



2017

MICHIGAN

AVIATION SYSTEM  
PLAN





# 2017 MASP Adoption

**The 2017 Michigan Aviation System Plan was adopted by the Michigan Aeronautics Commission in July of 2017**

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The Michigan Aviation System Plan (MASP) 2017 is the result of a collaborative team effort from a diverse group of aviation, planning, and economic professionals. The update of our state aviation system plan was conducted by the consulting firm of Mead & Hunt, with the assistance of their subconsultants. Guidance and oversight of the study was provided by the MDOT Office of Aeronautics and the MDOT Bureau of Transportation Planning. The Steering Committee members also provided input and recommendations based on the perspectives of the various organizations that each of them represented. We acknowledge and thank the following individuals and organizations for their valued contributions to the development of this document:

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# Section 1: Introduction

## 1.0 Introduction

The Michigan Department of Transportation (MDOT), Office of Aeronautics (AERO) commissioned the 2017 Michigan Aviation System Plan (2017 MASP) to provide an update to the *Michigan Airport System Plan: Report 08* (MASP 2008), which was adopted by the Michigan Aeronautics Commission (MAC) in July of 2008. This study continues the analysis and methods established during the 2008 plan update.

The 2017 MASP focuses on the public-use airports that when combined, generate more than two million aircraft operations annually. These airports range from the largest commercial service airport in the state, Detroit Metropolitan Wayne County Airport, to small General Aviation (GA) airports such as Home Acres Sky Ranch in Lake City. The study focuses its resources on those airports that have distinguished themselves as meeting one or more of the system goals, however, it should be recognized that there are more than 400 private and public-use aviation facilities throughout Michigan, 226 of which are airports open for public use as shown in **Table 1-1**. Michigan also has seven licensed heliports and one licensed seaplane base, all of which are open for public use. Through the results of the analysis of this study, 114 of the airports have been acknowledged as being critical to the system and are discussed further in this study and are listed in **Table 1-2** and shown in **Figure 1-1**.

The Great Lakes State covers a vast area of land and water. Within its borders are residents, businesses, and manufacturers who rely on aviation to connect to over 96,716 square miles of the state, and to the national and global aviation network. Air transportation access is also vital for visitors as thousands of tourists visit Michigan each year to experience the 3,288 miles of freshwater coastlines<sup>1</sup> and abundance of forested land for hunting, fishing, skiing, and other outdoor recreation. The geography of Michigan ranges from major urban cities to remote island locations and each airport serving this diverse geography has a significant, yet unique role within the state system.

This system plan explores the value and role of Michigan's airport network in providing access for all users to the larger air transportation network. Additionally, this plan serves as a resource for federal, state, and local stakeholders to maintain and enhance the system for continued use. Major components of the system plan are included in the following sections:

**Section 2:** Airport Roles

**Section 3:** MASP Issues & Considerations

**Section 4:** Forecasts

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<sup>1</sup> <http://www.michigan.gov/som/0,4669,7-192-26847-103397--,00.html>

**Section 5: System & Facility Development Goals****Section 6: Economic Impact****Table 1-1: Public-Use Airports by County 2017**

County	Publically Owned	Privately Owned	Total	County	Publically Owned	Privately Owned	Total
Alcona	1	1	2	Lake	1	0	1
Alger	2	0	2	Lapeer	1	0	1
Allegan	3	2	5	Leelanau	3	1	4
Alpena	1	0	1	Lenawee	1	5	6
Antrim	2	2	4	Livingston	1	4	5
Arenac	0	0	0	Luce	1	0	1
Baraga	0	0	0	Mackinac	4	0	4
Barry	1	0	1	Macomb	1	1	2
Bay	1	1	2	Manistee	1	0	1
Benzie	2	0	2	Marquette	1	2	3
Berrien	3	1	4	Mason	1	0	1
Branch	1	0	1	Mecosta	2	2	4
Calhoun	2	0	2	Menominee	1	0	1
Cass	1	0	1	Midland	1	0	1
Charlevoix	4	2	6	Missaukee	0	2	2
Cheboygan	2	2	4	Monroe	1	3	4
Chippewa	3	0	3	Montcalm	2	0	2
Clare	2	0	2	Montmorency	2	0	2
Clinton	2	9	11	Muskegon	1	0	1
Crawford	1*	0	1	Newaygo	2	0	2
Delta	1	0	1	Oakland	3	0	3
Dickinson	1	0	1	Oceana	1	0	1
Eaton	1	3	4	Ogemaw	1	0	1
Emmet	2	0	2	Ontonagon	1	0	1
Genesee	3	2	5	Osceola	1	1	2
Gladwin	1	1	2	Oscoda	2	1	3
Gogebic	1	0	1	Otsego	1	0	1
Grand Traverse	2	0	2	Ottawa	2	5	7
Gratiot	1	2	3	Presque Isle	2	0	2
Hillsdale	1	0	1	Roscommon	4	0	4
Houghton	1	1	2	Saginaw	3	2	5
Huron	2	2	4	St. Clair	1	9	10
Ingham	1	1	2	St. Joseph	2	0	2
Ionia	1	1	2	Sanilac	2	5	7
Iosco	2	1	3	Schoolcraft	1	0	1
Iron	2	0	2	Shiawassee	1	2	3
Isabella	2	2	4	Tuscola	1	1	2
Jackson	1	4	5	Van Buren	1	1	2
Kalamazoo	1	3	4	Washtenaw	1	3	4
Kalkaska	1	0	1	Wayne	5	0	5
Kent	3	2	5	Wexford	1	1	2
Keweenaw	0	0	0				
<i>Subtotals:</i>	65	45	110	<i>Subtotals:</i>	65	51	116
				<i>Total Public Airports: 130</i>			
				<i>Total Private Airports: 96</i>			
				<b>TOTAL: 226</b>			

Note: \*Grayling Army Airfield in Crawford County, MI is owned by the United States Army.

Source: MDOT AERO



Figure 1-1: 2017 MASP Study Airports (114)



Source: MDOT AERO

**Table 1-2: 2017 MASP Study Airports (114)**

Associated City	Facility Name	FAA Identifier
Adrian	Lenawee County Airport	ADG
Allegan	Padgham Field	35D
Alma	Gratiot Community Airport	AMN
Alpena	Alpena County Regional Airport	APN
Ann Arbor	Ann Arbor Municipal Airport	ARB
Atlanta	Atlanta Municipal Airport	Y93
Bad Axe	Huron County Memorial Airport	BAX
Baldwin	Baldwin Municipal Airport	7D3
Battle Creek	W. K. Kellogg Airport	BTL
Bay City	James Clements Municipal Airport	3CM
Beaver Island	Beaver Island Airport	SJX
Bellaire	Antrim County Airport	ACB
Benton Harbor	Southwest Michigan Regional Airport	BEH
Big Rapids	Roben-Hood Airport	RQB
Bois Blanc Island	Bois Blanc Island Airport	6Y1
Brighton	Brighton Field	45G
Cadillac	Wexford County Airport	CAD
Caro	Tuscola Area Airport	CFS
Charlevoix	Charlevoix Municipal Airport	CVX
Charlotte	Fitch H. Beach Airport	FPK
Cheboygan	Cheboygan County Airport	SLH
Clare	Clare Municipal Airport	48D
Coldwater	Branch County Memorial Airport	OEB
Detroit	Coleman A. Young Municipal Airport	DET
Detroit	Detroit Metropolitan Wayne County Airport	DTW
Detroit	Willow Run Airport	YIP
Detroit/Grosse Ile	Grosse Ile Municipal Airport	ONZ
Dowagiac	Dowagiac Municipal Airport	C91
Drummond Island	Drummond Island Airport	DRM
East Tawas	Iosco County Airport	6D9
Escanaba	Delta County Airport	ESC
Ewart	Ewart Municipal Airport	9C8
Flint	Bishop International Airport	FNT
Flushing	Dalton Airport	3DA
Frankenmuth	Wm 'Tiny' Zehnder Field	66G
Frankfort	Frankfort Dow Memorial Field	FKS
Fremont	Fremont Municipal Airport	FFX
Gaylord	Gaylord Regional Airport	GLR
Gladwin	Gladwin Zettel Memorial Airport	GDW
Grand Haven	Grand Haven Memorial Airpark	3GM
Grand Ledge	Abrams Municipal Airport	4D0
Grand Rapids	Gerald R. Ford International Airport	GRR
Grayling	Grayling Army Airfield	GOV
Greenville	Greenville Municipal Airport	6D6
Gregory	Richmond Field	69G
Hancock	Houghton County Memorial Airport	CMX
Harbor Springs	Harbor Springs Airport	MGN
Harsens Island	Harsens Island Airport	Z92
Hart/Shelby	Oceana County Airport	C04
Hastings	Hastings Airport	9D9
Hillsdale	Hillsdale Municipal Airport	JYM
Holland	West Michigan Regional Airport	BIV
Houghton Lake	Roscommon County, Blodgett Memorial Airport	HTL
Howell	Livingston County - Spencer J. Hardy Airport	OZW

**Table 1-2: 2017 MASP Study Airports (114)**

Associated City	Facility Name	FAA Identifier
Ionia	Ionia County Airport	Y70
Iron Mountain Kingsford	Ford Airport	IMT
Iron River	Stambaugh Airport	Y73
Ironwood	Gogebic-Iron County Airport	IWD
Jackson	Jackson County - Reynolds Field	JXN
Jenison	Riverview Airport	08C
Kalamazoo	Kalamazoo/Battle Creek International Airport	AZO
Lake City	Home Acres Sky Ranch	Y91
Lakeview	Lakeview Airport - Griffith Field	13C
Lambertville	Toledo Suburban Airport	DUH
Lansing	Capital Region International Airport	LAN
Lapeer	DuPont-Lapeer Airport	D95
Linden	Price's Airport	9G2
Ludington	Mason County Airport	LDM
Mackinac Island	Mackinac Island Airport	MCD
Manistee	Manistee County - Blacker Airport	MBL
Manistique	Schoolcraft County Airport	ISQ
Marine City	Marine City Airport	76G
Marlette	Marlette Township Airport	77G
Marquette	Sawyer International Airport	SAW
Marshall	Brooks Field Airport	RMV
Mason	Mason Jewett Field	TEW
Menominee	Menominee - Marinette Twin County Airport	MNM
Midland	Jack Barstow Airport	IKW
Mio	Oscoda County Dennis Kauffman Memorial Airport	51M
Monroe	Custer Airport	TTF
Mount Pleasant	Mount Pleasant Municipal Airport	MOP
Muskegon	Muskegon County Airport	MKG
New Hudson	Oakland Southwest Airport	Y47
Newberry	Luce County Airport	ERY
Niles	Jerry Tyler Memorial Airport	3TR
Northport	Woolsey Memorial Airport	5D5
Ontonagon	Ontonagon County - Schuster Field	OGM
Oscoda	Oscoda-Wurtsmith Airport	OSC
Owosso	Owosso Community Airport	RNP
Pellston	Pellston Regional Airport Of Emmet County	PLN
Pinconning	Gross Airport	52I
Plainwell	Plainwell Municipal Airport	61D
Plymouth	Canton-Plymouth Mettetal Airport	1D2
Pontiac	Oakland County International Airport	PTK
Port Huron	St Clair County International Airport	PHN
Ray	Ray Community Airport	57D
Rogers City	Presque Isle County Airport	PZQ
Romeo	Romeo State Airport	D98
Saginaw	MBS International Airport	MBS
Saginaw	Saginaw County H. W. Browne Airport	HYX
Saint Ignace	Mackinac County Airport	83D
Sandusky	Sandusky City Airport	Y83
Sault Ste. Marie	Chippewa County International Airport	CIU
Sault Ste. Marie	Sault Ste. Marie Municipal Airport/Sanderson Field	ANJ
South Haven	South Haven Area Regional Airport	LWA
Sparta	Paul C. Miller-Sparta Airport	8D4
Sturgis	Kirsch Municipal Airport	IRS
Three Rivers	Three Rivers Municipal, Dr. Haines Airport	HAI

**Table 1-2: 2017 MASP Study Airports (114)**

Associated City	Facility Name	FAA Identifier
Traverse City	Cherry Capital Airport	TVC
Troy	Oakland Troy Airport	VLL
Watervliet	Watervliet Municipal Airport	40C
West Branch	West Branch Community Airport	Y31
White Cloud	White Cloud Airport	42C
Zeeland	Ottawa Executive Airport	Z98

Source: MDOT AERO

## 1.1 Purpose of the MASP

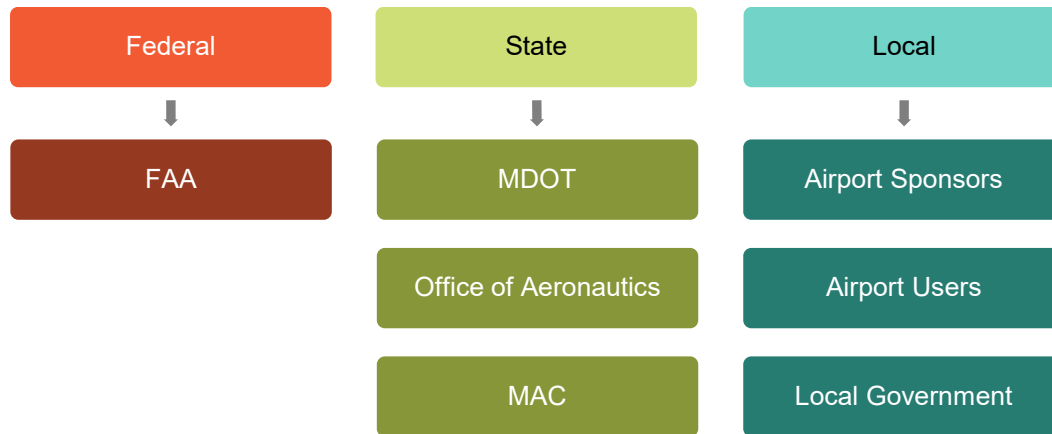
The purpose of this 2017 MASP is to help preserve the investment that has been made at Michigan's system airports, identify future development needs and opportunities, and plan accordingly for resource allocation. While a system plan typically spans a 20-year planning period, constant industry and economic changes necessitate periodic updates. As such, the MASP 2008 has been updated in 2017 to address industry trends that have affected aviation in the state, such as the economic recession of 2008 and commercial service modifications. System plans are an important tool used by stakeholders at the federal, state, and local levels to coordinate system-wide and airport-specific enhancements, shown in **Figure 1-2**.

At the federal level, system plans are required by the Federal Aviation Administration (FAA) as a condition of receiving federal funding through the Airport Improvement Program (AIP). The FAA uses the information contained in state system plans to predict and prepare for the resources needed to address aviation needs across the country. Additionally, the FAA can use system plans to help identify airports that may be qualified for inclusion in the *National Plan of Integrated Airport Systems* (NPIAS). Airports in the NPIAS are eligible for AIP funding. Currently 95 of Michigan's system airports are included in the NPIAS.

At the state level, the 2017 MASP provides guidance to MDOT AERO and the MAC for distribution of state funding to support individual airport development and growth.

At the local level, the 2017 MASP serves a variety of stakeholders, including local municipalities, airport sponsors, and airport users who reference the plan for guidance to achieve system goals and objectives. The 2017 MASP also provides airport-specific operational forecasts and recommendations that help airport sponsors plan for improvements to meet user needs.

**Figure 1-2: Role of Airport Stakeholders**



Source: Mead & Hunt

## 1.2 Importance of Aviation in the State

Residents, visitors, and businesses use commercial service and GA flights daily to transport people, goods, and services in, out, and around the state. Law enforcement, medical transporters, emergency responders, agricultural sprayers, and others also use aviation to conduct their operations. One of Michigan’s largest industries, tourism, is supported by commercial and general aviation. In 2014, Michigan hosted a record high 113.4 million visitors, which generated \$37.8 billion in total business sales, \$22.8 billion in traveler spending, and \$24.5 billion in tourism-related expenditures.<sup>2</sup> Commercial service and GA airports contribute to the access needed for tourists to reach their destinations.

### 1.2.1 Scheduled Air Service

Airports with scheduled air service are vital to Michigan’s air transportation system. Since they serve a variety of operations such as scheduled passenger service, corporate, international, and cargo, these airports help connect goods and the State’s nearly ten million residents to locations all over the world. The 18 airports with regularly scheduled air service are categorized as either commercial service or air carrier airports, as shown in **Table 1-3** and **Figure 1-3**. Commercial service airports enplane between 2,500 and 10,000 passengers annually and air carrier airports support more than 10,000 annual passenger enplanements. Airports without regularly scheduled air service, regardless of enplanements, are not air service airports for the purposes of the MASP.

<sup>2</sup> The Economic Impact of Travel in Michigan, Tourism Satellite Account Calendar Year 2014

**Table 1-3: Scheduled Air Service Airports in Michigan**

Associated City	Airport Name	FAA Identifier	Airport Type
Alpena	Alpena County Regional Airport	APN	Air Carrier
Charlevoix*	Charlevoix Municipal Airport	CVX	Commercial Service
Detroit	Detroit Metropolitan Wayne County Airport	DTW	Air Carrier
Escanaba	Delta County Airport	ESC	Air Carrier
Flint	Bishop International Airport	FNT	Air Carrier
Grand Rapids	Gerald R. Ford International Airport	GRR	Air Carrier
Hancock	Houghton County Memorial Airport	CMX	Air Carrier
Iron Mountain	Ford Airport	IMT	Air Carrier
Ironwood	Gogebic-Iron County Airport	IWD	Commercial Service
Kalamazoo	Kalamazoo/Battle Creek International Airport	AZO	Air Carrier
Lansing	Capital Region International Airport	LAN	Air Carrier
Manistee*	Manistee County- Blacker Airport	MBL	Commercial Service
Marquette	Sawyer International Airport	SAW	Air Carrier
Muskegon	Muskegon County Airport	MKG	Air Carrier
Pellston	Pellston Regional Airport of Emmet County	PLN	Air Carrier
Saginaw	MBS International Airport	MBS	Air Carrier
Sault Ste. Marie	Chippewa County International Airport	CIU	Air Carrier
Traverse City	Cherry Capital Airport	TVC	Air Carrier

Note: \*MBL and CVX service fluctuates

Source: MDOT AERO

**Figure 1-3: Scheduled Air Service Airports in Michigan**



\*MBL and CVX service fluctuates

Source: MDOT AERO



The 18 commercial service airports in Michigan provide important access to the commercial air transportation network serving the 100,000 square miles of Michigan. These 18 airports, dispersed throughout the lower and upper peninsulas, also provide non-stop service to a number of destinations, both domestic and international, a sample of which is provided in **Table 1-4**. Additionally, these airports provide access to a diverse number of airlines, both mainline carriers and low-cost carriers, which present the range of commercial air service providers. A sample of those are listed in **Table 1-5**. **Figure 1-4** illustrates the 60- and 90-minute drive time coverage of all 18 commercial service airports in Michigan and bordering state commercial service airports. Nearly every location within the state is within a 90 minute drive time or less of an airport offering commercial service.

**Table 1-4: Sampling of Domestic and International Non-Stop Destinations from Scheduled Air Service Airports in Michigan**

Domestic Destinations	International Destinations
Atlanta, GA	Amsterdam, Netherlands
Beaver Island, MI	Beijing, China
Boston, MA	Cancun, Mexico
Chicago, IL	Frankfurt, Germany
Denver, CO	London, United Kingdom
Houston, TX	Mexico City, Mexico
Los Angeles, CA	Montego Bay, Jamaica
Miami, FL	Monterrey, Mexico
Minneapolis, MN	Montreal, Canada
New Orleans, LA	Munich, Germany
New York, NY	Nagoya, Japan
Orlando, FL	Ottawa, Canada
Philadelphia, PA	Paris, France
Phoenix, AZ	Tokyo, Japan
San Diego, CA	Toronto, Canada
San Francisco, CA	Cancun, Mexico
Seattle, WA	Puerto Vallarta, Mexico
St. Louis, MO	Punta Cana, Dominican Republic

Note: Some service is seasonal. MBL and CVX service fluctuates.

Source: Airport and Airline websites as of August 2016

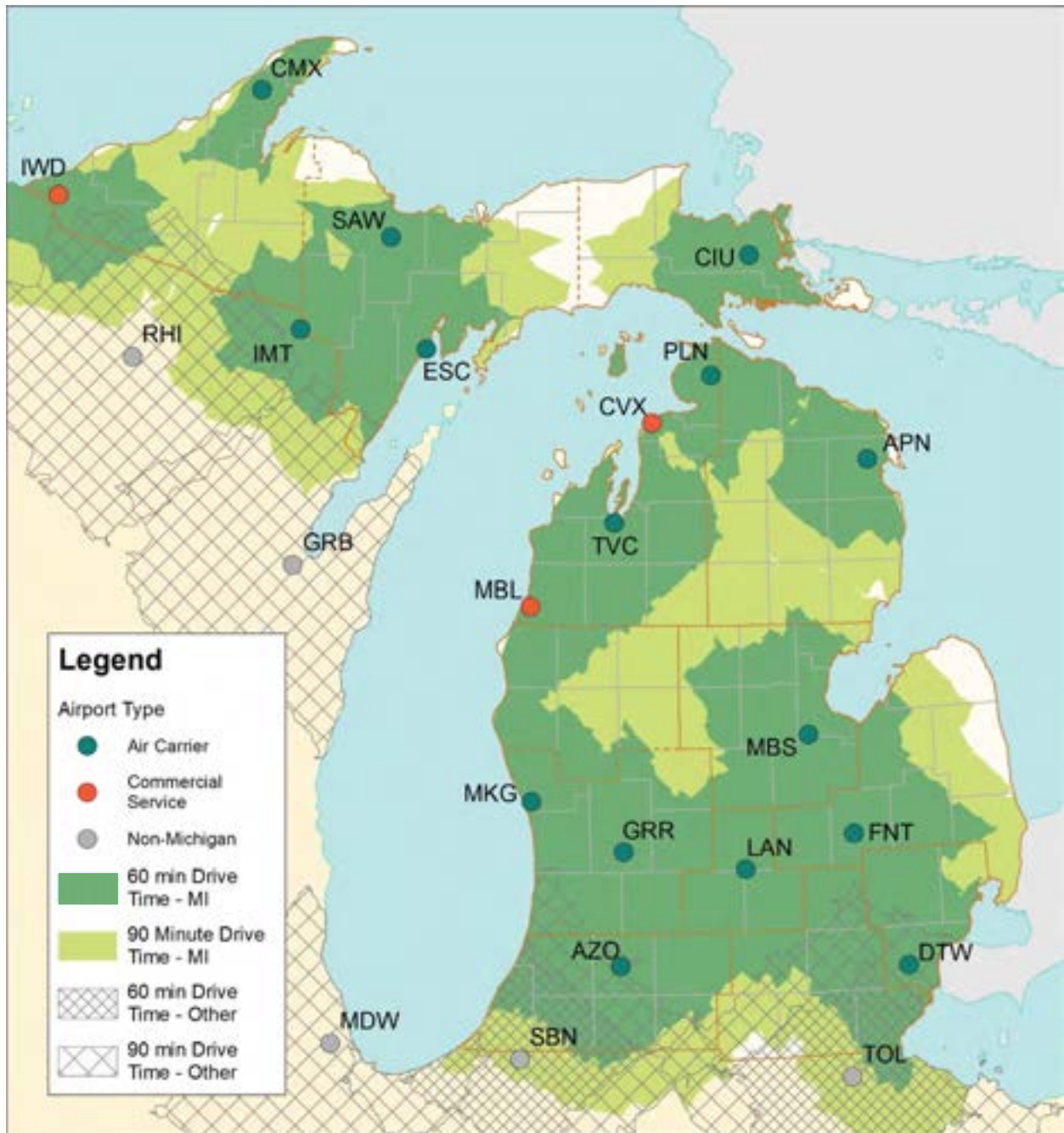
**Table 1-5: Airlines Servicing the State of Michigan**

Airlines	
Air Canada	JetBlue
Air Choice One	Lufthansa
Air France	North Country Sky
Alaska Airlines	Royal Jordanian
Allegiant Airlines	Spirit Airlines
American Airlines	Southwest Airlines
Delta Air Lines	United Airlines
Frontier	Virgin Atlantic
Island Airways	

Source: Airport and Airline websites as of August 2016



**Figure 1-4: Drive Time Coverage (60/90 Minutes) of Scheduled Air Service Airports**



Note: MBL and CVX service fluctuates

Source: MDOT AERO & Mead & Hunt

### 1.2.2 General Aviation

As noted in **Table 1-1**, there are 226 airports that are open for public use in the State that all serve the GA market, which is a critical element of the air transportation network. These airports (listed in **Table 1-6** and illustrated in **Figure 1-5**) provide air access to locations across the state that may not be served by commercial service carriers. GA is used by individuals to reach locations that would otherwise require a commercial flight and a lengthy drive, boat ride, etc. to reach their final destination. Businesses rely on GA to facilitate quick and efficient travel of personnel, minimize time away from work, provide dependable and flexible travel options to multiple destinations, and deliver goods on time. The GA system in Michigan supports a host of operations including, but not limited to:

- Agricultural spraying
- Emergency and medical operations
- Firefighting
- Flight training
- Aerial photography
- Coast guard and other military operations
- Remote access
- Personal travel
- Business aviation
- Cargo

**Table 1-6: All Public-Use Airports in Michigan**

Associated City	Facility Name	FAA Identifier
Adrian	Lenawee County Airport	ADG
Allegan	Padgham Field	35D
Alma	Gratiot Community Airport	AMN
Alpena	Alpena County Regional Airport	APN
Ann Arbor	Ann Arbor Municipal Airport	ARB
Atlanta	Atlanta Municipal Airport	Y93
Avoca	Avoca Airport	39G
Bad Axe	Engler Field	E53
Bad Axe	Huron County Memorial Airport	BAX
Baldwin	Baldwin Municipal Airport	7D3
Bannister	Shady Lawn Farms	4M4
Bath	University Airpark	41G
Battle Creek	W. K. Kellogg Airport	BTL
Bay City	James Clements Airport & S.P.B	3CM
Beaver Island	Beaver Island Airport	SJX
Beaver Island	Welke Airport	6Y8
Belding	Boulder Canyon	MI56
Bellaire	Antrim County Airport	ACB
Belleville	Belleville Airport	43G
Benton Harbor	Southwest Michigan Regional Airport	BEH
Berrien Springs	Andrews University Airpark	C20
Big Rapids	Roben - Hood Airport	RQB
Blissfield	Betz Airport	44G
Bois Blanc Island	Bois Blanc Island Airport	6Y1

**Table 1-6: All Public-Use Airports in Michigan**

Associated City	Facility Name	FAA Identifier
Boyne City	Boyne City Municipal	N98
Boyne Falls	Boyne Mountain Airport	BFA
Brighton	Brighton Airport	45G
Brooklyn	Shamrock Field	6G8
Brown City	Burgess	N/A
Cadillac	Wexford County Airport	CAD
Carleton	Buzz Wick Airport	W87
Caro	Tuscola Area Airport	CFS
Charlevoix	Charlevoix Municipal Airport	CVX
Charlotte	Fitch H. Beach Municipal	FPK
Charlotte	Wend Valley Airport	49G
Cheboygan	Cheboygan County Airport	SLH
Cheboygan	Hoffman's Black Mt Aerodrome	2M7
Chesaning	Howard Nixon Memorial Airport	50G
Clare	Clare Municipal Airport	48D
Clinton	Honey Acres	7N4
Clio	Alkay Airport	51G
Coldwater	Branch County Memorial	OEB
Corunna	Millstream Airpark	56M
Croswell	Arnold Field	55G
Crystal Falls	Iron County Airport	50D
Davison	Athelone Williams Memorial	6G0
Detroit	Coleman A. Young Municipal	DET
Detroit	Detroit Metro Wayne County	DTW
Detroit	Willow Run Airport	YIP
Detroit / Grosse Ile	Grosse Ile Municipal Airport	ONZ
Dewitt	Hoerner's Corners	MI10
Dewitt	Orban Air	N/A
Dexter	Cackleberry Airport	2E8
Dowagiac	Dowagiac Municipal Airport	C91
Drummond Island	Drummond Island Airport	DRM
Durand	Waite Field	29M
East Jordan	East Jordan City Airport	Y94
East Tawas	Iosco County Airport	6D9
Eastport	Torchport Airport	59M
Eaton Rapids	Skyway Estates Airport	60G
Elwell	Hamp Skyport	68R
Emmett	Sharpe's Strip	2E2
Empire	Empire Airport	Y87
Escanaba	Delta County Airport	ESC
Ewart	Ewart Municipal Airport	9C8
Flint	Bishop Int'l Airport	FNT
Flushing	Dalton Airport	3DA
Fowlerville	Maple Grove Airport	65G
Frankenmuth	Wm ""Tiny"" Zehnder Field	66G
Frankfort	Dow Memorial	FKS
Fremont	Fremont Municipal Airport	FFX
Fruitport	Flying - A - Ranch	39Z
Gaylord	Gaylord Regional Airport	GLR
Gaylord	Lakes Of The North	4Y4
Gladwin	Gladwin Zettel Memorial	GDW
Gladwin	Sugar Springs Airpark	5M6
Grand Haven	Memorial Airpark	3GM

**Table 1-6: All Public-Use Airports in Michigan**

Associated City	Facility Name	FAA Identifier
Grand Ledge	Abrams Municipal Airport	4D0
Grand Marais	Grand Marais Airport	Y98
Grand Rapids	Gerald R. Ford International Airport	GRR
Grayling	Grayling Army Airfield	GOV
Greenville	Greenville Municipal Airport	6D6
Gregory	Richmond Field	69G
Hale	Field Of Dreams	H80
Hancock	Houghton County Memorial	CMX
Harbor Springs	Harbor Springs Municipal Airport	MGN
Harrietta	Eagles Landing	4Y9
Harrison	Clare County Airport	80D
Harrisville	Harrisville City Airport	5Y0
Harsens Island	Harsens Island Airport	Z92
Hart/Shelby	Oceana County Airport	C04
Hastings	Hastings City / Barry County Airport	9D9
Hessel	Albert J. Lindberg Airport	5Y1
Hillman	Hillman Airport	Y95
Hillsdale	Hillsdale Municipal Airport	JYM
Holland	Park Township Airport	HLM
Holland	West Michigan Regional Airport	BIV
Houghton Lake	Roscommon County, Blodgett Memorial Airport	HTL
Houghton Lake Heights	Houghton Lake State Airport	5Y2
Howell	Livingston County-Spencer J. Hardy	OZW
Howell	Raether	4Y1
Indian River	Calvin Campbell Airport	Y65
Interlochen	Green Lake Township Airport	Y88
Ionia	Ionia County Airport	Y70
Iron Mountain Kingsford	Ford Airport	IMT
Iron River	Stambaugh Airport	Y73
Ironwood	Gogebic Iron County Airport	IWD
Ishpeming	Edward F. Johnson Airport	M61
Jackson	Jackson County - Reynolds Field	JXN
Jenison	Riverview Airport	08C
Kalamazoo	Kalamazoo/Battle Creek Int'l	AZO
Kalamazoo	Newman's Airport	4N0
Kalkaska	Kalkaska Airport	Y89
Kent City	Wilderness Airpark	24M
Laingsburg	Dennis Farms	15W
Lake City	Home Acres Sky Ranch	Y91
Lake Isabella	Cal Brewer Memorial	D15
Lakeview	Lakeview - Griffith Field	13C
Lambertville	Toledo Suburban Airport	DUH
Lansing	Capital Region Int'l	LAN
Lapeer	DuPont - Lapeer Airport	D95
Lewiston	Eagle II	8M8
Lexington	Flugplatz	7MI
Lincoln	Milwrick Flying "M"	3L7
Linden	Price's Airport	9G2
Lowell	Lowell City Airport	24C
Ludington	Mason County Airport	LDM
Luzerne	Lost Creek Airport	5Y4
Mackinac Island	Mackinac Island Airport	MCD
Mancelona	Mancelona Municipal Airport	D90

**Table 1-6: All Public-Use Airports in Michigan**

Associated City	Facility Name	FAA Identifier
Manchester	Rossettie Airport	75G
Manistee	Manistee County - Blacker	MBL
Manistique	Schoolcraft County Airport	ISQ
Marine City	Marine City Airport	76G
Marlette	Marlette Township Airport	77G
Marquette	Sawyer International	SAW
Marshall	Brooks Field	RMV
Mason	Mason Jewett Field	TEW
Mecosta	Canadian Lakes Airport	OC5
Mecosta	Mecosta - Morton Airport	27C
Menominee	Menominee - Marinette Twin County Airport	MNM
Midland	Jack Barstow Airport	IKW
Mio	Oscoda County Dennis Kauffman Mem Airport	51M
Monroe	Monroe Custer Airport	TTF
Moorestown	Moorestown Airpark	6Y0
Mount Pleasant	Mt. Pleasant Municipal Airport	MOP
Munising	Hanley Field	5Y7
Muskegon	Muskegon County Airport	MKG
Napoleon	Napoleon Airport	3NP
Napoleon	VanWagnen Airport	6H4
Napoleon	Wolf Lake Airport	26W
New Hudson	Oakland / Southwest Airport	Y47
Newberry	Luce County Airport	ERY
Niles	Jerry Tyler Memorial Airport	3TR
North Fox Island	North Fox Island	6Y3
Northport	Woolsey Memorial Airport	5D5
Nunica	Hat Field	5N7
Nunica	Jablonski Airport	33C
Onaway	Leo E. Goetz County Airport	Y96
Ontonagon	Ontonagon County Airport - Schuster Field	OGM
Oscoda	Oscoda - Wurtsmith Airport	OSC
Owosso	Owosso Community Airport	RNP
Parchment	Triple H Airport	2H4
Paw	Almena Airport	2C5
Pellston	Pellston Regional Airport Of Emmet County	PLN
Petersburg	Gradolph Field	88G
Pinconning	Gross Airport	52I
Plainwell	Plainwell Municipal	61D
Plymouth	Canton - Plymouth - Mettetal Airport	1D2
Pontiac	Oakland County International Airport	PTK
Port Austin	Grindstone Air Harbor	29C
Port Huron	St. Clair County International Airport	PHN
Pullman	Walle Airfield	M86
Ray	Ray Community Airport	57D
Reed City	Nartron Field	RCT
Reese	Bauer Field	N/A
Richmond	Robertson Field	MI99
Rock	Van Effen Field	6Y4
Rockford	Wells Airport	35C
Rogers City	Presque Isle County / Rogers City Airport	PZQ
Romeo	Romeo State Airport	D98
Roscommon	Roscommon Conservation Airport	3RC
Saginaw	M B S International Airport	MBS

**Table 1-6: All Public-Use Airports in Michigan**

Associated City	Facility Name	FAA Identifier
Saginaw	Saginaw County H. W. Browne Airport	HYX
Saint Charles	Oakwood Field	N/A
Saint Clair	David's Landing	5Y5
Saint Helen	Saint Helen Airport	6Y6
Saint Ignace	Mackinac County Airport	83D
Saint Johns	Glowacki Airport	97G
Saint Johns	Schiffer Acres	3S5
Saint Johns	Shady Lane	N/A
Saint Johns	Tripp Creek Airport	39T
Sandusky	Cowley Field	96G
Sandusky	Sandusky City Airport	Y83
Sault Ste. Marie	Chippewa County Int'l Airport	CIU
Sault Ste. Marie	Sault Ste. Marie Muni - Sanderson Airport	ANJ
Schoolcraft	Prairie Ronde Airport	P97
Sebewaing	Sebewaing Township Airport	98G
Sidnaw	Prickett Grooms Field	6Y9
Smiths Creek	Johnson Field	11G
South Haven	South Haven Area Regional	LWA
Sparta	Paul C. Miller - Sparta Airport	8D4
Stanwood	Cain Field	38C
Sturgis	Kirsch Municipal Airport	IRS
Sunfield	Hiram Cure Airfield	C43
Tecumseh	Al Meyers Airport	3TE
Tecumseh	Merillat International Airport	34G
Tecumseh	Tecumseh Mills Airport	22T
Thompsonville	Thompsonville Airport	7Y2
Three Rivers	Three Rivers Muni, Dr. Haines	HAI
Topinabee	Pbeaaye Airport	Y30
Traverse City	Cherry Capital Airport	TVC
Traverse City	Lake Ann Airway Estates	4M0
Troy	Oakland / Troy Airport	VLL
Watervliet	Watervliet Municipal Airport	40C
Wayland	Calkins Field	41C
Weidman	Ojibwa Airport	D11
West Branch	West Branch Community Airport	Y31
Westphalia	Forest Hill	3F5
White Cloud	White Cloud Airport	42C
Williamston	Maidens Airport	89Y
Winn	Woodruff Lake Airport	53W
Yale	Gavagan Field	48G
Yale	Para Field	4Y8
Yale	Yale Airport	D20
Zeeland	Ottawa Executive Airport	Z98

Source: MDOT AERO



Figure 1-5: All Public-Use Airports in Michigan

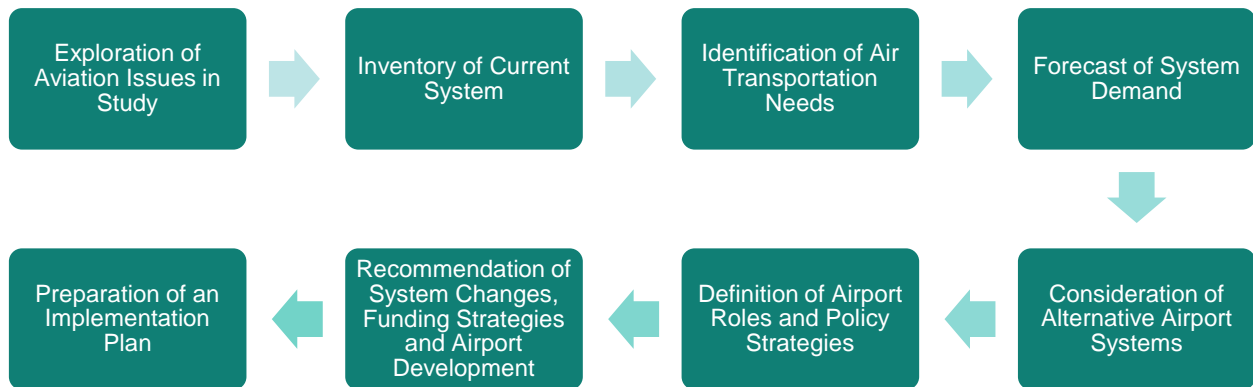


Source: MDOT AERO

### 1.3 System Planning Process

The planning process is guided by FAA Advisory Circular (AC) 150/5070-7 *The Airport System Planning Process* (see **Figure 1-6**). While it is necessary for system plans to include key elements from the AC, it is also important that these plans are tailored to focus on key statewide impacts and the needs of specific system users. These can differ considerably from state to state depending upon major industries and geographic location. Therefore, throughout this document, the emphasis is on key industries in Michigan like tourism, automobile manufacturing, and other key factors.

**Figure 1-6: System Planning Study Process**



Source: Based on FAA AC 150/5070-7

### 1.4 Summary

The aviation system in Michigan plays a crucial role in the state's transportation system and helps transport people and goods in a safe, timely, and efficient manner. The system also helps support the national, state, and local economies. The 2017 MASP acts as a guide to prioritize and coordinate funding and development needs for airports and facilities in Michigan's aviation system. This system plan provides the information needed for the continual evolution of Michigan's aviation system in a coordinated and effective manner.



## Section 2: Airport Roles

### 2.0 Introduction

Each airport in Michigan is unique in the types of users it serves, the facilities and services offered, and its location. As such, Michigan's system airports are classified using a two-part system to better define their roles by Airport Reference Codes and tiers, both of which are discussed in the following sections.

### 2.1 Airport Reference Codes (ARCs) and Goals

The Federal Aviation Administration (FAA) uses ARCs to classify airports by the operational and physical characteristics of the most demanding aircraft intended to operate at an airport. The ARC is composed of two components – the aircraft approach category (AAC) of the most demanding aircraft, and the airplane design group (ADG) of the aircraft (see **Tables 2-1** and **2-2**).

**Table 2-1: Aircraft Approach Category (AAC)**

AAC	Approach Speed
A	Approach speed less than 91 knots
B	Approach speed 91 knots or more but less than 121 knots
C	Approach speed 121 knots or more but less than 141 knots
D	Approach speed 141 knots or more but less than 166 knots
E	Approach speed 166 knots or more

Source: FAA Advisory Circular (AC) 150/5300-13A *Airport Design*

**Table 2-2: Airplane Design Group (ADG)**

ADG	Tail Height	Wingspan
I	Less than 20 feet	Less than 49 feet
II	20 – 30 feet	49 – 79 feet
III	30 – 45 feet	79 – 118 feet
IV	45 – 60 feet	118 – 171 feet
V	60 – 66 feet	171 – 214 feet
VI	66 – 80 feet	214 – 262 feet

Source: FAA Advisory Circular (AC) 150/5300-13A *Airport Design*

The airports in Michigan's system are diverse; they serve different types of communities, are used for different purposes and subsequently, are of differing sizes and activity levels. The ARC is an indicator of what type of activity can occur at a particular airport. Therefore, the development goals are aligned with airport ARCs.

An example of the type of aircraft accommodated by each ARC is shown in **Table 2-3**. As the table demonstrates, airports with an ARC of A-I or B-I are likely to see only small general aviation (GA) traffic and serve more rural areas or provide additional capacity for urban areas. In contrast, airports with ARCs of C-II or greater may have significant commercial airline operations and be the primary airport in their region.

**Table 2-3: Airport Reference Code (ARC) Aircraft Examples**

ARC	Description	Sample Aircraft
A-I	Light singles and twins	Beechcraft Bonanza Cessna 172 Cirrus SR22 Piper Cherokee
B-I	Medium piston twin aircraft Small turboprops and business jets	Beechcraft Baron 58 Cessna Citation CJ1 Cessna 421 Piper Navajo
B-II	Medium turboprops and business jets	Beechcraft King Air 200 Beechcraft 1900 Cessna Citation CJ2/XLS/Sovereign Dassault Falcon 20
C-II	Medium/large business and regional Jets	Bombardier Challenger 300 Canadair CRJ-200/700 Cessna Citation X Embraer E135/140/145
C-III	Large regional and business jets Narrow-body airliners	Airbus A320 Boeing 737 Canadair CRJ-705/900 Embraer 170/175/190/195
C-IV/V D-IV/V	Heavy and wide-body airliners	Airbus A330 Airbus A340 Boeing 747 Boeing 777

Source: FAA Advisory Circular (AC) 150/5300-13A *Airport Design*

## 2.2 Facility Development Goals Based on ARCs

Facility development goals reflect an airport's role in Michigan's aviation system. They are not requirements or justification; rather they serve as a guide to airports, along with local, state, and federal aviation agencies, in identifying deficiencies in the state's aviation system. The Michigan Aviation System Plan (MASP) uses ARCs to determine what the facility development goals are for system airports. The ARC assigned to an airport as part of the MASP study is independent of the existing FAA design ARC. Airport development goals in the MASP range from A-I to C-II. This does not indicate that airports with actual, FAA-recognized ARCs higher than C-II are not included in the MASP. These airports should continue to develop in accordance with their individual airport needs as identified in their airport planning studies and documents. However, for state system planning purposes, only one of four MASP ARCs are assigned. The process of assigning MASP ARCs is presented in **Section 5** of this report. **Table 2-4** provides the specific facility goals established by the Michigan Department of Transportation (MDOT) Office of Aeronautics (AERO) for each MASP ARC.

**Table 2-4: Michigan Airport Development Goals by MASP ARC**

Facility Goal	Airport Development Item	MASP ARC			
		A-I	B-I	B-II	C-II*
Primary Runway System	Length (feet)	2,500	3,500	4,300	5,000*
	Width (feet)	100	60	75	100*
	Surface Type	Turf	Paved	Paved	Paved
	Primary Taxiway System	None	Full Parallel if 20,000+ ops		Full Parallel
Lighting and Visual Aids	Runway Lighting System	Markers	MIRL	MIRL	HIRL
	PAPI*	No	Yes	Yes	Yes
	REIL*	No	Yes	Yes	Yes
	MALSR*	No	No	No	Yes
	Rotating Beacon	No	Yes	Yes	Yes
	Lighted Wind Indicator	No	Yes	Yes	Yes
	Segmented Circle	No	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms	No	Yes	Yes	Yes
	Fuel	No	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes	Yes
	Available Staff	Yes	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Visual	Non-Precision	Non-Precision	Precision
	Weather Reporting (AWOS*)	Preferred	Preferred	Yes	Yes
	Weather Briefing Access	Preferred	Preferred	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes	Yes
Landside Access	Public/Private Transportation	No	No	Yes	Yes

Notes: Tier 3 airport minimum development standards are defined in the Michigan Aeronautics Commission General Rules for licensed airports.

Runway length goals shown in the table are subject to FAA/AERO justification determination.

For A-I airports with paved runways, the standard width is 60 feet.

Airports having a VASI\* instead of a PAPI\* are acceptable. VASI/PAPI/REIL\* on one runway end is acceptable.

An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.

Aircraft parking consists of either a hangar, tie-down, or parking area.

Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.

\*Some airports have FAA ARCs greater than what is provided by the maximum C-II MASP ARC.

Source: MDOT AERO

### 2.2.1 Primary Runway System

System airports should have a primary runway system that is appropriate to their size, activity, and instrument approach. Generally, the primary runway is the longest runway at an airport. Occasionally, a shorter runway is the primary runway if it has a better instrument approach. The development goals for the primary runway system are shown in **Table 2-5** and outlined below:

- **Length** – The overall runway length of the runway surface, including displaced thresholds.
- **Width** – The width of the runway.
- **Surface** – Paved runways are those with concrete or asphalt surfaces. Turf includes grass or sod runways.
- **Primary Taxiway System** – A full parallel is a taxiway or series of taxiways generally parallel to the runway, allowing taxiing between each end of the runway without crossing the runway to which they are parallel. A partial parallel taxiway is a taxiway or series of taxiways parallel to only a portion of the entire length of the runway and does not allow taxiing from one end to the other without crossing the runway. A direct connector taxiway connects directly from parking/apron areas to an airport's runway.

**Table 2-5: Primary Runway System Development Goals**

Facility Goal	Airport Development Item	MASP ARC			
		A-I	B-I	B-II	C-II
Primary Runway System	Length (feet)	2,500	3,500	4,300	5,000
	Width (feet)	100	60	75	100
	Surface Type	Turf	Paved	Paved	Paved
	Primary Taxiway System	None	Full Parallel if 20,000+ ops		Full Parallel

Note: Runway length goals shown in the table are subject to FAA/AERO justification determination.

For A-I airports with paved runways, the standard width is 60 feet.

Source: MDOT AERO

### 2.2.2 Lighting and Visual Aids

Airport lighting and visual aids are used by aircraft pilots for guidance in the airport and runway environment. Development goals as they relate to lighting and visual aids are presented in **Table 2-6**. A brief summary and description of the airport lighting and visual aids that are part of the development goals are as follows:

- **Runway Lighting System** – The intensity (brightness) of the runway edge lighting. High Intensity Runway Lights (HIRL) or Medium Intensity Runway Lights (MIRL). Markers are unlit and used to delineate the edge of the runway on turf runways.
- **Precision Approach Path Indicator (PAPI)** – A PAPI is a type of Visual Guide Slope Indicator (VGSI) consisting of a single row of two or four lights that assist a pilot in their descent to landing. A Visual Approach Slope Indicator (VASI) is acceptable in lieu of a PAPI. A VASI has several different configurations.
- **Runway End Identifier Lights (REIL)** – The REIL lights consist of a pair of flashing lights at the end of a runway to assist the pilot in identifying the runway end during nighttime or periods of poor visibility.

- **Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR)** – A MALSR is one type of approach lighting system that provides guidance and visual cues to a pilot landing during periods of poor visibility. There are other approach lighting systems available that are normally installed based on the type of approach to the runway.
- **Rotating Beacon** – The beacon is an intermittent light (created by rotation of the beacon) that normally operates between sunset and sunrise. The beacon assists pilots in locating the airport during low-light and darkness while in the air, flying to, from, or near an airport.
- **Lighted Wind Indicator** – A wind indicator consists of a wind cone (windsock), wind tee, or tetrahedron. If one of these are illuminated to be visible at night, it is considered a lighted wind indicator.
- **Segmented Circle** – A segmented circle indicates traffic pattern direction if other than standard (left-hand traffic).

**Table 2-6: Lighting and Visual Aids Development Goals**

Facility Goal	Airport Development Item	MASP ARC			
		A-I	B-I	B-II	C-II
Lighting and Visual Aids	Runway Lighting System	Markers	MIRL	MIRL	HIRL
	PAPI	No	Yes	Yes	Yes
	REIL	No	Yes	Yes	Yes
	MALSR	No	No	No	Yes
	Rotating Beacon	No	Yes	Yes	Yes
	Lighted Wind Indicator	No	Yes	Yes	Yes
	Segmented Circle	No	Yes	Yes	Yes

Notes: Airports having a VASI instead of a PAPI are acceptable. VASI/PAPI/REIL on one runway end is acceptable.

Source: MDOT AERO

### 2.2.3 Approach Protection

Approach protection refers to land use and height regulations that protect airport approaches and airspace, as legislatively authorized by The Michigan Zoning Enabling Act, Act 110 of 2006, or the Airport Zoning Act, Act 23 of 1950. The goals for approach protection are shown in **Table 2-7** and described as the following:

- **Approach Protection Plan** – An approach protection plan or airport zoning ordinance may be used to meet the approach protection goals, and is in effect for the airport area.

**Table 2-7: Approach Protection Development Goals**

Facility Goal	Airport Development Item	MASP ARC			
		A-I	B-I	B-II	C-II
Approach Protection	Approach Protection Plan	Yes	Yes	Yes	Yes

Note: An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.

Source: MDOT AERO

### 2.2.4 Pilot Services

The development goals for pilot services include five airport services that may be available to pilots. Not all services are considered goals for each ARC. A summary of each service by ARC is provided in **Table 2-8** and a description of the criteria for consideration are as follows:

- **Restrooms** – The availability of 24-hour restroom facilities.
- **Fuel** – The availability of 100 Low-Lead (LL) aviation gasoline (Avgas) or Jet A fuel. Other fuel such as automotive gasoline (MoGas) may be available, but does not count toward meeting the fuel standard.
- **Aircraft Parking** – Parking consists of aircraft tie-downs, hangars, or an apron parking area that is accessible to both based and itinerant (transient) aircraft. Any of these parking types are compliant—an airport does not need all three to meet the standard.
- **Aircraft Maintenance** – Airframe or engine repair such as Major Airframe and Powerplant (A&P) or Minor A&P services.
- **Available Staff** – Airports attended by at least one employee on a regular schedule during the week. Airports with on-call attendance, irregular attendance, or are unattended do not meet the standard.

**Table 2-8: Pilot Services Development Goals**

Facility Goal	Airport Development Item	MASP ARC			
		A-I	B-I	B-II	C-II
Basic Pilot and Aircraft Services	Restrooms	No	Yes	Yes	Yes
	Fuel	No	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes	Yes
	Available Staff	Yes	Yes	Yes	Yes

Note: Aircraft parking consists of either a hangar, tie-down, or parking area.

Source: MDOT AERO

### 2.2.5 All-Weather Access

There are three all-weather access criteria: instrument approaches, weather reporting, and weather briefing. Weather reporting refers to a system to acquire current airport weather conditions, versus weather briefing, which refers to obtaining the required preflight weather information. The all-weather access development goals are shown in **Table 2-9** and summarized as follows:

- **Instrument Approach** – An instrument approach procedure that allows aircraft to access the airport in most weather conditions. The approach type should be appropriate for the airport size, activity, and specific needs.
- **Weather Reporting** – On-airport weather reporting normally obtained through an Automated Weather Observation System (AWOS). Weather observations may also be from Automated Terminal Information Service (ATIS) broadcast or Automated Surface Observations System (ASOS).
- **Weather Briefing Access** – Access to a weather briefing can be accomplished by land or wireless internet connection through a computer, cell phone, tablet or a Weather Briefing System. A land line or cell phone may also be used for audible weather briefings.

**Table 2-9: All-Weather Access Development Goals**

Facility Goal	Airport Development Item	MASP ARC			
		A-I	B-I	B-II	C-II
All-Weather Access	Instrument Approach	Visual	Non-Precision	Non-Precision	Precision
	Weather Reporting (AWOS)	Preferred	Preferred	Yes	Yes
	Weather Briefing Access	Preferred	Preferred	Yes	Yes

Note: Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.  
Source: MDOT AERO

### 2.2.6 Year-Round Access

Year-round access is generally tied to snow removal. Airports with snow removal are likely to be open regardless of seasonal changes. Some turf runways are closed during parts of the year due to spring thaw conditions or heavy snowfalls. A summary of year-round access development goals by ARC are shown in **Table 2-10** and described as follows:

- **Open Year-Round** – An airport that does not close for an extended period of time during the year due to snow or runway conditions.
- **Snow Removal** – An airport that has arrangements and plans for regular snow removal appropriate for their type/size of airport.

**Table 2-10: Year-Round Access Development Goals**

Facility Goal	Airport Development Item	MASP ARC			
		A-I	B-I	B-II	C-II
Year-Round Access	Open Year-Round	Yes	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes	Yes

Source: MDOT AERO

### 2.2.7 Landside Access

The development goals for landside access deal with the availability of ground transportation. A summary of goals by ARC is shown in **Table 2-11** and summarized below:

- **Public/Private Transportation** – Ground transportation is available on-airport or by arrangement for pilots and passengers of arriving aircraft. This includes courtesy cars, public transit (dial-a-ride and scheduled), rental cars, taxi, limousine services, and bicycles.

**Table 2-11: Landside Access Development Goals**

Facility Goal	Airport Development Item	MASP ARC			
		A-I	B-I	B-II	C-II
Landside Access	Public/Private Transportation	No	No	Yes	Yes

Source: MDOT AERO

## 2.3 Pavement Condition

Airport pavements are inspected and assigned a Pavement Condition Index (PCI) value between 0 and 100 that indicates the present condition of airport pavements. The higher the number the better the pavement condition. The PCI can be used to plan and program runway and taxiway rehabilitation projects. A PCI greater than 70 is considered acceptable and the pavement only needs ongoing preventative maintenance. The goal is for system airports to maintain (not develop to) an acceptable PCI. When a PCI is between 40 and 70, the pavement may need major rehabilitation. Generally, pavements with a PCI less than 40 indicate that the structure has failed and complete reconstruction is required. **Figure 2-1** shows the relationship of PCI value to pavement condition. In contrast to development goals, PCI minimum maintenance goals are expressed using the airport's actual FAA-recognized AAC instead of the MASP ARC assigned by this study. A summary of the minimum PCI maintenance goals are shown in **Table 2-12** and are described as follows:

- **Runway PCI** – The PCI of the largest section of pavement of the primary runway. If there are lateral differences in PCI, the center PCI is used as the runway PCI value.
- **Taxiway PCI** – The PCI of the largest section of pavement of the taxiway that is associated with the primary runway.

**Figure 2-1: Pavement Condition Index (PCI) Scale**

PCI		Condition
86-100		Preventive Maintenance
71-85		
56-70		Major Rehabilitation
41-55		
26-40		Reconstruction
11-25		
0-10		

Source: MDOT AERO, Airport Pavement Management System (APMS)

**Table 2-12: Minimum PCI Goals**

Facility Goal	Airport Surface	FAA AAC			
		A	B	C	D
Pavement Condition	Runway PCI	55*	55	60	65
	Taxiway PCI	45*	45	50	55

Note: \*N/A for turf runways/taxiways

Source: MDOT AERO



## 2.4 Airport Tiers

The 2008 MASP used a tier system to assign airports to one of three tiers based on an airport's ability to respond to state goals and objectives:

- **Tier 1** airports respond to essential/critical state airport system goals and objectives. These airports should be developed to their full and appropriate level.
- **Tier 2** airports complement the essential/critical state airport system and/or respond to local community needs. Focus at these facilities should be on maintaining infrastructure with less emphasis on facility expansion.
- **Tier 3** airports duplicate services provided by other airports and/or respond to specific needs of individuals and/or small businesses. These facilities are secondary to meeting the overall state system goals and often receive only minimal safety enhancements, such as runway cones and wind socks.

The 2017 MASP focuses only on Tier 1 and Tier 2 airports. Since an airport's tier is dependent on an airport's ability to meet system goals, please see **Section 5** for an analysis of each goal and a tier assignment for each of the airports in the system.

## 2.5 Summary

Michigan's system airports are classified using a two-step methodology including airport tiers (1, 2 and 3) and their associated ARCs (ranging from A-I to C-II), known as a MASP ARC. The MASP ARC is an indicator of the type of activity that occurs at an airport, and the role the airport plays in meeting system goals. The MASP ARC helps align development goals (primary runway system, lighting and visual aids, approach protection, pilot services, all-weather access, year-round access, and landside access) appropriate to each airport.

Since the MASP ARC assigned to an airport is independent of their existing FAA design ARC, airports should continue to develop in accordance with their individual airport needs and federal design standards as identified in their airport planning studies and documents. However, the facility development goals assigned to an airport through their MASP ARC should also be recognized and considered during future planning exercises in an effort to meet system goals. **Section 5** contains details on the classification of each system airport.

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## Section 3: MASP Issues & Considerations

### 3.0 Introduction

The airports included in the 2017 Michigan Aviation System Plan (2017 MASP) serve a role in the state, national, and global aviation systems. This section provides information on some of the technological advancements and other industry changes that are impacting these airports. Some of the issues were recognized in the *Michigan Airport System Plan: Report 08* (MASP 2008), and some are new for this 2017 MASP. The system-wide and facility-specific goals of the 2017 MASP directly related to addressing these impacts are presented in the following sections.

### 3.1 Preservation of the System

Preservation of an airport includes more than protecting and maintaining airfield pavement and aircraft access. There are many different factors that affect the preservation of airports, including off-airport property land uses, approach obstructions, noise sensitivity, and property rights. The following sections focus on various aspects of airport preservation.

#### 3.1.1 Endangered Airports

Although all airports studied in the 2017 MASP are under some degree of pressure from local, statewide, and nationwide agencies to maintain safe and efficient aircraft access and operations, privately owned airports are most likely to be considered endangered. Of the 226 airports open to the public in Michigan, 96 are privately owned and operated, or about 42 percent. Many of these airports do not receive state or federal funding and are endangered, or vulnerable to closure. There are multiple pressures facing these airports. This includes the lack of funding or income, regular maintenance, encroachment of development, or complete sale of airport land for other uses. Additionally, publicly owned, public use airports that are not a part of the *National Plan of Integrated Airport Systems* (NPIAS) do not receive any federal funding from the FAA and must be self-reliant. Often they must rely on state grants and local financial support to preserve the airport. These small publicly and privately owned airports often provide significant system capacity, such as additional based aircraft storage. Closures of these airports would put additional strain on the state's aviation system as based aircraft that regularly operate at an airport that closes would have to relocate to other area airports.

Larger commercial service or general aviation (GA) airports, especially those included in the NPIAS, receive federal and state funding, and generally have higher numbers of annual operations and based aircraft. These airports are less likely to become endangered as they must remain open

to comply with their state and federal grant obligations. Nevertheless, these airports also need continued support so they do not become endangered.

When considering preservation priority, airports typically fall into one of the following categories:

- Airports providing a critical transportation link to the community, especially in remote or isolated areas.
- Airports located in a region where there is a high demand for aviation access, and the airports provide needed regional capacity, such as hangars for based aircraft.
- Airports acting as reliever airports. These airports are found near metropolitan areas where smaller aircraft may use a smaller airport to avoid the major airport in the area where mixing with faster, larger aircraft could create capacity issues.
- Airports that supplement another nearby airport. In this case, the airport that best meets the needs of the community in which it serves should be prioritized for preservation.

System goals (detailed in **Section 5**) such as providing remote access, population coverage, and meeting regional capacity needs help airports define their importance in the system and defend against pressure to close.

### 3.1.2 Pavement Management

In 2006, the Michigan Department of Transportation (MDOT) entered into a multi-year agreement with Applied Pavement Technology, Inc. (AP Tech) to survey and evaluate the pavement at 80 airports in Michigan. The ultimate goal of the project was to gather the data necessary for MDOT and local airport sponsors to manage pavement life and plan for pavement rehabilitation and reconstruction actions at airports. AP Tech developed an [Airport Pavement Management System](#) (APMS) tool that helps identify failing pavements and assists MDOT in prioritizing different pavement repair and rehabilitation projects at airports throughout the state.

Though the original agreement with AP Tech was initially a three-year contract (2006-2008), MDOT and AP Tech have continued to work together on this project and, as of 2016, the number of airports included in the contract scope has increased to 97. The APMS includes 92 of the 95 NPIAS airports in Michigan; Detroit Metro (DTW), Willow Run (YIP), and Grand Rapids (GRR) are excluded from the APMS. In addition to these 92 NPIAS airports, five non-NPIAS airports are included in the APMS. Airports are evaluated on a three-year rotating schedule to keep the APMS tool up to date with changing pavement conditions. When an airport is evaluated, the existing condition of airport pavement is documented and projections of future pavement condition are also made for the next ten years. These projections help MDOT and airport sponsors anticipate needed repairs.

Recently updated methodology used to evaluate pavement conditions has significantly changed airport pavement reports. The change in methodology results in a larger deduction for weather related pavement distressing. Due to the significant weather changes throughout a yearly cycle in Michigan (hot summers followed by cold winters), it is common for pavements to show signs of distressing due to weather, but to remain structurally sound. Therefore, with a larger deduction for pavement conditions caused by weather, pavement condition index (PCI) scores for airport

pavements in Michigan showed substantial decreases, even though the pavement was almost unchanged. The PCI scores of some pavements, which are usually expected to only lower a few points a year, showed drops of nearly 20 points in some cases.

Facility goals (detailed in **Section 5**) for pavement condition reflect MDOT's emphasis on repairing and maintaining safe pavement at system airports.

