Montana Statewide

Economic Impact of Airports

2026

MONTANA
Department of Transportation

ZENITH ECONOMICS

Prepared for:

Montana Department of Transportation
2701 Prospect Ave
Helena, MT 59601

Prepared by:

Zenith Economics, LLC
355 S Grand Ave, Ste 2450 PMB 2220
Los Angeles, CA 90071

About This Report:

This study updates upon the previous 2008 and 2016 Montana Economic Impact of Airports studies to provide a comprehensive, FAA-compliant evaluation of the economic, fiscal, and qualitative contributions of Montana's statewide airport system, delivering defensible impact estimates, updated methodologies, and accessible tools to support policy, planning, and federal funding decisions.

About The Authoring Firm:

Zenith Economics, LLC is an independent and nonpartisan economic consultancy practice providing leading expertise in Economic Impact Analysis, Land Use, and Economic Development to a wide variety of public, private, and nonprofit clients. For more information about Zenith Economics, or to inquire about conducting a similar analysis for your organization, please visit www.zenithecon.com.

Special Thanks To:

- Karen Hallenbeck, MDT Airport/Airways Bureau Chief
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- Ian Van Dusen, Ito Geospatial, Project Mapmaker and Coordinator
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Disclosure:

All figures are based on numerous estimates and assumptions and should not be interpreted as a guarantee of the actual economic impact that was realized by any region or entity in the State of Montana. This report does not offer financial, legal, strategic, economic, political, or other advice in any form.

Executive Summary

Jobs
39,000

Payroll
$2.4 Billion

Economic Impact
$6.4 Billion

Fiscal Revenue
$328 Million

In 2025, the Montana Department of Transportation undertook a comprehensive update to its statewide aviation economic impact analysis to reflect changes in the structure of Montana's economy, aviation activity patterns, and the evolving role of airports across the state. Zenith Economics was retained, in partnership with Montana State University, to lead this update, and build upon prior statewide aviation studies while applying fresh data, modern modeling techniques, and expanded stakeholder input.

The purpose of this update, published in 2026, is to measure and document the contemporary economic role of Montana's airport system and to articulate the broader benefits aviation provides to communities throughout the state. Montana's airports collectively form a critical component of the state's multimodal transportation network, facilitating passenger travel, business connectivity, freight movement, emergency response, and specialized aviation services at the local, regional, national, and international levels.

The analysis quantifies measurable economic outcomes associated with Montana's airports, including activity generated by on-airport aviation and non-aviation businesses, spending by visitors who rely on air travel, capital investment in airport facilities and infrastructure, and secondary effects that occur as airport-related dollars circulate through the state economy. In addition to these quantifiable impacts, the study examines how individual airports support specific operational needs and community functions, providing context for the diverse ways aviation contributes to Montana's economic and social landscape.

Findings are informed by extensive primary data collection, including surveys and interviews with airport managers, tenants, aviation service providers, and airport users across the state.

Impact Type	Employment (Annual, 000s)	Labor Income ($M)	Value Added ($M)	Output ($M)	State & Local Taxes ($M)
Direct	25	1,461	2,134	3,746	209
Indirect	7.3	471	706	1,443	55
Induced	7.2	421	785	1,297	63
Total	**39.4**	**2,353**	**3,625**	**6,487**	**328**

Source: Analysis by Zenith Economics.

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Introduction

Airports play a critical and multifaceted role in Montana's economy, supporting not only the movement of people and goods, but also the State's long-term economic resilience, public safety, and quality of life. Given Montana's expansive geography, dispersed population centers, and reliance on air connectivity for business activity, tourism, emergency response, and community access, the State's airport system functions as essential economic infrastructure rather than a discretionary transportation asset.

Recognizing the need for updated, defensible, and comprehensive analysis, the Montana Department of Transportation (MDT) commissioned this Montana Economic Impact Study of Airports to quantify and communicate the full economic, fiscal, and qualitative contributions of the State's aviation system.

This study updates and expands upon MDT's prior statewide airport economic impact analyses, most recently completed in 2016, reflecting substantial changes in Montana's economy, population, and aviation activity over the past decade. Since the previous study, Montana has experienced significant in-migration, shifting industry composition, rising wages, and increased reliance on aviation to support tourism, healthcare access, wildfire response, and business operations across the state.

At the same time, best practices for airport economic impact analysis have evolved, with updated Federal Aviation Administration (FAA) guidance, improved data availability, and more advanced modeling techniques now considered industry standard. This study was designed to reflect these changes while maintaining consistency and comparability with prior analyses where appropriate.

The purpose of this study is threefold. First, it provides a rigorous and transparent assessment of the economic and fiscal impacts generated by Montana's airport system, including employment, labor income, and economic output supported by airport operations, on-airport businesses, visitor activity, and aviation-related capital investment. Second, it documents the quantitative and qualitative benefits of airports that are not fully captured by traditional economic metrics, such as emergency medical transport, wildfire suppression, disaster response, agricultural support, military activity, workforce development, and emerging aviation technologies. Third, it delivers a suite of accessible, decision-ready materials (including airport-specific summaries, statewide findings, and geospatial tools) intended to support policy decisions, stakeholder communication, and federal funding applications.

The analysis presented in this report is grounded in primary data collection, including extensive surveys of airport managers, tenants, aviation-related businesses, and passengers, supplemented by secondary data from federal, state, and industry sources. Economic impacts were estimated using IMPLAN input-output modeling software, applying modern, FAA-consistent methodologies designed to accurately capture direct, indirect, and induced effects while avoiding double-counting. Where appropriate, multi-regional modeling techniques were employed to reflect inter-county commuting and trade patterns unique to Montana's economy.

All key assumptions, data sources, and methodological choices made in this research are documented to ensure transparency, replicability, and long-term usefulness for MDT and its partners. For detailed information on the methods utilized for this report, please see the Appendix.

Overview of Approach

This study was designed to provide a comprehensive, transparent, and FAA-compliant assessment of the economic, fiscal, and qualitative impacts of Montana's statewide airport system. The analytical approach balanced methodological rigor with practical applicability, ensuring that results are defensible, replicable, and useful for policy, planning, and funding purposes. Where appropriate, this study maintains consistency with approaches used for prior Montana airport economic impact studies.

The study began with a review of prior statewide airport economic impact analyses, including the 2007 and 2016 studies, to understand existing methodologies, assumptions, and data. This review informed the development of an updated analytical framework (to view that framework, see Appendix A – Study Process Comparison) that reflects changes in Montana's economy, aviation activity, and best practices in economic impact analysis. Throughout the study, close coordination with the Montana Department of Transportation (MDT) ensured alignment with study objectives and reporting requirements.

Primary data collection formed the foundation of the analysis. The project team conducted extensive surveys and interviews with airport managers, on-airport businesses and tenants, aviation service providers, and airport users, including both commercial and general aviation passengers. These efforts were supplemented by in-person site visits to a sample of airports across the State, improving data quality and contextual understanding. Survey instruments were designed to collect information required for economic modeling, including employment, payroll, operating expenditures, capital activity, and visitor spending patterns. MDT also provided historic capital expenditure figures for many airports.

Secondary data sources were used to supplement and validate primary data. These sources included the U.S. Census Bureau, Bureau of Labor Statistics, American Community Survey, IMPLAN economic databases, FAA aviation activity data, and other relevant federal, state, and industry datasets. All data were reviewed for consistency, completeness, and reasonableness prior to inclusion in this analysis.

Economic and fiscal impacts were estimated using IMPLAN input-output modeling software, an industry-standard platform widely used for airport economic impact studies. The analysis quantified direct, indirect, and induced impacts associated with airport operations, on-airport businesses, visitor spending, and aviation-related capital investment. Where appropriate, multi-regional input-output modeling techniques were applied to account for inter-county commuting and trade patterns, improving accuracy and avoiding double-counting of impacts. While most data used in this report were collected in and/or represent 2025, the report is titled for 2026 and uses 2025 dollars to reflect the data collection year.

In addition to traditional economic impacts, the study evaluated quantitative and qualitative impacts of aviation that are not fully captured through standard input-output modeling. These impacts were assessed using a combination of qualitative documentation and targeted economic frameworks, such as avoided cost and productivity analyses, when sufficient data were available. This approach allowed the study to capture the broader role of aviation in supporting public safety, emergency response, agricultural productivity, and statewide business connectivity.

All assumptions, data sources, and methodological choices are documented within the report (for more details, see the Appendix) to ensure transparency and replicability. The resulting approach provides MDT and stakeholders with a robust, credible assessment of the full economic benefits attributable to Montana's airport system.

Glossary of Key Terms and Acronyms

The following tables give key definitions of key economic and aviation terms used throughout the report. Each of these terms is a standard term used in economic impact analysis. Examples of each term being used can be found throughout the report. Additionally, this section contains a glossary of all acronyms.

Table 2: Key Economic and Fiscal Impact Analysis Definitions

Term	Definition
Input-Output Model	A quantitative economic framework used to estimate how spending associated with airports and aviation-related activity circulates through the regional economy via inter-industry transactions.
Multi-Region Input-Output Model	An economic modeling framework that extends a standard input-output model by explicitly linking multiple geographic regions, allowing economic activity, trade flows, and commuting patterns between regions to be captured.
Employment (Jobs)	The total number of full-time, part-time, and seasonal jobs supported by airport operations, on-airport businesses, visitor spending, and aviation-related capital investment, reported on an annual average basis. This report presents all employment estimates in IMPLAN annual equivalent jobs, which is generally close to, but not equivalent to, full-time equivalents (FTEs).
Labor Income	The total value of wages, salaries, and employer-paid benefits earned by workers whose jobs are supported by aviation-related economic activity.
Value Added	A measure of economic contribution equal to labor income plus other property income and taxes on production; comparable to Gross Domestic Product at the state or county level.
Output	The total value of goods and services produced as a result of aviation-related activity, representing total industry sales or revenue.
Tax Revenue	Estimated revenues generated for state and local governments through taxes on production, property, sales, and income that result from aviation-related economic activity.
Direct Effects	Economic activity that occurs as a direct result of airport operations, on-airport businesses, aviation services, visitor spending, or capital investment at Montana airports.
Indirect Effects	Economic activity generated through supply-chain purchases made by businesses directly supported by aviation-related activity.
Induced Effects	Economic activity generated when workers supported by direct and indirect effects spend their earnings on household goods and services within the study area.

Term	Definition
Secondary Effects	The combined indirect and induced effects that occur beyond the initial direct aviation-related activity.
Total Effects	The sum of direct, indirect, and induced effects, representing the overall economic contribution of Montana's airport system.
Leakage	Spending associated with aviation-related activity that leaves the study region due to purchases from businesses or workers located outside the region.
Multiplier	A ratio that expresses how an initial unit of direct economic activity results in additional indirect and induced economic activity within the study region.

Source: Zenith Economics, IMPLAN.

Table 3: Key Aviation-Related Definitions

Term	Definition
Public-Use Airport	An airport that is open to the general public and eligible for federal and state aviation funding, including both commercial service and general aviation facilities.
Commercial Service Airport	A public-use airport that accommodates scheduled passenger air service and meets the 2,500-enplanement federal threshold for annual passenger boardings.
General Aviation Airport and EAS	A public-use airport that either (1) does not primarily support scheduled commercial airline service and is used for private, business, agricultural, medical, emergency, or recreational aviation or (2) offers limited commercial service.
Passenger Boarding	The act of a passenger boarding an aircraft at a commercial service airport; commonly used as a measure of passenger activity.
On-Airport Activity	Employment, operations, and business activity that physically occurs on airport property, including airport administration, tenants, aviation services, and related support functions.
Aviation Service Provider	A commercial business operating at an airport that provides services such as aircraft fueling, maintenance, hangar storage, ground handling, and pilot amenities.
Aerial Wildland Firefighting	The use of fixed-wing aircraft and helicopters to support wildfire detection, suppression, and management through water or fire-retardant application, personnel deployment, and aerial supervision.
Single-Engine Firefighting Aircraft	A small fixed-wing aircraft used in wildfire suppression to deliver fire retardant or water, typically operating from shorter runways at regional or rural airports.

Term	Definition
Large Firefighting Aircraft	A larger fixed-wing aircraft capable of delivering substantial volumes of fire retardant during wildfire suppression operations, generally requiring longer runways and specialized airport infrastructure.
Helicopter Support Base	An airport or designated facility used to stage, refuel, and support helicopters engaged in firefighting, medical transport, or emergency response.
Firefighting Reload Base	An airport equipped with infrastructure for loading fire retardant or water onto firefighting aircraft.
Closest Available Resource Doctrine	An interagency wildfire response principle in which aircraft and crews are dispatched based on proximity and availability rather than agency ownership or jurisdiction.
Air Ambulance Aircraft	Fixed-wing or rotary-wing aircraft used to transport patients, medical personnel, or organs for emergency or time-sensitive medical care.
Helicopter Landing Pad	A designated landing area for helicopters, typically located at hospitals or airports, supporting medical transport and emergency operations.
Air Cargo	The transportation of goods by aircraft, typically involving time-sensitive, high-value, or specialized commodities.
Air Express Shipment	Rapid, scheduled air cargo service used for documents, medical supplies, pharmaceuticals, and other time-critical shipments.
Visitor Spending	Expenditures made by non-resident travelers arriving by air, including lodging, food, transportation, recreation, and retail purchases within Montana.
Commercial Passenger Survey	A survey administered to passengers at commercial service airports to collect information on residency, trip characteristics, destinations, and spending patterns.
General Aviation Passenger Survey	A survey administered to general aviation users to collect information on trip purpose, length of stay, destinations, and visitor spending behavior.
Airport Manager Survey	A structured survey of airport managers used to collect data on airport operations, employment, expenditures, capital investment, and special uses such as firefighting or agriculture.
Business Aviation Survey	A survey of Montana businesses designed to assess how firms use airports for employee travel, logistics, site selection, and access to markets and services.
Aerial Application	The use of aircraft to apply fertilizers, herbicides, pesticides, or fungicides over agricultural land.
Surge Airport	An airport that does not host permanent operations for a specific activity but can be activated temporarily during periods of elevated demand.
Multi-Airport County	A county containing more than one study airport, requiring separate analytical treatment to isolate airport-specific activity.
Statewide Airport System	The integrated network of public-use airports within Montana that collectively supports passenger travel, freight movement, emergency response, and specialized aviation services.

Source: Zenith Economics, IMPLAN, Miscellaneous.

Table 4: Key Acronyms

Acronym	Definition
ACS	American Community Survey
ADA	Americans with Disabilities Act
ATADS	Air Traffic Activity Data System
BEA	Bureau of Economic Analysis
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BLS	Bureau of Labor Statistics
CIP	Capital Improvement Plan
CPI-U	Consumer Price Index for All Urban Consumers
CPS	Commercial Passenger Survey
DNRC	Montana Department of Natural Resources and Conservation
DOT	United States Department of Transportation
EIS	Economic Impact Study
ESRI	Environmental Systems Research Institute
FAA	Federal Aviation Administration
FBO	Fixed-Base Operator
FTE	Full-Time Equivalent
GA	General Aviation
GAPS	General Aviation Passenger Survey
GRP	Gross Regional Product
GSA	General Services Administration
IMPLAN	Impact Analysis for Planning
IO	Input-Output (Model)
KPI	Key Performance Indicator
LAT	Large Air Tanker
MDT	Montana Department of Transportation

Term	Definition
MRIO	Multi-Regional Input-Output
MSU	Montana State University
NICC	National Interagency Coordination Center
NIFC	National Interagency Fire Center
NPIAS	National Plan of Integrated Airport Systems
OEC	Observatory of Economic Complexity
QCEW	Quarterly Census of Employment and Wages
SEAT	Single-Engine Air Tanker
SMS	Safety Management System
USFS	United States Forest Service
USGS	United States Geological Survey

Sources: Zenith Economics, IMPLAN, Miscellaneous.

Image: South Main Street Butte, Montana. Red Mountain framed in the background

Overview of The Montana Economy

The economic landscape of Montana has undergone a profound structural transformation over the last decade. Once defined primarily by its cyclical reliance on natural resource extraction and agriculture, the state has pivoted toward a service-oriented economy fueled by rapid demographic expansion, technological integration, and high-amenity migration. This report establishes a baseline analysis of the Montana economy as of late 2025, contrasting current metrics with the conditions of 2016 (when the most recent Economic Impact Study of Montana Airports was published) to highlight the magnitude of this shift.

The data reveals an economy that is significantly larger, wealthier, and more diversified than it was ten years ago. Real Gross Domestic Product (GDP) has expanded by around 25% since 2016, and the labor market has tightened to historical lows, with unemployment stabilizing around 3.0% as of September 2025. However, this prosperity has been accompanied by acute structural rigidities. The decoupling of housing costs from local wages has created a "two-tier" economy, characterized by hyper-growth in the western mountain valleys and comparative stability in the eastern plains. This divergence presents the defining economic challenge for the state: managing the friction between rapid wealth creation and the capacity constraints of infrastructure and housing.

This section of the report seeks to provide context to the broader Montana Economy, beyond just those elements of Montana touched by the direct or secondary impacts of statewide aviation.

Image: Sunset Over Billings, Montana

The aggregate output of the Montana economy has demonstrated resilience and sustained growth, particularly in the post-pandemic era. The volatility associated with commodity price cycles—historically a primary driver of the state's economic health—has been dampened by the expansion of non-tradable service sectors.

According to the U.S. Bureau of Economic Analysis (BEA), Montana's Real GDP (measured in chained 2017 dollars) reached $60.6 billion in 2024, representing a substantial expansion from the $47.2 billion recorded in 2016. This growth trajectory accelerated significantly between 2021 and 2024, including the state outpacing the national growth rate in 2023 by expanding at 3.9% (compared to the U.S. average of 2.5%).

This expansion has not been uniform across industries. The traditional anchors of the economy—agriculture, mining, and logging—have seen their relative contributions stabilize or decline. In contrast, the "Professional, Scientific, and Technical Services" sector has emerged as a primary engine of growth, expanding by over 40% since 2016. This shift indicates a maturing economy that is increasingly integrating with national knowledge markets, facilitated by the widespread adoption of remote work technologies that allow high-wage earners to reside in Montana while exporting their labor digitally.

Table 5: Macroeconomic Indicators Comparison (2016 vs. 2024)

Economic Indicator	2016 Baseline	2024/2025 Current	% Change
Real GDP (Billions, Chained 2017$)	$47.20	$60.60	28%
Per Capita Personal Income (Nominal)	$44,800	$67,615	51%
Total Employment (Non-Farm)	468,000	525,000	12%
Median Household Income	$50,027	$69,922	40%

Sources: Bureau of Economic Analysis (BEA), US Census Bureau, Bureau of Labor Statistics (BLS). Analysis by Zenith Economics.

The fundamental catalyst for Montana's economic performance in the 2020s is population growth. For decades, the state struggled with "brain drain" and the outmigration of young professionals. This trend has reversed.

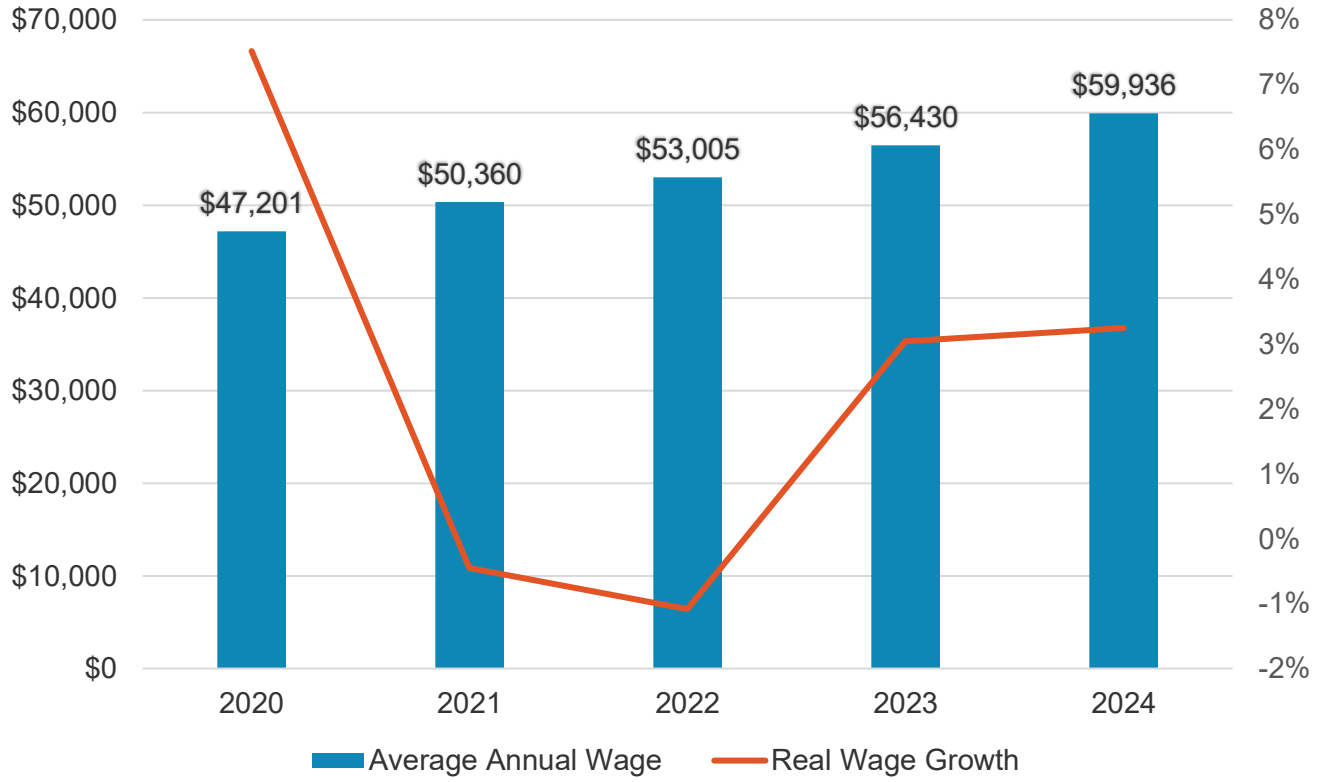
As of July 1, 2024, the U.S. Census Bureau estimates Montana's population at 1,137,233, an increase of nearly 148,000 residents since 2010, and approximately 97,000 since 2016. Between 2020 and 2024 alone, the population expanded by 5.2%, a rate significantly higher than the national average.

This growth is almost exclusively driven by net domestic in-migration rather than by natural increase. The profile of the new resident is distinct from historical norms: they are often older, wealthier, and possess higher educational attainment. While this has bolstered the tax base and consumer spending, it has also accelerated the aging of the workforce. The median age in Montana remains one of the highest in the nation at **40.6 years**, per the US Census, creating a persistent tension between labor demand and the available supply of prime-age workers.

The influx of capital and residents has tightened the labor market to levels previously viewed as frictional full employment. As of September 2025, the Bureau of Labor Statistics (BLS) reported a seasonally adjusted unemployment rate of 3.0%, down from the 4.2% annual average observed in 2016.

This statistical full employment masks a critical labor shortage. The civilian labor force reached a record **578,500** in 2024, yet job openings continue to outpace unemployed workers. Industries such as healthcare and construction face chronic vacancies, forcing wage adjustments that drive local inflation. The average annual wage in Montana reached **$59,936 in 2024**, yet these nominal gains struggle to keep pace with the escalating cost of living in the State's most desirable counties.

Figure 1: Montana Average Annual Wage and Real Wage Growth



Source: BLS, CPI-U, QCEW. Based on replicated chart from Montana Department of Labor & Industry Labor Day Report 2025. Analysis by Zenith Economics.

The Montana labor market entering 2026 is defined by a persistent and acute imbalance between labor demand and available supply. Although the state's labor force reached a record high of 578,500 people in 2024, the ratio of job openings to unemployed workers remains at a historically tight 1.8:1 as of November 2025. This tightening is not merely a symptom of economic expansion but is rooted in deeper structural demographics; specifically, an aging population and a high rate of early retirements have left an estimated 100,000 working-age Montanans entirely outside the labor force. While net domestic migration continues to bolster the population, the pace of growth moderated significantly in 2024 and 2025, falling to its lowest level in two decades at just 0.33% annually.

In response to these rigidities, the state launched the 406 JOBS initiative on August 11, 2025, a comprehensive workforce modernization strategy designed to remove systemic barriers for these disconnected workers. The initiative identifies six high-demand sectors—including health careers,

construction trades, and advanced manufacturing—and seeks to streamline pathways through apprenticeships and licensing reforms like House Bill 336, which allows for skill-based qualification in over 30 occupations. By focusing on "zero barriers" to employment, the state aims to re-engage the prime-age population that has exited the workforce due to high childcare costs or caregiving responsibilities.

