

MINNESOTA

Statewide Airport Economic Impact Study



2019

EXECUTIVE SUMMARY





Photo Credit: Emmanuel Canaan

STUDY OVERVIEW

Minnesota is served by an extensive system of 133 public general aviation and commercial service airports that provide essential transportation links, support aviation services, and generate a significant amount of economic activity. Starting in late 2018, the Minnesota Department of Transportation's Office of Aeronautics studied 126 of these airports to measure their economic impact on the state economy. Throughout this document these 126 airports are referred to as "study airports."

Economic impact results from studies conducted by the Metropolitan Airports Commission (MAC), for their seven airports in the Minneapolis-Saint Paul Metropolitan Area, are incorporated to provide a comprehensive summary of the annual economic impacts generated by all 133 public airports. Since a similar approach was used to estimate impacts for the MAC airports, the findings from the two separate efforts are combined to produce an overall statewide total, as shown in the table on this page.

In addition to the economic impacts associated with the public airports, activities the airports support also contribute annually to state and local tax revenues. Study airports are estimated to contribute **\$66.3 million** in annual state and local tax revenues, while MAC airports contribute approximately **\$557 million** in state and local tax revenues.

TOTAL ANNUAL STATEWIDE ECONOMIC IMPACTS FOR ALL MINNESOTA PUBLIC AIRPORTS

ANNUAL TOTALS	STUDY AIRPORTS	MAC AIRPORTS	ALL PUBLIC AIRPORTS
Employment	13,147	80,890	94,037
Payroll	\$570.1 million	\$3.9 billion	\$4.4 billion
Spending	\$1.0 billion	\$12.8 billion	\$13.8 billion
Annual Economic Activity	\$1.6 billion	\$16.6 billion	\$18.2 billion

Note: For more information on the MAC studies, visit metroairports.org.

ECONOMIC IMPACTS FOR ALL PUBLIC AIRPORTS

ANNUAL EMPLOYMENT
94,037

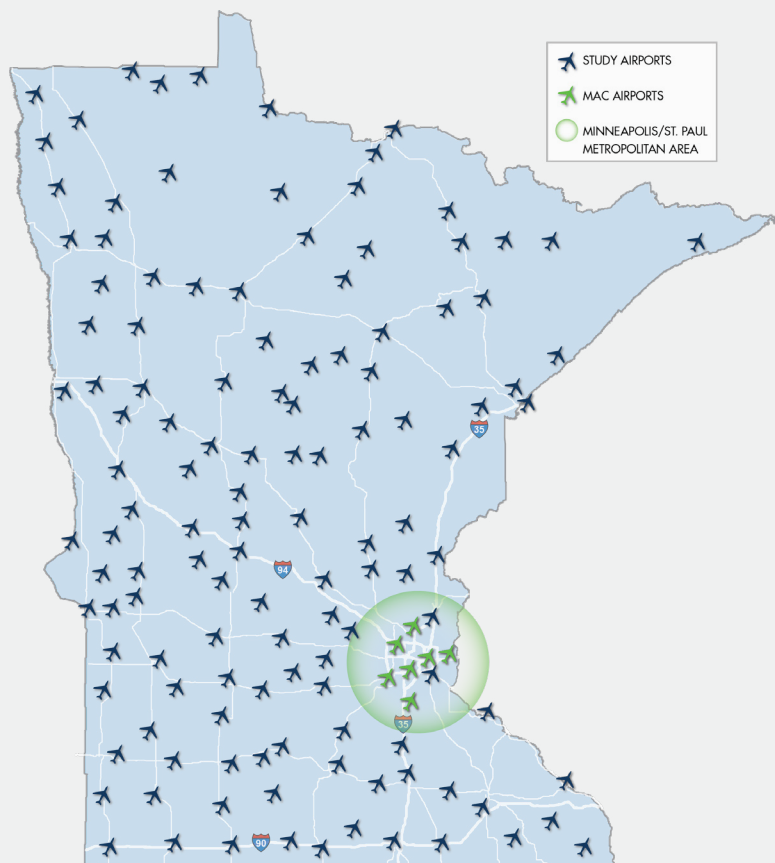
ANNUAL PAYROLL
\$4.4 B

ANNUAL SPENDING
\$13.8 B

ANNUAL ECONOMIC
ACTIVITY
\$18.2 B

STUDY & MAC AIRPORTS

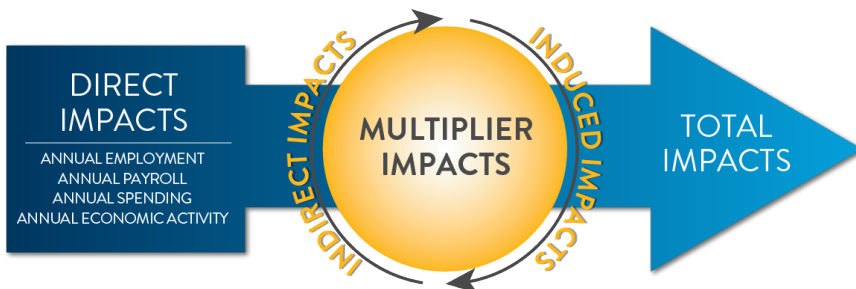
This map shows the geographic location for study and MAC airports.



STUDY PROCESS

The study used an approach consistent with the Federal Aviation Administration (FAA) guidelines to estimate annual economic impacts for study airports. Data was collected through interviews and surveys to estimate direct economic impacts. Direct impacts are the first stage of the economic cycle, in which airport impacts flow into other sectors of the state economy. The study estimates annual direct economic impacts associated with these categories: airport management, business tenants, capital investment, commercial visitor spending, and general aviation visitor spending.

An econometric input/output model, referred to in this document as IMPLAN, was used to estimate additional indirect and induced impacts, sometimes known as a multiplier effect, which trigger additional impacts. For this study, a statewide model was used to develop economic impact estimates. Indirect 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. When summed, direct, indirect, and induced impacts equal total annual economic impacts.



ECONOMIC IMPACT CATEGORIES

AIRPORT MANAGEMENT

Activities associated with the daily operation of each airport

BUSINESS TENANTS

On-airport aviation-related businesses that generate revenue and have employment

CAPITAL INVESTMENT

Five-year average annual state, federal, airport, and private investment for airport improvements

GENERAL AVIATION VISITOR SPENDING

Expenditures by visitors to Minnesota who arrive on general aviation airplanes

COMMERCIAL VISITOR SPENDING

Expenditures by visitors to Minnesota who arrive on a scheduled commercial airline flight

STATE & LOCAL TAX REVENUES

Airport-supported sales and state income taxes



Photo Credit: David Gonzales

IMPACTS MEASUREMENTS

This study used the following measurements to estimate annual economic impacts for the 126 study airports:

- Annual Employment
- Annual Payroll
- Annual Spending
- Annual Economic Activity

In this analysis, annual economic activity is the sum of payroll and spending. Combined, these two measures represent the flow of dollars and jobs from airport-supported activities into the state economy. Total statewide annual economic impacts estimates associated with the 126 study airports are presented by impact category in the next sections.