### 3.1.3 Compatible Land Use and Zoning

Historically, airports were developed in rural areas outside their respective town or city to provide separation between the airport and urban activity and development. Over time, cities and towns have expanded to accommodate community growth, and in some instances have encroached upon airports.

Airport compatible land use and zoning regulations provide three important functions:

1. Protect airports that receive federal grant money through the Federal Aviation Administration (FAA) Airport Improvement Program (AIP) that are obligated to take action to protect their airport from incompatible land use and structures.
2. Preserve airports, whether federally obligated or not, that may become endangered of closing if incompatible land uses are not controlled properly and encroach on the airport.
3. Provide for a separation of uses for the safety of both aircraft operations and the local community.

In response to the need for comprehensive protection from incompatible land uses adjacent to airports, the Michigan Legislature passed two legislative acts:

1. The Michigan Zoning Enabling Act, Act 110 of 2006, provides for the inclusion of airport approach plans (AAP) (sometimes called approach protection plans) in local zoning ordinances. It also requires that the AAP be integrated into local master planning or ordinance updates in the future. The Aeronautics Code of the State of Michigan states that the Michigan Aeronautics Commission (MAC) may adopt AAPs for individual airports. An AAP provides height and land use guidance for public use airports.
2. The Airport Zoning Act, Act 23 of 1950, provides details about adopting airport-specific zoning ordinances for publicly owned airports. Airport zoning ordinances, according to the Act, may limit the height of objects, the growth of natural objects, and land uses near airports.

As a result of these legislative acts, an AAP for all public use airports in Michigan has been adopted by the MAC under Section 151 of the Michigan Aeronautics Code. An airport zoning ordinance, that serves a similar purpose, is adopted per the provisions outlined in the Airport Zoning Act.

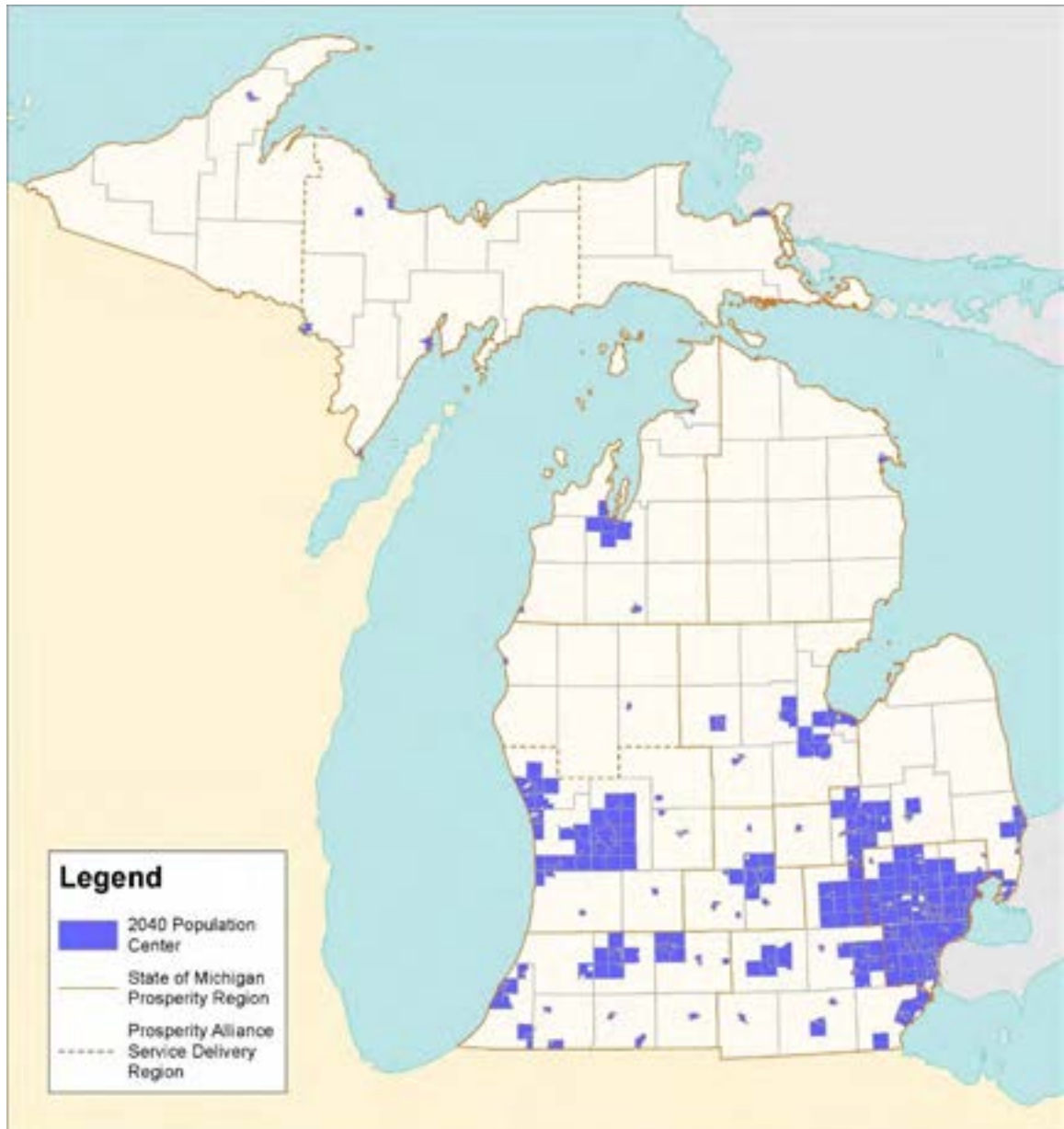
The facility goal for approach protection (see **Section 5**) holds airports and their local communities accountable for maintaining their AAPs or local airport zoning ordinances and for recognizing airports in local planning efforts.

## 3.2 System Accessibility

Because Michigan is separated into two peninsulas with several islands and is surrounded by four of the five Great Lakes, long distance travel across the state can be difficult and time consuming to accomplish. As such, Michigan's aviation system plays a key role in the transportation of individuals and goods across the state and the world. Due to the diverse geography of Michigan, it is important that system airports are easily accessible to key areas described in the following sections.

### 3.2.1 Population Centers

A population center is defined as a minor civil division of 5,000 or more people with a population density of 250 or more per square mile. In Michigan, the majority of population centers are situated in the southeastern part of the state, located in and around the Metro Detroit area (see **Figure 3-1**). Both GA and commercial service airports benefit from population centers as they attract business, freight, air cargo, medical, emergency, and other types of operations. The system goal of population center coverage (see **Section 5**) emphasizes the importance of providing access to MI airports for the most densely populated areas of the State.

**Figure 3-1: Population Centers in Michigan through 2040**

Source: Michigan Department of Transportation (MDOT)

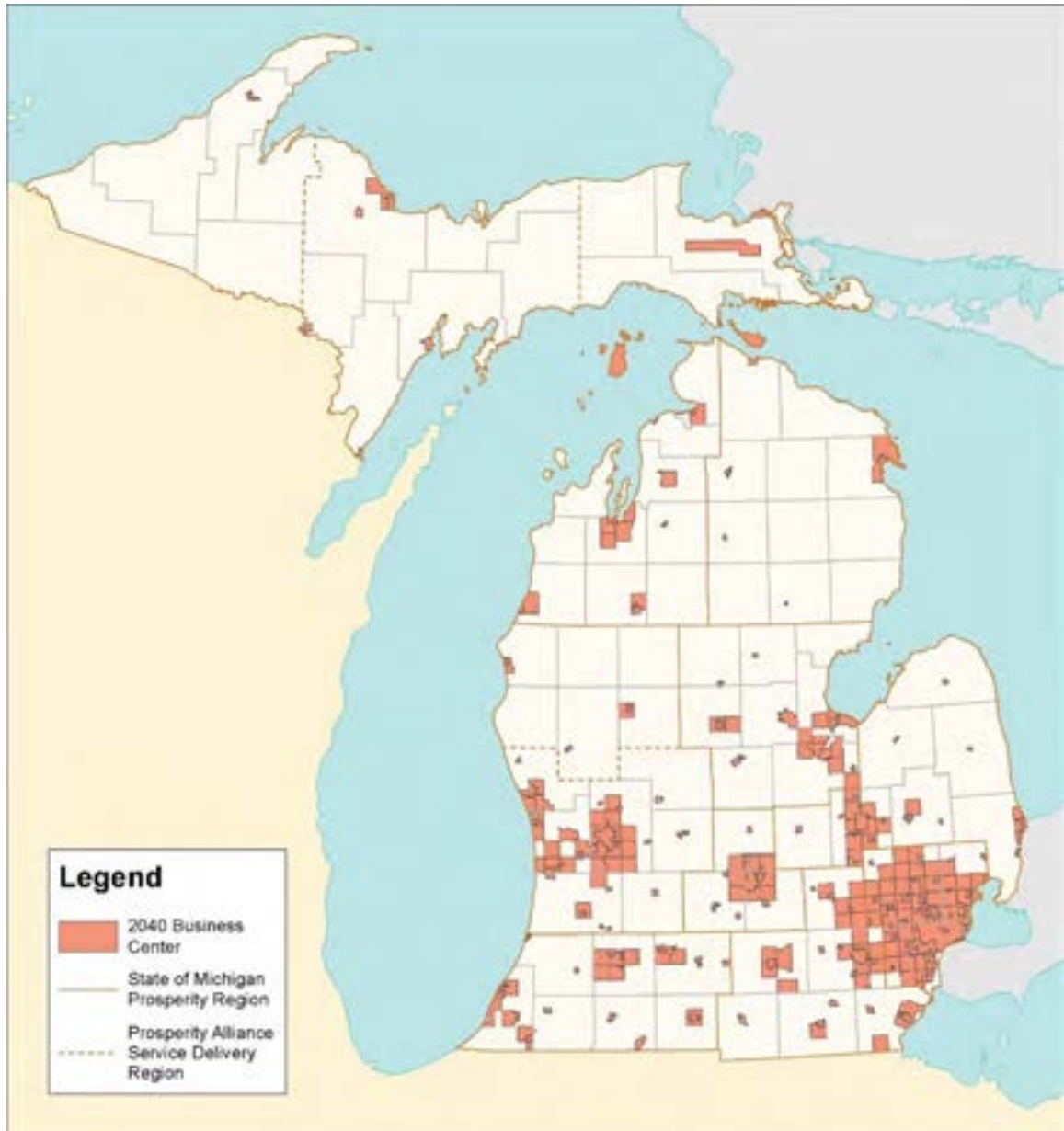
### 3.2.2 Business Centers

Business centers rely on the quick and efficient transportation of people and products. Business centers are defined as minor civil divisions with employment projections of at least 3,000 by year 2040. Similar to population centers, the majority of business centers are located in the southeastern portion of the state (shown in **Figure 3-2**). Manufacturing is one of the largest industries in Michigan, and relies heavily on the transport of raw materials to the state for production, and final products out for sale and distribution. Even small businesses may rely on the rapid transport of retail goods, staff members, correspondence, and more. Both commercial service and GA airports support the air transport of goods and services needed and supplied by Michigan businesses. The system goal of business center



coverage (see **Section 5**) highlights the significance of providing aviation facilities capable of supporting businesses in areas of the state with increased business activity.

**Figure 3-2: Business Centers in Michigan through 2040**



Source: Michigan Department of Transportation (MDOT)

### 3.2.3 Tourism/Convention Areas

Countless destinations across the state draw tourists from all over the country to experience the Great Lakes, sand dunes, premier cross country and downhill ski areas, wineries, and more. As one of the largest industries in Michigan, tourism is a large economic generator. With an emphasis on fishing, camping, hunting, and other popular outdoor activities, tourism supports Michigan's economy year-round. The tourism industry relies on aviation access to bring tourists to destinations across the state.



Counties with \$75 million or more in visitor spending, as shown in **Figure 3-3**, are considered tourism centers for the purpose of this analysis, using data provided by the Michigan Economic Development Corporation (MEDC) in their study titled *The Economic Impact of Travel in Michigan, Tourism Satellite Account, Calendar Year 2014* developed by Tourism Economics. The system goal of tourism center coverage (detailed in **Section 5**) emphasizes the importance of providing aviation facilities within a reasonable distance of tourist locations across Michigan.

**Figure 3-3: Michigan Counties with \$75 million or more in Total Annual Visitor Spending**



Source: *The Economic Impact of Travel in Michigan, Tourism Satellite Account, Calendar Year 2014*. Michigan Economic Development Corporation (MEDC). 2015.

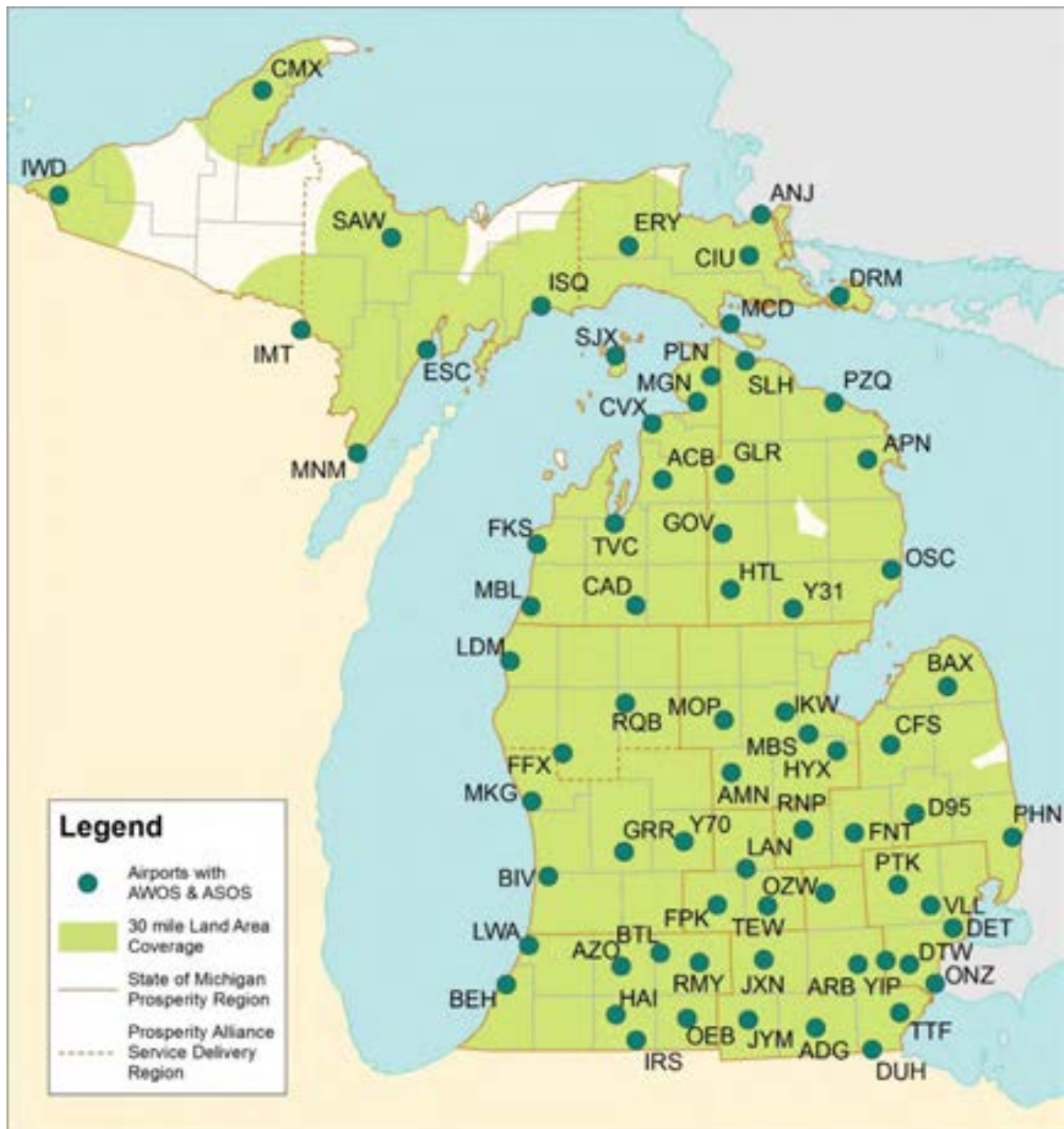
### 3.2.4 Isolated Areas

Michigan is bordered by four of the five Great Lakes: Superior, Michigan, Huron, and Erie. According to the National Oceanic and Atmospheric Administration (NOAA) Office for Coastal Management, Michigan has over 3,000 miles of Great Lakes coastline, which includes both mainland and offshore islands. Although some islands have remained uninhabited, other islands have permanent communities with a year-round population. Islands located in the Great Lakes are seasonally isolated and are sometimes without ferry service during the winter months. That leaves air transportation as the only reliable source of access between the mainland and islands, which is particularly important during instances such as emergency situations. This need is reaffirmed by the 1996 Island Transportation Policy that was adopted by both the State Transportation Commission and the MAC that stresses the importance of air travel between the mainland and the islands during the winter months. Specific islands of emphasis (with year-round residents) include: Beaver, Bois Blanc, Drummond, Harsens, and Mackinac. The system goal of isolated area coverage aligns with MDOT and MAC missions to provide aviation transportation to and from Michigan's inhabited islands, year round.

### 3.2.5 All-Weather Access

Since Michigan is located in the northern United States and is surrounded by the Great Lakes, aircraft operations in the state are susceptible to all types of weather patterns from extreme coastal winds, to intense thunderstorms, and large snow squalls. To aid flight operations in times of reduced visibility and low cloud ceilings, navigational landing aids, both in the cockpit and on the ground, are used to help pilots land safely. Providing navigational landing aids at appropriate airports in the system, including instrument approach procedures, is important for continued airport access, especially during Instrument Flight Rules (IFR) conditions.

To assist pilots flying in or across Michigan, many airports in the system have weather reporting stations such as Automated Weather Observation Systems (AWOS) or Automated Surface Observing Systems (ASOS) that provide current weather conditions including wind speed and direction, visibility, sky conditions, precipitation, and temperature. An AWOS or ASOS is installed at 71 of the airports in the MASP. These systems broadcast over radio frequencies and are typically received in properly equipped aircraft up to 10,000 feet in altitude within a range of approximately 30 statute miles (25 nautical miles) from an ASOS/AWOS location. A map of the ASOS and AWOS systems in Michigan, including their 30-mile coverage radius, is shown in **Figure 3-4**. Please note that one airport (Hart/Shelby) has an AWOS-A (altimeter only) system which only broadcasts barometric pressure information at the airport. These systems were excluded as they do not provide complete weather observations typically available through standard AWOS or ASOS stations.

**Figure 3-4: Michigan AWOS and ASOS Locations with 30-mile Coverage Area.**

Source: 2017 MASP Facility Information Worksheet, completed by airport sponsors between August and December 2016.

Weather briefings are also important for pilots planning their flight routes. Briefings may be accomplished by means of internet access on a cell phone, computer, tablet, verbally by telephone, or via a weather briefing system. While cell phones and Wi-Fi have become more mainstream, there are still a few airports in Michigan that may not offer cell phone service or reliable Wi-Fi. With scarce or no cell phone service, pilots rely on weather briefing systems, landline telephone, or landline internet access to obtain weather information needed for their flight.

Facility goals for all-weather access (detailed in **Section 5**) address the need for instrument approach procedures, weather reporting systems, and access to weather briefing information.

### 3.2.6 Airport Services

Ground support is vital for maintaining aviation system access in Michigan. When aircraft arrive at an airport, pilots, flight crew, and passengers are often in need of basic airport services, such as shelter, telephone access, restrooms, fuel, aircraft parking, and aircraft repair. Some airports provide basic services, while others offer an extensive range of additional or enhanced services that may specifically attract pilots and passengers to an airport. Each of the basic services can be identified as an aircraft service, or a pilot service.

Aircraft services are often needed for the operation of aircraft, such as fueling, aircraft parking and aircraft maintenance. At the most basic level, fueling can be provided using a self-serve credit card pump, parking can be provided, and minor maintenance can be offered. At an enhanced level, full-service fueling may be offered by a Fixed Base Operator (FBO), indoor parking may be available in hangars, and major maintenance staff may be available on site.

Pilot services are needed to support pilots and their passengers by providing a basic level of convenience, including shelter, restrooms, and flight planning options. At smaller airports, shelter can be provided by a small building, restrooms can be provided in the form of portable facilities, and phone service can be provided by a single land line to use for filing flight plans. At larger airports, these services may be provided in the form of a terminal or FBO facility with Wi-Fi, television, vending, pilot rooms, multiple restrooms, telephones, and computers.

Facility goals for pilot and aircraft services (included in **Section 5**) emphasize the importance of providing basic services at system airports.

### 3.2.7 Security

Although airports are to be accessible for aircraft and airport users, the system must remain secure. The Department of Homeland Security (DHS) is charged with maintaining a secure aviation system in the United States. An agency within DHS, the Transportation Security Administration (TSA), has evolved into the lead security agency for air travel in the United States.

Security efforts at commercial service airport terminals include passenger, baggage, and freight screening. At GA only airports, security duties generally fall on airport employees, pilots, and passengers to report suspicious activity to federal, state, and local law enforcement. This security system is more informal than the active security employed at airports with airline passenger service. In conjunction with the GA industry group Aircraft Owners and Pilots Association, the TSA developed the Airport Watch program that provides resources such as training materials and airport signage to assist GA airports in providing the appropriate level of security.

Another agency within the DHS is Customs and Border Protections (CBP). The CBP's primary mission is to provide border security and agricultural protection, and monitor illegal trading activities. At airports, this is carried out through customs inspection services for aircraft and passengers arriving from international destinations. Inspection services by CBP are available at 16

airports in Michigan, either on-demand or with prior notice. Michigan airports with CBP inspection services are shown in **Table 3-1**.

**Table 3-1: Michigan Airports with Customs and Border Inspections**

Airport	City	FAA ID
Alpena County Regional	Alpena	APN
WK Kellogg Regional	Battle Creek	BTL
James Clements Municipal	Bay City	3CM
Coleman A. Young International Airport	Detroit	DET
Detroit Metro-Wayne	Detroit	DTW
Drummond Island	Drummond Island	DRM
Bishop International	Flint	FNT
Gerald R. Ford International	Grand Rapids	GRR
Kalamazoo - Battle Creek	Kalamazoo	AZO
Chippewa County International	Kincheloe	CIU
Capital Region International Airport	Lansing	LAN
Oakland County International	Pontiac-Waterford	PTK
St. Clair County International	Port Huron	PHN
MBS International	Saginaw	MBS
Sault Ste. Marie Municipal/Sanderson Field	Sault Ste. Marie	ANJ
Willow Run	Ypsilanti	YIP

Source: *List of Airports Where CBP Inspection Services are Normally Available – January 15, 2015*. US Customs and Border Protection, retrieved February 2017.

### 3.3 Trends and Technologies

Over the 20-year planning period, several trends and technological advancements are expected to influence the aviation industry in Michigan. Examples of trends include a pilot shortage and an emphasis on Light Sport Aircraft (LSA) certifications; while increasing technological improvements are being found in the Next Generation Airspace System (NextGen) and in the form of Unmanned Aircraft Systems (UAS). Each of the following trends and technologies for the 2017 MASP are discussed further in this section.

#### 3.3.1 Pilot and Maintenance Technician Shortages

The aviation industry as a whole has seen a decrease in the number of available professionals over recent years, especially pilots and maintenance technicians. Regional airlines are experiencing the greatest shortage of pilots. This is important because, as of 2015, regional airlines accounted for about 33 percent of the passengers and 57 percent of the airline departures in Michigan.<sup>1</sup> At many of Michigan's air carrier airports, especially those serving smaller communities, regional airlines account for all of an airport's airline service. A continued trend of staffing shortages could lead to a reduction in flight schedules at regional airlines, causing a reduction, or even elimination, of air service at many of Michigan's airports.

<sup>1</sup> 2016 Annual Report, Regional Airline Association.

There are several factors that have contributed to the reduction in pilot availability. In the summer of 2014, the FAA changed the Airline Transport Pilot (ATP) rule that now requires commercial pilots to have at least 1,500 hours of flight experience instead of the 250-hour rule that applied prior to this change. Additionally, once these pilots gain the experience they need from a regional airline, they will likely move on to a major airline which ultimately provides better pay and better benefits. Accredited universities designated by the FAA, like Western Michigan University, have been helping pilots solve this issue by being one of the few flight education programs that support pilots receiving their ATP certificate with less than the 1,500-hour threshold, known as a Restricted ATP. Other factors contributing to the reduction in pilot availability are the expensive cost of flight training, the increasing number of aging pilots who are required to retire at age 65 from airlines, and increased requirements implemented by the FAA of mandatory rest periods that result in airlines needing to hire more pilots to fly their schedules.

The aviation workforce shortage is not only affecting pilots. Aircraft mechanics and maintenance technicians are also going to be in demand. Estimates by aircraft manufacturer Boeing indicate that between now and 2035, North America will need about 118,000 new aircraft technicians. Without this increase, aircraft operators across the industry, from GA to commercial airlines, may find themselves lacking the necessary staff to keep their aircraft flying in the United States and in Michigan.

### **3.3.2 Sport Pilot/Light Sport Aircraft (SP/LSA)**

In July of 2004, the FAA introduced the sport pilot/light sport aircraft (SP/LSA) rules to make flying more accessible and affordable for recreational pilots. An aircraft is certified as LSA if it meets certain criteria including weight, speed, and other guidelines defined by the FAA. LSA are intended to reduce costs of maintaining and operating a recreational airplane, as well as reduce the experience required to obtain a sport pilot certification. In general, LSA are simple aircraft that are designed to be easier to fly and operate than other, more complex aircraft. The SP/LSA rules are geared towards pursuing new and retaining long-time pilots with an interest in recreational aviation.



Examples of the types of aircraft included in the LSA category are shown in **Figure 3-5** and described as follows:

- A. Airplane (single-engine)
- B. Gyroplane
- C. Lighter-than-air (balloon)
- D. Weight-shift-control
- E. Glider
- F. Powered parachute

Operations of this type of aircraft are expected to grow into the foreseeable future. With fewer restrictions, flying LSA is attractive to new and existing pilots alike. It is expected that Michigan's aviation system will benefit from increased LSA activity across the state, including aircraft purchase and storage, rentals, training, fuel, and more. The state's aviation system may experience continued growth from the introduction of the SP/LSA rules. Airports, especially small GA airports, may be particularly impacted by this trend because LSA are likely to be based at and use their facilities.

**Figure 3-5: Examples of Light Sport Aircraft (LSA)**



Source: *Airplane Flying Handbook (FAA-H-8083-38)*. Federal Aviation Administration (FAA), 2016.

### 3.3.3 NextGen

One technological advancement created since the completion of the MASP 2008 is NextGen, an emerging air traffic system developed by the FAA to reform navigation within the National Airspace System (NAS). The main purpose of NextGen is to transform the national airspace from a ground-based navigation system to a technologically advanced satellite-based system. This allows for an increased number of aircraft flying closer together with more direct and precise flight paths. NextGen is supported by advanced cockpit equipment and includes the reduction of verbal communication between pilots and Air Traffic Control (ATC) by transitioning to more data-based communication. Since 2012, NextGen has been slowly evolving as the driving force behind a satellite-based navigational system that will allow for more direct flight paths. This shift should ultimately result in decreased flight times, delays, fuel consumption, and carbon emissions.

This new technology may result in the concentration of air traffic, leading to an increase in noise exposure. People who live under certain flight paths may experience more intense noise impacts as a result of the concentrated air traffic. Additionally, with technological growth, new approach and departure plans may be developed. While this is beneficial for the movement of air traffic in and out of an airport, this can create new areas susceptible to noise exposure and/or increase the noise exposure in areas already affected.

NextGen is already impacting Michigan's largest and busiest airport, DTW. According to an August 2016 interview with Barry Cooper, the FAA's regional administrator for the Great Lakes Region, "More than 90 percent of aircraft using Detroit Metro already are equipped to handle NextGen technology." As stated, DTW is a leading airport striving to boost on-time arrivals and decrease fuel consumption.

*The system of airports remains a vital part of Michigan's transportation link to national and global markets."*

*– 2040 MITP*

### 3.3.4 Unmanned Aircraft Systems (UAS)

A rapidly growing segment in the aviation industry is UAS, sometimes referred to as drones or Unmanned Aerial Vehicles (UAVs). UAS are remote-controlled or automatically-piloted aircraft that can perform a variety of civilian and military aviation activities. UAS can be operated by many types of individuals and groups including the military, government agencies, businesses, and hobbyists. There are a plethora of uses for UAS that include aerial photography, surveying, research, media production, and work site monitoring. Though UAS have been utilized since the late 1920s (used as a spy tactic during World War I), they have become readily available to the general public and have become a prominent subject matter in the past few years.

Individual and business use of UAS is expected to increase as these aircraft can be easily purchased and flown by a large percentage of individuals. While this may generate an increased interest in aviation, increased use can also pose a threat to any manned aircraft due to the ability to operate UAS at almost any location. It is important that manned and unmanned aircraft follow the regulations in place to maintain safe operations. Michigan airports and their communities can be proactive by educating citizens using UAS and monitoring the nearby airspace for UAS activity.

Statewide law regarding the use and regulation of UAS was established through the [Unmanned Aircraft Systems Act](#), which was passed by the Michigan Legislature in 2016 and effective April 4, 2017. Officially designated as Act 436 of 2016, the most notable provisions include a prohibition on local municipalities or political subdivisions of the state from enacting their own laws to regulate UAS (unless they are for the purpose of regulating UAS operated by the municipality). The Act also reinforces the necessity to operate UAS in accordance with federal regulations, prohibits operations that interfere with emergency first responders, and establishes a state UAS task force.

## 3.4 Alignment with the Michigan Transportation Plan

The 2040 Michigan Transportation Plan (MITP) provides long-range planning guidance for all modes of transportation in Michigan, including airports. Published in July 2016, the 2040 MITP highlights the connection between a strong transportation system and economic growth. In order to achieve this outcome, the 2040 MITP presents four goals (**Figure 3-6**) that are carried forward from the previous versions of the plan, including the 2030 MITP and the 2035 MITP.



**Figure 3-6: Goals of the 2040 Michigan Transportation Plan**

<b>System Improvements</b>	“Modernize and enhance the transportation system to improve mobility and accessibility.”
<b>Efficient and Effective Operations</b>	“Improve the efficiency and effectiveness of the transportation system and transportation services, and expand MDOT's coordination and collaboration with partners.”
<b>Safety and Security</b>	“Continue to improve transportation safety and ensure the security of the transportation system.”
<b>Stewardship</b>	“Preserve transportation system investments, protect the environment, and utilize public resources in a responsible manner.”

Source: *Moving Michigan Forward: 2040 State Long-Range Transportation Plan: Executive Summary*. Michigan Department of Transportation (MDOT), 2016.

Additionally, the 2040 MITP includes the same six strategies from previous reports to help achieve Michigan transportation goals:

- Focus improvements on Corridors of Highest Significance (COHS)
- Measure performance for all modes
- Integrate the transportation system
- Encourage Context Sensitive Solutions (CSS)
- Avoid, minimize, or mitigate for adverse impacts
- Identify appropriate funding

Though some have a higher level of connection than others, the goals of the 2017 MASP are linked to the goals of the 2040 MITP. **Table 3-2** and **Table 3-3** show the link between the MASP system and facility goals and the four goals of the MITP. A check mark indicates the goals with the highest link between the two plans.

**Table 3-2: Relationship of 2017 MASP System Goals to 2040 MITP Goals**

<b>MASP System Goals</b>	<b>MITP Goals</b>			
	<b>System Improvements</b>	<b>Efficient and Effective Operation</b>	<b>Safety and Security</b>	<b>Stewardship</b>
Preserve General Population Access/Land Coverage	✓	✓	✓	✓
Preserve Regional Capacity	✓	✓		✓
Serve Population Centers	✓	✓	✓	✓
Serve Business & Tourism/Convention Centers	✓	✓		✓
Serve Isolated Areas		✓	✓	

Source: *Moving Michigan Forward: 2040 State Long-Range Transportation Plan: Executive Summary*. Michigan Department of Transportation (MDOT), 2016; Analysis by Mead & Hunt, 2017.

**Table 3-3: Relationship of 2017 MASP Facility Goals to 2040 MITP Goals**

MASP Facility Goals (Development Standards)	MITP Goals			
	System Improvement	Efficient/Effective Operation	Safety and Security	Stewardship
Primary Runway System	✓		✓	
Pavement Condition			✓	✓
All Weather Access	✓		✓	✓
Year-Round Operation	✓	✓	✓	✓
Pilot Services	✓	✓	✓	✓
Lighting and Visual Aids	✓	✓	✓	
Approach Protection			✓	✓
Airport Zoning		✓	✓	✓
Landside Access	✓	✓		

Source: *Moving Michigan Forward: 2040 State Long-Range Transportation Plan: Executive Summary*. Michigan Department of Transportation (MDOT), 2016; Analysis by Mead & Hunt, 2017.

### 3.5 Summary

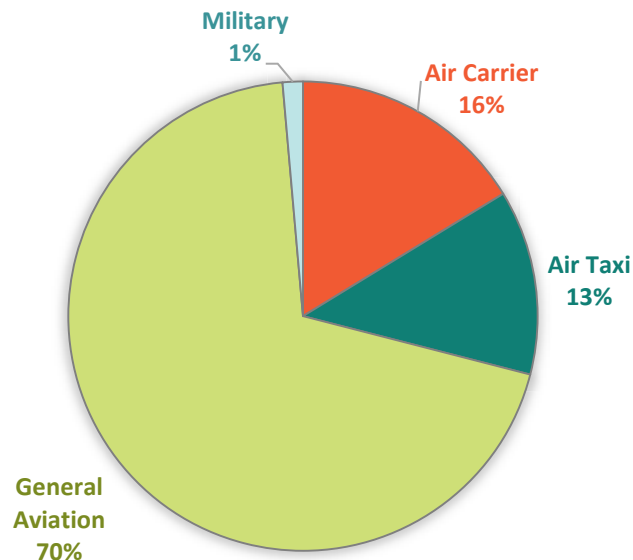
A number of trends, technologies, and unique features impact the aviation system in Michigan, as well as emphasize the importance of providing air transportation access to residents, visitors, businesses and government agencies in all locations. The issues discussed in this section are directly reflected by the 2017 MASP system and facility goals described and analyzed in **Section 5**.

## Section 4: Forecast Methodology

### 4.0 Introduction

The state's system of airports supports a wide range of activities, from recreational to business, general aviation (GA) to commercial service, and cargo to military. As depicted in **Figure 4-1**, GA operations made up 70 percent (70%) of the activity in the Michigan system of airports in 2015. Commercial service – air carrier and air taxi – account for 29 percent (29%) with military activity at 1 percent (1%). The majority of airports in the system have little or no commercial service, but support a valuable GA network to transport people and goods throughout the state.

**Figure 4-1: Components of Aviation Activity in Michigan, 2015**



Source: Federal Aviation Administration, Terminal Area Forecast for Michigan, 2015.

### 4.1 Purpose of Forecasting

Forecasts of aviation activity are the basis from which future requirements can be assessed. By understanding the volume and nature of future activity, as well as the factors that affect that activity, the State of Michigan and individual airport operators can plan for future facility needs. The forecast for this system plan considered activity since 1990 at the state's airports to understand how historical trends were shaped by socioeconomic and other factors. The analysis applied future forecasts of socioeconomic and aviation trends from national and international sources to determine activity for the period from 2016 through 2035. To fully describe the anticipated aviation activity in the state, forecasts were prepared for the State,

for the individual Michigan Economic Prosperity Regions<sup>1</sup>, and for each Michigan Aviation System Plan (MASP) airport.

## 4.2 Trends Affecting Forecasts

### 4.2.1 Economy and Business

Business relies on aviation for the transport of people and goods throughout the U.S. and abroad. As such, the business and economic climate of the U.S. and the world affect the aviation industry. The global economic downturn which began in 2007 resulted in an overall drop in aviation activity. Businesses cut back on travel affecting both commercial and corporate GA activity, while aircraft ownership and operating costs reduced activity in other GA segments. Manufacturing and consumer consumption fell resulting in a decrease in demand for air cargo. The downturn stabilized and the U.S. has seen modest economic growth since 2010. IHS Global Insight, an international economics consultancy, forecasts the U.S. annual gross domestic product to increase at an average annual rate of 2.1 percent (2.1%) through 2037.<sup>2</sup> This positive economic outlook indicates the potential for growth in aviation during that period.

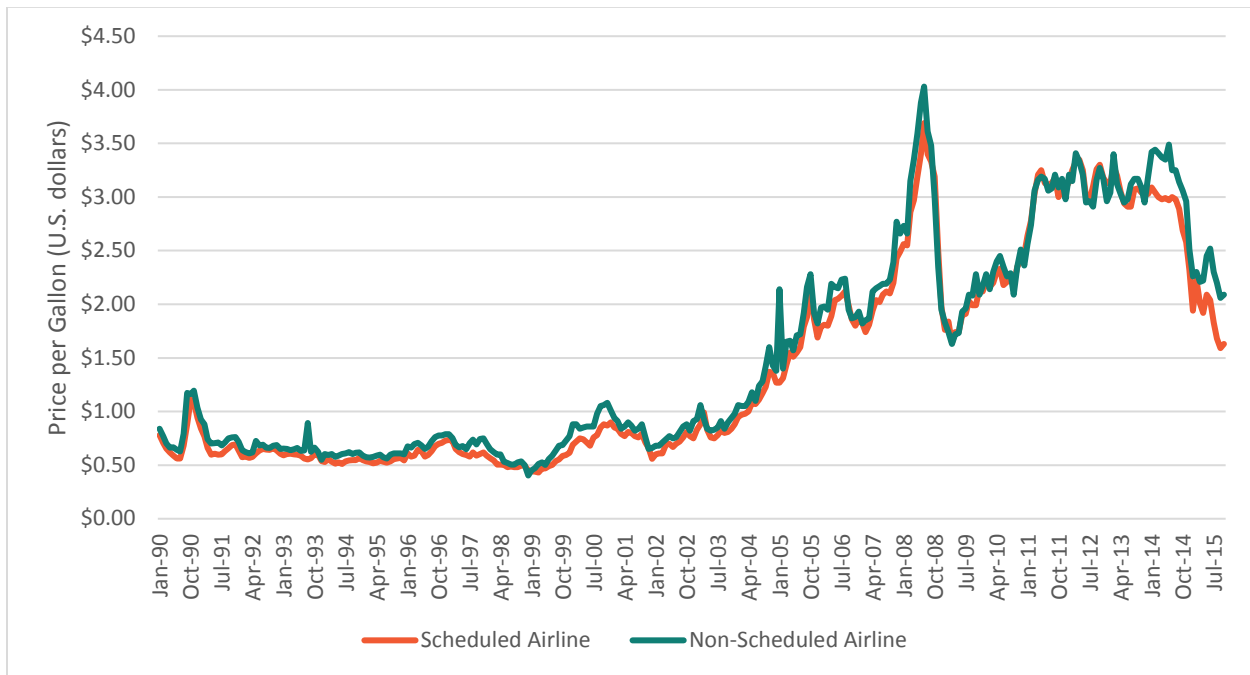
### 4.2.2 Fuel Prices

The cost of fuel is a significant component of the cost of aviation. The rise in fuel prices beginning in 2001 and remaining high through 2008 – 2011 impacted both commercial (passenger airlines and cargo) as well as GA. Data from the U.S. Bureau of Transportation Statistics for average domestic jet fuel prices for scheduled and non-scheduled airlines is presented in **Figure 4-2**. Generally, GA jet fuel is slightly more expensive due to the smaller delivery quantities and lack of bulk buying. As shown in the chart, fuel prices began rising in January 2002, peaking in July 2008 for non-scheduled and scheduled airlines at \$4.03 per gallon and \$3.69 per gallon, respectively. A precipitous drop in late 2008 and early 2009 with the economic downturn took prices to less than \$2.00 per gallon. Market volatility increased prices from mid-2011 to mid-2014 with the cost per gallon declining to \$2.09 per gallon and \$1.63 per gallon for non-scheduled and scheduled airlines, respectively. The turbulence of the market forced both carriers and corporate jet users to reduce travel and shift to more fuel efficient aircraft. Air carriers were also able to reduce weight on their aircraft and use hedging to manage the price paid for fuel.

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<sup>1</sup> Economic Prosperity Regions as designated by the State of Michigan are: Western Upper Peninsula (UP), Central UP, Eastern UP, Northwest, Northeast, West Central Michigan, West Michigan, East Central Michigan, East Michigan, South Central, Southwest, Southeast Michigan, and Detroit Metro. These Prosperity Regions were created by the governor's Regional Prosperity Initiative aimed at encouraging local economic collaboration and engagement throughout Michigan.

<sup>2</sup> Federal Aviation Administration, FAA Aerospace Forecasts, Fiscal Years 2017 – 2037.

**Figure 4-2: Domestic Airline Jet Fuel Prices, 1990 – 2015**

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, Airline Fuel Cost and Consumption, available at [http://www.bts.gov/programs/airline\\_information/](http://www.bts.gov/programs/airline_information/) as of December 2015.

In September 2014, the General Accountability Office (GAO) published a study on the impact of fuel pricing on the aviation industry.<sup>3</sup> The report cited that between 2002 and 2013, jet fuel prices more than quadrupled from \$0.72 to \$2.98 per gallon and GA gasoline prices more than tripled from \$1.29 to \$3.97 per gallon in nominal terms. Over the same period, GA operations at airports with active air traffic control towers decreased by 31 percent (31%). The General Aviation Manufacturers Association was also cited in the study as stating that increases in fuel prices contribute to decrease in sales of GA aircraft. The increase in aviation gas fuel prices, along with the weak economy contributed to a reduction in Fixed Base Operator (FBO) business, flight school training and on-demand charters.

IHS Global Insight is projecting oil prices will increase. The 2016 cost of around \$39 per barrel of crude is expected to increase to about \$47 per barrel in 2017 and to reach \$101 per barrel by 2026. While the relationship in the cost of crude to jet fuel is variable based on supply, refining costs and other factors, an increase in the cost of crude will translate to higher costs for all types of refined petroleum products including jet fuel and general aviation fuel.

<sup>3</sup> United States Government Accountability Office, Report to Congressional Committees, Impact of Fuel Price Increases on the Aviation Industry, September 2014.

#### 4.2.3 Airline Activity

Ongoing restructuring and consolidation in the major airlines since 2007 has resulted in capacity constraint as well as levying of new charges for services to create additional airline revenues. Whereas there were twelve major airlines in 2005, industry consolidation resulted in there being only six in 2016. Economic considerations have pushed the airlines to retire older, less fuel efficient aircraft, to consolidate routes, and to pull out of less lucrative markets. Smaller airports have seen a reduction in service in favor of expansion at larger hubs. Airlines have implemented additional charges for services, such as checked bags, additional leg room, early boarding, and other previously included extras. As a result, mainline carriers have stabilized operations and begun a period of profitability and growth that is expected by the Federal Aviation Administration (FAA) to continue. The FAA noted in its Aerospace Forecast that in 2016, mainline carriers provided 5 percent (5%) more capacity than in 2007 while carrying 8 percent (8%) more passengers.

Regional airlines confronted other challenges in maintaining market presence with industry restructuring since 2001. The regionals are meeting increased competition to win fewer contracts from mainline carriers. The regional market has continued to shrink as service has been reduced from smaller and less profitable markets. The FAA reports that regional carriers have experienced a 2.6 percent (2.6%) reduction in capacity between 2007 and 2016. In addition, regional airlines face pilot shortages and increased labor costs to try to attract and retain pilots. The regional fleet is being transitioned from smaller and less profitable 50-seat jets to more fuel efficient and profitable 70-seat jets.

The total number of departures for U.S. commercial air carriers increased in 2016, but is still below the peak 2007 activity level. The FAA, as noted in the Aerospace Forecast for 2017 – 2037, expects continued modest growth in air carrier activity through 2037. Domestic commercial operations (the sum of air carrier and air taxi) are projected to grow at a rate of 1.5 percent (1.5%) annually, while passenger traffic is expected to grow at a slightly higher rate. This reflects higher load factors and an increase in the number of seats per departure.

#### 4.2.4 General Aviation Activity

The GA fleet declined significantly between 2007 and 2013 due to registration policy changes as well as the global economic downturn. However, fleet numbers began a rebound in 2014, which has continued through 2015. Manufacturers' deliveries of new aircraft showed a trend toward larger jet and turboprop aircraft with a decline in deliveries of single- and multi-engine piston aircraft sales.

The FAA's long-term outlook for GA is "stable to optimistic." The active GA fleet is projected to increase at 0.1 percent (0.1%) annually through 2037. The number of hours flown by GA aircraft is projected to increase at a significantly greater rate of 0.9 percent (0.9%) annually during the same period. The increase in jet and turbine hours flown counteracts the 0.8 percent (0.8%) annual decline anticipated in fixed-wing piston hours, which mirrors the decline in that portion of the fleet. The retirement of smaller fixed-wing piston aircraft will be offset by the increase of turbine aircraft and helicopters, as business will be the primary driver of both commercial and GA activity. Fixed-wing piston aircraft retirements are a result of a declining number of pilots, increased ownership

cost, and new deliveries trailing retirements of aging aircraft. The FAA anticipates strong growth in light-sport-aircraft at about 4.1 percent (4.1%) annually through 2037. The FAA forecasts that GA operations will increase at an average of 0.3 percent (0.3%) annually through 2037, with the increase in turbine aircraft activity offsetting the decrease in piston aircraft activity.

### 4.3 Forecast of Aviation Activity

Forecasts of activity form the basis of analysis for long range planning of airport facilities and therefore are critical to developing the 2017 MASP. The objective is to consider the aviation system on a broad, statewide level—taking into account national, regional and statewide trends—when determining the level of aviation activity that the State of Michigan could realize over the next 20 years. This chapter presents the assumptions, methodologies, and historical data used to create the forecast.

The Michigan airport system includes 114 airports in Tiers 1 and 2 combined, of which 96 are GA and 18 are commercial service. The base year for forecasts is 2015, which was the latest full year of data available when this forecast was prepared. Forecasts of based aircraft and operations have been developed for the 20-year planning horizon at milestone points of: 2020, 2025, 2030, and 2035. **Table 4-1** identifies the elements to be forecast by the classification of airport user. Since commercial service airports account for only 18 of the 114 airports in the Michigan System, passenger enplanement and deplanement activity was not a part of this forecast. Air carrier, air taxi, and commuter aircraft may be scheduled or unscheduled and serve passengers or cargo, or both. So, although the number of passengers is not specifically considered in these forecasts, the aircraft activity serving those passengers is considered.

**Table 4-1: Forecast Elements by User Type**

User Type	Air Carrier	Air Taxi and Commuter	General Aviation	Military
Forecast Elements	Itinerant Operations	Itinerant Operations	Itinerant Operations Local Operations Based Aircraft	Itinerant Operations Local Operations

The following describes each element of aviation activity:

- **Total Operations** – An operation is defined as a landing or take-off by an aircraft on a runway at an airport. If an aircraft lands and then takes off from an airport, those are counted as two operations. Total operations are important in determining the existing and potential activity at an airport, and therefore the facilities required to accommodate that activity. Operations types are further segmented into:
  - **Local Operations** – Aircraft operations performed by aircraft that are based at the airport and that operate in the local traffic pattern or within sight of the airport. This includes aircraft that are known to be departing for or arriving from flights in local practice areas within a prescribed distance from the airport, or that execute simulated instrument approaches at the airport.<sup>4</sup>

<sup>4</sup> FAA Advisory Circular (AC) 150/5070-6B

- **Itinerant Operations** – Operations by an aircraft that leaves the local airspace.<sup>5</sup>

Segregating forecasts for local and itinerant operations is useful because it assists in better defining facility requirements. For example, itinerant GA operations passing through an airport often only need fuel and temporary use of ramp at an FBO, whereas the local operations will drive the demand/need for hangar space.

- **Based Aircraft** – An aircraft is considered based at an airport if it is parked or hangared at that airport long-term. The number of based aircraft at an airport determines the facilities needed to accommodate those aircraft, whether apron pavement, covered parking, or various types of hangars.

#### 4.4 Forecast Approach

Forecasts are generally based on one of three approaches: Historic Trend Analysis, Regression Analysis, and Market Share Analysis. The first, Historic Trend Analysis, relates future activity to historical trends in aviation activity under the philosophy that what happened in the past informs the future if all things remain consistent. The second, Regression Analysis, uses dependable future projections of other activity or variables—in this case socioeconomic projections or FAA forecasts—to forecast future activity. Using this analysis, a reliable correlation must exist between the two data sources to ensure reliability of the forecasts. That evaluation of correlation is typically tested using historical data. The Market Share method assumes that an individual airport or group of airports will continue to hold the same percentage of activity in a market in the future as they have historically. While the Regression Analysis uses socioeconomic projections to forecast future activity, the Historic Trend Analysis and Market Share Analysis are generally based on historical and forecast data from the FAA. A more detailed description of each of these methodologies is provided later in Section 4.6.

The FAA forecasts aviation activity in the U.S. in its annual Aerospace Forecast. The FAA develops the commercial aviation forecasts and assumptions from statistical (econometric) models that explain and incorporate emerging trends for the different segments of the industry.<sup>6</sup> The Aerospace Forecast is the primary input for the Terminal Area Forecast (TAF) which includes historical and forecast information for each airport in the National Plan of Integrated Airport Systems (NPIAS). The TAF model and database can be used to gather information by individual airport, state, or FAA region. The TAF data is used in this analysis to:

- Create combined data for each of the 13 Michigan Economic Prosperity Regions
- Evaluate historical trends to enable selection of potential forecasting methods
- Project future activity using historical data
- Check projections for reasonableness with the FAA's activity forecasts for the state and economic prosperity regions
- Determine each airport's market share of activity within the Michigan system
- Compare forecasting results with FAA's forecasts for individual airports

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<sup>5</sup> FAA Advisory Circular (AC) 150/5070-6B

<sup>6</sup> [https://www.faa.gov/data\\_research/aviation/](https://www.faa.gov/data_research/aviation/)



Four airports had recently prepared independent forecasts as part of a master plan or other study. These are detailed forecasts that reflect greater consideration of local and regional conditions. Therefore, where airport-specific forecasts were available and were no more than three years old (base year of 2012), those were adopted as the system plan forecasts for those airports. Airports with recent forecasts include:

- Detroit Metropolitan International Airport (DTW)
- Willow Run Airport (YIP)
- Capital Region International Airport (LAN)
- Bishop International Airport (FNT)

Typically forecasts of aviation activity are prepared for a 20-year timeline. Therefore, some of the available forecasts had ending years prior to the 2035 end year for this study. In those cases, the final few years were extrapolated based on the growth rates in the individual forecasts.

Eighteen Tier 1 and Tier 2 airports in the Michigan system are not in the NPIAS and therefore do not have a TAF. For these airports, based aircraft and annual operations data were obtained from the Airport's 5010 Form or the Michigan Statewide Airport Community Benefit Assessment conducted in 2013. Typically, one year of data was available for based aircraft and operations. Additionally, AirNAV ([www.airnav.com](http://www.airnav.com)) was consulted for estimated percentages of local vs. itinerant operations and based fleet mix. This data was used to check the reasonableness of derivative operations projections. For data older than 2015, the forecasts prepared under this study included the additional years of activity change.

Activity for the 120 Tier 3 airports was estimated after the Tier 1 and 2 airport analyses were completed. The basis for estimates was the number of based aircraft recorded in the Michigan Aeronautics Commission database for 2016. Additional explanation of the methodology used to estimate Tier 3 airport operations and based aircraft is provided in Sections 4.7.2.2 and 4.7.4, respectively.

## **4.5 Data Sources Used for Forecasting**

Many data sources are available to assist in estimating future aviation activity. As described above, the three basic approaches include Historic Trend Analysis, Regression Analysis, and Market Share Analysis, which use different sets of data, as described in the following sections.

### **4.5.1 FAA Historical and Forecast Data**

Historical activity is used to understand trends, and in the case of Historic Trend Analysis, to project future activity. Market Share Analysis uses FAA forecasts of future activity for comparisons with smaller markets. Therefore, operations and based aircraft data was collected from the FAA database for each airport, the state, and the Great Lakes Region for the period from 1990 through 2015.

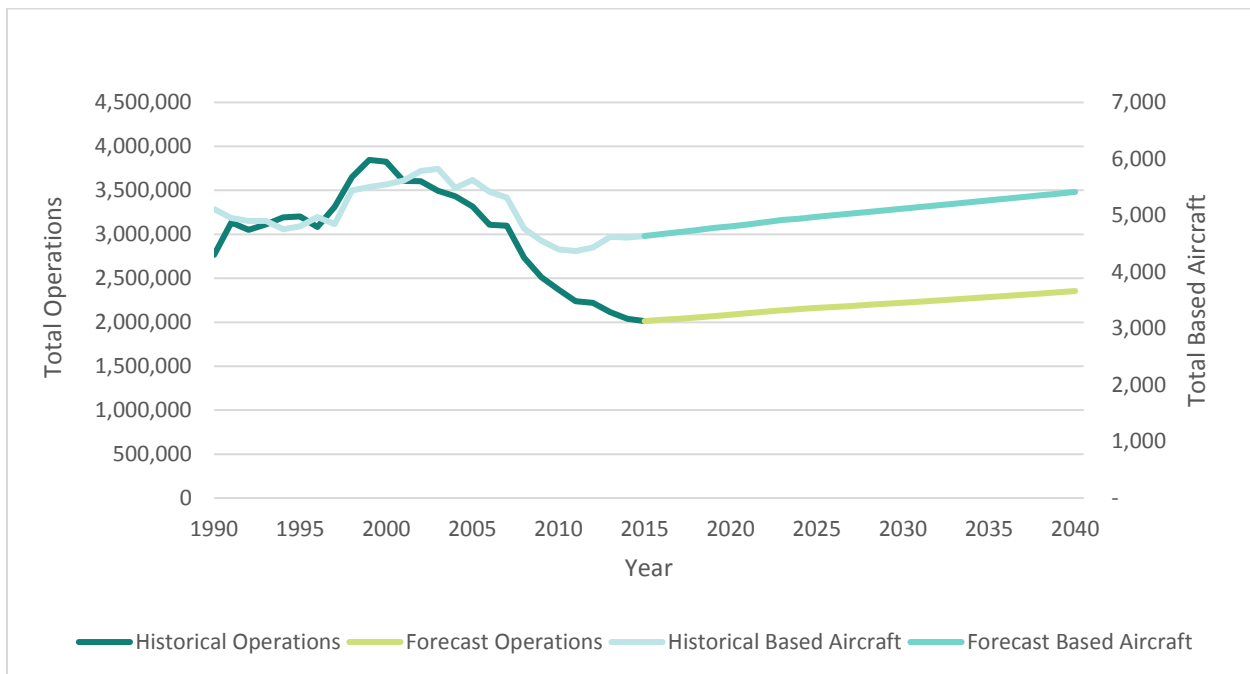
The primary source of data was the FAA's TAF, which includes historical information as reported to the FAA and forecasts of activity. All but 18 of the system airports are included in the FAA's TAF database. Data was downloaded for all system airports in the TAF and the Great Lakes Region as

defined by the FAA<sup>7</sup>. Individual airport data files were combined to create composite databases by MDOT Region and for the state.

**Figure 4-3** presents the FAA's historical data and forecast for the State of Michigan for aircraft operations and based aircraft. Operations are plotted on the left vertical axis and based aircraft are plotted on the right vertical axis for ease of trend comparison. As shown, operations and based aircraft have followed the same general trends from 1990 to 2015. The number of operations peaked statewide in 2000 and has declined in subsequent years. The decline in operations is due to multiple factors including airline consolidation affecting commercial airline operations, economic decline in the region, the U.S., and globally after 2008, and periods of high aviation fuel prices. The FAA forecasts a modest growth in operations through 2040 based on a more stable airline industry, lower fuel prices, and a better US economic outlook.

The number of based aircraft grew through 2006 and then fell with the economic decline and high fuel prices. However, there has been a slight increase in the market since 2010 that the FAA forecasts to continue through their forecast period.

**Figure 4-3: Michigan Historical and Forecasted Aircraft Operations and Based Aircraft**



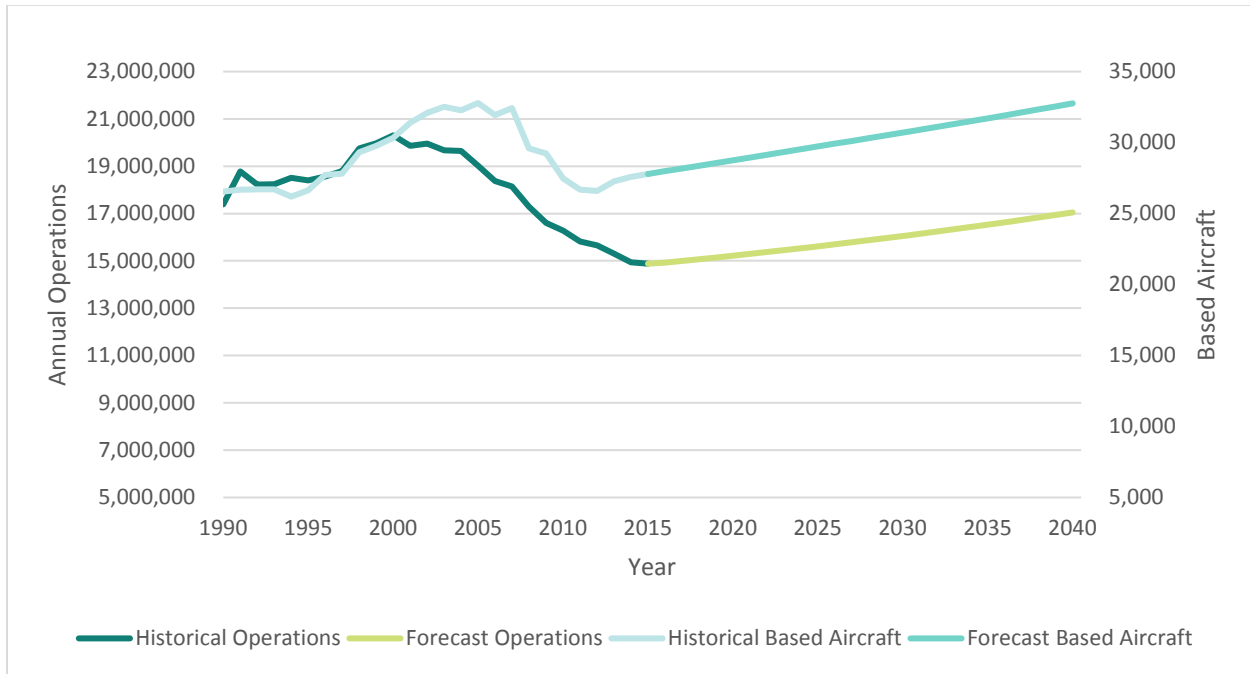
Source: Federal Aviation Administration, Terminal Area Forecast 2015-2040.

**Figure 4-4** presents similar historical and forecast data from the FAA's Aerospace Forecast for the Great Lakes Region of the United States. Trends are similar to those for Michigan, with operations

<sup>7</sup> The FAA's Great Lakes Region includes the states of Illinois, Indiana, Michigan, Minnesota, North Dakota, Ohio, South Dakota, and Wisconsin.

peaking two years later than Michigan in 2002 and based aircraft peaking in 2005, again, two years later than Michigan. Both the state and the Great Lakes Region saw an upswing in based aircraft after 2012. The FAA forecasts for both the state and Great Lakes Region show growth in the number of operations and based aircraft through 2040. For the Great Lakes Region, the increase in operations is approximately 11 percent (11%) through 2035 while based aircraft numbers are projected to increase by 14 percent (14%) over the same period.

**Figure 4-4: Great Lakes Region Historical and Forecasted Aircraft Operations and Based Aircraft**



Source: Federal Aviation Administration, Terminal Area Forecast 2015-2040.

#### 4.5.2 Socioeconomic Data

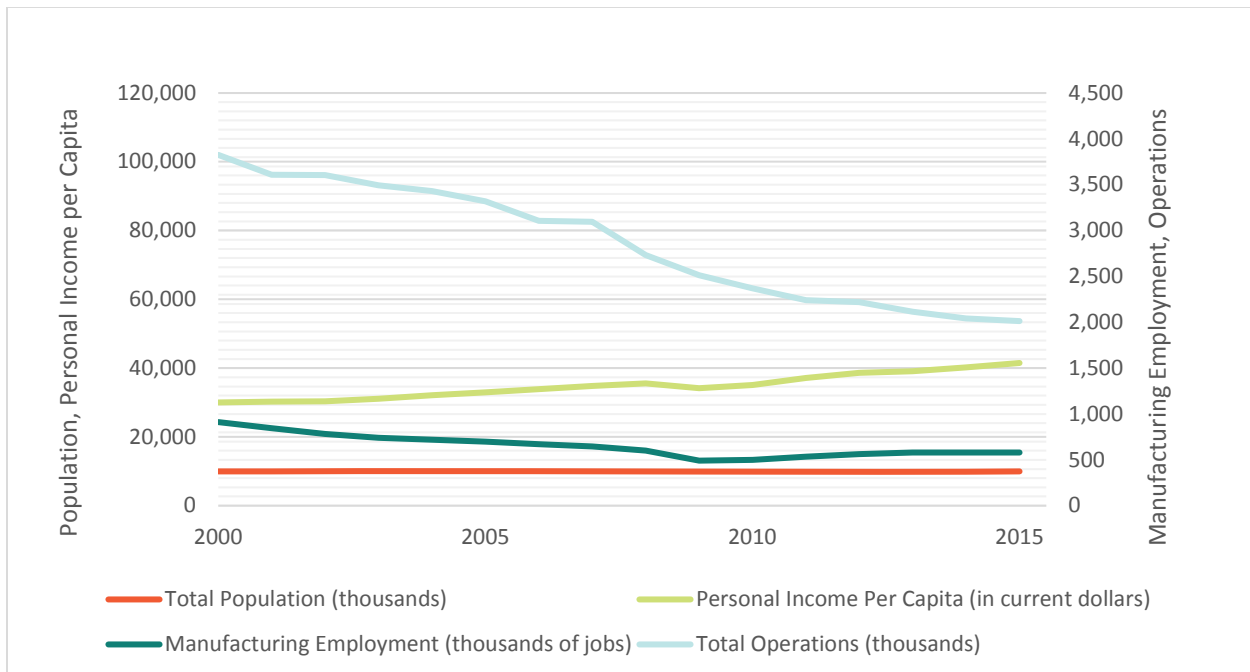
Socioeconomic conditions can often influence aviation activity. Aviation forecasts are therefore frequently based on socioeconomic factors that reflect the population and economic health of the region studied. Socioeconomic data was obtained from Woods & Poole Economics, Inc. (Woods & Poole), an independent firm that specializes in long-term economic and demographic projections. The Woods & Poole database includes every county in the United States and contains annually updated projections of various socioeconomic measures through 2050. The 2015 State Profile Series was used for this analysis, which contains data and projections for all Combined Statistical Areas (CSAs), Metropolitan Statistical Areas (MSAs), Micropolitan Statistical Areas (MICROs), Metropolitan Divisions (MDIVs), and counties within the State of Michigan.

