WYOMING STATEWIDE AVIATION

ECONOMIC IMPACT STUDY

METHODOLOGY GUIDE

OVERVIEW

This guide provides a high-level overview of the methodology used to estimate annual economic impacts for the **34 paved, public-use, commercial and general aviation airports in Wyoming.** The guide is designed to:

- Provide information on the categories for which economic impacts were estimated
- Describe the measurements used to report individual airport and statewide economic impacts
- Summarize the process used to estimate annual economic impacts
- Provide examples of economic impact calculations
- Help airports communicate their specific economic impacts

Economic impact studies are snapshots in time. Results for the Wyoming study reflect conditions at each airport during the time data was collected in 2025. The economic impacts estimated in the study are realized annually, indicating that similar impacts can be expected in subsequent years, if direct impacts, upon which study results are based, remain similar. More detail on the study can be found in the Technical Report.

An Economic Impact Calculator is available through WYDOT Aeronautics Division. This is a scenario-based tool that can estimate changes to economic impact at each airport beyond the 2026 study results. Please contact WYDOT Aeronautics Division if you wish to reassess your airport's economic impact estimate based on actual or potential changes.

CATEGORIES FOR ESTIMATING ANNUAL ECONOMIC IMPACT

Economic impact estimates are calculated using the following categories:

- **AIRPORT MANAGEMENT**
- **AIRPORT BUSINESS TENANTS**
- **AVERAGE ANNUAL CAPITAL INVESTMENT**
- **GENERAL AVIATION VISITOR SPENDING**
- **COMMERCIAL VISITOR SPENDING**

MEASUREMENTS FOR ANNUAL ECONOMIC IMPACT

Economic impact estimates for each of the five categories are reported using the following measurements:

- **ANNUAL EMPLOYMENT**
- **ANNUAL PAYROLL**
- **ANNUAL SPENDING**
- **ANNUAL ECONOMIC ACTIVITY**

Annual economic activity is the sum of annual payroll and annual spending. Payroll and spending combined represent the flow of economic activity from airport-supported activities into the state economy.

PROCESS TO ESTIMATE ANNUAL ECONOMIC IMPACTS

DIRECT ECONOMIC IMPACTS

The study first quantified "direct" impacts which are the start of the economic cycle. Direct impacts in each of the five impact categories are identified through a combination of surveys, on-site airport visits, research, and phone interviews.

DIRECT IMPACTS FROM AIRPORT MANAGEMENT AND AIRPORT BUSINESS TENANTS

For the airport management and the business tenant categories, direct impacts were identified as follows:

- Annual full-time and part-time employment dedicated to the daily operation of the airport or to the operation of the tenant's business*
- Annual payroll earned by all employees
- Annual spending to operate and maintain the airport or to operate the business
- Annual economic activity is the sum of payroll and spending

**Direct employment represents full-time equivalent (FTE) jobs which include all full-time, part-time, and seasonal jobs; these jobs may be on or off-airport.*

For this study, a business tenant is defined as a business on airport property providing aviation-related services to aircraft or airport customers. Business tenants have paid on-airport employment.

Airport Management and Business Tenant Direct Impacts

NOTES:

DIRECT IMPACTS FROM AVERAGE ANNUAL CAPITAL INVESTMENT & VISITOR SPENDING

A slightly different approach is needed to estimate direct impacts from capital investment and visitor spending.

AVERAGE ANNUAL CAPITAL INVESTMENT*

- Five years of federal, state, local, and private investment identified for each airport.
- Average annual capital investment established.
- Ratios in IMPLAN (an econometric input/output model) used to determine direct employment supported by average annual capital investment.
- Typical salaries in engineering and construction labor categories used to estimate direct annual payroll.
- Average annual capital investment represents both payroll and spending for materials needed to implement projects.
- Average annual capital investment is the same as direct annual economic activity.
- Direct payroll, subtracted from direct annual economic activity, equals annual direct "spending" on materials needed to implement the projects.