Photo Credit: USAF



AIRPORT MANAGEMENT

Most of the study airports have employees dedicated to managing and operating airports on a daily basis. These employees can be full-time, part-time or seasonal. For this analysis, all less than full-time jobs were converted to reflect full-time equivalent employment. For example, if two part-time employees each work 20 hours per week, these two part-time jobs equal one full-time equivalent employee. Depending on the number of hours worked, direct employment in airport management is sometimes less than one full-time equivalent job at some study airports.

Airports have annual spending to support their operations. Airport spending categories include, but are not limited to, items such as utilities, insurance, supplies, and routine maintenance. The table below shows total annual economic impacts associated with airport management at study airports.

AIRPORT MANAGEMENT ECONOMIC IMPACTS

IMPACT MEASURE	DIRECT	INDIRECT/ INDUCED	TOTAL
Employment	165	223	388
Payroll	\$8,110,020	\$6,108,180	\$14,218,200
Spending	\$19,498,140	\$24,852,870	\$44,351,010
Annual Economic Activity	\$27,608,160	\$30,961,050	\$58,569,210

BUSINESS TENANTS

Many of the study airports have business tenants that provide aviation-related services. A Fixed Base Operator (FBO) is one example of an airport business tenant that provides fueling, maintenance, and other services to aircraft and airport customers. Flight instructors, aerial applicators, corporate flight departments, airlines, TSA, and terminal concessionaires are other examples of business tenants that operate at airports. For a business tenant to be considered in this analysis, they need to be a business that provides aviation-related services with paid employees working at the airport. In this economic impact category, spending is equal to the expenditures each business has annually to support their operations. The table below shows total annual economic impacts associated with business tenants at study airports.

BUSINESS TENANTS ECONOMIC IMPACTS

IMPACT MEASURE	DIRECT	INDIRECT/ INDUCED	TOTAL
Employment	4,068	5,044	9,112
Payroll	\$221,853,620	\$213,687,850	\$435,541,470
Spending	\$457,607,010	\$242,559,800	\$700,166,810
Annual Economic Activity	\$679,460,630	\$456,247,650	\$1,135,708,280

CAPITAL INVESTMENT

Capital projects are undertaken using local, state, federal, and private funds to maintain, rehabilitate, and expand airports. Since the nature of capital improvement projects can be cyclical, for this analysis each airport's capital investment history over a five-year period was considered. Each airport's five-year average annual capital investment was used to estimate economic impacts in this category. Impacts take place when projects are being planned, permitted, designed, engineered, and implemented. Direct average annual capital investments for each study airport are entered into the IMPLAN model to estimate direct employment and payroll associated with the average annual investment. In this impact category, spending equates to the amount used to purchase materials and supplies to implement various capital improvement projects. The table below shows total annual economic impacts associated with capital investment at study airports.

CAPITAL INVESTMENT ECONOMIC IMPACTS

IMPACT MEASURE	DIRECT	INDIRECT/ INDUCED	TOTAL
Employment	326	517	843
Payroll	\$16,555,570	\$15,485,260	\$32,040,830
Spending	\$45,450,470	\$43,794,490	\$89,244,960
Annual Economic Activity	\$62,006,040	\$59,279,750	\$121,285,790

GENERAL AVIATION VISITOR SPENDING

The study concludes that approximately 80,000 general aviation aircraft bring an estimated 230,400 general aviation visitors to study airports annually. Visitors who arrive on general aviation aircraft come for both business- and leisure-related trips. General aviation is often selected for its efficiency, especially for business travel. Trips can be made in a day without an overnight stay. Surveys confirm that a high percentage of general aviation visitors stay only for the day. Study surveys indicate that average general aviation visitor spending for each airport per trip ranges from \$50 to \$270. General aviation spending estimates relate to the expenditures visitors have for things such as hotels, restaurants, ground transportation, entertainment, and retail purchases. These averages consider visitors who come for just the day and have very limited or no spending in the state, and they are used to estimate direct annual general aviation visitor spending. After direct visitor spending estimates by airport are developed, the IMPLAN model is used to determine the direct employment and payroll supported by visitor spending. The table below shows total annual economic impacts associated with general aviation visitor spending at study airports.

GENERAL AVIATION VISITOR SPENDING ECONOMIC IMPACTS

IMPACT MEASURE	DIRECT	INDIRECT/ INDUCED	TOTAL
Employment	946	420	1,366
Payroll	\$24,030,000	\$18,946,000	\$42,976,000
Spending	\$29,286,000	\$27,857,000	\$57,143,000
Annual Economic Activity	\$53,316,000	\$46,803,000	\$100,119,000





EIGHT COMMERCIAL STUDY AIRPORTS

- Bemidji Regional Airport
- Brainerd Lakes Regional Airport
- Duluth International Airport
- Range Regional Airport
- Falls International Airport
- Rochester International Airport
- St. Cloud Regional Airport
- Thief River Falls Regional Airport

COMMERCIAL VISITOR SPENDING

The study analyzed impacts related to commercial visitors arriving at the eight study airports with commercial service. A portion of each airport's annual enplanements (boarding passengers) are residents of the airport market area, and the remainder are visitors. The proportions of resident and visitor enplanements vary by airport. Information from the United States Department of Transportation is used to establish resident versus visitor enplanements for each commercial airport. Visitor enplanements, as a percent of each airport's total enplanements, ranges from 27 to 65 percent, depending on the airport.

Commercial airports throughout the state participated in the study by distributing surveys to departing visitors. Visitors provided information on length of stay and spending in categories including lodging, food, ground transportation, entertainment, and retail spending. Average length of stay and spending per trip vary by commercial airport. Study surveys indicate that most commercial airports also have visitors who come only for the day, limiting their spending. Airports with higher percentages of day-only visitors have lower average spending per trip. According to study surveys, average spending per commercial visitor trip ranges from \$236 to \$498. The table below shows total annual economic impacts associated with commercial visitor spending at study airports.

