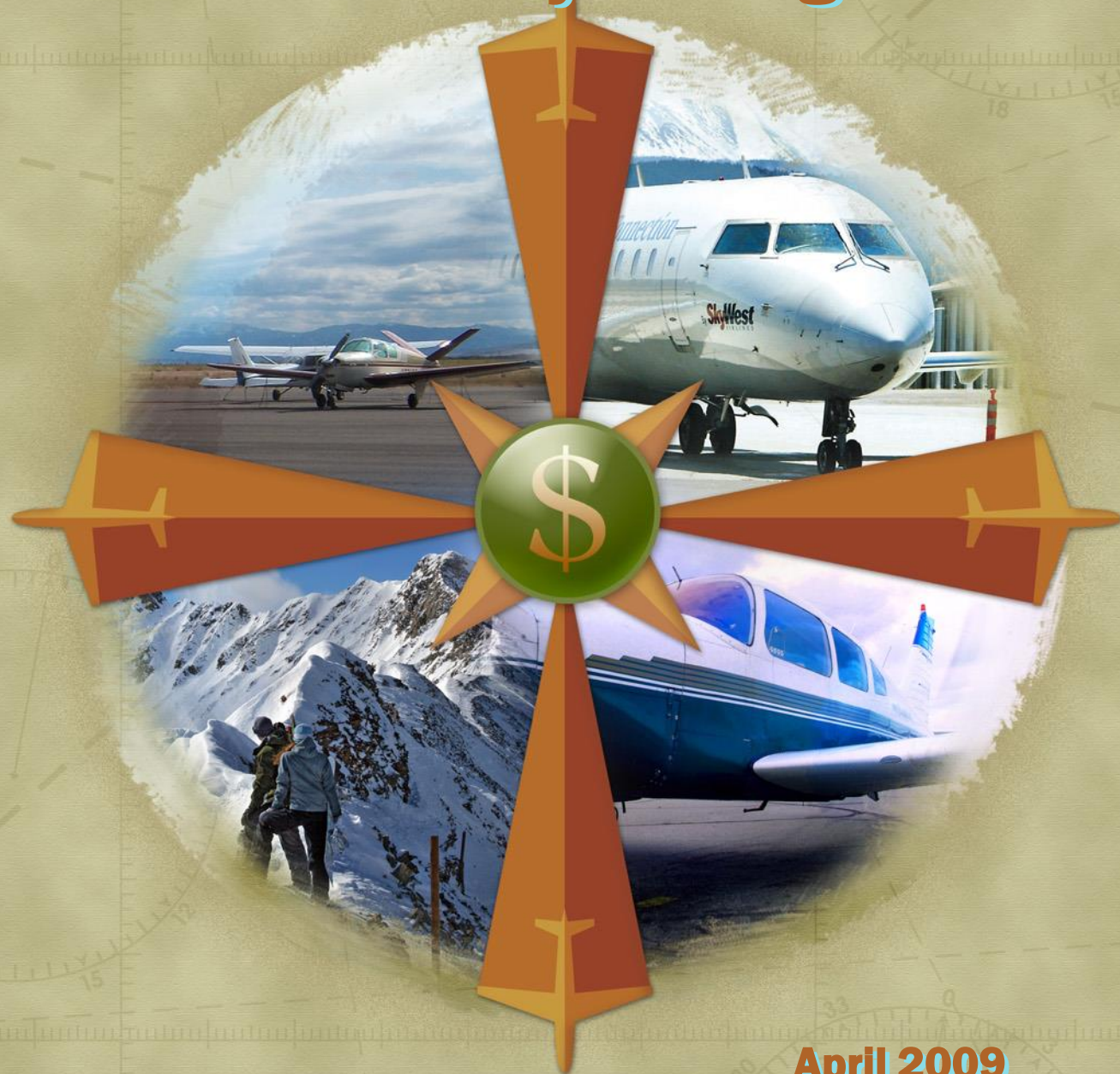


# Preliminary Findings

## MONTANA ECONOMIC IMPACT OF AIRPORTS STUDY

PREPARED FOR:  
**Montana Department  
of Transportation**

PREPARED BY:  
**Wilbur Smith  
Associates**



**April 2009**

# STUDY OVERVIEW

- Quantify the value of the Montana airport system
- Sponsored by MDT, Aeronautics Division
- Majority FAA funded
- 18 month study, began Fall 2007
- Included extensive survey effort
- Assisted by Morrison Maierle
- Followed FAA guidelines
- 120 airports analyzed
- Brochures prepared for 72 airports
- Identified quantitative and qualitative benefits