VISITOR SPENDING

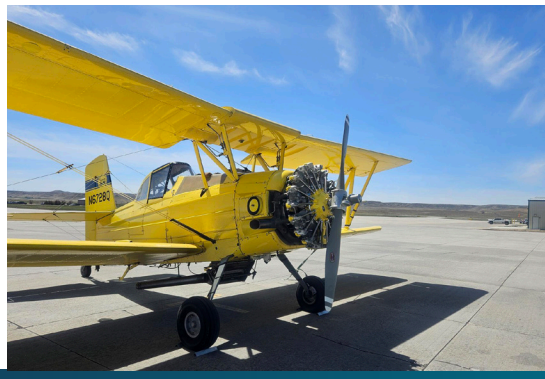
- Estimates of annual visitors at commercial study airports derived from United States Department of Transportation (USDOT) data.
- Estimates for general aviation visitors derived from data provided by 1200.aero systems that identify visiting aircraft arrivals.
- Estimates of visiting general aviation aircraft arrivals crosschecked against FAA Traffic Flow Management System Counts (TFMSC) data.
- Study survey data used to develop estimates of average spending per visitor, per trip, per airport.
- Total annual commercial and/or general aviation visitor spending estimated considering total visitors using each airport and their average expenditures per trip.
- Ratios in IMPLAN are used to determine direct employment and payroll that visitor spending supports.
- Direct payroll, subtracted from all visitor expenditures, equals the portion of annual direct visitor "spending" that actually goes to support the non-labor portion of all visitor expenditures.
- Study airports validated final estimate of general aviation visitor impacts.

INDIRECT/INDUCED AND TOTAL ANNUAL ECONOMIC IMPACTS

Once all direct annual employment, payroll, and spending impacts are identified, the IMPLAN model is used to determine how the direct impacts continue to "re-circulate" once they enter the economy. These impacts are experienced in the state economy as a result of the initial direct impacts. Indirect impacts result from industries purchasing from other industries, whereas induced impacts result from the expenditure of new household income associated with direct and indirect impacts.

Direct annual impacts for all categories (management, business tenants, capital investment, and visitor spending) and for all measurements (employment, payroll, and spending) are entered into the IMPLAN model. Depending on the category and the impact measurement, different multipliers within the model estimate how the direct impacts continue to re-circulate, creating indirect/induced impacts. There is sometimes a misconception that there is one single multiplier within IMPLAN that estimates the indirect/induced impacts. Many multipliers are considered to estimate indirect/induced impacts. The study's Technical Report provides information that shows, by impact category and measurement, economic impact related to direct and indirect/induced impacts. Combined, these impacts equal the total annual economic impact for each study airport.

NOTES:



EXAMPLE OF DIRECT ANNUAL AIRPORT MANAGEMENT IMPACTS

- 2.5 on-airport employees; 1.5 off-airport employees = **4 full-time employees**
- Direct payroll of **$140,000** is the combined payroll for all employees (both on-and off-airport and both full-time and part-time employees)
- **$60,000** is the direct spending to purchase goods/ supplies to operate the airport
- $140,000 payroll + $60,000 spending = **$200,000 direct economic activity**

THINGS TO KNOW ABOUT AIRPORT MANAGEMENT IMPACTS

- Information on airport employment, payroll, and spending was supplied by a contact at each study airport.
- Many airports support off-airport employment, e.g. part-time employees that provide airport support services. Examples of off-airport employment categories that often support the airport include: human resources, legal services, grants management, and maintenance.
- Direct spending is the same as the airport's annual operating budget. This includes spending for insurance, utilities, supplies, and other expenditures that support the airport's day-to-day operation.
- Direct spending does not include payroll, nor does it include any local match for state or federal grants.

ANNUAL AIRPORT MANAGEMENT IMPACTS

DIRECT EMPLOYMENT	DIRECT PAYROLL	DIRECT SPENDING	DIRECT ECONOMIC ACTIVITY
4	$140,000	$60,000	$200,000

NOTES:

EXAMPLE OF DIRECT ANNUAL AIRPORT BUSINESS TENANT IMPACTS

- Three tenants have a **total of 8 full-time direct employees**
- The combined annual payroll for the three tenants is **$304,000**
- Annually, on a combined basis, the three tenants have **$200,000** in direct spending to operate their individual businesses
- Direct economic activity for the three business tenants is **$504,000**, the sum of payroll and spending for all business tenants

THINGS TO KNOW ABOUT AIRPORT BUSINESS TENANT IMPACTS

- In this study, a business tenant is an on-airport company with paid employees that provides aviation-related services to aircraft or airport customers.
- Not all study airports have business tenants.
- Business tenants were contacted during the study to obtain information on their direct employment, payroll, and spending.
- When tenant survey responses were incomplete, group averages for the business tenant type were used to fill in missing information.