COMMERCIAL VISITOR SPENDING ECONOMIC IMPACTS

IMPACT MEASURE	DIRECT	INDIRECT/INDUCED	TOTAL
Employment	956	482	1,438
Payroll	\$24,427,000	\$20,882,000	\$45,309,000
Spending	\$62,392,000	\$56,630,000	\$119,022,000
Annual Economic Activity	\$86,819,000	\$77,512,000	\$164,331,000

TOTAL ANNUAL ECONOMIC IMPACTS FOR STUDY AIRPORTS

Total annual economic impact estimates for all study airports are summarized in the table below. The totals include direct impacts, identified through study research, and indirect/induced impacts estimated using the IMPLAN model. Economic Activity is the sum of Payroll and Spending for all economic impact categories.

	EMPLOYMENT	PAYROLL	SPENDING	ECONOMIC ACTIVITY
Airport Management	388	\$14,218,200	\$44,351,010	\$58,569,210
Airport Business Tenants	9,112	\$435,541,470	\$700,166,810	\$1,135,708,280
Capital Investment	843	\$32,040,830	\$89,244,960	\$121,285,790
General Aviation Visitors	1,366	\$42,976,000	\$57,143,000	\$100,119,000
Commercial Visitors	1,438	\$45,309,000	\$119,022,000	\$164,331,000
Total	13,147	\$570,085,500	\$1,009,927,780	\$1,580,013,280

TOTAL ANNUAL ECONOMIC IMPACTS FOR STUDY AIRPORTS

ANNUAL EMPLOYMENT 13,147	ANNUAL PAYROLL \$570.1 M	ANNUAL SPENDING \$1.0 B	ANNUAL ECONOMIC ACTIVITY \$1.6 B
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TAX REVENUE IMPACTS

The study airports are responsible for supporting certain activities that contribute to state and local tax revenues. For this analysis, state and local tax revenues estimates are based on employment, payroll, and spending associated with each of the direct impact categories. Tax rates in the analysis reflect Minnesota and local tax rates specific to each airport. Taxes considered in this analysis include:

- Sales tax collected on airport and business tenant expenditures needed to run an airport or an aviation-related business
- Sales tax paid on the taxable portion of materials/goods needed to implement capital projects
- Sales tax paid by all commercial and general aviation visitors arriving by air
- Sales tax paid by employees whose jobs are airport-supported or supported by visitor spending
- State income tax paid by employees whose jobs are airport-supported or supported by visitor spending

As the tables below reflect, when combined, annual sales tax and state income tax revenues from study airports are estimated at \$66.3 million.

ESTIMATED ANNUAL STATE AND LOCAL SALES TAX REVENUE FROM DIRECT SPENDING

SALES TAXES GENERATED BY:	SALES TAX
Airport Management	\$1,362,220
Airport Business Tenants	\$34,005,010
Airport Capital Investments	\$3,225,450
Commercial Visitor Spending	\$7,831,630
General Aviation Visitor Spending	\$4,425,580
Airport-Supported Employees*	\$3,804,950
Commercial/General Aviation Visitor-Supported Employees	\$758,950
Total Estimated Sales Tax	\$55,413,790

* Each airport-supported employee uses a portion of their income to purchase goods and other subject to a sales tax.

ESTIMATED ANNUAL STATE INCOME TAX REVENUE FROM DIRECT PAYROLL

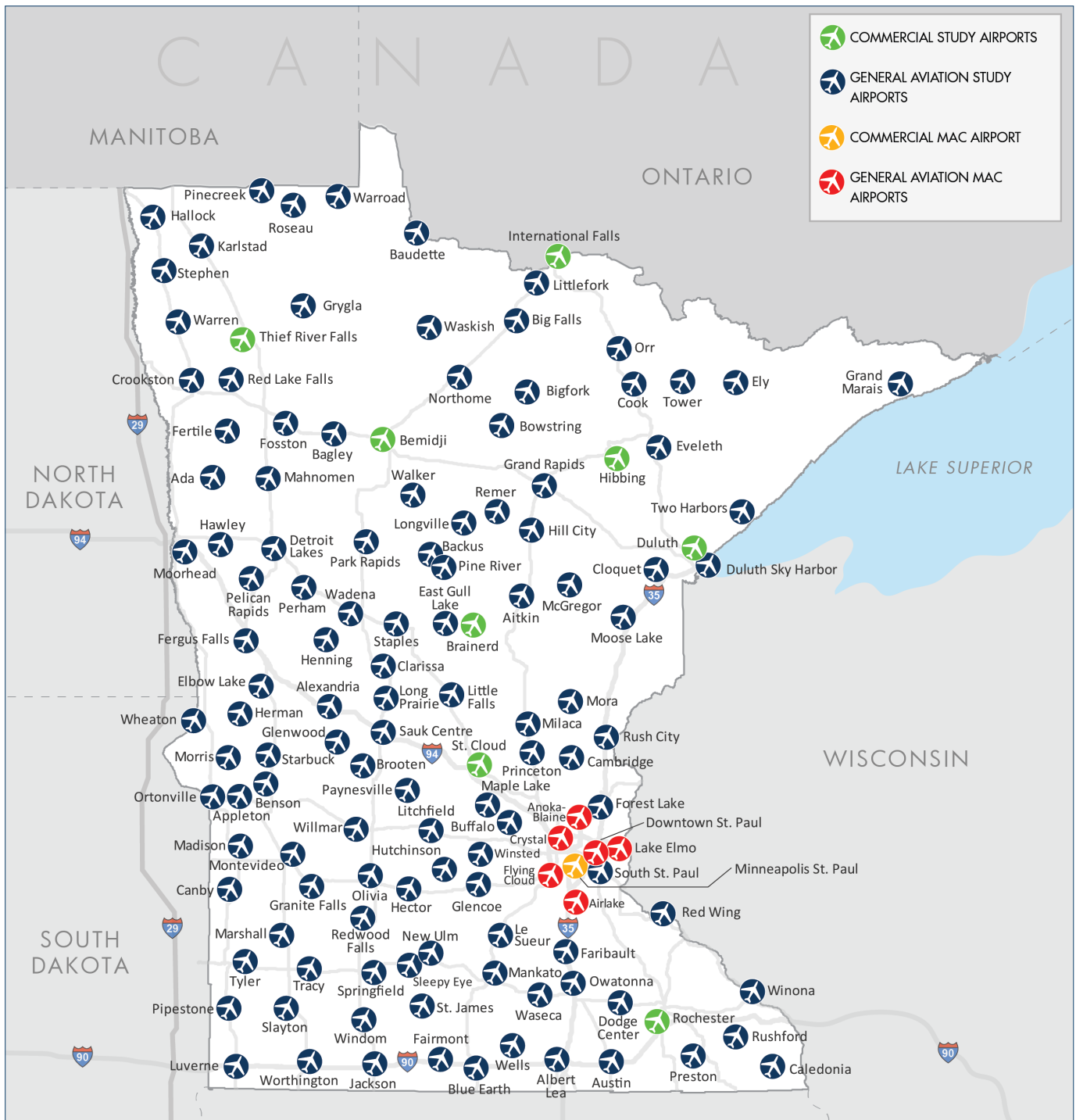
AVIATION-RELATED EMPLOYEES STATE INCOME TAX	STATE INCOME TAX
Airport Employees	\$288,510
Business Tenant Employees	\$9,038,610
Employees Supported by Capital Investment	\$623,960
Employees Supported by Commercial Visitor Spending	\$471,950
Employees Supported by General Aviation Visitor Spending	\$459,920
Total Estimated State Income Tax	\$10,882,980