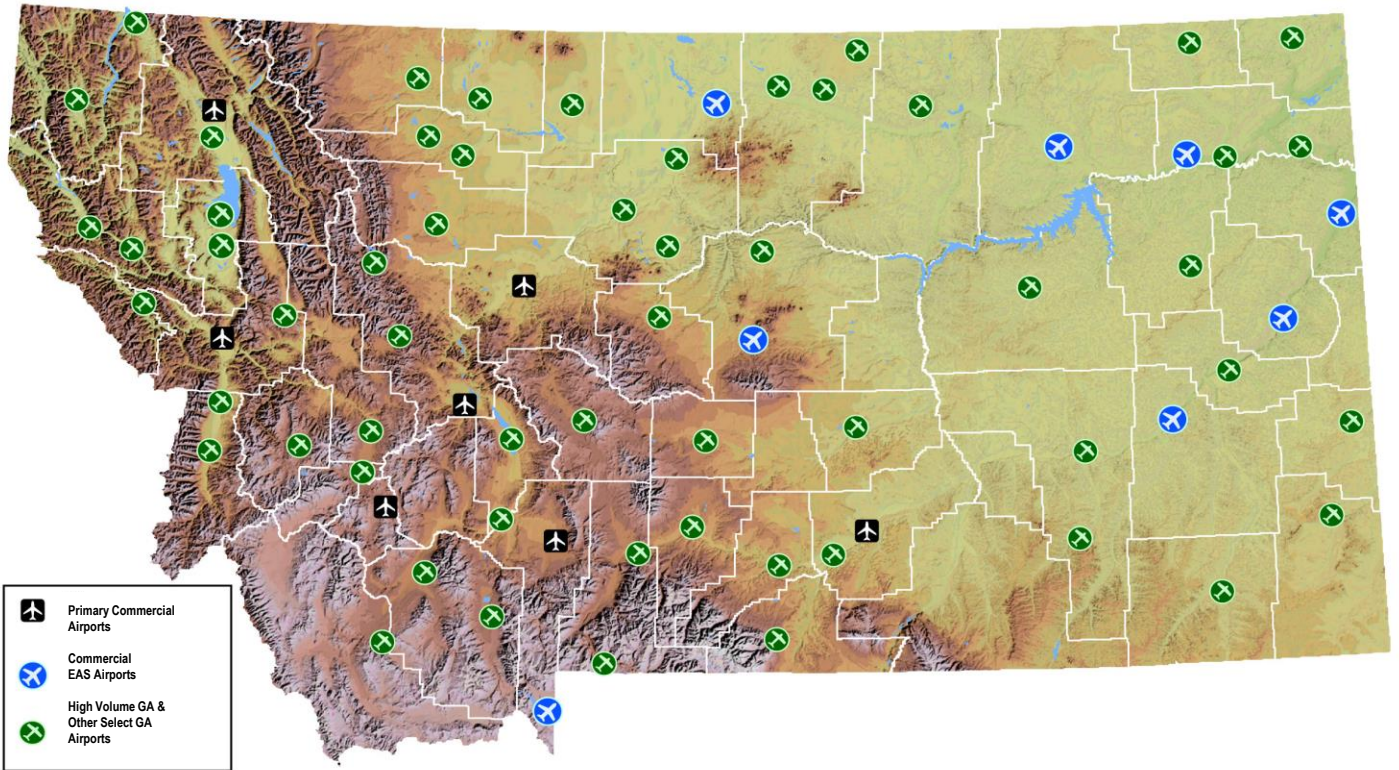


# MONTANA AIRPORT SYSTEM

- 7 Primary Commercial Service Airports
- 8 Commercial Essential Air Service Airports
- 20 High Volume General Aviation Airports (>10K Annual Operations)
- 37 Select General Aviation Airport
- 48 Rural Airports
- 120 Total Airports Analyzed



# MONTANA AIRPORT SYSTEM



# MONTANA AIRPORT SYSTEM

- Montana's commercial service airports enplane nearly 1.48 million passengers, including 786,600 annual visitors in 2007
- Over 292,400 visitors arrive in Montana annually on general aviation aircraft
- 344,000 annual itinerant general aviation operations
- 4,432 registered aircraft



# METHODOLOGY

## What Benefits Are Measured in the Montana Economic Impact Study?

- On-airport businesses
- On-airport capital improvements
- Visitor spending
- Non-aviation businesses dependent on airports



# METHODOLOGY

## What Metrics Are Used to Report Economic Benefits?

- Jobs/employment (full-time equivalent)
- Annual payroll/income
- Annual economic output/value of goods and services
  - Includes airport related spending
  - Includes all visitor spending