DIRECT EMPLOYMENT
8

DIRECT PAYROLL
$304,000

DIRECT SPENDING
$200,000

DIRECT ECONOMIC ACTIVITY
$504,000

	DIRECT EMPLOYMENT	DIRECT PAYROLL	DIRECT SPENDING	DIRECT ECONOMIC ACTIVITY
Tenant #1	2	$70,000	$51,000	$121,000
Tenant #2	1	$40,000	$32,000	$72,000
Tenant #3	5	$194,000	$117,000	$311,000
TOTAL	**8**	**$304,000**	**$200,000**	**$504,000**

In this example, the individual business tenant impacts are shown. However, in the study's technical report, individual business tenant impacts are combined, rather than shown separately, and the names of individual tenants are not included. For general aviation airports, the impacts of airport management and business tenants are combined to help shield more sensitive payroll and spending information.

EXAMPLE OF DIRECT ANNUAL IMPACTS FROM AVERAGE ANNUAL CAPITAL INVESTMENT

- Average annual capital investment or direct economic activity (over five years) estimated at **$610,000**
- IMPLAN model used to convert average annual capital investment (direct economic activity) to direct employment and direct payroll
- IMPLAN ratio = Every **$1.0 million*** in direct economic activity supports 10 jobs; $610,000 in direct economic activity = **6 full-time employees** (*Example not actual study conversion ratio)
- IMPLAN shows **$55,000*** in payroll per job supported: $55,000 x 6 = **$330,000 in direct payroll** (*Example not actual study conversion ratio)
- Direct economic activity minus payroll = **$280,000 direct spending** (this is the amount spent on materials to implement the projects)

ANNUAL CAPITAL INVESTMENT IMPACTS

DIRECT EMPLOYMENT	DIRECT PAYROLL	DIRECT SPENDING	DIRECT ECONOMIC ACTIVITY
6	$330,000	$280,000	$610,000

NOTES:

STEPS TO ESTIMATE GENERAL AVIATION VISITORS

In late 2024, 1200.aero systems were installed at every Wyoming study airport. These systems use Automatic Dependent Surveillance-Broadcast (ADS-B) technology to collect data on aircraft operations at each location. The information gathered includes aircraft identification, operator type, date and time, origin and destination, distance flown, aircraft type, seating capacity, and dwell time.

To accurately count general aviation visitor flights at the study airports, records excluded flights by commercial operators and aircraft based at those airports. Based aircraft lists for each location were supplied by WYDOT Aeronautics, drawing from both airport sources and the FAA's National Based Aircraft Inventory Program.

Because not all aircraft have ADS-B systems, some operations go unrecorded by the standard 1200.aero setup. To improve estimates of total operations, 1200.aero camera systems were also set up at several study airports to calculate the "miss rate," or the percentage of flights not captured.

Finally, to determine the number of general aviation visitors, a passenger load factor—developed jointly with airports and WYDOT—was applied to the number of seats available for each visiting aircraft.

Final estimates were reviewed by WYDOT Aeronautics and validated by airport managers.

THINGS TO KNOW ABOUT ESTIMATES OF GENERAL AVIATION VISITORS

- Not all "itinerant" operations are attributed to visiting/transient aircraft. Some itinerant operations are associated with aircraft based at the airport.
- Annual general aviation operations are assigned to one of two categories, local or itinerant. Local operations take place within sight of the airport; all other operations are classified as itinerant. There are no existing sources that precisely document general aviation visitors.
- Estimates of spending per visitor per trip were developed by assigning each airport to one of six "spending tiers" using information from general aviation visitor surveys.
- Visitor spending is typically distributed among the following categories: lodging, food, ground transportation (excluding aviation fuel), recreation, and retail purchases.