InterVISTAS conducted a separate study using the IMPLAN model to estimate state and local tax revenues for the MAC airports. State and local tax revenues for the MAC airports are reported as follows: \$546 million for Minneapolis-St. Paul International and over \$11 million for the six reliever airports. Due to the different methodology, specific local and state tax revenue inputs and outputs for MAC airports are not available.

INDIVIDUAL AIRPORT ANNUAL ECONOMIC IMPACTS

The total annual economic impact for each of Minnesota's 133 public general aviation and commercial service airports, along with each airport's state and local tax revenues, are presented on the following pages. Each airport's total annual economic impact is a sum of its estimated payroll and spending impacts. Tax revenues are a standalone category showing other benefits associated with public airports. Reported annual economic impacts for each airport are a snapshot in time with results representing conditions and activities at the airport when the study was conducted.

MINNESOTA PUBLIC AIRPORTS



ASSOCIATED CITY	AIRPORT NAME	TOTAL EMPLOYMENT	TOTAL PAYROLL	TOTAL SPENDING	TOTAL ANNUAL ECONOMIC ACTIVITY	TOTAL STATE AND LOCAL TAX REVENUES
COMMERCIAL STUDY AIRPORTS						
Bemidji	Bemidji Regional Airport	459	\$19,995,550	\$37,732,000	\$57,727,550	\$2,442,770
Brainerd	Brainerd Lakes Regional Airport	275	\$12,186,490	\$18,779,680	\$30,966,170	\$1,267,980
Duluth	Duluth International Airport	6,230	\$277,319,300	\$483,257,380	\$760,576,680	\$32,852,810
Hibbing	Range Regional Airport	263	\$10,719,820	\$25,386,580	\$36,106,400	\$1,426,080
International Falls	Falls International Airport	180	\$6,401,320	\$21,887,870	\$28,289,190	\$984,680
Rochester	Rochester International Airport	1,624	\$63,097,460	\$126,754,960	\$189,852,420	\$9,242,680
St. Cloud	St. Cloud Regional Airport	395	\$16,187,470	\$32,993,740	\$49,181,210	\$1,914,760
Thief River Falls	Thief River Falls Regional Airport	93	\$3,529,800	\$5,471,360	\$9,001,160	\$355,810
GENERAL AVIATION STUDY AIRPORTS						
Ada	Norman County/Ada/Twin Valley Airport	1	\$25,500	\$76,080	\$101,580	\$3,260
Aitkin	Aitkin Municipal Airport - Steve Kurtz Field	14	\$531,720	\$1,098,460	\$1,630,180	\$55,390
Albert Lea	Albert Lea Municipal Airport	80	\$2,486,560	\$3,633,320	\$6,119,880	\$276,420
Alexandria	Alexandria Municipal Airport - Chandler Field	140	\$5,984,880	\$8,568,480	\$14,553,360	\$569,570
Appleton	Appleton Municipal Airport	23	\$1,080,660	\$1,724,230	\$2,804,890	\$103,890
Austin	Austin Municipal Airport	47	\$3,820,850	\$4,979,150	\$8,800,000	\$386,720
Backus	Backus Municipal Airport	1	\$28,700	\$126,630	\$155,330	\$4,350
Bagley	Bagley Municipal Airport	3	\$72,820	\$164,360	\$237,180	\$7,580
Baudette	Baudette International Airport	17	\$586,070	\$1,152,290	\$1,738,360	\$62,600
Benson	Benson Municipal Airport - Veterans Field	11	\$576,360	\$1,198,060	\$1,774,420	\$64,460
Big Falls	Big Falls Municipal Airport	<1	\$4,880	\$10,550	\$15,430	\$480
Bigfork	Bigfork Municipal Airport	1	\$34,830	\$81,300	\$116,130	\$3,070
Blue Earth	Blue Earth Municipal Airport	13	\$569,510	\$1,168,560	\$1,738,070	\$57,960
Bowstring	Bowstring Airport	2	\$58,790	\$137,670	\$196,460	\$6,300
Brooten	Brooten Municipal Airport/John O. Bohmer Field	9	\$346,630	\$328,280	\$674,910	\$23,490
Buffalo	Buffalo Municipal Airport	59	\$1,995,160	\$3,353,690	\$5,348,850	\$208,030
Caledonia	Houston County Airport	10	\$435,700	\$685,300	\$1,121,000	\$37,100
Cambridge	Cambridge Municipal Airport	14	\$528,740	\$752,840	\$1,281,580	\$47,960
Canby	Canby Municipal Airport - Myers Field	18	\$773,960	\$1,645,390	\$2,419,350	\$80,400
Clarissa	Clarissa Municipal Airport	<1	\$12,300	\$12,660	\$24,960	\$790
Cloquet	Cloquet-Carlton County Airport	23	\$924,820	\$1,157,700	\$2,082,520	\$81,390
Cook	Cook Municipal Airport	4	\$117,370	\$284,550	\$401,920	\$12,910
Crookston	Crookston Municipal Airport - Kirkwood Field	39	\$1,430,630	\$2,248,650	\$3,679,280	\$145,680
Detroit Lakes	Detroit Lakes Municipal Airport	53	\$1,871,840	\$3,702,140	\$5,573,980	\$217,650
Dodge Center	Dodge Center Municipal Airport	12	\$567,260	\$968,610	\$1,535,870	\$57,800
Duluth	Duluth Sky Harbor Airport	52	\$2,360,730	\$2,780,830	\$5,141,560	\$199,810