Three types of data sets from the Woods & Poole database were considered in forecasting future aviation activity in the State of Michigan: population, manufacturing employment, and personal income per capita. Population influences how many people have access to aviation facilities in the state. Manufacturing employment in Michigan has historically been one of the largest employment sectors, spurring the need for business travel and providing good jobs to residents. Personal per

capita income is typically used as an indicator of a population's ability to engage in air travel either for business or recreation. In each of these sets, data was available for the U.S. as a whole, the Great Lakes Region, the State of Michigan, various metropolitan areas, and individual cities. This provided flexibility to evaluate from a macro view to a more focused local or regional view.

**Figure 4-5** graphs these three socioeconomic variables for the State of Michigan with total aircraft operations over the period 2000 to 2015 for airports in the NPIAS. Population and personal per capita income are on the right vertical axis while manufacturing employment and operations are on the left vertical axis. These are graphed together so that the trends can be compared visually to determine which of the socioeconomic factors might provide the best correlation to the total operations trend. As can be seen, the total aircraft operations trend most closely follows the manufacturing employment trend over this period.

**Figure 4-5: Michigan Socioeconomic Factors and Total Aircraft Operations at NPIAS Airports, 2000-2015**



Source: Woods & Poole Economics, Inc., 2015 State Profile Series for Michigan.

Manufacturing employment follows the decline of operations through 2010, but shows a slight rebound after 2010, while total operations continue to drop. Given this similarity, manufacturing employment data set was considered the most reasonable of the three to consider for forecasting future aviation operations through regression analysis, although not an ideal correlation.

## 4.6 Forecast Methods

The three forecasting methods considered for this analysis—Historical Trend Analysis, Market Share Analysis, and Socioeconomic Regression Analysis—were used to estimate the total operations and based aircraft anticipated over the planning horizon. The results were compared to the FAA's forecasts to

understand the possible range of activity and recommend a forecast for use in the MASP. To be consistent with FAA forecasts, the initial analyses used only those airports that are in the NPIAS, for which the FAA has prepared forecasts. The remainder of non-NPIAS airports were added to the analysis after the forecast methodology was selected. The initial analysis aggregated data into the seven MDOT Regions. These encompass larger areas than the 13 Economic Prosperity Regions but include the same number of airports overall. The methodologies are summarized as follows:

- **Historical Trend Analysis** forecasting utilizes historic trends to project future activity. In a trend analysis, a regression equation is used with time as the independent variable. For this analysis average compound annual growth rates (CAGR) were used as the trend from which to project future activity. The initial analysis projected activity for each of the Prosperity Regions using the trends in those regions.
- **Market Share Analysis** forecasting assumes that the relative share of the overall market, as well as the rate of growth or decline in the market share over time, will continue into the future. This approach is a “top-down” method of forecasting, and can be employed as long as a reliable larger aggregate “market” forecast is available. In this case, that is the FAA’s forecast for the Great Lakes Region. For this analysis, the operations and based aircraft for individual airports in Michigan were measured historically as a percentage of the total Great Lakes Region system. That resulting market share for each airport was then applied against FAA’s forecasts of future activity to determine the likely activity for each airport and in the State of Michigan.
- **Socioeconomic Regression Analysis** forecasting projects dependent variables based on their relationship to independent or explanatory variables. The relationship between the dependent and independent variables is established using historic data for both variables and then translating that relationship using a separate forecast of the independent variable. The strength of the relationship between the variables is measured by the R<sup>2</sup> statistic (called the coefficient of determination). Only variables with a strong R<sup>2</sup> value (i.e. a consistent relationship between each other) are used to project future activity. For this analysis, the relationship between aviation operations activity in Michigan (the dependent variable) and socioeconomic projection of Manufacturing Employment (the independent variable) was evaluated to forecast future activity.

## 4.7 Forecast Results

Forecast results varied by the type of method used. Detailed descriptions of results for each of the methodologies is discussed in the following sections, first for operations forecasts and then for based aircraft forecasts. For the reasons described below, the Market Share Analysis was found to produce the most reasonable results.

### 4.7.1 Analyses of Operations

Analyses began by forecasting operations using each of the three methods. The results were evaluated for reasonableness with the Michigan aviation market.

#### 4.7.1.1 Historical Trend Analysis

Historical aviation activity data for each airport from the FAA Aerospace Forecast was combined into data sets representing each of the seven MDOT regions<sup>8</sup>. This data was used in a trend line analysis to project future operations activity by prosperity region.

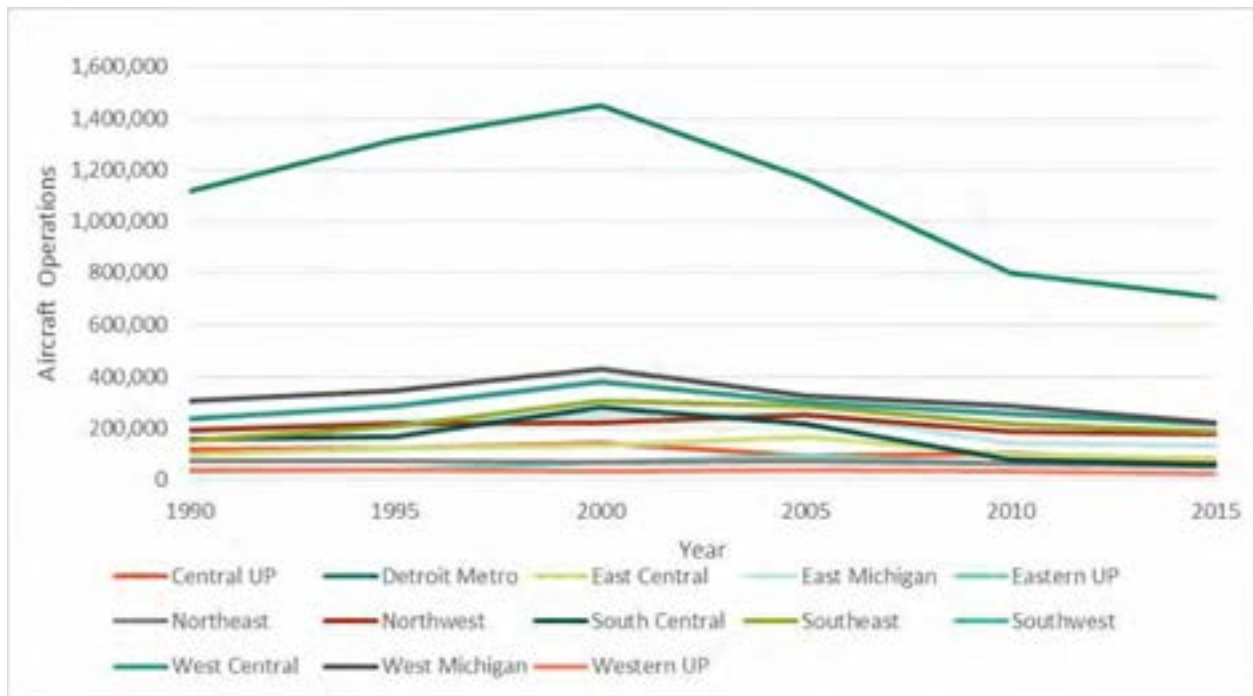
**Figure 4-6** charts historical aircraft operations by region for airports in the NPIAS. The Metro region's activity accounts for nearly 36 percent (36%) of the state's aviation activity. The Superior region is the smallest in terms of activity, accounting for only about 7.5 percent (7.5%) of the state's total. All regions of the state show a slight decline beginning in 2000, but the trend is most pronounced in the Metro region, which includes Detroit. This reflects the large drop in commercial service activity as a result of the September 11, 2001, attacks and airline consolidation. An additional downward trend occurs around 2006 with the beginning of escalating fuel prices and the global economic downturn. While activity in all regions was generally declining from 2000 to 2015, the decline is less in the period from 2010 to 2015. Therefore, FAA data for aircraft operations in Michigan by MDOT Region over the period from 2010 to 2015 was used for the trend line analysis.

**Figure 4-7** illustrates that using a trend line analysis to forecast future activity results in a continued reduction of activity in all regions, with two of the seven regions showing zero activity midway through the forecast period. This is not a realistic outlook, therefore this methodology was not used for forecasting operations and was dismissed from further consideration.

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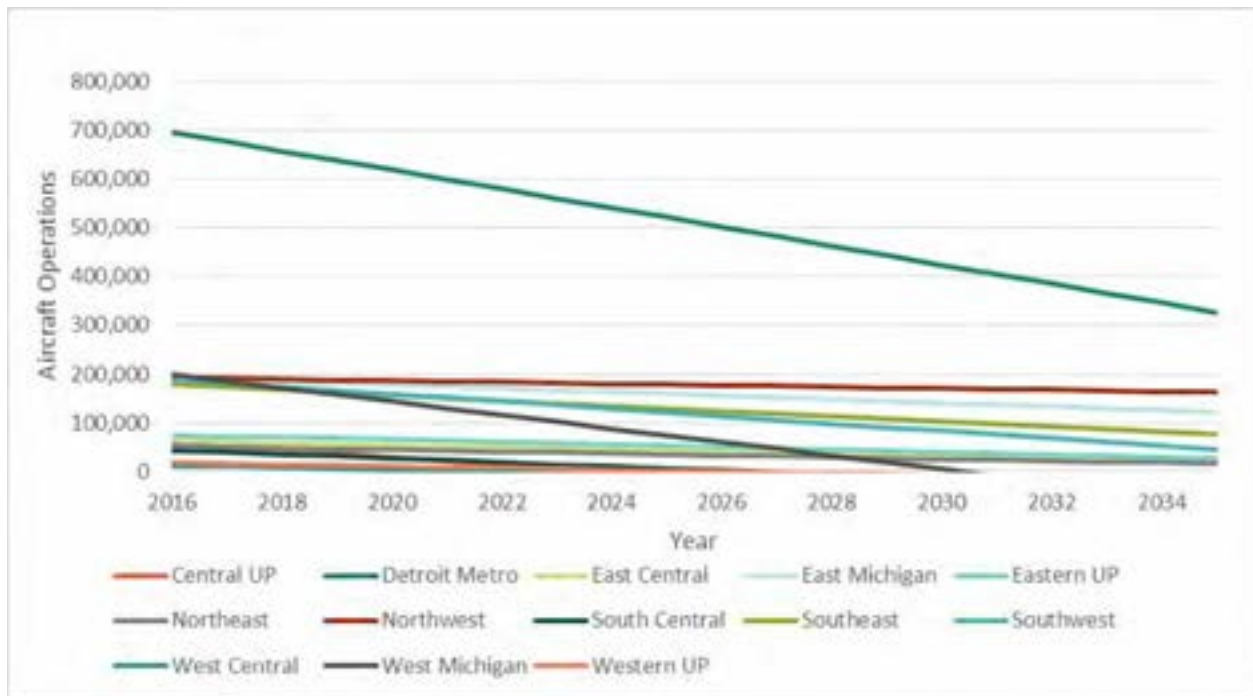
<sup>8</sup> The MDOT Regions differ from the state's Economic Prosperity Regions and encompass larger areas. The MDOT Regions are: Bay, Grand, Metro, North, Southwest, Superior, and University. The MDOT Regions, of which the Economic Prosperity Regions are generally subregions, were fewer, allowing data analysis and manipulation to be performed more expediently. After the preferred methodology was established, the data was reconstituted into the Economic Prosperity Regions.

**Figure 4-6: Michigan Historical Aircraft Operations at NPIAS Airports by Prosperity Region**



Source: Federal Aviation Administration, Terminal Area Forecast 2015-2040.

**Figure 4-7: Trend Line Forecast Operations at NPIAS Airports by Prosperity Region**



Source: Jacobsen|Daniels analysis, February 2017, based on FAA Terminal Area Forecast 2015-2040.

#### 4.7.1.2 Market Share Analysis

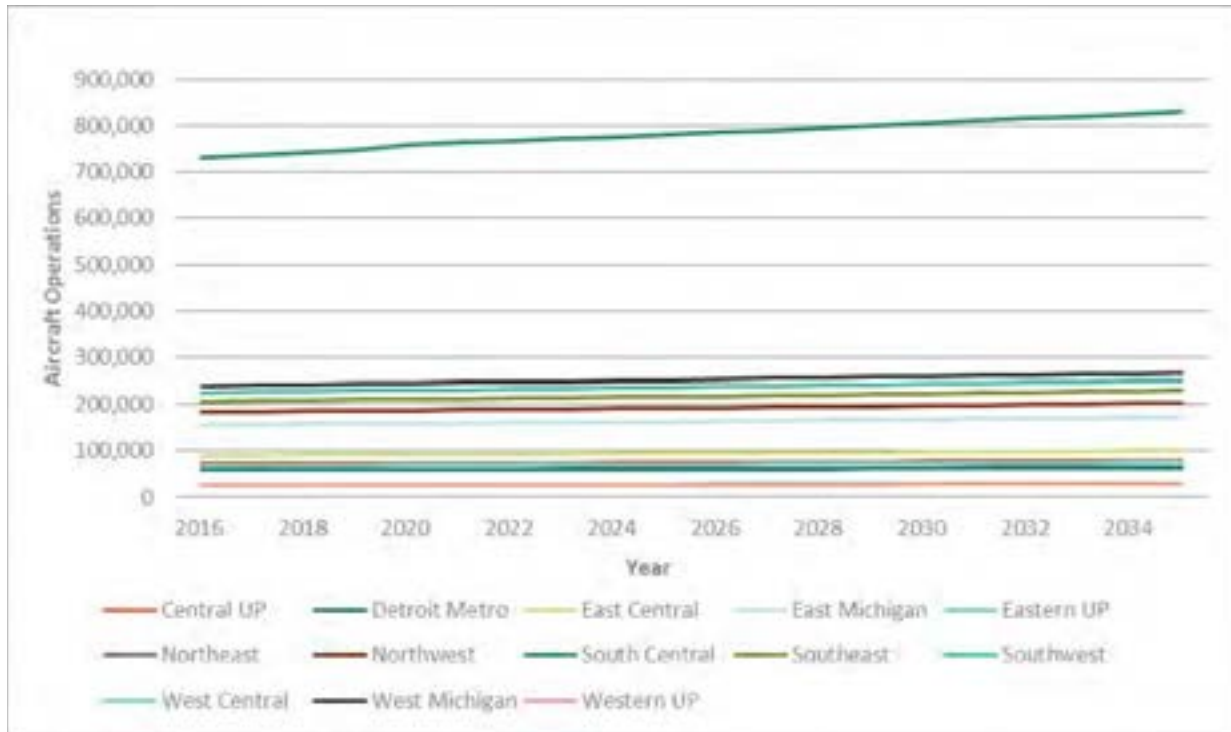
The market share analysis projects growth based on the historic market share of an individual airport or group of airports. In this case, the market share forecast was derived from each airport's historical market share of the Great Lakes Region's operations obtained from the FAA TAF database for airports in the NPIAS. This method reflects the FAA's outlook for future aviation activity in the region based on their national and regional analyses.

The FAA projects total aircraft operations in the U.S. to grow at an average annual rate of 0.9 percent (0.9%). Growth is expected to be the strongest at large hub airports at 1.60 percent (1.6%) CAGR compared to non-hub towered airports at 0.38 percent (0.38%) CAGR. This results in an increase of approximately 13.7 percent (13.7%) from 2015 to 2035 nationwide and 11.1 percent (11.1%) in the Great Lakes region.

The analysis was begun using the average market share value from the 2010 – 2015 period for each airport compared to the FAA's Great Lakes Region. Use of an average market share was selected to "smooth out" short term fluctuations in activity. That market share of total activity for each successive year, 2016 through 2035, was used as the forecast of operations. The aggregate projections for each prosperity region compared favorably to the TAF for those regions. However, comparing individual airport operations forecasts for 2016 through 2035, showed a wide variation in the projections compared to the individual TAFs. In one case, in which the airport had experienced a significant drop in operations over the five years, the projected 2016 operations were nearly twice the 2015 number. Using the five year average in this case had set the market share much higher than was reasonable. There were similar examples in which the number of operations in 2016 were significantly less than what was experienced in 2015.

Therefore, the methodology was adjusted to use only the 2015 operations for each individual airport to calculate that airport's market share. This resulted in reasonable and believable individual airport projections for 2016. The results of the projection using the Market Share method are presented in **Figure 4-8**.



**Figure 4-8: Market Share Forecast Operations at NPIAS Airports by Prosperity Region**

Source: Jacobsen|Daniels analysis, April 2017, based on FAA Terminal Area Forecast 2015-2040.

The results show a modest growth in activity in all of the prosperity regions, which is reflective of the FAA's overall outlook for the larger Great Lakes Region and the state of Michigan. For all prosperity regions, activity grows by 15.7 percent (15.7%) over the planning period. The results also compare favorably in terms of growth with those airports that have individual forecasts. The results are reasonable for each region and as a whole.

#### 4.7.1.3 Socioeconomic Regression Analysis

As described previously, the level of confidence in a regression analysis is high if there is a high correlation between the two sets of data used for the analysis. In this case, the known data is the projection of manufacturing employment for the state, which was used to extrapolate aviation activity. Correlation is expressed in terms of the coefficient of determination or R-squared ( $R^2$ ) value, of which a value of one is perfect correlation, while a value of zero indicates no correlation at all. A value above 0.85 shows a reasonable level of confidence in the correlation and resulting projection.

The regression analysis was to be performed in two phases: first for a sample of a variety of sizes of airports, and then, if the results from the initial analysis were reasonable, by each of the prosperity regions in the state for airports in the NPIAS. Sample airports are listed in **Table 4-2**. These were selected to represent the various FAA ASSET categories and regional diversity. The  $R^2$  values show the results of regression analyses comparing the correlation of historical operation activity at each airport to manufacturing employment

data for Michigan. The low  $R^2$  values indicate that there is little correlation between the data sets. Therefore, this method would not produce a reliable forecast of future activity, and no further socioeconomic data regression analysis was performed.

**Table 4-2:  $R^2$  Results for Historical Operations and Manufacturing Employment Regression**

Airport	Airport ID	$R^2$ Value
Detroit Metropolitan Airport	DTW	0.5396
Gerald R. Ford International Airport	GRR	0.5102
Kalamazoo/Battle Creek International Airport	AZO	0.3824
Willow Run Airport	YIP	0.0727
Ann Arbor Municipal Airport	ARB	0.1918
Gaylord Regional Airport	GLR	0.1899
Mackinac Island Airport	MCD	0.2129
Toledo Suburban Airport	DUH	0.6627

Source: Jacobsen|Daniels, January 2017.

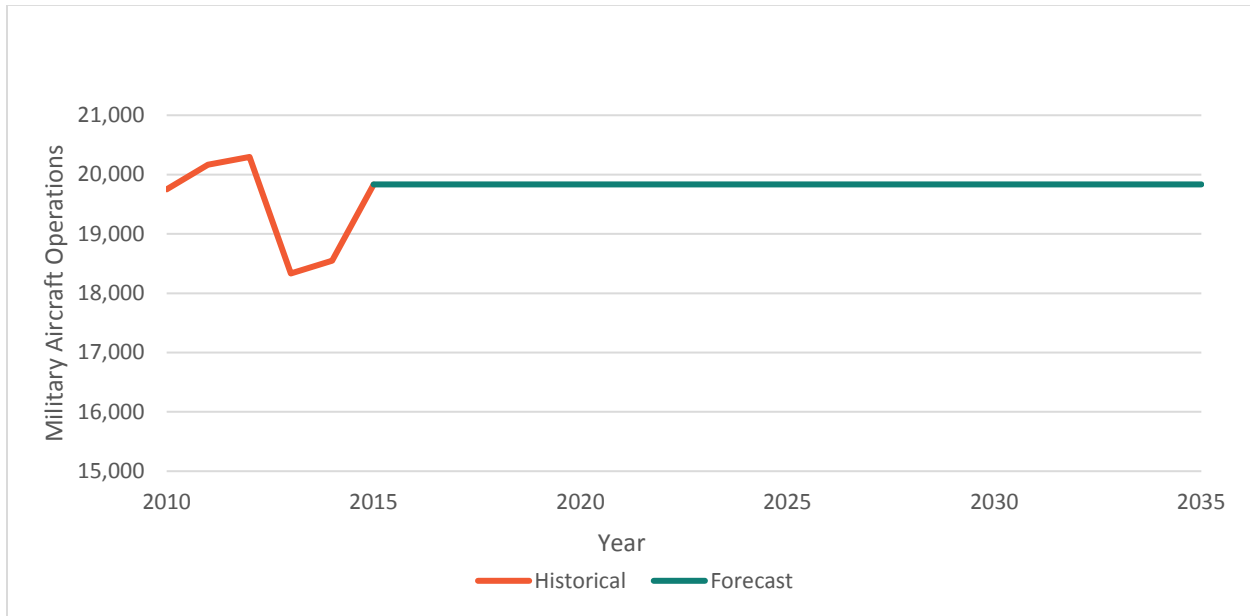
#### 4.7.1.4 Military Operations

Military operations are also considered in the forecast. The military has a strong flight presence at five airports in the state. These include:

- Alpena County Regional Airport, located in the North region of Michigan, is home to the U.S. Air National Guard base and the Alpena Combat Readiness Training Center (CRTC). The CRTC hosts a wide variety of large and small, ground and air training operations for the Department of Defense, Department of Homeland Security and emergency responders, as well as multinational participants.
- Grayling Army Airfield, a joint public/military use airport owned by the U.S. Army, is located in the North region of the state. It houses Camp Grayling, a four-season joint training center with a large restricted airspace up to 23,000 feet and aerial bombing range for live fire exercises.
- W.K. Kellogg Airport is home to the Michigan Air National Guard's 110<sup>th</sup> Attack Wing, and 217<sup>th</sup> Air Operations Group. It is located in the Southwest region of the state.
- Abrams Municipal Airport Grand Ledge, located in the University region, is home to three wings of the Army National Guard whose helicopters make up the military flight activity.
- Selfridge Air National Guard Base is home to units from every branch of the U.S. Armed Forces, hosted by the 127<sup>th</sup> Wing of the Michigan Air National Guard. The primary aircraft assigned to the base are A-10 Thunderbolt II, KC-135 Stratotanker, Chinook, Dolphin, and a variety of light helicopters, and fixed wing aircraft. This airport is not in the NPIAS as it serves entirely military operations. Daily average operations are estimated by AirNav at just over 100 per day, which add to the military activity in the state and Metro region. Military flights originating from Selfridge and using other Michigan airports are counted as military operations at those other airports.

Military flight activity in Michigan is graphed in **Figure 4-9**. From 2010 to 2015, operations fluctuated by about 10 percent (10%). In the peak years, military activity accounts for a very small percentage—approximately 0.9 percent (0.9%)—of the total flight activity in the state. This forecast addressed future military activity in the same manner as the FAA addresses it. Future activity is projected to continue at the 2015 level throughout the forecast period.

**Figure 4-9: Michigan Historical and Forecasted Military Aircraft Operations**



Source: Federal Aviation Administration, Terminal Area Forecast 2015-2040.

#### 4.7.2 Selected Methodology – Market Share Analysis

The Historical Trend Line analysis produced significant drops in operations in multiple regions and for the state overall as a result of reliance on historical declines in one or more of the variables. Although there have been significant drops in activity in the previous 10 years, it is expected that activity will recover and increase modestly in accordance with the FAA's outlook. Therefore, the Historical Trend Line analysis was not selected to project the future activity. Socioeconomic Regression showed very little correlation between aircraft activity and state socioeconomic trends, so it too could not be used to project future activity. The Market Share method reflects both historical drops and the current outlook for the Great Lakes Region, and therefore was selected as the preferred method to forecast activity.

The derivative elements of the operations forecast (as shown in **Table 4-1**) were developed using the ratio of each category of operations by airport in 2015 to the total operations for that airport. For example, if the percentage of GA itinerant operations at an airport was 40 percent (40%) of the total operations, that percentage was held constant over the forecast period and growth in that segment was proportional to the overall growth in operations. Base year airport operations reported

on airport Community Benefits Assessment (CBA) worksheets or airport 5010 forms were used. For airports with individual forecasts, the forecasted numbers were used.

#### **4.7.2.1 Forecasting for Airports Not in the NPIAS**

For airports that are not in the NPIAS, and therefore do not have a terminal area forecast, the single year of operations data was obtained from completed airport CBA worksheets or airport 5010 Forms as a starting point to forecast future operations activity. The average annual growth rate of the Great Lakes Region was then applied to create the forecast of operations. Itinerant and local percentages were assumed to be consistent with the data obtained from these other sources and to remain constant over the forecast period.

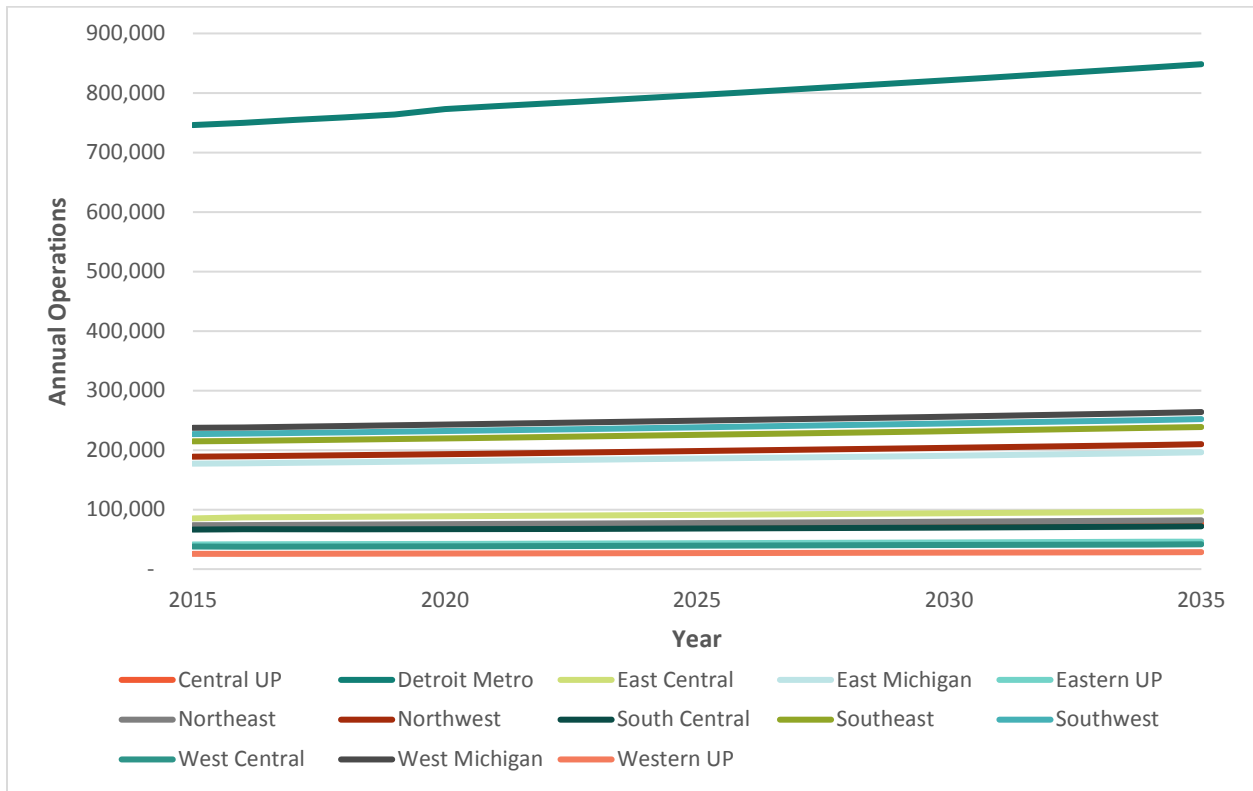
#### **4.7.2.2 Estimating Activity at Tier 3 Airports**

For Tier 3 airports, the basis of estimations was the number of based aircraft at each airport in 2016, sourced from aircraft registration data. To project the 2015 based aircraft, the 2016 based aircraft number was reduced by the annual growth rate for Tier 1 and 2 airports between 2015 and 2016. Then operations were estimated using the median number of operations per based aircraft for non-NPIAS Tier 2 airports. That group of airports was anticipated to be most similar to the Tier 3 airports. A number of Tier 3 airports reported no based aircraft in 2016. An annual total of 100 operations was assigned to each of those, that being the minimum number of operations in 2015 at Tier 1 and 2 airports. Growth rates equal to those of all GA activity at the Tier 1 and 2 airports was applied to the 2015 operations to estimate determine future year operations.

### **4.7.3 Operations Forecast Results**

**Figure 4-10** shows the operations forecasted in Michigan using the market share methodology for all Tier 1 and Tier 2 airports, by Economic Prosperity Region.

**Figure 4-10: Market Share Analysis Forecast Results - Operations by Prosperity Region for Tier 1 and Tier 2 Airports**

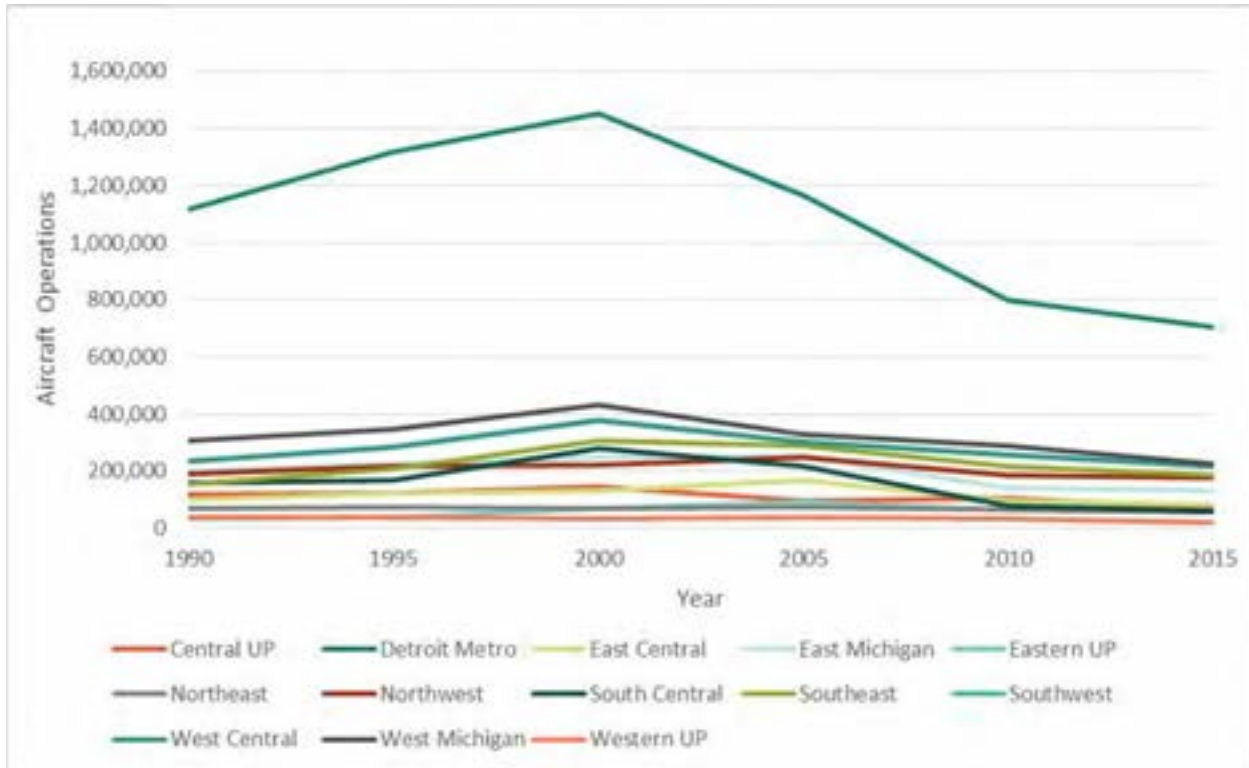


Source: Jacobsen|Daniels, June 2017.

#### 4.7.4 Based Aircraft Forecast Results

As shown in **Figure 4-11** the historical based aircraft data by Prosperity Region for airports in the NPIAS shows some volatility over the period from 1990 – 2015, reflecting trends seen in the historic operations data. The largest drop is shown by the Detroit Metro Prosperity Region between 2005 and 2010, primarily as a result of the economic downturn affecting aircraft ownership by both private and corporate entities.

**Figure 4-11: Michigan Historical Based Aircraft at NPIAS Airports by Economic Prosperity Region, 1990 – 2015**



Source: Jacobsen|Daniels, from Federal Aviation Administration, Aerospace Forecast 2016 – 2036.

The FAA's Aerospace Forecast for the U.S. projects that the active GA fleet will grow over the next 20 years by an average annual rate of 0.2 percent (0.2%) with the more expensive turbine-powered fleet growing at 2.1 percent (2.1%). For airports with air traffic control towers, GA operations will increase by an average annual rate of 0.3 percent (0.3%) over the same period, with an increase in turbine-powered aircraft activity and a decrease in piston activity. For the Great Lakes Region, based aircraft are expected to increase by 14 percent (14%) from 2015 to 2035.

The three methods considered for operations forecasts were also considered for use in forecasting based aircraft. However, because of the unrealistic results produced by socioeconomic regression analyses, that method was not considered for forecasting based aircraft. Likewise, the trend line analysis would not be reliable in markets with an overall downward trend such as the Detroit Metro Prosperity Region. The Market Share analysis showed the most reliability for forecast of based aircraft and therefore was selected as the preferred methodology.

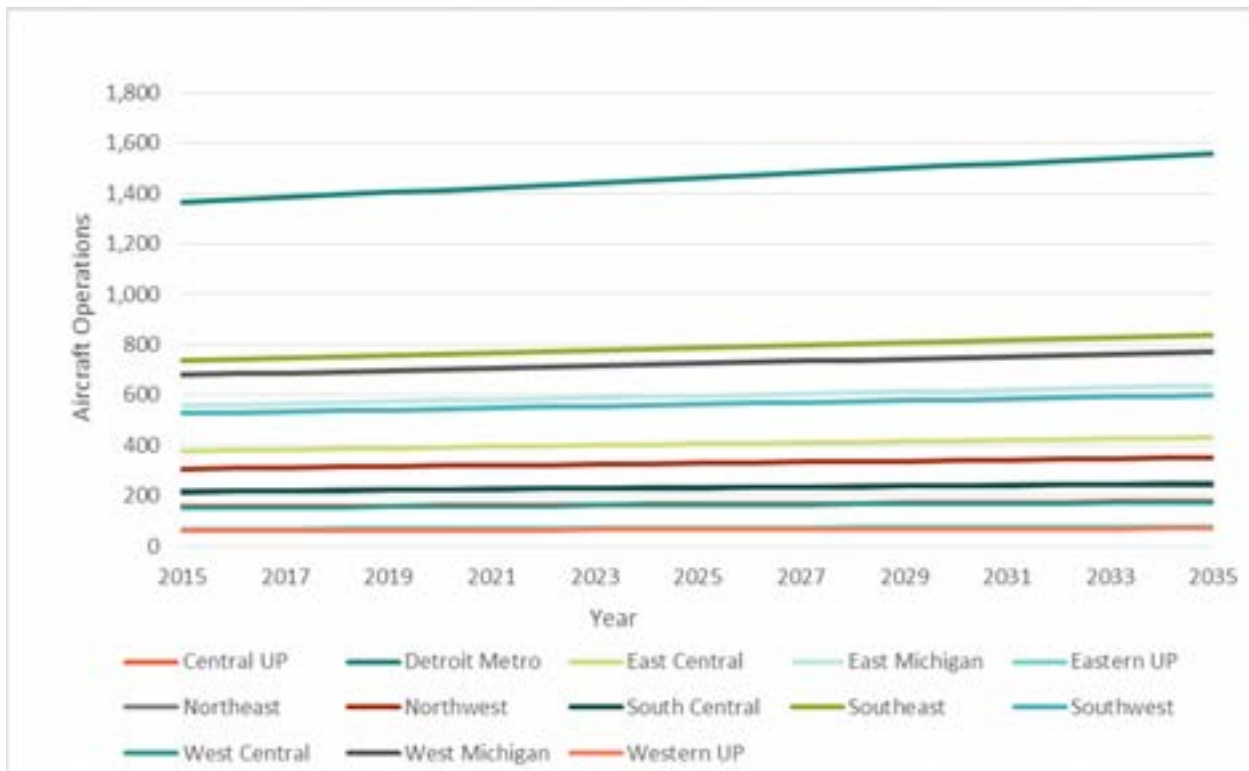
Using the Market Share approach, the number of based aircraft were derived by calculating each airport's market share of the Great Lakes Region's total based aircraft from 2000-2015. Comparing the market share by individual airport in the 15-year period to the most recent 10-year and 5-year period showed very little variation, therefore the ratio for the entire 15-year period was used as the basis for forecasting. That ratio was multiplied by the number of based aircraft at each airport as reported on airport CBA worksheets, basedaircraft.com, or airport 5010 forms. For the four airports

that have detailed individual forecasts, the number of based aircraft in the forecast was used. That number was used as the starting point to project growth consistent with that of based aircraft in the Great Lakes Region.

The results of the based aircraft forecast for all Tier 1 and 2 airports in the system are shown in **Figure 4-12**, presented by Economic Prosperity Region. Over the forecast period, the number of based aircraft in all regions is projected to increase by 14.3 percent (14.3%), varying from a low of 11.8 percent (11.8%) in the Central Upper Peninsula Region to a high of 15.9 percent (15.9%) in the Detroit Metro Region.

Tier 3 based aircraft were projected from the 2016 levels based on the growth projected for all Tier 1 and 2 airports over the forecast period. Those airports that had no based aircraft in 2016 were assumed to have no based aircraft through the forecast period, although the operations at those airports did increase.

**Figure 4-12: Market Share Analysis Forecast Results - Based Aircraft by Prosperity Region for Tier 1 and Tier 2 Airports**



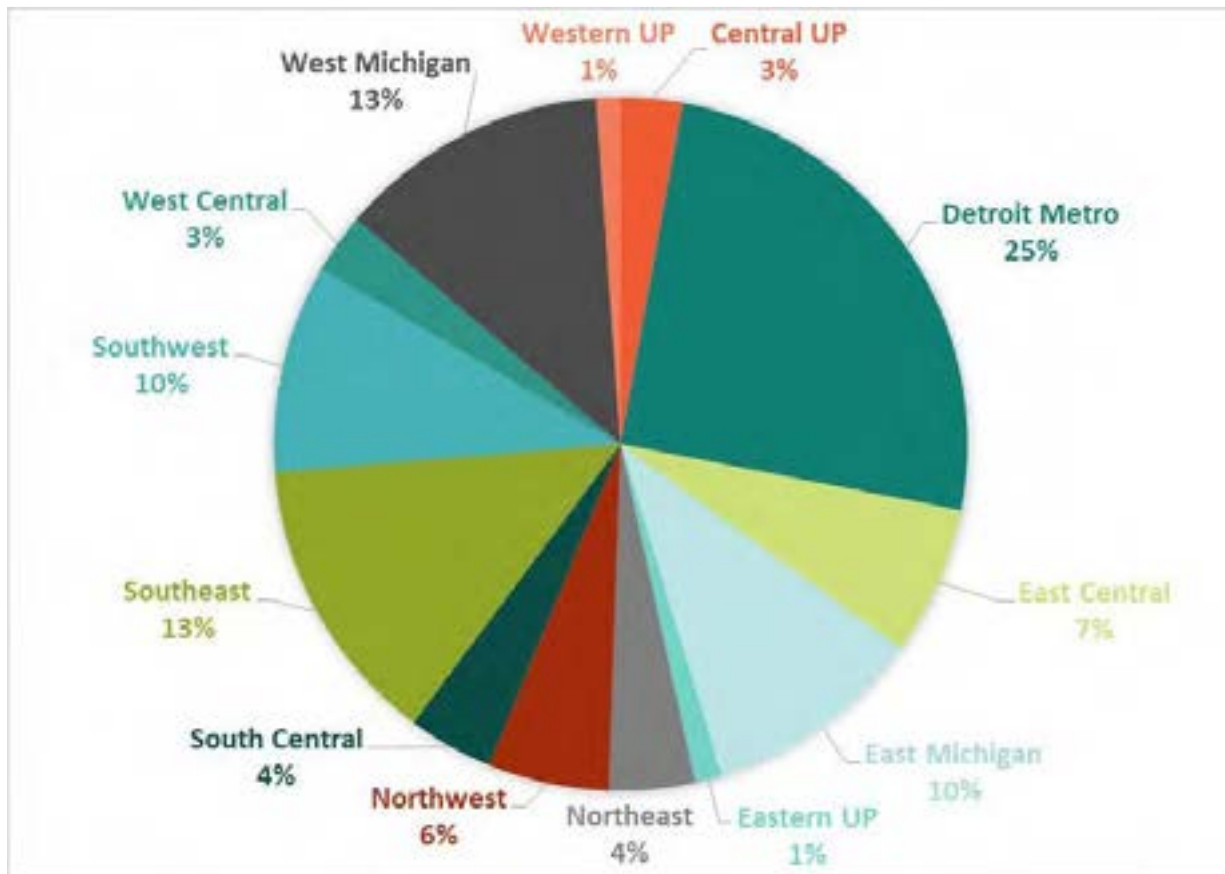
Source: Jacobsen|Daniels, June 2017.

#### 4.8 Recommended Forecasts of Operations and Based Aircraft by Prosperity Region

The Market Share method resulted in growth for all airports, consistent with the FAA's forecast for the Great Lakes Region. In the TAF, the FAA typically treats small, non-towered airport forecasts similar to military forecasts. That is, the number of operations and based aircraft are held constant over the forecast period. By using the Market Share method to forecast activity, this MASP forecast shows some growth for these airports and therefore varies from the TAF on an airport-by-airport comparison.

Forecast results for Tier 1 and Tier 2 airports are summarized for each Michigan Economic Prosperity Region in the following sections. **Figure 4-13** graphs the percentage of total operations in 2015 at Tier 1 and Tier 2 airports in the state by Economic Prosperity Region. **Table 4-3** and **Table 4-4** present summaries of annual aircraft operations and based aircraft by region for Tier 1 and Tier 2 airports and for the state's Tier 3 airports as a group.

**Figure 4-13: Percentage of Aircraft Operations in 2015 by Prosperity Region for Tier 1 and 2 Airports**



Source: Jacobsen|Daniels, June 2017.



**Table 4-3: Summary of Aircraft Operations by Prosperity Region for Tier 1 and Tier 2 Airports plus Tier 3 Airport Totals**

Region	Historical	Forecast			
	2015	2020	2025	2030	2035
<b>Tier 1 and Tier 2 Airports</b>					
Western UP	23,891	24,442	25,060	25,778	26,541
Central UP	68,980	70,573	72,359	74,434	76,637
Eastern UP	41,409	42,418	43,526	44,781	46,104
Northwest	188,892	193,277	198,182	203,869	209,899
Northeast	73,832	75,544	77,460	79,683	82,040
West Central	37,727	38,409	39,378	40,507	41,705
West Michigan	239,425	245,031	251,282	258,498	266,143
East Central	86,807	88,856	91,133	93,752	96,525
East Michigan	177,196	181,412	185,394	190,745	196,319
South Central	66,428	67,227	67,932	69,887	71,880
Southwest	226,844	232,111	238,003	244,832	252,074
Southeast	214,711	219,765	225,390	231,865	238,722
Detroit Metro	746,088	772,957	796,129	821,516	848,303
<b>Tier 3 Airports</b>					
All Tier 3 Airports	98,557	101,389	103,911	106,829	109,951
<b>Total</b>	<b>2,290,787</b>	<b>2,353,411</b>	<b>2,415,139</b>	<b>2,486,976</b>	<b>2,562,843</b>

Source: Jacobsen|Daniels, June 2017.

**Table 4-4: Summary of Based Aircraft by Prosperity Region for Tier 1 and Tier 2 Airports plus Tier 3 Airport Totals**

Region	Historical	Forecast			
	2015	2020	2025	2030	2035
<b>Tier 1 and Tier 2 Airports</b>					
Western UP	61	63	65	67	70
Central UP	156	161	167	172	178
Eastern UP	68	70	73	75	78
Northwest	307	318	329	340	351
Northeast	218	226	233	241	249
West Central	152	157	163	168	173
West Michigan	687	711	736	760	786
East Central	378	391	405	418	432
East Michigan	557	576	596	616	637
South Central	216	223	231	239	246
Southwest	526	544	563	581	600
Southeast	734	760	786	812	839
Detroit Metro	1,366	1,560	1,462	1,510	1,560
<b>Tier 3 Airports</b>					
All Tier 3 Airports	538	549	557	571	585
<b>Total</b>	<b>5,964</b>	<b>6,309</b>	<b>6,366</b>	<b>6,570</b>	<b>6,784</b>

Source: Jacobsen|Daniels, June 2017.

The following sections (4.8.1 through 4.8.13) present the recommended forecasts of operations and based aircraft by prosperity region in order of location in the state, from northwest to southeast:

- Western Upper Peninsula
- Central Upper Peninsula
- Eastern Upper Peninsula
- Northwest
- Northeast
- West Central
- West Michigan
- East Central
- East Michigan
- South Central
- Southwest
- Southeast
- Detroit Metro

Operations data for the Tier 1 and Tier 2 airports is presented in the tables by the six sub-categories: air carrier, air taxi, itinerant GA, local GA, itinerant military, and local military. Total operations and based aircraft for Tier 1 and Tier 2 airports are also graphed for each region. Forecasts for individual airports can be found in **Appendix A**.

#### 4.8.1 Western Upper Peninsula

The Western UP Region consists of four system airports, all classified as Tier 1, with two providing scheduled air service. The region includes the western end of the Upper Peninsula, bordering Wisconsin and Lake Superior (**Figure 4-14**). It is home to Ottawa and Chequamegon-Nicolet National Forests.

**Table 4-5** presents the region's historical and forecast operations and based aircraft, with operations segmented by type. **Figure 4-15** graphically depicts total operations and based aircraft.

GA accounted for just over 62 percent (62%) of the operations in this region in 2015, with commercial service making up nearly 38 percent (38%). Military activity was itinerant and limited to only 30 annual operations. Air taxi is expected to make up the majority of future commercial service. Local GA activity will continue to be slightly more than itinerant. Commercial service and GA operations are forecast to increase by 11 percent (11%) from 2015 to 2035. Based aircraft numbers are projected to increase by 15 percent (15%) over the same period.

**Figure 4-14: Western UP Region**



**Table 4-5: Western UP Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**

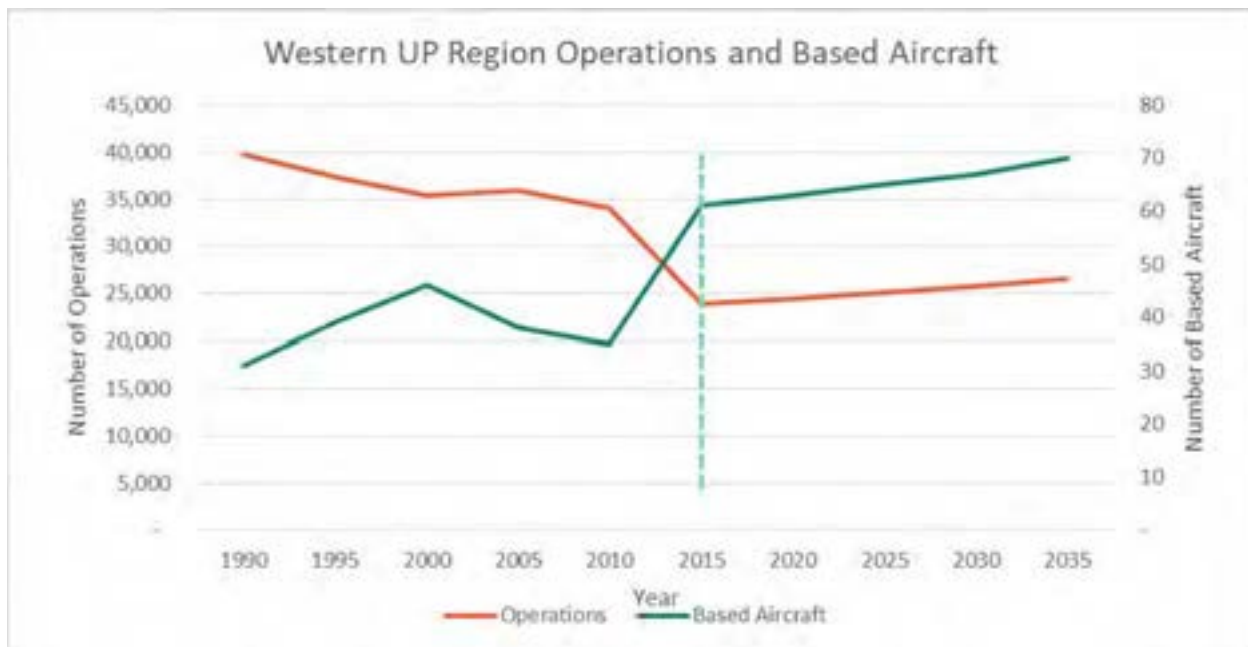
Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	-	10,543	12,000	16,800	440	-	39,783	31
1995	30	10,046	12,090	14,720	440	-	37,326	39
2000	-	7,840	12,300	14,870	440	-	35,450	46
2005	-	8,230	12,560	14,726	440	-	35,956	38
2010	4,404	3,164	11,942	14,422	120	-	34,052	35
2015	8	9,023	6,430	8,400	30	-	23,891	61
Forecast								
2020	8	9,231	6,578	8,594	30	-	24,442	63
2025	8	9,465	6,745	8,812	30	-	25,060	65
2030	9	9,737	6,939	9,064	30	-	25,778	67
2035	9	10,025	7,144	9,333	30	-	26,541	70

Notes: Rows may not total due to rounding.

Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

**Figure 4-15: Western UP Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

#### 4.8.2 Central Upper Peninsula Region

The Central UP Region, highlighted in **Figure 4-16**, consists of five airports, three of which provide scheduled air service, and all of which are classified as Tier 1. Airports in the region provide access to communities, recreational areas, and natural areas such as Hiawatha National Forest, Lake Superior, and Green Bay.

**Figure 4-16: Central UP Region**



**Table 4-6** presents the region's historical and forecasted operations and based aircraft. The operations have been segmented by type. **Figure 4-17** graphically depicts the summary of total operations and based aircraft.

About 63 percent (63%) of the region's operations in 2015 were GA. Air carrier and air taxi combined to make up 33 percent (33%) of the total operations in 2015 with military accounting for 4 percent (4%). Commercial service and GA operations are expected to grow at 11 percent (11%), while based aircraft are expected to grow 14 percent (14%) over the forecast period.

**Table 4-6: Central UP Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**

Year	Operations						Total	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	-	23,674	39,205	55,255	151	-	118,285	126
1995	38	34,599	44,937	42,517	149	-	122,240	143
2000	100	40,651	49,984	52,484	480	-	143,699	156
2005	10	23,930	37,700	32,321	649	638	95,248	148
2010	3,124	22,989	38,360	37,864	555	342	103,234	159
2015	6,050	16,764	15,418	27,721	1,985	1,032	68,970	156
Forecast								
2020	6,294	17,441	16,041	28,841	924	1,032	70,573	161
2025	6,458	17,895	16,458	29,591	924	1,032	72,359	167
2030	6,649	18,423	16,943	30,464	924	1,032	74,434	172
2035	6,851	18,982	17,458	31,390	924	1,032	76,637	178

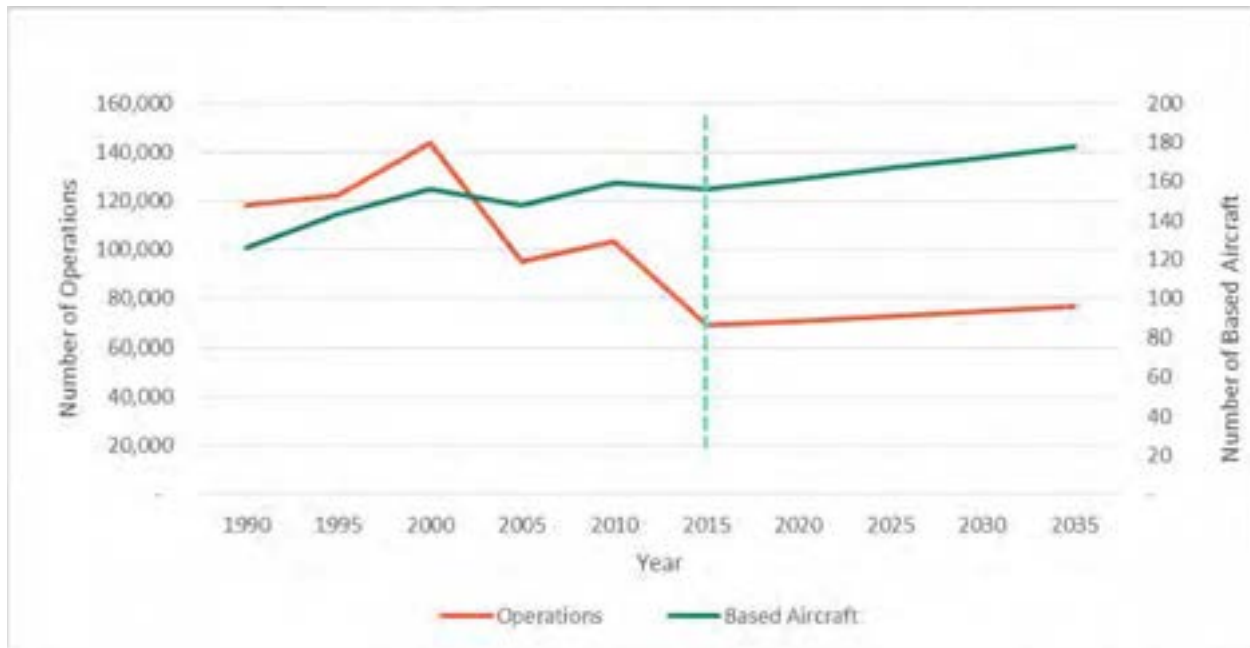
Notes: Rows may not total due to rounding.

Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

**Figure 0–17: Central UP Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

### 4.8.3 Eastern Upper Peninsula Region

The Eastern UP Region (**Figure 4-18**), consists of seven Tier 1 and Tier 2 airports with one providing scheduled commercial service. Five of the airports are classified as Tier 1, and two are Tier 2. This region provides access to Lakes Huron, Michigan and Superior, consists of numerous natural and recreational areas, and is a gateway to Canada.

**Table 4-7** presents the region's historical and forecast operations and based aircraft. Operations are segmented by type. **Figure 4-19** graphically depicts total operations and based aircraft.

GA activity made up nearly 78 percent (78%) percent of the activity in 2015, while commercial service accounted for 22 percent (22%) with military at less than one percent (1%). Itinerant GA operations are slightly higher than local GA operations. Air taxi provides the 92 percent (92%) of the commercial service activity as expected for this mostly rural region. Operations are projected to increase by 10 percent (10%) by 2035. The total number of based aircraft is projected to increase by 15 percent (15%), over that same period.

**Figure 4-18: Eastern UP Region**



**Table 4-7: Eastern UP Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**

Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	-	670	21,670	12,210	43	-	34,593	34
1995	20	16,855	11,090	12,350	43	-	40,358	32
2000	150	25,550	25,190	17,139	43	-	68,072	71
2005	3,500	26,900	51,962	9,651	93	-	92,106	64
2010	2	21,576	32,455	10,622	93	-	64,748	61
2015	728	8,506	17,690	14,925	190	-	42,039	68
Forecast								
2020	735	8,583	17,850	15,060	190	-	42,418	70
2025	754	8,808	18,319	15,455	190	-	43,526	73
2030	776	9,063	18,849	15,903	190	-	44,781	75
2035	799	9,332	19,408	16,375	190	-	46,104	78

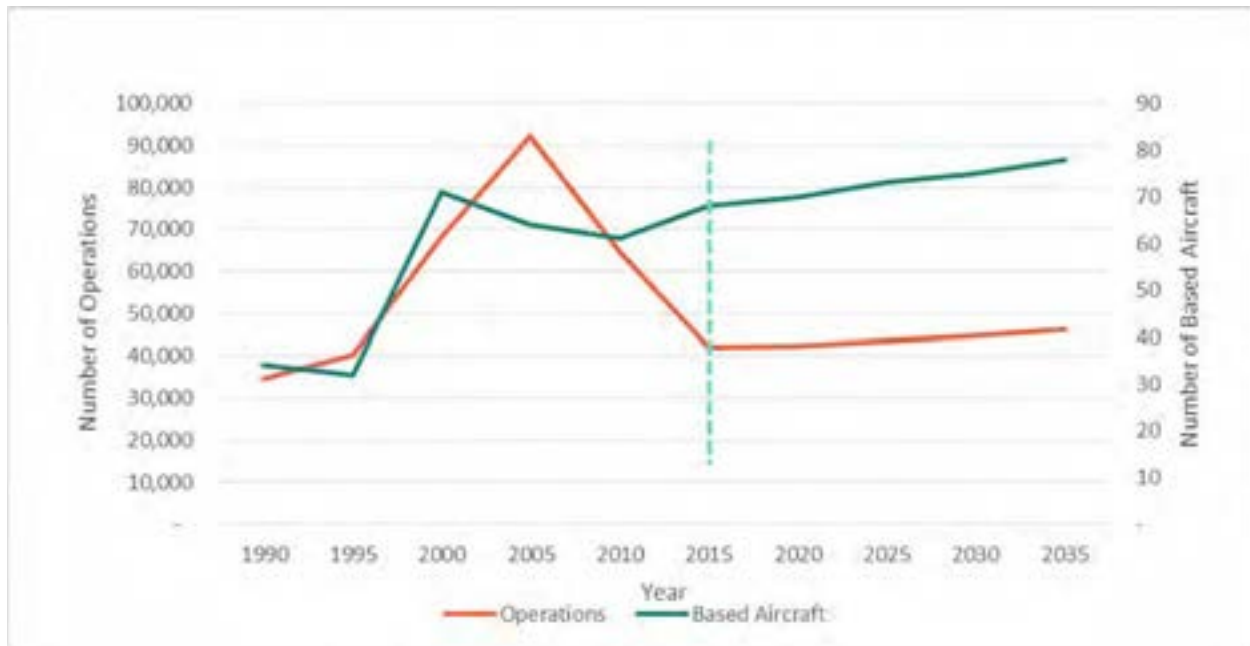
Notes: Rows may not total due to rounding.

Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

**Figure 4-19: Eastern UP Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

#### 4.8.4 Northwest Region

The Northwest Region (**Figure 4-20**) consists of 11 Tier 1 and Tier 2 airports with four providing scheduled air service. Six are classified as Tier 1 and five are Tier 2. The region includes shoreline and bays along the northeastern shore of Lake Michigan, nature areas, and many small communities.

**Table 4-8** presents the region's historical and forecast operations and based aircraft, with operations segmented by type. **Figure 4-21** graphically depicts total operations and based aircraft.

GA accounted for 75 percent (75%) of the operations in this region in 2015, with commercial service at 24 percent (24%) and military at less than 1 percent (1%). Air taxi makes up about three quarters of the commercial service activity while itinerant GA is slightly higher than local GA. Commercial service and GA operations are projected to increase by 11 percent (11%) between 2015 and 2035. Based aircraft numbers are expected to increase by 14 percent (14%) during the same period.

**Figure 4-20: Northwest Region**



**Table 4-8: Northwest Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**

Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	415	20,123	90,735	75,873	1,821	3,430	192,397	253
1995	3,581	25,052	95,099	85,469	2,726	5,478	217,405	266
2000	2,547	42,360	82,117	82,994	3,836	6,962	220,816	310
2005	8,980	34,481	109,615	82,028	4,111	10,598	249,813	268
2010	12,487	27,027	83,323	54,914	4,665	4,879	187,295	255
2015	2015	9,651	36,278	75,186	66,941	836	-	188,892
Forecast								
2020	9,876	37,124	76,939	68,502	836	-	193,277	318
2025	10,128	38,070	78,900	70,248	836	-	198,182	329
2030	10,420	39,167	81,174	72,272	836	-	203,869	340
2035	10,729	40,330	83,585	74,419	836	-	209,899	351

Notes: Rows may not total due to rounding.