Table 6: Recent Changes in Montana Labor Metrics

Labor Metric	2022 Baseline	2024/2025 Current	Long-Term Trend
Total Civilian Labor Force	563,000	579,000	Record High
Unemployment Rate	2.50%	3.30%	Low but Rising
Participation Rate	62.90%	63.10%	Structural Pressure

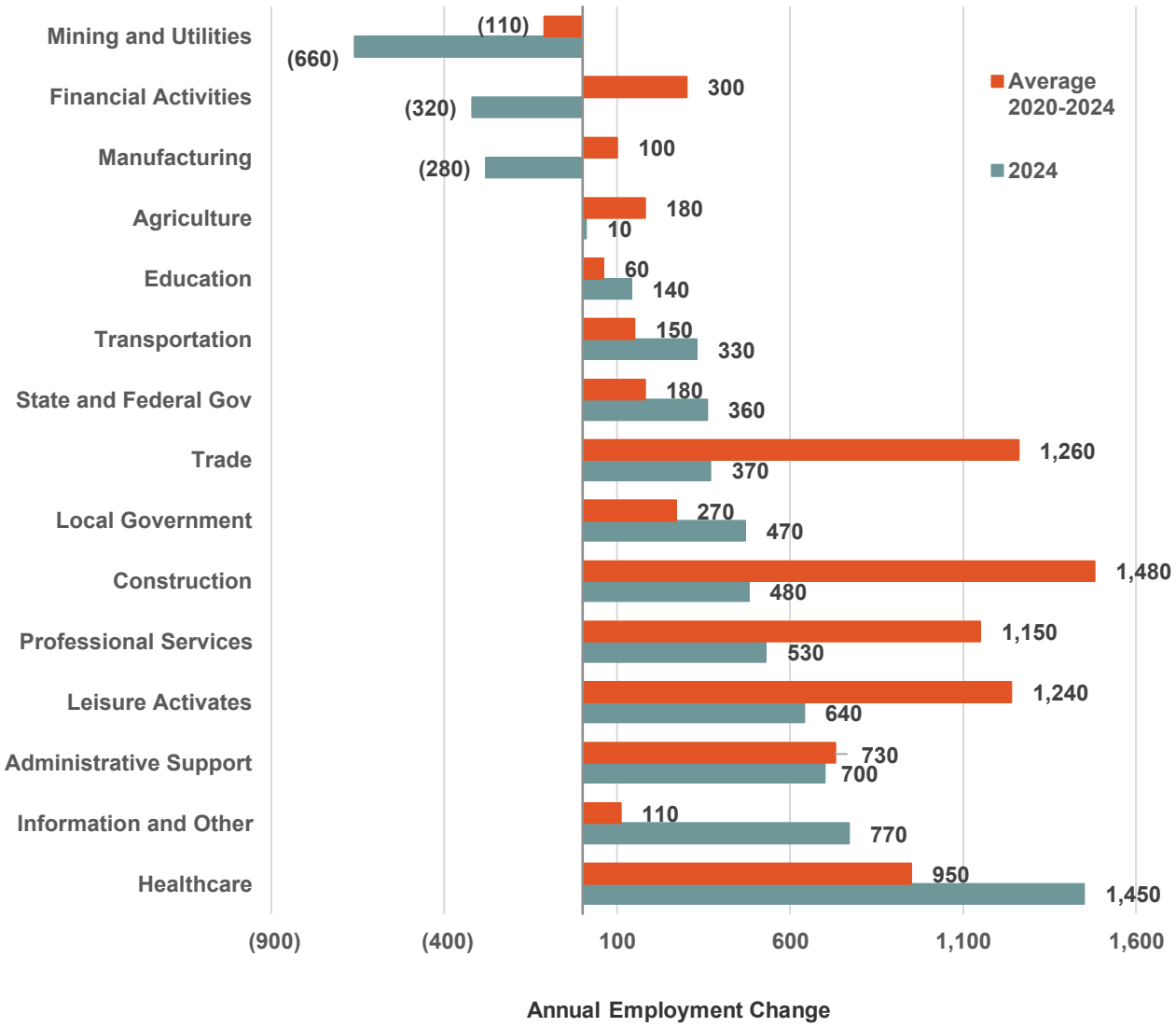
Source: US BLS. Analysis by Zenith Economics.

Over the past decade, the fundamental structure of Montana's economy has transitioned from a reliance on traditional commodity cycles to a diversified, service-led model characterized by the rapid expansion of high-wage professional sectors. As of late 2025, the Professional, Scientific, and Technical Services industry has established itself as the state's primary engine for production growth, recording an average annual increase in output of over 11% since 2020. This sector now functions as the second-highest paying industry in the state, with an average annual wage of approximately $102,000, trailing only the natural resources sector in compensation levels. This shift reflects a maturing economy that has successfully leveraged digital integration and high-amenity migration to attract remote-capable, high-value employment that is decoupled from local natural resource availability.

Image: Whitefish Airstrip 2025. Photo Credit: Stephen Torske, MDT

While the service and technology sectors surged, traditional resource-based industries including agriculture, mining, and wood products faced significant headwinds throughout 2024 and 2025 due to volatile global pricing and localized conditions. Despite these downturns in the primary sector, the state's Construction industry maintained its status as a top national performer, ranking 4th in the United States for output growth over the last five years.

Table 7: Montana Sectoral Trends



Source: Montana Department of Labor & Industry Labor Day Report 2025, BLS, CPI-U, QCEW

Non-resident tourism has transitioned from a seasonal amenity to a critical infrastructure component of Montana's economic resilience, providing a hedge against some of the historic volatility of the state's traditional "boom and bust" resource industries. In 2024, all non-resident travelers (not just those that visited by plane) spent a record $5 billion directly in Montana, per the University of Montana Institute for Tourism and Recreation Research, an injection of capital that rippled through local economies. While the Glacier and Yellowstone regions continue to attract the majority of this activity, the impacts are felt in every county through reduced tax burdens.

The economic contribution of tourism is heavily concentrated in the transportation and food services sectors, which collectively account for over 55% of all visitor expenditures. However, the sector entered 2025 facing new challenges as rising operating costs and a moderation in the length of stay began to temper the extreme growth seen in the post-pandemic era. Despite these headwinds, the industry remains a primary driver for the state's multimodal transportation needs, with traveler demand supporting significantly higher levels of air service and commercial hospitality infrastructure than Montana's resident population could sustain alone.

Table 8: Top Five Categories, Total 2024 Non-resident Visitor Spend (Not Just Aviation-Specific)

Expenditure Category	2024 Total Spend ($M)	% of Total Spend
Gasoline & Diesel	$1,120.00	23%
Hotel & Motel	$866.80	18%
Restaurant & Bar	$836.60	17%
Groceries & Snacks	$481.20	10%
Retail Sales	$353.80	7%

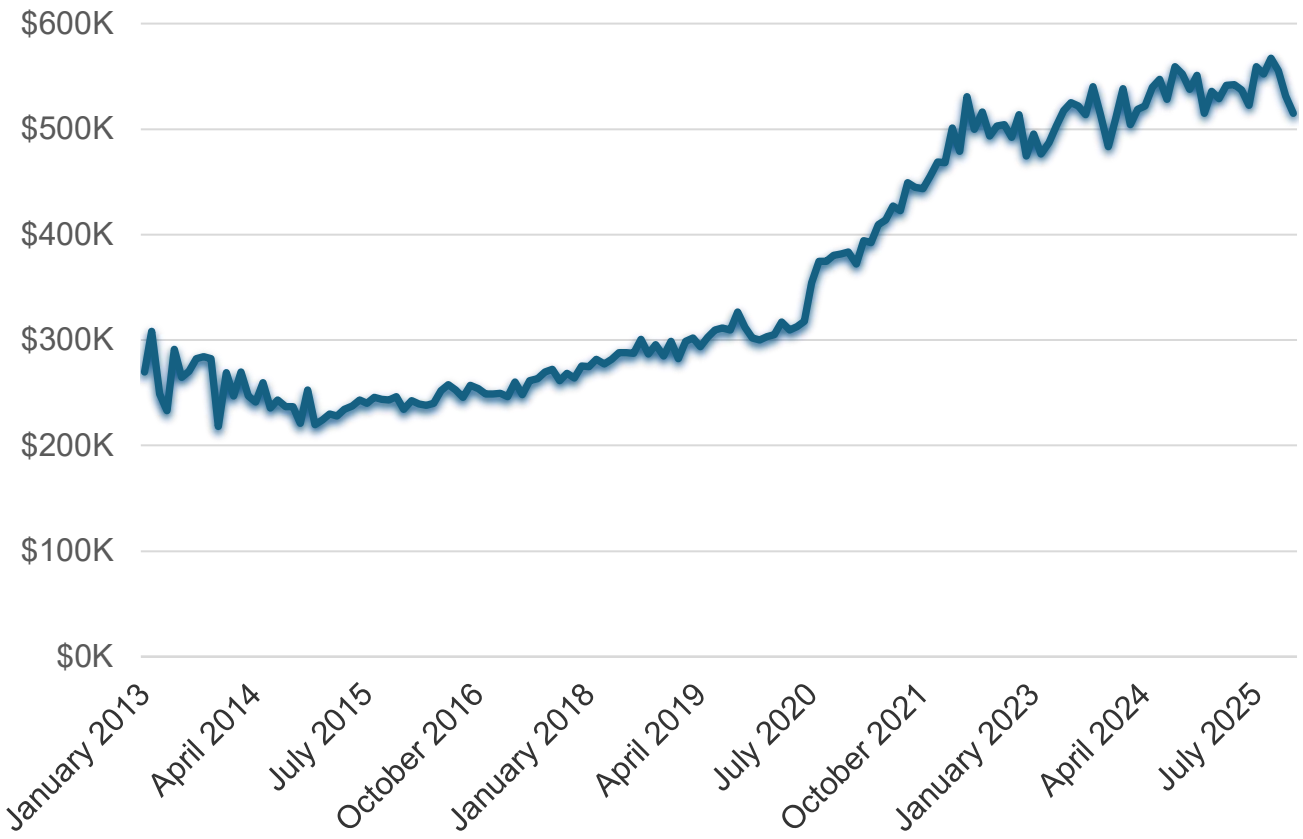
Source: Grau, Kara. 2024 Estimates: Nonresident Visitation, Expenditures, and Economic Contribution. Missoula: Institute for Tourism and Recreation Research, University of Montana, 2025. https://scholarworks.umt.edu/itrr_pubs/478/.

The most notable change relative to the 2016 baseline is the divergence between housing prices and local income levels. In 2016, Montana's housing market exhibited comparatively moderate price levels, with the statewide median home price estimated at approximately $235,000, a level broadly aligned with prevailing household incomes at that time.

By mid-2024, statewide housing prices had increased substantially. Data from the Federal Housing Finance Agency (FHFA) and Redfin indicate that the median home sale price reached approximately $543,000, with higher values observed in several rapidly growing markets. While the magnitude of appreciation has varied geographically, price increases have been evident across much of the state.

Rising housing costs have affected households differently depending on tenure and timing of purchase. Existing homeowners who entered the market prior to the recent period of rapid price growth have generally experienced increases in housing equity, while renters and prospective buyers face higher entry costs. These conditions have implications for household budgets, labor mobility, and community composition, particularly in areas experiencing sustained population growth and limited additions to housing supply.

Figure 2: Montana Median Single Family Residential Sales Price



Source: Redfin. Analysis by Zenith Economics

An aggregate analysis of the State conceals the divergence between the western intermountain valleys and the eastern plains. The economic drivers, demographic trends, and challenges facing these two regions are distinct, and in many ways the two halves function as unique economies.

Western Montana:

The counties of Gallatin (Bozeman), Missoula, and Flathead (Kalispell) represent the western economy. These regions have absorbed most the state's population growth and capital investment. Gallatin County, in particular, has emerged as a technology and bioscience hub, with a median home price approaching $700,000. The economy here is diversified but heavily reliant on high-skill services, tourism, and construction.

Eastern Montana:

Yellowstone County (Billings) and the surrounding eastern plains represent the traditional industrial and agricultural base. While Yellowstone County remains the state's most populous county and a critical healthcare and logistics hub, its growth has been more linear and stable compared to the exponential curves of the west. The housing market here remains comparatively affordable, with median prices significantly lower than the state average. However, this region faces long-term risks associated with the energy transition and the consolidation of the agricultural sector.

Table 9: Regional Comparative Analysis (2024-2025 Estimates)

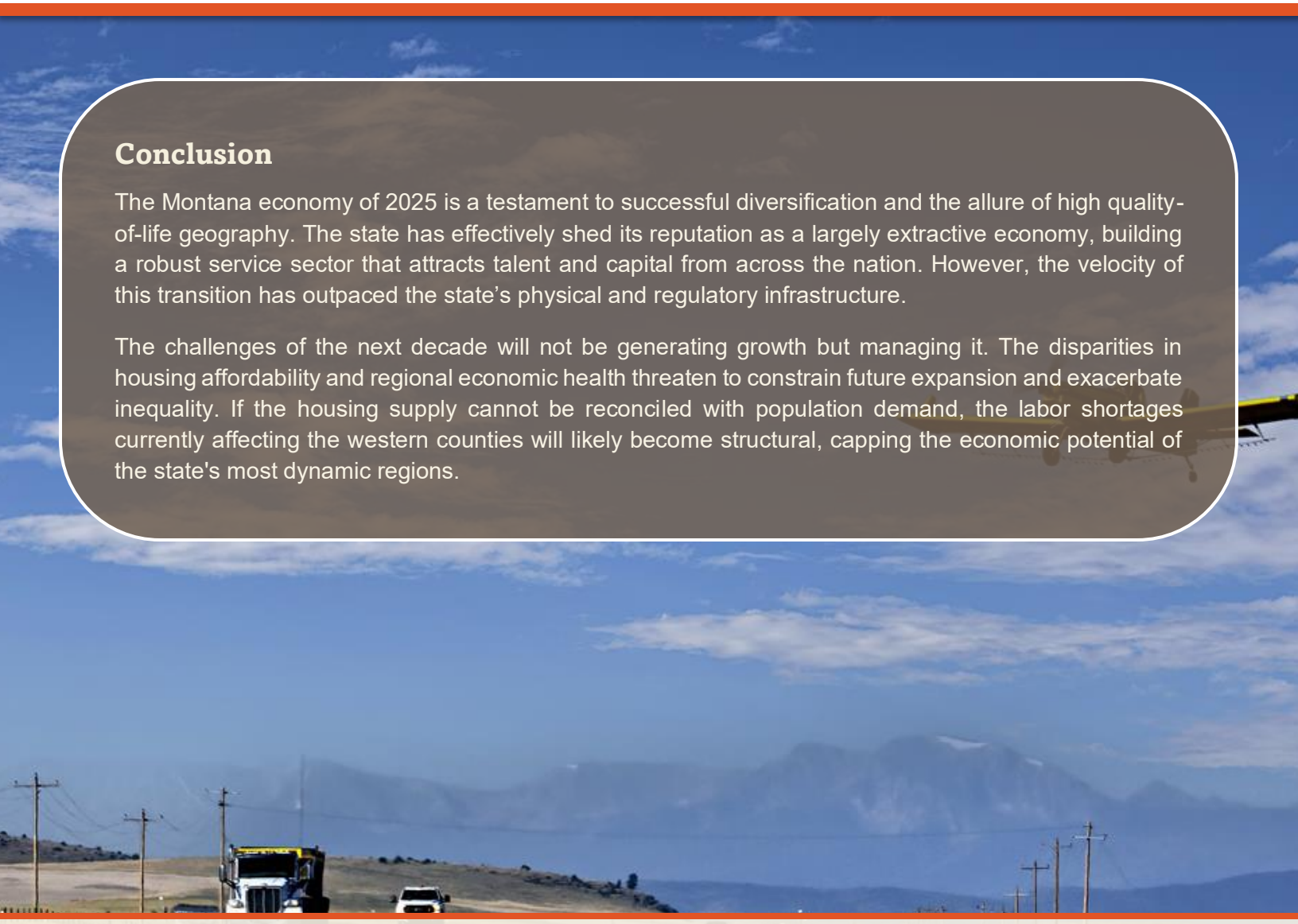
Metric	Gallatin County (Bozeman)	Yellowstone County (Billings)
Primary Economic Drivers	Tech, Tourism, Higher Ed, Bioscience	Healthcare, Oil Refining, Agriculture, Logistics
Median Home Price	~$784,500	~$326,000
Unemployment Rate	2.1% (Extreme Tightness)	2.9% (Balanced)
Population Growth (2020-2024)	High (>6%)	Moderate (~2-3%)
Key Economic Risk	Housing Affordability & Labor Supply	Commodity Volatility & Demographic Stagnation

Sources: City of Bozeman Economic Report, Montana Department of Revenue.

Conclusion

The Montana economy of 2025 is a testament to successful diversification and the allure of high quality-of-life geography. The state has effectively shed its reputation as a largely extractive economy, building a robust service sector that attracts talent and capital from across the nation. However, the velocity of this transition has outpaced the state's physical and regulatory infrastructure.

The challenges of the next decade will not be generating growth but managing it. The disparities in housing affordability and regional economic health threaten to constrain future expansion and exacerbate inequality. If the housing supply cannot be reconciled with population demand, the labor shortages currently affecting the western counties will likely become structural, capping the economic potential of the state's most dynamic regions.



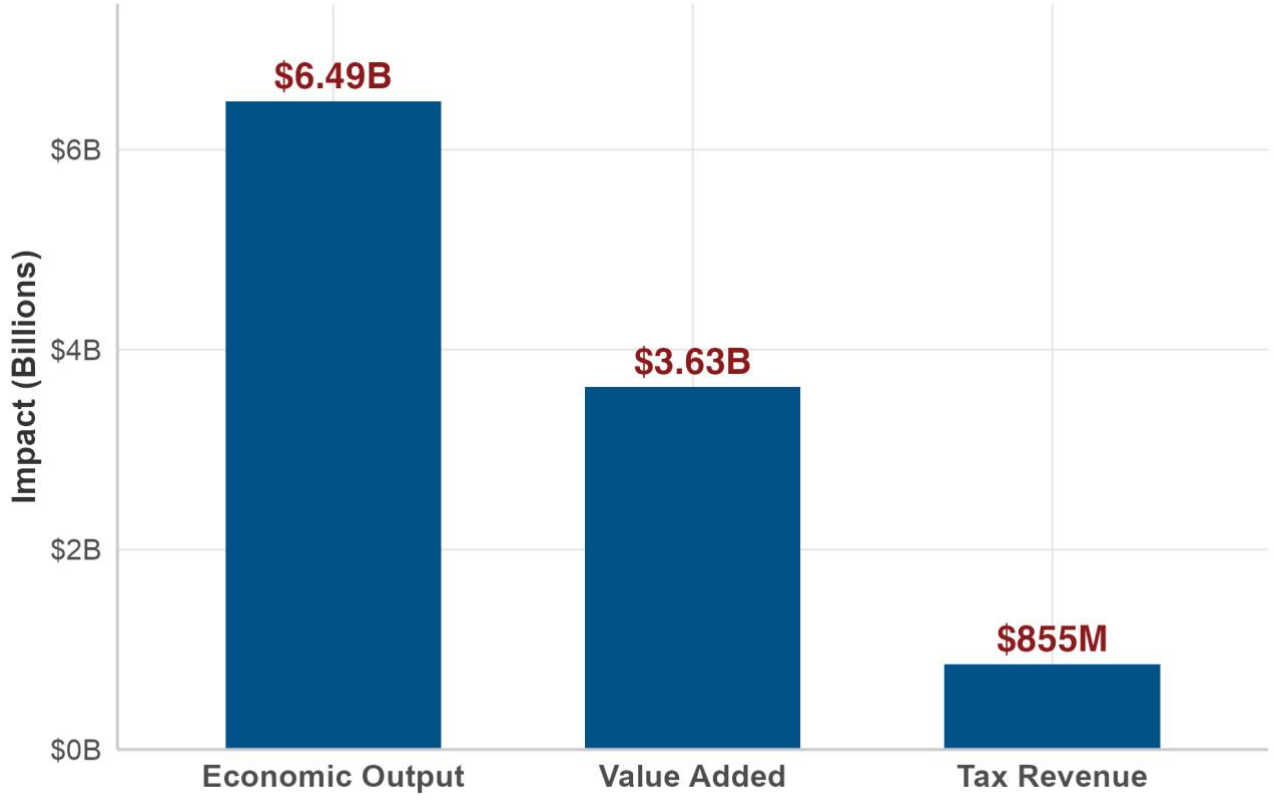
Economic Impacts of Aviation

This analysis estimates that Montana's statewide aviation system produces a total economic output of approximately $6.5B in 2025. This activity supported over 39,000 annual jobs, generated $2.4B in labor income, and contributed $3.6B in total GRP.

The primary drivers of this statewide, aviation-related economic activity are visitor spending and the operations of on-airport tenants and airport-related businesses; commercial visitor spending alone accounted for $3.7B in total output and supported 25,000 statewide jobs. Airport tenant operations generated $2.1B in output and sustained 10,000 jobs, while capital expenditures (CapEx) contribute $292.4M in output and support 1,600 jobs. General aviation visitor spending adds a further $241.3M in output, reinforcing the importance of diverse aviation segments in local economies.

The remainder of this section provides more detail into the estimated economic and fiscal impacts generated by statewide aviation in 2025, including breakouts by type of impact and by type of aviation-related spending. For further detail than is presented in this section, please see the Appendix.

Figure 3: Montana Airports - Total Economic Impact ($ Billions), 2025
Supporting over 39,000 jobs across the state



Source: IMPLAN 2024 Data for all-county Montana model. Analysis by Zenith Economics

Economic and Fiscal Impacts Overview

The study identifies five primary categories of direct spending that serve as the initial inputs for the economic impact modeling process. As shown in Table 10: Direct Spending Impacts, these categories represent the immediate financial injections into Montana's economy prior to the application of secondary multipliers. This direct activity is the primary driver behind the system's estimated total $6.5 billion in total annual economic output.

Visitor activity constitutes the most significant portion of direct economic contribution. Commercial visitor spending is estimated at $2.1 billion for 2025, reflecting the substantial impact of non-resident travelers on the state's service sectors. General aviation visitors contribute an additional $143.9 million, highlighting the role of private and business aviation in supporting regional economies. Collectively, this visitor-related spending injects new capital into Montana that would not otherwise exist in the state's economy.

Beyond visitor flows, the sustained operation and development of airport infrastructure generate consistent financial activity. Operations for airport tenants and related businesses account for $1.2 billion, representing the largest share of on-airport direct spending. This is complemented by $170.4 million in capital investment and $90.3 million in direct airport operations. These figures demonstrate that the aviation system is not only a facilitator of travel but a major industrial employer and driver of construction activity in its own right.

Table 10: Direct Spending Impacts

Direct Spend Category	Estimated 2025 Spend ($M)
Commercial Visitor	$2,114.8
Operations (Airport Tenants and Related Business)	$1,227.1
Capital Investment	$170.4
General Aviation Visitor	$143.9
Operations (Airports)	$90.3

Source: Various Data Sources, including MDT, Multiple Surveys, and Zenith Economics.

Primary Airport Impacts

Beyond their role in facilitating travel, Montana's airports function as economic engines through their own operational activities and infrastructure investments. Airport authorities employ administrative staff, maintenance crews, and operations personnel, while private tenants—including fixed-base operators, concessionaires, rental car agencies, and other service providers—add additional employment on airport property. Together, these activities generated **$919 million in direct labor income** and supported over **11 thousand jobs** in the studied period. Capital investments in runways, terminals, hangars, and safety improvements further stimulate economic activity through construction spending and equipment procurement.

Table 11: Airport OpEx and CapEx Impacts, 2025

Spending Type	Employment (Annual, 000s)	Labor Income ($M)	Value Added ($M)	Output ($M)	State & Local Taxes ($M)
Airport Operations	1.2	$90	$97	$178	$26
Airport Tenant Operations	10.0	$829	$1,252	$2,120	$302
Capital Expenditures	1.6	$119	$160	$292	$35
Total	**12.8**	**$1,038**	**$1,509**	**$2,591**	**$363**

All figures reported in 2025 dollars. Sources: IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

The economic footprint of airport operations extends well beyond the airport fence line. Airports and their tenants purchase fuel, utilities, professional services, and supplies from Montana businesses, creating indirect employment throughout local supply chains. Workers employed by airports and tenants spend their earnings at grocery stores, restaurants, and retailers, generating induced effects that ripple through the broader economy. When these multiplier effects are considered, airport operations and capital investment collectively support over **12.8 thousand jobs, $1.0 billion in labor income, and $2.6 billion in total economic output statewide.**

Commercial service airports account for the largest share of operational and capital impacts given their scale and passenger volumes, though general aviation facilities contribute meaningfully to their local economies, particularly in rural communities where the airport may represent one of the larger employers in the area.

Large Commercial Service Visitor Spending Impacts

Air travel represents a critical gateway for tourism in Montana, with the state's eight largest commercial service airports connecting visitors to destinations ranging from national parks to ski resorts to urban centers. In 2025, Zenith estimates that these airports handled approximately 2.6 million arriving visitors who collectively spent an estimated about $2 billion during their trips. Expenditures span lodging, dining, retail, transportation, and recreation which flow between businesses in the communities surrounding each airport or in other counties throughout the state.

