

Airports and economic development

The local general aviation airport is fast becoming the principle access route from a community to the nation and world.

As an important part of our statewide transportation network, local airports such as Marshfield Municipal Airport/Roy Shwery Field play a critical role in fostering business growth and economic development.

Convenient access to air transportation allows businesses to quickly move key personnel from one site to another, saving valuable time and increasing their productivity.

A recent study by the Wisconsin Department of Transportation (WisDOT) shows that between 1997 and 2001, over 85% of new or expanded manufacturing businesses were located within 15 miles of an airport capable of handling corporate jets. These manufacturers provided 34,064 jobs for Wisconsin residents.

The local airport also provides facilities for emergency medical flights, law enforcement, agricultural spraying, pilot training, recreational flying and many other important community services.



Communities that are readily accessible by air transportation are at a competitive advantage and may realize economic and quality of life benefits that can affect every citizen.



Airport location

Located in the northwest corner of Wood County, Marshfield Municipal Airport/Roy Shwery Field is 164 miles from Minneapolis/St. Paul, 184 miles from Milwaukee and 138 miles from Madison.

The City of Marshfield is home to Marshfield Clinic, St. Joseph's Hospital (the city's two largest employers), and the Marshfield Medical Research Foundation. Together, they offer Wisconsin's most comprehensive health care system with 660 physicians in more than 80 medical specialties serving patients in Marshfield and 39 regional centers throughout central, western and northern Wisconsin.

Marshfield also offers excellent continuing educational resources at either the University of Wisconsin - Marshfield/Wood County or Mid-State Technical College, numerous recreational opportunities, a diverse retail sector, and strong economic growth.

Manufacturing (10%), services (15%), and retail trade (8%) represent the largest employment sectors in Wood County.

To encourage economic growth in the area, the City of Marshfield developed the state's first airport business park in 1976, "Marshfield Air Business Park." Located adjacent to the airport



on WIS 13, the business park provides easy access for local businesses to all transportation modes and serves as an excellent example of compatible land use planning around airports.

Marshfield profile

Area population

City of Marshfield – 18,468

Wood County – 75,555

Marathon County – 126,743

Service area (35 miles) – 128,750

Wood County employment – 45,821

Per capita income - \$22,702

Median household income - \$39,857

Major employers

- Marshfield Clinic
- St. Joseph's Hospital
- Roehl Transport
- Marshfield Door Systems
- Wick Building Systems
- DeBoer, Inc.
- Land O' Lakes
- V&H, Inc.
- Figi's, Inc.

Sources: U.S. Census Bureau and the WI Department of Administration.

Marshfield Municipal Airport/Roy Shwery Field is a key ingredient to the region's economic growth and quality of life. Located in the southwest corner of the city, the airport is home to 45 single and multi-engine aircraft and recorded over 18,000 operations in 2000.

Owned and operated by the City of Marshfield, Roy Shwery Field is a public-use airport and is classified as a Transport/Corporate airport in the *Wisconsin State Airport System Plan: 2020*. Transport/Corporate airports are designed to

serve high-performance aircraft, such as large business jets, under all weather conditions.

Marshfield Municipal Airport is located on 552 acres and has two paved runways, one access taxiway, public apron areas, a fixed base operator area and hangar areas.

The airport is home to Duffy's Aircraft Sales and Leasing, Inc. which provides airport management services, aircraft fueling, flight training, full service aircraft maintenance, rental, charter, sales and leasing.

The primary runway (16/34) is 5,000 feet long by 100 feet wide and is constructed of bituminous concrete. It has a Medium Intensity Runway Lighting system (MIRLs) with a Medium Intensity Approach Lighting system (MALSR) on Runway 34, Runway End Identifier Lights (REILs) on Runway 16, and a Visual Approach Slope Indicator (VASI) on Runway 16 and 34.



The crosswind runway (04/22) is 3,600 feet in length with a width of 100 feet and is constructed of bituminous concrete. Lighting aids on this runway include MIRLs and REILs on Runway 04. Instrument approaches to the airport include a Simplified Directional Facility to Runway 34, Non-directional Radio Beacon approach to Runway 04 and 16 and a Very High Frequency Omnidirectional Radio Range.



Marshfield Clinic has a full time emergency helicopter based at the clinic that uses the airport on a nearly daily basis.

Other medical facilities that frequently use Marshfield Municipal Airport include UW Hospital and Clinics, Madison (MedFlight); Gunderson Lutheran Hospital, La Crosse (Medlink); Luke One Medical Helicopter, Superior; Life Flight Medical Helicopter, Duluth, MN; and Theda Clark Medical Center, Neenah (Theda Star).

The economic impact of Marshfield Municipal Airport/Roy Shwery Field

WisDOT's Bureau of Aeronautics recently completed a study of the contribution of Marshfield Municipal Airport/Roy Shwery Field to the local and state economy.

The economic impact of Marshfield Municipal Airport/Roy Shwery Field is the *economic output (sales), employment and wage income* that can be attributed directly and indirectly to the Airport.

Economic impacts measure the importance of an airport as a business in terms of the employment that it supports and the goods and services that it consumes.