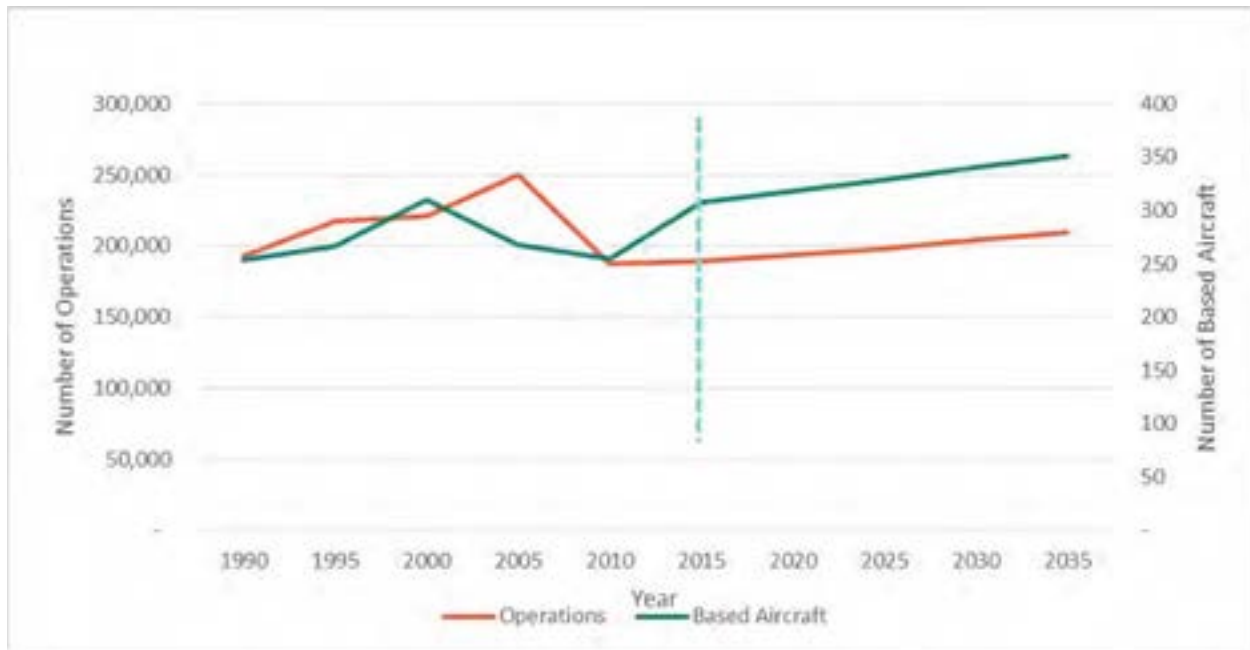
Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).



**Figure 4-21: Northwest Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

#### 4.8.5 Northeast Region

The Northeast Region (**Figure 4-22**) consists of 11 Tier 1 and Tier 2 airports with one providing scheduled air service. Eight are classified as Tier 1 and three as Tier 2. The region includes many natural areas such as the Atlanta and Grayling State Forest Areas and Huron National Forest as well as a large portion of the Lake Huron shoreline.

**Table 4-9** presents the region's historical and forecasted operations and based aircraft, with operations segmented by type. **Figure 4-23** graphically depicts total operations and based aircraft.

**Figure 4-22: Northeast Region**



GA made up 71 percent (71%) of the operations in this region in 2015, with 62 percent (62%) of that being itinerant. Commercial traffic was 3 percent (3%) of total operations and was split between air carrier and air taxi. Military activity made up over 25 percent (25%) of operations, reflecting the extent of military training activity in this region. Commercial and GA operations are projected to grow by 11 percent (11%) by 2035. Based aircraft growth begun around 2010 will continue, increasing by 14 percent (14%) from 2015 to 2035.

**Table 4-9: Northeast Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**

Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	10	10,212	27,170	18,016	16,042	-	71,450	139
1995	-	13,846	26,670	18,060	14,000	-	72,576	150
2000	2,190	14,167	26,902	20,699	5,526	-	69,484	210
2005	3,300	12,290	33,848	18,082	8,000	-	75,520	205
2010	2,336	4,028	24,502	28,849	5,568	-	65,283	141
2015	1,340	1,120	20,177	32,336	10,659	8,200	73,832	218
Forecast								
2020	1,532	1,281	23,074	36,978	4,479	8,200	75,544	226
2025	1,579	1,320	23,777	38,105	4,479	8,200	77,460	233
2030	1,633	1,365	24,593	39,413	4,479	8,200	79,683	241
2035	1,691	1,413	25,458	40,799	4,479	8,200	82,040	249

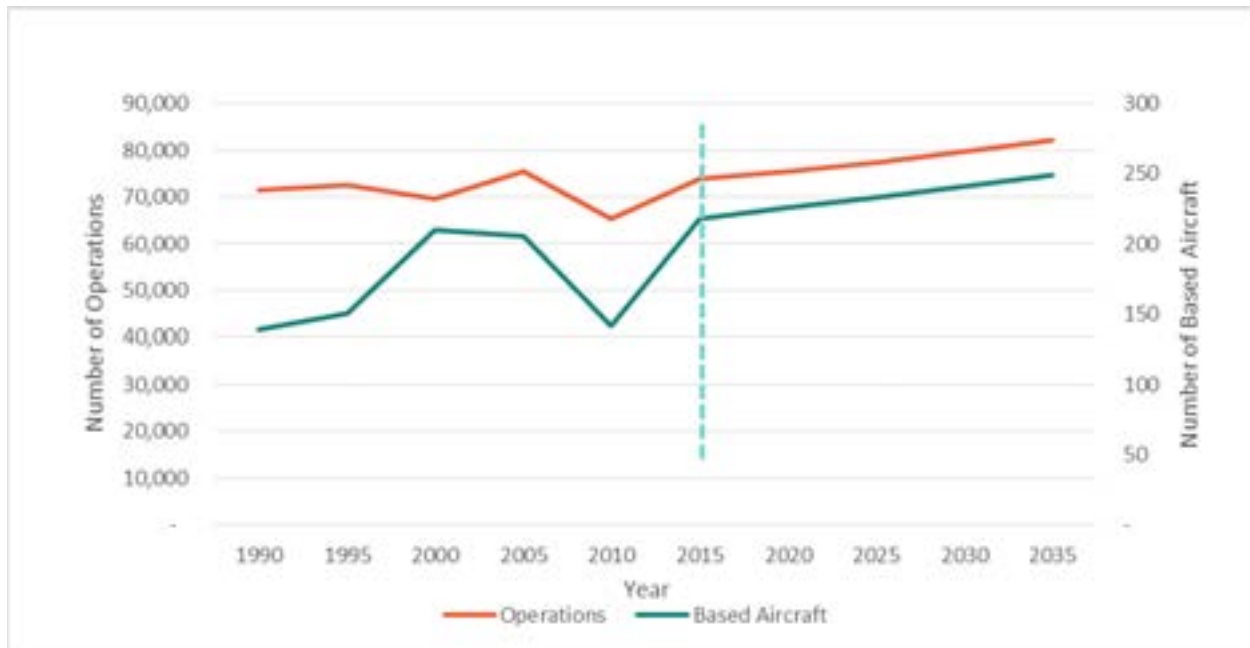
Notes: Rows may not total due to rounding.

Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

**Figure 4-23: Northeast Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

#### 4.8.6 West Central Region

The West Central Region consists of eight airports, none of which provide scheduled commercial service. Five airports are classified as Tier 1 and three are Tier 2. The region includes rural and farming areas and small communities in six counties (**Figure 4-24**).

**Table 4-10** presents the region's historical and forecast operations and based aircraft, with operations segmented by type. **Figure 4-25** graphically depicts total operations and based aircraft.

GA accounted for nearly 98 percent (98%) of the operations in this region in 2015. Commercial service by air taxi totaled just over 1 percent (1%) and military activity less than one percent (1%) of 2015 operations. Itinerant GA activity was higher than local activity. Growth is expected to increase the air taxi and GA operations by 11 percent (11%) between 2015 and 2035. Based aircraft are projected to continue the growth seen since 2010, increasing by 14 percent (14%) from 2015 to 2035.

**Figure 4-24: West Central Region**



**Table 4-10: West Central Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**

Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	-	1,290	17,430	26,910	-	-	45,630	84
1995	-	1,300	17,370	19,680	-	-	38,350	115
2000	-	1,520	24,500	28,010	-	-	54,030	117
2005	-	2,000	24,283	20,419	50	-	46,752	140
2010	-	2,000	18,248	19,524	20	-	39,792	124
2015	-	602	23,277	13,632	216	-	37,727	152
Forecast								
2020	-	613	23,700	13,880	216	-	38,409	157
2025	-	628	24,302	14,232	216	-	39,378	163
2030	-	647	25,002	14,642	216	-	40,507	168
2035	-	666	25,746	15,078	216	-	41,705	173

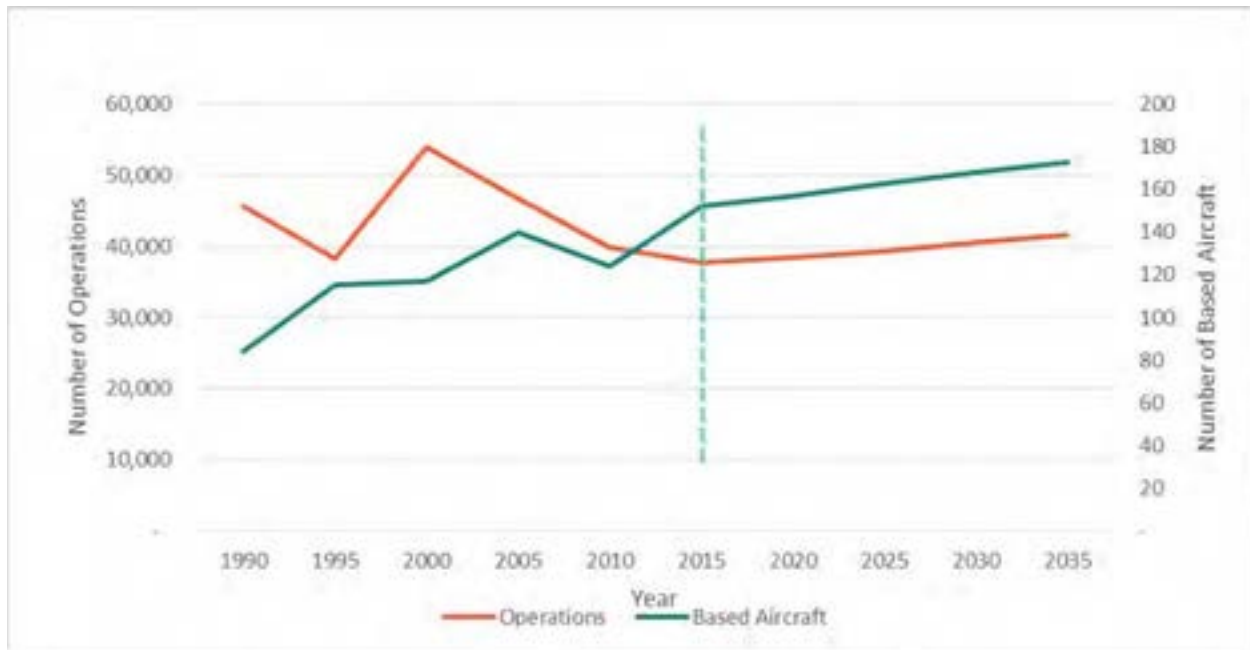
Notes: Rows may not total due to rounding.

Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

**Figure 4-25: West Central Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

#### 4.8.7 West Michigan Region

The West Michigan Region consists of 13 Tier 1 and Tier 2 airports with two providing scheduled air service. Nine airports are classified as Tier 1 and four are Tier 2. The region includes the Grand Rapids area, coastal areas along Lake Michigan, and large agricultural areas (Figure 4-26).

Table 4-11 presents the region's historical and forecast operations and based aircraft, with operations segmented by type. Figure 4-27 graphically depicts total operations and based aircraft.

GA accounted for approximately 78 percent (78%) of the operations in this region in 2015, with commercial service at 20 percent (20%) and military at 2 percent (2%). Commercial service is nearly evenly split between air carrier and air taxi, while itinerant GA makes up about 48 percent (48%) of the GA sector. Operations are projected to increase by 11 percent (11%) from 2015 to 2035. Based aircraft numbers will continue the rebound since 2010 and are projected to increase by 16 percent (16%) from 2015 to 2035.

Figure 4-26: West Michigan Region



Table 4-11: West Michigan Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports

Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	19,335	31,413	126,599	118,512	6,225	2,840	304,924	592
1995	26,532	48,121	142,016	124,631	3,259	3,560	348,119	531
2000	22,603	62,605	176,876	161,613	3,017	4,244	430,958	609
2005	20,248	45,606	132,593	122,198	2,777	3,327	326,749	632
2010	17,223	35,337	118,899	111,700	3,263	1,171	287,593	470
2015	22,338	24,490	91,162	96,503	4,010	922	239,425	679
Forecast								
2020	22,872	25,075	93,341	98,810	4,010	922	245,031	711
2025	23,468	25,728	95,772	101,383	4,010	922	251,282	736
2030	24,155	26,482	98,577	104,352	4,010	922	258,498	760
2035	24,883	27,280	101,549	107,498	4,010	922	266,143	786

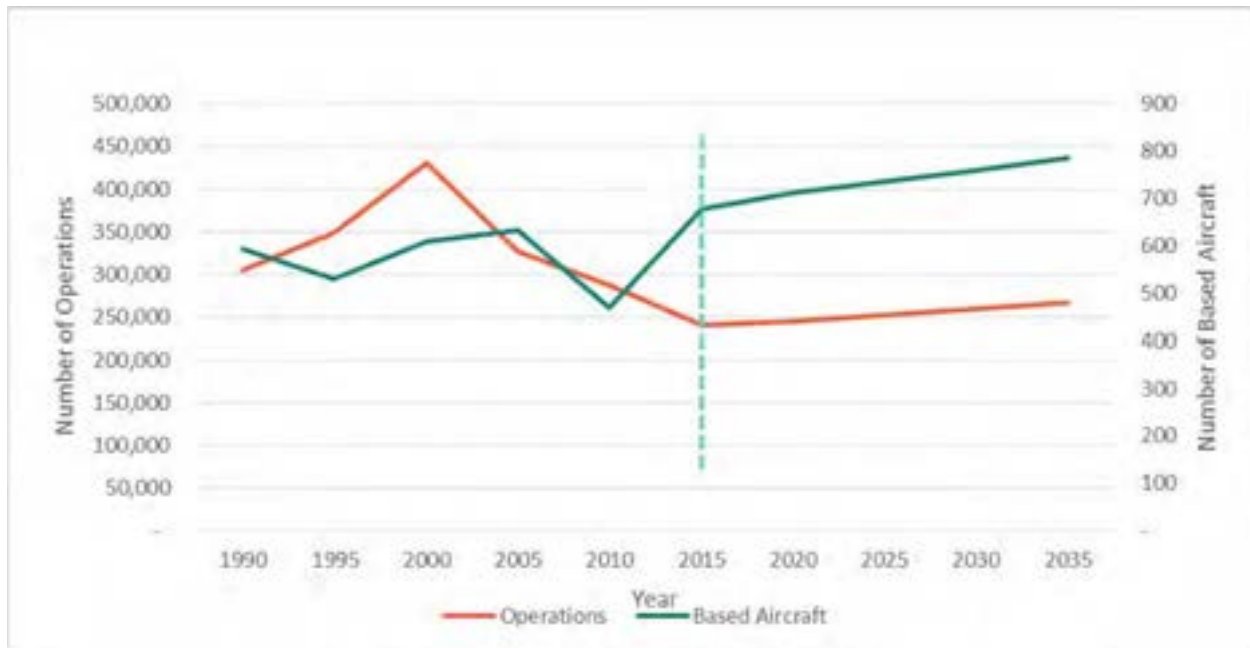
Notes: Rows may not total due to rounding.

Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

**Figure 4-27: West Michigan Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

#### 4.8.8 East Central Region

The East Central Region (**Figure 4-28**) consists of 10 Tier 1 and Tier 2 airports with one providing scheduled air service. Seven airports in this region are classified as Tier 1 and three are Tier 2. The region's airports offer access to the eastern shore of Saginaw Bay and communities along the Saginaw and Tittabawassee Rivers.

**Table 4-12** presents the region's historical and forecast operations and based aircraft, with operations segmented by type. **Figure 4-29** graphically depicts total operations and based aircraft.

About 89 percent (89%) of this region's activity in 2015 came from the GA sector. All sectors of activity decreased with the economic downturn after 2005. Commercial service, which makes up about 10% of operations, shifted to primarily air taxi, a trend that is expected to continue. Operations growth is projected at 11 percent (11%) over the forecast period with an increase of 14 percent (14%) in based aircraft.

**Figure 4-28: East Central Region**



**Table 4-12: East Central Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**

Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	5,473	8,858	40,447	42,632	666	852	98,928	186
1995	7,623	13,816	41,432	60,375	428	686	124,360	204
2000	10,095	15,457	51,512	55,050	261	175	132,550	252
2005	11,198	11,048	68,958	76,685	265	106	168,260	291
2010	1,609	9,031	44,746	40,369	222	142	96,119	311
2015	879	7,653	35,611	41,788	208	668	86,807	378
Forecast								
2020	900	7,835	36,460	42,784	208	668	88,856	391
2025	923	8,038	37,404	43,892	208	668	91,133	405
2030	950	8,272	38,489	45,165	208	668	93,752	418
2035	978	8,518	39,638	46,514	208	668	96,525	432

Notes: Rows may not total due to rounding.

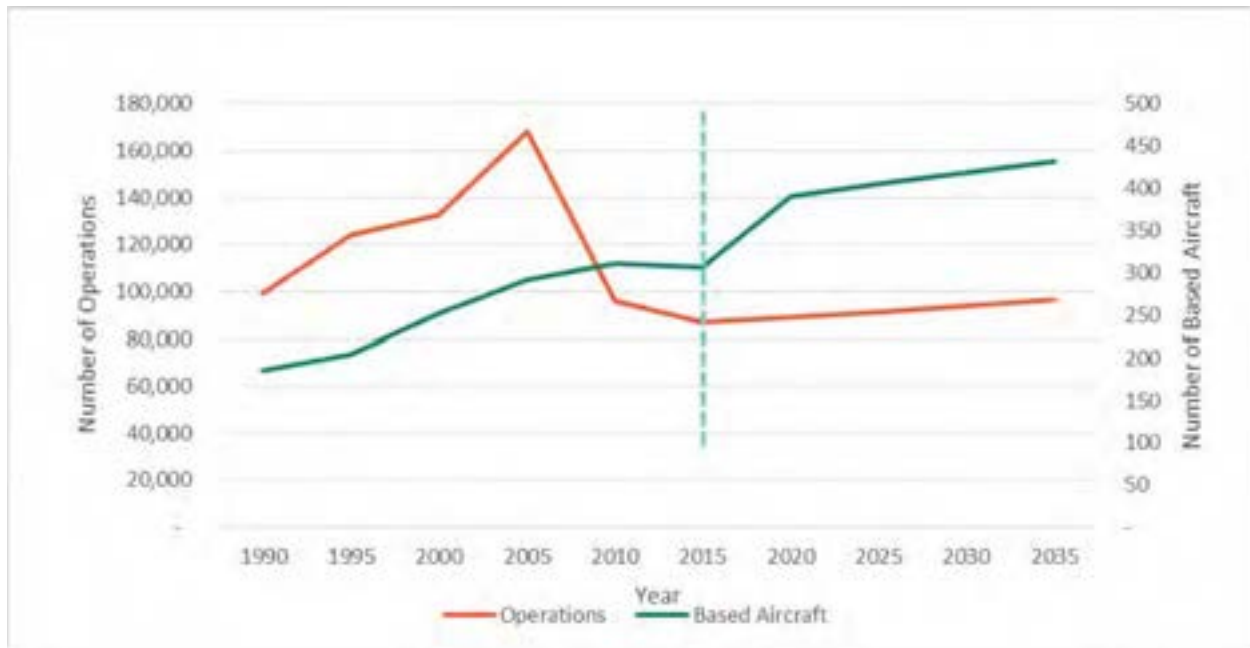
Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).



**Figure 4-29: East Central Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

#### 4.8.9 East Michigan Region

The East Michigan Region (**Figure 4-30**) consists of 12 Tier 1 and Tier 2 airports, of which nine are classified as Tier 1, and three are Tier 2. One airport provides scheduled air service. The region's airports provide access to the southeastern shores of Saginaw Bay, Lake Huron, and Lake St. Clair.

**Table 4-13** presents the region's historical and forecast activity for operations and based aircraft. Operations are segmented by type. **Figure 4-31** graphically depicts total operations and based aircraft.

In 2015, this region's operations were over 82 percent (82%) GA. All sectors of operations have decreased since 2005; however, activity is expected to stabilize with modest growth forecasted. Air taxi is expected to provide about 78 percent (78%) of the commercial service. Itinerant and local GA are expected to remain balanced. Operations growth is projected at 11 percent (11%) over the forecast period with an increase of 14 percent (14%) in based aircraft.

**Figure 4-30: East Michigan Region**



**Table 4-13: East Michigan Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**

Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	2,105	18,706	80,697	92,485	2,320	899	197,212	436
1995	3,423	26,621	75,426	118,046	600	1,192	225,308	402
2000	8,573	20,339	90,394	129,857	460	131	249,754	450
2005	13,265	17,641	84,576	138,985	175	392	255,034	514
2010	8,281	12,088	69,057	52,512	113	2	142,053	425
2015	6,166	22,696	73,723	71,713	2,062	836	177,196	557
Forecast								
2020	6,388	23,513	76,377	74,295	759	80	181,412	576
2025	6,529	24,032	78,061	75,933	759	80	185,394	596
2030	6,718	24,728	80,325	78,135	759	80	190,745	616
2035	6,915	25,454	82,682	80,428	759	80	196,319	637

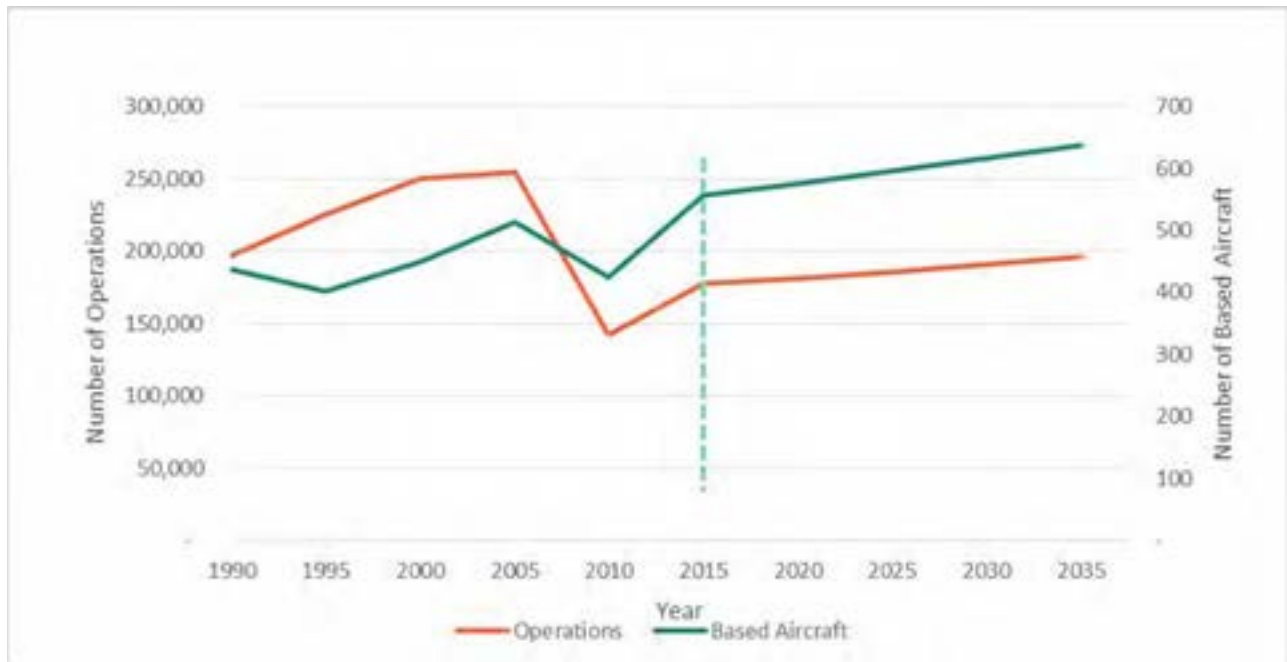
Notes: Rows may not total due to rounding.

Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

**Figure 4-31: East Michigan Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

#### 4.8.10 South Central Region

The South Central Region consists of two Tier 1 and two Tier 2 airports with one providing scheduled air service. The region is centered on Michigan's capital city of Lansing (Figure 4-32).

Table 4-14 presents the region's historical and forecast operations and based aircraft with operations segmented by type. Figure 4-33 graphically depicts total operations and based aircraft.

GA accounted for approximately 71 percent (71%) of the operations in this region in 2015, with commercial service at nearly 23 percent (23%) and military operations at 6 percent (6%). Approximately 84 percent (84%) of the commercial operations are by air taxi. Itinerant GA activity is about double that of local GA. Commercial service and GA operations are projected to grow by 8 percent (8%) from 2015 to 2035. The slower growth in air carrier operations from 2015 to 2035 is a reflection of Capital Region International Airport's Master Plan forecast. Based aircraft numbers are expected to increase by 15 percent (15%) over the forecast period.

Figure 4-32: South Central Region



Table 4-14: South Central Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports

Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	6,367	17,844	43,059	57,125	31,271	1,960	157,626	357
1995	8,148	29,630	40,964	55,156	31,890	3,008	168,796	255
2000	8,194	34,814	104,302	101,221	31,357	1,040	280,928	329
2005	12,554	16,494	74,474	80,201	31,764	1,438	216,925	304
2010	889	13,946	40,502	19,405	3,118	92	77,952	190
2015	2,314	12,850	33,136	14,019	4,059	50	66,428	216
Forecast								
2020	2,344	13,015	33,561	14,199	4,059	50	67,227	223
2025	2,370	13,160	33,936	14,357	4,059	50	67,932	233
2030	2,442	13,563	34,975	14,797	4,059	50	69,887	241
2035	2,516	13,974	36,035	15,245	4,059	50	71,880	249

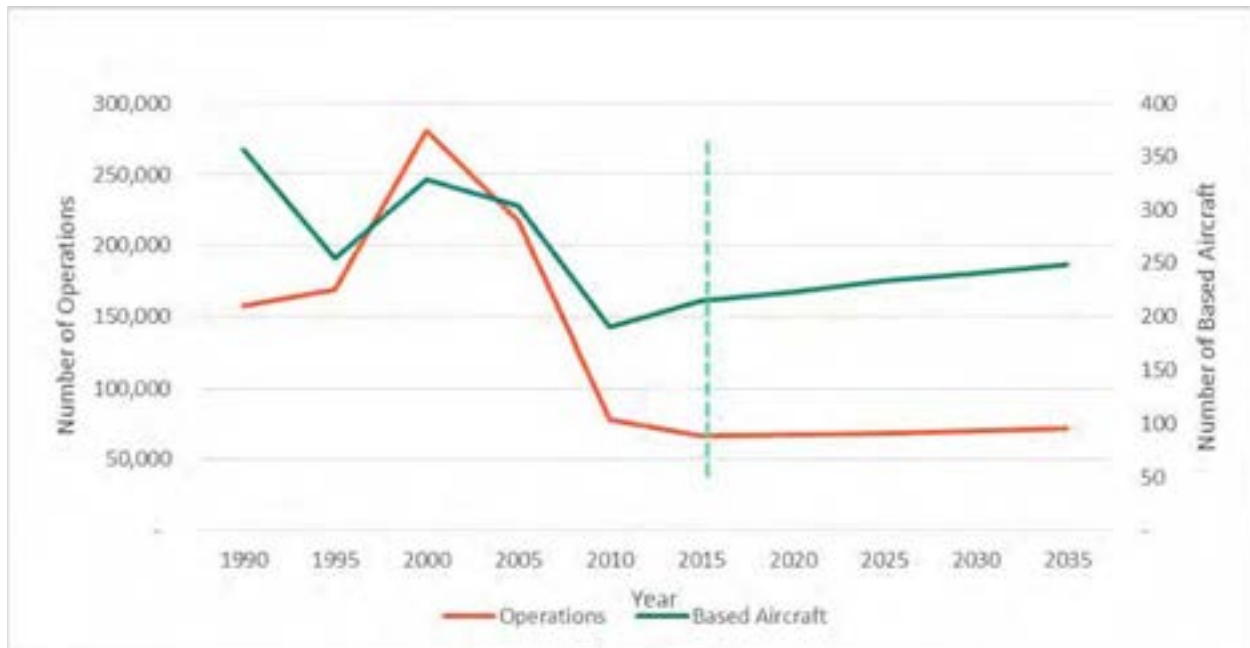
Notes: Rows may not total due to rounding.

Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

**Figure 4-33: South Central Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

#### 4.8.11 Southwest Region

The Southwest Region consists of 11 Tier 1 and Tier 2 airports with one providing scheduled air service. Seven of the airports are classified as Tier 1 and four are Tier 2. The region borders Indiana and Lake Michigan, and includes the cities of Kalamazoo and Battle Creek (Figure 4-34).

Table 4-15 presents the region's historical and forecast operations and based aircraft, with operations segmented by type. Figure 4-35 graphically depicts total operations and based aircraft.

GA accounted for over 94 percent (94%) of the operations in this region in 2015, with commercial service at just less 4 percent (4%) and military over 1 percent (1%). Commercial service is nearly 90 percent (90%) air taxi. Local GA activity is slightly higher than itinerant. Commercial service and GA activity are projected to increase by 10 percent (10%) from 2015 to 2035. Based aircraft numbers are expected to increase by 14 percent (14%) over the same period.

Figure 4-34: Southwest Region



Table 4-15: Southwest Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports

Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	5,071	18,114	114,193	88,655	4,521	4,220	234,774	487
1995	7,523	17,058	137,908	116,784	3,864	1,970	285,107	497
2000	4,965	22,933	176,982	170,387	4,224	872	380,363	601
2005	2,987	19,675	140,481	134,134	3,705	870	301,852	634
2010	360	10,921	118,368	123,683	1,197	855	255,384	465
2015	956	8,158	95,934	118,455	871	2,470	226,844	526
Forecast								
2020	974	8,314	97,769	120,721	851	1,895	230,524	544
2025	998	8,518	100,165	123,679	851	1,895	236,106	563
2030	1,026	8,755	102,957	127,127	851	1,895	242,611	581
2035	1,056	9,007	105,923	130,788	851	1,895	249,520	600

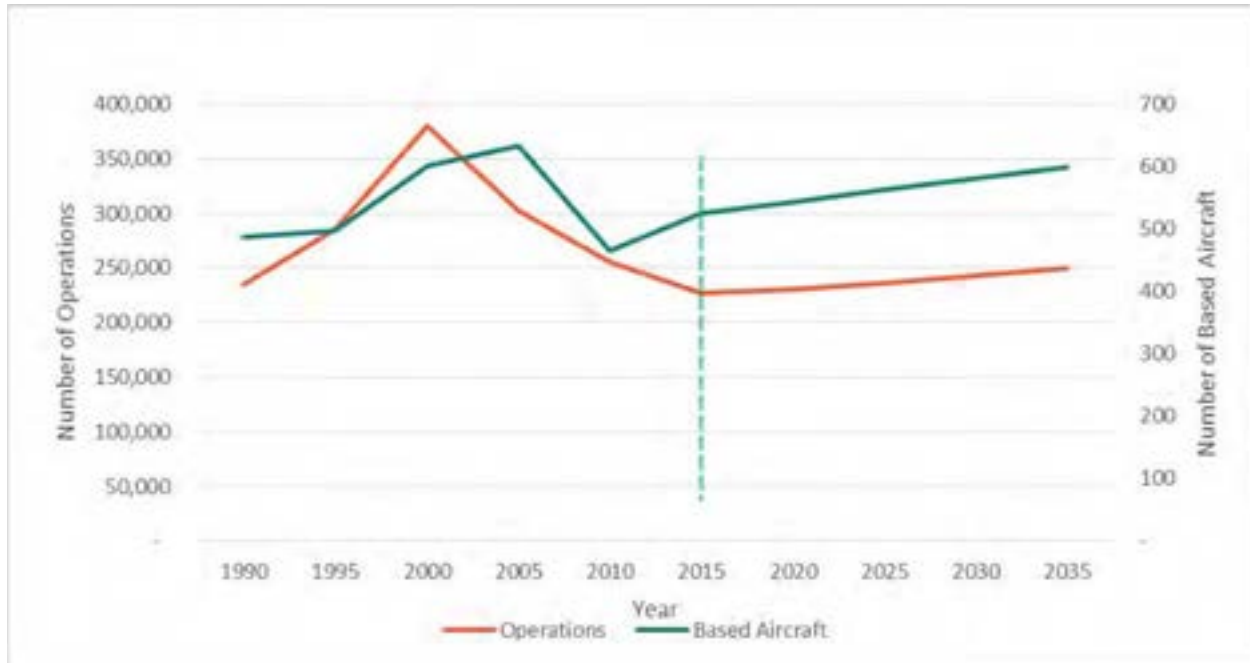
Notes: Rows may not total due to rounding.

Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

**Figure 4-35: Southwest Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

#### 4.8.12 Southeast Region

The Southeast Region consists of eight Tier 1 airports and one Tier 2 airport, none of which provide scheduled air service. The region encompasses the city of Ann Arbor, home to the University of Michigan, as well as small communities and recreational areas (**Figure 4-36**).

**Table 4-16** presents the region's historical and forecast operations and based aircraft, with operations segmented by type. **Figure 4-37** graphically depicts total operations and based aircraft.

Two of the region's airports have unscheduled commercial service flights, which can include air cargo.

This accounted for less than 1 percent (1%) of total operations in 2015. GA comprised nearly 99 percent (99%) of operations in this region in 2015, with itinerant activity about 66 percent (66%) of local GA activity. GA and commercial service are projected to increase by 11 percent (11%) from 2015 to 2035. Based aircraft numbers are projected to increase by 14 percent (14%) over the same period.

**Figure 4-36: Southeast Region**



**Table 4-16: Southeast Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**

Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	-	2,036	65,497	85,520	806	672	154,531	409
1995	31	4,235	83,850	118,395	217	980	207,708	360
2000	-	6,244	125,086	175,574	165	56	307,125	540
2005	4	4,060	115,279	169,243	172	13	288,771	510
2010	244	644	88,913	129,042	166	131	219,140	476
2015	45	1,747	84,696	127,537	570	116	214,711	734
Forecast								
2020	46	1,790	86,805	130,713	285	126	219,765	760
2025	47	1,836	89,031	134,064	285	126	225,390	786
2030	49	1,889	91,590	137,918	285	126	231,856	812
2035	50	1,945	94,307	142,009	285	126	238,722	839

Notes: Rows may not total due to rounding.

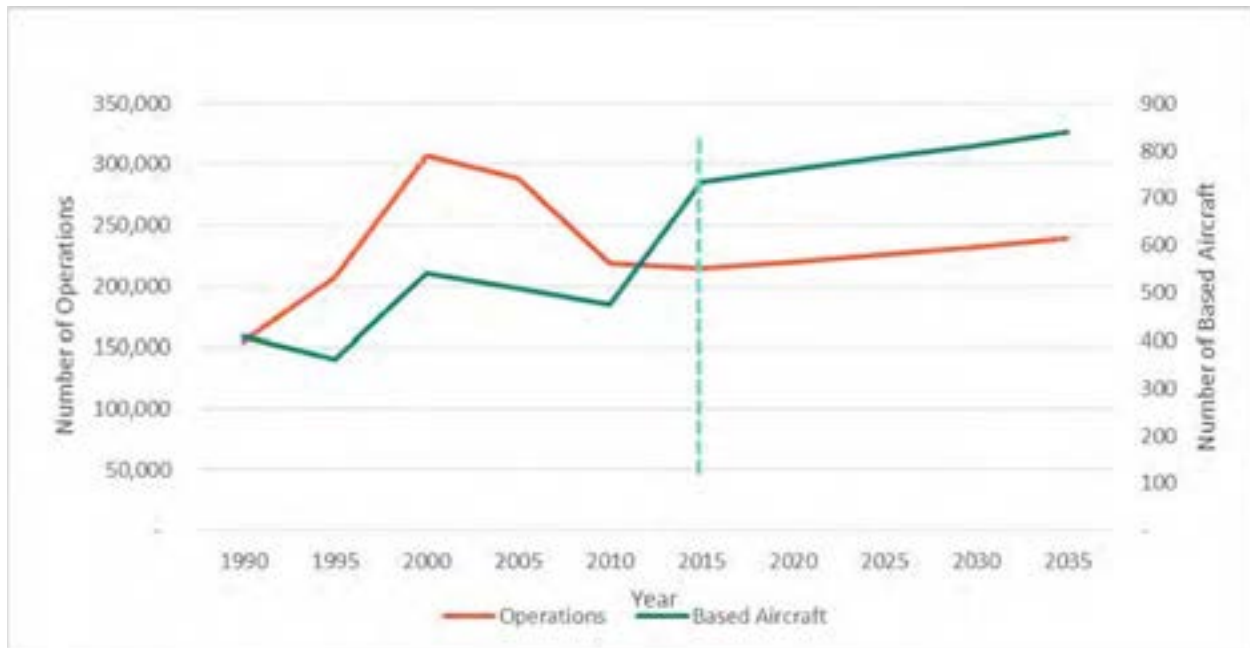
Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).



**Figure 4-37: Southeast Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

#### 4.8.13 Detroit Metro Region

The Detroit Metro Region includes 10 airports in its three counties (**Figure 4-38**), all classified as Tier 1. One airport, Detroit Metropolitan Wayne County Airport, the state's largest airport and a major U.S. hub, provides scheduled air service.

**Table 4-17** presents the region's historical and forecast operations and based aircraft, with operations segmented by type. **Figure 4-39** graphically depicts total operations and based aircraft.

Commercial service represented about 53 percent (53%) of the total activity in 2015, with GA at 46 percent (46%). Historically commercial service fluctuated as a result of economic conditions and airline industry changes, and has shown gains in recent years. The decline in business and recreational GA after 2000 resulted in a significant drop through 2010. However, GA sectors are anticipated to continue the recovery seen since that time. Commercial service and GA operations are expected to increase by 14 percent (14%) over the planning period. Based aircraft are forecast to grow by 14 percent (14%).

**Figure 4-38: Detroit Metro Region**



**Table 4-17: Metro Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**

Year	Operations						Total Operations	Based Aircraft
	Air Carrier	Air Taxi	Itinerant GA	Local GA	Itinerant Military	Local Military		
Historical								
1990	299,332	98,336	328,548	389,526	1,347	745	1,117,834	1,977
1995	343,675	170,446	389,430	408,578	2,288	1,578	1,315,995	1,815
2000	350,885	219,216	506,868	372,406	2,607	109	1,452,091	1,860
2005	332,997	235,632	284,582	309,819	1,770	44	1,164,844	1,878
2010	200,174	261,936	165,091	170,802	651	194	798,848	1,286
2015	272,742	125,339	168,009	176,694	643	2,661	746,088	1,366
Forecast								
2020	283,520	130,292	174,648	183,676	657	164	772,957	1,413
2025	292,028	134,202	179,889	189,188	657	164	796,129	1,462
2030	301,350	138,486	185,632	195,228	657	164	821,516	1,510
2035	311,186	143,006	191,690	201,600	657	164	848,303	1,560

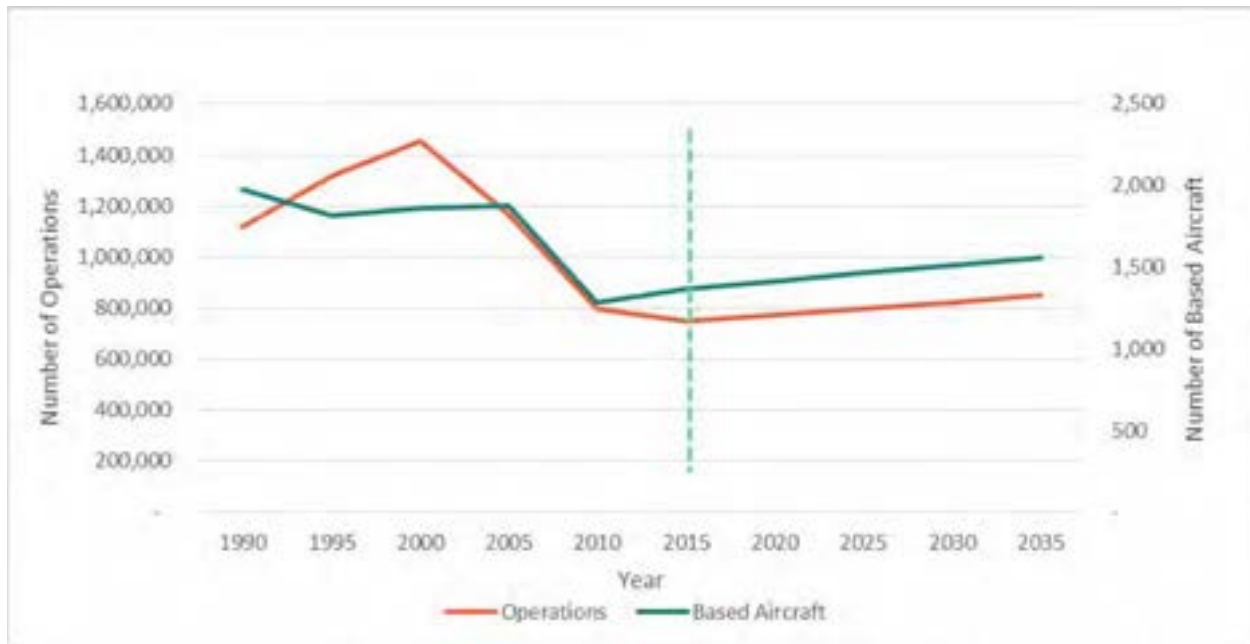
Notes: Rows may not total due to rounding.

Data does not include Tier 3 airports in the region.

Historical data shown is for NPIAS airports only.

Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

**Figure 4-39: Detroit Metro Region Historical and Forecasted Operations and Based Aircraft for Tier 1 and Tier 2 Airports**



Source: Jacobsen|Daniels, March 2017 (forecast), FAA Aerospace Forecast 2016 – 2036 (historical).

## 4.9 Summary

Aviation supports a wide range of activities in Michigan. GA operations represented the majority of the activity in 2015, with commercial service (air carrier and air taxi) the next highest activity and military activity, a small percentage. While the majority of system airports have little or no commercial service, they support a valuable GA network to transport people and goods throughout the state.

Forecasts of aviation activity provide the basis for assessing future requirements to effectively plan for future facility needs. Forecasts for the State of Michigan are affected by national, regional, and statewide trends in economy and business, fuel prices, airline activity, and GA activity. The three approaches that can be used are Historic Trend Analysis, Regression Analysis, and Market Share Analysis. Because forecasts typically are prepared for a 20-year timeline, some of the available forecasts for this study had ending years prior to the 2035 end year identified for this study. In those cases, the final few years were extrapolated based on the growth rates in the individual forecasts. This analysis used FAA historical and forecast data and socioeconomic data. Section 4.7 detailed the results of the methodologies used for this study, and demonstrates that the Market Share Analysis was found to produce the most reasonable results.

## Section 5: System & Facility Development Goals

### 5.0 Introduction

The Michigan Aviation System Plan (MASP) goals established in the 2008 study continue to reflect the ongoing mission of the Michigan Department of Transportation (MDOT) to support aviation in Michigan and as such have been carried forward into this 2017 MASP update. The MASP goals are divided into system and facility-based goals. System goals address the capability of Michigan's aviation system in responding to the air transportation needs of Michigan's residents, visitors, and the business community. Facility goals focus on specific airport development items that enhance services and infrastructure available across the system. Each set of goals are discussed in the following sections.

### 5.1 System Goals

System goals for the 2017 MASP were carried forward from the 2008 study, with some slight alteration in the analysis methodology. These system goals were established to address the major issues currently impacting aviation in Michigan. For more information on the identified issues, see **Section 3**.

This section provides an explanation of each system goal, the system standards applied, and the resulting airport tier classifications for each goal. As initially introduced in **Section 1**, there are 114 Tier 1 and Tier 2 airports that have been recognized as highly important to Michigan's aviation system. These 114 airports were identified among a total of 226 public-use airports in the state by analysis of the system goals presented in this section. The system standards were applied to all 226 airports in order to determine the Tier 1, Tier 2 (if applicable), or Tier 3 airports for each goal. After analysis of the system using the goals, airports were assigned an overall MASP tier based on the highest tier obtained for the eight goals, and an overall MASP Airport Reference Code (ARC) which corresponds with the highest MASP ARC assigned. Facility goals that correspond with each MASP ARC are discussed in Section 5.2. Each system goal was assessed independently. For example, an airport could be a Tier 1 for one goal, a Tier 2 for another goal, and Tier 3 on the remainder of the goals. Using this example, that airport would be a Tier 1 airport overall because it met Tier 1 criteria for at least one system goal. Airports not identified as Tier 1 or Tier 2 for any of the eight system goals are classified as Tier 3 airports. Out of the 226 public-use airports, the final analysis for the MASP resulted in 86 Tier 1, 28 Tier 2, and 112 Tier 3 airports.

### 5.1.1 Serve Significant Population Centers

The proximity of commercial service and general aviation (GA) airports to population centers is important to provide aviation access for the majority of Michigan's most populated areas. Population centers are identified as minor civil divisions of 5,000 or more people with a population density of 250 or more persons per square mile. Between 2010 and 2040, 21 additional areas are expected to meet the population center criteria, while three population centers are expected to fall below the defined threshold, shown in **Figure 5-1**.

Tier 1 airports are those that are necessary to reach (touch the boundary of) all defined population centers (shown in **Figure 5-1**) within a 30-minute drive time. Tier 2 airports are those that are necessary to completely cover (where possible) the population centers within a 30-minute drive time. It is a target for Tier 1 airports under the Population Center goal to have a MASP ARC of C-II, and Tier 2 airports to have a MASP ARC of B-II under this goal, as shown in **Table 5-1**. All airports not identified as Tier 1 or Tier 2 have been designated Tier 3 airports for this goal.

**Table 5-1: System Standards – Population Centers**

	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
<b>Surface Travel Time</b>	30 minutes	30 minutes	NA
<b>MASP ARC Classification</b>	C-II	B-II	NA
<b>Number of Airports Meeting</b>	42	11	173

Source: MDOT AERO

**Figure 5-1** illustrates the locations of all defined population centers in Michigan through the year 2040. **Figure 5-2** illustrates the drive time coverage of Tier 1 airports (in green) and Tier 2 airports (in red). The population center drive time analysis identified 42 Tier 1 airports and 11 Tier 2 airports as part of this system goal. A majority of the airports meeting this goal are clustered in the southern third of Michigan, aligning with the location of most of the state's population centers. Throughout the rest of the state, Tier 1 airports are located near population centers, mostly along the coastline. In instances where one airport could not completely cover a population center, Tier 2 airports were added to complete the 30-minute drive time goal.

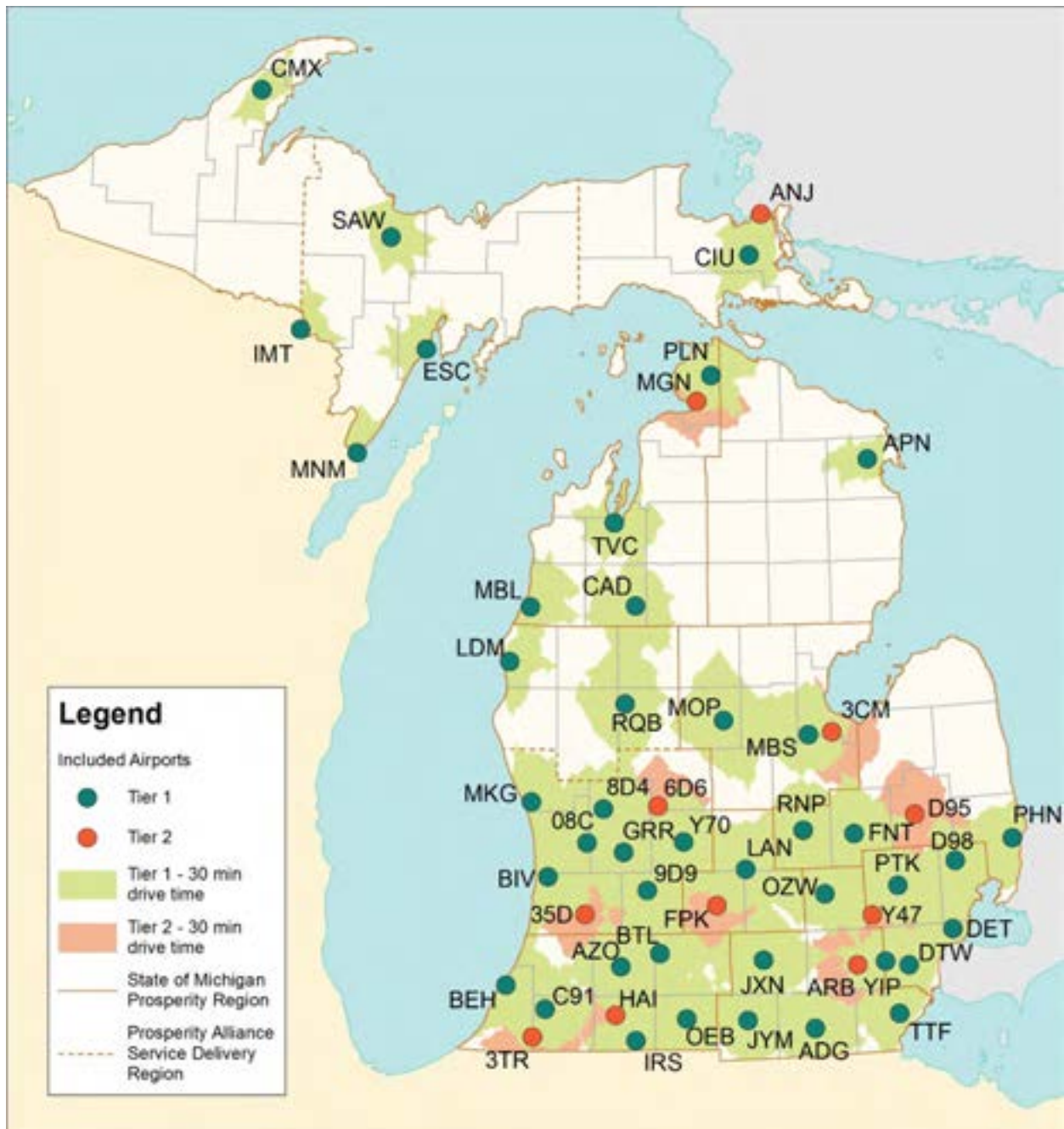
**Figure 5-1: Existing and Projected Population Centers 2010 - 2040**



Source: MDOT Statewide Modeling Unit data (11/7/2016) joined to Minor Civil Divisions from ESRI® Business Analyst™ 2015 data



**Figure 5-2: 30-Minute Drive Time Coverage of Population Centers from Tier 1 and Tier 2 Airports**



Source: data.michigan.gov, FAA, ESRI® Business Analyst™ 2015 analysis and data



### 5.1.2 Serve Significant Business Centers

Business centers rely on commercial service and GA airports to provide year-round transportation of people, goods and services to support businesses of all types and sizes that stimulate the local and statewide economy. Therefore, providing aviation access within a reasonable drive time of these business centers is an important goal of the MASP. Business centers are defined as minor civil divisions with 2040 employment projections of at least 3,000 employees.

Tier 1 airports are those necessary to reach (touch the boundary of) all defined business centers within a 30-minute drive time. Tier 2 airports are those that are necessary to completely cover (where possible) the business centers within a 30-minute drive time. It is a target for Tier 1 airports under the Business Center goal to have a MASP ARC of C-II, and Tier 2 airports to have a MASP ARC of B-II under this goal, as shown in **Table 5-2**. All airports not identified as Tier 1 or Tier 2 have been designated Tier 3 airports for this goal.

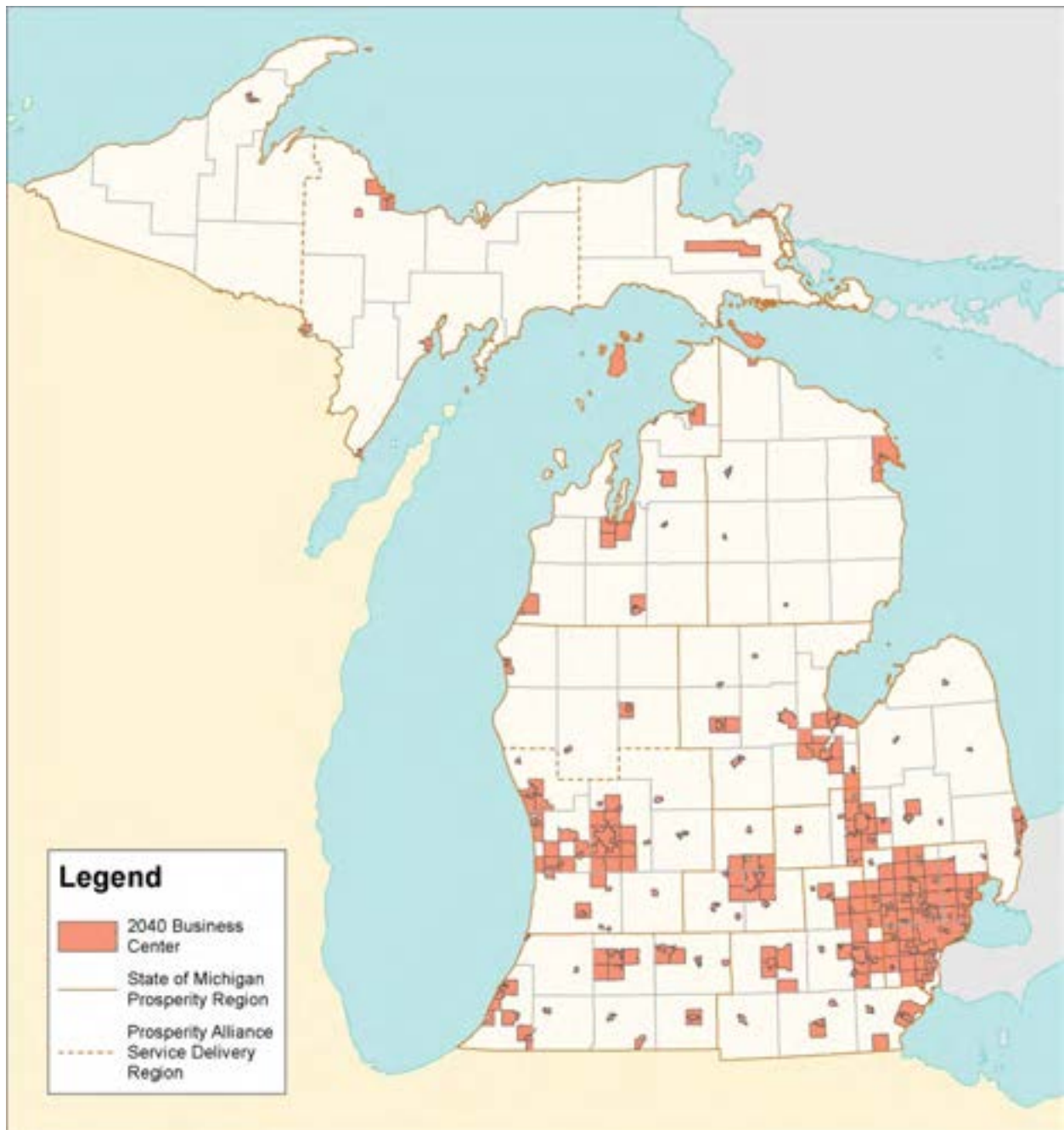
**Table 5-2: System Standards – Business Centers**

	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
<b>Surface Travel Time</b>	30 minutes	30 minutes	NA
<b>MASP ARC Classification</b>	C-II	B-II	NA
<b>Number of Airports Meeting</b>	52	13	161

Source: MDOT AERO

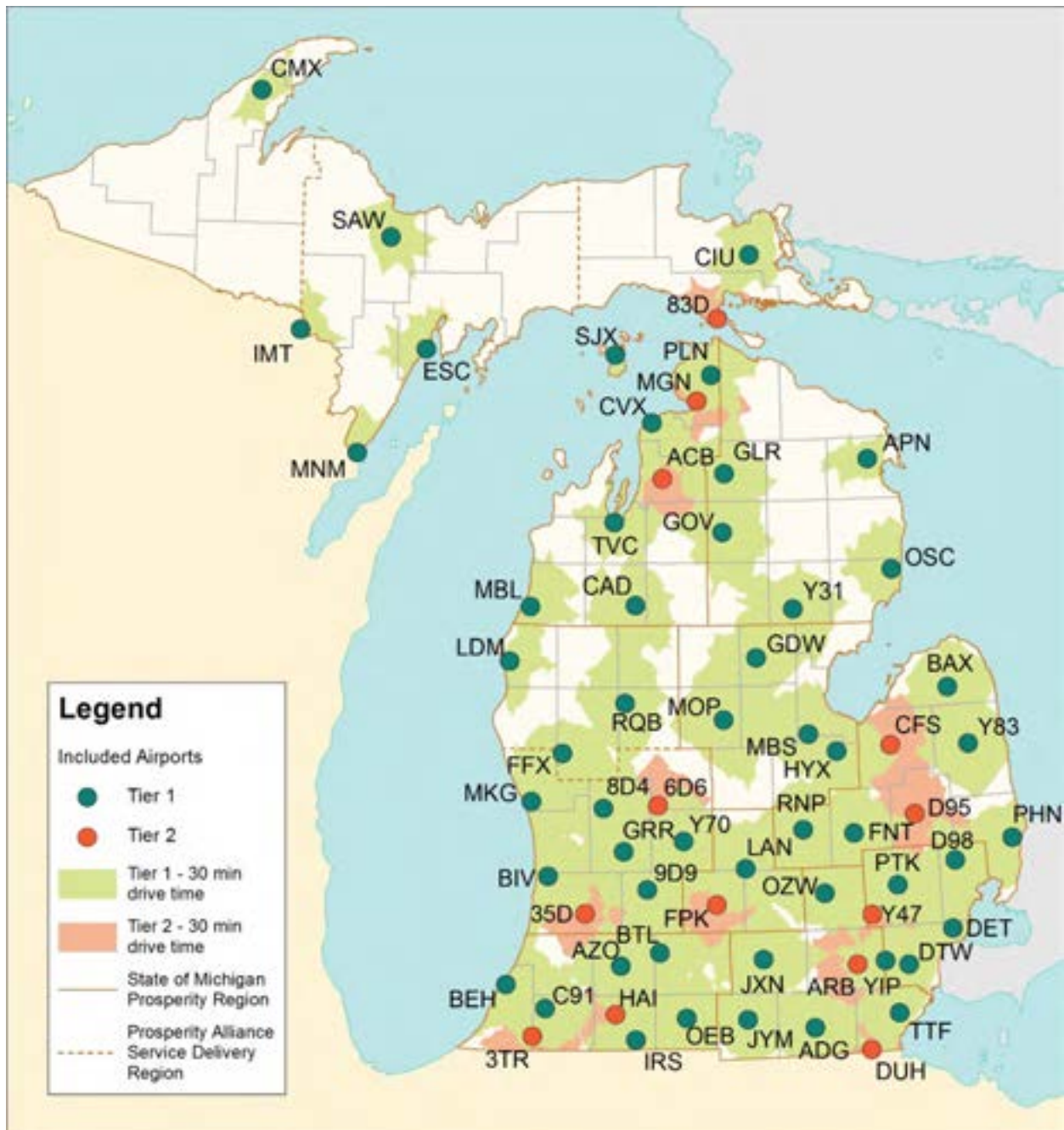
**Figure 5-3** illustrates the location of all defined business centers in Michigan through the year 2040. **Figure 5-4** illustrates the drive time coverage of Tier 1 airports (in green) and Tier 2 airports (in red). Analysis of the Business Centers system goal identified 52 Tier 1 airports and 13 Tier 2 airports, a slight expansion over the number of airports identified in the population center goal analysis. Most of the gains made in this goal were through the identification of business centers in the northern half of the state.

**Figure 5-3: Existing and Projected Business Centers in Michigan through 2040**



Source: MDOT Statewide Modeling Unit data (11/7/2016) joined to Minor Civil Divisions from ESRI® Business Analyst™ 2015 data

**Figure 5-4: 30-Minute Drive Time Coverage of Business Centers from Tier 1 and Tier 2 Airports**



Source: data.michigan.gov, FAA, ESRI® Business Analyst™ 2015 analysis and data

### 5.1.3 Serve Significant Tourism/Convention Centers

Covering almost 100,000 square miles of land and water, the complex geographic layout and diverse seasonal climates of Michigan attract visitors and tourists all year. In order to determine how tourism affects the state's economy, the Michigan Economic Development Corporation (MEDC) commissioned a study completed in 2015 that assessed the economic impact of tourism for the state of Michigan and summarized visitor spending for the year 2014. The study, *The Economic Impact of Travel in Michigan, Tourism Satellite Account, Calendar Year 2014*, was completed by Tourism Economics. The report states that Michigan welcomed 113.4 million visitors in 2014 who spent approximately \$22.8 billion. The \$22.8 billion in visitor spending moved through the state's economy and generated \$37.8 billion in total business sales. Additionally, a total of 326,685 jobs, with an income of \$10.6 billion were sustained by the tourism economy in Michigan in 2014. Tourism supported employment represents 6.2 percent (6.2%) of all employment in the state of Michigan and the unemployment rate would be 6 percent (6%) higher without tourism jobs.

To determine and measure total visitor spending in Michigan, the study used predetermined regions known as Prosperity Regions, created by the Governor's Regional Prosperity Initiative, which was designed to encourage local, economic collaboration and engagement throughout Michigan. There are 13 prosperity regions in Michigan (shown right), plus two prosperity alliances consisting of the three Upper Peninsula regions and the West Michigan and West Central regions.

The study summarizes the impact of each prosperity region and lists each county that appears in that prosperity region. The study then summarizes visitor spending in various spending categories:

- Lodging
- Food and Beverage
- Retail
- Recreation
- Transport

#### Michigan Prosperity Regions

- Western Upper Peninsula
- Central Upper Peninsula
- Eastern Upper Peninsula
- Northwest
- Northeast
- West Central
- West Michigan
- East Central
- East Michigan
- South Central
- Southwest
- Southeast
- Detroit Metro

The total visitor spending in each of these categories by region and the grand total of visitor spending can be found in **Table 5-3**.