ASSOCIATED CITY	AIRPORT NAME	TOTAL EMPLOYMENT	TOTAL PAYROLL	TOTAL SPENDING	TOTAL ANNUAL ECONOMIC ACTIVITY	TOTAL STATE AND LOCAL TAX REVENUES
East Gull Lake	East Gull Lake Airport	2	\$56,420	\$62,560	\$118,980	\$3,680
Elbow Lake	Elbow Lake Municipal Airport -Pride of the Prairie	32	\$950,220	\$1,652,510	\$2,602,730	\$88,860
Ely	Ely Municipal Airport	51	\$1,761,600	\$3,720,190	\$5,481,790	\$183,210
Eveleth	Eveleth-Virginia Municipal Airport	59	\$1,024,980	\$2,217,110	\$3,242,090	\$108,330
Fairmont	Fairmont Municipal Airport	30	\$1,144,290	\$2,764,630	\$3,908,920	\$148,500
Faribault	Faribault Municipal Airport-Liz Wall Strohfus Field	72	\$2,962,750	\$3,661,940	\$6,624,690	\$242,590
Fergus Falls	Fergus Falls Municipal Airport-Einar Mickelson Field	42	\$1,733,770	\$4,619,270	\$6,353,040	\$279,440
Fertile	Fertile Municipal Airport	2	\$62,500	\$93,460	\$155,960	\$4,970
Forest Lake	Forest Lake Airport	31	\$1,093,290	\$1,906,460	\$2,999,750	\$109,750
Fosston	Fosston Municipal Airport - Anderson Field	7	\$372,980	\$731,870	\$1,104,850	\$41,470
Glencoe	Glencoe Municipal Airport - Vernon Perschau Field	14	\$511,250	\$1,222,350	\$1,733,600	\$56,520
Glenwood	Glenwood Municipal Airport	26	\$1,082,270	\$1,153,970	\$2,236,240	\$75,800
Grand Marais	Grand Marais-Cook County Airport	35	\$941,380	\$2,266,800	\$3,208,180	\$122,650
Grand Rapids	Grand Rapids/Itasca Co-Gordon Newstrom Field	57	\$2,229,040	\$3,337,950	\$5,566,990	\$207,880
Granite Falls	Granite Falls Muni-Lenzen-Roe-Fagan Memorial Field	61	\$2,537,950	\$3,931,370	\$6,469,320	\$212,450
Grygla	Grygla Municipal Airport- Mel Wilkens Field	1	\$19,450	\$239,880	\$259,330	\$7,100
Hallock	Hallock Municipal Airport	23	\$601,540	\$2,399,760	\$3,001,300	\$103,190
Hawley	Hawley Municipal Airport	10	\$314,020	\$853,090	\$1,167,110	\$40,380
Hector	Hector Municipal Airport	14	\$802,810	\$1,070,970	\$1,873,780	\$65,760
Henning	Henning Municipal Airport	2	\$99,920	\$148,940	\$248,860	\$8,350
Herman	Herman Municipal Airport	4	\$166,920	\$428,560	\$595,480	\$22,560
Hill City	Hill City-Quadna Mountain Airport	1	\$38,710	\$38,940	\$77,650	\$2,050
Hutchinson	Hutchinson Municipal Airport - Butler Field	43	\$1,937,170	\$3,657,830	\$5,595,000	\$223,390
Jackson	Jackson Municipal Airport	25	\$850,020	\$1,409,310	\$2,259,330	\$91,050
Karlstad	Karlstad Municipal Airport	<1	\$18,990	\$81,460	\$100,450	\$2,770
Le Sueur	Le Sueur Municipal Airport	52	\$2,024,910	\$3,296,380	\$5,321,290	\$189,790
Litchfield	Litchfield Municipal Airport	17	\$574,990	\$1,273,860	\$1,848,850	\$69,420
Little Falls	Little Falls-Morrison County Airport	10	\$370,440	\$1,042,710	\$1,413,150	\$55,930
Littlefork	Littlefork Municipal - Hanover Airport	2	\$44,450	\$17,890	\$62,340	\$1,430
Long Prairie	Long Prairie Municipal Airport - Todd Field	7	\$224,430	\$647,810	\$872,240	\$29,800
Longville	Longville Municipal Airport	5	\$180,330	\$494,140	\$674,470	\$22,660
Luverne	Luverne Municipal Airport - Quentin Aanenson Field	52	\$2,058,920	\$4,355,410	\$6,414,330	\$233,850
Madison	Lac Qui Parle County Airport - Bud Frye Field	12	\$684,510	\$1,549,140	\$2,233,650	\$83,770
Mahnomen	Mahnomen County Airport	9	\$298,070	\$633,220	\$931,290	\$29,750
Mankato	Mankato Regional Airport - Sohler Field	221	\$11,424,510	\$13,346,550	\$24,771,060	\$1,011,190