Table 12: Visitor Spending Impacts by Airport, Large Commercial Only, 2025

Airport	Employment (Annual, 000s)	Labor Income ($M)	Value Added ($M)	Output ($M)	State & Local Taxes ($M)
Bozeman Yellowstone	9.5	$523	$837	$1,494	$72.7
Missoula Montana	4.5	$203	$331	$618	$31.3
Glacier Park	6.0	$278	$447	$847	$42.2
Billings Logan	2.5	$118	$189	$355	$16.6
Great Falls	1.6	$70	$113	$223	$10.6
Helena Regional	0.7	$31	$50	$96	$5.0
Bert Mooney	0.1	$4	$6	$12	$0.6
Yellowstone	0.1	$4	$6	$10	$0.5
Total	**25.0**	**$1,229**	**$1,979**	**$3,654**	**$179.4**

All figures reported in 2025 dollars. Sources: IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

This visitor spending directly supports **25 thousand jobs** and **$1.2 billion in labor income,** and **$3.6 billion in economic output** throughout Montana. As hotels, restaurants, and recreation providers purchase supplies and services from other Montana businesses, and as hospitality workers spend their paychecks locally, the economic benefits multiply throughout the state. Bozeman Yellowstone International Airport accounts for the largest share at 40.8% of total visitor spending impacts, reflecting both strong passenger volumes and high per-visitor expenditures tied to destination tourism.

Table 13: Visitor Spending Impacts by Type, Large Commercial Only, 2025

Impact Effect Type	Employment (Annual, 000s)	Labor Income ($M)	Value Added ($M)	Output ($M)	State & Local Taxes ($K)
Direct	16.8	$736	$1,148	$2,115	$115,013
Indirect	4.6	$281	$433	$883	$32,250
Induced	3.6	$212	$398	$657	$32,120
Total	**25.0**	**$1,229**	**$1,979**	**$3,654**	**$179,383**

All figures reported in 2025 dollars. Sources: IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

Indirect effects, purchases made by tourism related businesses from their suppliers, and induced effects, household spending by workers whose incomes derive from visitor activity, supported an additional **8.2 thousand jobs, $493 million in labor income, and $1.5 billion in economic output statewide.**

Image: Aircraft taxiing at Bozeman Yellowstone Int. Airport

General Aviation Visitor Spending Impacts

General aviation visitor spending is generated from Montana's 67 general aviation/small commercial (or EAS) airports and general aviation services provided by large commercial airports. General aviation services facilitate access for private pilots, charter flights, and recreational flyers visiting the state. These travelers contribute to local economies through expenditures on fuel, lodging, meals, and recreational activities during their stays. In 2025, Zenith Economics estimates that GA visitor spending totaled an approximately $162 million in direct expenditures.

Table 14: Visitor Spending Impacts by Airport Classification, GA, 2025

Airport	Employment (Annual, 000s)	Labor Income ($M)	Value Added ($M)	Output ($M)	State & Local Taxes ($K)
Primary Commercial	0.9	$51	$82	$139	$6,798
Secondary Commercial	0.4	$19	$30	$55	$2,700
EAS / GA Level 1	0.3	$15	$25	$46	$2,279
GA Level 2 & 3	0.0	$0	$1	$1	$59
GA Level 4	0.0	$0	$0	$0	$0
Total	**1.6**	**$86**	**$137**	**$241**	**$11,836**

All figures reported in 2025 dollars. Sources: MT SASP Classification (2015), IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

Including multiplier effects, GA and/or small commercial (EAS) visitor activity generates a total economic contribution of **1.6 thousand jobs, $86 million in labor income, and $241 million in statewide output.** While individual GA airports see modest visitor volumes compared to large commercial facilities, collectively they provide dispersed economic benefits to rural communities throughout the state.

Table 15: Visitor Spending Impacts by Type, GA, 2025

Impact Effect Type	Employment (Annual, 000s)	Labor Income ($M)	Value Added ($M)	Output ($M)	State & Local Taxes ($K)
Direct	1.1	$54	$83	$144	$7,788
Indirect	0.3	$17	$27	$53	$1,886
Induced	0.2	$14	$27	$44	$2,162
Total	**1.6**	**$86**	**$137**	**$241**	**$11,836**

All figures reported in 2025 dollars. Sources: IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

Summary Economic Impacts

The following table outlines the total estimated statewide economic impacts generated in the State of Montana by each individual airport, broken out by type of impact. These airport-specific impacts include impacts brought by on-airport activity (such as administration and airport-related businesses), construction (such as runway improvements or terminal upgrades), and visitor spending.

For more detailed breakouts of economic impacts by airport, region, and a host of other crosstabs, please visit the Appendix

Table 16: Summary of Total Economic Impacts by Airport, 2025

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Bozeman	Bozeman Yellowstone Intl	8,726	502,608	1,303,394	4,676	305,482	916,233	13,402	808,090	2,219,627
Missoula	Missoula Montana	4,159	256,404	650,275	2,691	161,679	504,004	6,850	418,083	1,154,280
Kalispell	Glacier Park International	4,989	257,219	638,071	2,704	155,468	485,568	7,693	412,686	1,123,638
Billings	Billings Logan Intl	2,800	153,116	478,507	1,784	112,680	345,527	4,585	265,796	824,034
Great Falls	Great Falls International	1,581	91,118	285,330	1,229	73,322	228,471	2,810	164,440	513,801
Helena	Helena Regional	1,636	131,751	236,978	856	49,830	156,987	2,492	181,581	393,965
Butte	Bert Mooney	205	12,120	31,857	130	7,494	23,148	336	19,614	55,006
West Yellowstone	Yellowstone	311	28,647	54,729	179	12,331	36,277	490	40,978	91,006
Sidney	Sidney-Richland Regional	26	1,818	3,993	11	660	2,183	37	2,478	6,176
Wolf Point	L M Clayton	1	22	81	0	10	38	1	32	119
Havre	Havre City-County	13	781	1,052	4	208	709	17	989	1,762
Glasgow	Wokal Field	10	409	1,372	6	315	963	17	724	2,336
Glendive	Dawson Community	9	404	1,422	5	338	991	14	742	2,412

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Hamilton	Ravalli County	23	1,258	3,275	13	666	2,257	36	1,924	5,532
Ennis	Ennis Big Sky	93	4,311	12,468	40	2,318	7,383	133	6,629	19,851
Harlowton	Wheatland County	4	165	518	2	91	323	6	256	841
Red Lodge	Red Lodge	2	149	233	1	35	124	2	183	358
Livingston	Mission Field	11	553	1,617	6	328	1,057	17	881	2,674
Anaconda	Bowman Field	4	119	379	1	78	232	5	197	611
Ronan	Ronan	2	103	232	1	40	144	3	143	376
Twin Bridges	Ruby Valley Field	5	118	249	1	37	126	5	155	375
Deer Lodge	Deer Lodge-City-County	14	489	1,464	5	256	900	19	745	2,364
Dillon	Dillon	9	563	1,008	5	231	840	14	794	1,848
Lewistown	Lewistown Municipal	23	1,019	2,795	10	536	1,859	33	1,555	4,654
Baker	Baker Municipal	14	578	1,343	4	199	662	18	777	2,005
Big Sandy	Big Sandy	2	65	191	0	20	76	2	85	267
Big Timber	Big Timber at Howard Field	33	2,068	4,965	16	910	3,281	49	2,978	8,246
Broadus	Broadus	0	3	73	0	20	46	0	23	118
Browning	Starr-Browning Airstrip	0	8	23	0	2	7	0	10	31
Chester	Liberty County	1	36	126	0	25	72	2	61	198

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Chinook	Edgar G Obie	0	9	36	0	4	15	0	13	51
Choteau	Choteau	6	207	721	3	143	467	9	350	1,189
Circle	Circle Town County	0	10	40	0	5	19	0	16	59
Colstrip	Colstrip	0	5	21	0	3	8	0	7	29
Columbus	Woltermann Memorial	4	122	401	2	90	265	5	212	666
Conrad	Conrad	10	602	1,514	4	245	748	14	847	2,262
Culbertson	Big Sky Field	3	76	267	1	27	104	3	103	371
Cut Bank	Cut Bank International	4	185	579	1	75	271	6	260	850
Ekalaka	Ekalaka	1	28	98	0	6	30	1	34	127
Eureka	Eureka	3	126	338	1	48	176	4	174	514
Forsyth	Tillitt Field	1	60	130	0	17	58	1	77	188
Fort Benton	Fort Benton	2	61	158	0	19	69	2	80	227
Gardiner	Gardiner	13	940	2,124	7	416	1,394	20	1,356	3,517
Geraldine	Geraldine	1	6	10	0	1	4	1	7	14
Hardin	Big Horn County	1	42	46	0	5	17	1	47	63
Harlem	Harlem	0	1	24	0	5	15	0	6	40
Hot Springs	Hot Springs	0	34	66	0	7	29	1	41	96
Jordan	Jordan	0	1	5	0	1	2	0	1	8

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Kalispell	Kalispell City	75	4,961	6,093	29	1,669	5,051	103	6,630	11,144
Laurel	Laurel Municipal	26	1,128	3,082	14	896	2,580	40	2,024	5,662
Libby	Libby	3	105	346	1	59	206	5	165	552
Lincoln	Lincoln	0	16	76	0	22	65	1	38	141
Malta	Malta	2	75	251	1	37	141	3	112	391
Miles City	Frank Wiley Field	4	187	561	3	201	525	7	388	1,086
Philipsburg	Riddick Field	0	11	118	0	18	64	1	28	182
Plains	Plains	2	127	289	1	33	131	3	161	421
Plentywood	Sher-Wood	1	30	121	0	17	59	1	47	179
Polson	Polson	12	388	1,352	6	302	1,017	19	691	2,369
Poplar	Poplar Municipal	3	100	341	1	40	149	4	140	490
Roundup	Roundup	7	296	850	2	136	467	9	432	1,317
Scobey	Scobey	3	59	520	2	76	283	4	135	803
Shelby	Shelby	6	243	746	2	153	438	9	396	1,184
Stanford	Stanford Biggerstaff Field	1	5	15	0	1	6	1	7	21
Stevensville	Stevensville	16	576	1,803	8	428	1,365	24	1,003	3,168

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
St Ignatius	St Ignatius	1	43	94	0	16	58	1	59	153
Superior	Mineral County	0	7	96	1	32	84	1	39	180
Terry	Terry	0	10	57	0	7	27	1	17	83
Thompson Falls	Thompson Falls	3	254	529	1	67	254	4	321	783
Three Forks	Three Forks	21	1,525	3,380	12	826	2,406	33	2,351	5,786
Townsend	Townsend	3	99	331	1	75	217	4	174	548
Turner	Turner	2	93	314	1	51	167	4	144	481
White Sulphur Springs	White Sulphur Springs	3	142	402	1	62	215	4	204	617
Winnett	Winnett	0	0	1	0	0	1	0	0	2
Troy	Troy	0	0	1	0	0	0	0	0	1
Whitefish	Whitefish	0	10	23	0	5	16	0	15	39

Sources: IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

Summary Fiscal Impacts

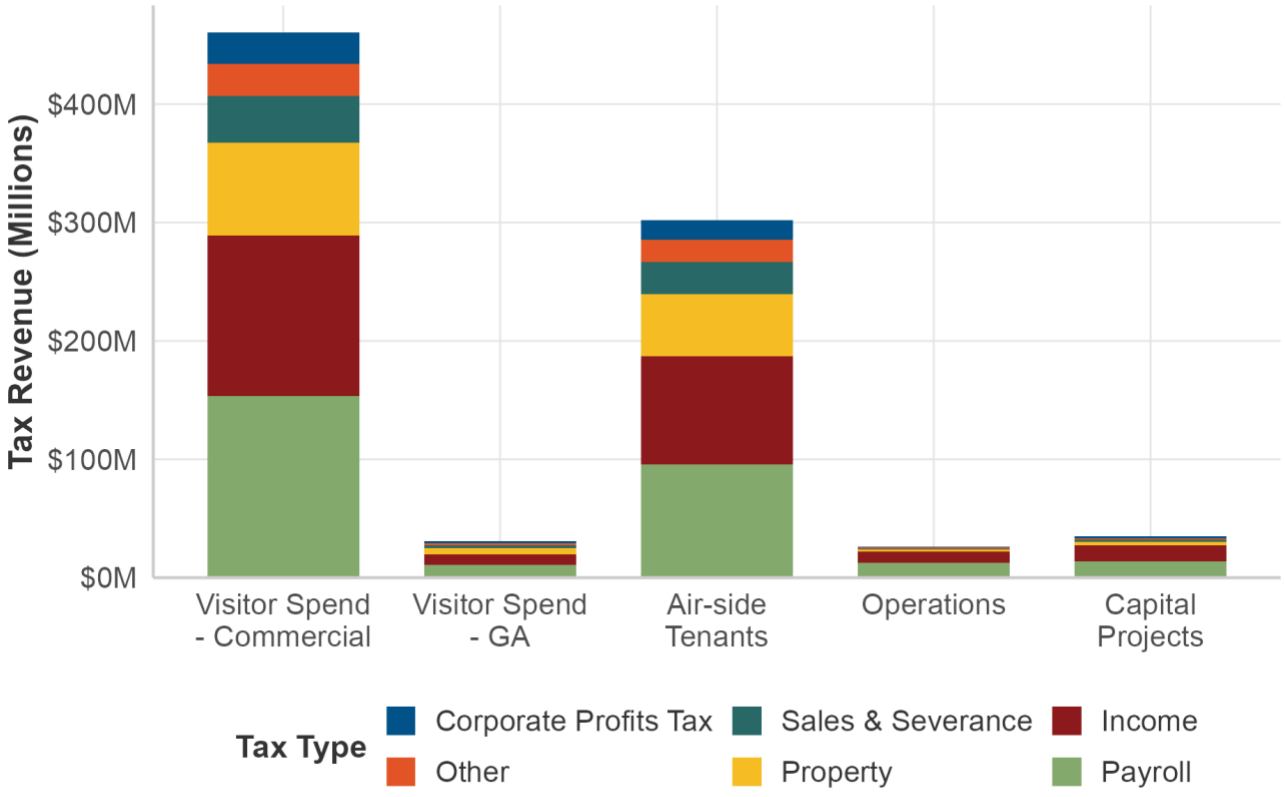
The economic activity generated by Montana's airport system produces substantial tax revenues across multiple jurisdictions. Based on the fiscal impact analysis, the system supports a total of $327.5M in combined state and local tax revenues. At the federal level, aviation-related activity contributes $527.2M. These fiscal contributions are largely driven by visitor spending, which accounts for $460.4M in total tax value.

A detailed examination of the state and local tax structure reveals that most of these revenues are generated through direct impacts, totaling $209.3M, while indirect and induced effects contribute $55.3M and $62.9M respectively. When categorized by tax entity, the state captures $205.1M of non-federal revenue, followed by counties and sub-county special districts which receive $44.1M and $50.2M, respectively. These funds are primarily sourced from payroll taxes ($286.2M), income taxes ($259.7M), and property taxes ($14.1M) supported by aviation-related employment and infrastructure.

The distribution of fiscal benefits is also delineated by airport type. Large commercial service airports drive the largest share of fiscal activity, accounting for $841.2M in tax value. General aviation (GA) airports generate $13.6M in fiscal impacts. These revenues support public infrastructure, education, and safety services across the state, along with providing support for the federal government.

Figure 4: Total Statewide Fiscal Impacts by Tax and Spending Type, 2025

Estimated revenue generated by airport economic activity



Source: IMPLAN 2024 Data for all-county Montana model. Analysis by Zenith Economics

Qualitative Impacts of Aviation

Traditional economic impact analysis provides a critical foundation for understanding how airports support employment, income, business activity, and tax revenues across Montana. Those measures offer a standardized and defensible framework for quantifying aviation's contribution to the State's economy. However, by design, conventional economic modeling captures only those impacts that flow through observable market transactions. Many of the important benefits provided by Montana's airport system occur outside of these transactions and are therefore not reflected in traditional economic impact results.

This section examines the qualitative impacts of aviation, defined as the economic, operational, and social benefits that arise because Montana aviation infrastructure exists and functions as an enabling system for other statewide activities. In many cases, the economic significance of aviation is best understood by considering what would occur in its absence. Longer emergency response times, increased wildfire damage, reduced agricultural yields, and diminished access to specialized services would impose meaningful economic and social costs on communities throughout the State. Aviation infrastructure mitigates these outcomes and, in doing so, enhances statewide economic resilience.

Figure 5: Qualitative Impacts

Airports across Montana play a critical role in enabling time-sensitive and mission-critical activities that would otherwise be severely constrained. Aviation supports emergency medical transport and air ambulance services that reduce response times and improve health outcomes for residents in remote communities. Airports serve as essential bases for wildfire detection, suppression, and logistical coordination, protecting lives, property, and natural resources during increasingly severe fire seasons. Aviation also supports agricultural productivity through aerial application and rapid access to regional and national markets, while facilitating military operations, disaster response, and search-and-rescue.

To collect the information needed for this section, Zenith Economics conducted expansive, statewide surveys of critical groups, including airport managers, Montana hospitals and clinics, and private sector businesses in a diverse assortment of industry sectors. Zenith Economics also identified and gathered data from a variety of other sources, such as the Federal Aviation Administration. For full details on the surveying, data collection, and methods utilized for this section of the report, please see the Appendix.

The findings presented in this section underscore that Montana's airports function as critical infrastructure assets. By enabling essential services, supporting key industries, and reducing economic risk, aviation infrastructure plays a central role in sustaining the State's economic health and quality of life.

Business Use of Montana Airports

Business aviation plays a quiet but foundational role in Montana's economy, supporting firms that operate across large geographic areas, serve dispersed markets, and rely on timely access to people, supplies, and services. To document this role, Zenith Economics collaborated with the Montana Department of Labor Unemployment Insurance Division on behalf of the Montana Department of Transportation to conduct a statewide Business Aviation Survey in fall 2025. The survey was distributed by repeat email to approximately 500 valid business email addresses anonymously provided by the Department of Labor and received **50 high quality responses**, with no skipped questions, providing an internally consistent snapshot of how Montana businesses interact with the state's airport system.

The respondents represent a broad cross-section of Montana's economy, including professional services, construction and engineering, energy and utilities, healthcare and social services, retail and hospitality, food and beverage, logistics, manufacturing, nonprofit organizations, and resource-based industries. Businesses responding to the survey range from small, locally owned firms to multi-location companies serving regional or statewide markets.

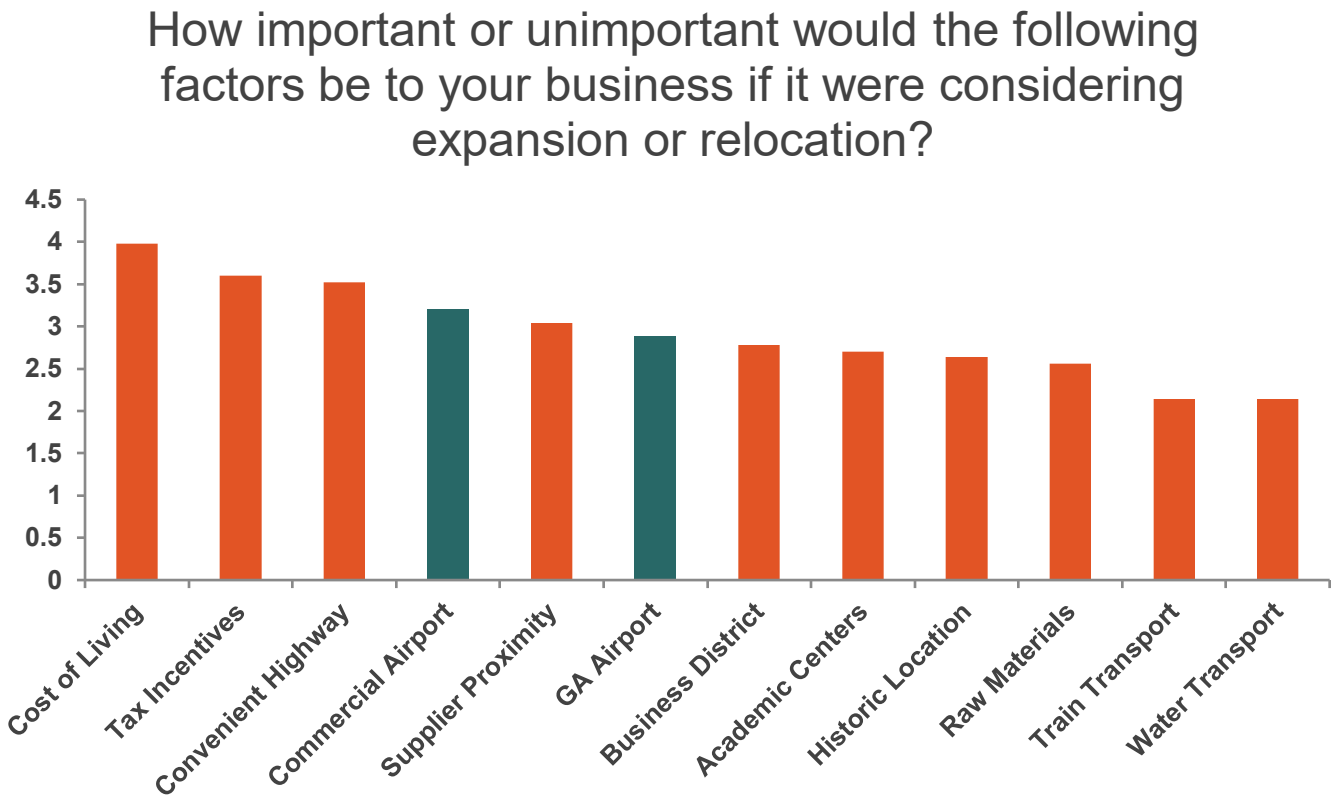
Montana's economic geography strongly shapes how businesses use aviation. With long travel distances between population centers, limited interstate connectivity in some regions, and seasonal weather constraints, airports function as essential business infrastructure rather than optional amenities. **56% of survey respondents** reported employees using large commercial airports for business, allowing firms to reach clients, suppliers, job sites, and professional services that would otherwise be impractical to access within required timeframes. On average, employees of responding firms took **3.4 business trips** across the most recent complete year.

Figure 6: Business Survey Question (% of Respondents)

Source: Zenith Economics, Montana Business Survey

Another consistent message in the survey data is the relationship between airport access and business location decisions. Respondents indicated that the availability and quality of local airport facilities influence their ability to attract and retain employees, clients, and partners. For firms that host visiting professionals, investors, or customers, nearby airport access was described as an important factor in maintaining business relationships and supporting growth. This suggests airports, both large commercial and general aviation, are valued for regional competitiveness.

Figure 7: Business Survey Question (Mean Response, 1-5 Scale)



Source: Zenith Economics, Montana Business Survey

Taken together, the Business Aviation Survey results provide clear evidence that Montana's airports are integral to the functioning of the state's economy. The complete participation of all 50 respondents and the diversity of represented industries indicate that business use of airports is widespread and embedded across sectors. Airports support productivity, market access, workforce mobility, and business resilience in a state where distance and geography are defining economic factors.

In the context of this Economic Impact Study of Aviation for the State of Montana, the Business Aviation Survey serves as qualitative and quantitative confirmation that airports function as enabling infrastructure for the private sector. The findings support the conclusion that investments in airport facilities and services yield returns not only through direct aviation activity, but through the broader business activity they make possible across Montana's economy.

For more details on the business survey, see the Appendix.

Hospital Use of Montana Airports

As part of this report, Zenith Economics collaborated with the Montana Hospital Association to survey all Hospitals and Clinics throughout the State of Montana on behalf of the Montana Department of Transportation. The Montana Hospital Association provided Zenith with contact information for 42 hospital/clinic locations throughout the state, of which 17 complete responses were collected through online surveying supported by repeated phone and email outreach. The data collected is useful for understanding the role aviation plays in the statewide medical system and in keeping Montana residents healthy.

Across survey respondent hospitals and clinics, reliance on aviation is widespread:

- Air ambulance activity is nearly universal. Sixteen of 17 respondents (94.1%) reported that patients are transferred to or from the facility via air ambulance.
- Helipad infrastructure is common. Twelve of 17 hospitals (70.6%) reported having a helipad.
- Air cargo / express shipping is used by a substantial share of facilities. Nine of 17 respondents (52.9%) reported using air cargo or air express shipment for at least one purpose, most commonly drug and supply shipments.
- Specialty clinics are prevalent, and aviation supports specialist access at a meaningful minority of hospitals. Nine of 17 respondents (52.9%) reported hosting specialty clinics. Of these, five facilities reported that specialists travel by aircraft for clinics (55.6% of specialty-clinic hosts; 29.4% of all respondents).
- Clinician “fly-out” outreach appears uncommon in the respondent set. Just one facility (Billings Clinic) reported conducting offsite specialty clinics requiring staff to fly.