**Table 5-3: Total Visitor Spending by Region – 2014 (in millions of dollars)**

Region	Lodging	Food and Beverage	Retail	Recreation	Transport	Total
Upper Peninsula*	279.74	210.72	141.49	344.66	214.15	1,190.76
Northwest	455.83	342.39	230.59	384.23	306.18	1,719.22
Northeast	223.82	118.19	80.50	74.04	149.22	645.77
West Michigan**	472.36	798.77	515.37	457.88	780.43	3,042.82
East Central	198.29	281.78	230.47	271.54	253.21	1,235.28
East Michigan	110.30	305.71	180.54	151.22	311.29	1,059.06
South Central	93.09	161.17	112.43	83.79	144.65	595.13
Southwest	244.64	329.10	190.76	412.04	308.27	1,484.82
Southeast	160.51	398.05	256.44	215.06	502.54	1,532.60
Detroit Metro	1,194.94	1,822.57	1,394.55	2,545.93	3,380.34	10,005.61
<b>State Total</b>	<b>3,433.55</b>	<b>4,768.45</b>	<b>3,333.13</b>	<b>4,958.39</b>	<b>6,350.28</b>	<b>22,843.79</b>

Source: The Economic Impact of Travel in Michigan, Tourism Satellite Account, Calendar Year 2014. Michigan Economic Development Corporation

Notes: Lodging spending includes second home valuation; Recreation spending includes casino wagering; Transport spending includes local and air transportation.

\*The Upper Peninsula region includes the West, Central, and Eastern Upper Peninsula Prosperity Regions.

\*\*The West Michigan region includes the West Central and West Michigan Prosperity Regions.

In the study, each spending category is further defined with what each category includes:

- Lodging – traveler spending in the accommodation sector. This includes food and other services provided by hotels and similar establishments.
- Food and Beverage – all traveler spending at restaurants and bars.
- Retail – traveler spending within all retail sectors within the Michigan economy.
- Recreation – traveler spending within the arts, entertainment, and recreation supersector.
- Transport – all forms of local transport services such as taxis, limos, trains, rental cars, and buses.

The total visitor spending amounts in each county were evaluated and assigned to one of three tiers:

- Tier 1 – More than \$125 million in total visitor spending in a county
- Tier 2 – \$75 million to \$125 million of total visitor spending in a county
- Tier 3 – Less than \$75 million in total visitor spending in a county

There are 34 counties in Michigan that meet the Tier 1 criteria, 23 counties that meet Tier 2 criteria, and 26 counties that meet Tier 3 criteria, as shown in **Table 5-4**. At \$6.78 billion, Wayne County had the highest amount of total visitor spending in 2014, while Keweenaw County had the lowest amount at \$20.07 million. One airport from each county was attributed as the primary airport per county. Since some counties in Michigan include more than one airport, each county's primary airport was determined as its largest (by Federal Aviation Administration [FAA] ARC), publically-owned airport, when applicable. In several instances, airports with an A-I ARC are the county's primary airport.

However, not all counties in Michigan were assigned a primary airport as some of them do not have a public-use airport in their county. These include Arenac, Baraga, and Keweenaw County. Additionally, in one instance a privately-owned airport was identified as the primary airport (Missaukee County; Lake City – Home Acres Sky Ranch) as it is the largest airport in Missaukee County and is open for public use.

**Table 5-4: Total Visitor Spending by County – 2014 (in millions of dollars)**

County	Total Visitor Spending (in millions of dollars)	Tier	Primary Airport FAA Identifier	Primary Airport Name
Wayne County	6,784.70	1	DTW	Detroit Metro
Oakland County	2,548.01	1	PTK	Oakland Pontiac
Kent County	1,157.30	1	GRR	Ford International
Macomb County	1,005.61	1	D98	Ray
Washtenaw County	684.45	1	ARB	Ann Arbor
Kalamazoo County	445.10	1	AZO	Kalamazoo
Genesee County	437.95	1	FNT	Flint
Berrien County	403.45	1	BEH	Benton Harbor
Grand Traverse County	401.40	1	TVC	Traverse City
Ingham County	391.34	1	LAN	Capital City
Saginaw County	378.69	1	MBS	MBS International
Emmet County	357.72	1	PLN	Pellston
Ottawa County	328.26	1	3GM	Grand Haven
Calhoun County	290.24	1	BTL	Battle Creek
Muskegon County	289.68	1	MKG	Muskegon
Charlevoix County	284.49	1	CVX/SJX	Charlevoix/Beaver Island (Both B-II)
Livingston County	248.50	1	OZW	Howell
Isabella County	217.07	1	MOP	Mt. Pleasant
Mackinac County	215.51	1	83D/MCD	Mackinac County/Mackinac Island (Both B-II)
Monroe County	212.94	1	TTF	Monroe
Allegan County	209.25	1	BIV	Holland
Jackson County	199.00	1	JXN	Jackson
Marquette County	180.40	1	SAW	Sawyer
St. Clair County	176.34	1	PHN	St. Clair County
Chippewa County	168.34	1	CIU	Chippewa County
Midland County	147.89	1	IKW	Midland
Bay County	147.26	1	3CM	Bay City
Manistee County	141.71	1	MBL	Manistee County
Lake County	133.00	1	7D3	Baldwin
Oceana County	132.12	1	C04	Oceana County
Montcalm County	129.67	1	6D6	Greenville
Arenac County	129.57	1	None	None
Newaygo County	126.63	1	FFX	Fremont
Mecosta County	125.55	1	RQB	Big Rapids
Wexford County	118.03	2	CAD	Cadillac
Van Buren County	116.02	2	LWA	South Haven
Eaton County	115.94	2	FPK	Charlotte
Leelanau County	115.05	2	5D5	Northport
Lenawee County	114.66	2	ADG	Adrian
Benzie County	113.76	2	FKS	Frankfort Dow
Menominee County	111.42	2	MNM	Menominee
Osceola County	107.53	2	9C8	Evart
Barry County	104.83	2	9D9	Hastings
Lapeer County	103.45	2	D95	Lapeer



**Table 5-4: Total Visitor Spending by County – 2014 (in millions of dollars)**

County	Total Visitor Spending (in millions of dollars)	Tier	Primary Airport FAA Identifier	Primary Airport Name
Mason County	100.61	2	LDM	Mason County
Ionia County	98.39	2	Y70	Ionia County
Huron County	90.48	2	BAX	Bad Axe
Otsego County	90.39	2	GLR	Gaylord
Sanilac County	89.75	2	77G	Marlette
Clinton County	87.85	2	4D0	Grand Ledge
Cheboygan County	87.36	2	SLH	Cheboygan County
Antrim County	86.81	2	ACB	Bellaire
Clare County	82.25	2	48D	Clare
Tuscola County	81.19	2	CFS	Caro
Cass County	80.69	2	C91	Dowagiac
Shiawassee County	79.91	2	RNP	Owosso
St. Joseph County	77.67	2	HAI/IRS	Three Rivers/Sturgis (Both B-II)
Roscommon County	73.92	3	HTL	Houghton Lake
Hillsdale County	73.05	3	JYM	Hillsdale
Branch County	71.65	3	OEB	Coldwater
Gratiot County	71.33	3	AMN	Gratiot County
Gogebic County	69.86	3	IWD	Ironwood
Ogemaw County	67.35	3	Y31	West Branch
Delta County	66.63	3	ESC	Escanaba
Iosco County	64.69	3	OSC	Oscoda-Wurtsmith
Gladwin County	61.21	3	GDW	Gladwin Zettel
Dickinson County	60.12	3	IMT	Iron Mountain
Houghton County	60.10	3	CMX	Houghton County
Kalkaska County	60.01	3	Y89	Kalkaska City
Crawford County	53.67	3	GOV	Grayling
Alcona County	46.36	3	5Y0	Harrisville Airport
Montmorency County	43.97	3	Y93	Atlanta
Baraga County	43.56	3	None	None
Schoolcraft County	43.52	3	ISQ	Schoolcraft County
Alger County	42.19	3	57Y	Munising
Iron County	41.90	3	Y73	Iron River
Oscoda County	41.46	3	51M	Oscoda County
Alpena County	40.64	3	APN	Alpena
Missaukee County	40.25	3	Y91	Lake City-Home Acres Sky Ranch (privately owned)
Presque Island County	35.95	3	PZQ	Presque Island
Luce County	34.56	3	ERY	Newberry
Ontonagon County	32.58	3	OGM	Ontonagon
Keweenaw County	20.07	3	None	None

Source: The Economic Impact of Travel in Michigan, Tourism Satellite Account, Calendar Year 2014. Michigan Economic Development Corporation

There were two cases where geographic boundaries were a deciding factor. Willow Run Airport is a GA airport located just east of the town of Ypsilanti. The airport's property is split with the west side of the airport being in Washtenaw County, and the east side of the airport being in Wayne County. Since Detroit Metropolitan Wayne County Airport is clearly the primary airport in Wayne County, Willow Run Airport and Ann Arbor Municipal Airport were both in consideration for being the primary airport in Washtenaw County. Due to its centralized location and proximity to the county's largest city (Ann Arbor), Ann Arbor Municipal Airport was chosen as the primary airport for Washtenaw County. Another example where county lines played a crucial role was with Jerry Tyler

Memorial Airport in Niles. Jerry Tyler Memorial Airport is located on the border of Berrien and Cass Counties. Positioned as a prime area for vacationers and tourists, Berrien County is the southwestern most county in Michigan as the county's western region shares a border with Lake Michigan. Due to its location and larger ARC, Southwest Michigan Regional Airport in Benton Harbor was determined to be the primary airport in Berrien County. Cass County is located just to the east of Berrien County and the eastern side of Jerry Tyler Memorial Airport is situated in Cass County. Coincidentally, Jerry Tyler Memorial Airport and Dowagiac Municipal Airport (located in Cass County) are both B-II airports. However, Dowagiac Municipal Airport is noted to have a slightly longer runway length at 4,700 feet, compared to 4,100 feet at Jerry Tyler Memorial Airport, and therefore, was determined as the primary airport for Cass County.

Three counties in Michigan contain multiple primary airports. These include Charlevoix, Mackinac, and St. Joseph County. Due to similar geographic layouts, Charlevoix and Mackinac County each have two primary airports; one mainland airport and one island airport. For Charlevoix County, Beaver Island Airport is located on Beaver Island and serves residents and tourists of the island. The same goes for Mackinac County, as Mackinac Island Airport is located on Mackinac Island and serves residents and tourists of the island. For the mainland airports, Charlevoix Municipal Airport and Mackinac County Airport service mainland operations for Charlevoix and Mackinac County, respectively. St Joseph County lies in the southwestern part of Michigan and shares its southern border with Indiana. It has been determined that two B-II airports are listed as the primary airports in St. Joseph County. These airports are Three Rivers Municipal Dr. Haines Airport and Sturgis Municipal Airport.

The final clarification was made for Ingham County with regards to Lansing's Capital Region International Airport. Capital Region International Airport is situated in the southernmost part of Clinton County. However, the airport serves the City of Lansing, which is predominately located in Ingham County. A decision was made by MDOT officials to designate Capital Region International Airport as the primary airport for Ingham County. This means that Abrams Municipal Airport in Grand Ledge serves as the primary airport for Clinton County.

As one of Michigan's largest industries, tourism plays a key role in the state, regional, and local economies. Consequently, providing an aviation network that supports the transportation of visitors and goods in, out, and around the state is critical to the state's prosperity. By continuously evaluating visitor spending, MDOT and other state officials can identify geographic regions that are most impacted by the tourism industry and focus available resources to provide an aviation network that can continue to support this activity.

Tier 1 airports include the primary airports in counties with more than \$125 million in total visitor spending. Tier 2 airports include the primary airports in counties with \$75-\$125 million in total visitor spending, and Tier 3 airports include the primary airports in counties with less than \$75 million in total visitor spending. The target for Tier 1 and Tier 2 airports is to have a MASP ARC of B-II, as shown in **Table 5-5**.



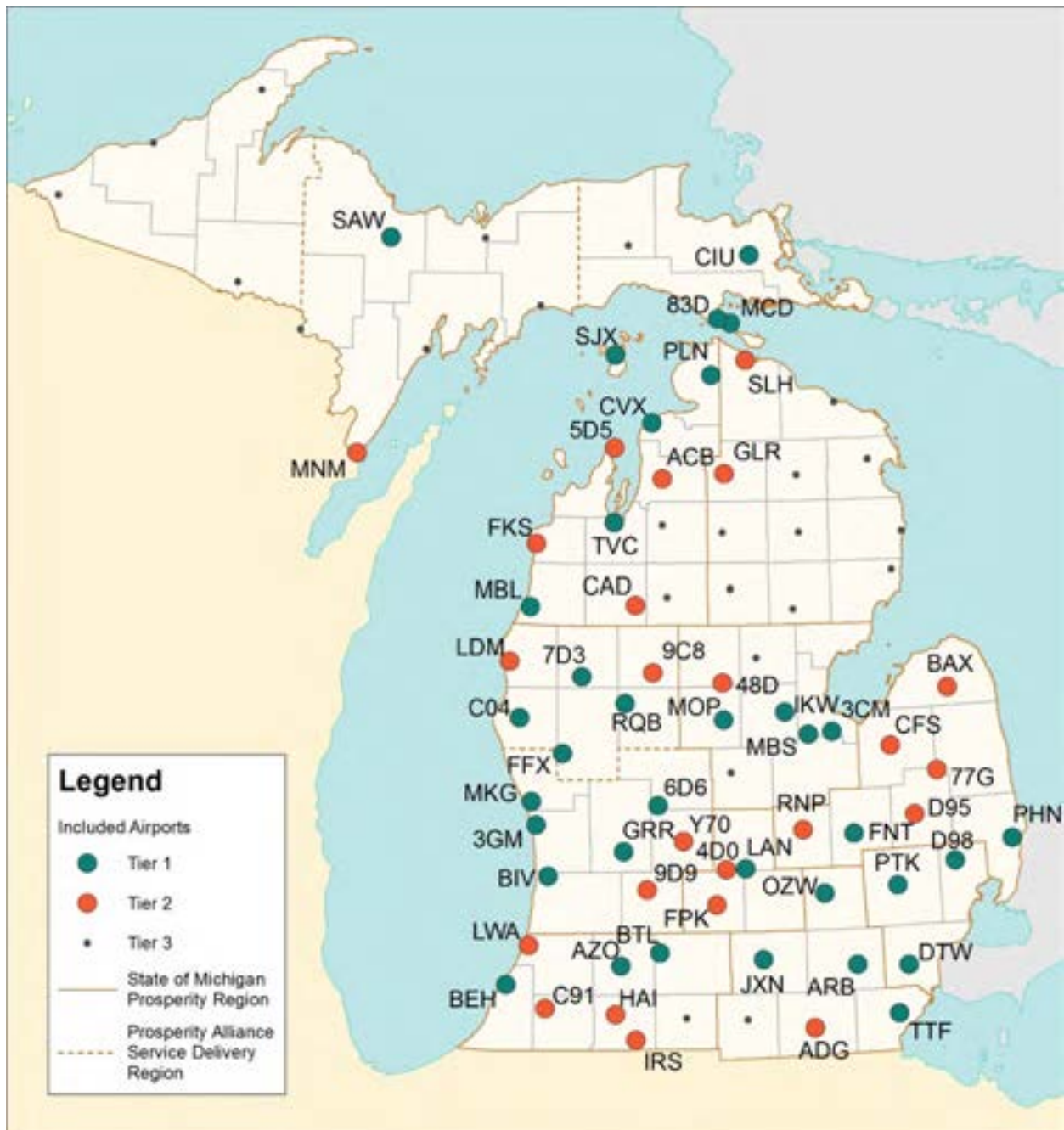
**Table 5-5: System Standards – Tourism/Convention Centers**

	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
<b>Visitor Spending (by county)</b>	More than \$125 million	\$75-\$125 million	Less than \$75 million
<b>MASP ARC Classification</b>	B-II	B-II	NA
<b>Number of Airports Meeting</b>	35	24	167

Source: MDOT AERO

Generally, the counties with \$75 million in total visitor spending and the associated Tier 1 and Tier 2 airports are located in or near major urbanized areas such as Detroit, Grand Rapids, and Lansing, or somewhat concentrated in the northwestern parts of the Lower Peninsula and eastern portions of the Upper Peninsula. **Figure 5-5** illustrates the location of tourism/convention areas in Michigan and identifies 35 Tier 1 and 24 Tier 2 airports that meet the Tourism/Convention Centers system goal.

**Figure 5-5: Locations of Tourism/Convention Centers**



Source: The Economic Impact of Travel in Michigan, Tourism Satellite Account, Calendar Year 2014. Michigan Economic Development Corporation

#### 5.1.4 Provide Access to General Population

The aviation system in Michigan is utilized by a wide variety of users, and providing air transportation access to those users is of critical importance. In addition to recreational and business uses, aviation is utilized by healthcare organizations (hospitals, medivac, etc.), law enforcement agencies (police, Customs and Border Patrol, etc.), educational institutions, and more. Since the need for aviation access by the general public is not concentrated in just a few locations, providing aviation facilities throughout the state is critical.

Tier 1 airports under this goal are defined as those necessary to reach 95 percent (95%) of Michigan's total population within a 45-minute drive time, shown in **Figure 5-6**. No Tier 2 airports are defined for this goal. The target for Tier 1 airports is to have a MASP ARC of B-II, as shown in **Table 5-6**. All airports not identified as Tier 1 have been designated Tier 3 airports for this goal. A total of 20 airports were identified as Tier 1 airports as part of this system goal.

**Table 5-6: System Standards – General Population Access**

	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
<b>Surface Travel Time</b>	45 minutes	NA	NA
<b>Performance Target</b>	95% population coverage	NA	NA
<b>MASP ARC Classification</b>	B-II	NA	NA
<b>Number of Airports Meeting</b>	20	NA	206

Source: MDOT AERO

Note: Tier 2 standards are not defined for this goal.

**Figure 5-6: 45-Minute Drive Time Coverage of Tier 1 General Population Access Airports**



Source: data.michigan.gov, FAA, ESRI® Business Analyst™ 2015 analysis and data

### 5.1.5 Provide Adequate Land Area Coverage

Totaling over 96,000 square miles, the state of Michigan covers a vast area of land. In order to maintain a safe and secure aviation system, GA pilots should have access to at least one readily available paved runway within 30 miles in case of a pilot, passenger, or aircraft emergency.

Tier 1 airports under this goal are defined as those necessary to reach 95 percent (95%) of Michigan's total land area (water bodies included) within a 30-mile radius, shown in **Figure 5-7**. These airports provide a network of facilities that are reachable in many emergency situations. No Tier 2 airports are defined for this goal. The target for Tier 1 airports is to have a MASP ARC of B-II, as shown in **Table 5-7**. All airports not identified as Tier 1 have been designated Tier 3 airports for this goal. The analysis of the land area coverage determined that 44 airports meet the Tier 1 system standard under this goal.

**Table 5-7: System Standards – Land Area Coverage**

	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
<b>System Standard</b>	30 mile radius	NA	NA
<b>Performance Target</b>	95% land coverage	NA	NA
<b>MASP ARC Classification</b>	B-II	NA	NA
<b>Number of Airports</b>	44	NA	182

Source: MDOT AERO

Note: Tier 2 standards are not defined for this goal.

Figure 5-7: 30-Mile Radius Coverage of Tier 1 Land Area Coverage Airports



Source: data.michigan.gov. FAA



### 5.1.6 Provide Adequate Regional Capacity

There are 226 public use aviation facilities currently in operation throughout Michigan. At any given time some of these facilities are under pressure from local officials and/or developers to close and be converted to an alternate use. These pressures are most often exerted on small GA airports operating in or adjacent to their service communities.

To identify airports critical to meet current capacity needs, the number of based aircraft at each system airport in 2016 was analyzed and each airport given a tier designation for this goal based upon that number.

- Airports with 40 or more based aircraft were identified as Tier 1 airports.
- Airports with 20-39 based aircraft were identified as Tier 2 airports.
- Those airports with 19 or less based aircraft were identified as Tier 3 airports.

**Table 5-8** lists the number of based aircraft for each of the 226 public use airports in the state.

**Table 5-8: 2016 Based Aircraft by Airport**

Associated City	Airport Name	FAA ID	2016 Based Aircraft	Regional Capacity Tier
Adrian	Lenawee County	ADG	58	1
Allegan	Padgham Field	35D	26	2
Alma	Gratiot Community	AMN	23	2
Alpena	Alpena County Regional	APN	20	2
Ann Arbor	Ann Arbor Municipal	ARB	183	1
Atlanta	Atlanta Municipal	Y93	10	3
Avoca	Avoca	39G	2	3
Bad Axe	Huron County Memorial	BAX	23	2
Bad Axe	Engler Field	E53	4	3
Baldwin	Baldwin Municipal	7D3	1	3
Bannister	Shady Lawn Field	4M4	6	3
Bath	University Airpark	41G	8	3
Battle Creek	W. K. Kellogg	BTL	101	1
Bay City	James Clements & S.P.B	3CM	70	1
Beaver Island	Welke	6Y8	12	3
Beaver Island	Beaver Island	SJX	1	3
Belding	Boulder Canyon	N/A	N/A	3
Bellaire	Antrim County	ACB	15	3
Belleville	Belleville Airpark	43G	9	3
Benton Harbor	Southwest Michigan Regional	BEH	79	1
Berrien Springs	Andrews	C20	N/A	3
Big Rapids	Roben - Hood	RQB	23	2
Blissfield	Betz	44G	9	3
Bois Blanc Island	Bois Blanc Island	6Y1	5	3
Boyne City	Boyne City Municipal	N98	15	3
Boyne Falls	Boyne Mountain	BFA	1	3
Brighton	Brighton Field	45G	91	1
Brooklyn	Shamrock Field	6G8	2	3
Brown City	Burgess Field	N/A	N/A	3
Cadillac	Wexford County	CAD	53	1
Carleton	Buzzwick	W87	4	3
Caro	Tuscola Area	CFS	38	2
Charlevoix	Charlevoix Municipal	CVX	30	2

**Table 5-8: 2016 Based Aircraft by Airport**

Associated City	Airport Name	FAA ID	2016 Based Aircraft	Regional Capacity Tier
Charlotte	Fitch H. Beach Municipal	FPK	26	2
Charlotte	Wend Valley	49G	5	3
Cheboygan	Cheboygan County	SLH	18	3
Cheboygan	Hoffman's Black MT	2M7	2	3
Chesaning	Howard Nixon Memorial	50G	17	3
Clare	Clare Municipal	48D	26	2
Clinton	Honey Acres	7N4	4	3
Clio	Alkay	51G	2	3
Coldwater	Branch County Memorial	OEB	37	2
Corunna	Millstream Airpark	56M	2	3
Croswell	Arnold Field	55G	N/A	3
Crystal Falls	Iron County	50D	3	3
Davison	A Williams Memorial	6G0	2	3
Detroit	Detroit Metro Wayne County	DTW	5	3
Detroit	Coleman A. Young Municipal	DET	61	1
Detroit	Willow Run	YIP	215	1
Detroit / Grosse Ile	Grosse Ile Municipal	ONZ	61	1
DeWitt	Hoerner's Corners	MI10	N/A	3
DeWitt	Orbanair	N/A	N/A	3
Dexter	Cackleberry	2E8	3	3
Dowagiac	Dowagiac Municipal	C91	20	2
Drummond Island	Drummond Island	DRM	7	3
Durand	Waite Field	29M	N/A	3
East Jordan	East Jordan City	Y94	3	3
East Tawas	Iosco County	6D9	28	2
Eastport	Torchport Airpark	59M	5	3
Eaton Rapids	Skyway Estates	60G	13	3
Elwell	Hamp Skyport	68R	4	3
Emmett	Sharpe's Strip	2E2	1	3
Empire	Empire	Y87	3	3
Escanaba	Delta County	ESC	34	2
Evart	Evart Municipal	9C8	1	3
Flint	Bishop Int'l	FNT	91	1
Flushing	Dalton	3DA	73	1
Fowlerville	Maple Grove	65G	5	3
Frankenmuth	Wm 'Tiny' Zehnder Field	66G	34	2
Frankfort	Dow Memorial	FKS	14	3
Fremont	Fremont Municipal	FFX	19	3
Fruitport	Flying-A-Ranch	39Z	3	3
Gaylord	Gaylord Regional	GLR	44	1
Gaylord	Lake of the North	4Y4	9	3
Gladwin	Sugar Springs	5M6	N/A	3
Gladwin	Gladwin Zettel Memorial	GDW	14	3
Grand Haven	Memorial Airpark	3GM	28	2
Grand Ledge	Abrams Municipal	4D0	35	2
Grand Marais	Grand Marais	Y98	1	3
Grand Rapids	Gerald R. Ford International	GRR	93	1
Grayling	Grayling Army Airfield	GOV	8	3
Greenville	Greenville Municipal	6D6	35	2
Gregory	Richmond Field	69G	36	2
Hale	Field of Dreams	H80	N/A	3
Hancock	Houghton County Memorial	CMX	25	2
Harbor Springs	Harbor Springs Municipal	MGN	16	3
Harrietta	Eagles Landing	4Y9	2	3



**Table 5-8: 2016 Based Aircraft by Airport**

Associated City	Airport Name	FAA ID	2016 Based Aircraft	Regional Capacity Tier
Harrison	Clare County	80D	8	3
Harrisville	Harrisville City	5Y0	N/A	3
Harsens Island	Harsens Island	Z92	1	3
Hart/Shelby	Oceana County	C04	34	2
Hastings	Hastings City / Barry County	9D9	72	1
Hessel	Albert J. Lindberg	5Y1	1	3
Hillman	Hillman	Y95	4	3
Hillsdale	Hillsdale Municipal	JYM	13	3
Holland	West Michigan Regional	BIV	59	1
Holland	Park Township	HLM	18	3
Houghton Lake	Roscommon County, Blodgett Memorial	HTL	26	2
Houghton Lake Heights	Houghton Lake State	5Y2	12	3
Howell	Raether	4Y1	N/A	3
Howell	Livingston County-Spencer J. Hardy	OZW	156	1
Indian River	Calvin Campbell	Y65	14	3
Interlochen	Green Lake Twp.	Y88	4	3
Ionia	Ionia County	Y70	67	1
Iron Mountain Kingsford	Ford	IMT	45	1
Iron River	Stambaugh	Y73	7	3
Ironwood	Gogebic Iron County	IWD	16	3
Ishpeming	E.F. Johnson	M61	4	3
Jackson	Jackson County - Reynolds Field	JXN	102	1
Jenison	Riverview	08C	38	2
Kalamazoo	Kalamazoo/Battle Creek Int'l	AZO	111	1
Kalamazoo	Newman's	4N0	18	3
Kalkaska	Kalkaska	Y89	5	3
Kent City	Wilderness Airpark	24M	5	3
Laingsburg	Dennis Farms	15W	2	3
Lake City	Home Acers Sky Ranch	Y91	32	2
Lake Isabella	Cal Brewer Memorial	D15	6	3
Lakeview	Lakeview - Griffith Field	13C	30	2
Lambertville	Toledo Suburban	DUH	54	1
Lansing	Capital Region Int'l	LAN	61	1
Lapeer	DuPont - Lapeer	D95	70	1
Lewiston	Eagle II	8M8	N/A	3
Lexington	Flugplatz	7MI	N/A	3
Lincoln	Milwrick Flying "M" Ranch	3L7	N/A	3
Linden	Price's	9G2	20	2
Lowell	Lowell City	24C	17	3
Ludington	Mason County	LDM	24	2
Luzerne	Lost Creek	5Y4	1	3
Mackinac Island	Mackinac Island	MCD	5	3
Mancelona	Mancelona Municipal	D90	2	3
Manchester	Rossettie	75G	13	3
Manistee	Manistee County - Blacker	MBL	11	3
Manistique	Schoolcraft County	ISQ	8	3
Marine City	Marine City	76G	27	2
Marlette	Marlette Township	77G	32	2
Marquette	Sawyer International	SAW	39	2
Marshall	Brooks Field	RMV	26	2
Mason	Mason Jewett Field	TEW	65	1
Mecosta	Canadian Lakes	0C5	N/A	3
Mecosta	Morton	27C	N/A	3
Menominee	Menominee - Marinette Twin County	MNM	30	2

**Table 5-8: 2016 Based Aircraft by Airport**

Associated City	Airport Name	FAA ID	2016 Based Aircraft	Regional Capacity Tier
Midland	Jack Barstow	IKW	49	1
Mio	Oscoda County Dennis Kauffman Mem	51M	9	3
Monroe	Monroe Custer	TTF	46	1
Moorestown	Moorestown Airpark	6Y0	2	3
Mount Pleasant	Mt. Pleasant Municipal	MOP	21	2
Munising	Hanley Field	5Y7	1	3
Muskegon	Muskegon County	MKG	81	1
Napoleon	Napoleon	3NP	17	3
Napoleon	Wolf Lake	26W	6	3
Napoleon	Vanwagnen	6H4	1	3
New Hudson	Oakland / Southwest	Y47	64	1
Newberry	Luce County	ERY	13	3
Niles	Jerry Tyler Memorial	3TR	32	2
North Fox Island	North Fox Island Airstrip	6Y3	N/A	3
Northport	Woolsey Memorial	5D5	8	3
Nunica	Hat Field	5N7	4	3
Nunica	Jablonski	33C	2	3
Onaway	Leo E. Goetz Co.	Y96	N/A	3
Ontonagon	Ontonagon County - Schuster Field	OGM	4	3
Oscoda	Oscoda - Wurtsmith	OSC	5	3
Owosso	Owosso Community	RNP	55	1
Parchment	Triple H	2H4	2	3
Paw Paw	Almena	2C5	10	3
Pellston	Pellston Regional Of Emmet County	PLN	26	2
Petersburg	Gradolph	88G	1	3
Pinconning	Gross	52I	31	2
Plainwell	Plainwell Municipal	61D	20	2
Plymouth	Canton - Plymouth - Mettetal	1D2	87	1
Pontiac	Oakland County International	PTK	587	1
Port Austin	Grindstone	29C	N/A	3
Port Huron	St. Clair County Int'l	PHN	95	1
Pullman	Walle Field	M86	N/A	3
Ray	Ray Community	57D	98	1
Reed City	Nartron Field	RCT	N/A	3
Reese	Bauer Field	N/A	N/A	3
Richmond	Robertson Field	N/A	N/A	3
Rock	Van Effen	6Y4	0	3
Rockford	Wells	35C	5	3
Rogers City	Presque Isle County/Rogers City	PZQ	5	3
Romeo	Romeo State	D98	65	1
Roscommon	Roscommon Conservation	3RC	4	3
Saginaw	M B S International	MBS	27	2
Saginaw	Saginaw County H. W. Browne	HYX	66	1
Saint Charles	Oakwood Field	N/A	N/A	3
Saint Clair	David's Landing	5Y5	4	3
Saint Helen	Saint Helen	6Y6	6	3
Saint Ignace	Mackinac County	83D	11	3
Saint Johns	Shady Lane	N/A	N/A	3
Saint Johns	Schiffer Acres	3S5	18	3
Saint Johns	Tripp Creek	39T	2	3
Saint Johns	Glowacki	97G	1	3
Sandusky	Sandusky City	Y83	32	2
Sandusky	Cowley Field	96G	1	3
Sault Ste. Marie	Sault Ste. Marie Muni - Sanderson	ANJ	14	3

**Table 5-8: 2016 Based Aircraft by Airport**

Associated City	Airport Name	FAA ID	2016 Based Aircraft	Regional Capacity Tier
Sault Ste. Marie	Chippewa County Int'l	CIU	13	3
Schoolcraft	Prairie Ronde	P97	4	3
Sebewaing	Township	98G	5	3
Sidnaw	Prickett-Grooms	6Y9	N/A	3
Smiths Creek	Johnson Field	11G	2	3
South Haven	South Haven Area Regional	LWA	44	1
Sparta	Paul C. Miller - Sparta	8D4	81	1
Stanwood	Cain Field	38C	14	3
Sturgis	Kirsch Municipal	IRS	20	2
Sunfield	Hiram Cure Airfield	C43	2	3
Tecumseh	Mills Airport	22T	N/A	3
Tecumseh	Merillat	34G	19	3
Tecumseh	Al Meyers	3TE	11	3
Thompsonville	Thompsonville	7Y2	7	3
Three Rivers	Three Rivers Muni, Dr. Haines	HAI	32	2
Topinabee	Pbeaaye	Y30	13	3
Traverse City	Cherry Capital	TVC	97	1
Traverse City	Lake Ann	4M0	9	3
Troy	Oakland / Troy	VLL	101	1
Watervliet	Watervliet Municipal	40C	20	2
Wayland	Calkins Field	41C	10	3
Weidman	Ojibwa	D11	4	3
West Branch	West Branch Community	Y31	25	2
Westphalia	Forest Hill	3F5	3	3
White Cloud	White Cloud	42C	13	3
Williamston	Williamston Maidens	89Y	1	3
Winn	Woodruff	53W	9	3
Yale	Para Field	4Y8	N/A	3
Yale	Gavagan Field	48G	1	3
Yale	Yale	D20	1	3
Zeeland	Ottawa Executive	Z98	37	2

Source: Community Benefit Assessment (CBA) worksheets from airport managers, basedaircraft.com, and 5010s

The target for Tier 1 and Tier 2 airports is to have a MASP ARC of A-I, as shown in **Table 5-9**. All airports not identified as Tier 1 or Tier 2 have been designated Tier 3 airports for this goal.

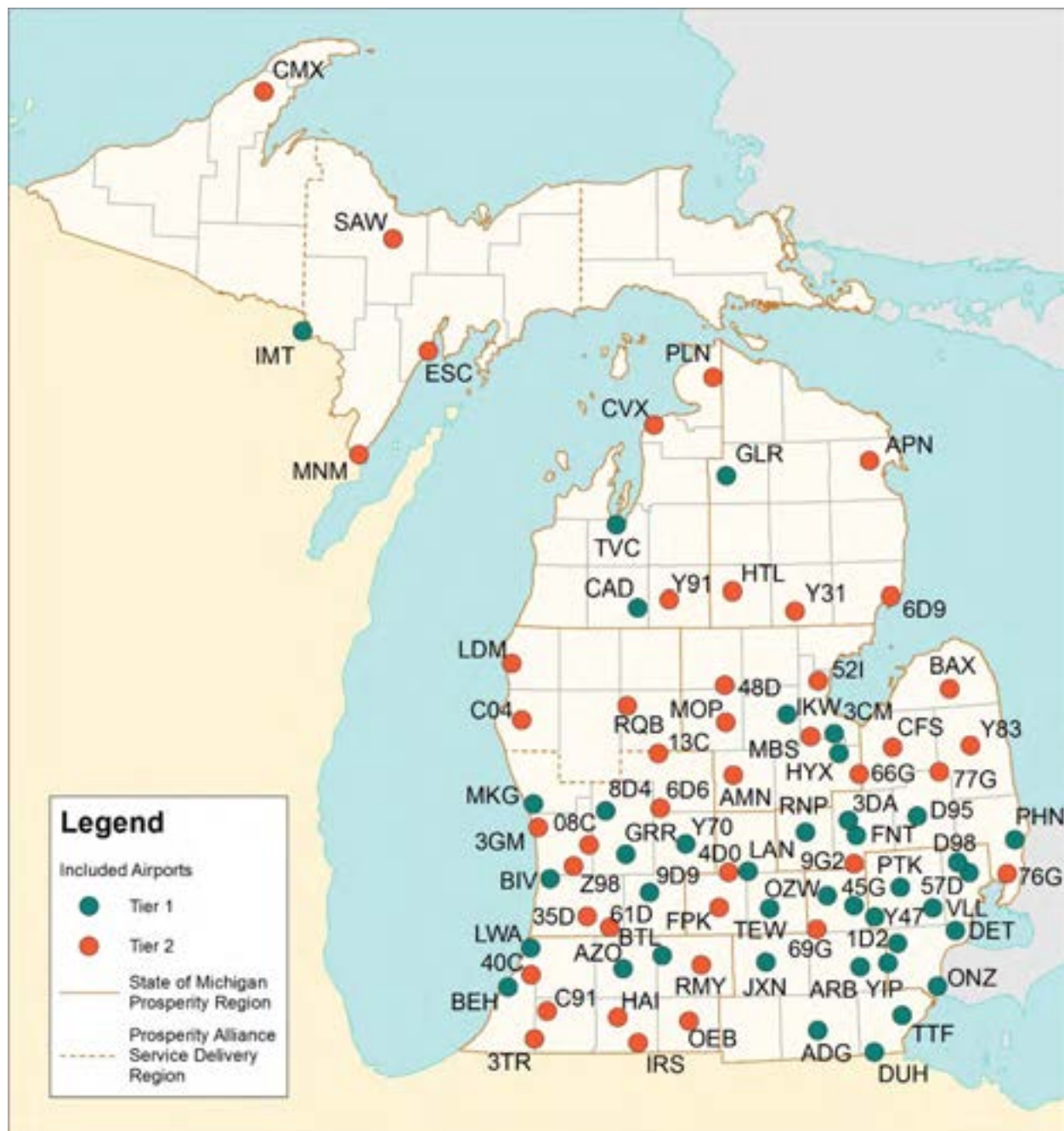
**Table 5-9: System Standards – Regional Capacity**

	Tier 1	Tier 2	Tier 3
<b>Number of Based Aircraft</b>	40 or more	Between 20 and 39	19 less
<b>MASP ARC Classification</b>	A-I	A-I	A-I
<b>Number of Airports Meeting</b>	40	43	143

Source: MDOT AERO

**Figure 5-8** illustrates the location of Tier 1 and Tier 2 airports under the Regional Capacity goal. Using the method above of based aircraft revealed there are 40 Tier 1 and 42 Tier 2 airports meeting the criteria for this system standard.

**Figure 5-8: Locations of Tier 1 and Tier 2 Regional Capacity Airports**



Source: Community Benefit Assessment (CBA) worksheets from airport managers, [basedaircraft.com](http://basedaircraft.com), and 5010s

### 5.1.7 Serve Seasonally Isolated Areas

There are a five islands in the Great Lakes that have year round residents who require access to air transportation on and off of the island during all seasons. As such, it is a goal of this plan to support airports on these islands (Beaver, Bois Blanc, Drummond, Harsens, and Mackinac) and their continued operation providing vital transportation of goods and services. These island airports are backed by the Island Transportation Policy that supports year-round access from these airports to the mainland.

Airports on each of these islands are designated as Tier 1 airports due to their location and the transportation provided between the island and the mainland. The target MASP ARC for Tier 1 airports under this goal is B-I, as noted in **Table 5-10**. No Tier 2 airports are defined for this goal. **Figure 5-9** illustrates the location of the Tier 1 isolation airports. All airports not identified as Tier 1 have been designated Tier 3 airports for this goal. Five airports on islands were identified as Tier 1 airports under this goal.

**Table 5-10: System Standards – Isolated Areas**

	Tier 1	Tier 2	Tier 3
<b>Airport Location</b>	On an Island	NA	Not on an Island
<b>MASP ARC Classification</b>	B-I	NA	NA
<b>Number of Airports Meeting</b>	5	NA	221

Source: MDOT AERO

Note: Tier 2 standards are not defined for this goal.

**Figure 5-9: Locations of Tier 1 Isolation Airports**



Source: MDOT

### 5.1.8 NPIAS Inclusion

Airports that are included in the National Plan of Integrated Airport Systems (NPIAS) may be eligible for FAA funding through the Airport Improvement Program (AIP). This program funds much of the airport development in the national aviation system. When airport sponsors accept funding from the AIP, they agree to a set of conditions known as Grant Assurances that help keep the airport viable and preserve the investment that has been made at the airport. Consequently, it is critical that the 2017 MASP recognize the 95 airports in Michigan that are included in the NPIAS.

Airports that support some form of commercial air service are included in the NPIAS and are designated as Tier 1 airports. GA airports that are included in the NPIAS are designated as Tier 2 airports. The target MASP ARC for Tier 1 and Tier 2 airports under this goal is B-I, as noted in **Table 5-11**.

**Table 5-11: System Standards – NPIAS Inclusion**

	Tier 1	Tier 2	Tier 3
<b>NPIAS Classification</b>	Commercial Service	General Aviation	Non-NPIAS
<b>MASP ARC Classification</b>	B-I	B-I	NA
<b>Number of Airports Meeting</b>	18	77	131

Source: MDOT AERO, National Plan of Integrated Airport Systems (NPIAS), 2017-2021

Note: Pontiac (PTK) and Beaver Island (SJX) are classified as commercial service airports in the NPIAS, but are classified as GA airports for the purposes of the MASP. Manistee (MBL) is classified as a GA airport in the NPAIS but considered a Commercial Service airport for the MASP.

**Figure 5-10** illustrates the location of the Tier 1 and Tier 2 airports based upon NPIAS inclusion. All airports not identified as Tier 1 or Tier 2 have been designated Tier 3 airports for this goal. There are 95 NPIAS airports in Michigan, which include 19 commercial service and 76 GA airports. However, two of the airports classified as commercial service (Pontiac-PTK and Beaver Island-SJX) were considered GA airports for the purposes of the MASP. Additionally, one airport classified as a GA airport in the NPIAS (Manistee-MBL) has scheduled air service and is considered commercial service for the MASP. Therefore, the analysis revealed that there are 18 airports that can be classified as Tier 1 because they support commercial air service (see Section 1.2.1), and 77 airports that are classified as Tier 2 because they are classified as GA airports, as shown in **Table 5-12**.



**Table 5-12: 2016 Airport NPIAS Inclusion**

Associated City	Airport Name	FAA ID	Airport Type	NPIAS Tier
Adrian	Lenawee County	ADG	GA	2
Allegan	Padgham Field	35D	GA	2
Alma	Gratiot Community	AMN	GA	2
Alpena	Alpena County Regional	APN	Air Carrier	1
Ann Arbor	Ann Arbor Municipal	ARB	GA	2
Atlanta	Atlanta Municipal	Y93	GA	2
Bad Axe	Huron County Memorial	BAX	GA	2
Battle Creek	W. K. Kellogg	BTL	GA	2
Bay City	James Clements & S.P.B	3CM	GA	2
Beaver Island	Beaver Island	SJX	GA	2
Bellaire	Antrim County	ACB	GA	2
Benton Harbor	Southwest Michigan Regional	BEH	GA	2
Big Rapids	Roben - Hood	RQB	GA	2
Bois Blanc Island	Bois Blanc Island	6Y1	GA	2
Cadillac	Wexford County	CAD	GA	2
Caro	Tuscola Area	CFS	GA	2
Charlevoix	Charlevoix Municipal	CVX	Commercial Service	1
Charlotte	Fitch H. Beach Municipal	FPK	GA	2
Cheboygan	Cheboygan County	SLH	GA	2
Clare	Clare Municipal	48D	GA	2
Coldwater	Branch County Memorial	OEB	GA	2
Detroit	Coleman A. Young Municipal	DET	GA	2
Detroit	Detroit Metro Wayne County	DTW	Air Carrier	1
Detroit	Willow Run	YIP	GA	2
Detroit/Grosse Ile	Grosse Ile Municipal	ONZ	GA	2
Dowagiac	Dowagiac Municipal	C91	GA	2
Drummond Island	Drummond Island	DRM	GA	2
Escanaba	Delta County	ESC	Air Carrier	1
Ewart	Ewart Municipal	9C8	GA	2
Flint	Bishop Int'l	FNT	Air Carrier	1
Frankfort	Dow Memorial	FKS	GA	2
Fremont	Fremont Municipal	FFX	GA	2
Gaylord	Gaylord Regional	GLR	GA	2
Gladwin	Gladwin Zettel Memorial	GDW	GA	2
Grand Haven	Memorial Airpark	3GM	GA	2
Grand Ledge	Abrams Municipal	4D0	GA	2
Grand Rapids	Gerald R. Ford International	GRR	Air Carrier	1
Grayling	Grayling Army Airfield	GOV	GA	2
Greenville	Greenville Municipal	6D6	GA	2
Hancock	Houghton County Memorial	CMX	Air Carrier	1
Harbor Springs	Harbor Springs Municipal	MGN	GA	2
Hart/Shelby	Oceana County	C04	GA	2
Hastings	Hastings City/Barry County	9D9	GA	2
Hillsdale	Hillsdale Municipal	JYM	GA	2
Holland	West Michigan Regional	BIV	GA	2
Houghton Lake	Roscommon County, Blodgett Memorial	HTL	GA	2
Howell	Livingston County-Spencer J. Hardy	OZW	GA	2
Ionia	Ionia County	Y70	GA	2
Iron Mountain Kingsford	Ford	IMT	Air Carrier	1
Ironwood	Gogebic Iron County	IWD	Commercial Service	1
Jackson	Jackson County - Reynolds Field	JXN	GA	2
Kalamazoo	Kalamazoo/Battle Creek Int'l	AZO	Air Carrier	1
Lakeview	Lakeview - Griffith Field	13C	GA	2



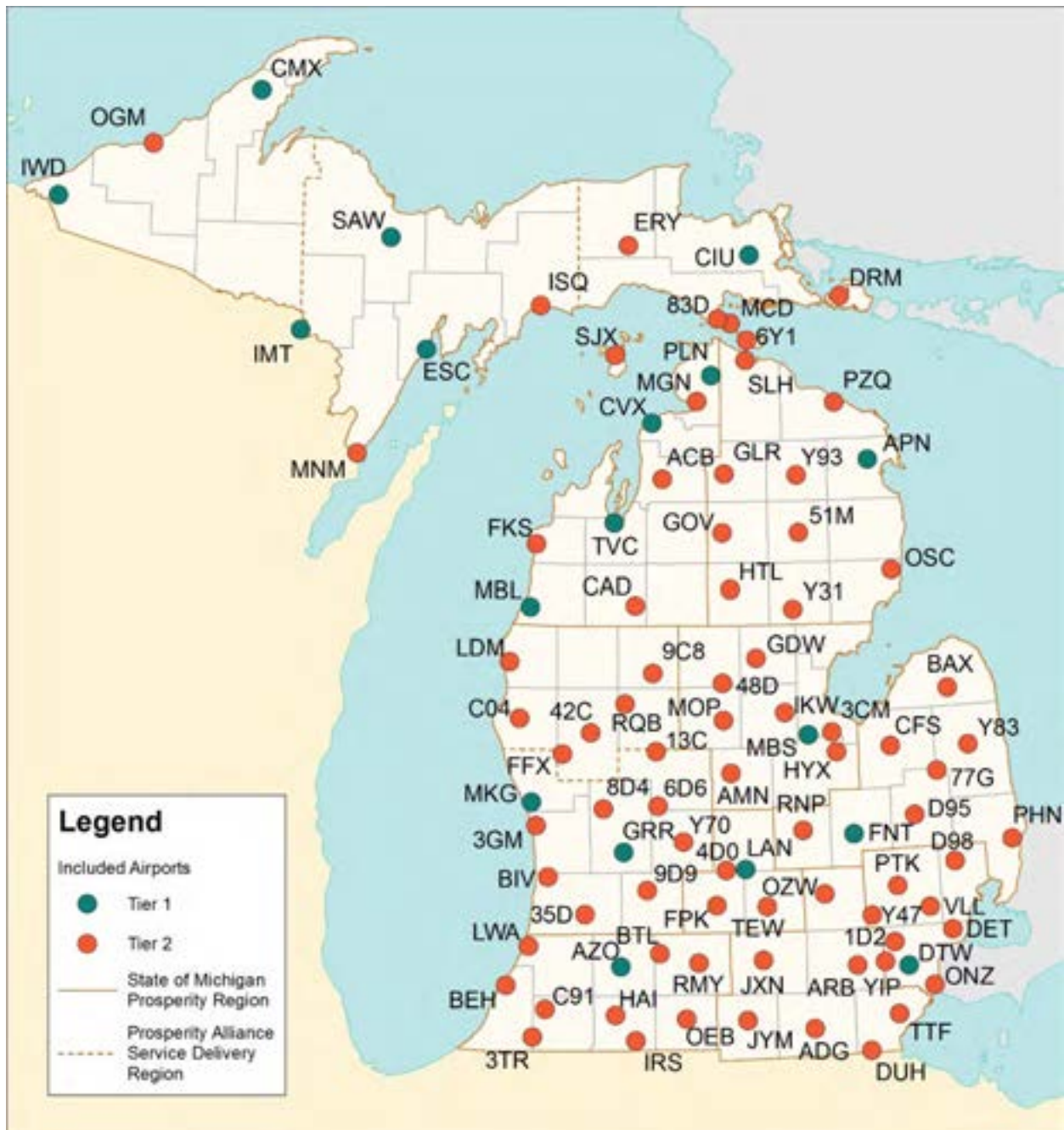
**Table 5-12: 2016 Airport NPIAS Inclusion**

Associated City	Airport Name	FAA ID	Airport Type	NPIAS Tier
Lambertville	Toledo Suburban	DUH	GA	2
Lansing	Capital Region Int'l	LAN	Air Carrier	1
Lapeer	DuPont - Lapeer	D95	GA	2
Ludington	Mason County	LDM	GA	2
Mackinac Island	Mackinac Island	MCD	GA	2
Manistee	Manistee County - Blacker	MBL	Commercial Service	1
Manistique	Schoolcraft County	ISQ	GA	2
Marlette	Marlette Township	77G	GA	2
Marquette	Sawyer International	SAW	Air Carrier	1
Marshall	Brooks Field	RMV	GA	2
Mason	Mason Jewett Field	TEW	GA	2
Menominee	Menominee - Marinette Twin County	MNM	GA	2
Midland	Jack Barstow	IKW	GA	2
Mio	Oscoda County Dennis Kauffman Mem	51M	GA	2
Monroe	Monroe Custer	TTF	GA	2
Mount Pleasant	Mt. Pleasant Municipal	MOP	GA	2
Muskegon	Muskegon County	MKG	Air Carrier	1
New Hudson	Oakland/Southwest	Y47	GA	2
Newberry	Luce County	ERY	GA	2
Niles	Jerry Tyler Memorial	3TR	GA	2
Ontonagon	Ontonagon County - Schuster Field	OGM	GA	2
Oscoda	Oscoda - Wurtsmith	OSC	GA	2
Owosso	Owosso Community	RNP	GA	2
Pellston	Pellston Regional Of Emmet County	PLN	Air Carrier	1
Plymouth	Canton - Plymouth - Mettetal	1D2	GA	2
Pontiac	Oakland County International	PTK	GA	2
Port Huron	St. Clair County Int'l	PHN	GA	2
Rogers City	Presque Isle County/Rogers City	PZQ	GA	2
Romeo	Romeo State	D98	GA	2
Saginaw	Saginaw County H. W. Browne	HYX	GA	2
Saginaw	M B S International	MBS	Air Carrier	1
Saint Ignace	Mackinac County	83D	GA	2
Sandusky	Sandusky City	Y83	GA	2
Sault Ste. Marie	Chippewa County Int'l	CIU	Air Carrier	1
South Haven	South Haven Area Regional	LWA	GA	2
Sparta	Paul C. Miller - Sparta	8D4	GA	2
Sturgis	Kirsch Municipal	IRS	GA	2
Three Rivers	Three Rivers Muni, Dr. Haines	HAI	GA	2
Traverse City	Cherry Capital	TVC	Air Carrier	1
Troy	Oakland/Troy	VLL	GA	2
West Branch	West Branch Community	Y31	GA	2
White Cloud	White Cloud	42C	GA	2

Source: National Plan of Integrated Airport Systems (NPIAS), 2017-2021

Note: Pontiac (PTK) and Beaver Island (SJX) are classified as commercial service airports in the NPIAS, but are classified as GA airports for the purposes of the MASP. Manistee (MBL) is classified as a GA airport in the NPAIS but considered a Commercial Service airport for the MASP.

**Figure 5-10: Locations of Tier 1 and Tier 2 NPIAS Airports**



Source: National Plan of Integrated Airport Systems (NPIAS), 2017-2021

Note: Pontiac (PTK) and Beaver Island (SJX) are classified as commercial service airports in the NPIAS, but are classified as GA airports for the purposes of the MASP. Manistee (MBL) is classified as a GA airport in the NPAIS but considered a Commercial Service airport for the MASP.

### 5.1.9 Airport Tiers

As noted in **Section 1**, the 2017 MASP update initially began with the evaluation of the 108 Tier 1 and Tier 2 airports from the 2008 study. However, to provide a comprehensive evaluation of all public-use airports to identify any additional airports that would serve as Tier 1 or Tier 2 airports (or conversely, to identify airports no longer meeting Tier 1 or Tier 2 criteria from the 2008 plan) all public-use airports published in the 2016 Michigan Airport Directory were investigated. A total of 226 airports were reviewed for inclusion as Tier 1 or Tier 2 airports for all eight goals. A summary of the total number of airports assigned to each tier for the eight system goals, and the overall number of airports in each tier, is provided in **Table 5-13**. The location of the total 86 Tier 1 and 28 Tier 2 airports are shown in **Figure 5-11**. Details of the assigned tiers by system goal, including the overall MASP tier and ARC assigned to each airport are shown in **Table 5-14**, **Table 5-15**, and **Table 5-16** for Tier 1, Tier 2, and Tier 3 airports, respectively.

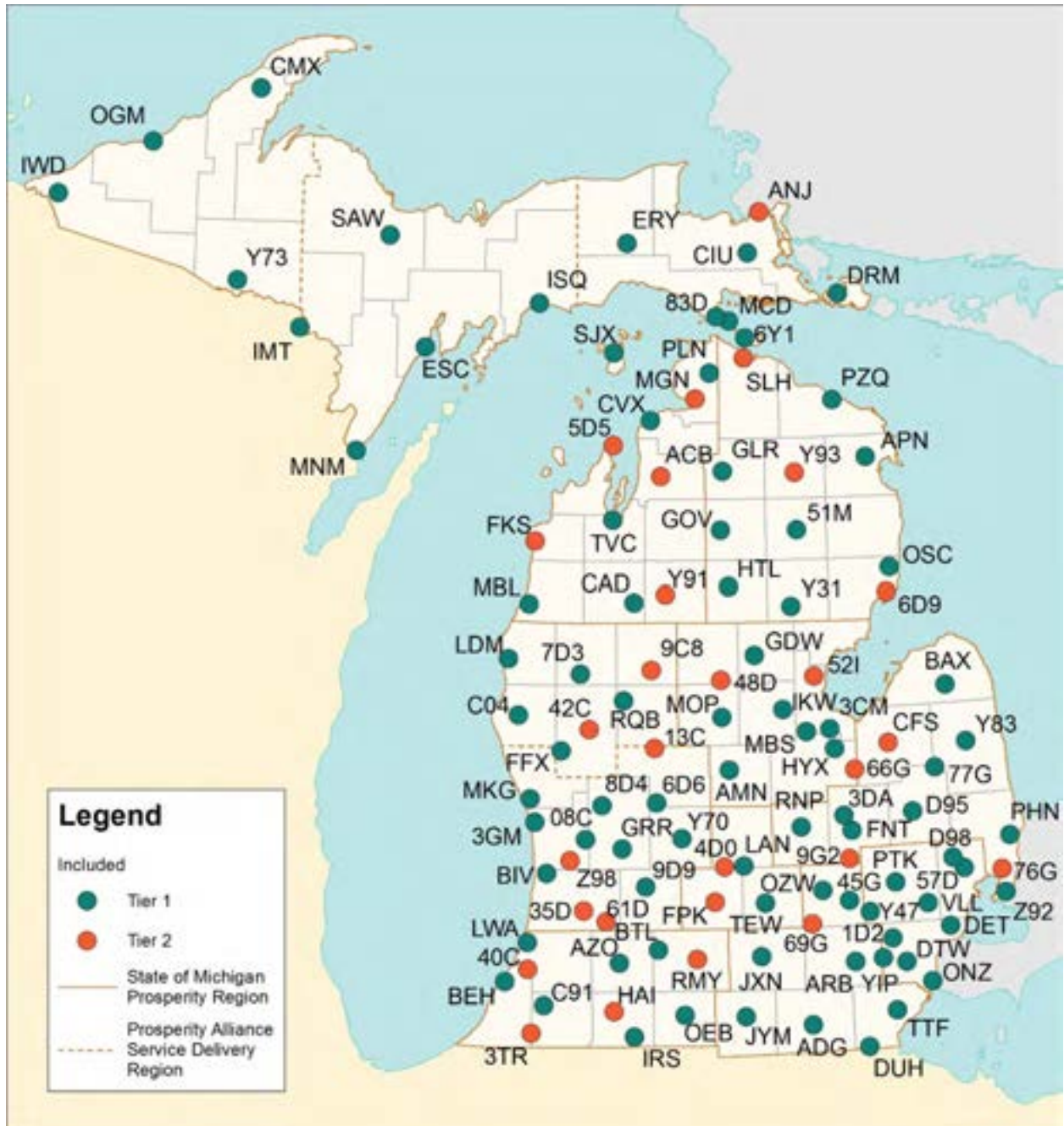
**Table 5-13: 2017 MASP Tier Composite Summary**

Tier	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion	Total
Tier 1	42	52	35	20	44	40	5	18	86
Tier 2	11	13	24	NA	NA	43	NA	77	28
Subtotal	53	65	59	20	44	83	5	95	114
Tier 3	173	161	167	206	182	143	221	131	112
<b>Total</b>	<b>226</b>	<b>226</b>	<b>226</b>	<b>226</b>	<b>226</b>	<b>226</b>	<b>226</b>	<b>226</b>	<b>226</b>

Source: Analysis by Mead & Hunt, 2017

Note: Tiers do not total horizontally because airports may be counted in the same tier for more than one goal.