ASSOCIATED CITY	AIRPORT NAME	TOTAL EMPLOYMENT	TOTAL PAYROLL	TOTAL SPENDING	TOTAL ANNUAL ECONOMIC ACTIVITY	TOTAL STATE AND LOCAL TAX REVENUES
Maple Lake	Maple Lake Municipal - Bill Mavencamp Sr. Field	3	\$84,260	\$203,590	\$287,850	\$10,060
Marshall	Southwest Minnesota Regional-Marshall/Ryan Field	108	\$5,670,920	\$12,981,280	\$18,652,200	\$810,060
McGregor	McGregor - Isedor Iverson Airport	2	\$52,870	\$80,000	\$132,870	\$3,670
Milaca	Milaca Municipal Airport	3	\$116,360	\$228,720	\$345,080	\$12,240
Montevideo	Montevideo-Chippewa County Airport	13	\$466,420	\$790,550	\$1,256,970	\$47,360
Moorhead	Moorhead Municipal Airport	51	\$2,129,800	\$3,211,420	\$5,341,220	\$215,090
Moose Lake	Moose Lake-Carlton County Airport	14	\$507,790	\$943,990	\$1,451,780	\$57,840
Mora	Mora Municipal Airport	27	\$879,150	\$1,282,270	\$2,161,420	\$74,740
Morris	Morris Municipal Airport - Charlie Schmidt Field	16	\$622,780	\$1,558,000	\$2,180,780	\$69,950
New Ulm	New Ulm Municipal Airport	45	\$1,649,330	\$4,006,810	\$5,656,140	\$221,100
Northome	Northome Municipal Airport	3	\$61,400	\$79,590	\$140,990	\$3,510
Olivia	Olivia Regional Airport	21	\$1,236,690	\$3,477,240	\$4,713,930	\$150,940
Orr	Orr Regional Airport	2	\$79,280	\$305,680	\$384,960	\$12,080
Ortonville	Ortonville Municipal Airport - Martinson Field	3	\$114,260	\$319,430	\$433,690	\$13,740
Owatonna	Owatonna Degner Regional Airport	71	\$2,307,660	\$3,557,190	\$5,864,850	\$243,580
Park Rapids	Park Rapids Municipal Airport - Konshok Field	119	\$4,654,400	\$8,497,920	\$13,152,320	\$509,600
Paynesville	Paynesville Municipal Airport	5	\$210,140	\$344,320	\$554,460	\$19,040
Pelican Rapids	Pelican Rapids Municipal Airport - Lyon's Field	2	\$44,690	\$139,680	\$184,370	\$5,910
Perham	Perham Municipal Airport	4	\$129,740	\$225,890	\$355,630	\$12,690
Pine River	Pine River Regional Airport	12	\$475,820	\$703,560	\$1,179,380	\$41,750
Pinetree	Pinetree-Pinetree Border Airport	1	\$33,380	\$79,340	\$112,720	\$3,810
Pipestone	Pipestone Municipal Airport	21	\$813,950	\$1,400,470	\$2,214,420	\$82,240
Preston	Preston - Fillmore County Airport	9	\$312,990	\$542,310	\$855,300	\$31,190
Princeton	Princeton Municipal Airport	81	\$2,960,540	\$3,235,110	\$6,195,650	\$209,830
Red Lake Falls	Red Lake Falls Municipal Airport	31	\$1,564,340	\$3,201,330	\$4,765,670	\$179,800
Red Wing	Red Wing Regional Airport	216	\$7,323,400	\$11,322,530	\$18,645,930	\$645,990
Redwood Falls	Redwood Falls Municipal Airport	68	\$4,411,540	\$3,731,420	\$8,142,960	\$302,290
Remer	Remer Municipal Airport	1	\$25,320	\$25,470	\$50,790	\$1,310
Roseau	Roseau Municipal Airport - Rudy Billberg Field	10	\$351,270	\$719,450	\$1,070,720	\$36,310
Rush City	Rush City Regional Airport	34	\$1,374,000	\$2,142,060	\$3,516,060	\$124,910
Rushford	Rushford Municipal Airport - Robert W. Bunke Field	11	\$456,290	\$971,180	\$1,427,470	\$54,410
Sauk Centre	Sauk Centre Municipal Airport	16	\$661,780	\$1,216,930	\$1,878,710	\$64,700
Slayton	Slayton Municipal Airport	1	\$55,170	\$127,820	\$182,990	\$5,150
Sleepy Eye	Sleepy Eye Municipal Airport	6	\$305,040	\$670,450	\$975,490	\$38,240
South St. Paul	South St. Paul Municipal Airport - Fleming Field	507	\$31,105,980	\$34,081,880	\$65,187,860	\$2,409,520

ASSOCIATED CITY	AIRPORT NAME	TOTAL EMPLOYMENT	TOTAL PAYROLL	TOTAL SPENDING	TOTAL ANNUAL ECONOMIC ACTIVITY	TOTAL STATE AND LOCAL TAX REVENUES
Springfield	Springfield Municipal Airport	2	\$78,510	\$228,800	\$307,310	\$10,550
St. James	St. James Municipal Airport	8	\$280,120	\$1,307,230	\$1,587,350	\$48,830
Staples	Staples Municipal Airport	16	\$716,290	\$981,140	\$1,697,430	\$62,220
Starbuck	Starbuck Municipal Airport	3	\$66,320	\$207,080	\$273,400	\$7,830
Stephen	Stephen Municipal Airport	20	\$1,086,140	\$2,235,170	\$3,321,310	\$126,390
Tower	Tower Municipal Airport	13	\$388,250	\$521,790	\$910,040	\$32,120
Tracy	Tracy Municipal Airport	6	\$175,020	\$293,980	\$469,000	\$15,860
Two Harbors	Two Harbors Municipal - Richard B. Helgeson Field	11	\$316,160	\$381,800	\$697,960	\$27,370
Tyler	Tyler Municipal Airport	4	\$121,420	\$284,000	\$405,420	\$13,510
Wadena	Wadena Municipal Airport	5	\$197,030	\$562,100	\$759,130	\$26,050
Walker	Walker Municipal Airport	8	\$275,160	\$509,730	\$784,890	\$33,120
Warren	Warren Municipal Airport	12	\$705,390	\$1,133,250	\$1,838,640	\$67,200
Warroad	Warroad International Memorial Airport	44	\$2,725,130	\$7,296,140	\$10,021,270	\$387,810
Waseca	Waseca Municipal Airport	25	\$811,070	\$1,518,950	\$2,330,020	\$85,490
Waskish	Waskish Municipal Airport	6	\$288,040	\$575,780	\$863,820	\$34,410
Wells	Wells Municipal Airport	11	\$445,830	\$888,940	\$1,334,770	\$48,040
Wheaton	Wheaton Municipal Airport	19	\$751,420	\$1,313,080	\$2,064,500	\$69,830
Willmar	Willmar Municipal Airport - John L. Rice Field	87	\$4,341,150	\$7,574,040	\$11,915,190	\$484,940
Windom	Windom Municipal Airport	14	\$607,390	\$1,742,960	\$2,350,350	\$85,200
Winona	Winona Municipal Airport - Max Conrad Field	73	\$3,653,550	\$7,144,140	\$10,797,690	\$407,460
Winsted	Winsted Municipal Airport	2	\$68,110	\$231,860	\$299,970	\$8,950
Worthington	Worthington Municipal Airport	25	\$874,970	\$1,959,300	\$2,834,270	\$106,020
STUDY AIRPORT TOTALS		13,147	\$570.1 million	\$1.0 billion	\$1.6 billion	\$66.3 million
MAC AIRPORTS						
Minneapolis	Airlake Airport	38	\$3,500,000	\$9,700,000	\$13,200,000	\$57,000
Minneapolis	Anoka County/Blaine Airport - Janes Field	460	\$22,000,000	\$96,000,000	\$118,000,000	\$1,000,000
Minneapolis	Crystal Airport	250	\$14,000,000	\$57,000,000	\$71,000,000	\$700,000
Minneapolis	Flying Cloud Airport	1,040	\$52,000,000	\$117,000,000	\$229,000,000	\$2,600,000
Minneapolis	Minneapolis-Saint Paul International Airport	77,800	\$3,700,000,000	\$12,200,000,000	\$15,900,000,000	\$546,000,000
St. Paul	Lake Elmo Airport	42	\$2,300,000	\$10,500,000	\$12,800,000	\$49,000
St. Paul	St. Paul Downtown Airport - Holman Field	1,260	\$70,000,000	\$242,000,000	\$312,000,000	\$6,700,000
MAC AIRPORT TOTALS		80,890	\$3.9 billion	\$12.8 billion	\$16.6 billion	\$557 million
TOTAL ALL PUBLIC AIRPORTS (STUDY & MAC)		94,037	\$4.4 billion	\$13.8 billion	\$18.2 billion	*See note below

Source: Aviation, MAC

*Note: Results include the 126 commercial service and general aviation study airports plus the 7 MAC airports. Reporting of the impacts for the MAC has been adjusted to be consistent with the impact measurement terminology used in the state study. In the MAC study, payroll was classified as earnings and annual economic activity as economic output. Different methodologies were used in the state and MAC studies to estimate tax impacts; the two results for this particular impact measure are not considered additive.

