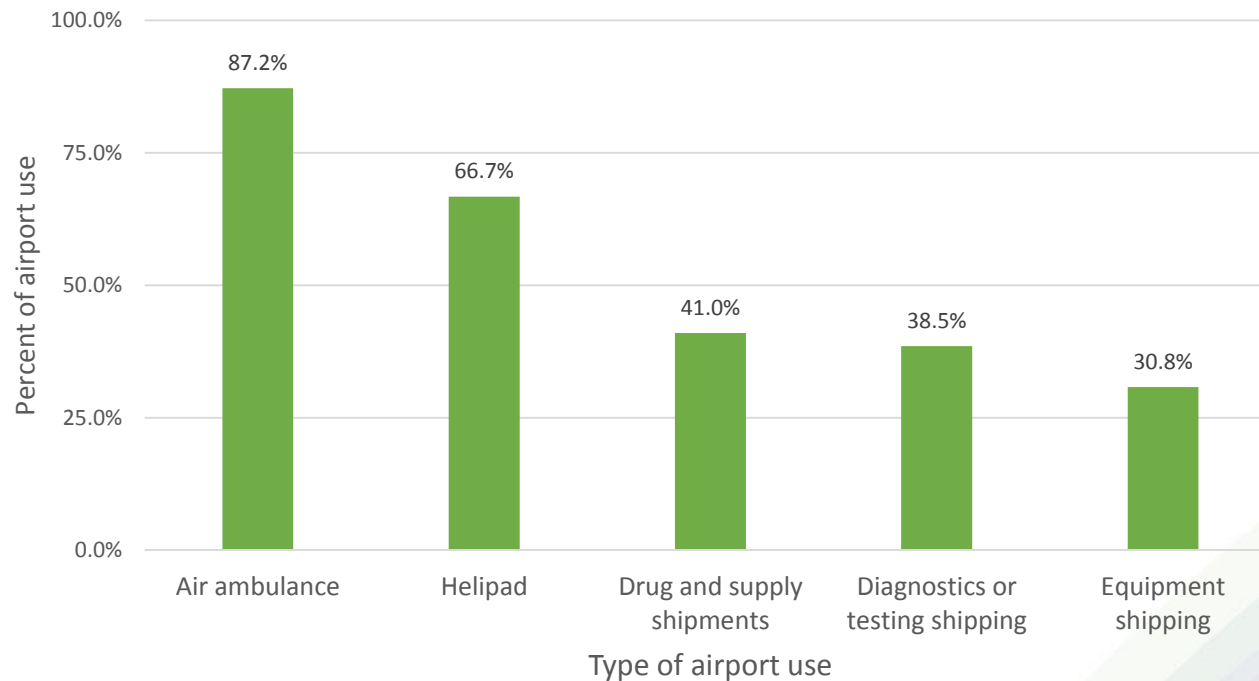


- Key roles
 - Facilitate emergency evacuation services
 - Support health care practitioners who fly to remote communities to provide routine and specialty care
- Benefits
 - Vital for patients who require immediate medical attention or advanced care
 - Allow residents to remain in local communities instead of relocating to receive specialized care
- Hospital survey conducted by the University of Montana Bureau of Business and Economic Research



Hospital Survey

- Indicated that a majority of hospitals depend on airports in some capacity
- Survey encompassed all hospital in the state (61)





Wildland Firefighting



- Majority of airports serve as primary or alternatives for fire suppression
- Key agencies
 - Bureau of Land Management
 - U.S. Forest Service
 - Montana Department of Natural Resources and Conservation
- 8,404 fires from 2011 to 2015
- Operations benefit local and regional economies through indirect and induced spin-off effects