These findings are consistent with the role that hospital-related aviation services have historically played in Montana’s healthcare access (particularly for rural communities) where airports support emergency evacuation, clinician travel, and urgent logistics.

Hospitals operate under clinical and logistical constraints where time-to-care and time-to-supply can materially affect outcomes and operating continuity. In large, rural states like Montana, aviation is one of the few modes that can reliably connect remote communities with tertiary care, specialty clinicians, and urgent shipments. The hospital survey conducted as part of this study was designed to provide a structured, facility-level view of aviation reliance across several channels, while remaining consistent with previous surveys conducted as part of this same study done in previous decades:

1. Medical Air cargo and express shipments (drugs, supplies, diagnostics/testing, equipment, documents),
2. Helipad availability and, by extension, on-site capability to receive rotor-wing transport,
3. Air ambulance transfers and the approximate annual volume of transfers, and
4. Specialty clinics supported by inbound specialist travel and outbound staff travel.

Consistent with prior practice, results are reported using straightforward descriptive statistics (counts and percentages), with limited cross-tabulations to highlight salient patterns. The analysis relies exclusively on the data and information directly provided by responding hospitals and clinics.

1. Use of Medical Air Cargo or Air Express Shipment (by Purpose)

A majority of respondents (52.9%) reported using air cargo or air express shipments for at least one purpose. By category, the most frequently reported uses were drug shipments and supply shipments.

Table 17: Air Cargo / Express Shipment Use by Purpose (n = 17)

Purpose	Hospitals reporting "Yes"	Share of respondents
Drug shipments	8	47.10%
Supply shipments	8	47.10%
Diagnostics or testing	7	41.20%
Equipment shipments	7	41.20%
Document shipments	5	29.40%

Source: Visitor Survey Data, 2025. Zenith Economics, LLC.

The pattern suggests these logistics operations are not limited to rare, exceptional circumstances; rather, they appear embedded in routine procurement and clinical support workflows (particularly for pharmaceuticals, supplies, and diagnostic-related movements).

2. Helipad Availability

Twelve of 17 respondents (70.6%) reported having a helipad. This level of infrastructure availability is consistent with a healthcare delivery environment where rotor-wing access is a planning consideration for emergency transport and time-sensitive transfers.

3. Air Ambulance Transfers and Annual Volume

Sixteen of 17 hospitals (94.1%) reported that patients are transferred to or from the facility via air ambulance. The distribution amongst respondents who reported transfers is summarized below:

- Total transfers across respondents: 3,085 annually
- Median: 52 transfers/year
- Mean: 193 transfers/year (influenced by a small number of high-volume facilities)
- Range: 5 to 1,900 transfers/year

The median indicates that many facilities experience air ambulance activity as a recurring, operationally relevant event. The gap between mean and median indicates a right-skewed distribution, consistent with a system where a limited number of facilities serve as higher-volume transfer nodes. All hospitals reporting a helipad also reported air ambulance transfers. Among hospitals without a helipad, most still reported transfers, implying reliance may occur through nearby receiving infrastructure, shared facilities, or other arrangements.

4. Specialty Clinics and Specialist Travel by Aircraft

Nine of 17 respondents (52.9%) reported hosting specialty clinics. Among hospitals hosting specialty clinics (n = 9), five reported that specialists travel via aircraft for these clinics (55.6%). Across all respondents, this equals 29.4%.

Respondents identifying aviation-enabled specialist travel most commonly referenced clinical areas such as cardiology (including pediatric/adult congenital), orthopedics, OB/GYN, general surgery, neurosurgery, podiatry, and pediatric subspecialties (e.g., hematology, urology). These responses indicate aviation supports access to specialties that are typically concentrated in larger regional centers. While many hospitals host specialty clinics, the subset requiring specialist air travel suggests aviation is a targeted mechanism to extend specialty coverage where surface travel time, scheduling constraints, or clinical urgency make air access operationally valuable.

There are several important things to consider regarding the Montana Hospital Survey conducted as part of this analysis:

- Results should be interpreted as descriptive of respondents rather than as a statistically weighted statewide estimate.
- Self-reported operational activity may reflect differences in internal tracking practices across facilities.
- Air ambulance volume is highly skewed, and interpretation should rely on medians and ranges alongside means.

Despite these potential limitations of the survey, it is evident from the surveyed sample that hospitals and clinics throughout Montana are heavily reliant on various forms of aviation, including via plane and via helicopter, to perform essential services for the health and safety of Montana residents.

Image: Medical Helicopter in Flight

Firefighting Use of Montana Airports

In Montana, aerial firefighting is not a peripheral aviation activity but a valuable element of the state's wildfire suppression system. Given the state's expansive geography, dispersed population centers, and extensive forest and rangeland resources, aviation assets play a critical role in protecting communities, infrastructure, timberlands, and recreational assets. Federal guidance consistently emphasizes the importance of aviation in western wildfire response, particularly in states characterized by large distances, complex topography, and limited ground access.

Montana's public-use airports provide the physical backbone that enables these aerial operations. Many facilities support wildfire response activities for the Bureau of Land Management, the U.S. Forest Service, and the Montana Department of Natural Resources and Conservation, which together constitute the primary agencies responsible for aerial wildfire suppression in the state. Airports used for these missions may function as tanker or helicopter bases, reload and refueling points, crew staging areas, or logistical coordination centers. In many cases, existing airport infrastructure allows these functions to be integrated alongside other aviation uses with minimal modification.

As part of this analysis, structured surveys and oral interviews with airport managers and operators throughout the state were conducted to assess the share of airports involved in firefighting use throughout the state. Across Montana, 51 of 75 studied airports answered survey questions about whether their airport participated in aerial or wildland firefighting. Of the 51 responding airports, 35 (66.7%) indicated that their airport was involved in aerial or wildland firefighting operations. MDT staff confirmed the airports with firefighting operations. Those airports are as follows:

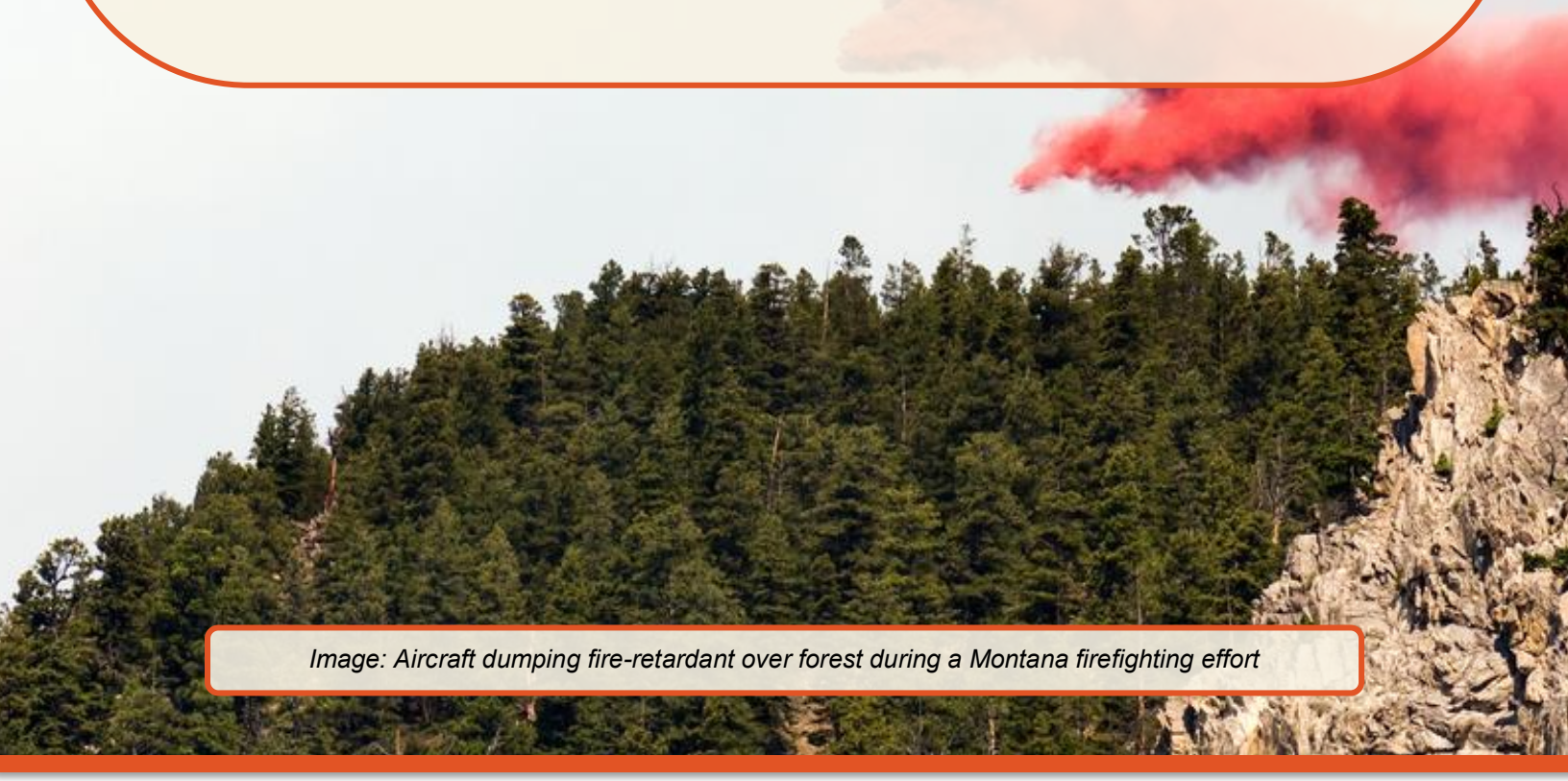


Image: Aircraft dumping fire-retardant over forest during a Montana firefighting effort

Table 18: Responding Airports that Indicated Aerial and/or Wildland Firefighting Use

Airport Code	Airport	Airport Code	Airport
BHK	Baker Municipal	S27	Kalispell Municiple
BTM	Bert Mooney	9S4	Mineral County
00U	Big Horn County	LVM	Mission Field
3U8	Big Sandy	MSO	Missoula Montana
6S0	Big Timber at Howard Field	MLS	Frank Wiley Field
BZN	Bozeman Yellowstone Intl	S34	Plains
BIL	Billings Logan Intl.	HRF	Ravalli County
M46	Colstrip Ricks Field	U05	Riddick Field
GDV	Dawson Community	RVF	Ruby Valley Field
DLN	Dillon	SDY	Sidney-Richland Regional
88M	Eureka	52S	St Ignatius
79S	Fort Benton	S64	Stanford/Biggerstaff Field
5U8	Geraldine	8S0	Starr-Browning Airstrip
GPI	Glacier Park International	THM	Thompson Falls
GTF	Great Falls International	58S	Whitefish
HVR	Havre City-County	GGW	Wokal Field/Glasgow-Valley County
HLN	Helena Regional	WYS	Yellowstone
S69	Lincoln		

Source: Zenith Economics 2025 survey of statewide public airports; MDT Aeronautics.

Aerial wildland firefighting encompasses the coordinated use of fixed-wing aircraft and helicopters to suppress and manage wildfires through the application of water, long-term fire retardants, foams, and gels. Aviation resources also enable the rapid deployment of highly trained firefighting personnel, including smokejumpers who parachute into remote fire locations and crews who are inserted by helicopter via rappel. Together, these capabilities allow agencies to access terrain that is otherwise difficult or impossible to reach by ground, particularly during the initial attack phase when rapid response can substantially limit fire growth.

Wildfire aviation activity is not evenly distributed across the airport system, nor is it static over time. While only a subset of airports host permanent or seasonal firefighting bases, many others are designated as alternate or surge locations that can be activated during periods of elevated fire risk. Airports statewide have been identified as supporting aerial wildland firefighting operations in some capacity, either as primary bases or as alternates suitable for suppression aircraft. The flexibility of this network is essential, as wildfire response agencies operate in a highly mobile environment. Aircraft and crews are routinely

relocated across Montana to follow fire activity, shifting operational demand among airports as fire conditions evolve throughout the season.

This adaptive use of Montana's airport system underscores the close relationship between aviation infrastructure and wildfire resilience. Airports that support aerial firefighting contribute not only to emergency response capacity but also to broader public safety and resource protection objectives, reinforcing their strategic importance within the statewide aviation network.

Aerial firefighting activity in Montana is coordinated through an interagency system that integrates federal, state, tribal, and local resources. Wildfire suppression aircraft—including large air tankers, single-engine air tankers (SEATs), helicopters, and fixed-wing reconnaissance aircraft—are deployed based on proximity, availability, and fire behavior conditions rather than jurisdictional ownership. This operational framework, commonly referred to as the "closest available resource" approach, is administered nationally through the National Interagency Fire Center (NIFC) and applied across the western United States, including Montana.

Within this system, Montana's public-use airports serve as operational nodes that enable the staging, refueling, loading, maintenance, and crew transport functions required for aerial wildfire response. Depending on the facility, airports may be designated as primary tanker bases, helicopter bases, reload bases, or alternate/surge locations that are activated during periods of elevated fire activity. These designations are not static and may change seasonally or annually based on agency needs, infrastructure capacity, and wildfire risk conditions.

Wildfire activity in Montana varies significantly from year to year depending on weather, fuel conditions, and ignition patterns. Historical data from the National Interagency Coordination Center (NICC) indicate that Montana regularly experiences hundreds to thousands of wildfire incidents annually, with total acres burned fluctuating across fire seasons. In recent decades, several fire years have exceeded averages in fire occurrence and acreage burned, increasing operational demands on aerial firefighting resources.

This variability places a premium on geographic flexibility within the aviation system. Airports that are not designated as permanent firefighting bases may still play a critical role during high-activity periods by supporting aircraft repositioning, refueling, or crew logistics. The distributed nature of Montana's airport network allows agencies to adapt to shifting fire conditions and redeploy aviation assets as needed across large distances and varied terrain.

From an operational perspective, airports supporting aerial firefighting provide several essential functions:

- **Aircraft staging and basing**, including parking, hangar access, and secure apron space
- **Fueling and retardant loading**, where infrastructure is available
- **Crew movement and logistics**, including transport of pilots, firefighters, and support personnel
- **Maintenance and inspection access** necessary to sustain high-tempo operations

These functions are integrated into existing airport operations and typically occur alongside civilian and commercial aviation activity. As such, wildfire aviation use represents one of several mission-critical public services supported by Montana's airport system, particularly during the peak wildfire season.

Air Cargo Reliance

Air service provides an essential foundation for Montana's high-value commerce by enabling the rapid, long-distance movement of commodities critical to the state's economic vitality. In 2024, Montana reached a record **$2.4 billion** in total international goods exports—a **53% increase** over the previous decade. While air cargo accounts for a relatively small fraction of total freight tonnage, it represents a higher percentage of freight by value, particularly for time-sensitive "just-in-time" deliveries required by the state's manufacturing and healthcare sectors.

Operational data from 2024 and 2025 indicates a robust demand for air logistics at Montana's primary aviation hubs. Growth in dedicated cargo activity aligns with significant enplanement increases at other regional gateways such as Missoula (MSO), which grew **11.6%**, and Glacier Park International (GPI), which grew **10.4%** in 2024. The following table highlights specific high-value commodities identified in current trade profiles that are traditionally reliant on-air transport for global delivery:

Table 19: MT High-Value Air-Reliant Commodity (2024) Annual Export Value ($Millions)

Export Category	2024 Total Export Value
Civilian Aircraft and Parts	$219.2
Semiconductor Machinery	$153.9
Medical and Precision Instruments	$84.2
Integrated Circuits	$28.6

Source: The Observatory of Economic Complexity. Analysis by Zenith Economics.

Montana's air cargo infrastructure is vital for industries producing low-weight, high-value goods that require global supply chain integration. The state's top exported commodities by value in 2024 included aircraft parts **($219.2 million**) and semiconductor machinery **($153.9 million**), both of which are common customers of air transport for rapid global distribution.

- Chemical and Pharmaceutical Products: With chemicals representing the state's largest manufacturing export at $533 million, air cargo is often essential for transporting pharmaceuticals and inorganic chemicals that require specialized handling.
- Technology and Electronics: High-complexity goods, such as machinery for semiconductor production ($153.9 million), frequently rely on air transport to reach international markets.
- Healthcare Dependency: Montana's healthcare sector relies on air cargo for the shipment of critical drugs and diagnostic tests; 47% of responding hospitals utilize air cargo for drug shipments and 41% use it for diagnostics or testing, per surveys from this study.
- Just-in-Time Manufacturing: Traditional and technology-based manufacturers utilize air cargo to receive production inputs "just-in-time," facilitating some of the $156 million in business sales that are often reliant on the airport system to receive necessary inputs.

The global air cargo market is projected to maintain a growth rate of 2.4% through 2026. For Montana, growth will potentially be driven by the expansion of tech manufacturing and the necessity for rapid transit of high-value components. The state's current freight strategies prioritize streamlining these air-to-ground logistics to support international trade activity.

Montana Airports and Agriculture

Montana's agricultural sector is deeply intertwined with the state's airport system and broader aviation infrastructure, reflecting both the geographic scale of agricultural production and the operational realities of farming and ranching in a large, sparsely populated state. With more than 57 million acres of farmland and ranchland and an agricultural economy dominated by wheat, barley, pulse crops, hay, cattle, and specialty crops, Montana producers operate across distances and terrain that make aviation a practical necessity rather than a convenience. Airports—particularly general aviation facilities—function as enabling infrastructure for time-sensitive crop management, livestock operations, and access to national and international markets, reinforcing agriculture's productivity and resilience.

A central linkage between aviation and agriculture in Montana is aerial application, commonly referred to as crop dusting. Fixed-wing aircraft and helicopters are routinely used to apply fertilizers, herbicides, fungicides, and pesticides across large acreages, particularly in eastern and north-central Montana where grain production is concentrated. These operations are highly dependent on local airports, which provide runways, fuel, storage, maintenance access, and staging areas for seasonal aerial applicators. According to the National Agricultural Aviation Association, aerial application accounts for the treatment of over one hundred million acres nationally each year and is especially critical in regions where short application windows and weather variability constrain ground-based methods. In Montana, where spring planting and pest pressure often coincide with narrow weather windows, the ability to deploy aircraft rapidly from nearby airports can directly affect crop yields and farm revenues.

As part of this analysis, structured surveys and oral interviews with airport managers and operators throughout the state were conducted to assess the share of airports involved in agricultural use throughout the state. Across Montana, 51 of 75 studied airports answered survey questions about whether their airport participated in agricultural use. Of the 51 responding airports, 25 (49.0%) indicated that their airport was involved in agricultural spraying operations; MDT staff confirmed one additional airport with agricultural spraying operations. Those airports were:

Table 20: Responding Airports that Indicated Agricultural Use

Airport Code	Airport
BHK	Baker Municipal
00U	Big Horn County
3U8	Big Sandy
00F	Broadus
S01	Conrad
DLN	Dillon
S71	Edgar G Obie
79S	Fort Benton
5U8	Geraldine
GTF	Great Falls International
HVR	Havre City-County
HLN	Helena Regional
S09	Hot Springs
JDN	Jordan
S27	Kalispell City
MLS	Frank Wiley Field
U05	Riddick Field
RVF	Ruby Valley Field
PWD	Sher-Wood
SDY	Sidney-Richland Regional
S64	Stanford/Biggerstaff Field
8U6	Terry
9S5	Three Forks
1S3	Tillitt Field K1S3
7S2	Winnett
GGW	Wokal Field/Glasgow-Valley County

Source: Zenith Economics 2025 survey of statewide public airports; MDT Aeronautics.

Montana's airport network supports this activity through its breadth rather than its scale. Many agricultural aviation operations are based at smaller, rural airports with limited commercial service but sufficient runway length and apron space to accommodate agricultural aircraft. The Montana Department of Transportation Aeronautics Division has documented that the majority of airports in the state serve multiple functions, including agricultural aviation, and that these uses are particularly important in rural counties where farming and ranching dominate the local economy. These airports enable applicators to operate close to fields, reducing ferry time, lowering operating costs, and increasing the number of acres that can be treated during critical periods.

Beyond crop production, aviation also supports Montana's extensive livestock industry. Montana ranks among the top U.S. states for cattle and calf inventory, with ranches often spanning thousands of acres and located far from urban centers. Aircraft and helicopters are used for livestock management activities such as herd monitoring, fencing inspection, predator control, and emergency response during extreme weather events. Airports provide the logistical base for these operations, ensuring access to fuel, hangar space, and maintenance services in regions where alternative infrastructure is limited.

Air cargo and general aviation freight movements also play a supporting role in Montana's agricultural economy, particularly for high-value, time-sensitive, or specialized inputs. Agricultural producers and cooperatives rely on air transport for certain veterinary supplies, precision agriculture equipment components, replacement parts, and biological inputs that may not be readily available locally. While the bulk of Montana's agricultural commodities move by rail and truck, air cargo provides a complementary function by enabling rapid access to critical goods that support ongoing operations.

Airports also facilitate outbound agricultural trade by connecting Montana producers to domestic and international markets. Montana agriculture is export-oriented, with wheat, barley, and pulse crops shipped to destinations across Asia, Latin America, and Europe. While exports are primarily consolidated and shipped via surface transportation to coastal ports, air travel enables producer access to buyers, trade missions, agricultural research institutions, and regulatory agencies. The Montana Department of Agriculture actively promotes international trade and has emphasized the importance of transportation connectivity—including aviation—in supporting export growth and market diversification. Airports serving Montana's regional population centers provide the access necessary for producers and agribusiness firms to participate in global supply chains, negotiate contracts, and respond to market conditions.

The role of aviation in agriculture extends to research, extension, and risk management. Universities, government agencies, and private firms rely on aircraft for agricultural research, remote sensing, and environmental monitoring. Aerial imaging and survey flights support crop condition assessment, irrigation planning, and soil analysis, increasingly integrating with precision agriculture technologies. These activities depend on airport infrastructure to support specialized aircraft and equipment. The U.S. Geological Survey and other federal agencies routinely use aviation assets for land and resource monitoring in Montana, underscoring the broader linkage between aviation, agriculture, and land stewardship.

Appendix

The appendices to this report provide detailed technical documentation, supporting data, and methodological transparency for the Economic Impact Study of Montana Airports. Together, these materials are intended to supplement the main body of the report by presenting expanded analyses, reference tables, survey instruments, and modeling details that support the study's findings while allowing readers to review assumptions, data sources, and analytical approaches in greater depth.

Appendix A: Historic Study Comparison

Appendix A documents how the methodology, data sources, and analytical scope of this study compare with prior statewide airport economic impact studies conducted in Montana. It summarizes key differences across study years, including changes in survey design, modeling approaches, geographic resolution, and performance metrics, providing important context for interpreting results over time.

Appendix B: Model Determination

Appendix B describes how the study's geographic regions and analytical structure were defined for economic modeling purposes. This section explains the county-level and multi-region framework used in the analysis and how individual airports were mapped within the modeling structure to ensure accurate attribution of impacts.

Appendix C: IMPLAN Model

Appendix C provides a detailed overview of the IMPLAN input-output modeling framework used to estimate economic and fiscal impacts. It documents the model setup, use of multi-regional input-output (MRIO) techniques, modeling methodology, and the procedures used to translate survey and expenditure data into model inputs.

Appendix D: Survey Data

Appendix D summarizes the primary data collection efforts that underpin the study, including commercial passenger surveys, general aviation passenger surveys, hospital surveys, and business surveys. This appendix describes survey deployment methods, response volumes, and key data cleaning and validation steps used prior to analysis.

Appendix E: Detailed Economic and Fiscal Impacts

Appendix E presents detailed economic and fiscal impact results at the airport, county, and statewide levels. These tables provide disaggregated estimates of employment, labor income, output, and fiscal impacts by impact category and activity type, supporting transparency and enabling further independent review or use by stakeholders.

Appendix F: Detailed Survey Questions

Appendix F contains the full set of survey instruments used in the study, including questionnaires for commercial passengers, general aviation users, hospitals, and businesses. Providing the complete survey language allows readers to assess question framing, response options, and consistency with prior studies and industry best practices.

Appendix A: Historic Study Comparison

The State of Montana has conducted iterations of this same study about once a decade, making this 2026 research the third "Economic Impact of Aviation" study performed for the State. Over the years, many changes have occurred to statewide aviation, economic impact analysis software, economic impact analysis best practices, and FAA guidelines regarding statewide aviation system planning.

The purpose of this section of the Appendix is to conduct a comprehensive review of the 2007 and 2016 Montana Airport Economic Impact Studies, which was then used to update and refine the methodological framework for this current study. This includes reviewing past data sources, key performance indicators (KPIs), modeling approaches, and identifying opportunities for methodological improvement. The following tables and analysis were written to provide the MDT Aeronautics Division team with an overview of Zenith's approach to this new study.

Our hope is that this documentation will greatly improve future replication efforts by the State, even if performed by a new vendor. The below table examines key performance indicators (KPIs) identified in prior studies and records any observed differences between past studies and this current study.