EXAMPLE FOR ESTIMATING ANNUAL GENERAL AVIATION VISITORS

- Annual visiting general aviation aircraft arrivals capture by 1,200. aero systems = **1,000**
- 6 seats per visiting general aviation aircraft arrival (on average) x 50 percent load factor (on average) = **3 visitors per visiting aircraft arrival**
- 1,000 annual visiting general aviation aircraft arrivals x 3 visitors per aircraft = **3,000 annual general aviation visitors**

EXAMPLE OF DIRECT GENERAL AVIATION VISITOR SPENDING

- **3,000** total visitors x **$180** per visitor trip = **$540,000 annual direct general aviation visitor spending or annual economic activity**

EXAMPLE OF DIRECT EMPLOYMENT AND PAYROLL IMPACTS FROM ANNUAL GENERAL AVIATION VISITOR SPENDING

- Direct general aviation visitor spending (annual economic activity) **estimated at $540,000**
- IMPLAN model used to convert direct economic activity to direct employment and direct payroll
- IMPLAN ratio = Every **$1.0 million*** in direct economic activity supports 15 jobs; $540,000 in direct economic activity = **8 full-time direct employees** (*Example not actual study conversion ratio)
- IMPLAN shows **$26,000*** in payroll per job supported; $26,000 x 8 = **$208,000 direct payroll** (*Example not actual study conversion ratio)
- Direct economic activity minus payroll = **$332,000 in direct spending**

NOTES:

ANNUAL GENERAL AVIATION VISITOR SPENDING IMPACTS

DIRECT EMPLOYMENT	DIRECT PAYROLL	DIRECT SPENDING	DIRECT ECONOMIC ACTIVITY
8	$208,000	$332,000	$540,000

EXAMPLE OF DIRECT IMPACTS FROM ANNUAL COMMERCIAL VISITOR SPENDING

- 100,000 enplanements x 40% visitors = **40,000 annual commercial visitors**
- For each airport, USDOT data on visitor vs. resident enplanements is used to establish annual visitors by airport
- 40,000 visitors x $600 spending per visitor trip = **$24.0 million in direct commercial visitor economic activity**
- IMPLAN model used to convert direct economic activity to direct employment and direct payroll
- IMPLAN ratio = Every **$1.0 million*** in direct economic activity supports 15 jobs; $24.0 million in direct economic activity = 360 full-time direct employees (*Example not actual study conversion ratio)
- IMPLAN shows **$26,000*** in payroll per job supported; $26,000 x 360 = **$9.36 million in direct payroll** (*Example not actual study conversion ratio)
- Direct economic activity - payroll = **$14.64 million in direct spending**

THINGS TO KNOW ABOUT COMMERCIAL VISITOR SPENDING

- For each commercial airport, part of its annual enplanements are attributed to residents of the airport's market area, and the other part is visitors from outside the area.
- The distribution between resident and visitor enplanements varies by airport; for the study, data from the USDOT is used to identify each airport's visiting enplanements.
- All study commercial airports provided assistance with distributing surveys to departing visitors.
- Study surveys help to determine average length of stay and average spending per trip. Both indicators, trip length and trip spending, are specific to each study airport.
- Commercial visitors spending typically includes lodging, food, ground transportation, entertainment, and retail purchases.

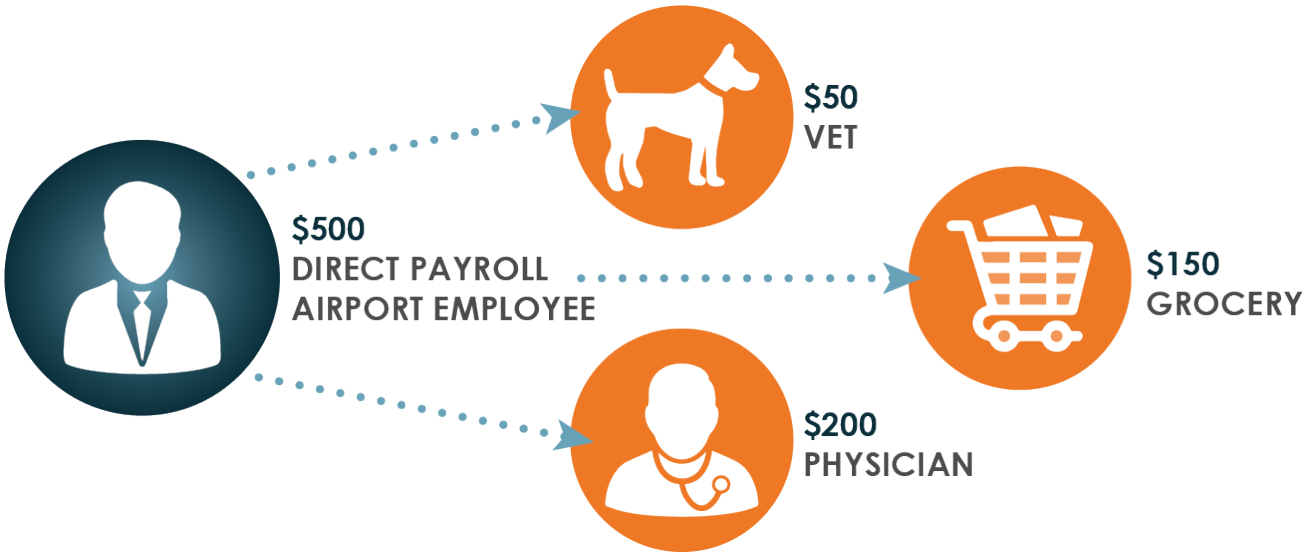
ANNUAL COMMERCIAL VISITOR SPENDING IMPACTS