# METHODOLOGY

## How Was Data for the Study Gathered?

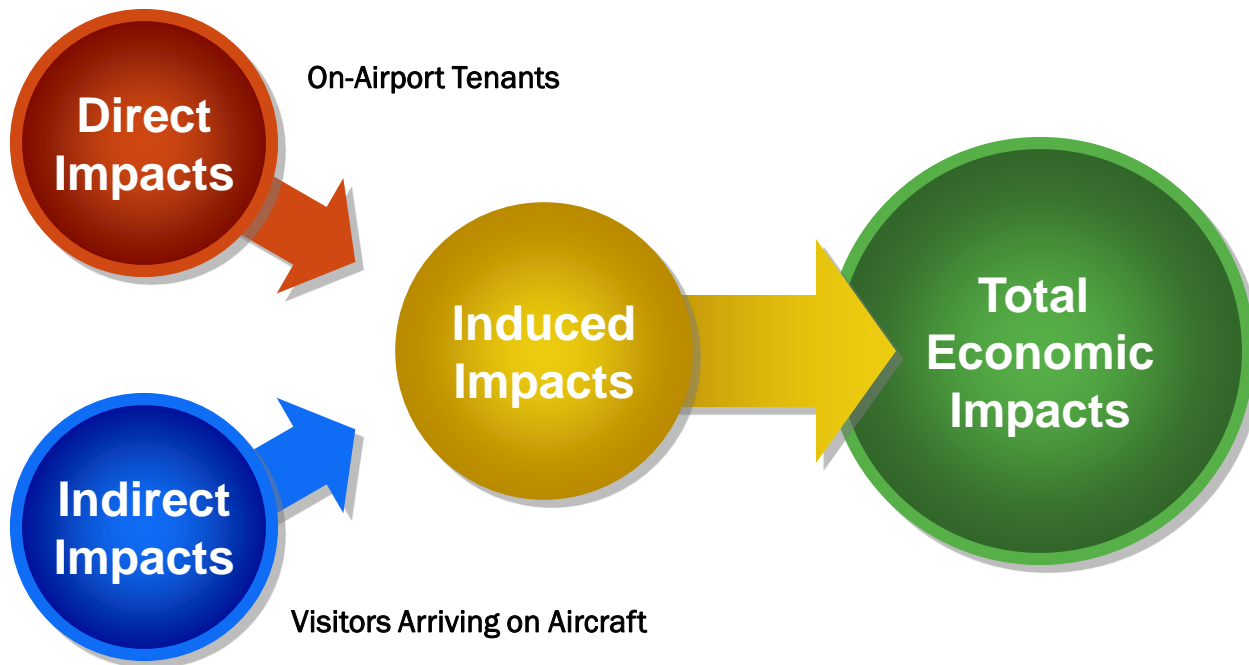
- Surveys of all airports and on-airport businesses
- On-site visits to 35 airports
- Surveys of commercial airline visitors
- Surveys of transient (visiting) general aviation pilots/passengers
- Surveys of aviation dependent businesses
- Secondary data sources: FAA, USFS, BLM, Hospitals





# ECONOMIC MODELING

*First Round + Second Round = Total*



- Input/Output Econometric Model
- IMPLAN Multipliers

# METHODOLOGY

## What Factors Were Measured in the **Direct** Impact Category?

- On-airport businesses and tenants
  - FBOs
  - Airlines
  - Air Cargo
  - Aerial Applicators
- Capital improvement projects (CIP)
  - FAA, MDT, local investment
  - CIP impacts averaged over multi-year period
  - CIP Impacts at GA airports are transient

# METHODOLOGY

## What Factors Were Measured in the **Indirect Impact Category?**

- Visitor spending (commercial and general aviation)
  - Cumulative visitor spending = indirect annual economic activity/output
  - \$1 million in visitor spending supports 19 jobs
  - Jobs supported by visitor spending are primarily in the hospitality/tourism industry



# METHODOLOGY

## How Are **Induced (Multiplier) Impacts** Estimated?

- Multipliers used to measure economic cycle that starts with airports/visitors
- Multipliers applied to both Direct and Indirect Impacts to estimate Induced Impacts
- Modeling process traces re-spending of initial dollars

# EXAMPLE AIRPORT

## Billings Logan International Airport

- Direct On Airport Tenant Impacts
- Survey Data Indicates
  - 32 Business & Government Tenants On Airport
  - \$90.3 Million Annual Output
  - 674 Employees
  - \$27.5 Million Annual Payroll