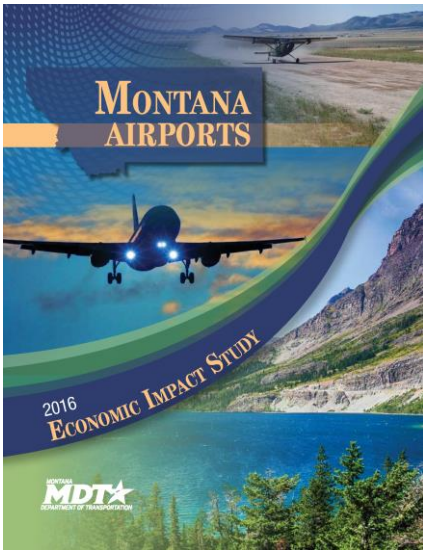
Military / Law Enforcement

- Key law enforcement activities
 - Responding to calls in remote areas
 - Search and rescue
 - Prisoner transport
 - Homeland security operations
- Military exercise and training
 - Over 30 airports accommodate military aircraft
 - Some facilities established by the U.S. Army Air Forces during World War II
- Operations support military and civilian jobs, drive fuel sales, and provide other benefits



Products

Statewide Executive Summary



Introduction

Montana's airports play an integral role in our transportation system by providing access to destinations within the state, throughout the country, and throughout the world. Through the search for new airports, existing airports are being upgraded and existing airports are being expanded. The expansion of airports goes beyond transportation and economic impacts. Airports are also vital to the state's tourism industry. Airports are also vital to the state's agriculture industry. Airports are also vital to the state's education industry. Airports are also vital to the state's health care industry. Airports are also vital to the state's energy industry. Airports are also vital to the state's manufacturing industry. Airports are also vital to the state's retail industry. Airports are also vital to the state's service industry. Airports are also vital to the state's transportation industry. Airports are also vital to the state's information industry. Airports are also vital to the state's entertainment industry. Airports are also vital to the state's recreation industry. Airports are also vital to the state's culture industry. Airports are also vital to the state's history industry. Airports are also vital to the state's science industry. Airports are also vital to the state's technology industry. Airports are also vital to the state's innovation industry. Airports are also vital to the state's leadership industry. Airports are also vital to the state's excellence industry. Airports are also vital to the state's success industry. Airports are also vital to the state's future industry. Airports are also vital to the state's destiny industry. Airports are also vital to the state's destiny industry.

Statewide Summary of Impacts

DIRECT ECONOMIC IMPACTS

- 16 Airports
- \$111,164,000
- 1,147 Employees
- \$1,147,000
- 1,147,000
- \$111,164,000

SPILL-OFF ECONOMIC EFFECT

- \$1,089,045,000

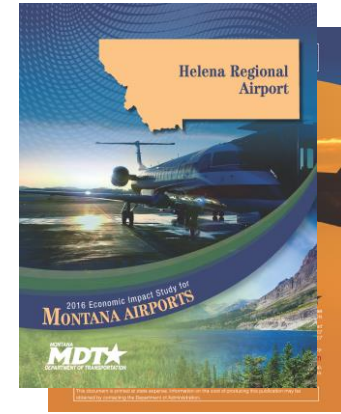
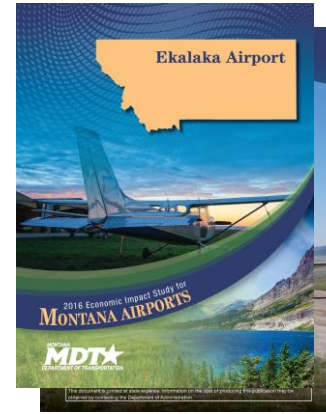
STATEWIDE TOTAL IMPACTS

- \$1,200,209,000
- 2,294
- \$2,294,000
- \$111,164,000
- \$2,294,000
- \$111,164,000

Montana's airport system contributes 4% to the state's employment base.

2016 Economic Impact Study

Individual airport brochures



Montana's Airports Support Our State

Montana's airports play an integral role in our transportation system by providing access to destinations within the state, throughout the country, and across the globe. Through the search for new airports, existing airports are being upgraded and existing airports are being expanded. The expansion of airports goes beyond transportation and economic impacts. Airports are also vital to the state's tourism industry. Airports are also vital to the state's agriculture industry. Airports are also vital to the state's education industry. Airports are also vital to the state's health care industry. Airports are also vital to the state's energy industry. Airports are also vital to the state's manufacturing industry. Airports are also vital to the state's retail industry. Airports are also vital to the state's service industry. Airports are also vital to the state's transportation industry. Airports are also vital to the state's information industry. Airports are also vital to the state's entertainment industry. Airports are also vital to the state's recreation industry. Airports are also vital to the state's culture industry. Airports are also vital to the state's history industry. Airports are also vital to the state's science industry. Airports are also vital to the state's technology industry. Airports are also vital to the state's innovation industry. Airports are also vital to the state's leadership industry. Airports are also vital to the state's excellence industry. Airports are also vital to the state's success industry. Airports are also vital to the state's future industry. Airports are also vital to the state's destiny industry. Airports are also vital to the state's destiny industry.