BUSINESS USE OF AVIATION AND JOBS THAT BENEFIT FROM AIRPORT USE

Minnesota businesses rely on airports to improve their efficiency. The study identified countless examples of employers in communities around the state that rely on aviation as a business tool. Businesses use aviation to tie together offices in multiple domestic and international locations, oversee large-scale development projects, expand their market areas, reduce employee travel time, provide convenient access for their customers, and ship and receive products and supplies.

The Minnesota Department of Employment and Economic Development (DEED) indicates that accessibility to transportation infrastructure, such as public airports, is a very important factor to where businesses locate in Minnesota. Many businesses would not be able to compete domestically and in some instances globally without access to a nearby airport.

Minnesota airports promote greater efficiency throughout numerous sectors of the economy and help increase productivity for non-aviation industries. The IMPLAN model estimates that 55,740 additional jobs throughout Minnesota gain efficiencies by using Minnesota airports. These 55,740 jobs (2% of Minnesota employment) are in addition to the previously identified 94,037 (3% of Minnesota employment) airport-supported jobs.

SAMPLE OF BUSINESSES THAT USE STUDY AIRPORTS

- GLACIAL GRAINS SPIRITS
- ANI PHARMACEUTICALS
- RELCO
- TEAM INDUSTRIES
- BENSON TECHNICAL WORKS (BTW)
- OUTLAND ENERGY SERVICES
- DIGI-KEY
- CIRRUS AIRCRAFT
- PAGE 1 PRINTERS
- SAGEGLASS
- DAIKIN INDUSTRIES
- FARIBAULT FOODS
- BERGQUIST
- 3M
- HORMEL
- SENECA FOODS
- FORM-A-FEED
- SCHWAN'S
- RAPAT
- MATTRACKS
- MILLERBERND
- CAMBRIA
- CLEVELAND CLIFFS
- NORTHLAND PROCESS PIPING
- MINNESOTA RUBBER AND PLASTICS
- AGCO
- TAYLOR
- SUPERIOR INDUSTRIES
- FASTENAL
- TRW AUTOMOTIVE
- RED WING SHOES
- MARVIN WINDOWS AND DOORS
- DAKTRONICS
- COBORN'S
- MCNEILUS TRUCK
- ARCTIC CAT

More information on businesses using study airports can be found in Individual Airport Reports at [MnDOT.gov/aero](https://mn.gov/aero)

CASE STUDIES

Airports support many different uses and users. Six different case studies document the importance of airports to businesses, air cargo, aerial firefighting, agriculture, and medical/healthcare services. The excerpts below from two of the case studies illustrate how the medical/healthcare and agricultural industries rely on airports. All six case studies can be found in their entirety in Chapter 11 of the Technical Report.

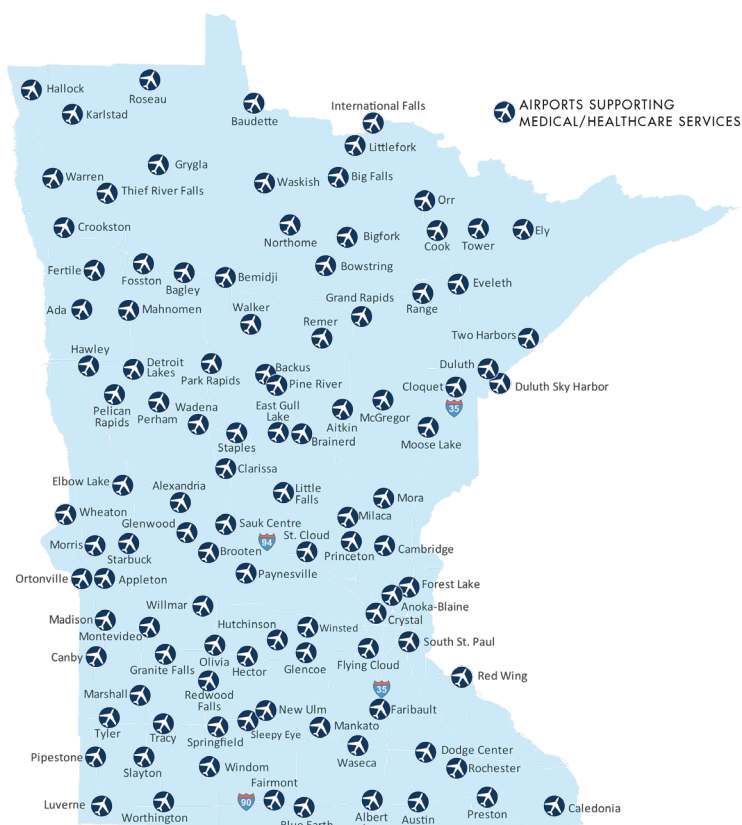
MEDICAL/HEALTHCARE SERVICES

Minnesota's hospitals, rural health clinics, and emergency medical services (EMS) providers are strong economic engines. The airport system is a critical component to efficiently deliver services that support search and rescue, patient transfers, tissue and organ transport, physician access to small hospitals in need of specialists, and medical-related express packages and air freight.

AGRICULTURAL SUPPORT SERVICES

Agriculture accounts for 51 percent of the state's land area and contributes \$17 billion annually to the state economy. Many agricultural producers benefit from aerial applicators that depend on access to public airports. Aerial applicators spray fields to prevent crop disease, which helps support higher crop yields. Many public airports have aerial applicators that are based at the airport, while others have aerial applicators that operate on a transient or visiting basis. Either way, the airports that support aerial applicators provide an important service to agricultural interests throughout the state.