Figure 5-11: Overall Tier 1 and Tier 2 MASP Airports



Source: Analysis by Mead & Hunt, 2017

**Table 5-14: 2017 MASP Tier 1 Airports by System Goal**

Associated City - Airport	FAA ID	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion	2017 MASP Tier	2017 MASP ARC
Adrian – Lenawee Co.	ADG	1	1	2	1	1	1	3	2	1	C-II
Alma – Gratiot Community	AMN	3	3	3	3	1	2	3	2	1	B-II
Alpena – Alpena Co. Regional	APN	1	1	3	3	1	2	3	1	1	C-II
Ann Arbor – Ann Arbor Muni.	ARB	2	2	1	3	3	1	3	2	1	B-II
Bad Axe – Huron Co. Memorial	BAX	3	1	2	3	1	2	3	2	1	C-II
Baldwin – Baldwin Muni.	7D3	3	3	1	3	3	3	3	3	1	B-II
Battle Creek – W.K. Kellogg	BTL	1	1	1	1	1	1	3	2	1	C-II
Bay City – James Clements & S.P.B	3CM	2	3	1	3	3	1	3	2	1	B-II
Beaver Island – Beaver Island	SJX	3	1	1	3	3	3	1	2	1	C-II
Benton Harbor – Southwest Michigan Regional	BEH	1	1	1	1	1	1	3	2	1	C-II
Big Rapids – Roben-Hood	RQB	1	1	1	1	1	2	3	2	1	C-II
Bois Blanc Island – Bois Blanc Island	6Y1	3	3	3	3	3	3	1	2	1	B-I
Brighton – Brighton Field	45G	3	3	3	3	3	1	3	3	1	A-I
Cadillac – Wexford Co.	CAD	1	1	2	1	1	1	3	2	1	C-II
Charlevoix – Charlevoix Muni.	CVX	3	1	1	3	1	2	3	1	1	C-II
Coldwater – Branch Co. Memorial	OEB	1	1	3	3	1	2	3	2	1	C-II
Detroit – Coleman A. Young Memorial	DET	1	1	3	3	3	1	3	2	1	C-II
Detroit – Detroit Metro Wayne Co.	DTW	1	1	1	1	1	3	3	1	1	C-II
Detroit – Willow Run	YIP	1	1	3	3	3	1	3	2	1	C-II
Detroit / Grosse Ile – Grosse Ile Muni.	ONZ	3	3	3	3	3	1	3	2	1	B-I
Dowagiac – Dowagiac Muni.	C91	1	1	2	3	3	2	3	2	1	C-II
Drummond Island – Drummond Island	DRM	3	3	3	3	3	3	1	2	1	B-I
Escanaba – Delta Co.	ESC	1	1	3	3	1	2	3	1	1	C-II
Flint – Bishop Int'l	FNT	1	1	1	1	1	1	3	1	1	C-II
Flushing – Dalton	3DA	3	3	3	3	3	1	3	3	1	A-I
Fremont – Fremont Muni.	FFX	3	1	1	3	3	3	3	2	1	C-II
Gaylord – Gaylord Regional	GLR	3	1	2	1	1	1	3	2	1	C-II
Gladwin – Gladwin Zettel Memorial	GDW	3	1	3	3	3	3	3	2	1	C-II
Grand Haven – Memorial Airpark	3GM	3	3	1	3	3	2	3	2	1	B-II
Grand Rapids – Gerald R. Ford Int'l	GRR	1	1	1	1	1	1	3	1	1	C-II
Grayling – Grayling Army Airfield	GOV	3	1	3	3	3	3	3	2	1	C-II
Greenville – Greenville Muni.	6D6	2	2	1	3	3	2	3	2	1	B-II
Hancock – Houghton Co. Memorial	CMX	1	1	3	1	1	2	3	1	1	C-II
Harsens Island – Harsens Island	Z92	3	3	3	3	3	3	1	3	1	B-I
Hart/Shelby – Oceana Co.	C04	3	3	1	3	3	2	3	2	1	B-II
Hastings – Hastings City/Barry Co.	9D9	1	1	2	3	3	1	3	2	1	C-II



**Table 5-14: 2017 MASP Tier 1 Airports by System Goal**

Associated City - Airport	FAA ID	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion	2017 MASP Tier	2017 MASP ARC
Hillsdale – Hillsdale Muni.	JYM	1	1	3	3	3	3	3	2	1	C-II
Holland – West Michigan Regional	BIV	1	1	1	3	1	1	3	2	1	C-II
Houghton Lake – Roscommon County, Blodgett Memorial	HTL	3	3	3	3	1	2	3	2	1	B-II
Howell – Livingston Co. – Spencer J. Hardy	OZW	1	1	1	3	3	1	3	2	1	C-II
Ionia – Ionia Co.	Y70	1	1	2	3	3	1	3	2	1	C-II
Iron Mountain Kingsford - Ford	IMT	1	1	3	3	1	1	3	1	1	C-II
Iron River – Stambaugh	Y73	3	3	3	3	1	3	3	3	1	B-II
Ironwood – Gogebic Iron Co.	IWD	3	3	3	3	1	3	3	1	1	B-II
Jackson – Jackson Co. Reynolds Field	JXN	1	1	1	1	1	1	3	2	1	C-II
Jenison - Riverview	08C	1	3	3	3	3	2	3	3	1	C-II
Kalamazoo – Kalamazoo/Battle Creek Int'l	AZO	1	1	1	3	1	1	3	1	1	C-II
Lambertville – Toledo Suburban	DUH	3	2	3	3	3	1	3	2	1	B-II
Lansing – Capital Region Int'l	LAN	1	1	1	1	1	1	3	1	1	C-II
Lapeer – DuPont – Lapeer	D95	2	2	2	3	3	1	3	2	1	B-II
Ludington – Mason Co.	LDM	1	1	2	3	1	2	3	2	1	C-II
Mackinac Island – Mackinac Island	MCD	3	3	1	3	3	3	1	2	1	B-II
Manistee – Manistee Co. – Blacker	MBL	1	1	1	3	1	3	3	1	1	C-II
Manistique – Schoolcraft Co.	ISQ	3	3	3	3	1	3	3	2	1	B-II
Marlette – Marlette Twp.	77G	3	3	2	3	1	2	3	2	1	B-II
Marquette – Sawyer Int'l	SAW	1	1	1	1	1	2	3	1	1	C-II
Mason – Mason Jewett Field	TEW	3	3	3	3	3	1	3	2	1	B-I
Menominee – Menominee – Marinette Twin Co.	MNM	1	1	2	3	1	2	3	2	1	C-II
Midland – Jack Barstow	IKW	3	3	1	3	3	1	3	2	1	B-II
Mio – Oscoda Co. Dennis Kauffman Memorial	51M	3	3	3	3	1	3	3	2	1	B-II
Monroe – Monroe Custer	TTF	1	1	1	3	3	1	3	2	1	C-II
Mount Pleasant – Mt. Pleasant Municipal	MOP	1	1	1	1	1	2	3	2	1	C-II
Muskegon – Muskegon Co.	MKG	1	1	1	1	1	1	3	1	1	C-II
New Hudson – Oakland/Southwest	Y47	2	2	3	3	3	1	3	2	1	B-II
Newberry – Luce County	ERY	3	3	3	3	1	3	3	2	1	B-II
Ontonagon – Ontonagon Co. – Schuster Field	OGM	3	3	3	3	1	3	3	2	1	B-II
Oscoda – Oscoda – Wurtsmith	OSC	3	1	3	3	1	3	3	2	1	C-II
Owosso – Owosso Community	RNP	1	1	2	3	3	1	3	2	1	C-II
Pellston – Pellston Regional Of Emmet Co.	PLN	1	1	1	3	1	2	3	1	1	C-II
Plymouth – Canton – Plymouth – Mettetal	1D2	3	3	3	3	3	1	3	2	1	B-I
Pontiac – Oakland Co. Int'l	PTK	1	1	1	1	1	1	3	2	1	C-II
Port Huron – St. Clair Co. Int'l	PHN	1	1	1	1	1	1	3	2	1	C-II

**Table 5-14: 2017 MASP Tier 1 Airports by System Goal**

Associated City - Airport	FAA ID	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion	2017 MASP Tier	2017 MASP ARC
Ray – Ray Community	57D	3	3	3	3	3	1	3	3	1	A-I
Rogers City – Presque Isle Co./Rogers City	PZQ	3	3	3	3	1	3	3	2	1	B-II
Romeo – Romeo State	D98	1	1	1	3	3	1	3	2	1	C-II
Saginaw – MBS Int'l	MBS	1	1	1	1	1	2	3	1	1	C-II
Saginaw – Saginaw Co. H.W. Browne	HYX	3	1	3	3	3	1	3	2	1	C-II
Sandusky – Sandusky City	Y83	3	1	3	3	3	2	3	2	1	C-II
Saint Ignace – Mackinac Co.	83D	3	2	1	3	3	3	3	2	1	B-II
Sault Ste. Marie – Chippewa Co. Int'l	CIU	1	1	1	1	1	3	3	1	1	C-II
South Haven – South Haven Area Regional	LWA	3	3	2	3	3	1	3	2	1	B-II
Sparta – Paul C. Miller – Sparta	8D4	1	1	3	3	3	1	3	2	1	C-II
Sturgis – Kirsch Muni.	IRS	1	1	2	3	3	2	3	2	1	C-II
Traverse City – Cherry Capital	TVC	1	1	1	1	1	1	3	1	1	C-II
Troy – Oakland/Troy	VLL	3	3	3	3	3	1	3	2	1	B-I
West Branch – West Branch Community	Y31	3	1	3	3	1	2	3	2	1	C-II

Source: MDOT AERO, MASP System Analysis by Mead &amp; Hunt, 2017

**Table 5-15: 2017 MASP Tier 2 Airports by System Goal**

Associated City - Airport	FAA ID	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion	2017 MASP Tier	2017 MASP ARC
Allegan – Padgham Field	35D	2	2	3	3	3	2	3	2	2	B-II
Atlanta – Atlanta Muni.	Y93	3	3	3	3	3	3	3	2	2	B-I
Bellaire – Antrim Co.	ACB	3	2	2	3	3	3	3	2	2	B-II
Caro – Tuscola Area	CFS	3	2	2	3	3	2	3	2	2	B-II
Charlotte – Fitch H. Beach Muni.	FPK	2	2	2	3	3	2	3	2	2	B-II
Cheboygan – Cheboygan Co.	SLH	3	3	2	3	3	3	3	2	2	B-II
Clare – Clare Muni.	48D	3	3	2	3	3	2	3	2	2	B-II
East Tawas – Iosco Co.	6D9	3	3	3	3	3	2	3	3	2	A-I
Ewart – Ewart Muni.	9C8	3	3	2	3	3	3	3	2	2	B-II
Frankenmuth – Wm 'Tiny' Zehnder Field	66G	3	3	3	3	3	2	3	3	2	A-I
Frankfort – Dow Memorial	FKS	3	3	2	3	3	3	3	2	2	B-II
Grand Ledge – Abrams Muni.	4D0	3	3	2	3	3	2	3	2	2	B-II
Gregory – Richmond Field	69G	3	3	3	3	3	2	3	3	2	A-I
Harbor Springs – Harbor Springs Muni.	MGN	2	2	3	3	3	3	3	2	2	B-II
Lake City – Home Acres Sky Ranch	Y91	3	3	3	3	3	2	3	3	2	A-I

**Table 5-15: 2017 MASP Tier 2 Airports by System Goal**

Associated City - Airport	FAA ID	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion	2017 MASP Tier	2017 MASP ARC
Lakeview – Lakeview – Griffith Field	13C	3	3	3	3	3	2	3	2	2	B-I
Linden – Price's	9G2	3	3	3	3	3	2	3	3	2	A-I
Marine City – Marine City	76G	3	3	3	3	3	2	3	3	2	A-I
Marshall – Brooks Field	RMV	3	3	3	3	3	2	3	2	2	B-I
Niles – Jerry Tyler Memorial	3TR	2	2	3	3	3	2	3	2	2	B-II
Northport – Woolsey Memorial	5D5	3	3	2	3	3	3	3	3	2	B-II
Pinconning – Gross	52I	3	3	3	3	3	2	3	3	2	A-I
Plainwell – Plainwell Municipal	61D	3	3	3	3	3	2	3	3	2	A-I
Sault Ste. Marie – Sault Ste. Marie Muni. - Sanderson	ANJ	2	3	3	3	3	3	3	3	2	B-II
Three Rivers – Three Rivers Muni., Dr. Haines	HAI	2	2	2	3	3	2	3	2	2	B-II
Watervliet – Watervliet Muni.	40C	3	3	3	3	3	2	3	3	2	A-I
White Cloud – White Cloud	42C	3	3	3	3	3	3	3	2	2	B-I
Zeeland – Ottawa Executive	Z98	3	3	3	3	3	2	3	3	2	A-I

Source: MDOT AERO, MASP System Analysis by Mead &amp; Hunt, 2017

**Table 5-16: 2017 MASP Tier 3 Airports by System Goal**

Associated City - Airport	FAA ID	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion	2017 MASP Tier	2017 MASP ARC
Avoca – Avoca	39G	3	3	3	3	3	3	3	3	3	A-I
Bad Axe – Engler Field	E53	3	3	3	3	3	3	3	3	3	A-I
Bannister – Shady Lawn Field	4M4	3	3	3	3	3	3	3	3	3	A-I
Bath – University Airpark	41G	3	3	3	3	3	3	3	3	3	A-I
Beaver Island – Welke	6Y8	3	3	3	3	3	3	3	3	3	A-I
Belding – Boulder Canyon	N/A	3	3	3	3	3	3	3	3	3	A-I
Belleville – Belleville Airpark	43G	3	3	3	3	3	3	3	3	3	A-I
Berrien Springs – Andrews	C20	3	3	3	3	3	3	3	3	3	A-I
Blissfield – Betz	44G	3	3	3	3	3	3	3	3	3	A-I
Boyne City – Boyne City Muni.	N98	3	3	3	3	3	3	3	3	3	A-I
Boyne Falls – Boyne Mtn.	BFA	3	3	3	3	3	3	3	3	3	A-I
Brooklyn – Shamrock Field	6G8	3	3	3	3	3	3	3	3	3	A-I
Brown City – Burgess Field	N/A	3	3	3	3	3	3	3	3	3	A-I
Carleton – Buzzwick	W87	3	3	3	3	3	3	3	3	3	A-I
Charlotte – Wend Valley	49G	3	3	3	3	3	3	3	3	3	A-I



**Table 5-16: 2017 MASP Tier 3 Airports by System Goal**

Associated City - Airport	FAA ID	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion	2017 MASP Tier	2017 MASP ARC
Cheboygan – Hoffman's Black MT	2M7	3	3	3	3	3	3	3	3	3	A-I
Chesaning – Howard Nixon Memorial	50G	3	3	3	3	3	3	3	3	3	A-I
Clinton – Honey Acres	7N4	3	3	3	3	3	3	3	3	3	A-I
Clio – Alkay	51G	3	3	3	3	3	3	3	3	3	A-I
Corunna – Millstream Airpark	56M	3	3	3	3	3	3	3	3	3	A-I
Croswell – Arnold Field	55G	3	3	3	3	3	3	3	3	3	A-I
Crystal Falls – Iron Co.	50D	3	3	3	3	3	3	3	3	3	A-I
Davison – A Williams Memorial	6G0	3	3	3	3	3	3	3	3	3	A-I
DeWitt – Hoerner's Corners	MI10	3	3	3	3	3	3	3	3	3	A-I
DeWitt – Orbanair	N/A	3	3	3	3	3	3	3	3	3	A-I
Dexter – Cackleberry	2E8	3	3	3	3	3	3	3	3	3	A-I
Durand – Waite Field	29M	3	3	3	3	3	3	3	3	3	A-I
East Jordan – East Jordan City	Y94	3	3	3	3	3	3	3	3	3	A-I
Eastport – Torchport Airpark	59M	3	3	3	3	3	3	3	3	3	A-I
Eaton Rapids – Skyway Estates	60G	3	3	3	3	3	3	3	3	3	A-I
Elwell – Hamp Skyport	68R	3	3	3	3	3	3	3	3	3	A-I
Emmett – Sharpe's Strip	2E2	3	3	3	3	3	3	3	3	3	A-I
Empire – Empire	Y87	3	3	3	3	3	3	3	3	3	A-I
Fowlerville – Maple Grove	65G	3	3	3	3	3	3	3	3	3	A-I
Fruitport – Flying-A-Ranch	39Z	3	3	3	3	3	3	3	3	3	A-I
Gaylord – Lake of the North	4Y4	3	3	3	3	3	3	3	3	3	A-I
Gladwin – Sugar Springs	5M6	3	3	3	3	3	3	3	3	3	A-I
Grand Marais – Grand Marais	Y98	3	3	3	3	3	3	3	3	3	A-I
Hale – Field of Dreams	H80	3	3	3	3	3	3	3	3	3	A-I
Harrietta – Eagles Landing	4Y9	3	3	3	3	3	3	3	3	3	A-I
Harrison – Clare Co.	80D	3	3	3	3	3	3	3	3	3	A-I
Harrisville – Harrisville City	5Y0	3	3	3	3	3	3	3	3	3	A-I
Hessel – Albert J. Lindberg	5Y1	3	3	3	3	3	3	3	3	3	A-I
Hillman - Hillman	Y95	3	3	3	3	3	3	3	3	3	A-I
Holland – Park Township	HLM	3	3	3	3	3	3	3	3	3	A-I
Houghton Lake Heights – Houghton Lake State	5Y2	3	3	3	3	3	3	3	3	3	A-I
Howell – Raether	4Y1	3	3	3	3	3	3	3	3	3	A-I
Indian River – Calvin Campbell	Y65	3	3	3	3	3	3	3	3	3	A-I
Interlochen – Green Lake Twp.	Y88	3	3	3	3	3	3	3	3	3	A-I
Ishpeming – E.F. Johnson	M61	3	3	3	3	3	3	3	3	3	A-I
Kalamazoo – Newman's	4N0	3	3	3	3	3	3	3	3	3	A-I

**Table 5-16: 2017 MASP Tier 3 Airports by System Goal**

Associated City - Airport	FAA ID	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion	2017 MASP Tier	2017 MASP ARC
Kalkaska – Kalkaska	Y89	3	3	3	3	3	3	3	3	3	A-I
Kent City – Wilderness Airpark	24M	3	3	3	3	3	3	3	3	3	A-I
Laingsburg – Dennis Farms	15W	3	3	3	3	3	3	3	3	3	A-I
Lake Isabella – Cal Brewer Memorial	D15	3	3	3	3	3	3	3	3	3	A-I
Lewiston – Eagle II	8M8	3	3	3	3	3	3	3	3	3	A-I
Lexington – Flugplatz	7MI	3	3	3	3	3	3	3	3	3	A-I
Lincoln – Milwrick Flying “M” Ranch	3L7	3	3	3	3	3	3	3	3	3	A-I
Lowell – Lowell City	24C	3	3	3	3	3	3	3	3	3	A-I
Luzerne – Lost Creek	5Y4	3	3	3	3	3	3	3	3	3	A-I
Mancelona – Mancelona Muni.	D90	3	3	3	3	3	3	3	3	3	A-I
Manchester – Rossettie	75G	3	3	3	3	3	3	3	3	3	A-I
Mecosta – Canadian Lakes	0C5	3	3	3	3	3	3	3	3	3	A-I
Mecosta – Morton	27C	3	3	3	3	3	3	3	3	3	A-I
Moorestown – Moorestown Airpark	6Y0	3	3	3	3	3	3	3	3	3	A-I
Munising – Hanley Field	5Y7	3	3	3	3	3	3	3	3	3	A-I
Napoleon – Napoleon	3NP	3	3	3	3	3	3	3	3	3	A-I
Napoleon – Vanwagnen	6H4	3	3	3	3	3	3	3	3	3	A-I
Napoleon – Wolf Lake	26W	3	3	3	3	3	3	3	3	3	A-I
North Fox Island – North Fox Island Airstrip	6Y3	3	3	3	3	3	3	3	3	3	A-I
Nunica – Hat Field	5N7	3	3	3	3	3	3	3	3	3	A-I
Nunica – Jablonski	33C	3	3	3	3	3	3	3	3	3	A-I
Onaway – Leo E. Goetz Co.	Y96	3	3	3	3	3	3	3	3	3	A-I
Parchment – Triple H	2H4	3	3	3	3	3	3	3	3	3	A-I
Paw Paw – Almena	2C5	3	3	3	3	3	3	3	3	3	A-I
Petersburg – Gradolph	88G	3	3	3	3	3	3	3	3	3	A-I
Port Austin – Grindstone	29C	3	3	3	3	3	3	3	3	3	A-I
Pullman – Walle Field	M86	3	3	3	3	3	3	3	3	3	A-I
Reed City – Natron Field	RCT	3	3	3	3	3	3	3	3	3	A-I
Reese – Bauer Field	N/A	3	3	3	3	3	3	3	3	3	A-I
Richmond – Robertson Field	N/A	3	3	3	3	3	3	3	3	3	A-I
Rock – Van Effen Field	6Y4	3	3	3	3	3	3	3	3	3	A-I
Rockford – Wells	35C	3	3	3	3	3	3	3	3	3	A-I
Roscommon – Roscommon Conservation	3RC	3	3	3	3	3	3	3	3	3	A-I
Saint Charles – Oakwood Field	N/A	3	3	3	3	3	3	3	3	3	A-I
Saint Clair – David’s Landing	5Y5	3	3	3	3	3	3	3	3	3	A-I
Saint Helen – Saint Helen	6Y6	3	3	3	3	3	3	3	3	3	A-I

**Table 5-16: 2017 MASP Tier 3 Airports by System Goal**

Associated City - Airport	FAA ID	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion	2017 MASP Tier	2017 MASP ARC
Saint Johns – Glowacki	97G	3	3	3	3	3	3	3	3	3	A-I
Saint Johns – Schiffer Acres	3S5	3	3	3	3	3	3	3	3	3	A-I
Saint Johns – Shady Lane	N/A	3	3	3	3	3	3	3	3	3	A-I
Saint Johns – Tripp Creek	39T	3	3	3	3	3	3	3	3	3	A-I
Sandusky – Cowley Field	96G	3	3	3	3	3	3	3	3	3	A-I
Schoolcraft – Prairie Ronde	P97	3	3	3	3	3	3	3	3	3	A-I
Sebewaing – Township	98G	3	3	3	3	3	3	3	3	3	A-I
Sidnaw – Prickett – Grooms	6Y9	3	3	3	3	3	3	3	3	3	A-I
Smiths Creek – Johnson Field	11G	3	3	3	3	3	3	3	3	3	A-I
Stanwood – Cain Field	38C	3	3	3	3	3	3	3	3	3	A-I
Sunfield – Hiram Cure Airfield	C43	3	3	3	3	3	3	3	3	3	A-I
Tecumseh – Al Meyers	3TE	3	3	3	3	3	3	3	3	3	A-I
Tecumseh – Merillat	34G	3	3	3	3	3	3	3	3	3	A-I
Tecumseh – Mills Airport	22T	3	3	3	3	3	3	3	3	3	B-II
Thompsonville – Thompsonville	7Y2	3	3	3	3	3	3	3	3	3	A-I
Topinabee – Pbeaaye	Y30	3	3	3	3	3	3	3	3	3	A-I
Traverse City – Lake Ann	4M0	3	3	3	3	3	3	3	3	3	A-I
Wayland – Calkins Field	41C	3	3	3	3	3	3	3	3	3	A-I
Weidman – Ojibwa	D11	3	3	3	3	3	3	3	3	3	A-I
Westphalia – Forest Hill	3F5	3	3	3	3	3	3	3	3	3	A-I
Williamston – Maidens	89Y	3	3	3	3	3	3	3	3	3	A-I
Winn – Woodruff	53W	3	3	3	3	3	3	3	3	3	A-I
Yale – Gavagan Field	48G	3	3	3	3	3	3	3	3	3	A-I
Yale – Para Field	4Y8	3	3	3	3	3	3	3	3	3	A-I
Yale – Yale	D20	3	3	3	3	3	3	3	3	3	A-I

Source: MDOT AERO, MASP System Analysis by Mead &amp; Hunt, 2017

In addition to the 226 public-use airports, **Table 5-17** includes the tiers assigned to the eight other public-use aviation facilities in Michigan, which include heliports and seaplane bases. Since the publication of the previous system study in 2008, airports have entered the system, been removed, and reassigned to new Tiers. **Table 5-18** provides a summary of the tier changes from the 2008 study to the 2017 MASP update.

**Table 5-17: 2017 MASP Tier Summary for Other Aviation Facilities**

Associated City - Airport	FAA ID	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion	2016 MASP Tier	2016 MASP ARC
Benzonia – Joy Field Heliport	N/A	3	3	3	3	3	3	3	3	3	A-I
Benzonia – Six Mile Heliport	N/A	3	3	3	3	3	3	3	3	3	A-I
Drummond Island – Yacht Haven SPB	D22	3	3	3	3	3	3	3	3	3	A-I
Onondaga – Ghere's Gorilla Heliport	11J	3	3	3	3	3	3	3	3	3	A-I
Tecumseh – Van Camp's Heliport	2T7	3	3	3	3	3	3	3	3	3	A-I
Fowlerville – Maple Grove Heliport	E66	3	3	3	3	3	3	3	3	3	A-I
Highland – Ponderosa Heliport	13D	3	3	3	3	3	3	3	3	3	A-I

Source: MDOT AERO, MASP System Analysis by Mead & Hunt, 2017

**Table 5-18: Tier Changes from 2008 Study to 2017 MASP Update**

Associated City – Airport	FAA ID	2008 Overall Tier	2017 Overall Tier	Notes
Allegan – Padgham Field	35D	1	2	
Baldwin – Baldwin Muni.	7D3	2	1	
Bellaire – Antrim Co.	ACB	1	2	
Brighton – Brighton Field	45G	3	1	Added as Tier 1
Caro – Tuscola Area	CFS	1	2	
Charlotte – Fitch H. Beach Muni.	FPK	1	2	
Dowagiac – Dowagiac Muni.	C91	2	1	
Flushing – Dalton	3DA	3	1	Added as Tier 1
Frankenmuth – Wm 'Tiny' Zehnder Field	66G	3	2	Added as Tier 2
Frankfort – Dow Memorial	FKS	1	2	
Gladwin – Gladwin Zettel Memorial	GDW	2	1	
Grand Ledge – Abrams Muni.	4D0	1	2	
Greenville – Greenville Muni.	6D6	2	1	
Gregory – Richmond Field	69G	3	2	Added as Tier 2
Harbor Springs – Harbor Springs Muni.	MGN	1	2	
Hart/Shelby – Oceana Co.	C04	2	1	
Hastings – Hastings City/Barry Co.	9D9	2	1	
Jenison – Riverview Airport	08C	2	1	
Lake City – Home Acres Sky Ranch	Y91	3	2	Added as Tier 2

**Table 5-18: Tier Changes from 2008 Study to 2017 MASP Update**

Associated City – Airport	FAA ID	2008 Overall Tier	2017 Overall Tier	Notes
Lapeer – Dupont-Lapeer	D95	2	1	
Linden – Price's Airport	9G2	1	2	
Marine City – Marine City	76G	1	2	
Munising – Hanley Field	5Y7	1	3	Dropped to Tier 3
Pinconning – Gross	52I	3	2	Added as Tier 2
Plainwell – Plainwell Muni.	61D	3	2	Added as Tier 2
Sandusky – Sandusky City	Y83	2	1	
South Haven – South Haven Area Regional	LWA	2	1	
Tecumseh – Al Meyers	3TE	1	3	Dropped to Tier 3
Watervliet – Watervliet Muni.	40C	3	2	Added as Tier 2
<b>Airports Removed from the System</b>				
Baraga	-	1	-	Never Developed
Neebish Island	-	1	-	Never Developed
Sugar Island	-	1	-	Never Developed
Paradise	-	2	-	Never Developed
Avoca – Tackaberry	-	3	-	Closed
Carsonville – Circle U Heliport	-	3	-	Closed
Carson City – Mayes	-	3	-	Closed
Deckerville – Indian Creek Ranch	-	3	-	Closed
Erie – Erie Aerodrome	-	3	-	Closed
Grant – Grant	-	3	-	Closed
Mason – Craft's Field	-	3	-	Closed
New Lothrop – Bean Blossom	-	3	-	Closed
Rothbury – Double JJ Resort	-	3	-	Closed
Traverse City – Sugar Loaf Wallace G. Fryer Airfield	-	3	-	Closed
Vassar – Vassar Field	-	3	-	Closed

Source: MDOT AERO, MASP System Analysis by Mead &amp; Hunt, 2017

## 5.2 Facility Development Goals

There are seven facility goals for airports included in the MASP. Each facility goal contains specific development items based on the MASP ARC assigned to the airport through the system goals process described in Section 5.1. The MASP ARC and the associated facility goals reflect what MDOT Office of Aeronautics (AERO) believes is the appropriate level of development to support each goal, and is not a justification for individual airports to require funding to meet their MASP ARC designations and associated development goals.

A description of each facility goal is available in **Section 2** of this report. For the purposes of this analysis, the airport ARC identified as appropriate for the MASP is used to determine the development goals for an airport, regardless of the actual FAA recognized ARC. This method allows system airports that serve similar roles to have similar development goals.

The 114 airports in Tiers 1 and 2 in the MASP are assigned one of four MASP ARC designations: A-I, B-I, B-II, or C-II, based on the highest ARC identified during the analysis of the system goals, presented in the previous section. A summary of each goal, and the MASP ARC assigned for each tier within a system goal, is shown in **Table 5-19**. For example, if an airport is a Tier 2 in the population center goal (B-II) and a Tier 2 in the NPIAS inclusion goal (B-I), the airport would receive an overall MASP ARC of B-II. Airports assigned to Tier 3 are not given a MASP ARC, and therefore, are not part of the analysis provided in this section.

**Table 5-19: 2017 MASP ARC Summary**

Tier	Population Center	Business Center	Tourism Center	General Population	Land Coverage	Regional Capacity	Isolated Areas	NPIAS Inclusion
Tier 1	C-II	C-II	B-II	B-II	B-II	A-I	B-I	B-I
Tier 2	B-II	B-II	B-II	NA	NA	A-I	NA	B-I

Source: MDOT AERO

Note: NA indicates that no airports are defined for Tier 2.

A summary of all facility goals by MASP ARC is presented in **Table 5-20**. Sections 5.2.1 through 5.2.7 focus on the 114 Tier 1 and Tier 2 airports, the system performance with regard to meeting the facility goals, and their associated development items.

**Table 5-20: Michigan Airport Facility Development Goals by MASP ARC for Tier 1 and Tier 2 Airports**

Facility Goal	Airport Development Item	MASP Airport Reference Code (ARC)			
		A-I	B-I	B-II	C-II*
Primary Runway System	Length (feet)	2,500	3,500	4,300	5,000*
	Width (feet)	100	60	75	100*
	Surface Type	Turf	Paved	Paved	Paved
	Primary Taxiway System	None	Full Parallel if 20,000+ ops		Full Parallel
Lighting and Visual Aids	Runway Lighting System	Markers	MIRL	MIRL	HIRL
	PAPI	No	Yes	Yes	Yes
	REIL	No	Yes	Yes	Yes
	MALSR	No	No	No	Yes
	Rotating Beacon	No	Yes	Yes	Yes
	Lighted Wind Indicator	No	Yes	Yes	Yes
	Segmented Circle	No	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms	No	Yes	Yes	Yes
	Fuel	No	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes	Yes
	Available Staff	Yes	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Visual	Non-Precision	Non-Precision	Precision
	Weather Reporting (AWOS)	Preferred	Preferred	Yes	Yes
	Weather Briefing Access	Preferred	Preferred	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes	Yes
Landside Access	Public/Private Transportation	No	No	Yes	Yes

Notes: \*See the paragraph following this table for more information.

Tier 3 airport minimum development standards are defined in the MAC General Rules for licensed airports.

Runway length goals shown in the table are subject to FAA/AERO justification determination.

For A-I airports with paved runways, the standard width is 60 feet.

Airports having a VASI instead of a PAPI are acceptable. VASI/PAPI/REIL on one runway end is acceptable.

An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.

Aircraft parking consists of either a hangar, tie-down, or parking area.

Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.

Source: MDOT AERO

It is important to note that some airports have FAA ARCs greater than what is provided by the maximum C-II MASP ARC. Airports with an FAA ARC larger than C-II are identified though their individual master planning process as locations where current or expected aircraft operations exceed the C-II standards, such as airports that commonly support larger commercial service and military aircraft, shown in **Table 5-21**. Conversely, some airports have an actual FAA ARC that is less than their designated MASP ARC. These airports are shown in **Table 5-22**.



**Table 5-21: MASP Airports with FAA ARC Classification Higher than MASP ARC of C-II**

Associated City	Airport	Current FAA ARC	MASP ARC
Alpena	Alpena County Regional	C-IV	C-II
Battle Creek	W. K. Kellogg	D-III	C-II
Detroit	Willow Run	D-IV	C-II
Detroit	Detroit Metro Wayne County	D-V	C-II
Escanaba	Delta County	C-III	C-II
Flint	Bishop International	D-IV	C-II
Gaylord	Gaylord Regional	C-III	C-II
Grand Rapids	Gerald R. Ford International	D-IV	C-II
Hancock	Houghton County Memorial	C-III	C-II
Holland	West Michigan Regional	D-II	C-II
Iron Mountain Kingsford	Ford Airport	C-III	C-II
Kalamazoo	Kalamazoo/Battle Creek International	C-III	C-II
Lansing	Capital Region International	D-IV	C-II
Marquette	Sawyer International	D-III	C-II
Muskegon	Muskegon County	C-III	C-II
Oscoda	Oscoda - Wurtsmith	D-V	C-II
Pontiac	Oakland County International	D-III	C-II
Saginaw	M B S International	D-IV	C-II
Sault Ste. Marie	Chippewa County International	D-III	C-II
Traverse City	Cherry Capital	C-III	C-II

Source: MDOT AERO, MASP System Analysis by Mead &amp; Hunt, 2017

**Table 5-22: MASP Airports with Existing FAA ARC Less than MASP ARC Classification**

Associated City	Airport	MASP Tier	Current FAA ARC	MASP ARC
Bad Axe	Huron County Memorial Airport	1	B-II	C-II
Beaver Island	Beaver Island Airport	1	B-II	C-II
Big Rapids	Roben - Hood Airport	1	B-II	C-II
Charlevoix	Charlevoix Municipal Airport	1	B-II	C-II
Coldwater	Branch County Memorial	1	B-II	C-II
Dowagiac	Dowagiac Municipal Airport	1	B-II	C-II
Ewart	Ewart Municipal Airport	2	B-I	B-II
Frankfort	Dow Memorial	2	B-I	B-II
Gladwin	Gladwin Zettel Memorial	1	B-II	C-II
Grayling	Grayling Army Airfield	1	B-II	C-II
Harsens Island	Harsens Island Airport	1	A-I	B-I
Hart/Shelby	Oceana County Airport	1	B-I	B-II
Hastings	Hastings City/Barry County Airport	1	B-II	C-II
Hillsdale	Hillsdale Municipal Airport	1	B-II	C-II
Ionia	Ionia County Airport	1	B-II	C-II
Iron River	Stambaugh Airport	1	A-I	B-II
Jenison	Riverview Airport	1	B-I	C-II
Lambertville	Toledo Suburban Airport	1	B-I	B-II
Ludington	Mason County Airport	1	B-II	C-II
Menominee	Menominee - Marinette Twin County Airport	1	B-II	C-II
Mio	Oscoda County Dennis Kauffman Memorial Airport	1	B-I	B-II
Monroe	Monroe Custer Airport	1	B-II	C-II
New Hudson	Oakland/Southwest Airport	1	B-I	B-II
Northport	Woolsey Memorial Airport	2	A-I	B-II
Ontonagon	Ontonagon County Airport - Schuster Field	1	B-I	B-II
Owosso	Owosso Community Airport	1	B-II	C-II
Plymouth	Canton - Plymouth - Mettetal Airport	1	A-I	B-I
Romeo	Romeo State Airport	1	B-II	C-II
Sandusky	Sandusky City Airport	1	B-I	C-II
Sparta	Paul C. Miller - Sparta Airport	1	B-II	C-II
Sturgis	Kirsch Municipal Airport	1	B-II	C-II
West Branch	West Branch Community Airport	1	B-II	C-II
White Cloud	White Cloud Airport	2	A-I	B-I

Source: MDOT AERO, MASP System Analysis by Mead &amp; Hunt, 2017

Note: See Section 5.1 for detailed information about individual airport tier and MASP ARC classifications.

### 5.2.1 Primary Runway System

Tier 1 and Tier 2 airports should have a primary runway system, including a runway of appropriate length, width, and surface, plus a full parallel taxiway if warranted by activity level. The primary runway system goals by MASP ARC are presented in **Table 5-23**.

**Table 5-23: Primary Runway System Goals**

Facility Goal	Airport Development Item	MASP Airport Reference Code (ARC)			
		A-I	B-I	B-II	C-II
Primary Runway System	Length (feet)	2,500	3,500	4,300	5,000
	Width (feet)	100	60	75	100
	Surface Type	Turf	Paved	Paved	Paved
	Primary Taxiway System	None	Full Parallel if > 20,000 operations		Full Parallel

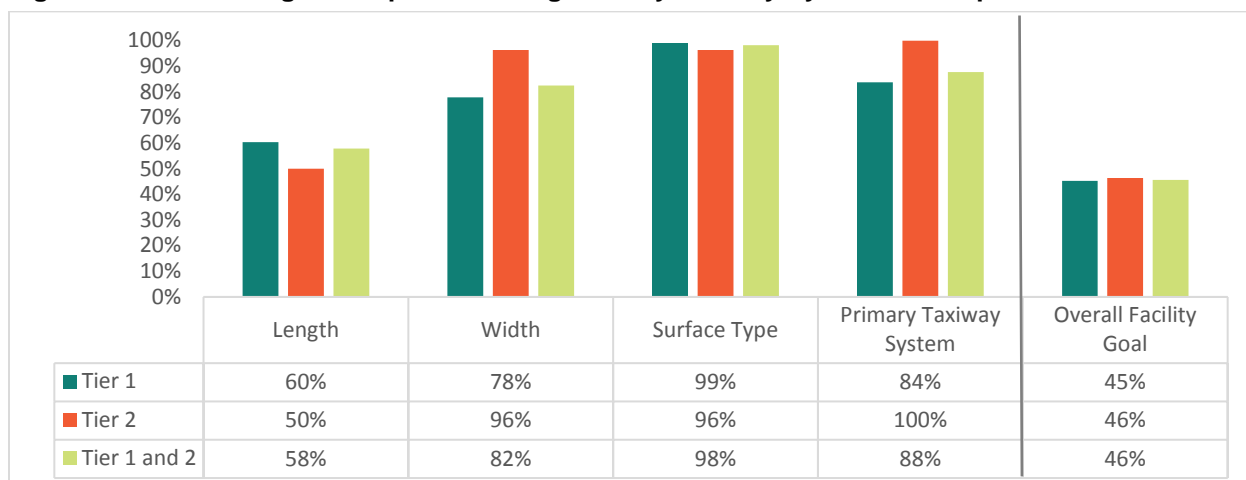
Notes: For A-I airports with paved runways, the standard width is 60 feet.

Runway length goals shown in the table are subject to FAA/AERO justification determination.

Source: MDOT AERO

Out of the 114 Tier 1 and 2 airports, over half (54%) are deficient in at least one of the primary runway system development goals for their assigned MASP ARC. The foremost cause of primary runway system deficiencies in Tier 1 and Tier 2 airports is insufficient runway length, with only 60% of Tier 1 and 50% of Tier 2 airports meeting the runway length goal. Although these airports are lacking sufficient runway length to meet the MASP facility goal, runway extensions to meet goals are subject to individual FAA and AERO justification determinations and environmental clearances. A higher number of Tier 1 airports than Tier 2 airports are lacking in runway width. The surface type goal is met by most airports, with only one airport from each tier failing to meet the “paved” requirement. All Tier 2 airports meet the primary taxiway system goals, however, 16% of Tier 1 airports are deficient of the goal. The system performance of each primary runway system goal, and the overall facility goal, is shown in **Figure 5-12**. **Table 5-24** and **Table 5-25** identify the primary runway system deficiencies by airport at Tier 1 and Tier 2 airports, respectively.

**Figure 5-12: Percentage of Airports Meeting Primary Runway System Development Goals**



Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Form 5010, FAA Digital-Chart Supplement (d-CS); Analysis by Mead & Hunt, 2017

**Table 5-24: Primary Runway System Deficiencies, Tier 1 Airports**

Associated City – Airport	FAA ID	MASP ARC	Length	Width	Surface Type	Primary Taxiway System
Alpena - Alpena County Regional Airport	APN	C-II	✓	✓	✓	Partial Parallel
Ann Arbor - Ann Arbor Municipal Airport	ARB	B-II	3,505	✓	✓	✓
Bad Axe - Huron County Memorial Airport	BAX	C-II	✓	75	✓	✓
Baldwin - Baldwin Municipal Airport	7D3	B-II	3,800	✓	✓	✓
Bay City - James Clements Airport & S.P.B	3CM	B-II	3,798	✓	✓	✓
Beaver Island - Beaver Island Airport	SJX	C-II	4,299	75	✓	Direct Connector
Big Rapids - Roben - Hood Airport	RQB	C-II	4,300	75	✓	Direct Connector
Bois Blanc Island - Bois Blanc Island Airport	6Y1	B-I	3,498	✓	✓	✓
Brighton - Brighton Field	45G	A-I	✓	24	✓	✓
Charlevoix - Charlevoix Municipal Airport	CVX	C-II	4,549	75	✓	✓
Coldwater - Branch County Memorial	OEB	C-II	✓	75	✓	Partial Parallel
Dowagiac - Dowagiac Municipal Airport	C91	C-II	4,700	✓	✓	Direct Connector
Flushing - Dalton Airport	3DA	A-I	✓	50	✓	✓
Gladwin - Gladwin Zettel Memorial	GDW	C-II	4,699	75	✓	✓
Grand Haven - Memorial Airpark	3GM	B-II	3,752	✓	✓	✓
Grayling - Grayling Army Airfield	GOV	C-II	✓	✓	✓	Partial Parallel
Greenville - Greenville Municipal Airport	6D6	B-II	4,199	✓	✓	✓
Harsens Island - Harsens Island Airport	Z92	B-I	2,200	✓	Turf	✓
Hart/Shelby - Oceana County Airport	C04	B-II	3,500	✓	✓	✓
Hastings - Hastings City / Barry County Airport	9D9	C-II	4,502	75	✓	Partial Parallel
Hillsdale - Hillsdale Municipal Airport	JYM	C-II	✓	✓	✓	Partial Parallel
Houghton Lake - Roscommon County, Blodgett Memorial Airport	HTL	B-II	4,000	✓	✓	✓
Ionia - Ionia County Airport	Y70	C-II	4,298	75	✓	✓
Iron River - Stambaugh Airport	Y73	B-II	2,000	40	✓	✓
Jackson - Jackson County - Reynolds Field	JXN	C-II	✓	✓	✓	Partial Parallel
Jenison - Riverview Airport	08C	C-II	3,920	49		Partial Parallel
Lambertville - Toledo Suburban Airport	DUH	B-II	✓	50	✓	✓
Lapeer - DuPont - Lapeer Airport	D95	B-II	3,800	✓	✓	✓
Ludington - Mason County Airport	LDM	C-II	✓	75	✓	✓
Mackinac Island - Mackinac Island Airport	MCD	B-II	3,501	✓	✓	✓
Marlette - Marlette Township Airport	77G	B-II	3,796	✓	✓	✓
Menominee - Menominee - Marinette Twin County Airport	MNM	C-II	✓	✓	✓	Partial Parallel
Midland - Jack Barstow Airport	IKW	B-II	3,801	✓	✓	✓
Mio - Oscoda County Dennis Kauffman Memorial Airport	51M	B-II	3,000	✓	✓	✓
Monroe - Monroe Custer Airport	TTF	C-II	4,997	✓	✓	✓
New Hudson - Oakland / Southwest Airport	Y47	B-II	3,128	40	✓	✓
Ontonagon - Ontonagon County Airport - Schuster Field	OGM	B-II	3,503	✓	✓	✓
Owosso - Owosso Community Airport	RNP	C-II	4,300	75	✓	✓

**Table 5-24: Primary Runway System Deficiencies, Tier 1 Airports**

Associated City – Airport	FAA ID	MASP ARC	Length	Width	Surface Type	Primary Taxiway System
Plymouth - Canton - Plymouth - Mettetal Airport	1D2	B-I	2,303	✓	✓	✓
Ray - Ray Community Airport	57D	A-I	2,495	✓	✓	✓
Rogers City - Presque Isle County / Rogers City Airport	PZQ	B-II	4,106	✓	✓	✓
Romeo - Romeo State Airport	D98	C-II	4,000	75	✓	✓
Saint Ignace - Mackinac County Airport	83D	B-II	3,800	✓	✓	✓
Sandusky - Sandusky City Airport	Y83	C-II	3,501	75	✓	Direct Connector
Sparta - Paul C. Miller - Sparta Airport	8D4	C-II	4,032	75	✓	✓
Sturgis - Kirsch Municipal Airport	IRS	C-II	✓	✓	✓	Partial Parallel
West Branch - West Branch Community Airport	Y31	C-II	✓	✓	✓	Partial Parallel

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Form 5010, FAA Digital-Chart Supplement (d-CS); Analysis by Mead & Hunt, 2017.

Note: A checkmark (✓) indicates that an airport is meeting its respective MASP ARC goal regardless of whether or not the development item is present.

**Table 5-25: Primary Runway System Deficiencies, Tier 2 Airports**

Associated City – Airport	FA ID	MASP ARC	Length	Width	Surface Type	Primary Taxiway System
Atlanta - Atlanta Municipal Airport	Y93	B-I	3,000	✓	✓	✓
Charlotte - Fitch H. Beach Municipal	FPK	B-II	3,510	✓	✓	✓
Cheboygan - Cheboygan County Airport	SLH	B-II	4,005	✓	✓	✓
Clare - Clare Municipal Airport	48D	B-II	3,500	✓	✓	✓
Ewart - Ewart Municipal Airport	9C8	B-II	3,804	✓	✓	✓
Frankfort - Dow Memorial	FKS	B-II	4,050	✓	✓	✓
Grand Ledge - Abrams Municipal Airport	4D0	B-II	3,199	✓	✓	✓
Gregory - Richmond Field	69G	A-I	2,471	✓	✓	✓
Harbor Springs - Harbor Springs Municipal Airport	MGN	B-II	4,149	✓	✓	✓
Lakeview - Lakeview - Griffith Field	13C	B-I	3,499	✓	✓	✓
Niles - Jerry Tyler Memorial Airport	3TR	B-II	4,100	✓	✓	✓
Northport - Woolsey Memorial Airport	5D5	B-II	3,663	✓	Turf	✓
Plainwell - Plainwell Municipal	61D	A-I	✓	50	✓	✓
Three Rivers - Three Rivers Muni, Dr. Haines	HAI	B-II	3,999	✓	✓	✓
White Cloud - White Cloud Airport	42C	B-I	2,916	✓	✓	✓

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Form 5010, FAA Digital-Chart Supplement (d-CS); Analysis by Mead & Hunt, 2017.

Note: A checkmark (✓) indicates that an airport is meeting its respective MASP ARC goal regardless of whether or not the development item is present.

### 5.2.2 Lighting and Visual Aids

Lighting and visual aids include runway edge lighting or markers, Precision Approach Path Indicator (PAPI), Runway End Identifier Lights (REIL), a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR) on runways with existing precision approaches, a rotating beacon, segmented circle, and a lighted wind indicator.

A Visual Approach Slope Indicator (VASI) is acceptable in lieu of a PAPI. Additionally, a PAPI or REIL at one end of the runway is considered meeting the development goals. At airports with an approach lighting system (ALS) at each runway end, there will not be any REIL lighting because an ALS and REIL are not installed on the same runway. Airports with precision approaches were held to the MALSR goal. If they do not have a precision approach, but should by MASP goal, then they are not expected to have an ALS and are not held to the goal.

Goals by MASP ARC for lighting and visual aids are shown in **Table 5-26**. Please note that these goals are for the primary runway at each airport (typically the longest runway, but not always) and do not consider secondary runways at airports with more than one runway.

**Table 5-26: Lighting and Visual Aids Goals**

Facility Goal	Airport Development Item	MASP Airport Reference Code (ARC)			
		A-I	B-I	B-II	C-II
Lighting and Visual Aids	Runway Lighting System	Markers	MIRL	MIRL	HIRL
	PAPI	No	Yes	Yes	Yes
	REIL	No	Yes	Yes	Yes
	MALSR	No	No	No	Yes
	Rotating Beacon	No	Yes	Yes	Yes
	Lighted Wind Indicator	No	Yes	Yes	Yes
	Segmented Circle	No	Yes	Yes	Yes

Note: Airports having a VASI instead of a PAPI are acceptable.

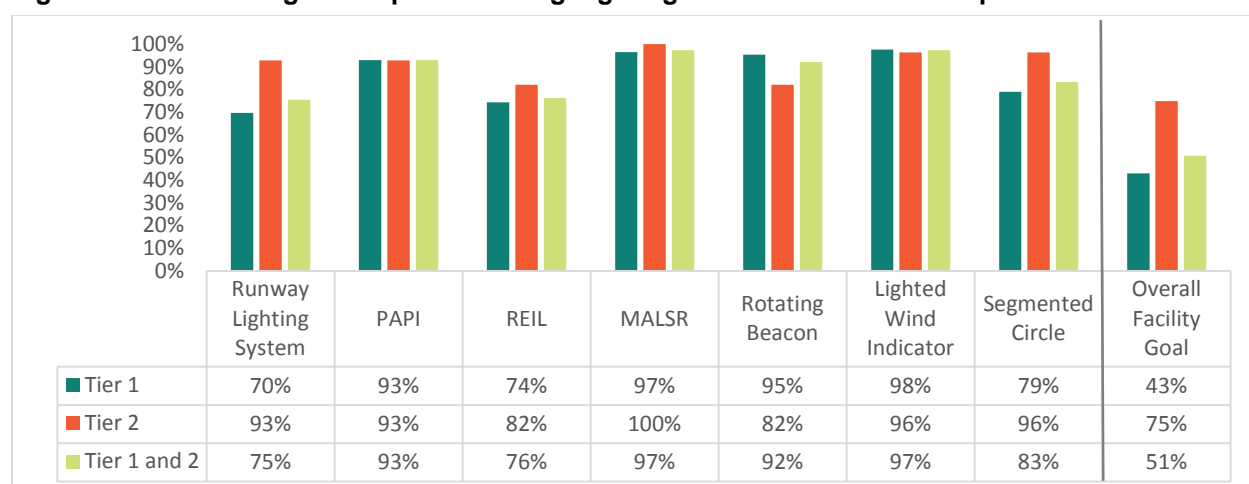
A VASI/PAPI and/or REIL on one runway end is acceptable.

A MALSR and REIL cannot be installed on the same runway end.

A MALSR is not a development goal for C-II airports without an existing precision approach.

Source: MDOT AERO

In general, the most common inadequacy is due to the runway lighting system, with only 70% of Tier 1 airports meeting the goal. This is mainly due to airports with a MASP ARC of C-II lacking High Intensity Runway Lights (HIRL). The second most common deficiency is the REIL goal, in which 74% of Tier 1 and 82% of Tier 2 airports are meeting the goal. Only 79% of the Tier 1 airports have a segmented circle and about 82% of Tier 2 airports are meeting the rotating beacon goal. A combination of deficiencies across the multiple development goals has created an overall system performance of 51%, as shown in **Figure 5-13**. System deficiencies at Tier 1 airports are shown in **Table 5-27** and for Tier 2 airports in **Table 5-28**.

**Figure 5-13: Percentage of Airports Meeting Lighting and Visual Aids Development Goals**

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Form 5010, FAA Digital-Chart Supplement (d-CS); Analysis by Mead & Hunt, 2017.

**Table 5-27: Lighting and Visual Aid Deficiencies, Tier 1**

Associated City – Airport	FAA ID	MASP ARC	Runway Lighting System	PAPI	REIL	MALSR	Rotating Beacon	Lighted Wind Indicator	Segmented Circle
Bad Axe – Huron County Memorial Airport	BAX	C-II	MIRL	✓	✓	✓	✓	✓	✓
Baldwin – Baldwin Municipal Airport	7D3	B-II	No Lighting	No	No	✓	No	No	✓
Bay City – James Clements Airport & S.P.B	3CM	B-II	✓	✓	No	✓	✓	✓	✓
Beaver Island – Beaver Island Airport	SJX	C-II	MIRL	✓	✓	✓	✓	✓	No
Big Rapids – Roben-Hood Airport	RQB	C-II	MIRL	✓	✓	✓	✓	✓	No
Cadillac – Wexford County Airport	CAD	C-II	✓	✓	✓	No	✓	✓	✓
Charlevoix – Charlevoix Municipal Airport	CVX	C-II	MIRL	✓	✓	✓	✓	✓	✓
Coldwater – Branch County Memorial	OEB	C-II	MIRL	✓	✓	✓	✓	✓	✓
Detroit – Coleman A. Young Municipal	DET	C-II	✓	✓	✓	No	✓	✓	No
Detroit – Detroit Metro Wayne County	DTW	C-II	✓	No	No	✓	✓	✓	No
Detroit – Willow Run Airport	YIP	C-II	✓	✓	No	✓	✓	✓	No
Dowagiac – Dowagiac Municipal Airport	C91	C-II	MIRL	✓	✓	✓	✓	✓	✓
Drummond Island – Drummond Island Airport	DRM	B-I	✓	✓	No	✓	✓	✓	✓
Flint – Bishop International Airport	FNT	C-II	✓	✓	No	✓	✓	✓	No
Fremont – Fremont Municipal Airport	FFX	C-II	MIRL	✓	✓	✓	✓	✓	✓
Gladwin – Gladwin Zettel Memorial	GDW	C-II	MIRL	✓	✓	✓	✓	✓	✓
Grand Rapids – Gerald R. Ford International Airport	GRR	C-II	✓	✓	No	✓	✓	✓	No
Grayling – Grayling Army Airfield	GOV	C-II	MIRL	✓	✓	✓	✓	✓	✓
Hancock – Houghton County Memorial	CMX	C-II	✓	✓	✓	✓	✓	✓	No



**Table 5-27: Lighting and Visual Aid Deficiencies, Tier 1**

Associated City – Airport	FAA ID	MASP ARC	Runway Lighting System	PAPI	REIL	MALSR	Rotating Beacon	Lighted Wind Indicator	Segmented Circle
Harsens Island – Harsens Island Airport	Z92	B-I	Markers	No	No	✓	No	No	No
Hart/Shelby – Oceana County Airport	C04	B-II	✓	✓	No	✓	No	✓	✓
Hastings – Hastings City / Barry County Airport	9D9	C-II	MIRL	✓	✓	✓	✓	✓	✓
Hillsdale – Hillsdale Municipal Airport	JYM	C-II	✓	✓	✓	✓	✓	✓	No
Ionia – Ionia County Airport	Y70	C-II	MIRL	✓	✓	✓	✓	✓	✓
Iron River – Stambaugh Airport	Y73	B-II	LIRL	No	No	✓	No	✓	✓
Jackson – Jackson County-Reynolds Field	JXN	C-II	✓	✓	No	✓	✓	✓	✓
Jenison – Riverview Airport	08C	C-II	MIRL	No	No	✓	✓	✓	✓
Lambertville – Toledo Suburban Airport	DUH	B-II	✓	No	No	✓	✓	✓	✓
Lansing – Capital Region International	LAN	C-II	✓	✓	No	✓	✓	✓	No
Ludington – Mason County Airport	LDM	C-II	MIRL	✓	✓	✓	✓	✓	✓
Menominee – Menominee – Marinette Twin County Airport	MNM	C-II	✓	✓	No	✓	✓	✓	No
Mio – Oscoda County Dennis Kauffman Memorial Airport	51M	B-II	✓	✓	No	✓	✓	✓	✓
Monroe – Monroe Custer Airport	TTF	C-II	MIRL	✓	✓	✓	✓	✓	✓
Mount Pleasant – Mt. Pleasant Municipal Airport	MOP	C-II	MIRL	✓	✓	✓	✓	✓	✓
Muskegon – Muskegon County Airport	MKG	C-II	✓	✓	✓	✓	✓	✓	No
New Hudson – Oakland / Southwest Airport	Y47	B-II	LIRL	✓	No	✓	✓	✓	✓
Oscoda – Oscoda-Wurtsmith Airport	OSC	C-II	✓	✓	No	✓	✓	✓	No
Owosso – Owosso Community Airport	RNP	C-II	MIRL	✓	✓	✓	✓	✓	✓
Plymouth – Canton-Plymouth-Mettetal Airport	1D2	B-I	✓	✓	No	✓	✓	✓	✓
Pontiac – Oakland County International Airport	PTK	C-II	✓	✓	✓	✓	✓	✓	No
Romeo – Romeo State Airport	D98	C-II	MIRL	✓	✓	✓	✓	✓	✓
Saginaw – M B S International Airport	MBS	C-II	✓	✓	No	✓	✓	✓	✓
Saginaw – Saginaw County H. W. Browne Airport	HYX	C-II	MIRL	✓	✓	No	✓	✓	✓
Sandusky – Sandusky City Airport	Y83	C-II	MIRL	✓	✓	✓	✓	✓	✓
Sparta – Paul C. Miller-Sparta Airport	8D4	C-II	MIRL	✓	✓	✓	✓	✓	No
Sturgis – Kirsch Municipal Airport	IRS	C-II	MIRL	✓	✓	✓	✓	✓	No
Traverse City – Cherry Capital Airport	TVC	C-II	✓	✓	No	✓	✓	✓	✓
Troy – Oakland/Troy Airport	VLL	B-I	✓	✓	No	✓	✓	✓	No
West Branch – West Branch Community Airport	Y31	C-II	MIRL	✓	✓	✓	✓	✓	✓

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Form 5010, FAA Digital-Chart Supplement (d-CS); Analysis by Mead & Hunt, 2017.

Note: A checkmark (✓) indicates that an airport is meeting its respective MASP ARC goal regardless of whether or not the development item is present.

**Table 5-28: Lighting and Visual Aid Deficiencies, Tier 2**

Associated City – Airport	FAA ID	MASP ARC	Runway Lighting System	PAPI	REIL	MALSR	Rotating Beacon	Lighted Wind Indicator	Segmented Circle
Atlanta – Atlanta Municipal Airport	Y93	B-I	LIRL	✓	No	✓	No	No	✓
Evert – Evert Municipal Airport	9C8	B-II	✓	✓	✓	✓	No	✓	✓
Harbor Springs – Harbor Springs Municipal Airport	MGN	B-II	✓	✓	No	✓	✓	✓	No
Marshall – Brooks Field	RMV	B-I	✓	✓	No	✓	✓	✓	✓
Northport – Woolsey Memorial Airport	5D5	B-II	LIRL	No	No	✓	No	✓	✓
Sault Ste. Marie – Sault Ste. Marie Municipal-Sanderson Airport	ANJ	B-II	✓	✓	✓	✓	No	✓	✓
White Cloud – White Cloud Airport	42C	B-I	✓	No	No	✓	No	✓	✓

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Form 5010, FAA Digital-Chart Supplement (d-CS); Analysis by Mead & Hunt, 2017.

Note: A checkmark (✓) indicates that an airport is meeting its respective MASP ARC goal regardless of whether or not the development item is present.

### 5.2.3 Approach Protection

Approach Protection Plans are a development goal at all Tier 1 and Tier 2 airports, as shown in **Table 5-29**.

**Table 5-29: Approach Protection Goals**

Facility Goal	Airport Development Item	MASP Airport Reference Code (ARC)			
		A-I	B-I	B-II	C-II
Approach Protection	Approach Protection Plan	Yes	Yes	Yes	Yes

Source: MDOT AERO

Note: An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.

This facility goal and development goal has 100% compliance at the time of the MASP study. All public-use airports in Michigan have an Approach Protection Plan, or an Airport Zoning Ordinance in lieu of an Approach Protection Plan. These approach plans are approved by the Michigan Aeronautics Commission (MAC) and are kept on file with MDOT AERO.

#### 5.2.4 Basic Pilot and Aircraft Services

Basic airport services include a restroom, aviation fuel, aircraft parking, regular attendance by airport staff, and aircraft maintenance. The level of services included in the development goal depend on the MASP ARC assigned to the airport. The pilot and aircraft services development goals are presented in **Table 5-30**.

**Table 5-30: Basic Pilot and Aircraft Services Goals**

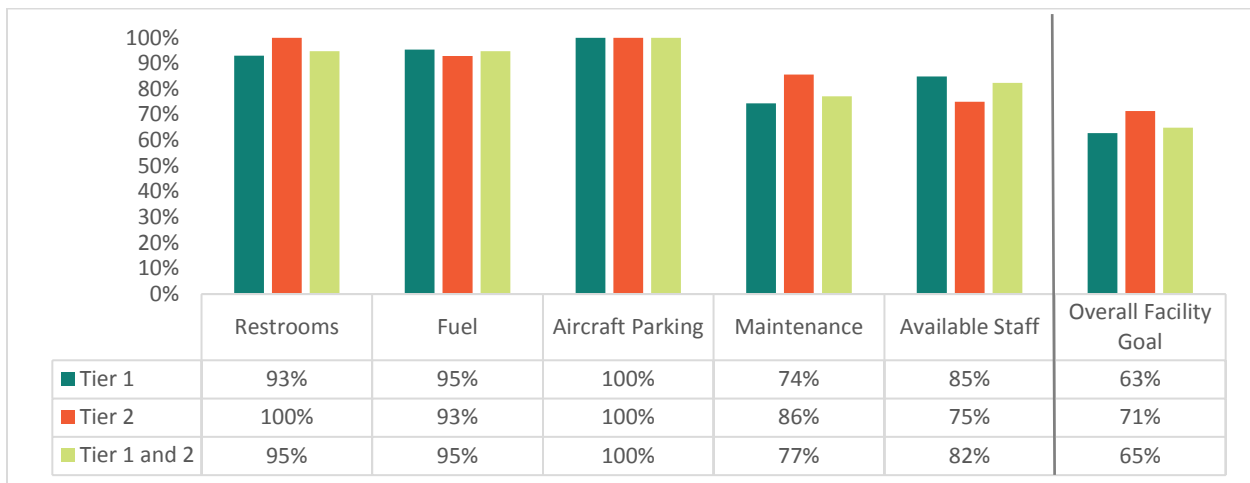
Facility Goal	Airport Development Item	MASP Airport Reference Code (ARC)			
		A-I	B-I	B-II	C-II
Basic Pilot and Aircraft Services	Restrooms	No	Yes	Yes	Yes
	Fuel	No	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes	Yes
	Available Staff	Yes	Yes	Yes	Yes

Source: MDOT AERO

Note: Aircraft parking consists of either a hangar, tie-down, or parking area.

All Tier 1 and Tier 2 airports provide some form of aircraft parking, and a majority have restrooms and fuel available. The largest deficiencies are for aircraft maintenance and available staff, with only 77% and 82% of Tier 1 and Tier 2 airports, respectively, meeting these goals. Performance of the basic pilot and aircraft services goals is shown in **Figure 5-14**. The basic pilot and aircraft services deficiencies for Tier 1 and Tier 2 airports are shown in **Table 5-31** and **Table 5-32**, respectively.

**Figure 5-14: Percentage of Airports Meeting Basic Pilot and Aircraft Services Development Goals**



Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Form 5010, FAA Digital-Chart Supplement (d-CS); Analysis by Mead & Hunt, 2017.

**Table 5-31: Basic Pilot and Aircraft Services Deficiencies, Tier 1**

Associated City – Airport	FAA ID	MASP ARC	Restrooms	Fuel	Aircraft Parking	Maintenance	Available Staff
Alma – Gratiot Community Airport	AMN	B-II	✓	✓	✓	No	✓
Bad Axe – Huron County Memorial Airport	BAX	C-II	✓	✓	✓	No	✓
Baldwin – Baldwin Municipal Airport	7D3	B-II	No	No	✓	No	No
Bay City – James Clements Airport & S.P.B	3CM	B-II	✓	✓	✓	No	✓
Beaver Island – Beaver Island Airport	SJX	C-II	✓	✓	✓	No	✓
Bois Blanc Island – Bois Blanc Island Airport	6Y1	B-I	✓	No	✓	✓	No
Detroit – Detroit Metro Wayne County	DTW	C-II	✓	✓	✓	No	✓
Dowagiac – Dowagiac Municipal Airport	C91	C-II	✓	✓	✓	No	No
Fremont – Fremont Municipal Airport	FFX	C-II	No	✓	✓	✓	✓
Gladwin – Gladwin Zettel Memorial	GDW	C-II	✓	✓	✓	No	✓
Grayling – Grayling Army Airfield	GOV	C-II	✓	✓	✓	No	No
Hancock – Houghton County Memorial	CMX	C-II	No	✓	✓	✓	✓
Harsens Island – Harsens Island Airport	Z92	B-I	No	No	✓	✓	No
Hart/Shelby – Oceana County Airport	C04	B-II	✓	✓	✓	✓	No
Hillsdale – Hillsdale Municipal Airport	JYM	C-II	No	✓	✓	✓	✓
Iron River – Stambaugh Airport	Y73	B-II	✓	✓	✓	No	No
Ironwood – Gogebic Iron County Airport	IWD	B-II	✓	✓	✓	No	✓
Jenison – Riverview Airport	08C	C-II	✓	✓	✓	No	✓
Mackinac Island – Mackinac Island Airport	MCD	B-II	✓	No	✓	No	✓
Manistee – Manistee County – Blacker	MBL	C-II	✓	✓	✓	No	✓
Manistique – Schoolcraft County Airport	ISQ	B-II	✓	✓	✓	No	✓
Marlette – Marlette Township Airport	77G	B-II	✓	✓	✓	✓	No
Mason – Mason Jewett Field	TEW	B-I	✓	✓	✓	✓	No
Mio – Oscoda County Dennis Kauffman Memorial Airport	51M	B-II	✓	✓	✓	No	No
Monroe – Monroe Custer Airport	TTF	C-II	No	✓	✓	✓	✓
Mount Pleasant – Mt. Pleasant Municipal Airport	MOP	C-II	✓	✓	✓	No	✓
Newberry – Luce County Airport	ERY	B-II	✓	✓	✓	No	✓
Ontonagon – Ontonagon County Airport-Schuster Field	OGM	B-II	✓	✓	✓	No	No
Port Huron – St. Clair County International Airport	PHN	C-II	✓	✓	✓	No	✓
Rogers City – Presque Isle County / Rogers City Airport	PZQ	B-II	✓	✓	✓	No	No
Romeo – Romeo State Airport	D98	C-II	✓	✓	✓	No	✓
Sparta – Paul C. Miller-Sparta Airport	8D4	C-II	✓	✓	✓	✓	No

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Form 5010, FAA Digital-Chart Supplement (d-CS); Analysis by Mead & Hunt, 2017.