This study examines the economic benefits of Montana's airports in terms of jobs, payroll, and total economic impact. The Montana Department of Transportation (MDT) conducted a comprehensive study of the state's airports. The study includes a list of all airports in Montana, a list of all airports that are currently under construction, and a list of all airports that are planned for future construction. The study also includes a list of all airports that are currently operating, a list of all airports that are currently closed, and a list of all airports that are currently in the process of being closed. The study also includes a list of all airports that are currently in the process of being opened, a list of all airports that are currently in the process of being expanded, and a list of all airports that are currently in the process of being upgraded. The study also includes a list of all airports that are currently in the process of being demolished, a list of all airports that are currently in the process of being abandoned, and a list of all airports that are currently in the process of being repurposed. The study also includes a list of all airports that are currently in the process of being converted, a list of all airports that are currently in the process of being repurposed, and a list of all airports that are currently in the process of being repurposed.

- STATEWIDE IMPACTS**
- 16 Airports
 - 1,147 Employees
 - \$1,147,000
 - 1,147,000
 - \$111,164,000

Ekalaka Airport

Ekalaka Airport plays an integral role in our transportation system by providing access to destinations within the state, throughout the country, and across the globe. Through the search for new airports, existing airports are being upgraded and existing airports are being expanded. The expansion of airports goes beyond transportation and economic impacts. Airports are also vital to the state's tourism industry. Airports are also vital to the state's agriculture industry. Airports are also vital to the state's education industry. Airports are also vital to the state's health care industry. Airports are also vital to the state's energy industry. Airports are also vital to the state's manufacturing industry. Airports are also vital to the state's retail industry. Airports are also vital to the state's service industry. Airports are also vital to the state's transportation industry. Airports are also vital to the state's information industry. Airports are also vital to the state's entertainment industry. Airports are also vital to the state's recreation industry. Airports are also vital to the state's culture industry. Airports are also vital to the state's history industry. Airports are also vital to the state's science industry. Airports are also vital to the state's technology industry. Airports are also vital to the state's innovation industry. Airports are also vital to the state's leadership industry. Airports are also vital to the state's excellence industry. Airports are also vital to the state's success industry. Airports are also vital to the state's future industry. Airports are also vital to the state's destiny industry. Airports are also vital to the state's destiny industry.

This study examines the economic benefits of Ekalaka Airport in terms of jobs, payroll, and total economic impact. The Montana Department of Transportation (MDT) conducted a comprehensive study of the state's airports. The study includes a list of all airports in Montana, a list of all airports that are currently under construction, and a list of all airports that are planned for future construction. The study also includes a list of all airports that are currently operating, a list of all airports that are currently closed, and a list of all airports that are currently in the process of being closed. The study also includes a list of all airports that are currently in the process of being opened, a list of all airports that are currently in the process of being expanded, and a list of all airports that are currently in the process of being upgraded. The study also includes a list of all airports that are currently in the process of being demolished, a list of all airports that are currently in the process of being abandoned, and a list of all airports that are currently in the process of being repurposed. The study also includes a list of all airports that are currently in the process of being converted, a list of all airports that are currently in the process of being repurposed, and a list of all airports that are currently in the process of being repurposed.

- STATEWIDE IMPACTS**
- 16 Airports
 - 1,147 Employees
 - \$1,147,000
 - 1,147,000
 - \$111,164,000

Study Benefits and Uses

- Supports decision-making at all levels
- Communicates wide range of benefits of Montana airports, many of which are not recognized or understood
- Promotes economic activity and development
- Understanding of how broader economic, demographic, and other trends have affected aviation in Montana

The results can be used to support decision-making on all levels for projects, resources, and funding

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