Table 21: KPI Comparison

KPI Name	2007 Methodology	2016 Methodology	Observed Differences	2025 Update from 2016 Methodology
Direct Employment	• Airport manager and tenant surveys Missing data estimated by applying ratios derived from survey responses. • Visitor spending related employment derived from state level IMPLAN data.	• Updated manager and tenant survey + secondary data sources such as ESRI • Visitor spending related employment derived from state level IMPLAN data	• 2016 study used secondary data sources to estimate employment where survey data was unavailable. 2007 study used ratios derived from survey data. 2007 study excluded some on-site businesses assumed to be unrelated or would exist without airport. • 2016 study used headcount, 2007 study used FTE employment. • 2007 surveys conducted in person, by email, or over the phone. 2016 added a digital or online collection component.	• Introduced a monetary incentive to improve response rate and sample size • Used IMPLAN county level MRIO model to fill in employment gaps.

KPI Name	2007 Methodology	2016 Methodology	Observed Differences	2025 Update from 2016 Methodology
Payroll Expenditures	• Airport manager and tenant surveys • Visitor spending and capex related payroll expenditure derived from state level IMPLAN data.	• Updated manager, tenant survey, passenger survey + secondary data sources	• 2007 study used tenant survey results to estimate payroll for non-responsive tenants. 2016 study used supplemental data sources.	• Introduced a monetary incentive to improve response rate and sample size
Visitor Spending	• Visitor intercept survey at 7 major commercial airports + mail in transient pilot survey to create spending pattern estimates. • Spending profile estimates applied to passenger count data to estimate visitor expenditures.	• Visitor intercept survey at 7 major commercial airports (3-day surveying period) + mail in surveys at 6 additional airports (2 months; online option made available). Survey estimates were adjusted using GSA per diem rates and UM Institute for Tourism and Recreation Research data. • Spending profile estimates applied to passenger count data to estimate visitor expenditures.	• 2016 study surveyed 6 additional airports, provided multiple response options (including an online link), and adjusted survey results using externally validated data. Both studies conducted GA surveys targeted at pilots and/or passengers. • 2007 study calculated "spending opportunity differentials" that adjusted spending based on airport proximity to amenities.	• Introduced a monetary incentive to improve response rate and sample size, updating questions to provide greater detail into spending patterns, including basic demographic questions and trip details. • Conducted survey during two seasons, including busy summer months to increase response rate and collect a representative sample.
Capex Expenditures	• Expenditure data collected from airport sponsor, tenants and government agencies. Collection methods, response rates, and data gaps not discussed in technical report. 4-year capex average calculated to smooth data. • State level IMPLAN multipliers used to calculate direct and secondary effects.	• Expenditure data collected from airport manager survey from 2013-2015. 3-year capex average calculated to smooth data. • Region level IMPLAN multipliers used to calculate direct and secondary effects.	• Time horizon changed e.g., 4-year average vs. 3-year average, source inconsistency. • Multipliers changed from state level (2007) to region level (2016).	• Used updated, more precise construction sector multipliers based on project type. • Increased geographic precision to county level model.

KPI Name	2007 Methodology	2016 Methodology	Observed Differences	2025 Update from 2016 Methodology
Fiscal Impacts	• Study indicates "taxes contributed by airports are also estimated" (pg. 4 of technical report) but does not indicate methods or present results. • Property tax data was collected via tenant survey but unclear how this was incorporated into model.	• Property tax data collected via surveys; unclear how it was incorporated into EIS model. Fiscal results not presented.	• Tax impacts were not reported in either study although property tax data was collected by each study.	• Modeled and clearly reported estimated direct, indirect, and induced fiscal impacts by tax jurisdiction using IMPLAN's fiscal model.
Secondary Impacts	• Statewide IMPLAN multipliers used to estimate secondary effects.	• Regional IMPLAN multipliers used to estimate secondary effects.	• IMPLAN multipliers and models change over time for a variety of reasons (see IMPLAN website for more details).	• Utilized county level MRIO.
Total Economic Output	• IMPLAN statewide model.	• IMPLAN model with regional customization.	• Different estimation techniques, assumptions vary	• Utilized county level MRIO • Documented assumptions clearly

Sources: 2007, 2016, and 2025 Economic Impact Study of Montana Airports. By Zenith Economics.

Key Observations:

- The 2007 study relied more heavily on primary survey data; the 2016 study incorporated more modeling with the use of other datasets from IMPLAN, vFreight etc.
- Though IMPLAN was used to provide multipliers in both studies, 2007 used statewide multipliers whereas 2016 seemingly used regional multipliers.
- Fiscal impacts were not explicitly reported in either study.

Key Updates in this Study Iteration:

- This analysis adopted IMPLAN MRIO modeling to better reflect inter-county dynamics.
- Survey uptake was financially incentivized and lead with a digital first strategy
- Assumptions were more transparently documented to allow replication in future studies.

To contextualize changes in methodology and system growth, baseline direct impacts from the 2007 and 2016 studies are summarized below (table 22). These figures represent the foundational inputs used in economic modeling (e.g., direct employment, payroll, and output) and help illustrate both real changes in activity and methodological shifts in how impacts were estimated. Note that due to the vast differences in methods (particularly related to the number of airports included) and major changes in IMPLAN's internal modeling weights, we generally advise against detailed public comparison of results identified across the two studies.

Table 22: Direct Impact Comparison

Direct Impacts (aggregate)	2009	2016	2026
Airports included	120 (70 NPIAS)	77	75
Employment	12,900	15,000	24,900
Payroll ($, m)	388.1	296.9	1,461
Economic Activity (output $, m)	1,000	1,690	2,133

Sources: 2007, 2016, and 2025 Economic Impact Study of Montana Airports. Zenith Economics.

Zenith Economics worked with the Montana Department of Transportation to define the airports to be included in this analysis. After substantial discussion with appropriate Montana Department of Transportation staff, the following 75 airports were selected for inclusion in this economic impact study, allowing for a deep understanding of the economic impact of airports throughout the state:

Image: Terminal Waiting Area, Yellowstone Airport

Table 23: Economic Impact Study Airport Inclusion List

Airport Code	Airport City	Airport Name
BZN	Bozeman	Bozeman Yellowstone International
MSO	Missoula	Missoula Montana
GPI	Kalispell	Glacier Park International
BIL	Billings	Billings Logan International
GTF	Great Falls	Great Falls International
HLN	Helena	Helena Regional
BTM	Butte	Bert Mooney
WYS	West Yellowstone	Yellowstone
SDY	Sidney	Sidney-Richland Regional
OLF	Wolf Point	L M Clayton
HVR	Havre	Havre City-County
GGW	Glasgow	Wokal Field/Glasgow-Valley County
GDV	Glendive	Dawson Community
HRF	Hamilton	Ravalli County
EKS	Ennis	Ennis Big Sky
HWQ	Harlowton	Wheatland County at Harlowton
RED	Red Lodge	Red Lodge
LVM	Livingston	Mission Field
3U3	Anaconda	Bowman Field
7S0	Ronan	Ronan
RVF	Twin Bridges	Ruby Valley Field
38S	Deer Lodge	Deer Lodge-City-County
DLN	Dillon	Dillon
LWT	Lewistown	Lewistown Municipal
BHK	Baker	Baker Municipal
3U8	Big Sandy	Big Sandy
6S0	Big Timber	Big Timber at Howard Field
00F	Broadus	Broadus
8S0	Browning	Starr-Browning Airstrip
LTY	Chester	Liberty County

Airport Code	Airport City	Airport Name
S71	Chinook	Edgar G Obie
CII	Choteau	Choteau
4U6	Circle	Circle Town County
M46	Colstrip	Colstrip
6S3	Columbus	Woltermann Memorial
S01	Conrad	Conrad
S85	Culbertson	Big Sky Field
CTB	Cut Bank	Cut Bank International
97M	Ekalaka	Ekalaka
88M	Eureka	Eureka
1S3	Forsyth	Tillitt Field
79S	Fort Benton	Fort Benton
29S	Gardiner	Gardiner
5U8	Geraldine	Geraldine
00U	Hardin	Big Horn County
48S	Harlem	Harlem
S09	Hot Springs	Hot Springs
JDN	Jordan	Jordan
S27	Kalispell	Kalispell City
6S8	Laurel	Laurel Municipal
S59	Libby	Libby
S69	Lincoln	Lincoln
M75	Malta	Malta
MLS	Miles City	Frank Wiley Field
U05	Philipsburg	Riddick Field
S34	Plains	Plains
PWD	Plentywood	Sher-Wood
8S1	Polson	Polson
PO1	Poplar	Poplar Municipal
RPX	Roundup	Roundup

Airport Code	Airport City	Airport Name
9S2	Scobey	Scobey
SBX	Shelby	Shelby
S64	Stanford	Stanford/Biggerstaff Field
32S	Stevensville	Stevensville
52S	St Ignatius	St Ignatius
9S4	Superior	Mineral County
8U6	Terry	Terry
THM	Thompson Falls	Thompson Falls
9S5	Three Forks	Three Forks
8U8	Townsend	Townsend
9U0	Turner	Turner
7S6	White Sulphur Springs	White Sulphur Springs
7S2	Winnett	Winnett
57S	Troy	Troy
58S	Whitefish	Whitefish

Source: Montana Department of Transportation.

Data Sources and Inputs: Zenith has prepared the following table comparing data sources used across studies to support the refinement of future data collection and ensure methodological consistency.

Table 24: Data Sources and Uses

Data Source / Input	2007 Use	2016 Use	2026 Use
Airport Tenant Survey	Estimate direct employment, wages, opex and capex	Estimate direct employment, wages, opex and capes	Retain survey with standard format for direct jobs + wages, opex, and capex
Airport Manager Survey	Estimate airport direct employment, wages, opex and capex.	Estimate airport direct employment, wages, opex and capex.	Retain survey with standard format, slight question improvements
Passenger Survey	Primary input for visitor spending estimates at commercial airports	Primary input for visitor spending estimates at commercial airports	Retain survey with standard format, update with additional demographic questions. Primary input for visitor spending estimates attributable to commercial airports

Data Source / Input	2009 Use	2016 Use	2026 Use
GA Survey	Primary input for visitor spending estimates at GA airports	Primary input for visitor spending estimates at GA airports	Retain survey with standard format, update with additional demographic questions. Primary input for visitor spending estimates attributable to General Aviation I airports
Hospital Survey	Primary source of descriptive statistics for healthcare use of airport services	Primary source of descriptive statistics for healthcare use of airport services	Retain survey with standard format
Business Survey	Primary input into analysis of Montana businesses airport use.	Primary input into analysis of Montana businesses airport use.	Retain streamlined survey. Will be used to provide insight into Montana businesses airport dependency.
IMPLAN Multipliers	Estimate economic output and employment multipliers; supplemental data source to fill in survey data gaps	Used IMPLAN for more detailed multipliers; supplemental data source to fill in survey data gaps	Use IMPLAN consistently with documented assumptions
FAA CIP (Capital Improvement Plan)	Undetermined	Undetermined	Supplement survey data and adjust estimates as needed.
Airport Financial Statements	Not used	Not used	Use selectively to improve expenditure breakdowns, supplement survey data
Airport Operations Counts (ATADS)	Not used	Used to benchmark operational scale	Integrate to refine ops-related output metrics

Sources: 2007, 2016, and 2025 Economic Impact Study of Montana Airports. By Zenith Economics.

Zenith compiled a data catalogue to track key variables across the 2007 and 2016 studies as well as anticipated variables for the 2025 study. It is important to note that this table is not exhaustive.

Table 25: Data Catalogue of Economic Impact Studies Across Years

Data Source	2007 Variables	2016 Variables	Proposed Variables
Airport Manager Survey	• Employment (operations only) • Annual payroll expenditures (aggregate) • Capex expenditures (2004-2007) • Opex expenditures (excluding payroll) • Tenant Contact Information	• Employment (operations only) • Annual payroll expenditures (aggregate) • Capex expenditures (2013-2015) • Opex expenditures (excluding payroll) • Tenant Contact Information • Number general aviation operations in 2015 • % of transient operations • Avg number of passengers per operation • Aviation Activity • Cargo value and volumes • Local Business Usage	• Employment (operations only) • Annual payroll expenditures (aggregate) • Capex expenditures (2022-2024) • Opex expenditures (excluding payroll) • Tenant Contact Information • Number general aviation operations in 2015 • % of transient operations • Avg number of passengers per operation • Aviation Activity • Cargo value and volumes • Local Business Usage
Airport Tenant Survey	• Type of activity • Employment (full + part-time) • Annual wages (on-site) • Property tax paid • Capex expenditures (2004-2007) • Opex expenditures (excluding payroll) • Annual gross sales	• Type of activity • Organization type • Employment (full + part-time) • Annual wages (on-site) • Real estate taxes paid • Capex expenditures (2004-2007)	• Type of activity (by 2-digit NAICS code) • Organization type • Employment (full + part-time) • Annual wages (on-site) • Capex expenditures (2004-2007) • Opex expenditures (excluding payroll) • Annual gross sales (where available)

Data Source	2007 Variables	2016 Variables	Proposed Variables
Commercial Passenger Survey	• Passenger count • Group size • Trip Purpose •Nights spent in Montana • Spending (by type and category)	• Passenger count • Group size • Trip Purpose •Nights spent in Montana • Type of Lodging • Spending (by type and category) • Trip hypothetical in absence of airport	• Passenger count • Group size • Trip Purpose •Nights spent in Montana • Type of Lodging (adding vacation rental/home share) • Spending (by type and category; adding several categories • Trip hypothetical in absence of airport • Passenger count • Group size • Trip Purpose •Nights spent in Montana • Type of Lodging • Spending (by type and category) • Demographic Info (age)
GA Passenger Survey	• Group size • Trip Purpose • Type of Aircraft • Major product or service •Nights spent in Montana • Spending (by type and category)	• Survey location • Home zip code • Group size • Trip Purpose • Major product or service • Nights spent in Montana • Type of Lodging • Spending (by type and category) • Trip hypothetical in absence of airport (including transit mode)	• Survey location • Home zip code • Group size • Trip Purpose • Transit used (during trip) • Major product or service • Nights spent in Montana • Type of Lodging • Spending (by type and category) • Trip hypothetical in absence of airport (including transit mode) • demographic Info (age)
Hospital Use Survey	N/A	• Air cargo usage and type • Air ambulance usage and frequency • Helipad site • Air travel dependency	• Air cargo usage and type • Air ambulance usage and frequency • Helipad site • Air travel dependency
ESRI	N/A	• Business establishments by location	N/A – Provided adequate data by Montana Department of Labor

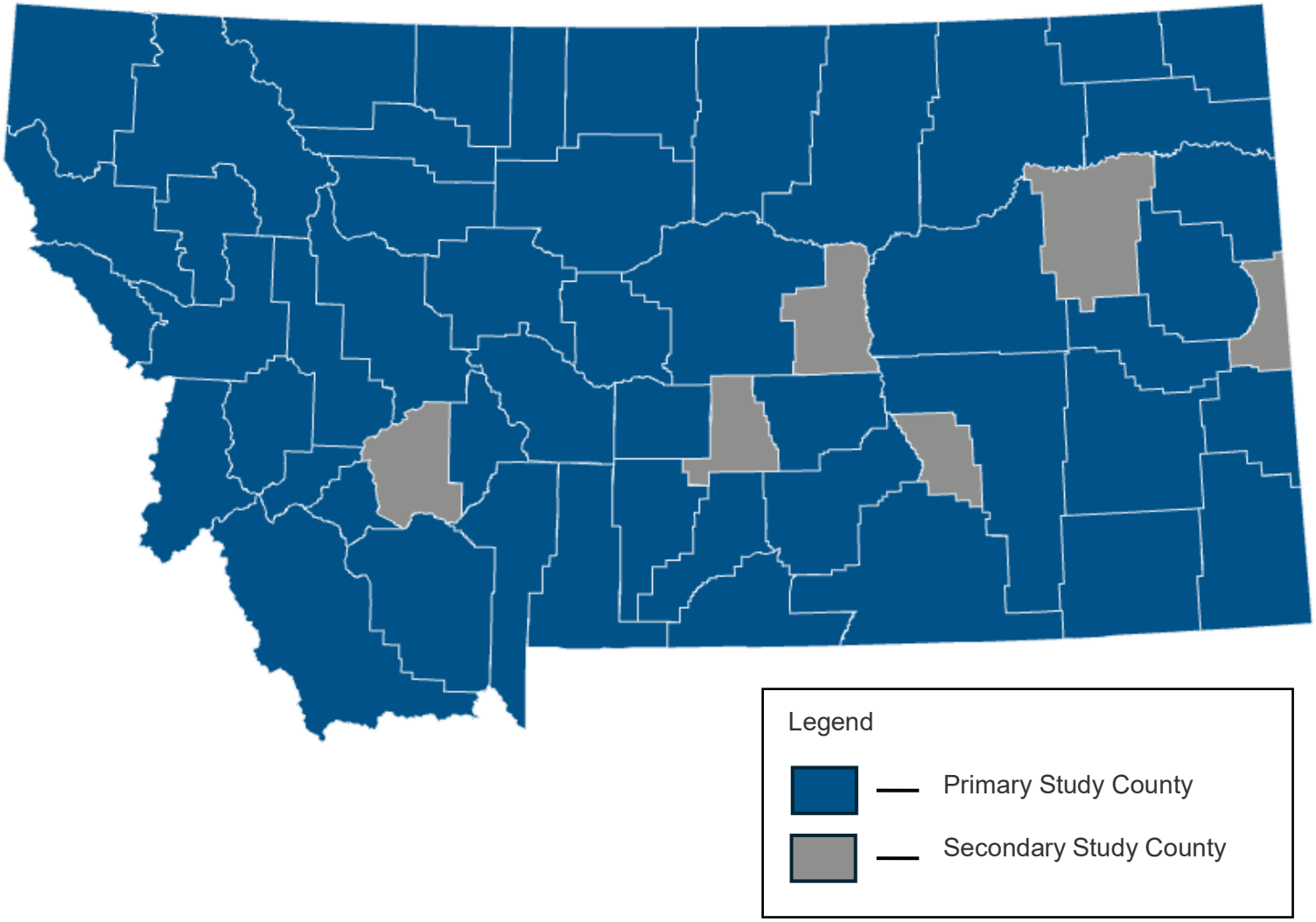
Data Source	2007 Variables	2016 Variables	Proposed Variables
Montana Business Survey	• Employment (full + part-time) • Number of airline trips • Reliance on general aviation • Reliance on commercial aviation • Site selection factors (including proximity to airport facilities)	• Employment (full + part-time) • Average annual salary • Site selection factors (including proximity to airport facilities) • Reliance on general aviation • Reliance on commercial aviation • Air cargo usage and importance • Specific airport usage (by location code)	• Employment (full + part-time) • Average annual salary • Site selection factors (including proximity to airport facilities) • Reliance on general aviation • Reliance on commercial aviation • Air cargo usage and importance • Specific airport usage (by location code)
Data Base Products, Inc.	N/A	• Commercial airline passenger counts	N/A – Utilized FAA data for commercial airports, blend of Airport Manager Reported Data, AirNav Flight Data, and Imputed Values
vFreight	N/A	• Freight data	N/A – Utilized OEC data

Sources: 2007, 2016, and 2025 Economic Impact Study of Montana Airports. By Zenith Economics

Appendix B: Model Determination

Input-output modeling with IMPLAN begins with study region specification; this document will follow the same order starting with a brief discussion of the regions Zenith modeled, followed by an overview of the model itself.

Figure 8: Economic Impact Analysis Study Region(s)

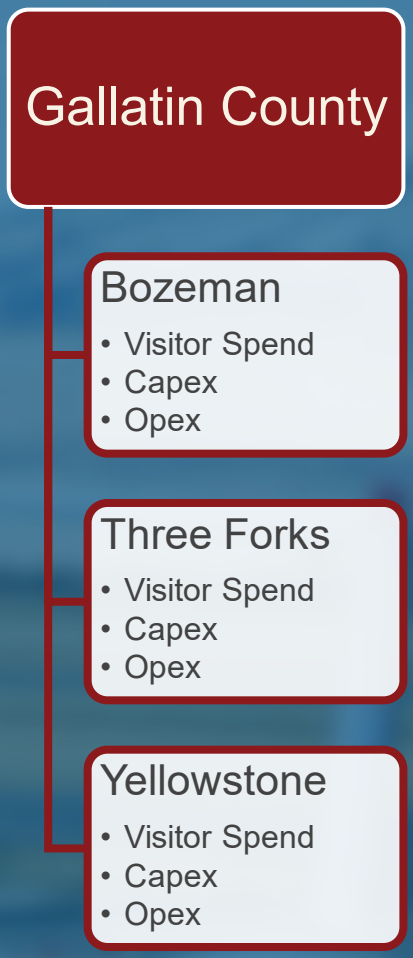


Zenith's modeling approach used counties as the smallest geographic unit of measure. A multi-region approach allows for a more nuanced understanding of how the economic benefits from Montana Airports are disperse across the state and identifies potential inter-regional economic linkages. All counties with an airport were modeled as a unique county.

In total, this analysis studied 75 airport facilities, which were spread out across 51 of 56 Montana counties – highlighted dark blue in the above figure. The 5 remaining counties were combined into a "Rest of Montana" region – highlighted light blue. Sixteen counties, such as Gallatin, contain either 2 or 3 study airports.

For those counties with multiple airports, separate IMPLAN input events were used for each airport to ensure that the impact of each facility could be analyzed in isolation. Figure 9 to the left uses Gallatin County study airports to illustrate how inputs for each study airport could be mapped to multi airport counties within the IMPLAN model.

Figure 9: Multi-Airport County Rollup



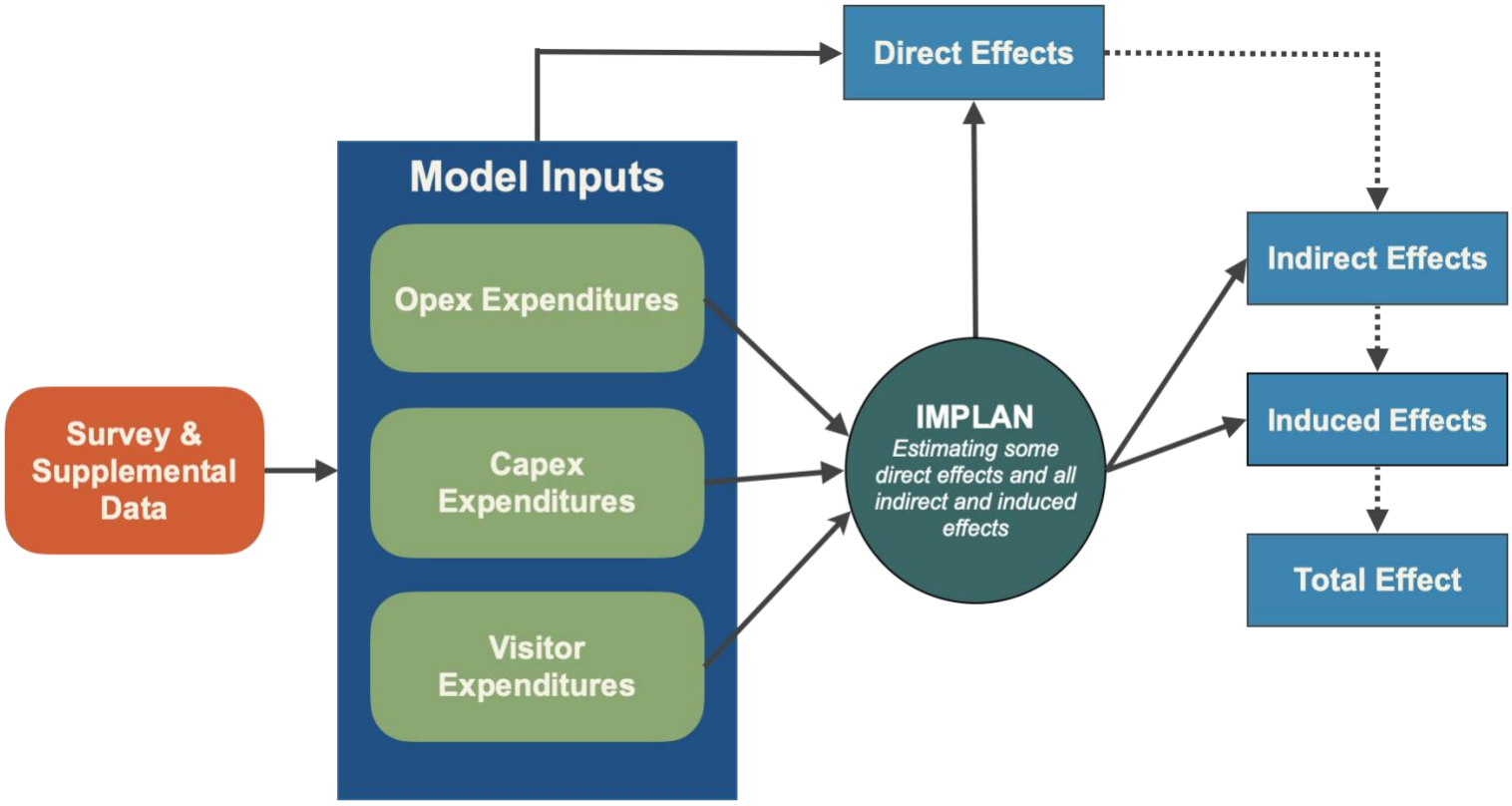
Appendix C: IMPLAN Model

This section provides a brief overview of the IMPLAN model, MRIO set-up and analysis techniques. IMPLAN is a state-of-the-art input-output modeling software that estimates how expenditures correlate and affect other industries in the economy to generate economic and fiscal impacts via the multiplier effect.