DIRECT EMPLOYMENT	DIRECT PAYROLL	DIRECT SPENDING	DIRECT ECONOMIC ACTIVITY
360	$9.36M	$14.64M	$24.0M

NOTES:

INDIRECT & INDUCED IMPACTS OR "THE MULTIPLIER IMPACTS"

- When any direct impact (employment, payroll, or spending) enters the economy, additional indirect/induced impacts are created.
- Re-circulated impacts associated with all direct impacts are often referred to as "multiplier" impacts.
- All indirect/induced impacts in the study were estimated with a Wyoming-specific IMPLAN model.
- IMPLAN multipliers are based on economic connections between industry sectors.
- The more times spending repeats in-state, the higher the multiplier.
- Spending that occurs out-of-state reduces the multiplier.



INDIRECT: portion of grocery revenue from airport employee is used to buy goods from vendors/suppliers, who also purchase from vendors/suppliers; cycle of re-spending repeats

INDUCED: portion of grocery revenue from airport employee supports staff pay; grocery staff re-spends portion of pay in local economy, supporting other jobs; cycle of re-spending repeats

NOTES:

EXAMPLE OF DIRECT + INDIRECT/INDUCED = TOTAL IMPACTS

(USING AIRPORT MANAGEMENT CATEGORY AS AN EXAMPLE)

- There are 4 direct jobs and 3.5 additional jobs supported in the indirect/induced categories. Total employment in this example is 7.5 rounded to **8 full-time employees.**
- The direct payroll for the 4 full-time direct employees is $140,000, with $113,400 in additional indirect/induced payroll. **Total payroll is estimated at $253,400.**
- Total direct spending is $60,000, with an additional $45,000 in indirect/induced spending. **Total spending is estimated at $105,000.**
- Payroll and spending added together equal economic activity. Direct plus indirect/induced annual economic activity equals **$358,400 in total economic activity** for this example.
- Multipliers shown here are examples only; the total impact divided by the direct impact yields the "implied" multiplier.
- In the actual analysis, many different multipliers are used to estimate indirect/induced impacts. Implied multipliers shown below reflect all of the multipliers combined.

	EMPLOYMENT	PAYROLL	SPENDING	ECONOMIC ACTIVITY
DIRECT	4	$140,000	$60,000	$200,000
INDIRECT/INDUCED	3.5	$113,400	$45,000	$158,400
TOTAL	8	$253,400	$105,000	$358,400
IMPLIED MULTIPLIER	**1.87**	**1.81**	**1.75**	**1.79**

COMMUNICATIONS TIPS

Effective communication is essential to the ultimate success of the Wyoming Statewide Aviation Economic Impact Study for commercial and general aviation airports. General suggestions to help airports convey study results are provided below.

Airports should use materials, tools, and templates in this document (modified as needed) to meet the needs of their individual airport/community.

Effectively communicating study results requires the ongoing commitment and support of all airports. It is only through this active participation that Wyoming can convey and capitalize upon the great benefits associated with Wyoming's airports. Communicating the study results to the public, businesses, and elected officials at the local level, with local perspective from the airport and its staff, creates greater credibility.