AIRPORTS THAT SUPPORT HEALTHCARE AND MEDICAL SERVICES



AIRPORTS THAT SUPPORT AERIAL APPLICATORS

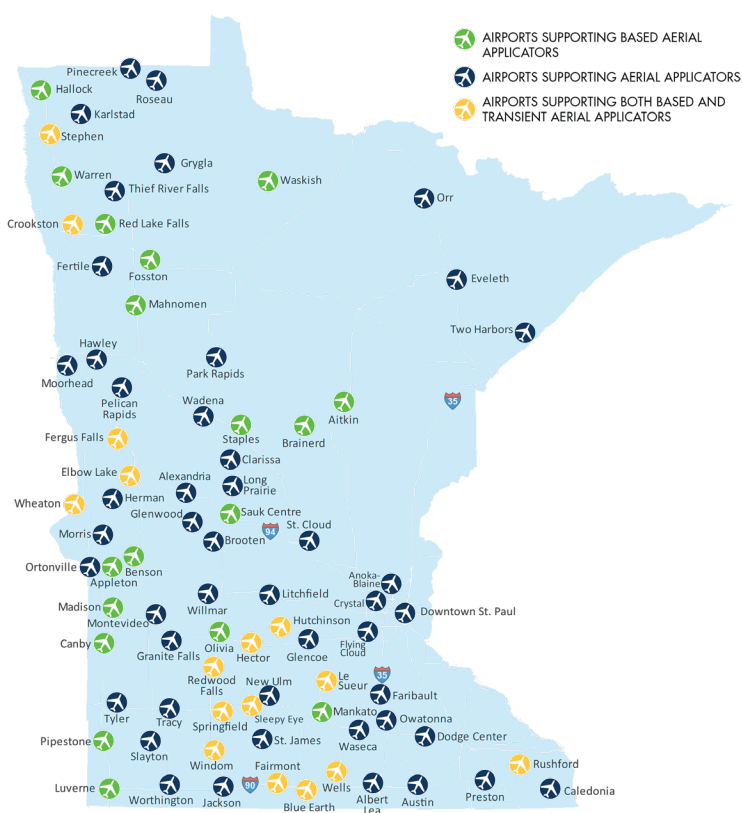




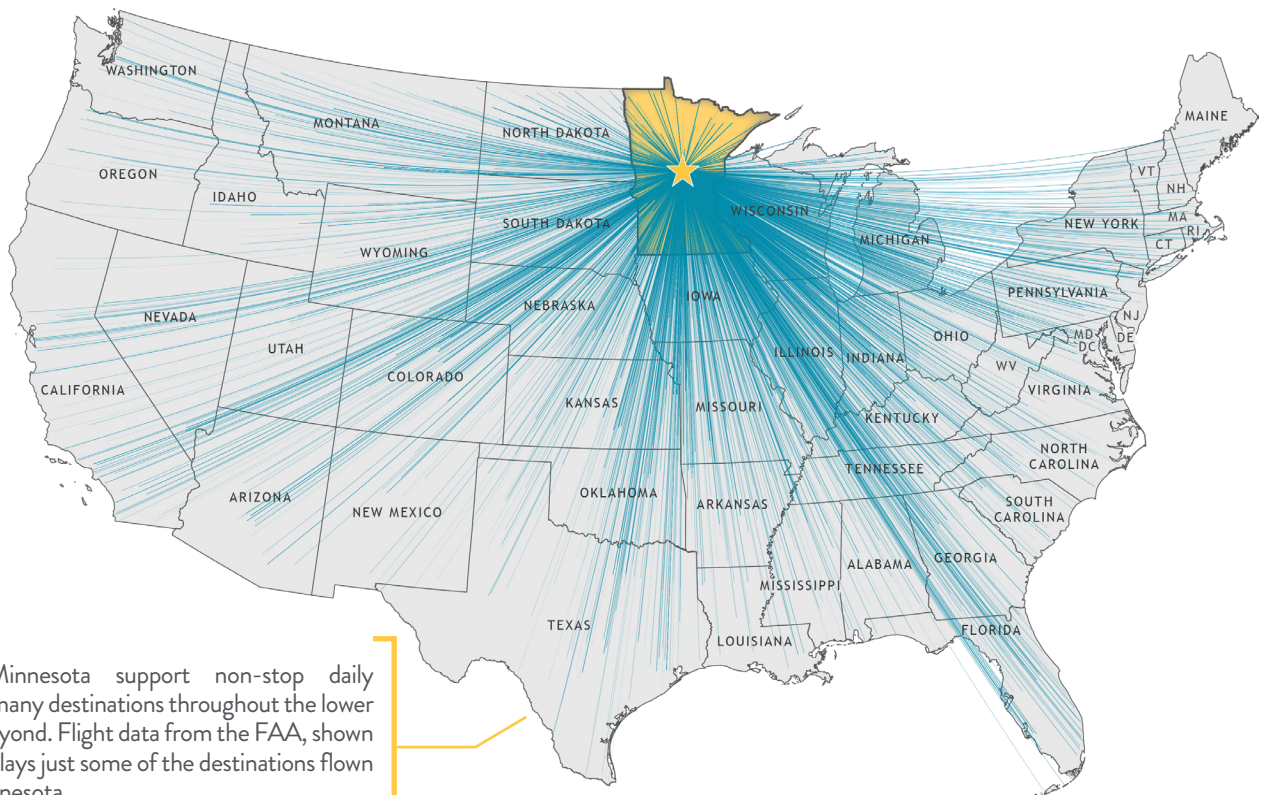
Photo Credit: Ryan Frank

STUDY CONCLUSIONS

Minnesota's 133 public airports provide significant annual economic impacts, and help support approximately 94,000 jobs. There are another 55,740 jobs that benefit from improved efficiencies that public airports provide. Study airports generate approximately \$66.3 million in annual state and local tax revenues, while MAC airports generate an estimated at \$557 million in state and local tax revenues. Statewide, total annual payroll and spending for all public airports supports an estimated \$18.2 billion in annual economic activity --this represents almost 5% of Minnesota's Gross State Product of \$368 billion.

Aviation enables Minnesota-based businesses to expand their market areas and facilitate easy access for customers and suppliers who need to visit our state. On a daily basis, commercial and general aviation flights departing Minnesota airports connect our businesses and residents to hundreds of domestic and international destinations. These flights are commerce in action, and Minnesota airports are a key contributor to the state economy.

MINNESOTA AIRPORTS CAN TAKE YOU ANYWHERE!



Airports in Minnesota support non-stop daily connectivity to many destinations throughout the lower 48 states and beyond. Flight data from the FAA, shown on this map, displays just some of the destinations flown to and from Minnesota.

MINNESOTA

Statewide Airport Economic Impact Study

MNDOT.GOV/AERO

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