The model calculates impacts through a series of iterative steps illustrated by Figure 10 and listed below:

- Initial direct effects are entered as inputs, these include visitor expenditures, capital expenditures, operational expenditures, and employment for study airports and their associated on-site business or institutions.
- Some direct effects such as visitor spending related employment and payroll by sector will be estimated by IMPLAN using sector and region-specific data – these calculations are performed by IMPLAN rather than by hand.
- Total impacts are aggregated for each study region and then across all study regions while avoiding double-counting.

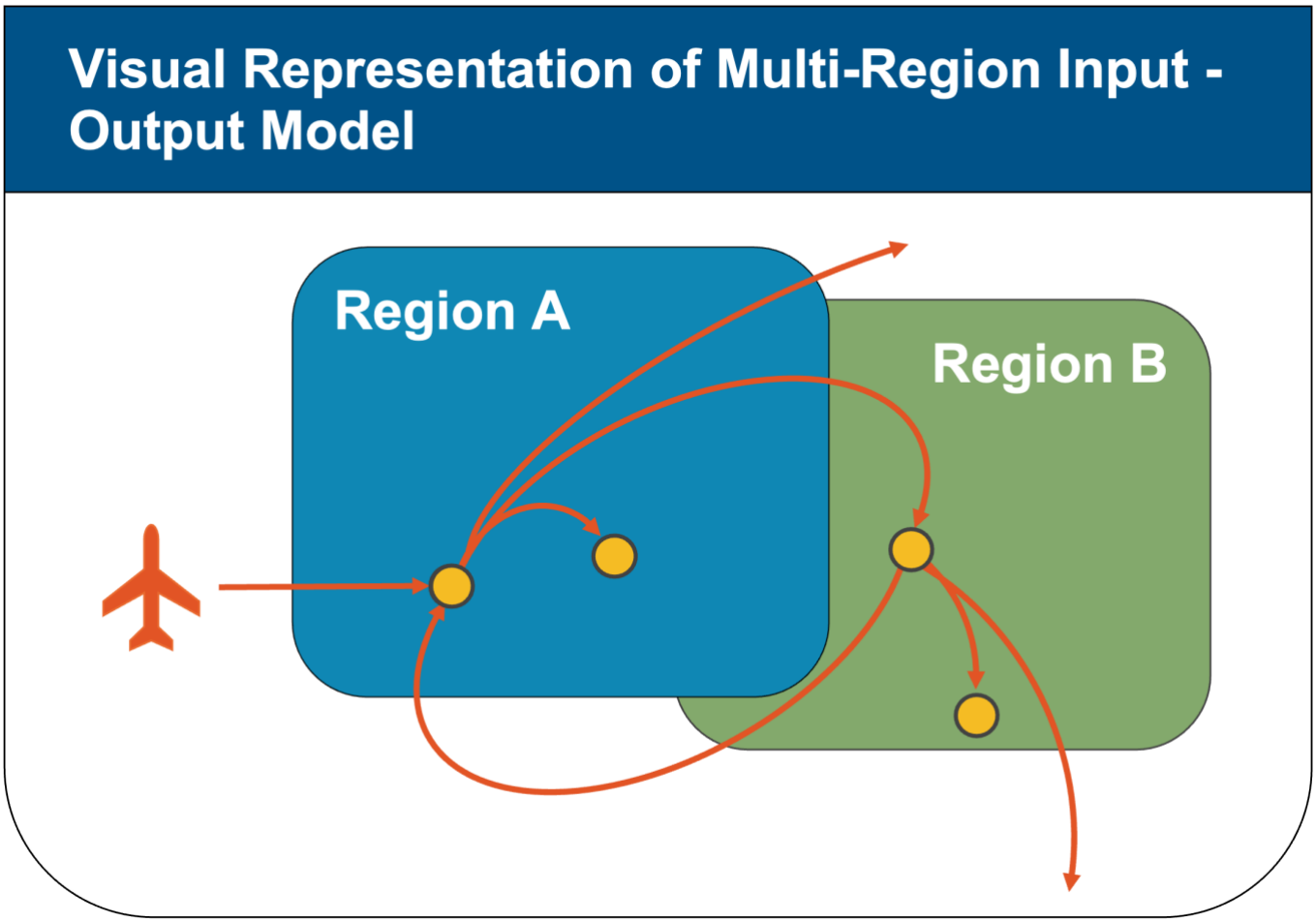
Figure 10: Graphical Representation of Modeling Process with IMPLAN



Not all IMPLAN models have the same geographic structure. This study utilized a multi-regional input output model (MRIO), rather than a standard input output model (IO), to fully capture the economic and fiscal impacts of aviation across the State. An MRIO model is the industry standard for multi-region analysis, offering a number of key advantages for this analysis over standard input output models.

First, the MRIO model accounts for inter-regional trade and commuting flows. A standard IO model simply loses all dollars (via trade or commuting) that leave a study region. Figure 11 illustrates this dynamic using a simple two-region mockup. Many counties in Montana, and in particular lower population rural counties, serve as study regions for this analysis and have large trade flows and out-commuting patterns towards nearby counties. A standard input-output model would lose any dollars leaving from one Montana county to another via trade or commuting, while the MRIO model will accurately estimate value captured between Montana Counties.

Figure 11: Graphical Representation of MRIO Process



Input Specification

Direct effects were modeled using a series of IMPLAN input "events" associated with each study airport. Events were entered at the county level using an import template built for the software. Inputs fall into three broad categories:

1. **Visitor spending** was estimated using a bottom-up approach that multiplied average total spending by sector (e.g., lodging, food, retail, transportation) by the total number of visitors. (see Figure 12). The result was an estimate of total spending by sector.

Figure 12: Visitor Spending Analysis Overview

In this setup, which is often modeled using commodity output events, the place of purchase was unknown. In other words, visitor surveys will tell Zenith what was bought (the commodity) but not necessarily from whom it was bought (industry).

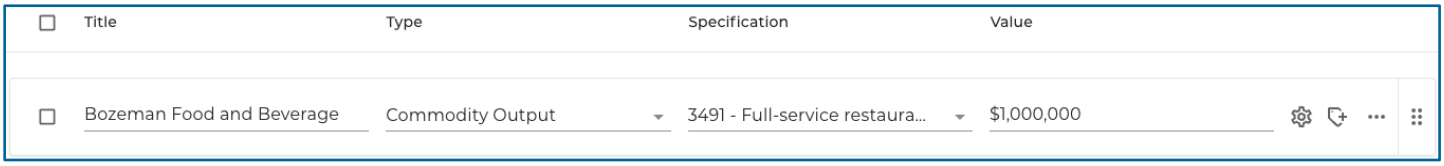
Each spending type was assigned to IMPLAN commodity codes representing relevant industries (see table 26 for an example of commodities; figure 13 shows how events look in IMPLAN).

Table 26: Partial Sample of Visitor Spending Commodities (IMPLAN 2024)

Commodity Code	Commodity Description
3489	Hotels and motel services, including casino hotels
3493	All other food and drinking place services
3400	Transit and ground passenger transportation services
3432	Automotive equipment rental and leasing services
3389	Retail services - Food and beverage stores
3392	Retail services - Clothing and clothing accessories stores
3393	Retail services - Sporting goods, hobby, musical instrument and bookstores
3394	Retail services - General merchandise stores

Sources: IMPLAN, Zenith Economics.

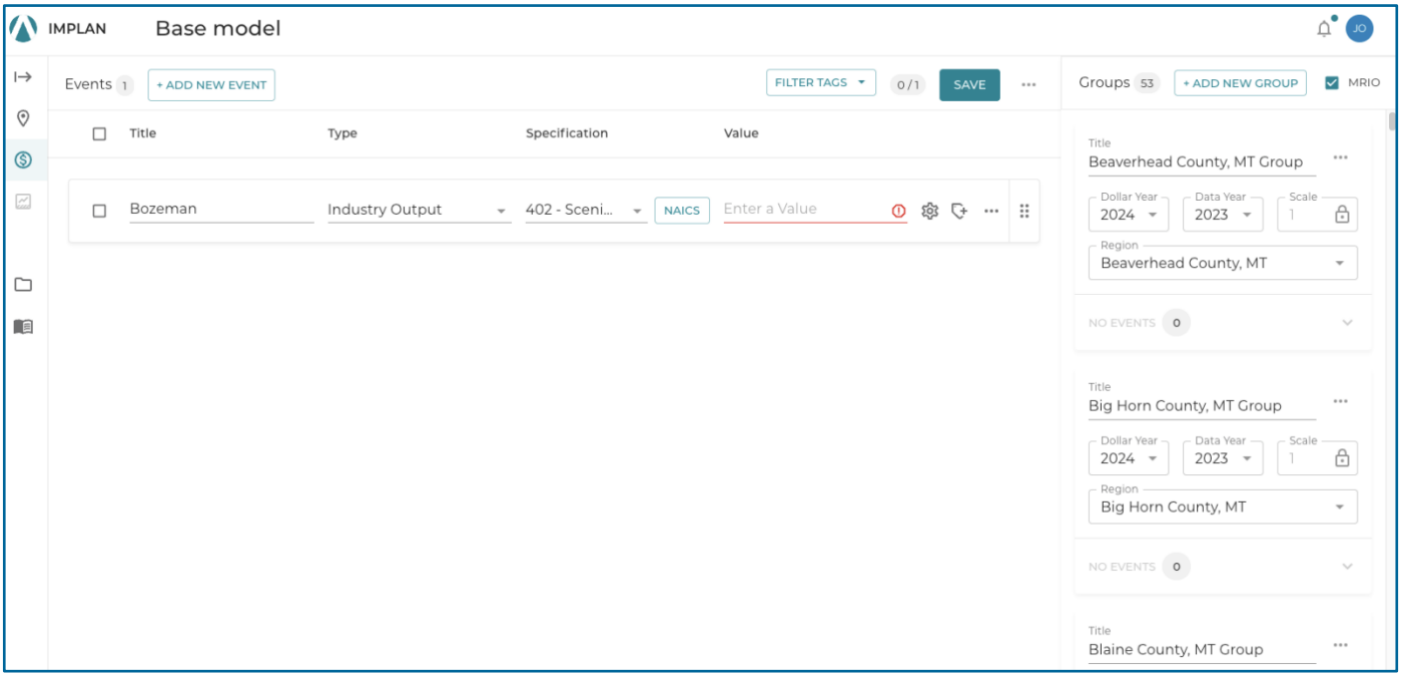
Figure 13: Sample Commodity Event Plan with IMPLAN



2. **Capital Expenditures** are estimated from Airport Manager survey results and state-provided investment and funding information.
    - Modeled using industry output events
    - Mapped to relevant construction and equipment-related industries based on project type
    - Include airside infrastructure, terminal improvements, and support facilities as well as on-site tenant improvements
3. **Operational Expenditures** are estimated from commercial passenger and GA pilot/passenger survey results
    - Also entered as industry output events
    - Reflect recurring spending by airports and on-site businesses
    - Mapped primarily to air transportation services and related support sectors

Figure 14 below shows a snapshot of the preliminary model built for this study and a sample input event in IMPLAN. Each airport-level event—such as industry output for operational spending—was mapped to the appropriate county on the right under “Groups." Notice that the MRIO toggle was checked, which ensured that correct method of calculation was used.

Figure 14: Actual Visualization of Modeling Process with IMPLAN



Assumptions and Limitations

While this analysis was conducted using industry best practices, there exist several important assumptions and limitations of this analysis, and of economic impact analysis generally. The following are interpreted in addition to assumptions and limitations listed elsewhere in the report:

- The analysis assumed that current economic relationships captured in the most up-to-date IMPLAN model year data (2024) would remain relatively stable into 2025.
- The analysis assumed constant returns to scale, or that the same quantity of inputs is needed per unit of output, regardless of the level of production.
- IO and MRIO models typically assume that all firms within an industry are characterized by a common production process best described as industrial homogeny. If the production structure of the initially affected local firm is not consistent with the average relationships of the firms that make up the regional industry in the MRIO accounts, then the impact of the change on the local economy will differ from that implied by a regional multiplier.
- Impact results represent estimated contributions based on detailed data collected during the study period and may vary from estimates made with even more granular or less granular data.
- The analysis assumed that 100% of estimated capital investment and on-site employment are attributable to study airports and the counties they are located in.
- Additionally, all reported impact figures throughout this report are in current (at the time of data collection) dollars. Zenith does not at any point in this report escalate prices, costs, or impact figures to account for future inflation; this report exclusively contains findings presented using 2025 dollars, unless noted.
- It is assumed that visitor surveys at airports collected a representative sample of plane passengers entering and/or leaving Montana's airports. Given the sample size of about 7,400 raw commercial passenger surveys collected, over 25 times the sample collected in the previous iteration of this study, we believe that this is reasonable.

Appendix D: Visitor Survey Data

Commercial Passenger Survey (CPS)

The primary data source for visitor spending is the Commercial Passenger Survey (CPS), a virtual, unmanned intercept survey conducted at Montana's eight highest-volume commercial service airports. The survey collected information on:

- Traveler residency status (Montana resident vs. non-resident)
- Trip characteristics (purpose, group size, duration)
- Geographic destinations within Montana (primary and secondary counties visited)
- Time allocation across destinations
- Expenditures by category

Commercial Visitor Spending Methodology

The visitor spending analysis estimates the economic contribution of air travelers arriving at Montana's eight largest commercial service airports. This component captures spending by non-resident visitors across the state's counties, accounting for how travelers distribute their time and expenditures across multiple destinations during their trips.

Data Sources

The primary data source is the Commercial Passenger Survey (CPS), an intercept survey conducted at Montana's eight largest commercial service airports. The survey collected information on traveler residency status (Montana resident vs. non-resident), trip characteristics (purpose, group size, and duration), and geographic destinations within Montana, specifically identifying primary and secondary counties visited. Furthermore, the survey tracked time allocation across these destinations and expenditures by category. After data cleaning to remove incomplete, rushed, or other invalid survey responses, the analysis utilized 5,827 non-resident respondents from the CPS.

Table 27: Consultant-Led QR-Code Survey Placement Levels, Dates, and Collected Samples

Airport	Total Placards Placed at Airports	Date of Placard Site Visit and Survey Start	Survey End Date	Raw Responses Total
Billings	12	6/27/25	10/1/25	523
Bozeman	13	6/6/25	10/1/25	3,227
Bert Mooney	5	6/20/25	10/1/25	107
Helena	10	6/20/25	10/1/25	417
Missoula	15	6/24/25	10/1/25	1,059
Glacier Park	12	6/24/25	10/1/25	1,471
Great Falls	11	6/20/25	10/1/25	563
TOTAL	**78**			**7,367**

Complementing the survey data, annual passenger enplanement counts by airport were obtained from Federal Department of Transportation (DOT) data. These counts represent the total passenger volume at each commercial service airport and serve as the basis for scaling survey-derived spending patterns to the full traveler population.

Analytical Framework

Only non-resident travelers are included in the visitor spending analysis. Montana residents traveling within the state represent internal economic transfers rather than new economic activity; their spending merely redistributes existing in-state income. Non-resident visitors, by contrast, inject new dollars into Montana's economy. Resident/non-resident ratios were calculated for each airport from the CPS data and applied to enplanement counts to estimate the number of visiting non-resident air travelers.

Visitor expenditures were captured across the following categories:

- **Lodging**: Hotels, motels, vacation rentals, and campgrounds.
- **Food & Beverage**: Restaurants, bars, and groceries.
- **Transportation:** Vehicle rental, fuel, and ground transportation.
- **Recreation:** Entertainment, tours, equipment rental, and lift tickets.
- **Retail:** Shopping, souvenirs, and supplies.
- **Other:** Miscellaneous trip expenses.

Estimation Methodology

The calculation of total economic impact follows a multi-step process to ensure spending is accurately attributed to the locations where the economic activity occurs.

Step 1: Per-Person Spending Calculation

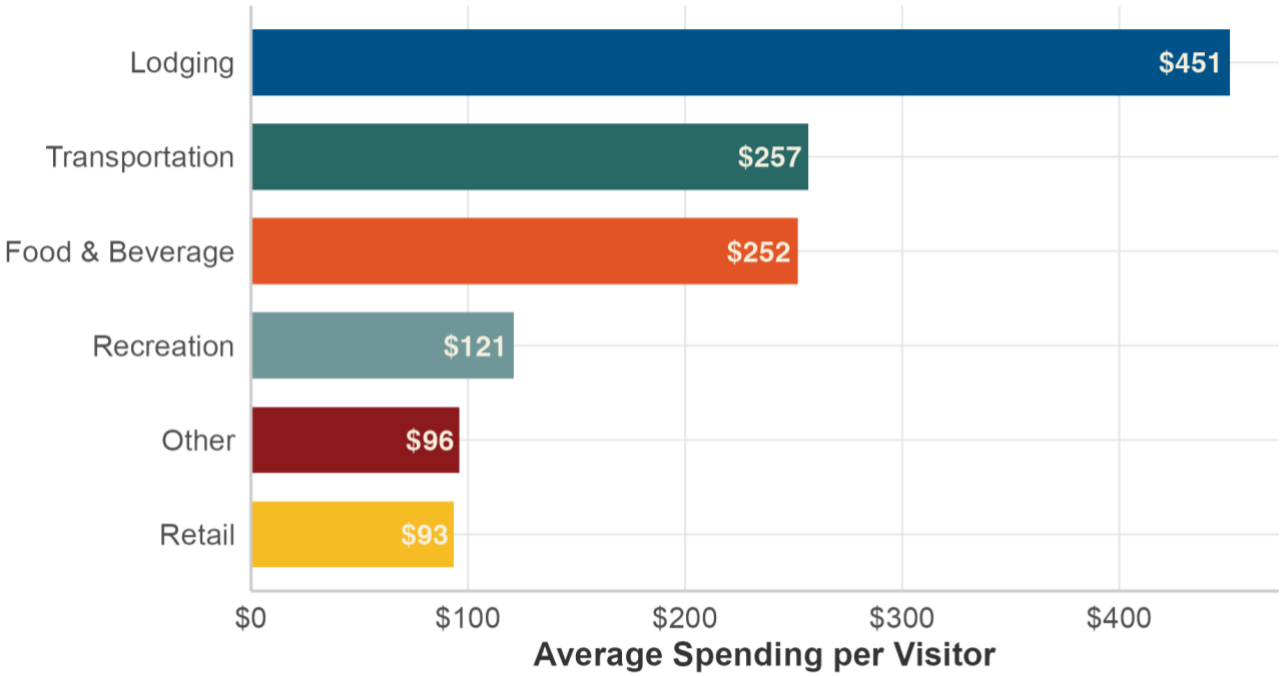
Survey respondents reported total trip expenditures for their travel party. To derive individual-level spending, reported expenditures were divided by travel party size. Data cleaning adjustments included:

1. **Zero group sizes**: Respondents reporting a group size of zero were assumed to be solo travelers (group size set to 1).
2. **Implausible group sizes**: Respondents reporting group sizes of 60 or greater were determined to have reported group activity size rather than travel party size. These were adjusted to 1, treating the reported expenditures as individual spending.
3. **Zero spenders:** Respondents reporting zero total expenditure across all categories (incomplete survey responses) were excluded from the spending profile calculations.

Using this process, the following “Commercial Airport Visitor Spending Profile” was established:

Figure 15: Estimated Visitor Spending Profile – Largest Commercial Airports

Average per-person spending by category across 8 largest commercial service airports



Note: Based on 5,827 non-resident survey respondents. Each figure represents the average dollar amount spent per trip in a given category, i.e. $451.00 in lodging expenses per visitor.
Source: Commercial Passenger Survey (2025)

Step 2: Geographic Time Allocation

The CPS captured how visitors distributed their time across Montana destinations, including the primary destination (the main county visited and percentage of trip time), out-of-state time (percentage of trip time spent outside Montana), and up to three secondary destinations. The allocation proportions were defined using the following terms:

- Primary destination: The main county visited, with the percentage of trip time spent there
- Out-of-state time: Percentage of trip time spent outside Montana (for trips partially in other states)
- Secondary destinations: Up to three additional Montana counties visited

The allocation proportions for spending attributions were calculated as:

- Primary proportion = % of time at main destination / 100
- Out-of-MT proportion = % of time outside Montana / 100
- Remaining MT proportion = 1 - Primary - Out-of-MT
- Per-secondary proportion = Remaining MT / (number of secondary counties)

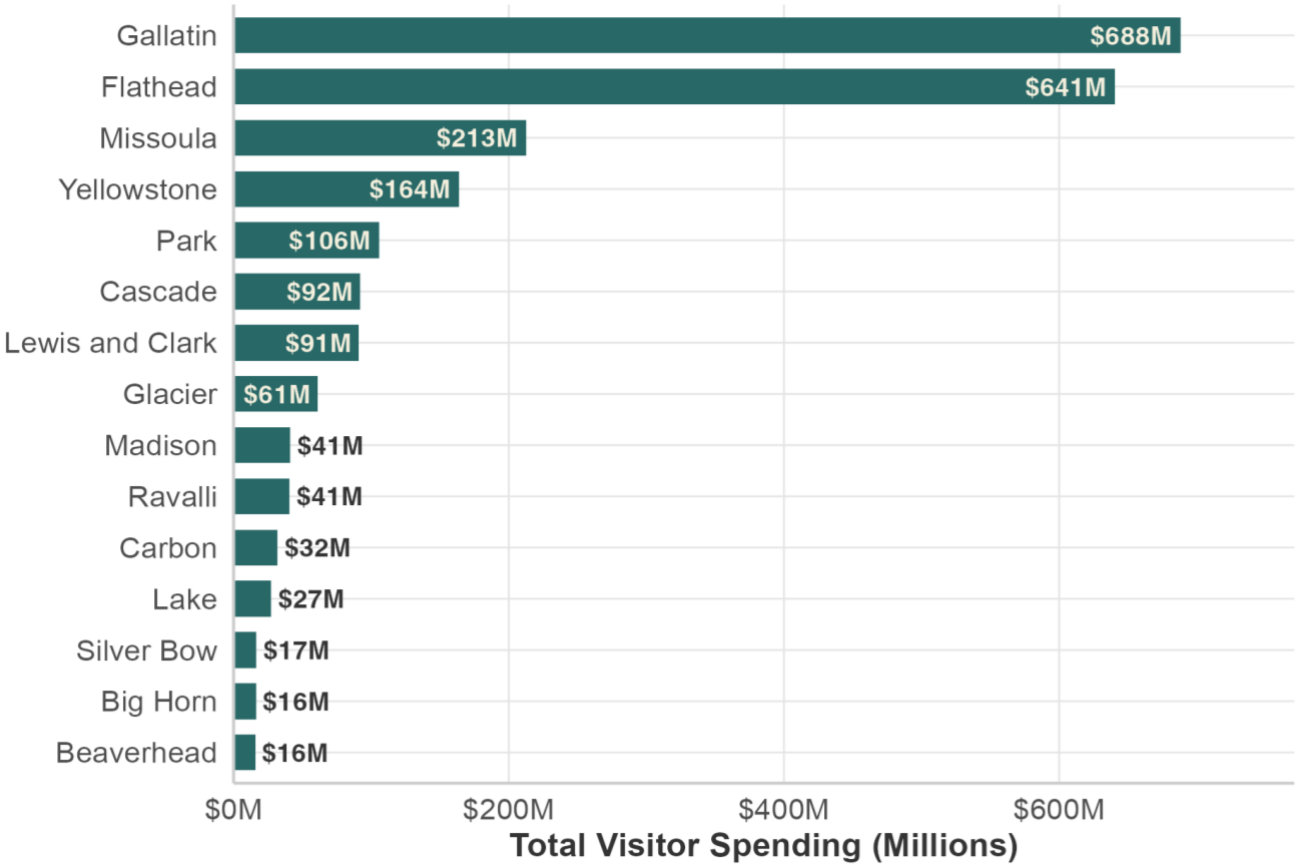
Step 3: Spending Allocation to Counties

Visitor spending was allocated to counties based on the time allocation proportions, with a distinct methodology for vehicle rentals. Non-rental spending was distributed across counties proportionally to time spent, where the primary county receives the product of spending and the primary proportion, and each secondary county receives the product of spending and the per-secondary proportion.

Vehicle rental spending was allocated 100% to the airport county. This rationale stems from the fact that rental vehicles are typically picked up and returned at the airport, regardless of where the traveler spends their time. The economic activity—including the transaction and associated employment—occurs at the airport location.