KEY QUESTIONS TO CONSIDER WHEN FORMULATING A COMMUNICATIONS PLAN FOR YOUR AIRPORT

Consider each of the following as you set up and implement a communications plan for your airport:

- What do you want to communicate to the community?
- What is your message?
- With whom do you want to communicate?
- Who is your audience?
- How will you communicate your message?
- What communication channels/techniques will you use?
- What contacts are needed to use those channels?
- What steps are necessary to distribute your message?
  - Identify the purpose of your communication
  - Identify each target audience
  - Plan and design your message
  - Plan for obstacles
  - Strategize local media contacts
  - Identify others who might help spread the message
  - Establish defined tasks
  - Assign responsibilities
  - Identify measures for determining the effectiveness of your plan

DESIGN YOUR MESSAGE

Keep the message simple and focused

- Message content may need to be different depending on the audience (business, elected officials, general public)
- Rely on graphics from the study to communicate

SAMPLE MESSAGES

Airports in Wyoming support $3.5 billion in annual economic activity.

Airport Name is a significant contributor to the economic vitality of our community and the state. – *Present airport's annual economic impact available from airport's Individual Airport Report.*

Airport Name is an economic driver by keeping jobs in our community. – *Show airport's flight map available from Individual Airport Report.*

Airport Name contributes to funding state and local services – *Show airport's annual tax revenue generation contained in the Individual Airport Report, with more detail in Section X of the study's Technical Report.*

Airport Name brings ___ number of visitors to our community each year. – *Number of general aviation and commercial visitors for each airport are available in the Technical Report in Section X.*

Air visitors to our community spend an estimated $_____ annually with local and Wyoming businesses. – *Annual visitor spending by airport is available in the Technical Report in Section X.*

Airport Name and its tenants keep jobs in our community by spending $____ annually to purchase the goods and services they need to operate the airport and to run their businesses – *This information is available in Section X of the Technical Report.*

Each airport's Individual Airport Report and the study's Technical Report are available by visiting, **dot.state.wy.us/home/aeronautics.html**

COMMUNICATING STUDY RESULTS

IN PERSON:

- Meet with the local leaders. Provide the Statewide Summary Presentation on the economic benefits of Wyoming airports to civic and community groups, and help them understand your local airport's role in connecting the state and local economies. These groups could include the local Chamber of Commerce, Rotary, Lions Clubs, senior centers, high school math/science and business classes, or scheduled meetings of local elected officials.
- Host community gatherings or tours at the airport. Provide take-home copies of the study Fact Sheet and your airport's Individual Airport Report.

WEBSITE/SOCIAL MEDIA:

- Post information about study results on your airport's website. Create an intriguing headline message: "Did you know that **Airport Name** supports $_____ in total annual economic activity? (This information is found in your Individual Airport Report).
- Post the study Fact Sheet, Executive Summary, and/or your Individual Airport Report. (PDF versions of all study products are available by visiting the project website at dot.state.wy.us/home/aeronautics.html).
- Remember the value of putting a face to your story. Create a social media communication plan such as a "Did You Know?" social campaign using simple elements such as a phone video (30 seconds or less).
- Distribute social media messages using X (formerly Twitter), Facebook, Instagram, LinkedIn, YouTube, or other social media platforms.

WORK WITH LOCAL MEDIA:

- Host Airport Media Day.
- Contact local newspapers, TV and radio stations, and other media outlets to schedule an interview related to the study. Provide the study Fact Sheet and your Individual Airport Report. Invite reporters to tour your airport. Consider coordinating interviews with airport tenants, local businesses, regular customers, pilots, air service providers, emergency services providers, and others who rely on your airport.
- Provide a Media Packet including: Study Fact Sheet, your individual Airport Report, any recent press releases, aviation activity stats, and contact information.
- Complete and submit the example press release to local news outlets (provided on the following page).
- Always remember to preemptively answer: Who, What, When, Where, and How.

The following example press release can be customized and used by any study airport. Please make sure that any information sent in a press release for your airport is factual and based on final study results.

PRESS RELEASE
For Immediate Release

Date: XXX
Point of Contact: Name, Airport Manager
Local Airport Name
Contact Information: Phone number/email address

Wyoming Airports contribute $3.5 Billion Annually to State and Local Economies

City, WY: The Wyoming Department of Transportation (WYDOT) Aeronautics Division released a Statewide Aviation Economic Impact Study showing that public airports are significant contributors to both the state economy and the local economies.