The results of the study indicate that Marshfield Municipal Airport/Roy Shwery Field provided \$3.84 million in economic output, supported 77 jobs and contributed \$1.61 million in wage income to the local and state economy in 2000.

The methodology used to estimate the contribution of the airport to the local and state economy is the WisDOT Airport Benefit-Cost (ABC) System.

The WisDOT ABC System is a Microsoft Access database application for evaluating the economic impact of airports and airport improvement projects.

ABC Airport Benefit-Cost System

The WisDOT ABC System was developed based on guidelines established by the FAA in the document "*Estimating the Regional Economic Significance of Airports*", U.S. DOT, September 1992.

The WisDOT ABC System uses data from the following three primary sources:

- Airport activity and business survey data obtained from airport management and the fixed base operator (FBO).
- Data from the U.S. Bureau of Economic Analysis on industry employment, wages and sales.
- Regional economic multipliers obtained from the industry transaction tables in the Impact Analysis for Planning Model (IMPLAN) computer model.

IMPLAN is a computer model, produced for WisDOT by the Minnesota IMPLAN Group, Inc., that estimates purchases and sales between various sectors of the Wisconsin economy.

The model can produce statewide results or focus on specific counties and groups of counties. Multipliers for two sectors were used in the analysis.

The regional economic multipliers used in this study for the Air Transportation sector are 1.3 (sales), 1.37 (employment) and 1.32 (wages).

Multipliers used for the Retail/Hotel/Restaurant sector are 1.29 (sales), 1.14 (employment) and 1.27 (wages).

The economic contribution of Marshfield Municipal Airport/Roy Shwery Field is comprised of three types of impacts: *Direct*,



Economic Impact

Marshfield Municipal Airport/Roy Shwery Field (MFI)
Marshfield, WI

Indirect (Visitor Spending) and Induced (Multiplier Effect). Each of these impacts is expressed in terms of their effect on economic output (sales), employment (jobs) and wage income.

Direct impacts

The direct effect of Marshfield Municipal Airport on the local economy reflects the jobs, payroll and sales associated with activity at the airport. This includes the management and operation of the airport as well as the businesses providing aircraft maintenance, fueling, storage, rental, charter sales and leasing activities.

In 2000, the direct effect of the airport on the local economy totaled 20 employees, a payroll of over \$551,400 and \$1.4 million in economic output.

Indirect impacts

The visitor spending, or indirect effect of the airport, is the amount of money flowing into the local economy from air passengers who reside outside the county. These visitors spend money on lodging, meals, ground transportation and retail purchases within the county.

The \$900,000 of visitor spending (sales) in 2000 supported 30 additional jobs with a payroll of \$402,000.

Induced impacts

The multiplier or induced effect represents the downstream effect of airport operation and visitor spending throughout the local and state economy.

This impact includes the activity of suppliers to the businesses at the airport (including electricity, office supplies, aircraft parts, fuel for resale) and suppliers to the businesses serving visitors (including sheets, towels, wholesale food, etc.). It also includes the activity generated by the airport workers re-spending

their income (clothes, groceries, entertainment, and other necessities).



Employment (FTE jobs)

Direct	20
Indirect (visitor spending)	30
Induced (multiplier effect)	12

Total employment impact 62 Jobs

Wage income/payroll

Direct	\$0.55 million
Indirect (visitor spending)	\$0.4 million
Induced (multiplier effect)	\$0.29 million

Total payroll impact \$1.24 million

Economic Output/Sales

Direct	\$ 1.4 million
Indirect (Visitor Spending)	\$ 0.9 million
Induced (Multiplier Effect)	\$ 0.7 million

Total Economic Output \$3 million

Other benefits



Economic Impact

Marshfield Municipal Airport/Roy Shwery Field (MFI) Marshfield, WI

The study also measured the public revenue generated at both the local and state level from airport and aviation related fees.

In 2000, Marshfield Municipal Airport generated \$39,301 in revenue for the city from fuel flowage fees, aircraft storage, agricultural leases and local taxes on privately owned property.

The airport also generated \$13,165 in state revenue from general aviation fuel taxes and aircraft registration fees for a total of \$52,466 in direct local and state public revenue.

Public revenue – direct impact

City of Marshfield	State	Total
\$39,301	\$13,165	\$52,466

The activity at Marshfield Municipal Airport/Roy Shwery Field in 2000 also generated an additional \$840,000 in sales, 15 jobs and \$370,000 in payroll to the state economy.

When combined with the local impact, the total contribution of Marshfield Municipal Airport/Roy Shwery Field to the local and state economy in 2000 is \$3.84 million in sales, 77 jobs and \$1.61 million in wage income.

Contribution of Marshfield Municipal Airport to the local and state economy

FTE jobs	Wage income/ payroll	Economic output/sales
77	\$1.61 million	\$3.84 million

Local economic impact

The results of the study indicate that Marshfield Municipal Airport/Roy Shwery Field provided \$3 million in economic output, supported 62 jobs and contributed \$1.24 million in wage income to the local economy in 2000.

Contribution of Marshfield Municipal Airport to the local economy

FTE jobs	Wage income/ payroll	Economic output/sales
62	\$1.24 million	\$3 million



Local and state economic impact