Figure 16: Top 15 Counties by Estimated Commercial Visitor Spend

Total visitor expenditures allocated by destination county



Note: Spending allocated to counties based on estimated visitor time spent at each destination. 100% of vehicle rental spending was allocated to the visitor's arrival airport county.
Source: Commercial Passenger Survey (2025)

Step 4: County Interaction Weights

A visitor-county interaction weight was calculated to capture the relative importance of each county in the travel patterns of visitors using each airport:

Weight = (Airport-County Interactions in Survey) / (Total Interactions for Airport)

This approach naturally accounts for the rental vs. non-rental split, reflects actual visitor behavior from survey data, and provides a defensible, data-driven allocation mechanism.

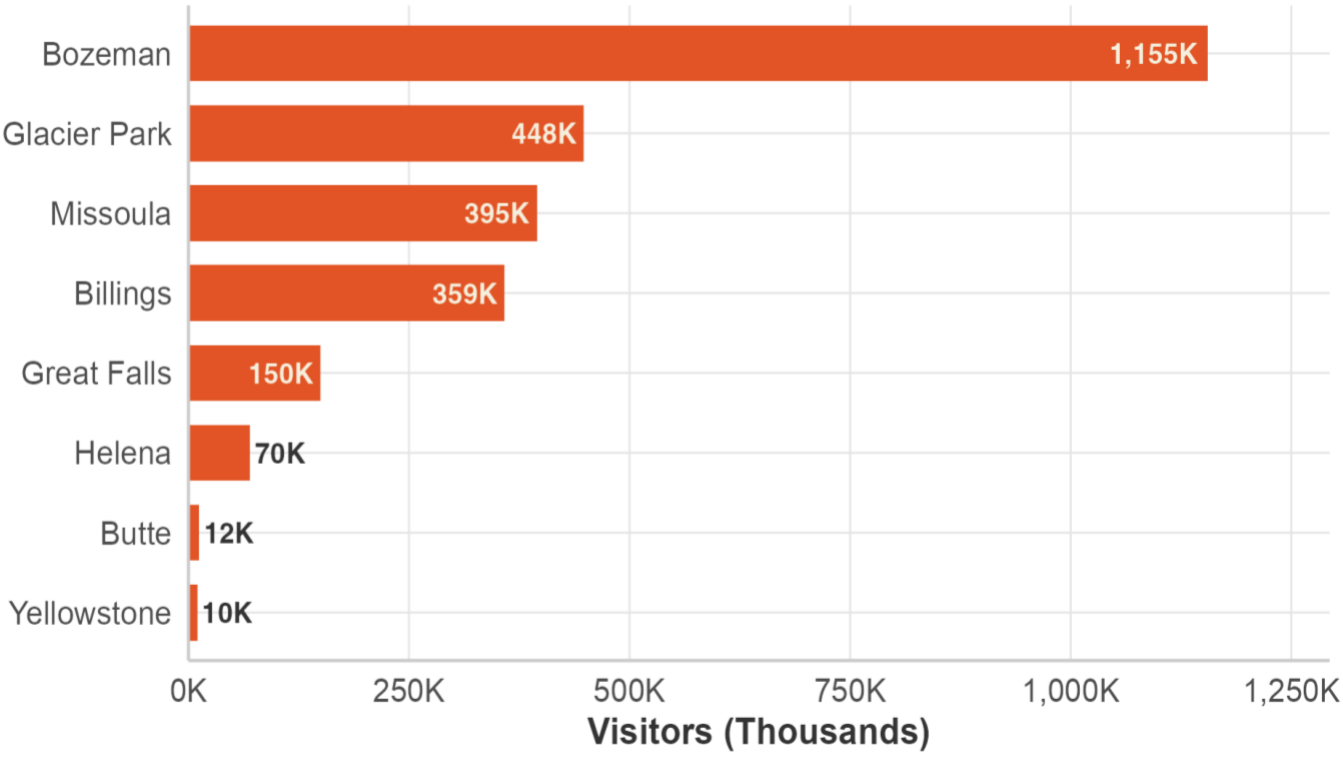
Step 5: Visitor Volume Estimation

Total visitor counts by airport were estimated by applying the non-resident ratio to enplanement data:

Visitors = Enplanements × (% non-resident from CPS)

Figure 17: Estimated Non-Resident Visitors by Airport

Commercial air service arrivals only



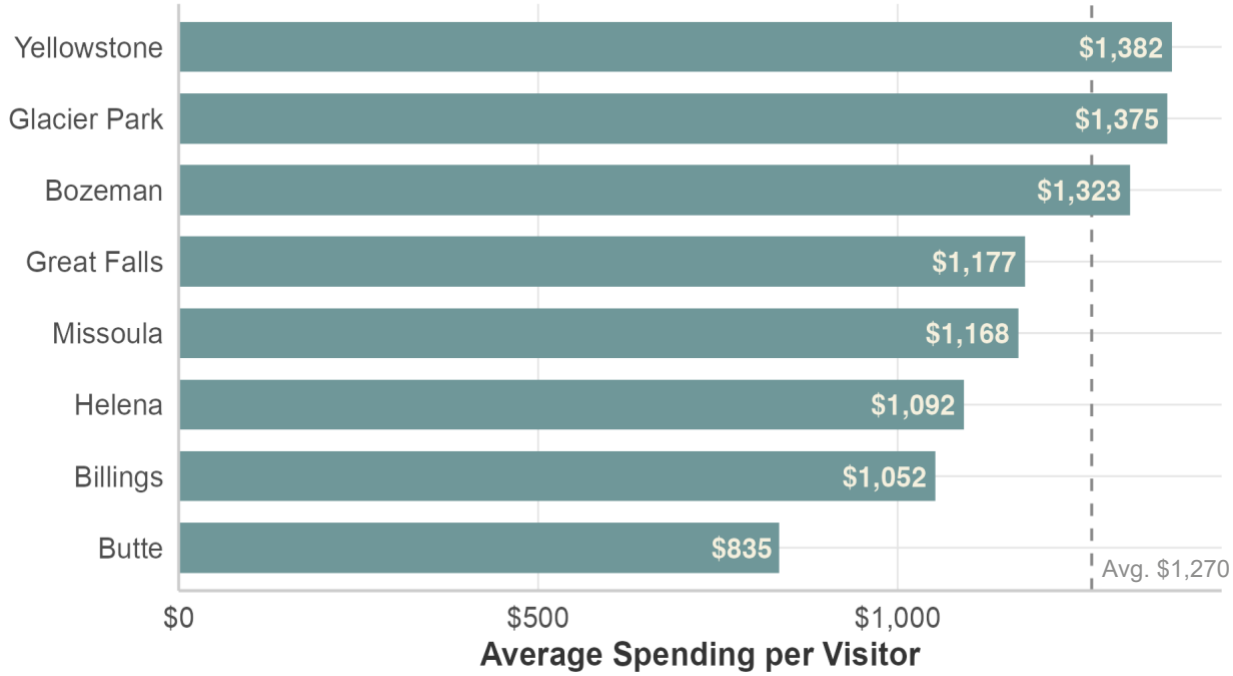
Note: Visitor counts derived from federal enplanements data, adjusted by airport-specific non-resident ratios. Source: Federal DOT enplanement data; Commercial Passenger Survey (2025)

Step 6: Total Spending Calculation

Final spending by county was calculated by first allocating visitors to counties using the interaction weights (Total airport visitors x County weight). This allocated visitor count was then multiplied by the average per-person spending. This was computed separately for each spending category to produce category-specific spending estimates by county.

Figure 18: Average Spending per Visitor, Studied Airports

Total trip spending, in dollars.



Note: Dashed line indicates statewide average. Based on non-resident survey respondents.
Source: Commercial Passenger Survey (2025)

General Aviation Passenger Survey (GAPS)

The general aviation passenger survey was intended to be the key data source for estimating visitor spending through the general aviation pathway. A virtual, unmanned intercept survey was attempted at all 75 study airports using QR code placards. Physical placards with detailed placement instructions were provided to airport managers. The survey was intended to collect information on:

- Traveler residency status (Montana resident vs. non-resident)
- Trip characteristics (purpose, group size, duration)
- Geographic destinations within Montana (primary and secondary counties visited)
- Time allocation across destinations
- Expenditures by category

Successful survey completion rates were extremely low; over the 5-month survey period a total of 23 respondents satisfactorily completed the survey. Due to the very small sample size, the data collected

was determined to be of limited use. The study team decided to pursue an alternative modeling approach for general aviation-related visitor spending, discussed below.

General Aviation Visitor Spending Modeling

General aviation visitor spending profiles were estimated using a Personal Consumption Expenditures-adjusted carry-forward model based on the 2016 aviation study's expenditure data. While less analytically rigorous than the passenger intercept survey, the carry-forward model provides a reasonable approximation of visitor spending given study constraints, consistent with established practice in aviation economic impact studies where current survey data is unavailable. Table 28 provides GA passenger spending profiles by airport classification from the 2016 study and the PCE inflation adjusted values used in the 2025 study.

Table 28: General Aviation Visitor Spending Profiles Comparison

Airport Category	Visitor Spend Per Trip ($ per passenger, 2015)	Inflation Adj Fig. ($ per passenger)
Commercial 1	$ 496.0	$ 638.0
Commercial 2	$ 339.0	$ 436.1
GA 1	$ 184.0	$ 236.7
GA 2 & 3	$ 43.0	$ 55.3
GA 4	$ 14.0	$ 18.0

All figures reported in 2025 dollars. Sources: MT SASP Classification (2015), IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

General Aviation Spending Estimation Methodology

A variety of airport operations data were collected from the airport manager survey, including specific questions detailing the number of general aviation flights, estimated number of passengers per general aviation flight, and the estimated non-local proportion of flights. Using each of these operational components, the study team built a basic model of general aviation visitors by airport. Based aircraft counts, sourced from the FAA, were used as a weighting variable to account for differences in airport size and operational capacity. A small airfield such as Winnett (7S2), with only 1 based aircraft, would likely have lower operational activity than a larger airport such as Kalispell (S27), with 28 based aircraft.

General aviation non-local visitor counts were then computed for airports that did not respond to the survey. This was achieved using weighted average non-local passengers per GA flight and average weighted flights per based aircraft. To calculate total general aviation visitor spending estimates, carry-forward spending profile estimates were multiplied by general aviation visitor counts. The study team assumed that all GA visitor spending occurred within the airport's home county. This assumption reflects the absence of multi-destination itinerary data for GA travelers — unlike commercial passengers, for whom detailed destination and time-allocation data were collected via intercept survey. Spending estimates were additionally dampened to account for the more localized nature of typical GA travel patterns.

IMPLAN Modeling and Outputs

The analysis produces three primary output tables: spending profiles (average per-person spending and resident/non-resident ratios), spending by geography (total spending by airport-county combination), and county allocation weights.

County-level spending totals by category are translated into IMPLAN event inputs for economic impact modeling. Each spending category is mapped to the appropriate IMPLAN sector and entered as Industry Output (sales/revenue) in the visitor spending project type. The IMPLAN analysis then estimates direct impacts (the spending itself), indirect impacts (supply chain activity), and induced impacts (household spending from labor income). Results are reported in terms of employment, labor income, value added, and total output.

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Appendix E: Detailed Economic and Fiscal Impacts

Table 29: Economic Impacts by Airport, OpEx Only

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Bozeman	Bozeman Yellowstone Intl	1,655	136,953	319,726	1,227	83,589	240,597	2,882	220,542	560,323
Missoula	Missoula Montana	977	125,662	272,456	1,081	68,715	208,316	2,059	194,377	480,772
Kalispell	Glacier Park International	648	68,963	96,191	455	26,326	78,632	1,103	95,289	174,823
Billings	Billings Logan International	812	67,953	235,616	865	56,421	170,784	1,677	124,374	406,400
Great Falls	Great Falls International	420	46,861	150,198	661	41,100	123,890	1,081	87,961	274,088
Helena	Helena Regional	1,070	111,063	177,342	611	35,749	110,992	1,681	146,813	288,334
Butte	Bert Mooney	100	8,231	19,843	83	4,806	14,673	183	13,037	34,516
West Yellowstone	Yellowstone	170	16,959	29,779	99	6,704	19,253	269	23,663	49,032
Sidney	Sidney-Richland Regional	5	430	709	3	165	497	8	595	1,206
Wolf Point	L M Clayton	0	8	25	0	5	17	0	13	42
Havre	Havre City-County	11	698	801	4	174	586	14	873	1,387
Glasgow	Wokal Field	5	174	706	4	223	633	9	397	1,339
Glendive	Dawson Community	2	84	476	2	167	423	4	251	898
Hamilton	Ravalli County	1	80	257	2	94	256	3	173	513
Ennis	Ennis Big Sky	9	52	1,408	8	573	1,389	17	625	2,798
Harlowton	Wheatland County	1	7	42	0	10	30	1	17	72
Red Lodge	Red Lodge	2	143	219	1	33	118	2	176	337
Livingston	Mission Field	0	0	145	1	66	172	1	66	317

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Anaconda	Bowman Field	1	36	108	1	35	94	2	71	201
Ronan	Ronan	1	17	20	0	3	12	1	21	32
Twin Bridges	Ruby Valley Field	3	25	28	0	6	17	3	30	44
Deer Lodge	Deer Lodge-City-County	2	98	147	1	35	105	2	133	252
Dillon	Dillon	5	465	626	4	170	604	9	635	1,231
Lewistown	Lewistown Municipal	4	159	493	2	144	423	7	304	916
Baker	Baker Municipal	5	207	287	1	59	172	6	266	459
Big Sandy	Big Sandy	1	15	21	0	3	8	1	18	29
Big Timber	Big Timber at Howard Field	1	31	153	1	55	154	2	86	308
Broadus	Broadus	0	0	63	0	19	43	0	19	106
Browning	Starr-Browning Airstrip	0	0	2	0	0	1	0	0	4
Chester	Liberty County	1	25	83	0	20	55	1	45	138
Chinook	Edgar G Obie	0	0	7	0	1	4	0	1	11
Choteau	Choteau	2	62	199	1	58	171	3	119	371
Circle	Circle Town County	0	8	28	0	4	15	0	13	43
Colstrip	Colstrip	0	0	5	0	1	4	0	1	9
Columbus	Woltermann Memorial	2	78	248	1	69	193	3	148	440
Conrad	Conrad	1	2	46	0	18	42	1	20	88
Culbertson	Big Sky Field	1	6	24	0	5	16	1	11	40
Cut Bank	Cut Bank International	1	42	135	0	28	97	2	69	232
Ekalaka	Ekalaka	0	11	39	0	3	16	0	15	55

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Eureka	Eureka	1	15	40	0	10	29	1	25	69
Forsyth	Tillitt Field	0	0	6	0	2	4	0	2	11
Fort Benton	Fort Benton	1	15	24	0	3	11	1	19	35
Gardiner	Gardiner	0	0	19	0	8	19	0	8	38
Geraldine	Geraldine	1	5	8	0	1	3	1	6	12
Hardin	Big Horn County	1	42	45	0	5	17	1	47	63
Harlem	Harlem	0	0	22	0	5	15	0	5	37
Hot Springs	Hot Springs	0	0	0	0	0	0	0	0	0
Jordan	Jordan	0	0	3	0	1	1	0	1	5
Kalispell	Kalispell City	59	4,314	4,248	21	1,229	3,678	80	5,543	7,926
Laurel	Laurel Municipal	7	263	771	5	331	883	12	594	1,654
Libby	Libby	1	31	101	0	26	77	1	57	179
Lincoln	Lincoln	0	0	28	0	12	34	0	12	62
Malta	Malta	1	39	136	1	24	87	2	64	223
Miles City	Frank Wiley Field	3	140	440	3	179	456	6	319	896
Philipsburg	Riddick Field	0	0	86	0	15	52	0	15	139
Plains	Plains	0	0	8	0	2	5	0	2	14
Plentywood	Sher-Wood	0	0	30	0	8	22	0	8	52
Polson	Polson	3	123	398	2	130	397	6	253	795
Poplar	Poplar Municipal	1	25	75	0	16	52	1	41	127
Roundup	Roundup	1	45	149	1	40	104	2	85	253
Scobey	Scobey	1	5	271	1	53	186	2	58	458
Shelby	Shelby	2	62	200	1	70	168	3	131	367

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Stanford	Stanford/Bigg erstaff Field	1	1	1	0	0	0	1	1	2
Stevensville	Stevensville	4	157	503	3	185	506	7	342	1,009
St Ignatius	St Ignatius	0	9	13	0	3	9	0	12	23
Superior	Mineral County	0	0	75	1	30	76	1	30	152
Terry	Terry	0	0	12	0	2	8	0	2	20
Thompson Falls	Thompson Falls	0	0	26	0	6	18	0	6	44
Three Forks	Three Forks	4	137	419	2	172	442	6	310	860
Townsend	Townsend	2	67	217	1	57	158	3	124	375
Turner	Turner	1	53	184	1	37	114	2	91	298
White Sulphur Springs	White Sulphur Springs	1	25	87	0	19	56	1	44	143
Winnett	Winnett	0	0	1	0	0	1	0	0	2
Troy	Troy	0	0	0	0	0	0	0	0	0
Whitefish	Whitefish	0	0	0	0	0	0	0	0	0

Sources: IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

Image: Dining at Yellowstone International Airport

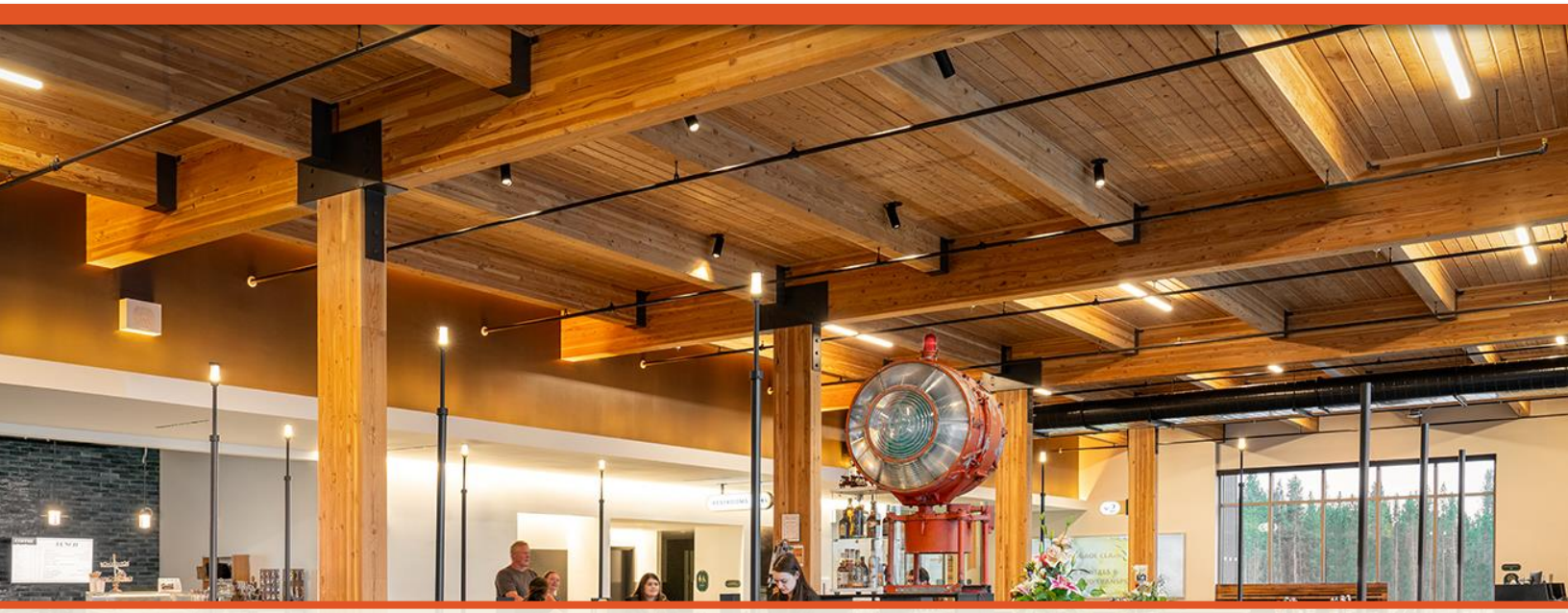

Table 30: Economic Impacts by Airport, CapEx Only

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Bozeman	Bozeman Yellowstone Intl	147	14,372	28,079	89	6,428	19,569	236	20,800	47,647
Missoula	Missoula Montana	144	10,898	24,069	102	6,520	20,535	246	17,418	44,604
Kalispell	Glacier Park International	279	22,176	47,427	172	10,583	33,660	451	32,759	81,087
Billings	Billings Logan International	90	7,298	15,650	55	3,759	11,621	145	11,057	27,271
Great Falls	Great Falls International	49	3,914	8,532	32	1,964	6,424	81	5,878	14,957
Helena	Helena Regional	25	1,885	4,159	15	913	3,004	40	2,799	7,163
Butte	Bert Mooney	18	927	2,499	9	592	1,882	27	1,519	4,381
West Yellowstone	Yellowstone	91	8,952	17,488	56	3,994	12,159	147	12,946	29,648
Sidney	Sidney-Richland Regional	17	1,236	2,802	7	420	1,436	24	1,656	4,238
Wolf Point	L M Clayton	0	0	0	0	0	0	0	0	0
Havre	Havre City-County	0	30	72	0	10	35	1	39	107
Glasgow	Wokal Field	2	102	290	1	38	133	3	139	423
Glendive	Dawson Community	7	302	890	3	164	541	10	466	1,431
Hamilton	Ravalli County	12	812	1,863	7	356	1,235	19	1,168	3,098
Ennis	Ennis Big Sky	2	161	336	1	54	182	3	214	518
Harlowton	Wheatland County	4	158	475	1	81	294	5	239	769
Red Lodge	Red Lodge	0	3	6	0	1	2	0	3	9
Livingston	Mission Field	2	145	324	1	60	201	3	205	526
Anaconda	Bowman Field	0	0	0	0	0	0	0	0	0
Ronan	Ronan	1	76	176	1	31	113	2	107	289
Twin Bridges	Ruby Valley Field	1	43	90	0	14	47	1	57	137
Deer Lodge	Deer Lodge-City-County	0	14	31	0	4	14	0	18	45
Dillon	Dillon	0	0	0	0	0	0	0	0	0

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Lewistown	Lewistown Municipal	6	512	1,061	3	183	659	9	695	1,720
Baker	Baker Municipal	2	155	377	1	44	158	3	199	535
Big Sandy	Big Sandy	1	47	163	0	16	65	2	63	228
Big Timber	Big Timber at Howard Field	32	2,034	4,802	15	855	3,124	47	2,889	7,927
Broadus	Broadus	0	2	7	0	1	2	0	3	10
Browning	Starr-Browning Airstrip	0	6	17	0	1	5	0	8	22
Chester	Liberty County	0	0	0	0	0	0	0	0	0
Chinook	Edgar G Obie	0	0	0	0	0	0	0	0	0
Choteau	Choteau	0	22	47	0	6	21	0	28	68
Circle	Circle Town County	0	0	0	0	0	0	0	0	0
Colstrip	Colstrip	0	2	4	0	0	1	0	3	6
Columbus	Woltermann Memorial	0	6	16	0	2	8	0	8	24
Conrad	Conrad	10	600	1,469	3	227	705	13	827	2,174
Culbertson	Big Sky Field	1	33	95	0	7	27	1	40	122
Cut Bank	Cut Bank International	1	54	141	0	15	54	1	69	195
Ekalaka	Ekalaka	0	11	39	0	2	8	0	12	47
Eureka	Eureka	1	75	182	1	23	86	2	98	268
Forsyth	Tillitt Field	1	58	115	0	15	51	1	73	166
Fort Benton	Fort Benton	0	0	0	0	0	0	0	0	0
Gardiner	Gardiner	13	939	2,102	6	408	1,373	20	1,347	3,475
Geraldine	Geraldine	0	0	0	0	0	0	0	0	0
Hardin	Big Horn County	0	0	0	0	0	0	0	0	0
Harlem	Harlem	0	0	0	0	0	0	0	0	0
Hot Springs	Hot Springs	0	33	66	0	7	29	1	41	95

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Thompson Falls	Thompson Falls	3	251	492	1	59	231	4	310	724
Three Forks	Three Forks	10	949	1,853	6	417	1,266	15	1,365	3,120
Townsend	Townsend	0	0	0	0	0	0	0	0	0
Turner	Turner	0	13	45	0	5	17	0	18	62
White Sulphur Springs	White Sulphur Springs	2	103	270	1	38	140	3	141	410
Winnett	Winnett	0	0	0	0	0	0	0	0	0
Troy	Troy	0	0	0	0	0	0	0	0	0
Whitefish	Whitefish	0	7	16	0	3	10	0	11	26

Sources: IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

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Table 31: Economic Impacts by Airport, Largest Commercial Airport Visitor Spending