# EXAMPLE AIRPORT

## Billings Logan International Airport

- Direct On Airport Construction Impacts
- Survey Data and Model Indicate:
  - \$11.0 Million in Average CIP On Airport
  - 147.5 Employees
  - \$5.22 Million in Annual Payroll



# EXAMPLE AIRPORT

## Billings Logan International Airport

- Indirect Commercial Service Visitor Impacts

Annual CS Enplanements	Estimated CS Visitors	Total Annual Number of Days Stayed	Annual CS Visitor Expenditures
415,300	207,650	664,480	\$60,740,100

- Survey Data Indicates
  - 50% of Enplaning Pax at BIL are Visitors
  - 3.2 Days Stayed on Average
  - \$91 Expenditure Per Visitor Per Day

# EXAMPLE AIRPORT

## Billings Logan International Airport

- Indirect Commercial Service Visitor Impacts
- \$60.74 Million Supports
  - 1,165 Jobs in the Visitor Industry
  - \$22.7 Million in Annual Payroll





# EXAMPLE AIRPORT

## Billings Logan International Airport

- Indirect General Aviation Visitor Impacts

True Transient Arrivals	Estimated GA Visitors	Total Annual Number of Days Stayed	Annual GA Visitor Expenditures
8,270	33,080	62,852	\$6,285,200

- Survey Data Indicates
  - 4 Pax per General Aviation Aircraft
  - 1.9 Days Stayed on Average
  - \$100 Expenditure Per Person

# EXAMPLE AIRPORT

## Billings Logan International Airport

- Indirect General Aviation Visitor Impacts
- \$6.29 Million Generates
  - 120.5 Jobs in the Visitor Industry
  - \$2.34 Million in Annual Payroll



# EXAMPLE AIRPORT

## Billings Logan International Airport

### Individual Airport Brochure Summary Table



#### AIRPORT SUMMARY TABLE

##### FIRST-ROUND ECONOMIC IMPACTS

On-Airport	Visitor Spending
<ul style="list-style-type: none"> <li>• FAA, Other Government</li> <li>• Airport Management</li> <li>• Aircraft maintenance</li> <li>• Vendors</li> <li>• Retail &amp; Restaurant</li> <li>• Car Rental</li> <li>• Parking</li> <li>• Other Ground Transportation</li> <li>• Fixed Based Operators</li> </ul>	<ul style="list-style-type: none"> <li>• Visitor Spending</li> <li>• Visitor Dependent Businesses</li> <li>• Hotels</li> <li>• Retail &amp; Restaurants</li> <li>• Travel Agents</li> <li>• Convention Centers</li> <li>• Tourist Destinations</li> </ul>
<p><b>820.5 Jobs</b>  <b>\$32,681,700 in Payroll</b>  <b>\$101,294,900 in Economic Output</b></p>	<p><b>1285.0 Jobs</b>  <b>\$25,057,600 in Payroll</b>  <b>\$67,025,300 in Economic Output</b></p>

##### SECOND-ROUND ECONOMIC IMPACTS

<ul style="list-style-type: none"> <li>• Suppliers of Materials &amp; Services to Airports</li> <li>• Air Dependent Businesses</li> <li>• Visitor Dependent Businesses</li> <li>• Consumer Product and Service Sales</li> </ul>
<p><b>1165.0 Jobs</b>  <b>\$39,375,300 in Payroll</b>  <b>\$110,870,700 in Economic Output</b></p>

##### TOTAL ECONOMIC IMPACTS

<p><b>3270.5 Jobs</b>  <b>\$97,114,600 in Wages</b>  <b>\$279,190,900 in Economic Activity</b></p>
--

# Statewide Economic Impact

## Impacts of All Airports

	<u>First-Round</u>	<u>Total</u>
Employment	12,134.5	18,743.5
Payroll	\$360.2 Million	\$600.0 Million
Output	\$941.7 Million	\$1.55 Billion