Note: A checkmark (✓) indicates that an airport is meeting its respective MASP ARC goal regardless of whether or not the development item is present.

**Table 5-32: Basic Pilot and Aircraft Services Deficiencies, Tier 2**

Associated City – Airport	FAA ID	MASP ARC	Restrooms	Fuel	Aircraft Parking	Maintenance	Available Staff
Atlanta – Atlanta Municipal Airport	Y93	B-I	✓	✓	✓	✓	No
Caro – Tuscola Area Airport	CFS	B-II	✓	✓	✓	✓	No
Clare – Clare Municipal Airport	48D	B-II	✓	✓	✓	No	No
Ewart – Ewart Municipal Airport	9C8	B-II	✓	No	✓	No	✓
Frankfort – Dow Memorial	FKS	B-II	✓	✓	✓	No	No
Niles – Jerry Tyler Memorial Airport	3TR	B-II	✓	✓	✓	✓	No
Northport – Woolsey Memorial Airport	5D5	B-II	✓	No	✓	No	No
White Cloud – White Cloud Airport	42C	B-I	✓	✓	✓	✓	No

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Form 5010, FAA Digital-Chart Supplement (d-CS); Analysis by Mead & Hunt, 2017.

Note: A checkmark (✓) indicates that an airport is meeting its respective MASP ARC goal regardless of whether or not the development item is present.

### 5.2.5 All-Weather Access

Instrument Approaches, Automated Weather Observation System (AWOS), and weather briefing access are part of the all-weather access development goals. Facility goals, shown in **Table 5-33**, indicate that airports with MASP ARCs of B-II and C-II have instrument approaches, weather reporting, and briefing access. Airports with MASP ARCs of B-I have non-precision approaches and are preferred to have weather reporting and briefing access. Airports with MASP ARCs of A-I are not required to have an instrument approach, but are preferred to have weather reporting and briefing access.

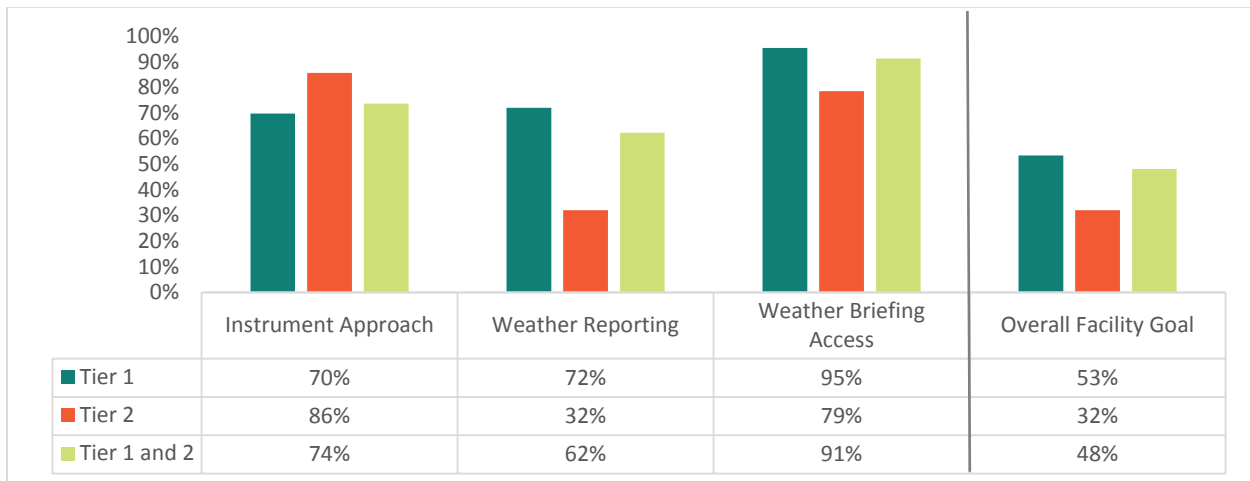
**Table 5-33: All-Weather Access Goals**

Facility Goal	Airport Development Item	MASP Airport Reference Code (ARC)			
		A-I	B-I	B-II	C-II
All-Weather Access	Instrument Approach	Visual	Non-Precision	Non-Precision	Precision
	Weather Reporting (AWOS/ASOS)	Preferred	Preferred	Yes	Yes
	Weather Briefing Access	Preferred	Preferred	Yes	Yes

Source: MDOT AERO

Note: Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.

Performance of the all-weather access goals are shown in **Figure 5-15**. The lowest performing goal is weather reporting, due to only 32% of Tier 2 airports meeting the goal. However, although these airports are counted as not meeting the goal, the weather reporting development is only preferred for Tier 2 airports classified as A-I or B-I. Tier 1 airports are meeting the instrument approach goal at 70%, mainly due to a lack of precision approaches at C-II airports. Weather briefing access is available at 95% of Tier 1 airports, but only 79% of Tier 2 airports, likely due to the unknown status of cellular phone coverage at several Tier 2 airports. Specific system deficiencies at Tier 1 and Tier 2 airports are presented in **Table 5-34** and **Table 5-35**.

**Figure 5-15: Percentage of Airports Meeting All-Weather Access Development Goals**

Source: Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Digital-Chart Supplement (d-CS); FAA Terminal Procedures; Analysis by Mead & Hunt, 2017.

**Table 5-34: All-Weather Access Deficiencies, Tier 1**

Associated City – Airport	FAA ID	MASP ARC	Instrument Approach	Weather Reporting	Weather Briefing Access
Adrian – Lenawee County Airport	ADG	C-II	Non-Precision	✓	✓
Bad Axe – Huron County Memorial Airport	BAX	C-II	Non-Precision	✓	✓
Baldwin – Baldwin Municipal Airport	7D3	B-II	✓	No	✓
Bay City – James Clements Airport & S.P.B	3CM	B-II	✓	No	✓
Beaver Island – Beaver Island Airport	SJX	C-II	Non-Precision	✓	✓
Big Rapids – Roben-Hood Airport	RQB	C-II	Non-Precision	✓	✓
Bois Blanc Island – Bois Blanc Island Airport	6Y1	B-I	✓	No	✓
Brighton – Brighton Field	45G	A-I	✓	No	No
Charlevoix – Charlevoix Municipal Airport	CVX	C-II	Non-Precision	✓	✓
Coldwater – Branch County Memorial	OEB	C-II	Non-Precision	✓	✓
Dowagiac – Dowagiac Municipal Airport	C91	C-II	Non-Precision	No	✓
Flushing – Dalton Airport	3DA	A-I	✓	No	No
Fremont – Fremont Municipal Airport	FFX	C-II	Non-Precision	✓	✓
Gladwin – Gladwin Zettel Memorial	GDW	C-II	Non-Precision	No	✓
Grand Haven – Memorial Airpark	3GM	B-II	✓	No	✓
Grayling – Grayling Army Airfield	GOV	C-II	Non-Precision	✓	✓
Greenville – Greenville Municipal Airport	6D6	B-II	✓	No	No
Harsens Island – Harsens Island Airport	Z92	B-I	Visual	No	✓
Hart/Shelby – Oceana County Airport	C04	B-II	✓	No	✓
Hastings – Hastings City/Barry County Airport	9D9	C-II	Non-Precision	No	✓
Hillsdale – Hillsdale Municipal Airport	JYM	C-II	Non-Precision	✓	✓
Ionia – Ionia County Airport	Y70	C-II	Non-Precision	✓	✓

**Table 5-34: All-Weather Access Deficiencies, Tier 1**

Associated City – Airport	FAA ID	MASP ARC	Instrument Approach	Weather Reporting	Weather Briefing Access
Iron River – Stambaugh Airport	Y73	B-II	Visual	No	✓
Jenison – Riverview Airport	08C	C-II	Visual	No	✓
Ludington – Mason County Airport	LDM	C-II	Non-Precision	✓	✓
Marlette – Marlette Township Airport	77G	B-II	✓	No	✓
Mio – Oscoda County Dennis Kauffman Memorial Airport	51M	B-II	Visual	No	✓
Monroe – Monroe Custer Airport	TTF	C-II	Non-Precision	✓	✓
Mount Pleasant – Mt. Pleasant Municipal Airport	MOP	C-II	Non-Precision	✓	✓
New Hudson – Oakland/Southwest Airport	Y47	B-II	✓	No	✓
Ontonagon – Ontonagon County Airport-Schuster Field	OGM	B-II	✓	No	✓
Owosso – Owosso Community Airport	RNP	C-II	Non-Precision	✓	✓
Plymouth – Canton-Plymouth-Mettetal Airport	1D2	B-I	✓	No	✓
Ray – Ray Community Airport	57D	A-I	✓	No	✓
Romeo – Romeo State Airport	D98	C-II	Non-Precision	No	No
Saint Ignace – Mackinac County Airport	83D	B-II	✓	No	✓
Sandusky – Sandusky City Airport	Y83	C-II	Visual	No	✓
Sparta – Paul C. Miller-Sparta Airport	8D4	C-II	Non-Precision	No	✓
Sturgis – Kirsch Municipal Airport	IRS	C-II	Non-Precision	✓	✓
West Branch – West Branch Community Airport	Y31	C-II	Non-Precision	✓	✓

Source: Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Digital-Chart Supplement (d-CS); FAA Terminal Procedures; Analysis by Mead & Hunt, 2017.

Note: A checkmark (✓) indicates that an airport is meeting its respective MASP ARC goal regardless of whether or not the development item is present.

**Table 5-35: All-Weather Access Deficiencies, Tier 2**

Associated City – Airport	FAA ID	MASP ARC	Instrument Approach	Weather Reporting	Weather Briefing Access
Allegan – Padgham Field	35D	B-II	✓	No	✓
Atlanta – Atlanta Municipal Airport	Y93	B-I	Visual	No	✓
Clare – Clare Municipal Airport	48D	B-II	✓	No	✓
East Tawas – Iosco County Airport	6D9	A-I	✓	No	✓
Ewart – Ewart Municipal Airport	9C8	B-II	Visual	No	✓
Frankenmuth – WM 'Tiny' Zehnder Field	66G	A-I	✓	No	No
Grand Ledge – Abrams Municipal Airport	4D0	B-II	✓	No	✓
Gregory – Richmond Field	69G	A-I	✓	No	No
Lake City – Home Acres Sky Ranch	Y91	A-I	✓	No	No
Lakeview – Lakeview-Griffith Field	13C	B-I	✓	No	✓
Linden – Price's Airport	9G2	A-I	✓	No	✓
Marine City – Marine City Airport	76G	A-I	✓	No	✓

**Table 5-35: All-Weather Access Deficiencies, Tier 2**

Associated City – Airport	FAA ID	MASP ARC	Instrument Approach	Weather Reporting	Weather Briefing Access
Niles – Jerry Tyler Memorial Airport	3TR	B-II	✓	No	✓
Northport – Woolsey Memorial Airport	5D5	B-II	Visual	No	✓
Pinconning – Gross Airport	52I	A-I	✓	No	No
Plainwell – Plainwell Municipal	61D	A-I	✓	No	No
Watervliet – Watervliet Municipal Airport	40C	A-I	✓	No	No
White Cloud – White Cloud Airport	42C	B-I	Visual	No	✓
Zeeland – Ottawa Executive Airport	Z98	A-I	✓	No	✓

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory, FAA Digital-Chart Supplement (d-CS); FAA Terminal Procedures; Analysis by Mead & Hunt, 2017.

Note: A checkmark (✓) indicates that an airport is meeting its respective MASP ARC goal regardless of whether or not the development item is present.

### 5.2.6 Year-Round Access

Both Tier 1 and Tier 2 airports are expected to have snow removal during the winter season and be open year-round. The two goals are tied to each other, as airports with snow removal are generally open year-round. The year-round access system development goals are shown in **Table 5-36**.

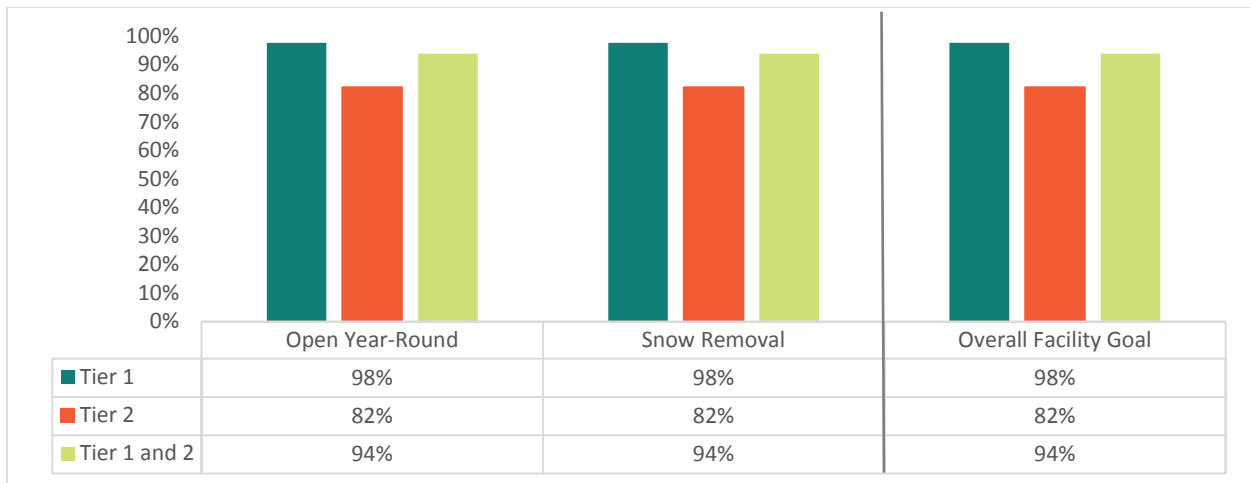
**Table 5-36: Year-Round Access Goals**

Facility Goal	Airport Development Item	MASP Airport Reference Code (ARC)			
		A-I	B-I	B-II	C-II
Year-Round Access	Open Year-Round	Yes	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes	Yes

Source: MDOT AERO

Those airports with year-round access deficiencies are neither open year-round, nor do they have snow removal available. Two Tier 1 airports and five Tier 2 airports do not meet the system goals, as presented in **Table 5-37** and **Table 5-38**. System performance, presented in **Figure 5-16**, reveals that 98% of Tier 1 airports and 82% of Tier 2 airports are meeting the system goals.



**Figure 5-16: Percentage of Airports Meeting Year-Round Access Development Goals**

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory; Analysis by Mead & Hunt, 2017.

**Table 5-37: Year-Round Access Deficiencies, Tier 1**

Associated City – Airport	FAA ID	MASP ARC	Open Year-Round	Snow Removal
Baldwin – Baldwin Municipal Airport	7D3	B-II	No	No
Harsens Island – Harsens Island Airport	Z92	B-I	No	No

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory; Analysis by Mead & Hunt, 2017.

**Table 5-38: Year-Round Access Deficiencies, Tier 2**

Associated City – Airport	FAA ID	MASP ARC	Open Year-Round	Snow Removal
Gregory – Richmond Field	69G	A-I	No	No
Lake City – Home Acres Sky Ranch	Y91	A-I	No	No
Northport – Woolsey Memorial Airport	5D5	B-II	No	No
Plainwell – Plainwell Municipal	61D	A-I	No	No
Watervliet – Watervliet Municipal Airport	40C	A-I	No	No

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory; Analysis by Mead & Hunt, 2017.

### 5.2.7 Landside Access

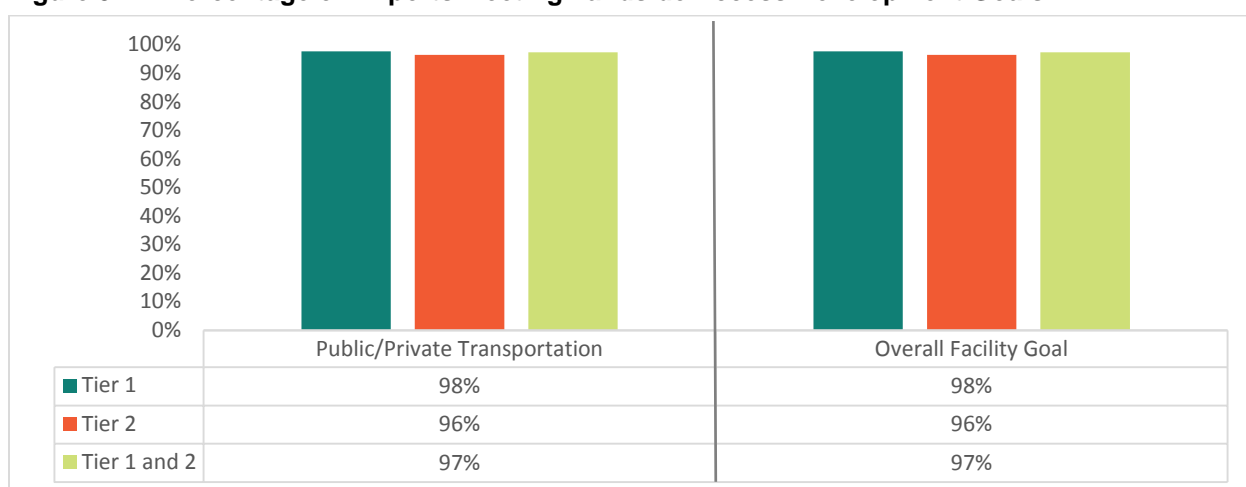
There should be at least one mode of landside transportation available for airports with a MASP ARC of B-II or C-II, as shown in **Table 5-39**. Transportation may include courtesy cars, rental cars, buses, shuttles, public transit, car services, and in some cases, bicycles or horse carriages. Transportation is available on-demand at the airport, or through prior arrangement.

**Table 5-39: Landside Access Goals**

Facility Goal	Airport Development Item	MASP Airport Reference Code (ARC)			
		A-I	B-I	B-II	C-II
Landside Access	Public/Private Transportation	No	No	Yes	Yes

Source: MDOT AERO

Of the 114 Tier 1 and Tier 2 airports, only two Tier 1 and one Tier 2 airport do not provide a mode of landside transportation service, resulting in an overall system performance of 97%, shown in **Figure 5-17**. The landside access deficiencies at Tier 1 and Tier 2 airports are shown in **Table 5-40** and **Table 5-41**, respectively.

**Figure 5-17: Percentage of Airports Meeting Landside Access Development Goals**

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory; Analysis by Mead &amp; Hunt, 2017.

**Table 5-40: Landside Access Deficiencies, Tier 1**

Associated City – Airport	FAA ID	ARC	Public/Private Transportation
Marlette – Marlette Township Airport	77G	B-II	No
Mio – Oscoda County Dennis Kauffman Memorial Airport	51M	B-II	No

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory; Analysis by Mead &amp; Hunt, 2017.

**Table 5-41: Landside Access Deficiencies, Tier 2**

Associated City – Airport	FAA ID	ARC	Public/Private Transportation
Ewart – Ewart Municipal Airport	9C8	B-II	No

Source: MDOT AERO ASM, Facility Information Worksheets, MDOT Airport Directory; Analysis by Mead &amp; Hunt, 2017.

### 5.3 Minimum Pavement Condition Index (PCI) Goals

The PCI is not a development goal, but rather a minimum maintenance standard for airports. Additionally, rather than relying on the MASP ARC, the minimum desired PCI values at system airports based on their actual, existing FAA Airport Approach Category (AAC).

The minimum PCI goals are differentiated by airport surface, one value for runways and one for taxiways, with the runway PCI ten points higher than the taxiway goal. The pavement condition goals were revised and lowered slightly from the last system plan study *Report 08: Michigan Airport System Plan*. Maintenance of airport pavements is specifically mentioned in the *2040 Michigan Transportation Plan* (MITP) as part of the stewardship goal. One of the performance measures directly associated with the MITP stewardship goal is to “Maintain 100 percent of all Tier 1 airport primary runway pavement in good or better condition.” Pavement condition maintenance goals, by PCI value for each FAA AAC, are shown in **Table 5-42**.

**Table 5-42: Minimum Pavement Condition Goals (Primary Runways/Taxiways Only)**

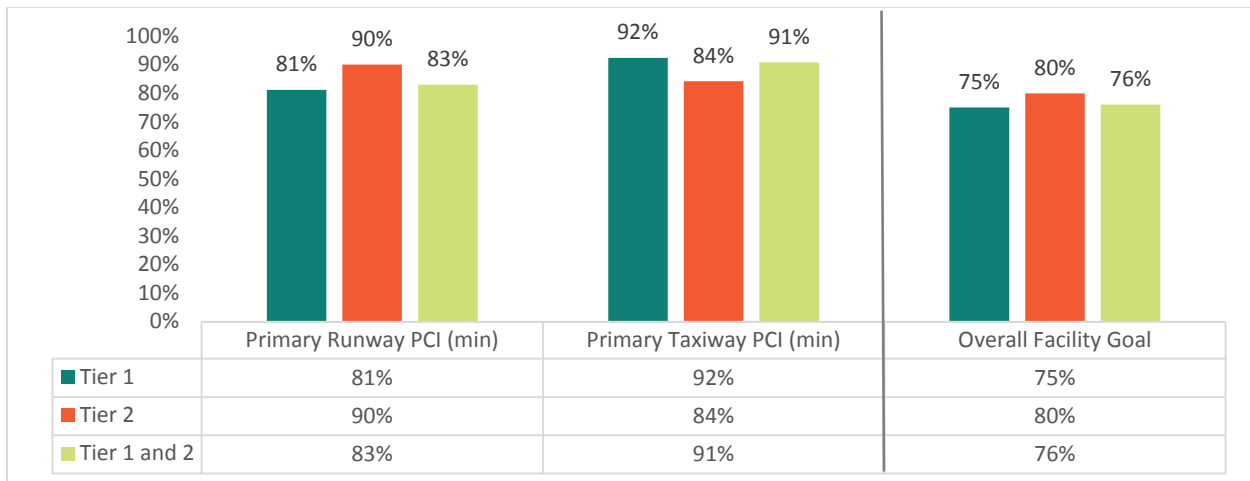
Facility Goal	Airport Surface	FAA Aircraft Approach Category (AAC)			
		A	B	C	D
Pavement Condition	Runway PCI	55*	55	60	65
	Taxiway PCI	45*	45	50	55

Note: \*N/A for turf runways/taxiways  
Source: MDOT AERO

The PCI used in this analysis is based on the largest section of pavement of the primary runway and the PCI of the largest section of pavement of the taxiway associated with the primary runway. Turf surfaces were not considered in the PCI performance analysis, regardless if they are meeting the runway surface development goal for their assigned ARC. Airports that are paved, but not part of the state’s Airport Pavement Management System (APMS), were also not included as part of the performance analysis unless PCI values were specifically provided by the airport during the data collection process.

The percentage of airports meeting the runway PCI goal is 83%, while the taxiway PCI goal is met by 91% of the Tier 1 and 2 airports. Combined performance for Tier 1 and 2 airports is at 76%, shown in **Figure 5-18**. Airports with deficient PCI values are shown in **Table 5-43** and **Table 5-44**.

**Figure 5-18: Percentage of Airports Meeting Minimum PCI Goals**



Notes: Excludes runways and taxiways that have a turf surface or are not part of the MDOT Airport Pavement Management System (AMPS), unless a PCI was specifically provided by the airport. Performance excludes the following airports:

Tier 1 Airports Excluded from PCI Analysis			Tier 2 Airports Excluded from PCI Analysis		
Baldwin	Baldwin Municipal Airport	(non-APMS)	Frankenmuth	WM 'Tiny' Zehnder Field	(turf surface)
Brighton	Brighton Field	(non-APMS)	Gregory	Richmond Field	(turf surface)
Flushing	Dalton Airport	(non-APMS)	Lake City	Home Acres Sky Ranch	(turf surface)
Harsens Island	Harsens Island Airport	(turf surface)	Northport	Woolsey Memorial Airport	(turf surface)
Iron River	Stambaugh Airport	(non-APMS)	Pinconning	Gross Airport	(turf surface)
Jenison	Riverview Airport	(non-APMS)	Plainwell	Plainwell Municipal	(non-APMS)
<u>Taxiway Only:</u>			Watervliet	Watervliet Municipal Airport	
Detroit	Willow Run Airport	(not provided)	Zeeland	Ottawa Executive Airport	(non-APMS)
			<u>Taxiway Only:</u>		
			Atlanta	Atlanta Municipal Airport	(turf taxiway)

Source: MDOT Airport Pavement Management System (APMS), Facility Information Worksheets.

**Table 5-43: Pavement Condition Deficiencies, Tier 1**

Associated City – Airport	FAA ID	FAA AAC	Primary Runway PCI (min)	Primary Taxiway PCI (min)
Detroit – Coleman A. Young Municipal	DET	C	50	✓
Escanaba – Delta County Airport	ESC	C	39	✓
Hancock – Houghton County Memorial	CMX	C	✓	42
Houghton Lake – Roscommon County, Blodgett Memorial Airport	HTL	B	49	✓
Iron Mountain Kingsford – Ford Airport	IMT	C	47	✓
Kalamazoo – Kalamazoo/Battle Creek International	AZO	C	38	✓
Manistee – Manistee County – Blacker	MBL	C	38	45
Marlette – Marlette Township Airport	77G	B	49	✓
Marquette – Sawyer International	SAW	D	✓	24
Mason – Mason Jewett Field	TEW	B	53	✓
Menominee – Menominee – Marinette Twin County Airport	MNM	B	48	✓
Mount Pleasant – Mt. Pleasant Municipal Airport	MOP	C	59	✓
Muskegon – Muskegon County Airport	MKG	C	54	✓
New Hudson – Oakland/Southwest Airport	Y47	B	27	✓
Ontonagon – Ontonagon County Airport-Schuster Field	OGM	B	✓	38
Oscoda – Oscoda-Wurtsmith Airport	OSC	D	57	✓
Pontiac – Oakland County International Airport	PTK	D	✓	41
Saginaw – Saginaw County H. W. Browne Airport	HYX	C	54	✓
Traverse City – Cherry Capital Airport	TVC	C	37	✓
Troy – Oakland/Troy Airport	VLL	B	✓	42

Source: MDOT Airport Pavement Management System (APMS), Facility Information Worksheets.

**Table 5-44: Pavement Condition Deficiencies, Tier 2**

Associated City – Airport	FAA ID	FAA AAC	Primary Runway PCI (min)	Primary Taxiway PCI (min)
Bellaire – Antrim County Airport	ACB	B	33	31
Grand Ledge – Abrams Municipal Airport	4D0	B	✓	37
Niles – Jerry Tyler Memorial Airport	3TR	B	49	✓
Sault Ste. Marie – Sault Ste. Marie Municipal-Sanderson Airport	ANJ	B	✓	18

Source: MDOT Airport Pavement Management System (APMS), Facility Information Worksheets.

## 5.4 Summary

The goals of the MASP are divided into two groups, system-based goals and facility-based goals. System goals address the system's capability to respond to air transportation needs. Facility goals focus on specific development items assigned to airports to enhance the services and infrastructure available.

A two-step classification process is used in the MASP. First, airports are assigned a tier designation based on their ability to meet each of the eight system goals. Each goal is evaluated independently of the others, and the highest tier that an airport achieves becomes their overall tier (Tier 1, Tier 2 or Tier 3). Second, an airport reference code (referred to as a MASP ARC) is assigned to each tier level by goal. The MASP ARC is reflective of the type of facility needed to serve each goal. The largest MASP ARC assigned to the highest tier achieved becomes an airport's overall MASP ARC. It is important to note that the MASP ARC is independent of an FAA ARC assigned to an airport and each airport should continue to develop in accordance with their individual airport needs and federal design standards.

Facility-based goals are dependent on an airports assigned MASP ARC. This method allows system airports that serve similar roles to have similar development goals. The seven facility goals are described in **Section 2** of this report. **Table 5-20** summarizes the facility development goals by MASP ARC for Tier 1 and Tier 2 airports.

Pavement condition is not considered a facility development goal, but a maintenance priority. As such, it is included in the analysis, although the minimum desired PCI values are based on airports' actual, existing FAA AAC rather than their MASP ARCs.

## Section 6: Economic Impact

### 6.0 Introduction

An economic impact study was completed in conjunction with the 2017 Michigan Aviation System Plan (MASP) update. The purpose of the study is to demonstrate that aviation has a positive effect on the local, regional, and Michigan's statewide economy. Many residents, visitors, businesses, and government agencies rely on aviation each day. For some, the impacts are direct, as they may use airports and their services to transport people and goods or may be employed by an airport. For others, the impacts are indirect, but no less important. Jobs in manufacturing and shipping may not be at airports, but are reliant on their services.

This section of the MASP takes a look at the economic contributions of airports and the aviation industry as a whole within Michigan. This effort to quantify the impact of aviation in the state is not a new one – the Michigan Department of Transportation (MDOT) has been calculating the economic impact of Michigan airports for decades. The following sections describe the process of calculating the value of Michigan's aviation system:

- 6.1 Data Collection
- 6.2 Definitions
- 6.3 Methodology
- 6.4 Total Statewide Value
- 6.5 Summary

### 6.1 Data Collection

Economic impact calculations include a combination of on-site (in this instance, on-airport) economic activities, off-site visitor spending, and spinoff impacts<sup>1</sup>. The information needed to calculate on- and off-airport impacts (and associated spinoff impacts) was collected through two survey efforts at the 114 Tier 1 and Tier 2 system airports:

1. Visitor Spending Surveys that collected info from visitors traveling through both general aviation (GA) and commercial service airports.
2. Community Benefits Analysis (CBA) Worksheets completed by airport managers to identify economic indicators and activities within each local community.

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<sup>1</sup> Spinoff impacts are also known as multiplier impacts, and are defined in Section 6.2.2

### 6.1.1 Visitor Surveys

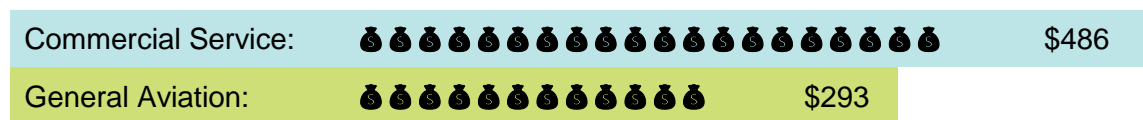
During the summer and early fall of 2016, two surveys were circulated to visitors: the Commercial Service Visitor Survey and the GA Visitor Survey. The surveys were distributed to passengers traveling on commercial airline aircraft and those traveling via GA aircraft. Each survey questioned visitors about basic spending on their trip, the reasons for the visit, and about what choices they made in selecting their travel plans. The commercial service visitor surveys were primarily collected during in-person canvassing at several of the system airports. Gerald R. Ford International Airport in Grand Rapids, Cherry Capital Airport in Traverse City, Bishop International Airport in Flint, and Sawyer International Airport near Marquette were identified by MDOT Office of Aeronautics (AERO) as a sample set of airports for in-person survey efforts. The GA surveys were collected using drop boxes (see **Figure 6-1**) available at Fixed Based Operators and GA terminals at 108 system airports<sup>2</sup>. Both surveys could be returned via US Mail (postage paid) or by using an online survey tool (Survey Monkey) if a visitor wished to complete the survey at a later time. The MASP project website included a link to the online survey tool as well as a printable PDF (postage paid) survey for visitors that did not have an opportunity to pick up a survey at an airport.

**Figure 6-1: MASP Visitor Survey Set Up**



The surveys returned represented ten of the 18 commercial service airports, and 68 of the system airports. Some airports had multiple survey responses, while others had none. According to the data collected, passengers traveling via commercial airlines spend an average of \$486 during their visit to Michigan, and visitors traveling via GA aircraft spend an average of \$293. A summary of the average spending by commercial service and GA visitors is shown in **Figure 6-2**. A total of 742 commercial service visitor surveys and 748 GA visitor surveys were used to calculate spending.

**Figure 6-2: Average Statewide Visitor Spending by Airport Type**



Source: Visitor Surveys

Visitor spending was also tallied by Michigan Prosperity Region. There are a total of ten Prosperity Regions, with one region (Upper Peninsula) having three sub-regions, and another having two sub-regions (western Lower Peninsula), for a total of 13 regions and sub-regions. The visitor spending by region is a total of both commercial service and GA combined. According to the data collected, the highest spending was seen in the West Michigan and South Central regions. The lowest spending came from the West Central region. It is important to note however, that the number of

<sup>2</sup> At the onset of the project, the 108 Tier 1 and Tier 2 airports from the 2008 plan received survey boxes to capture the most traffic traveling to and from Michigan during the summer months. Later in this study, the number of Tier 1 and Tier 2 airports increased to 114 after the survey period closed.

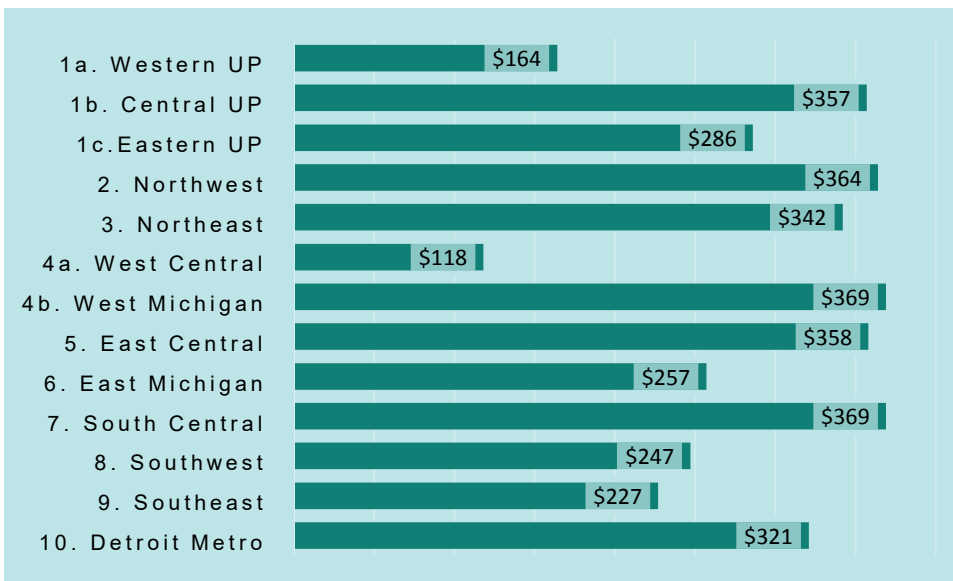


surveys collected in each region was not the same (see **Table 6-1**), which can allow for greater fluctuation between actual spending and reported spending. The average spending by Prosperity Region is shown in **Figure 6-3**.

**Table 6-1: Total Surveys Returned by Prosperity Region**

MDOT Prosperity Region	# of Surveys Received
Western UP	11
Central UP	64
Eastern UP	88
Northwest	429
Northeast	133
West Central	26
West Michigan	276
East Central	46
East Michigan	233
South Central	65
Southwest	51
Southeast	38
Detroit Metro	33

**Figure 6-3: Average Visitor Spending by Prosperity Region**



Source: Visitor Surveys

A copy of the GA and Commercial Service visitor surveys and a more detailed analysis of visitor spending by various categories can be found in **Appendix C**.

### 6.1.2 Community Benefits Assessment

In addition to surveying visitors, airport managers were surveyed on economic indicators at their facilities using a CBA worksheet (**Figure 6-4**). The worksheet asked airports to estimate economic indicators such as jobs directly and indirectly tied to the airport, plus information about aviation activity such as annual operations, visitors, and fuel sales. Airports that had recently completed an airport-specific economic impact study were not required to complete a new CBA worksheet as the information needed was available through these documents. The data obtained from the CBA worksheets was used to populate an electronic tool developed for MDOT AERO (called the Community Benefits Assessment Tool) that estimates the economic impact of each system airport based on these various data inputs. Section 6.3 provides more detailed information on the CBA Tool. A copy of the CBA worksheet sent to airport managers is provided in Appendix D.

**Figure 6-4: CBA Worksheet**

**Community Benefits Assessment Worksheet**

**Table A – Aviation Related Jobs at the Airport**

Category	# of Jobs	Description
A1. Federal Government (FAA, TSA, CBP)		
A2. Local Government		
A3. FBO and Private Operations		
A4. Airline and Other Aviation Businesses		
A5. Shipping and Warehousing		
A6. Terminal Concessions		
A7. Other (specify):		

**Table B – Non-Aviation Related Jobs at the Airport**

Category	# of Jobs	Description
B1. Municipal Offices		
B2. Professional Services		
B3. Manufacturing		
B4. Other (specify):		

**Table C – Off Airport Air-Related Business**

Category	# of Jobs	Description
C1. Shipping / Warehousing		
C2. Airline Catering and other Services		
C3. Retail Manufacturers		
C4. Retail Services		
C5. Retail Government Activities		
C6. Other (specify):		

**Table D – Operations**

Operations	GA Local	GA Inland	Air Taxi (Cumulative)	Air Carrier	Military
D1. Annual Operations*					
D2. Passengers per Operation (incl. Pilot)					
D3. Visitor Portion of Passengers					
D4. Cargo Tons per Operation					

\*NOTE: If data reported with an asterisk (\*) are self-reported, System Plan forecast numbers will be used.

**Table E – Based Aircraft**

Based Aircraft	Single Engine	Multi-Engine	Jet	Rotocraft	Other / Military / Gliders
E1. Number of Based Aircraft					

\*NOTE: If not based, System Plan forecast numbers will be used.

**Table F – Fuel Sales**

Fuel Type	TOTAL (Gallons)	Jet A	Other (specify):
F1. Fuel sold in past 12 months (gallons)			

Please Return by **September 8, 2018** to: Michigan Department of Transportation  
Office of Aviation  
Alex Linn Smith  
2700 Port Larned Rd  
Lansing, MI 48906

You may also email worksheet to: [2018CBA@mdot.state.mi.us](mailto:2018CBA@mdot.state.mi.us)

Worksheet Completed by (print name): \_\_\_\_\_ Title: \_\_\_\_\_

Airport Name: \_\_\_\_\_ 3-Letter Airport (I): \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

## 6.2 Definitions

To better explain the economic impact of Michigan's aviation system, a few terms and concepts must be defined. These terms include various types of impacts and methods of assessing economic activity such as jobs, personal income, and business sales.

### 6.2.1 Direct Impacts

**On-Airport** impacts represent economic activities that occur on airport grounds. Aviation related activities are those that would not occur without the airport, such as terminal services for passengers and pilots, aircraft maintenance, and security provided by the Transportation Security Administration (TSA). This category includes airport management and other individuals employed directly by the airport. Also included are non-aviation-related airport tenants. Impacts are reported as jobs, income, and output:

- **Jobs** as referred to in the economic analyses found in this chapter are those positions created as a result of the aviation industry in Michigan. These positions are supported through the business sales/budget expenditures that are made.
- **Income** refers to payroll. This includes the amount of money earned in a calendar year by an employee, as well as benefits, which are paid by an employer from the business sales that they earn.
- **Output** refers to business sales or budget expenditures.

**Off-Airport** impacts include off-airport expenditures made by air travelers who are visiting from outside the region. Off-airport spending includes expenditures by GA pilots and passengers as well as commercial service passengers arriving via the 18 commercial service airports. This information was captured via the visitor surveys discussed in Section 6.1.1. In addition to visitor spending, the impact of area businesses that rely on aviation for business travel and cargo shipping services is included. Off-airport direct impacts are also reported as jobs, income, and output.

### 6.2.2 Spinoff Impacts (Economic Multipliers)

These indirect impacts reflect the recycling of dollars through both the local and state economies. Spinoff impacts are often reported as indirect and induced impacts. Indirect impacts include the income of businesses that supply goods and services to airports, airport tenants, companies that receive visitors (hotels, restaurants, etc.) and off airport dependent businesses. Induced impacts include the economic activity generated when direct employees (on airport, companies, visitor industries, and off-airport dependent businesses) and suppliers re-spend their wages on local consumer purchases. The size of the spinoff effects vary with the scale of the economic region. For example, the multipliers of local areas are smaller than the state as whole. This is because more business suppliers and household services are found as geographic regions expand.

The core concept behind spinoff impacts is that dollars spent in the economy do not disappear; rather, they move through the economy in successive rounds until incrementally exported from the region and state. As aviation-related expenditures enter the economy, they circulate among other industry sectors, creating successive waves of re-spending effects. These successive rounds of spending are identified as the spinoff impacts and represent the full impact of each dollar generated due to aviation in Michigan. Spending occurring outside the area is considered economic leakage and is not reflected in the economic multiplier. See **Figure 6-5** for an illustration of the relationship between direct and spinoff impacts.

### 6.2.3 Scope of Impact

Two separate levels of impacts are defined for each type of impact. Local impacts refer to the contribution of each airport to the economy of the specific county in which the airport is located. Statewide impacts refer to the contributions of airports to the Michigan state economy as a whole.

### 6.2.4 False Precision

False precision is the action of using limited data to convey precise totals. Throughout this analysis, an attempt was made to avoid misleading readers in giving the appearance of more accuracy than warranted by the data. To avoid misleading readers, rounding was employed in two places. First, visitor spending per passenger, which is the aggregation of off-airport purchases of lodging, meals, transportation, entertainment, and retail, was rounded to the dollar. Secondly, and more importantly, all final totals for visitor spending, on-airport impacts, and airport dependency impacts were rounded to the nearest thousand. By rounding to the closest thousand dollar unit, this study attempts to maximize reliability and avoid misleading readers by claiming false precision.

## 6.3 Methodology

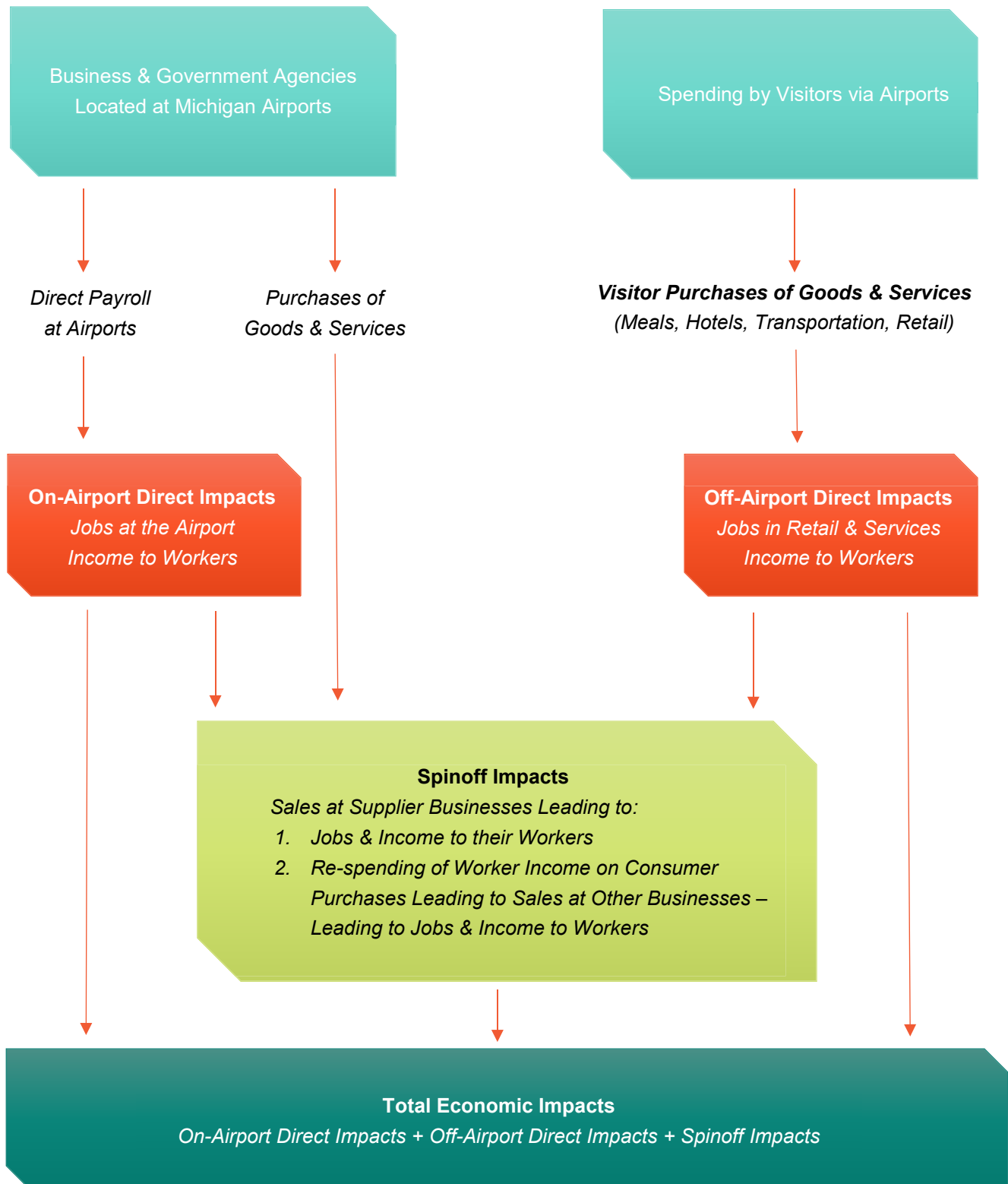
The term “economic impact” is commonly used to describe what is more accurately the “economic contribution” of airports to their local area and the state as a whole. As mentioned previously, the economic contributions of the state’s system airports are calculated using several impacts including direct on-airport and off-airport effects, and spinoff (or multiplier) effects.

These overall economic effects, which include output, employment, and personal income, are interrelated and are part of a chain of economic activity. By generating additional business sales, airports also support the jobs created by this increase in business activity. A portion of the business sales revenue is used to pay wages and benefits for those jobs. **Figure 6-5** illustrates the interrelationships between direct and spinoff effects of output, jobs, and personal income, both directly and indirectly related to aviation activity.

An analysis of the impact of jobs, personal income, and output at two levels has been conducted for this economic impact study. A different multiplier has been used for each of the levels to determine spinoff impacts. A smaller multiplier is applied to local impacts to determine the spinoff effects (or recycling of money) within the immediate area surrounding an airport (the county in which the airport is located). A larger multiplier is applied to state impacts to determine the spinoff effects within Michigan.

The local and statewide analyses examine the impacts of Michigan’s system airports from different geographical perspectives. The primary difference is the reach of spinoff effects which are limited to the county level when assessing local impact, and are expanded to incorporate the total economy of Michigan for the statewide analysis.

**Figure 6-5: Interrelationships between Economic Impacts**



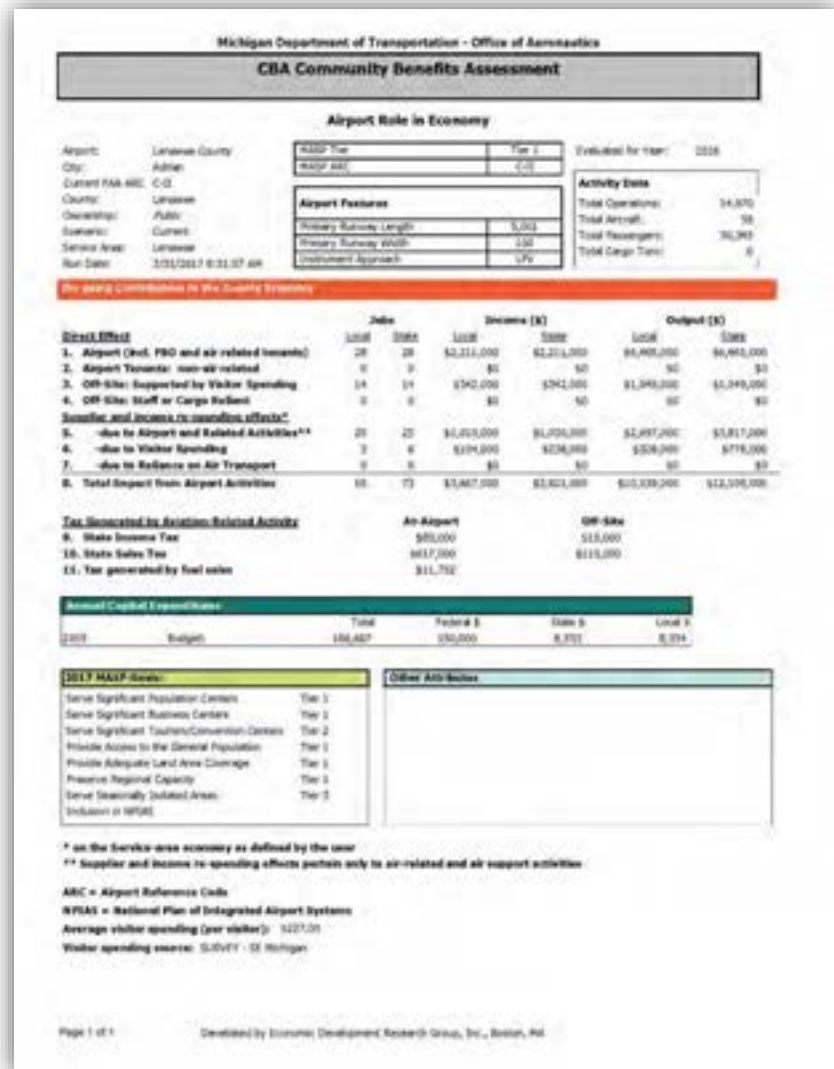
Source: Economic Development Research Group

To quantify the impact of continued re-investment of spending resulting from on-airport direct, off-airport direct (visitor spending), and airport dependent impacts, MDOT AERO partnered with Economic Development Research Group (EDRG) and Mead & Hunt, Inc. to develop an economic modeling tool to calculate the individual impact of each system airport and the state system as a whole. The initial tool was created in 2003 and is now in its fourth iteration (updates were made in 2008 and 2015). As a part of the 2017 MASP, the CBA Tool was updated with the latest economic industry inputs from IMPLAN, LLC. to maintain the accuracy of the results. The CBA Tool uses separate multipliers for each major industry group that represents on-airport tenants and visitor expenditures in order to increase accuracy. Industry groupings include air transportation, eating and drinking establishments, federal and state/local government, and other tenants and dependent industries.

The CBA Tool generates a CBA Report (Figure 6-6) for each facility for which data is entered. These reports document the local and statewide impact of the subject facility. The newly updated 2017 CBA tool was used to generate a CBA Report for 111 of the 114 Tier 1 and Tier 2 airports in the state system (Detroit Metro [DTW], Willow Run [YIP], and Gerald R. Ford [GRR] airports had recently completed economic impact studies that were used in lieu of a CBA Report). The impacts produced by the tool were used to calculate the total

economic impact of Michigan's aviation system as a whole, presented in Section 6.4. A copy of each airport's CBA Report generated in 2017, using 2016 data, is provided in Appendix D.

Figure 6-6: CBA Report Sample



## 6.4 Total Statewide Value

Individual CBA Reports plus independent economic impact studies for DTW, YIP, and GRR were used to generate the statewide impact of aviation on Michigan's economy. Data from 111 CBA Reports was gathered, looking at seven different categories as noted in the sample CBA Report shown in **Figure 6-7** and noted below by each line number. The direct impacts include:

- (1) aviation reliant activities on airports;
- (2) non-aviation reliant activities on airports;
- (3) off-airport related and/or reliant activity supported by visitor spending; and
- (4) off-airport staff or cargo reliant activity.

The CBA Reports list each of these four segments of Michigan's aviation economy and their separate direct effects (initial transactions), along with spinoff (multiplier) impacts of:

- (5) airport and aviation related activities;
- (6) visitor spending; and
- (7) activities reliant on air transportation.

The combination of these seven effects at the state level yields the total impact (output) from airport activities for an individual airport, shown in **Figure 6-7**.

**Figure 6-7: Sample Economic Impact from CBA Report**

On-going Contribution to the County Economy						
Direct Effect	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
1. Airport (incl. FBO and air related tenants)	28	28	\$2,211,000	\$2,211,000	\$6,465,000	\$6,465,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	14	14	\$342,000	\$342,000	\$1,049,000	\$1,049,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<u>Supplier and income re-spending effects*</u>						
5. -due to Airport and Related Activities**	20	25	\$1,010,000	\$1,030,000	\$2,697,000	\$3,817,000
6. -due to Visitor Spending	3	6	\$104,000	\$238,000	\$328,000	\$778,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
<b>8. Total Impact from Airport Activities</b>	<b>65</b>	<b>73</b>	<b>\$3,667,000</b>	<b>\$3,821,000</b>	<b>\$10,539,000</b>	<b>\$12,109,000</b>

The total output from each of the 111 airports with CBA reports were added together, along with the economic impact from the three individual studies completed for DTW (in 2013), GRR (in 2014), and YIP (in 2014), as shown in **Table 6-2**. The findings from these three studies were incorporated as published, except that dollars for output and labor income were adjusted to 2016 dollar values so they could be added to the CBA findings. Note that the DTW study included statewide impacts, but findings for GRR were limited to a five-county region and those for YIP were completed for a ten-county region. State wide analyses for these latter two airports would have yielded higher multiplier effects, therefore it is assumed that the resulting total is a conservative assessment of the total economic impact.



**Table 6-2: Total Statewide Economic Impact of Michigan's Aviation System**

	Jobs	Labor Income (\$)	Output (\$)
111 System Airports with CBA Reports	55,757	\$2,244,280,000	\$7,906,093,000
Airport Economic Impact Studies Provided for Airports without CBA Reports <sup>1</sup>			
Grand Rapids - Gerald R Ford Int'l (GRR) <sup>2</sup>	40,582	\$1,537,670,000	\$3,244,928,000
Detroit – Willow Run (YIP) <sup>3</sup>	950	\$41,372,000	\$126,164,000
Detroit – Detroit Metro Wayne County (DTW) <sup>4</sup>	86,308	\$3,226,185,000	\$10,630,255,000
<b>TOTAL</b>	<b>183,597</b>	<b>\$7,049,507,000</b>	<b>\$21,907,440,000</b>

Notes:

<sup>1</sup>Dollars updated to 2016 using BEA price deflators for GDP<sup>2</sup>Study published January, 2015. Dollars updated from 2014 to 2016. Additional economic impact since study publication was not calculated. **Study region:** Barry, Kent, Montcalm, Muskegon and Ottawa counties.<sup>3</sup>Study published in 2014. Dollars updated from 2014 to 2016. Additional economic impact since study publication was not calculated. **Study region:** Genesee, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne counties.<sup>4</sup>Study published in 2013. Dollars updated from 2013 to 2016. Additional economic impact since study publication was not calculated. **Study region:** State of Michigan.

Source: CBA Tool, Economic Impact Studies from GRR, YIP, DTW

**In total, the contribution of Michigan's 114 system airports to the state economy is nearly \$22 billion in business sales and budget expenditures (economic output) that includes more than \$7 billion in labor income to Michigan residents and supports almost 184,000 full-time and part-time jobs across the state.**

It is important to note that the statewide impact calculation only considers the 114 Tier 1 and Tier 2 airports in the system – and does not account for the 100+ remaining public use airports in the state. As a result, the overall state findings as shown in **Table 6-2** are assumed to be an undercount from what they would be if all public use airports in Michigan were part of this analysis.

To better understand the impact by type of airport, the total statewide economic impact has been divided by specific criteria, including airport tiers, prosperity regions in which airports are located, the type of operations supported by airports (GA vs commercial service) and participation in the Essential Air Service (EAS) program. **Tables 6-3** through **6-6** illustrate the criteria trends.

Overall the 86 Tier 1 airports in the system generate the majority of the total state impact at nearly \$22 billion (98.8%), compared to the 28 Tier 2 airports that account for about \$260 million (1.2%), shown in **Table 6-3**.

**Table 6-3: Statewide Economic Impact of Michigan's Aviation System by Airport Tier**

Airport Tier	Jobs	Income (\$)	Output (\$)
Tier 1 Airports	181,302	\$6,946,992,000	\$21,652,401,000
Tier 2 Airports	2,295	\$102,515,000	\$255,039,000
<b>TOTAL</b>	<b>183,597</b>	<b>\$7,049,507,000</b>	<b>\$21,907,440,000</b>

Source: CBA Tool, Economic Impact Studies from GRR, YIP, DTW

GA airports (96) comprise 84 percent (84%) of the total system and generate nearly \$5.3 billion dollars, or 24 percent (24%) of the total direct impact, as shown in **Table 6-4**. Commercial service airports (18) comprising the remaining 16 percent (16%) of the system generate nearly \$17 billion, or 76 percent (76%) of the total direct impact.



**Table 6-4: Statewide Economic Impact of Michigan's Aviation System by Airport Type**

Airport Type	Jobs	Income (\$)	Output (\$)
General Aviation	33,753	\$1,441,634,000	\$5,278,455,000
Commercial Service	149,844	\$5,607,873,000	\$16,628,985,000
<b>TOTAL</b>	<b>183,597</b>	<b>\$7,049,507,000</b>	<b>\$21,907,440,000</b>

Source: CBA Tool, Economic Impact Studies from GRR, YIP, DTW

Of the 18 airports in the state that offer commercial service, half of them are supported by the US Department of Transportation's EAS Program that was established to support small communities in sustaining commercial air service after airline deregulation. The EAS program subsidizes airline service in order to provide EAS eligible communities with access to the National Air Transportation System. The nine EAS airports in Michigan have a total economic impact of over \$490 million on the statewide economy, shown in **Table 6-5**.

**Table 6-5: Statewide Economic Impact of Michigan's Aviation System EAS Airports**

EAS Airports	Jobs	Income (\$)	Output (\$)
Essential Air Service Airports	4,075	\$174,039,000	\$493,971,000
All Other Commercial Service Airports	145,769	\$5,433,834,000	\$16,135,014,000
<b>TOTAL</b>	<b>149,844</b>	<b>\$5,607,873,000</b>	<b>\$16,628,985,000</b>

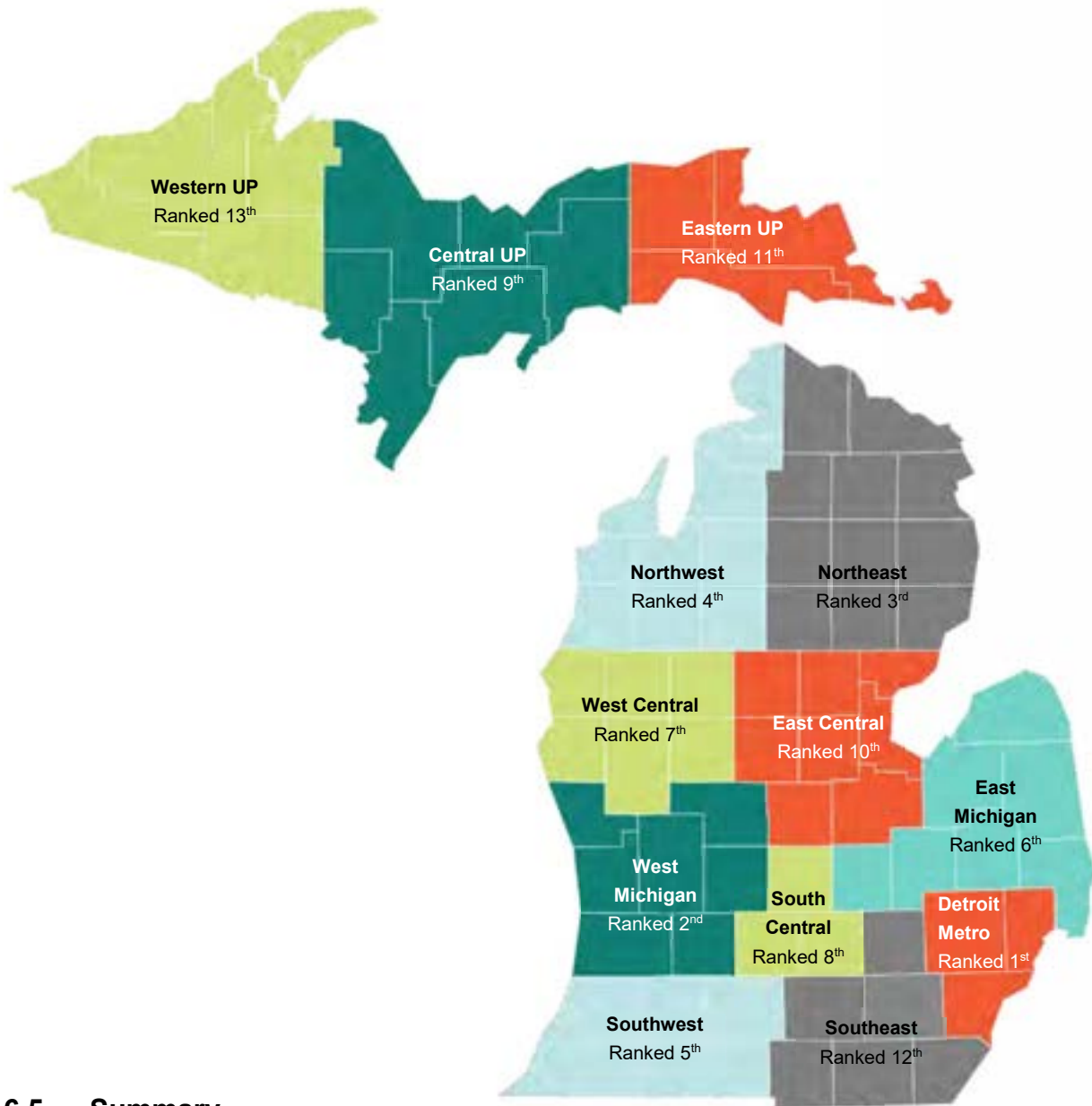
Source: CBA Tool, Economic Impact Studies from GRR, YIP, DTW

**Table 6-6** and **Figure 6-8** summarize the total economic impact of Michigan's aviation system by Prosperity Region. The Detroit Metro region has the highest total output of over \$11 billion alone, due largely to DTW, while the Western UP region has the lowest total output of about \$156 million.