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Bozeman	Bozeman Yellowstone Intl	6,413	323,124	884,667	3,128	199,655	609,162	9,541	522,779	1,493,829
Missoula	Missoula Montana	2,988	117,773	347,955	1,482	84,871	270,284	4,470	202,644	618,239
Kalispell	Glacier Park International	3,959	161,928	482,482	2,028	115,663	364,230	5,986	277,591	846,713
Billings	Billings Logan International	1,729	70,494	207,040	785	47,461	147,922	2,514	117,954	354,962
Great Falls	Great Falls International	1,103	39,995	125,559	532	30,002	97,340	1,634	69,997	222,899
Helena	Helena Regional	526	18,230	53,793	223	12,779	41,726	749	31,009	95,519
Butte	Bert Mooney	66	2,230	7,172	28	1,554	4,901	94	3,783	12,073
West Yellowstone	Yellowstone	39	2,176	6,050	20	1,330	3,973	59	3,506	10,023

Sources: IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

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Table 32: Economic Impacts by Airport, General Aviation Visitor Spending

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Bozeman	Bozeman Yellowstone Intl	511	28,158	70,923	232	15,810	46,905	742	43,969	117,827
Missoula	Missoula Montana	49	2,071	5,795	26	1,573	4,869	75	3,644	10,664
Kalispell	Glacier Park International	103	4,152	11,970	50	2,895	9,045	153	7,047	21,016
Billings	Billings Logan International	170	7,371	20,202	79	5,040	15,199	249	12,410	35,401
Great Falls	Great Falls International	9	349	1,041	4	255	817	14	604	1,858
Helena	Helena Regional	15	572	1,685	7	388	1,265	22	961	2,950
Butte	Bert Mooney	22	732	2,343	10	542	1,693	31	1,275	4,035
West Yellowstone	Yellowstone	10	560	1,411	4	303	892	15	863	2,304
Sidney	Sidney-Richland Regional	4	152	483	1	75	250	6	227	732
Wolf Point	L M Clayton	0	14	56	0	5	22	1	19	77
Havre	Havre City-County	2	53	179	1	24	88	2	77	267
Glasgow	Wokal Field	3	132	376	1	55	197	4	188	573
Glendive	Dawson Community	0	18	56	0	8	27	1	25	83
Hamilton	Ravalli County	10	366	1,156	5	216	765	15	582	1,921
Ennis	Ennis Big Sky	83	4,099	10,725	31	1,691	5,811	114	5,790	16,536
Harlowton	Wheatland County	0	0	0	0	0	0	0	0	0
Red Lodge	Red Lodge	0	2	8	0	1	4	0	3	11
Livingston	Mission Field	9	408	1,148	4	201	683	13	609	1,832
Anaconda	Bowman Field	3	82	272	1	43	138	4	125	410
Ronan	Ronan	0	10	37	0	5	19	0	15	55
Twin Bridges	Ruby Valley Field	1	50	132	0	18	62	1	68	194

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Deer Lodge	Deer Lodge-City-County	12	377	1,286	5	217	781	17	594	2,067
Dillon	Dillon	4	98	382	1	61	236	5	159	617
Lewistown	Lewistown Municipal	12	348	1,240	4	208	777	17	556	2,017
Baker	Baker Municipal	6	217	679	2	95	332	8	312	1,011
Big Sandy	Big Sandy	0	3	8	0	1	3	0	3	11
Big Timber	Big Timber at Howard Field	0	3	9	0	1	3	0	3	12
Broadus	Broadus	0	1	2	0	0	1	0	1	3
Browning	Starr-Browning Airstrip	0	1	4	0	0	1	0	2	6
Chester	Liberty County	0	11	44	0	5	17	1	15	60
Chinook	Edgar G Obie	0	9	29	0	3	11	0	12	40
Choteau	Choteau	4	124	475	2	79	275	6	203	750
Circle	Circle Town County	0	2	12	0	1	4	0	3	16
Colstrip	Colstrip	0	3	11	0	1	4	0	3	15
Columbus	Woltermann Memorial	1	38	137	0	18	65	2	56	202
Conrad	Conrad	0	0	0	0	0	0	0	0	0
Culbertson	Big Sky Field	1	36	148	0	15	61	2	51	210
Cut Bank	Cut Bank International	2	89	304	1	33	120	3	122	423
Ekalaka	Ekalaka	0	6	20	0	1	6	0	7	26
Eureka	Eureka	1	36	117	0	16	61	2	51	177
Forsyth	Tillitt Field	0	2	9	0	1	3	0	3	12
Fort Benton	Fort Benton	1	45	134	0	16	58	1	61	193
Gardiner	Gardiner	0	1	3	0	0	1	0	1	4

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Geraldine	Geraldine	0	1	2	0	0	1	0	1	2
Hardin	Big Horn County	0	0	0	0	0	0	0	0	0
Harlem	Harlem	0	1	2	0	0	1	0	1	3
Hot Springs	Hot Springs	0	0	1	0	0	0	0	0	1
Jordan	Jordan	0	1	2	0	0	1	0	1	3
Kalispell	Kalispell City	15	618	1,783	7	426	1,331	23	1,045	3,113
Laurel	Laurel Municipal	18	766	2,099	8	515	1,545	26	1,281	3,644
Libby	Libby	2	75	245	1	33	129	3	108	373
Lincoln	Lincoln	0	16	47	0	10	32	1	26	79
Malta	Malta	1	14	59	0	6	28	1	20	87
Miles City	Frank Wiley Field	1	23	70	0	12	37	1	35	107
Philipsburg	Riddick Field	0	0	1	0	0	0	0	0	1
Plains	Plains	1	27	84	0	9	36	1	36	120
Plentywood	Sher-Wood	0	2	5	0	0	2	0	2	7
Polson	Polson	9	265	953	4	172	621	13	438	1,574
Poplar	Poplar Municipal	1	41	167	0	17	69	2	57	236
Roundup	Roundup	3	87	325	1	45	162	4	132	487
Scobey	Scobey	0	0	0	0	0	0	0	0	0
Shelby	Shelby	3	121	391	1	60	194	5	181	586
Stanford	Stanford/Biggers taff Field	0	4	13	0	1	6	0	5	19

		Direct Impacts			Secondary Impacts			Total Impacts		
Airport City	Airport Name	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)	Jobs	Payroll ($K)	Output ($K)
Stevensville	Stevensville	11	392	1,239	5	232	821	16	624	2,060
St Ignatius	St Ignatius	0	2	6	0	1	3	0	2	9
Superior	Mineral County	0	4	12	0	1	4	0	5	16
Terry	Terry	0	2	8	0	1	3	0	2	11
Thompson Falls	Thompson Falls	0	3	10	0	1	4	0	4	15
Three Forks	Three Forks	8	440	1,108	3	237	698	11	677	1,806
Townsend	Townsend	1	32	114	0	18	59	1	50	173
Turner	Turner	1	27	85	0	9	36	1	36	121
White Sulphur Springs	White Sulphur Springs	0	14	45	0	5	19	1	18	64
Winnett	Winnett	0	0	0	0	0	0	0	0	0
Troy	Troy	0	0	1	0	0	0	0	0	1
Whitefish	Whitefish	0	3	7	0	2	5	0	4	13

Sources: IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

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Table 33: Economic Impacts by Economic Impacts by County, All Spending

		Direct Impacts			Secondary Impacts			Total Impacts		
County Name	County FIPS*	Jobs	Payroll ($M)	Output ($M)	Jobs	Payroll ($M)	Output ($M)	Jobs	Payroll ($M)	Output ($M)
Beaverhead	30001	147	4.0	13.3	54	2.4	9.6	202	6.4	22.9
Big Horn	30003	132	5.8	15.0	22	1.1	4.5	154	6.9	19.5
Blaine	30005	9	0.4	1.1	3	0.1	0.6	13	0.5	1.7
Broadwater	30007	19	0.6	1.8	34	1.6	8.6	53	2.2	10.4
Carbon	30009	256	7.9	24.8	88	3.6	13.7	344	11.6	38.5
Carter	30011	1	0.0	0.1	0	0.0	0.1	1	0.0	0.2
Cascade	30013	1,152	76.2	241.2	1,051	63.9	203.7	2,203	140.1	444.9
Chouteau	30015	35	1.2	3.8	9	0.4	1.6	45	1.6	5.4
Custer	30017	31	1.1	3.0	28	1.8	4.2	59	2.9	7.2
Daniels	30019	13	0.2	1.4	3	0.1	0.6	16	0.4	2.1
Dawson	30021	18	0.6	2.2	9	0.6	1.8	26	1.2	4.0
Deer Lodge	30023	88	2.3	7.5	29	1.6	4.4	117	3.9	12.0
Fallon	30025	15	0.6	1.4	4	0.2	0.8	19	0.8	2.2
Fergus	30027	135	3.7	12.4	41	2.0	7.8	176	5.7	20.2
Flathead	30029	6,050	299.5	742.9	3,164	181.4	556.8	9,215	480.8	1,299.7
Gallatin	30031	6,596	441.0	1,110.3	3,858	264.9	750.8	10,454	705.9	1,861.1
Garfield	30033	1	0.0	0.1	0	0.0	0.1	1	0.0	0.1
Glacier	30035	417	16.1	51.5	92	4.3	17.3	509	20.4	68.8
Golden Valley	30037	0	0.0	0.0	0	0.0	0.1	0	0.0	0.1
Granite	30039	76	2.3	8.0	21	0.7	3.2	97	2.9	11.2
Hill	30041	83	2.6	7.2	28	1.3	5.1	111	4.0	12.3
Jefferson	30043	42	0.9	3.4	52	2.0	9.3	94	3.0	12.8

		Direct Impacts			Secondary Impacts			Total Impacts		
County Name	County FIPS*	Jobs	Payroll ($M)	Output ($M)	Jobs	Payroll ($M)	Output ($M)	Jobs	Payroll ($M)	Output ($M)
Judith Basin	30045	13	0.3	1.3	4	0.2	0.8	17	0.5	2.1
Lake	30047	242	6.7	21.8	119	6.1	23.6	360	12.8	45.4
Lewis and Clark	30049	1,873	140.4	260.2	892	53.1	166.9	2,765	193.5	427.0
Liberty	30051	9	0.2	0.8	2	0.1	0.3	11	0.3	1.1
Lincoln	30053	79	2.4	7.4	36	1.4	5.4	115	3.9	12.8
Madison	30057	437	20.3	48.5	127	6.6	22.6	564	26.8	71.2
McCone	30055	2	0.0	0.2	1	0.0	0.2	3	0.1	0.4
Meagher	30059	47	1.5	4.2	14	0.6	2.9	61	2.1	7.1
Mineral	30061	116	3.9	11.0	36	1.6	5.7	152	5.5	16.7
Missoula	30063	2,640	201.5	493.9	1,992	125.2	370.6	4,632	326.7	864.5
Musselshell	30065	16	0.5	1.5	7	0.3	1.3	23	0.8	2.9
Park	30067	876	36.5	95.9	302	13.6	51.7	1,178	50.2	147.6
Petroleum	30069	0	0.0	0.0	0	0.0	0.1	0	0.0	0.1
Phillips	30071	5	0.1	0.5	3	0.1	0.6	8	0.3	1.1
Pondera	30073	17	0.8	2.2	11	0.9	2.4	29	1.7	4.6
Powder River	30075	0	0.0	0.1	0	0.0	0.0	0	0.0	0.1
Powell	30077	70	2.5	6.7	24	1.1	4.4	93	3.6	11.1
Prairie	30079	4	0.1	0.3	1	0.0	0.2	5	0.1	0.5
Ravalli	30081	358	14.2	39.6	248	12.1	39.9	607	26.3	79.5
Richland	30083	62	2.8	7.1	22	1.4	5.1	84	4.2	12.2
Roosevelt	30085	11	0.3	1.1	3	0.2	0.8	14	0.5	1.9
Rosebud	30087	14	0.3	1.3	15	1.2	8.5	29	1.6	9.8
Sanders	30089	58	2.7	6.4	28	1.2	5.6	86	3.9	12.0

		Direct Impacts			Secondary Impacts			Total Impacts		
County Name	County FIPS*	Jobs	Payroll ($M)	Output ($M)	Jobs	Payroll ($M)	Output ($M)	Jobs	Payroll ($M)	Output ($M)
Sheridan	30091	2	0.1	0.2	1	0.1	0.3	3	0.1	0.5
Silver Bow	30093	269	14.1	37.8	218	13.8	46.5	487	27.9	84.3
Stillwater	30095	55	1.6	5.3	24	1.1	3.9	79	2.7	9.2
Sweet Grass	30097	100	5.2	11.7	43	2.1	7.4	144	7.3	19.0
Teton	30099	42	1.4	4.5	23	1.1	4.4	65	2.5	8.9
Toole	30101	26	0.8	2.9	20	1.5	4.6	46	2.3	7.5
Treasure	30103	5	0.1	0.4	1	0.0	0.2	6	0.2	0.7
Valley	30105	20	0.7	2.4	10	0.5	1.5	29	1.2	3.9
Wheatland	30107	13	0.4	1.4	4	0.2	0.7	16	0.6	2.1
Wibaux	30109	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Yellowstone	30111	2,156	131.2	415.2	1,663	110.1	345.9	3,819	241.3	761.0

**Federal Information Processing Standards codes, issued by the American National Standards Institute. https://www.census.gov/library/reference/code-lists/ansi.html*

Sources: IMPLAN, Bureau of Economic Analysis (BEA), Zenith Economics.

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Appendix F: Detailed Survey Questions

The following section provides generalized information about the specific survey topics and survey questions asked of various groups and entities throughout the data collection period of this project. In total, this study relied on six surveys targeting statewide Airport Managers, commercial and general aviation visitors, airport tenants, businesses, and hospitals.

Survey 1: Airport Manager Survey

Administered to airport managers at all participating Montana airports. Respondents were asked to provide 2024 data or data from the most recent available fiscal year. The survey covered four subject areas: airport background, employment and expenditures, airport activity, and community benefit.

Airport Information

1. Airport name and contact information (name, phone).

Employment

2. Number of full-time and part-time employees at the airport in 2024, and whether totals include FBO staff.

Expenditures

3. Total 2024 annual wages and benefits paid to all airport employees.
4. Capital improvement spending over the last three years (2022, 2023, and 2024), including federal, state, and local funding.
5. Total 2024 operating expenses, excluding payroll and capital improvements.
6. Whether the airport has a co-located business or office park, with a brief description if applicable.

Airport Activity

7. Estimated number of operations (takeoffs or landings) in 2024, broken out by GA and commercial/scheduled service.
8. Estimated percentage of 2024 GA traffic classified as transient (non-local visitors).
9. Estimated total number of passengers, including pilots, per GA operation.

Aviation Activity

10. All applicable aviation activities and community attributes at the airport. Respondents were asked to check all that apply from the following list:

    - Recreational flying and/or parachuting
    - Ballooning
    - Agricultural spraying

- Search and rescue
- Freight/cargo activity
- Flight training
- Traffic/news reporting
- Emergency medical aviation
- Corporate/business activity
- Gateway for VIPs/high-profile visitors
- Environmental patrol
- Staging area for community events
- Aerial photography/surveying
- Police/law enforcement
- Aerial inspections (pipeline, electric, etc.)
- Location for community facilities/utilities
- Aerial advertising/banner towing
- Public charters
- Promotional activities (open houses, airshows, etc.)
- Preservation of open space/wetlands/woodlands
- Aerial/wildland firefighting
- Prisoner transport
- Military exercises/training
- Real estate tours
- Career training/education
- Shipping of perishable goods
- Other (open field)

11. Brief descriptions of the checked activities above (e.g., "Annual July Airshow," "Aerial application of adjacent wheat fields").
12. Narrative description of special attributes, community importance, sponsored events, and available anecdotes or testimonials. Respondents were encouraged to attach additional pages.
13. Surface transportation modes available at the airport terminal, with options including: Courtesy Car, Dedicated Rideshare Facility, Limousine/Black Car Service, Rental Car, Taxicab or Rideshare, Hotel Shuttle Service, Bus, Rail, and Other.
14. Whether surface transportation is considered adequate, with an open explanation field.
15. Whether access to major highways (primary or interstate) is considered adequate, with an open explanation field.

Airport Managers Addendum

In addition to the survey, airport managers were asked to provide supplemental lists covering the following:

1. All FBOs, tenants, government agencies, and other businesses located at the airport, including company name and type, contact information, employee counts, and annual revenues to the airport.
2. All businesses that base aircraft at the airport but are not listed above, with the same fields as Item I.

3. Non-local businesses that frequently use the airport to access surrounding areas, including company name, type, contact information, and mailing address.
4. Local businesses that rely on the airport, especially those without aircraft, with company name, type, contact, and mailing address.
5. For airports with cargo and freight facilities: estimated annual cargo value and tonnage, and the source and type of freight handled.

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Survey 2: Airport Tenant Survey

Administered to businesses and tenants operating at or in direct association with Montana airports. The survey captures business background, industry classification, and operational details related to airport use.

Business Background

1. Company name, mailing address, and contact person (name, email, phone number).
2. Company industry, selected from the NAICS classification table below:

Table 34: 2-Digit NAICS Classification Scheme – Airport Tenant Survey

NAICS	Industry
11	Agriculture, Forestry, Fishing and Hunting
21	Mining, Quarrying, and Oil and Gas Extraction
22	Utilities
23	Construction
31–33	Manufacturing
42	Wholesale Trade
44–45	Retail Trade
48–49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative, Support, Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (except Public Administration)
92	Public Administration

Airport Tenant Operations

3. Whether the respondent is a representative of a business or tenant with operations at or related to a Montana airport.
4. If yes, the applicable business type. Respondents were asked to select all that apply:
    a. Fixed-Base-Operator
    b. Tenant
    c. Government Agency
    d. Non-local business (frequent airport user)
    e. Local business (relies heavily on airport)
    f. Other
5. Whether the business bases aircraft at the airport.
6. Number of full-time and part-time employees in 2024.
7. Estimated annual revenues to the airport from the tenant or business.

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Survey 3: Commercial Passenger Survey

Administered to departing commercial passengers at Montana's eight largest commercial service airports. All responses were confidential.

About Your Trip

1. Confirmation that the respondent is at the airport preparing to depart Montana.
2. Departure airport. Options: Bozeman, Billings, Helena, Yellowstone, Missoula, Great Falls, Bert Mooney.
3. Main purpose of trip. Options: Business, Vacation, Specific Event, Other.
4. Brief description of the trip (open field).
5. Main destination city/town.
6. Percentage of trip spent at the main destination.
7. Percentage of trip spent outside the State of Montana.
8. Other cities/towns where a significant amount of time was spent, if any.
9. Total number of household or group members on the trip, including the respondent.
10. Number of group members under 18 years of age.
11. Main type of transportation used on the trip, excluding flights to/from Montana. Options: Car/Truck, Bus, Motorhome, Train, Airplane, Other.
12. Respondent's home city/town, state/province, postal code, and country.

Trip Spending

Respondents were asked to estimate total group spending in Montana across the full trip duration in US dollars, excluding purchases made inside the airport. All expenditure types were included: cash, cards, traveler's cheques, pre-purchased vouchers, and taxes and tips. Estimates were requested for the following categories:

13. Total group lodging expenses, including hotels, rentals, camping fees, and all other. Respondents also indicated lodging type: Camping Facility, RV Park, Vacation Rental, Hotel/Motel, or Other.
14. Local transportation expenses: gas/vehicle repairs, vehicle rental, and local taxis or rideshare.
15. Food and beverage expenses: groceries/liquor stores, restaurants, and lounges/bars/clubs.
16. Shopping expenses: clothing and other retail purchases.
17. Recreation and entertainment expenses.
18. All other trip-related spending in Montana.

Survey 4: General Aviation Visitor Survey

Administered to general aviation (GA) visitors at participating Montana airports. All responses were confidential.

About Your Trip/Flight

1. Confirmation that the respondent is at the airport due to a general aviation flight.
2. Main purpose of trip. Options: Flight Hours, Vacation, Specific Event, Business, Other.
3. Main destination city/town.
4. Percentage of trip spent at the main destination.
5. Other cities/towns where a significant amount of time was spent, if any.
6. Total number of people on the flight/trip, including the respondent.
7. Number of people on the trip under 18 years of age.
8. Other transportation modes used on the trip, aside from the GA flight. Options: Car/Truck, Bus, Motorhome, Train, Other.
9. Respondent's home city/town, state/province, postal code, and country.

Trip Spending

Respondents were asked to estimate total group spending in Montana in US dollars, excluding all on-airport purchases such as landing fees, fuel flowage fees, hangar/tiedown fees, and airport restaurants or entertainment. Estimates were requested for the following categories:

10. Total group lodging expenses, including hotels, rentals, and camping. Respondents also indicated lodging type: Camping Facility, RV Park, Vacation Rental, Hotel/Motel, or Other.
11. Local transportation: gas/vehicle repairs (excluding aircraft), vehicle rental, and taxis/rideshare.
12. Food and beverage: groceries/liquor stores, restaurants, and lounges/bars (all off-airport).
13. Shopping: clothing and other retail (off-airport).
14. Recreation and entertainment (off-airport).
15. All other trip-related spending (off-airport).

Survey 5: Montana Business Survey

Administered to Montana businesses to assess how commercial and general aviation services support business operations across the state. Respondents were asked to provide information for calendar year 2024 or data from the most recent available fiscal year.

Business Information

1. Business name, location, employee count (full-time and part-time), and contact details (name, phone, email).
2. Industry classification, selected from the NAICS table below:

Table 35: 2-Digit NAICS Classification Scheme – Business Survey

NAICS	Industry
11	Agriculture, Forestry, Fishing and Hunting
21	Mining, Quarrying, and Oil and Gas Extraction
22	Utilities
23	Construction
31–33	Manufacturing
42	Wholesale Trade
44–45	Retail Trade
48–49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative, Support, Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (except Public Administration)
92	Public Administration

Commercial Aviation Use

3. Whether any clients or vendors use commercial airline transportation to visit the business.
4. Approximate number of client/vendor air visits per year.
5. Top three origin locations from which clients or vendors fly to visit the business.
6. Whether Montana-based employees take business air trips.
7. Approximate number of business air trips taken by Montana-based employees in the past year.

General Aviation Use

8. Estimated percentage of business activity dependent on access to general aviation airports.
9. Whether clients or vendors use general aviation aircraft to visit the business.
10. Approximate number of GA client/vendor visits per year.
11. Top three origin locations from which clients or vendors fly GA aircraft to visit the business.
12. Whether the company owns GA aircraft, uses charters or air taxis, leases GA aircraft, or holds fractional ownership in an aircraft.
13. Montana airports used by the company for general aviation.
14. Air cargo service types used, if any: documents under 2 lbs, parcels 2–70 lbs, or freight over 70 lbs.

Importance of Business Location Factors

Respondents rated the importance of thirteen business location factors on a five-point scale from Very Unimportant to Very Important, in the context of a hypothetical expansion or relocation decision.

Table on following page.

Table 36: Airport Importance Questionnaire – Business Survey

Factor	Very Unimportant	Somewhat Unimportant	Neutral	Somewhat Important	Very Important
Convenient Highway Access	☐	☐	☐	☐	☐
Availability of Trained Workforce	☐	☐	☐	☐	☐
Cost of Living	☐	☐	☐	☐	☐
Tax Incentives	☐	☐	☐	☐	☐
Supplier Proximity	☐	☐	☐	☐	☐
Commercial Airport	☐	☐	☐	☐	☐
Urban Business District	☐	☐	☐	☐	☐
Academic or Cultural Centers	☐	☐	☐	☐	☐
Historic Location of Business	☐	☐	☐	☐	☐
General Aviation Airport	☐	☐	☐	☐	☐
Raw Materials/Resources	☐	☐	☐	☐	☐
Rail Transportation Facilities	☐	☐	☐	☐	☐
Water Transportation Facilities	☐	☐	☐	☐	☐

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Survey 6: Hospital and Healthcare Facility Survey

Administered to Montana hospitals and healthcare facilities to document aviation-dependent services including air cargo, air ambulance transport, and specialist travel for clinical programs. Respondents were asked to provide 2024 data or data from the most recent available fiscal year.

Facility Information

1. Facility name, location, and contact information (name, phone).

Aviation Use

2. Whether the facility uses air cargo or air express shipments for any of the following purposes: drug shipments, supply shipments, diagnostics or testing, equipment shipments, or document shipments.
3. Whether the facility has a helipad.
4. Whether patients are transferred to or from the facility via air ambulance, and if so, approximately how many per year.
5. Whether the facility hosts specialty clinics (e.g., cardiology, oncology).
6. If yes, whether specialists travel to the facility by aircraft for those clinics, and a list of all such specialty clinics.
7. Whether the facility conducts specialty clinics at offsite locations that require staff to travel by aircraft.

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MONTANA
Department of
Transportation

AERONAUTICS DIVISION
2630 Airport Road
PO Box 200507
Helena, MT 59620-0507

ZENITH
ECONOMICS

ZENITH ECONOMICS
355 South Grand Ave
Ste 2450 PMB 2220
Los Angeles, CA 90071

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