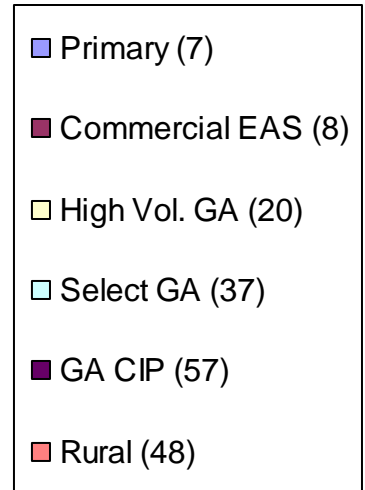
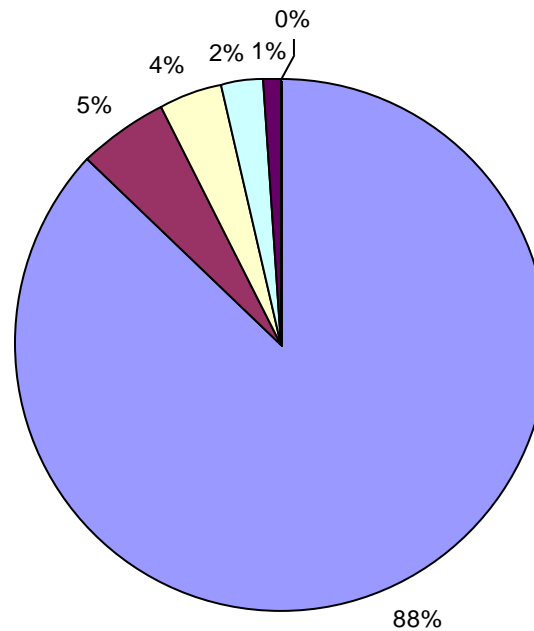
# Statewide Economic Impact

- Airports in Montana support nearly 18,750 jobs which represents 4 percent of all jobs in the State.
- Total economic impact for Montana airports comprises 4.5 percent of Montana's Gross State Product



# Statewide Economic Impact

## Breakout by Airport Category



# Statewide Economic Impact

## Primary CS Airport Impacts

	<u>First-Round</u>	<u>Total</u>
Employment	10,865.0	16,623.5
Payroll	\$321.9 Million	\$534.2 Million
Output	\$822.9 Million	\$1.35 Billion



# Statewide Economic Impact

## Commercial EAS Airport Impacts



	<u>First-Round</u>	<u>Total</u>
Employment	528.5	861.5
Payroll	\$16.9 Million	\$28.4 Million
Output	\$47.5 Million	\$79.7 Million





# Statewide Economic Impact

## High Volume GA Airport Impacts

	<u>First-Round</u>	<u>Total</u>
Employment	492.0	820.5
Payroll	\$13.8 Million	\$23.3 Million
Output	\$38.6 Million	\$63.8 Million



# Statewide Economic Impact

## Select GA Airport Impacts



	<u>First-Round</u>	<u>Total</u>
Employment	257.5	529.5
Payroll	\$2.9 Million	\$5.1 Million
Output	\$22.5 Million	\$37.0 Million



# Statewide Economic Impact

## Rural GA Airport Impacts

	<u>First-Round</u>	<u>Total</u>
Employment	4	9
Payroll	\$142,600	\$266,100
Output	\$288,200	\$478,200



# Statewide Economic Impact

## GA Airport Construction Impacts

	<u>First-Round</u>	<u>Total</u>
Employment	132	218
Payroll	\$6.4 Million	\$10.6 Million
Output	\$9.8 Million	\$16.4 Million



# QUALITATIVE BENEFITS OF AIRPORTS IN MONTANA

## Hospital Survey Data

- Over 88 percent of Montana's hospitals rely on air ambulance services
- Forty percent of hospitals reported flying doctors and nurses in to local hospitals for clinics
- More than a quarter of hospitals require the services of air cargo express companies
- Air ambulance services to transport critically ill patients, sometimes to cities as far away as Salt Lake City and Seattle.



# QUALITATIVE BENEFITS OF AIRPORTS IN MONTANA

## Wildland Firefighting

- 10 percent of all fires initially reported by aircraft while 5 percent are reported by agency lookout towers
- 60 percent of all wildland urban interface acres on fire rely on fixed wing tanker aircraft
- 93 percent of all wildland urban interface acres on fire rely on helicopters
- Tanker aircraft support 60 percent of all acres burned in the state
- Smokejumper bases in Missoula and Yellowstone



# VALUE-ADDED BUSINESS BENEFITS



- Two business surveys conducted
- Sampled each industry sector in the state
- It is estimated that nearly \$11.8 billion, or 38 percent, in the State's Gross Domestic Product is reliant on the availability of commercial service airlines.
- This translates into approximately 166,800 jobs in the state depending on the availability of commercial aviation.

# ACCESS TO AVIATION IS A CRITICAL FACTOR FOR BUSINESS LOCATION

1. Highway access
2. Trained workforce
3. Tax incentives
4. Cost of living
5. **Commercial service airport**
6. Proximity to suppliers
7. Universities, academic and R&D centers
8. **General aviation airport**
9. Urban
10. Rail transport
11. Historic location
12. Raw materials
13. Water transport



**Thank You!**

**Questions??**