"We are excited to share the study results and pleased to see that our airport continues to provide economic benefits to our community," said_____, **Airport Manager**. Wyoming has an extensive system of public airports. The **<airport name>** is one of 34 commercial and general aviation airports that ensure the needs of commerce are met across the state. The study illustrates the importance of each local airport and the role it plays in the local economy. **Airport Name** supports $_____ in total annual economic activity, while supporting _____ jobs.

The study shows that flights to **<airport name>** bring approximately_____business and recreational visitors to Wyoming each year. "We're excited that the study helps our community understand the contribution our airport makes to the vitality of both our local economy and the state economy," **Airport Manager** stated.

The WYDOT study analyzed five economic activity categories for each airport, including economic activity generated by general aviation visitor spending, commercial aviation visitor spending, investment for capital improvements, airport business tenants, and airport management.

For more information, detailed study results can be found by visiting dot.state.wy.us/home/aeronautics.html or by contacting **Airport Manager at (phone or email).**

AVIATION ECONOMIC IMPACT STUDY

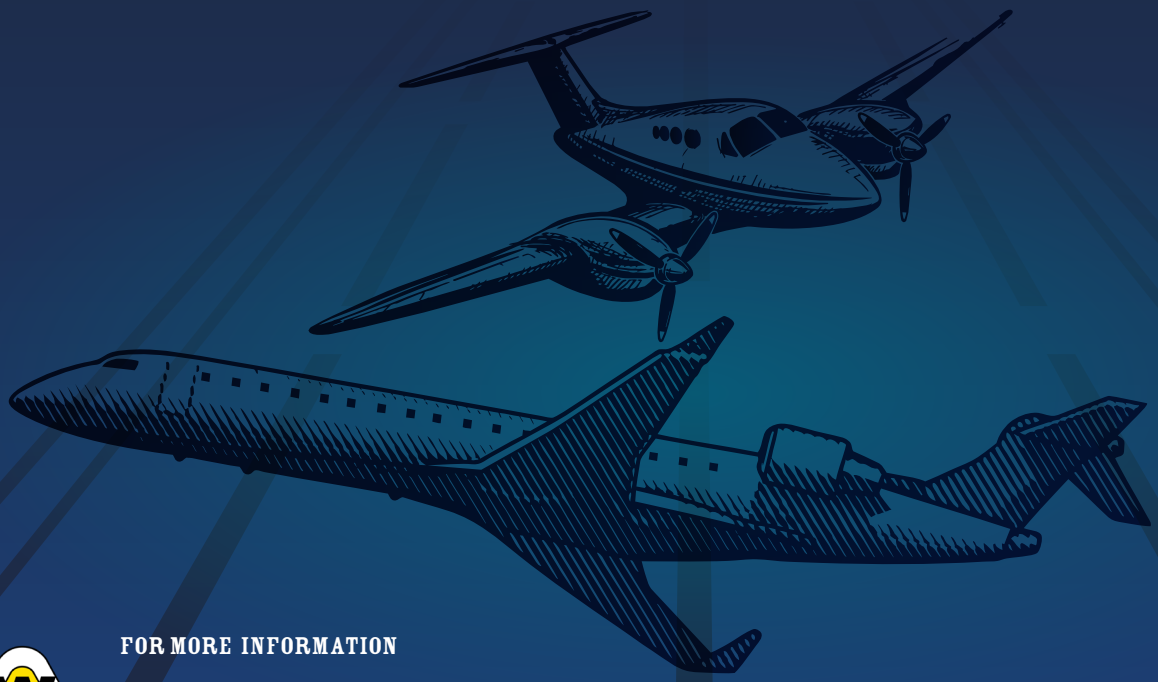
2026

WYOMING

WYOMING AIRPORTS DELIVER

Wyoming airports are essential infrastructure that support economic opportunity, healthcare access, tourism, agriculture, business growth, public safety, education, military readiness, and quality of life throughout the Cowboy State.

Every day, airports help connect Wyoming residents, businesses, visitors, and communities to opportunities across the state, the nation, and the world.



FOR MORE INFORMATION

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