**Table 6-6: Statewide Economic Impact of Michigan's Aviation System by Prosperity Region**

Prosperity Region	Jobs	Income (\$)	Output (\$)	Ranking
Detroit Metro	90,674	\$3,502,888,000	\$11,495,318,000	1
West Michigan	47,934	\$1,864,949,000	\$4,377,862,000	2
Northeast	8,355	\$291,003,000	\$1,445,289,000	3
Northwest	10,319	\$362,420,000	\$1,280,145,000	4
Southwest	3,547	\$157,162,000	\$650,366,000	5
East Michigan	5,053	\$186,498,000	\$622,876,000	6
West Central	4,363	\$168,876,000	\$482,939,000	7
South Central	3,933	\$140,337,000	\$375,282,000	8
Central UP	2,437	\$93,200,000	\$354,834,000	9
East Central	2,226	\$100,552,000	\$295,260,000	10
Eastern UP	1,794	\$81,650,000	\$189,002,000	11
Southeast	1,262	\$57,156,000	\$181,705,000	12
Western UP	1,700	\$42,816,000	\$156,562,000	13
<b>TOTAL</b>	<b>183,597</b>	<b>\$7,049,507,000</b>	<b>\$21,907,440,000</b>	

Source: CBA Tool, Economic Impact Studies from GRR, YIP, DTW

**Figure 6-8: Michigan Prosperity Regions Ranked by Economic Impact**

## 6.5 Summary

Michigan has a robust system of public use airports across the state that support numerous aviation (and non-aviation related) activities that fuel the local and state economies. From the transportation of visitors who spend money in the state to the provision of office space for a company to locate at an airport or the use of aviation in agricultural production, the impacts of airports can be seen in the form of jobs, labor income from those jobs, and business sales and expenditures that support continued operation and employment. The dollars that are attributed to each airport facility in the state are supporting not only the local county economy, but the larger state economy as a whole when those dollars are recycled and re-spent in other locations on other goods and services. Generating nearly \$22 billion in economic activity annually, Michigan's system of airports is critical to the health of the state economy, and therefore must be maintained to continue providing services that support Michigan residents, visitors, businesses and more.

# Acronym Dictionary

## Michigan Aviation System Plan Acronym Dictionary

Acronym	Description
100LL	100 Low-Lead Fuel
A&P	Airframe and Powerplant
AAC	Aircraft Approach Category
AAP	Airport Approach Plan
AC	Advisory Circular
ACRP	Airport Cooperative Research Program
ADG	Airplane Design Group
AERO	Office of Aeronautics
AIM	Aeronautical Information Manual
AIP	Airport Improvement Program
ALS	Approach Light System
AP Tech	Applied Pavement Technology, Inc.
APMS	Airport Pavement Management System
ARC	Airport Reference Code
ASM	Automatic Storage Management
ASOS	Automated Surface Observing Systems
ATC	Air Traffic Control
ATCT	Air Traffic Control Tower
ATIS	Automated Terminal Information Service
ATP	Airline Transport Pilot
AVGAS	Aviation Gasoline
AWOS	Automated Weather Observing Systems
AWOS-A	Automated Weather Observing Systems with Altimeter
BEA	Bureau of Economic Analysis
CAGR	Compound Annual Growth Rate
CBA	Community Benefits Analysis
CBP	Customs and Border Protection
CFR	Code of Federal Regulations
COHS	Corridors of Highest Significance
CRTC	Combat Readiness Training Center
CS	Commercial Service
CSA	Combined Statistical Area
CSS	Context Sensitive Solutions

**Michigan Aviation System Plan Acronym Dictionary**

Acronym	Description
d-CS	Digital-Chart Supplement
DHS	Department of Homeland Security
EAS	Essential Air Service
ESRI	Environmental Systems Research Institute
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FBO	Fixed Base Operator
FSS	Flight Service Station
GA	General Aviation
GAO	General Accountability Office
GDP	Gross Domestic Product
GIS	Geographic Information Systems
HIRL	High Intensity Runway Lights
IFR	Instrument Flight Rules
LIRL	Low Intensity Runway Lights
LSA	Light Sport Aircraft
MAC	Michigan Aeronautics Commission
MALSF	Medium Intensity Approach Light System with Runway Alignment Indicator Lights
MALSR	Medium Intensity Approach Light System with Sequenced Flashing Lights
MASP	Michigan Aviation System Plan
MDIV	Metropolitan Divisions
MDOT	Michigan Department of Transportation
MEDC	Michigan Economic Development Corporation
MICRO	Metropolitan Statistical Area
MIRL	Medium Intensity Runway Lights
MITP	Michigan Transportation Plan
MOGAS	Motor Gasoline
MS	Metropolitan Statistical Area
NAS	National Airspace System
NextGen	Next Generation National Airspace System
NOAA	National Oceanic and Atmospheric Administration
NOTAM	Notice to Airmen
NPIAS	National Plan of Integrated Airport Systems
PAPI	Precision Approach Path Indicator
PCI	Pavement Condition Index
PMP	Pavement Management Program
RDC	Runway Design Code
REIL	Runway End Indicator Lights
SP	Sport Pilot
TAF	Terminal Area Forecast

**Michigan Aviation System Plan Acronym Dictionary**

Acronym	Description
TSA	Transportation Security Administration
UAS	Unmanned Aircraft System
UAV	Unmanned Aerial Vehicles
UP	Upper Peninsula
VASI	Visual Approach Slope Indicator
VGSI	Visual Glide Slope Indicator

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# Glossary

Several of the terms used in the 2017 MASP are defined in the pages that follow. Definitions for these terms come from a variety of sources that are noted below. In the interest of brevity, these sources have been abbreviated after each applicable definition.

Source	Source Abbreviation
Michigan 2015 Tourism Advertising Evaluation and Image Study	2015 MEDC Study
2017 Michigan Aviation System Plan	2017 MASP
Federal Aviation Administration (FAA) Advisory Circular (AC)	AC
Airport Cooperative Research Program Report	ACRP Report
U.S. Customs and Border Protection Website	cbp.gov
Federal Aviation Administration Website	faa.gov
Federal Aviation Administration (FAA) Aeronautical Information Manual (AIM)	FAA AIM
Federal Aviation Administration (FAA) Pilot/Controller Glossary	FAA Pilot/Controller Glossary
Title 14 of the Electronic Code of Federal Regulations (CFR), Federal Aviation Regulations (FAR)	FAR 14 CFR
State of Michigan's Geographic Information Systems Database	gis-michigan.opendata.arcgis.com
State of Michigan Website	michigan.gov
Transportation Security Administration (TSA) Website	tsa.gov

**Aircraft Fuel** – A petroleum-based fuel used to power aircraft. Types of fuel used in aircraft traveling to and from Michigan airports include: – (FAA AIM)

**100LL** – 100 octane low-leaded aviation gasoline used in most piston engine GA aircraft.

**Jet-A** – Fuel for turboprop and jet aircraft.

**MOGAS** – Automotive Gasoline.

**Airplane** – An engine-driven, fixed-wing aircraft that is heavier than air, and is supported in flight by the dynamic reaction of the air against its wings. – (AC 150/5300-13A)

**Jet** – Jet aircraft.

**Multi-Engine Aircraft** – Multi-engine propeller-driven aircraft.

**Single Engine Aircraft** – Single engine propeller driven aircraft.

**Airplane Design Group (ADG)** - A classification of aircraft based on wingspan and tail height. When the aircraft wingspan and tail height fall in different groups, the higher group is used. – (FAR, 14 CFR)

**Airport** - An area of land that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any. – (FAR, 14 CFR)

**Airport Approach Category (AAC)** - A grouping of aircraft based on a reference landing speed and the maximum certificated landing weight. – (FAR, 14 CFR)

**Airport Tier** – An assigned number (1-3) based on pre-determined development standards. Development standards were created by Michigan Department of Transportation (MDOT) officials. – (2017 MASP)

**Tier 1** airports respond to essential/critical state airport system goals and objectives. These airports should be developed to their full and appropriate level.

**Tier 2** airports complement the essential/critical state airport system and/or respond to local community needs. Focus on these facilities should be on maintaining infrastructure with less emphasis on facility expansion.

**Tier 3** airports duplicate services provided by other airports and/or respond to specific needs of individuals and/or small businesses. These facilities are secondary to meeting the overall state system goals and receive only minimal safety enhancements, such as runway cones and wind socks.

**Approach Protection Plan (APP)** – A state plan for approach protection areas surrounding airports, landing fields, and other aeronautical facilities, establishing standards of height and use to which any structure or obstruction, whether natural or human-made, may be erected or maintained within a distance from the boundaries of any airport, landing field or other aeronautical facility necessary for public safety. – (michigan.gov)

**Airport Improvement Program (AIP)** – A program that provides grants to public agencies — and, in some cases, to private owners and entities — for the planning and development of public-use airports that are included in the National Plan of Integrated Airport Systems. – (faa.gov)

**Airport Master Plan** – The airport's concept of the long-term development and use of an airport's land and facilities. – (AC 150/5070-6B)



**Airport Operation** – The landing or takeoff by an aircraft on a runway at an airport. – (AC 150/5070-6B)

**Airport Reference Code (ARC)** - An airport designation that signifies the airport's highest Runway Design Code (RDC), minus the third (visibility) component of the RDC. The ARC is used for planning and design only and does not limit the aircraft that may be able to operate safely on the airport. – (FAR, 14 CFR)

**Airport Zoning** – An effective method of meeting the federal obligation to ensure compatible land use and to protect airport approaches. Generally, zoning is a matter within the authority of state and local governments. Where the sponsor does have authority to zone or control land use, FAA expects the sponsor to zone and use other measures to restrict the use of land in the vicinity of the airport to activities and purposes compatible with normal aircraft operations. Restricting residential development near the airport is essential in order to avoid noise-related problems. – (faa.gov)

**Annual Operations** – The total amount of landings and takeoffs by an aircraft on a runway at an airport in a year. – (AC 150/5070-6B)

**Approach Light System (ALS)** – An airport lighting facility which provides visual guidance to landing aircraft by radiating light beams in a directional pattern by which the pilot aligns the aircraft with the extended centerline of the runway on his/her final approach for landing. – (FAA Pilot/Controller Glossary)

**Apron** – A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, refueling, parking or maintenance. – (FAA Pilot/Controller Glossary)

**Automated Weather Systems** – Any of the automated weather sensor platforms that collect weather data at airports and disseminate the weather information via radio and/or landline. Some of the common automated weather systems found at airports in Michigan include: – (FAA AIM)

**ASOS** – Automated Surface Observing System

**AWOS** – Automated Weather Observing System

**AWOS-A** – Automated Weather Observing System with Altimeter

**Based Aircraft** – The general aviation aircraft that use a specific airport as a home base. – (AC 150/5070-6B)

**Business Aviation** – The use of a general aviation airplane for a business purpose to provide speed, flexibility, efficiency and productivity. Business aviation is used for many reasons, such as transporting personnel and goods, increasing employee productivity while traveling, reaching destinations without commercial service, and providing a dependable and predictable travel option. – (NBAA)

**Business Center** – Minor civil divisions with 2040 employment projections of at least 3,000 employees. – (2017 MASP)

**Cargo Service Airports** – Airports that, in addition to any other air transportation services that may be available, are served by aircraft providing air transportation of only cargo with a total annual landed weight of more than 100 million pounds. – (faa.gov)

**Commercial Service Airports** – Publicly owned airports that have at least 2,500 passenger boardings each calendar year and receive scheduled passenger service. Passenger boardings refer to revenue passenger boardings on an aircraft in service in air commerce whether or not in scheduled service. The definition also includes passengers who continue on an aircraft in international flight that stops at an airport in any of the 50 States for a non-traffic purpose, such as refueling or aircraft maintenance rather than passenger activity. Passenger boardings at airports that receive scheduled passenger service are also referred to as Enplanements. – (faa.gov)

**Nonprimary Commercial Service Airports** – Commercial Service Airports that have at least 2,500 and no more than 10,000 passenger boardings each year.

**Primary Airports** – Commercial Service Airports that have more than 10,000 passenger boardings each year.

**Courtesy Car** – A free car service offered by some Fixed Base Operators (FBOs) for pilots to drive if they are without transportation at an airport.

**Crosswind Runway** – An additional runway that compensates for primary runways that provide less wind coverage than desired. – (AC 150/5325-4C)

**Customs & Border Protection (CBP)** – With more than 60,000 employees, CBP is one of the world's largest law enforcement organizations and is charged with keeping terrorists and their weapons out of the U.S. while facilitating lawful international travel and trade. – (cbp.gov)

**False Precision** – The action of using limited data to convey precise totals. – (2017 MASP)

**Federal Aviation Administration (FAA)** – The FAA is responsible for the safety of civil aviation. Major roles of the FAA include: – (faa.gov)

- Regulating civil aviation to promote safety,
- Encouraging and developing civil aeronautics, including new aviation technology,
- Developing and operating a system of air traffic control and navigation for both civil and military aircraft,
- Researching and developing the National Airspace System and civil aeronautics,
- Developing and carrying out programs to control aircraft noise and other environmental effects of civil aviation, and
- Regulating U.S. commercial space transportation.

**Fixed Base Operator (FBO)** – A business enterprise located at an airport that provides services to pilots including aircraft rental, training, fueling, maintenance, parking, and the sale of pilot supplies. – (AC 150/5070-6B)

**Forecast Methods** – Methods of analysis to estimate the total operations and based aircraft anticipated over a planning horizon. Examples of forecast methods include: – (2017 MASP)

**Historical Trend Analysis** – A forecasting method comprised of historical aviation activity data.

**Market Share Analysis** – A forecasting method that projects growth based on the historic market's share of an individual airport or group of airports.

**Socioeconomic Regression Analysis** – A forecasting method that projects dependent variables based on their relationship to independent or explanatory variables.

**General Aviation (GA)** - All non-scheduled flights other than military conducted by non-commercial aircraft. General aviation covers local recreational flying to business aviation operations that are not operating under the FAA regulations for commercial air carriers. – (AC 150/5300-13A)

**General Aviation Airports** – Public-use airports that do not have scheduled service or have less than 2,500 annual passenger boardings. – (faa.gov)

**Hangar** – An enclosed building used for storing and securing aircraft against wind and other adverse weather conditions. Hangars can be rectangular, square, or corporate style buildings separated from the next hangar. – (AC 150/5300-13A)

**Helicopter** - A rotorcraft that, for its horizontal motion, depends principally on its engine-driven rotors. – (FAA Pilot/Controller Glossary)

**Helipad** – A small, designated area, usually with a prepared surface, on a heliport, airport, landing/takeoff area, apron/ramp, or movement area used for takeoff, landing, or parking of helicopters. – (FAA Pilot/Controller Glossary)

**Heliport** - An area of land, water, or structure used or intended to be used for the landing and takeoff of helicopters. – (FAA Pilot/Controller Glossary)

**Indirect Impacts** – The income of businesses that supply goods and services to airports, airport tenants, companies that receive visitors (hotels, restaurants, etc.) and off airport dependent businesses. – (2017 MASP)

**Induced Impacts** – The economic activity generated when direct employees (on airport, companies, visitor industries, and off-airport dependent businesses) and suppliers re-spend their wages on local consumer purchases. – (2017 MASP)

**Instrument Approaches** – An approach and landing using instruments for navigation guidance based on an instrument approach procedure. – (FAA Pilot/Controller Glossary)

**Instrument Approach Procedure** – A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing or to a point from which a landing may be made visually. – (FAA Pilot/Controller Glossary)

**Instrument Flight Rules (IFR) Conditions** – Weather conditions below the minimum for flight under visual flight rules. – (FAA Pilot/Controller Glossary)

**Isolated Area** – Great Lakes islands that are populated year round, but are seasonally isolated due to weather conditions. – (2017 MASP)

**Itinerant Operations** – Operations by an aircraft that leaves the local airspace. – (AC 150/5070-6B)

**Light-Sport Aircraft (LSA)** – An aircraft, other than a helicopter or powered-lift that, since its original certification, has continued to meet the following:

- (1) A maximum takeoff weight of not more than
  - (i) 1,320 pounds (600 kilograms) for aircraft not intended for operation on water; or
  - (ii) 1,430 pounds (650 kilograms) for an aircraft intended for operation on water.
- (2) A maximum airspeed in level flight with maximum continuous power of not more than 120 knots CAS under standard atmospheric conditions at sea level.
- (3) A maximum never-exceed speed of not more than 120 knots CAS for a glider.
- (4) A maximum stalling speed or minimum steady flight speed without the use of lift-enhancing devices of not more than 45 knots CAS at the aircraft's maximum certificated takeoff weight and most critical center of gravity.
- (5) A maximum seating capacity of no more than two persons, including the pilot.
- (6) A single, reciprocating engine, if powered.
- (7) A fixed or ground-adjustable propeller if a powered aircraft other than a powered glider.
- (8) A fixed or feathering propeller system if a powered glider.
- (9) A fixed-pitch, semi-rigid, teetering, two-blade rotor system, if a gyroplane.
- (10) A non-pressurized cabin, if equipped with a cabin.
- (11) Fixed landing gear, except for an aircraft intended for operation on water or a glider.
- (12) Fixed or retractable landing gear, or a hull, for an aircraft intended for operation on water.
- (13) Fixed or retractable landing gear for a glider. – (FAR, 14 CFR)

**Lighted Wind Indicator** – An illuminated wind cone (wind sock), wind tee, or tetrahedron that provides surface wind direction information visually to pilots. – (FAR, 14 CFR)

**Local Impacts** – The contribution of each airport to the economy of the specific county in which the airport is located. – (2017 MASP)

**Local Operations** – Aircraft operations performed by aircraft that are based at the airport and that operate in the local traffic pattern or within sight of the airport. This includes aircraft that are known to be departing for or arriving from flights in local practice areas within a prescribed distance from the airport, or that execute simulated instrument approaches at the airport. – (AC 150/5070-6B)

**Michigan Department of Transportation (MDOT) Region** – The Michigan Department of Transportation (MDOT) has divided up the state into seven regions. Each region handles transportation-related construction, maintenance and programs within each region's geographic boundaries. Regional offices are managed by professional engineers who are trained to direct and oversee the transportation activities and programs of their respective regions. – (gis-michigan.opendata.arcgis.com)

**Michigan Prosperity Regions** – Ten prosperity regions were created for the Regional Prosperity Initiative. The Regional Prosperity Initiative is comprised of two parts, an effort by the State of Michigan to align around a common set of service boundaries to create a better structure for collaboration and a local voluntary grant initiative. – (gis-michigan.opendata.arcgis.com)

**Michigan Transportation Plan (MITP)** – A 25-year plan for transforming Michigan's transportation system. MDOT is reaffirming the current plan by evaluating its inputs, forecasts and strategies against current trends and is extending the horizon year to 2040. – (michigan.gov)

**National Plan of Integrated Airport Systems (NPIAS)** – The National Plan of Integrated Airport Systems (NPIAS) identifies nearly 3,400 existing and proposed airports that are significant to national air transportation and thus eligible to receive Federal grants under the Airport Improvement Program (AIP). It also includes estimates of the amount of AIP money needed to fund infrastructure development projects that will bring these airports up to current design standards and add capacity to congested airports. The FAA is required to provide Congress with a 5-year estimate of AIP eligible development every two years. – (faa.gov)

**Non-Precision Approach** – A standard instrument approach procedure in which no electronic glideslope is provided. – (FAA Pilot/Controller Glossary)

**Off-Airport Impacts** – Off-airport expenditures made by air travelers who are visiting from outside the region. Off-airport spending includes expenditures by general aviation pilots and passengers as well as commercial service passengers arriving via the 18 commercial service airports. Off-airport direct impacts are also reported as jobs, income, and output. – (2017 MASP)

**On-Airport Impacts** – Impacts that represent economic activities that occur on airport grounds. Aviation related activities are those that would not occur without the airport, such as terminal services for passengers and pilots, aircraft maintenance, and security provided by the Transportation Security Administration (TSA). Impacts are reported as jobs, income, and output: - (2017 MASP)

**Jobs** are those positions which are created as a result of the aviation industry in Michigan. These positions are supported through the business sales/budget expenditures that are made.

**Income** refers to payroll. This includes the amount of money earned in a calendar year by an employee, as well as benefits, which are paid by an employer from the business sales that they earn.

**Output** refers to business sales or budget expenditures.

**Pavement Condition Index (PCI) Survey** – A pavement condition rating standard for airfield pavements performed as part of a Pavement Management Program (PMP). The PCI is a numerical indicator that reflects the structural integrity and surface operational condition of a pavement. – (AC 150/5380-7B)

**Population Center** – A minor civil division of 5,000 or more people with a population density of 250 or more per square mile. – (2017 MASP)

**Precision Approach** – A standard instrument approach procedure in which an electronic glideslope/or other type of glidepath is provided. – (FAA Pilot/Controller Glossary)

**Primary Runway** – A runway constructed strictly to meet airport capacity needs, aligned as closely as possible to the prevailing wind. – (AC 150/5325-4C)

**Reliever Airport** - Airport designated by the FAA to relieve congestion at commercial service airports and to provide improved general aviation access to the overall community. These may be publicly or privately-owned. – (faa.gov)

**Rotating Beacon** – A visual Navigational Aid (NAVAID) operated at many airports. At civil airports, alternating white and green flashes indicate the location of the airport. At military airports, the beacons flash alternately white and green, but are differentiated from civil beacons by dual-peaked (two quick) white flashes between the green flashes. – (FAA Pilot/Controller Glossary)

**Runway** - A defined rectangular surface on an airport prepared or suitable for the landing or takeoff of aircraft. – (AC 150/5300-13A)

**Runway Edge Lights** – Used to outline usable operational areas of airports during periods of darkness and low visibility weather conditions. Types of runway edge lights found at airports in Michigan include: – (AC 150/5340-30H)

**HIRL** – High Intensity Runway Edge Lights.

**LIRL** – Low Intensity Runway Edge Lights.

**MIRL** – Medium Intensity Runway Edge Lights.

**Non-Standard Lighting** – Lighting that does not meet FAA standards and has improper spacing, color or placement.

**Runway End Identifier Lights (REIL)** - Two synchronized flashing lights, one on each side of the runway threshold, which provide rapid and positive identification of the approach end of a particular runway. – (FAA Pilot/Controller Glossary)

**Runway Pavement** – Designed and constructed to provide adequate support for the loads imposed by airplanes and to produce a firm, stable, smooth, skid resistant, year-round, all-weather surface free of debris or other particles that can be blown or picked up by propeller wash or jet blast. Types of runway pavement found at airports in Michigan include: – (AC 150/5320-6F)

**Segmented Circle** – A system of visual indicators designed to provide traffic pattern information at airports without operating control towers. – (FAA Pilot/Controller Glossary)

**Snow Removal Equipment** – Equipment used by airport operators to maintain runways and taxiways to a “no worse than wet” condition during winter storms. – (AC 150/5220-20A)

**Statewide Impacts** – The contributions of airports to the Michigan state economy as a whole. – (2017 MASP)

**Taxilane** – A taxiway designed for low speed and precise taxiing. Taxilanes are usually, but not always, located outside the movement area, providing access from taxiways (usually an apron taxiway) to aircraft parking positions and other terminal areas. – (AC 150/5300-13A)

**Taxiway** – A defined path established for the taxiing of aircraft from one part of the airport to another. – (AC 150/5300-13A)

**Full Parallel Taxiway** – A parallel taxiway running the full length of the runway.

**Partial Parallel Taxiway** – A parallel taxiway running less than full length of the runway.

**Connecting Taxiway** – A taxiway between a runway to either another taxiway or apron.

**Terminal Area Forecast (TAF)** – The official forecast of aviation activity, both aircraft and enplanements, at FAA facilities. This includes FAA-towered airports, federally contracted towered airports, non-federal towered airports, and many non-towered airports. – (AC 150/5070-6B)

**Tie-Down** – Positions on the ground surface available for securing aircraft. (ACRP Report 113)

**Tourism/Convention Area** – Counties with at least \$75 million of total visitor spending in 2014. – (2015 MEDC Study)

**Transportation Security Administration (TSA)** – Protects the nation’s transportation systems to ensure freedom of movement for people and commerce while providing the most effective transportation security in the most efficient way as a high performing counterterrorism organization. – (tsa.gov)

**Unmanned Aircraft System (UAS)** – An aircraft operated without the possibility of direct human intervention from within or on the aircraft. – (AC 107-2)

**Visual Approach** – An approach conducted on an instrument flight rules (IFR) flight plan which authorizes the pilot to proceed visually and clear of clouds to the airport. – (FAA Pilot/Controller Glossary)

**Visual Glide Slope Indicator (VGSI)** – Visual indicators to the pilot during landing. Types of VGSIs found at Michigan airports include:

**Precision Approach Path Indicator (PAPI)** – An airport lighting facility, providing vertical approach slope guidance to aircraft during approach to landing. – (FAA Pilot/Controller Glossary)

**Visual Approach Slope Indicator (VASI)** – An airport lighting facility providing vertical visual approach slope guidance to aircraft during approach to landing by radiating a directional pattern of high intensity red and white focused light beams which indicate to the pilot that he/she is “on path.” – (FAA Pilot/Controller Glossary)

**Weather Briefing System (Pilot Briefing)** – A service provided by the Flight Service Station (FSS) to assist pilots in flight planning. Briefing items may include weather information, Notice to Airmen (NOTAMs), military activities, flow control information, and other items as requested. – (FAA AIM)





## Appendix A: Airport Forecasts



# Appendix A: Airport Forecasts

This appendix presents the historical and forecast data for each airport in the Michigan Aviation System, listing the airports alphabetically by airport name. The information is presented in the following formats:

- Table presenting operations and based aircraft. Ten years of historical data (2005 to 2015) is shown, where available, as well as data for forecast years 2020, 2025, 2030 and 2035. Operations are segmented by type:
  - Itinerant Air Carrier
  - Itinerant Air Taxi
  - Itinerant GA
  - Itinerant Military
  - Local GA
  - Local Military
  - Total Operations
- Graph of total operations
- Graph of total based aircraft

The growth rate shown is the compounded annual growth rate of operations from 2015 to 2035.

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## Lenawee County (ADG)

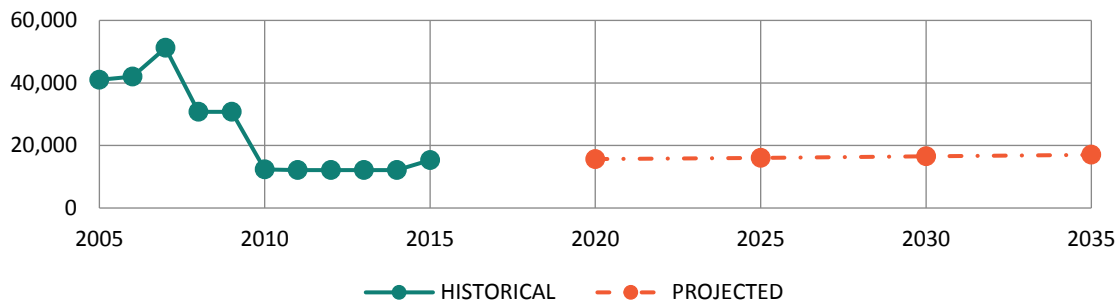
Adrian, MI

Growth Rate (2015-2035): 0.53%

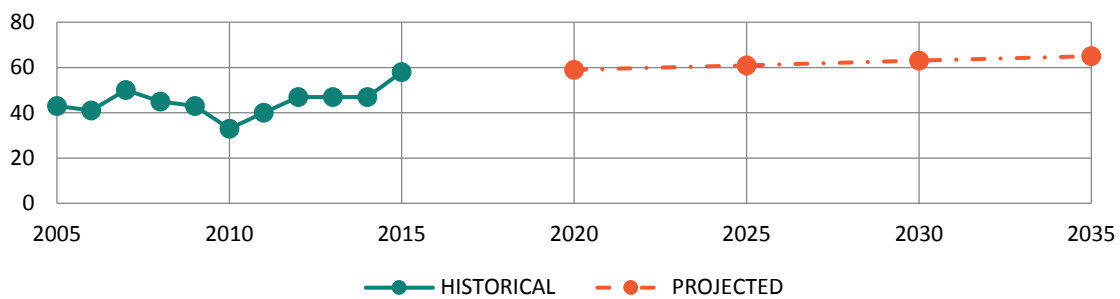
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	1,500	7,906	0	31,624	0	41,030	43
2006	0	0	8,398	0	33,598	0	41,996	41
2007	0	0	10,239	0	40,961	0	51,200	50
2008	0	0	10,239	0	20,480	0	30,719	45
2009	0	0	10,239	0	20,480	0	30,719	43
2010	0	0	4,158	0	8,216	0	12,374	33
2011	0	0	4,075	0	8,052	0	12,127	40
2012	0	0	4,075	0	8,052	0	12,127	47
2013	0	0	4,075	0	8,052	0	12,127	47
2014	0	0	4,075	0	8,052	0	12,127	47
2015	0	135	145	25	15,000	0	15,305	58
Projected								
2020	0	138	148	25	15,345	0	15,656	60
2025	0	142	152	25	15,727	0	16,046	62
2030	0	146	156	25	16,173	0	16,500	64
2035	0	150	161	25	16,664	0	17,000	66

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Padgham Field (35D)

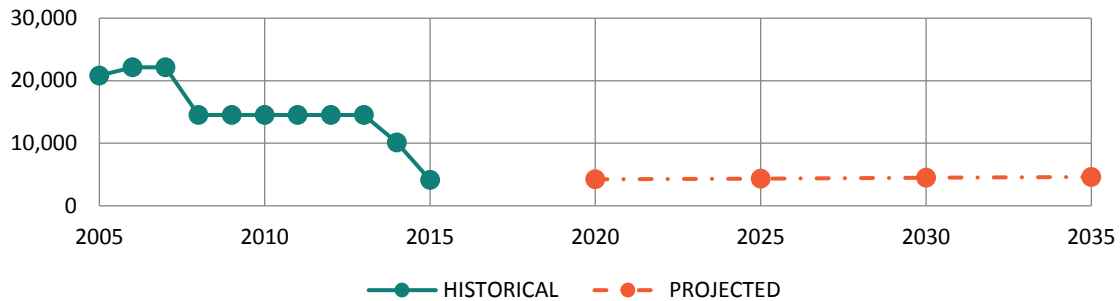
Allegan, MI

Growth Rate (2015-2035): 0.53%

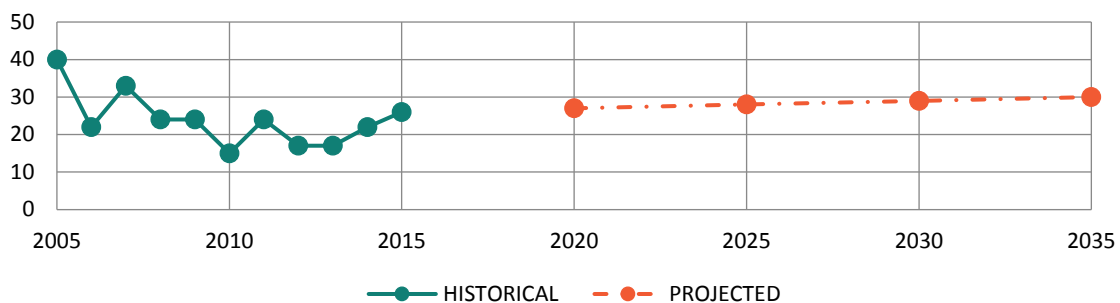
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	100	6,275	0	14,455	0	20,830	40
2006	0	100	17,614	0	4,428	0	22,142	22
2007	0	100	17,614	0	4,428	0	22,142	33
2008	0	100	10,000	0	4,428	0	14,528	24
2009	0	100	10,000	0	4,428	0	14,528	24
2010	0	100	10,000	0	4,428	0	14,528	15
2011	0	100	10,000	0	4,428	0	14,528	24
2012	0	100	10,000	0	4,428	0	14,528	17
2013	0	100	10,000	0	4,428	0	14,528	17
2014	0	100	5,000	0	5,000	0	10,100	22
2015	0	0	150	0	4,000	0	4,150	26
Projected								
2020	0	0	170	0	4,075	0	4,245	27
2025	0	0	174	0	4,178	0	4,352	28
2030	0	0	179	0	4,298	0	4,477	29
2035	0	0	184	0	4,425	0	4,609	30

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Gratiot Community (AMN)

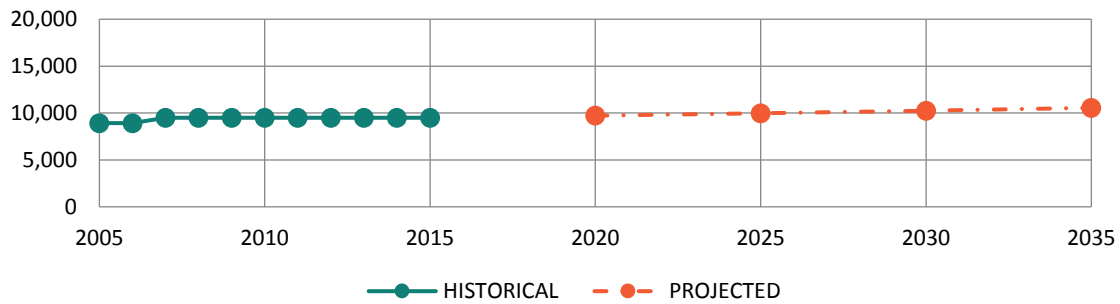
Alma, MI

Growth Rate (2015-2035): 0.53%

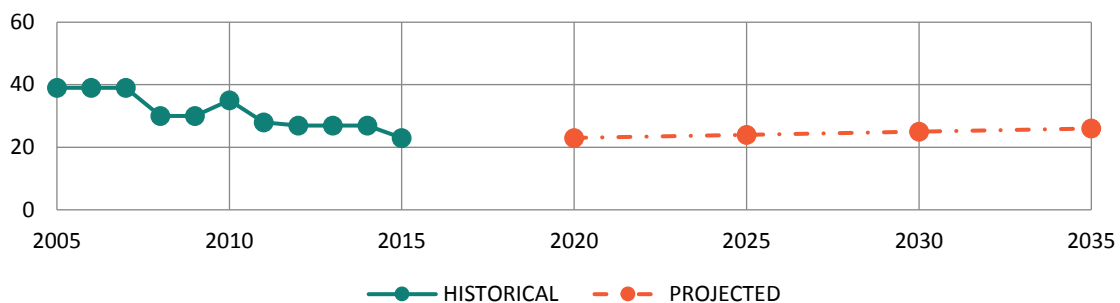
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	3,570	0	5,354	0	8,924	39
2006	0	0	3,570	0	5,354	0	8,924	39
2007	0	0	4,000	0	5,500	0	9,500	39
2008	0	0	4,000	0	5,500	0	9,500	30
2009	0	0	4,000	0	5,500	0	9,500	30
2010	0	0	4,000	0	5,500	0	9,500	35
2011	0	0	4,000	0	5,500	0	9,500	28
2012	0	0	4,000	0	5,500	0	9,500	27
2013	0	0	4,000	0	5,500	0	9,500	27
2014	0	0	4,000	0	5,500	0	9,500	27
2015	0	440	4,380	0	5,475	320	10,615	39
Projected								
2020	0	450	4,484	0	5,605	320	10,859	40
2025	0	462	4,600	0	5,750	320	11,132	42
2030	0	476	4,736	0	5,920	320	11,451	43
2035	0	490	4,880	0	6,100	320	11,790	44

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Alpena County Regional (APN)

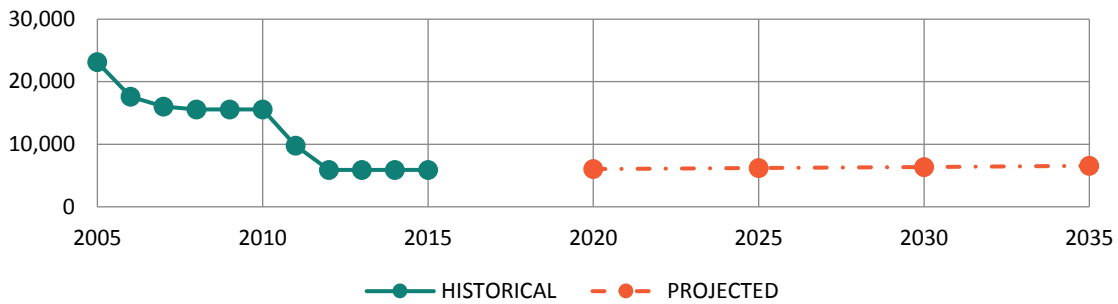
Alpena, MI

Growth Rate (2015-2035): 0.53%

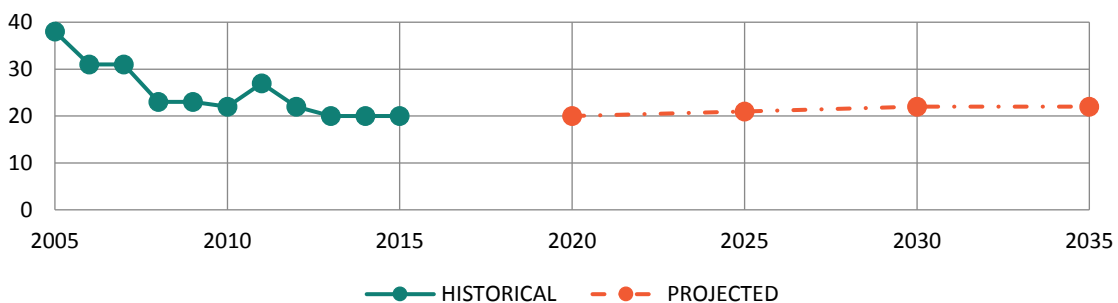
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	3,300	5,400	5,227	7,000	2,200	0	23,127	38
2006	2,329	5,400	3,929	3,778	2,200	0	17,636	31
2007	2,332	4,028	3,831	3,135	2,700	0	16,026	31
2008	2,336	4,028	2,700	3,831	2,700	0	15,595	23
2009	2,336	4,028	2,700	3,831	2,700	0	15,595	23
2010	2,336	4,028	2,700	3,831	2,700	0	15,595	22
2011	1,962	0	143	3,810	3,875	0	9,790	27
2012	1,340	0	143	2,581	1,838	0	5,902	22
2013	1,340	0	143	2,581	1,838	0	5,902	20
2014	1,340	0	143	2,581	1,838	0	5,902	20
2015	1,340	0	143	2,581	1,838	0	5,902	20
Projected								
2020	1,394	0	149	2,581	1,913	0	6,037	21
2025	1,456	0	155	2,581	1,997	0	6,190	21
2030	1,528	0	163	2,581	2,095	0	6,367	22
2035	1,603	0	171	2,581	2,199	0	6,555	23

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft





## Ann Arbor Municipal (ARB)

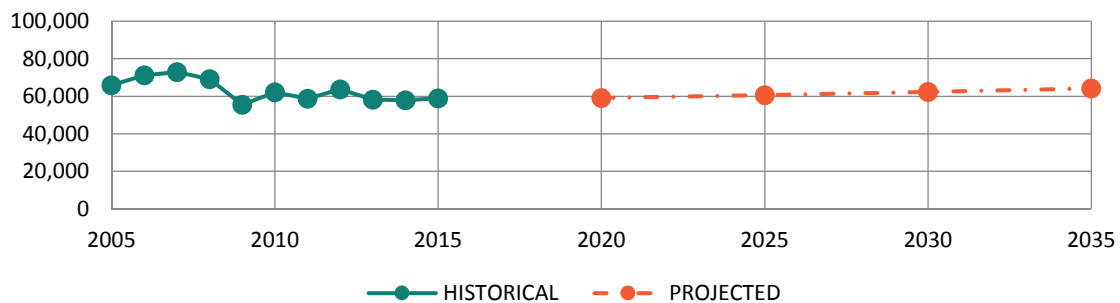
Ann Arbor, MI

Growth Rate (2015-2035): 0.53%

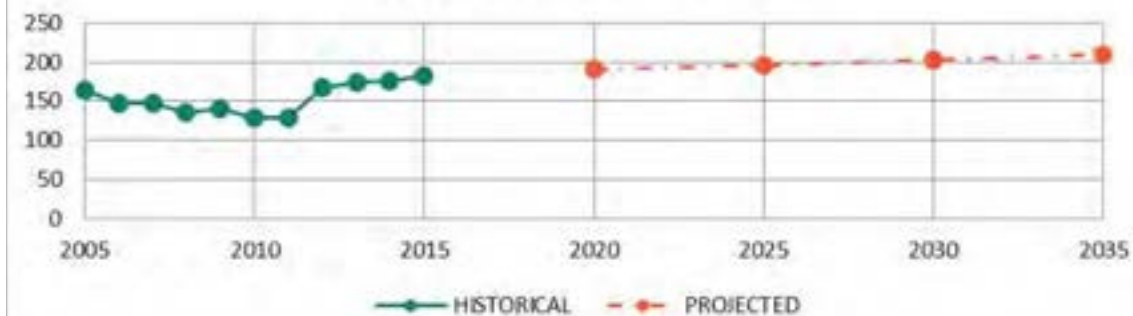
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	1,989	24,748	80	39,122	5	65,944	164
2006	0	2,210	25,822	247	42,971	0	71,250	148
2007	0	1,862	26,137	238	44,658	0	72,895	148
2008	0	1,532	23,436	61	44,136	2	69,167	136
2009	0	415	20,953	14	34,140	2	55,524	141
2010	12	232	20,775	22	41,096	13	62,150	129
2011	16	227	20,891	40	37,509	2	58,685	129
2012	6	481	23,694	53	39,488	1	63,723	168
2013	2	538	22,241	42	35,411	4	58,238	175
2014	2	513	21,701	38	35,599	4	57,857	176
2015	5	489	22,403	62	36,000	16	58,975	183
Projected								
2020	5	500	22,918	62	36,828	16	60,329	191
2025	5	513	23,497	62	37,757	16	61,850	196
2030	5	517	23,686	62	38,061	16	62,347	202
2035	6	543	24,887	62	39,991	16	65,505	209

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Atlanta Municipal (Y93)

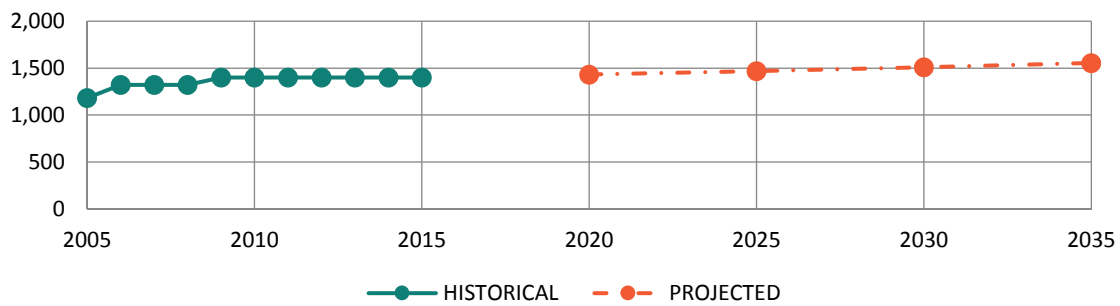
Atlanta, MI

Growth Rate (2015-2035): 0.53%

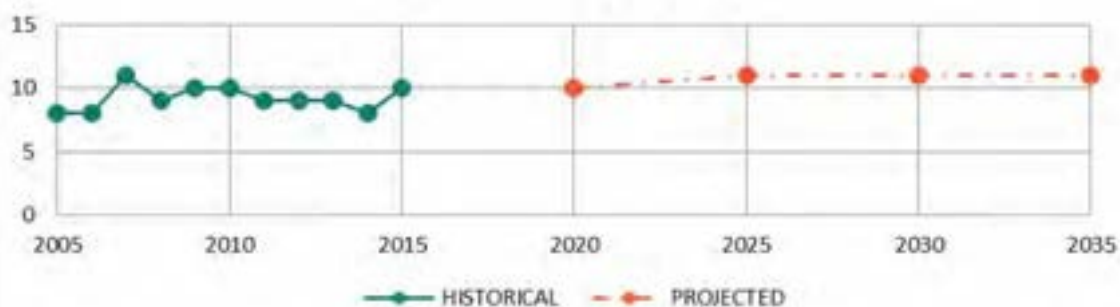
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	709	0	472	0	1,181	8
2006	0	0	794	0	529	0	1,323	8
2007	0	0	794	0	529	0	1,323	11
2008	0	0	794	0	529	0	1,323	9
2009	0	0	700	0	700	0	1,400	10
2010	0	0	700	0	700	0	1,400	10
2011	0	0	700	0	700	0	1,400	9
2012	0	0	700	0	700	0	1,400	9
2013	0	0	700	0	700	0	1,400	9
2014	0	0	700	0	700	0	1,400	8
2015	0	0	700	0	700	0	1,400	10
Projected								
2020	0	0	716	0	716	0	1,432	10
2025	0	0	734	0	734	0	1,468	11
2030	0	0	755	0	755	0	1,510	11
2035	0	0	778	0	778	0	1,555	11

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Huron County Memorial (BAX)

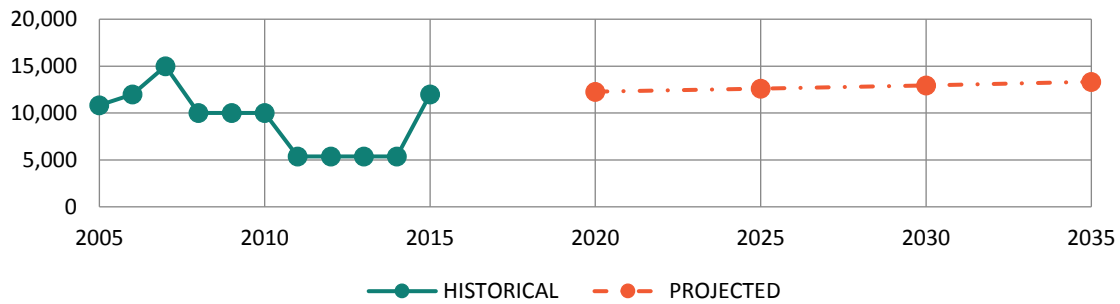
Bad Axe, MI

Growth Rate (2015-2035): 0.53%

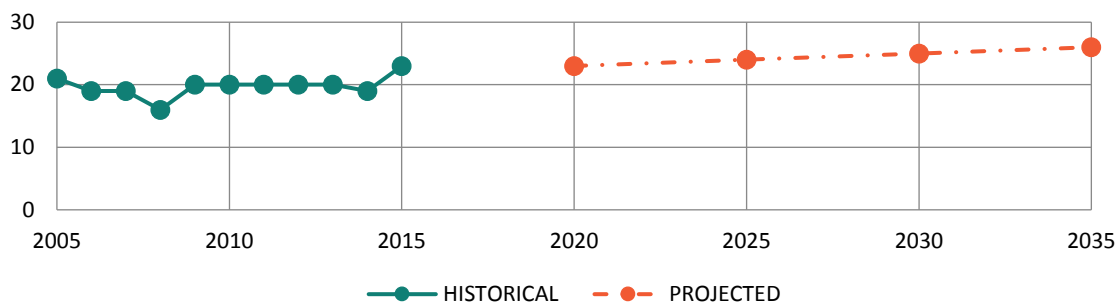
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	5,412	0	5,412	0	10,824	21
2006	0	0	6,000	0	6,000	0	12,000	19
2007	0	0	9,000	0	6,000	0	15,000	19
2008	0	0	6,000	0	4,000	0	10,000	16
2009	0	0	6,000	0	4,000	0	10,000	20
2010	0	0	6,000	0	4,000	0	10,000	20
2011	0	0	3,222	0	2,148	0	5,370	20
2012	0	0	3,222	0	2,148	0	5,370	20
2013	0	0	3,222	0	2,148	0	5,370	20
2014	0	0	3,222	0	2,148	0	5,370	19
2015	0	2,000	3,500	0	6,500	0	12,000	23
Projected								
2020	0	2,046	3,580	0	6,649	0	12,275	23
2025	0	2,098	3,671	0	6,817	0	12,585	24
2030	0	2,158	3,776	0	7,012	0	12,946	25
2035	0	2,222	3,888	0	7,220	0	13,329	26

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft

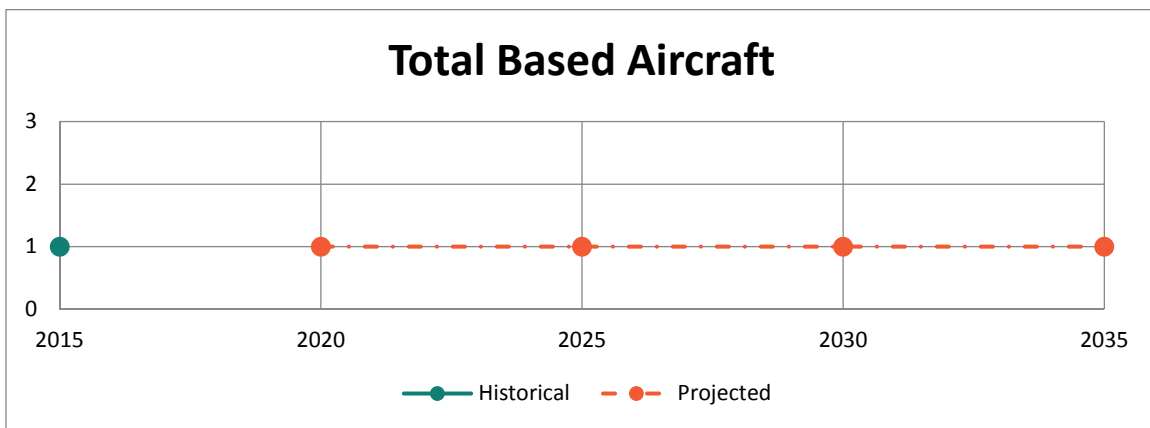
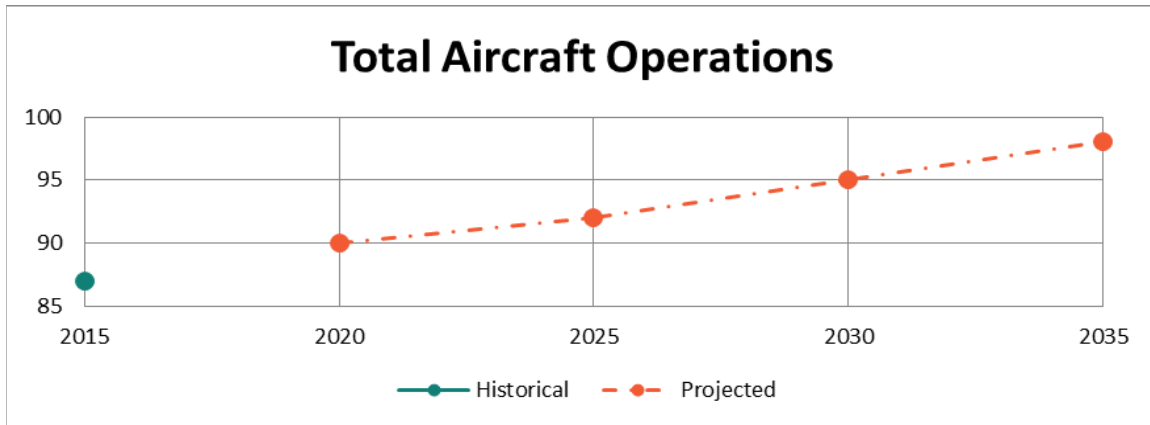


**Baldwin Municipal (7D3)****Baldwin, MI**

Growth Rate (2015-2035): 0.60

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	80				6	1	87	1
Projected								
2020	83				6	1	90	1
2025			85	6	1		92	1
2030	88				6	1	95	1
2035			91	6	1		98	1

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



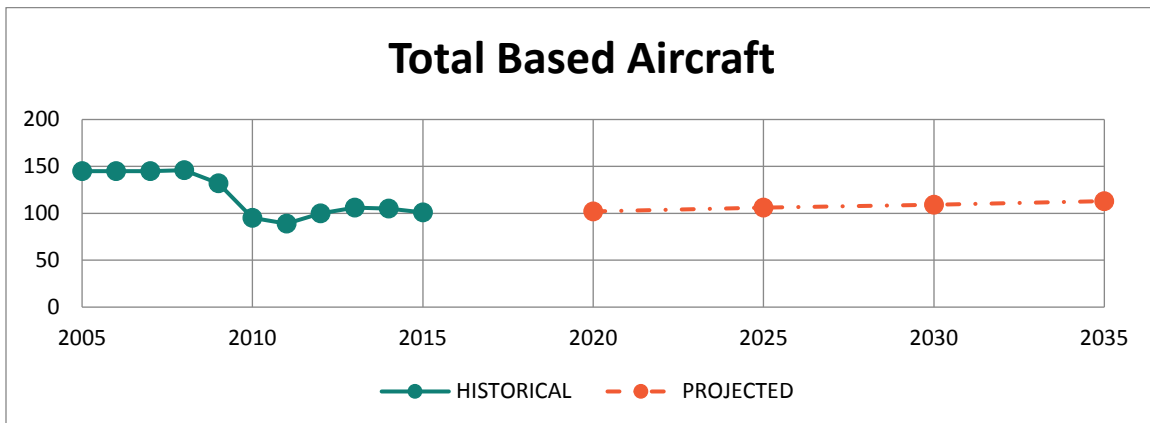
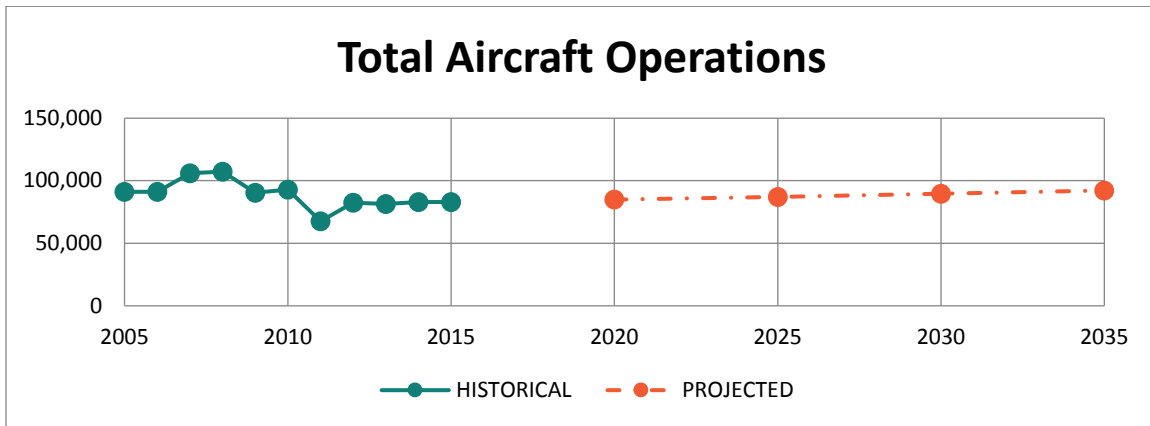
## W. K. Kellogg (BTL)

Battle Creek, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	39	986	46,966	3,542	38,888	830	91,251	145
2006	22	960	47,220	3,074	39,208	656	91,140	145
2007	38	908	48,173	2,862	53,713	440	106,134	145
2008	29	734	43,763	2,650	59,112	940	107,228	146
2009	19	594	37,391	754	50,790	737	90,285	132
2010	18	572	38,380	1,086	52,189	795	93,040	95
2011	21	478	28,755	1,292	36,461	611	67,618	89
2012	8	677	31,442	1,339	48,036	895	82,397	100
2013	9	727	30,092	883	48,967	840	81,518	106
2014	69	926	30,274	463	50,358	933	83,023	105
2015	14	1,107	29,325	610	49,540	2,427	83,023	101
Projected								
2020	14	1,133	30,024	610	50,720	2,427	84,929	104
2025	15	1,163	30,809	610	52,047	2,427	87,070	108
2030	15	1,198	31,723	610	53,592	2,427	89,565	112
2035	16	1,234	32,695	610	55,233	2,427	92,215	115

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## James Clements Municipal (3CM)

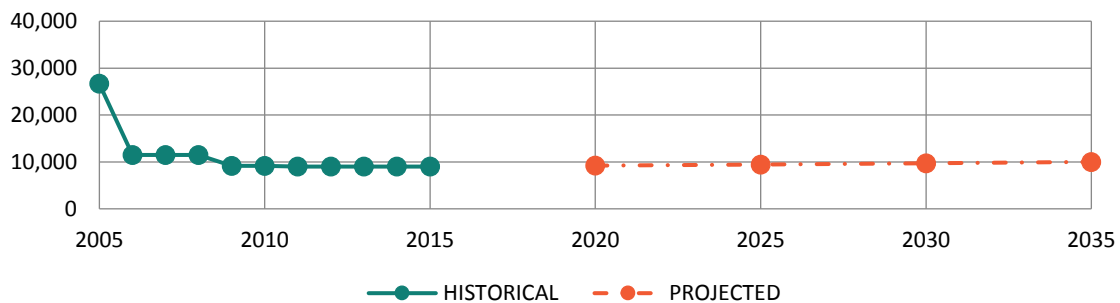
Bay City, MI

Growth Rate (2015-2035): 0.53%

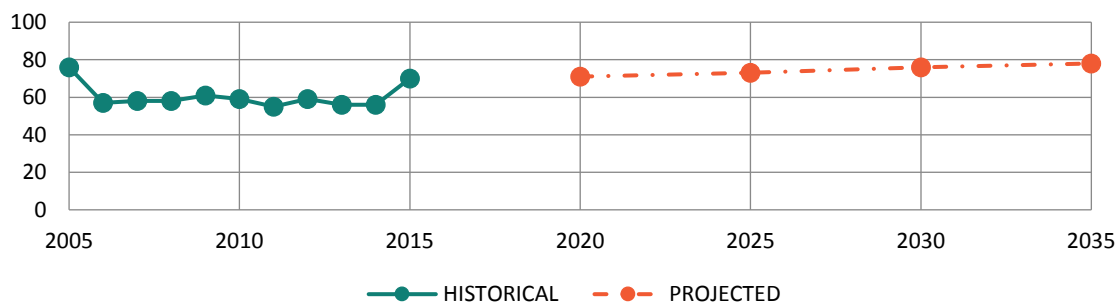
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	700	13,000	0	13,000	0	26,700	76
2006	0	0	5,745	0	5,745	0	11,490	57
2007	0	0	5,745	0	5,745	0	11,490	58
2008	0	0	5,745	0	5,745	0	11,490	58
2009	0	0	4,595	0	4,595	0	9,190	61
2010	0	0	4,595	0	4,595	0	9,190	59
2011	0	0	4,503	0	4,503	0	9,006	55
2012	0	0	4,503	0	4,503	0	9,006	59
2013	0	0	4,503	0	4,503	0	9,006	56
2014	0	0	4,503	0	4,503	0	9,006	56
2015	0	0	4,503	0	4,503	0	9,006	70
Projected								
2020	0	0	4,607	0	4,607	0	9,213	71
2025	0	0	4,723	0	4,723	0	9,445	73
2030	0	0	4,858	0	4,858	0	9,716	76
2035	0	0	5,002	0	5,002	0	10,003	78

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Beaver Island (SJX)

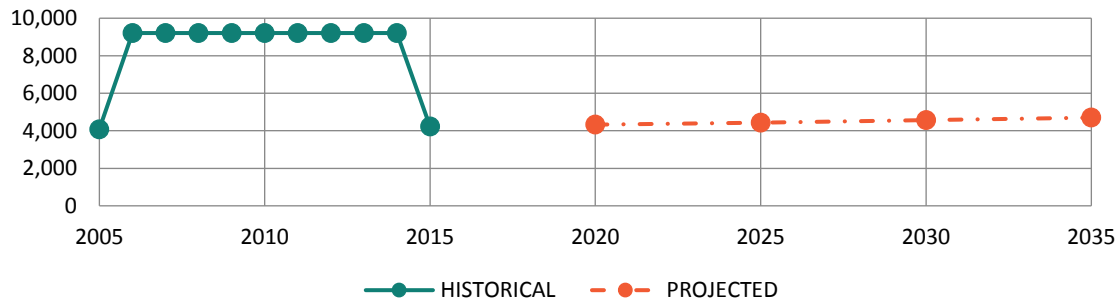
Beaver Island, MI

Growth Rate (2015-2035): 0.53%

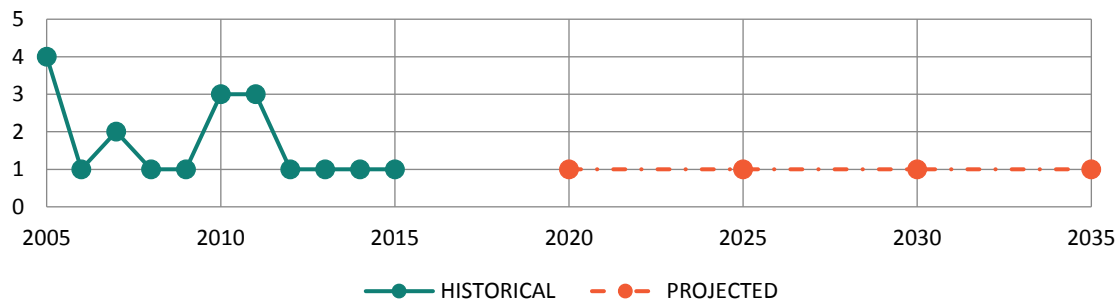
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	408	0	0	3,672	0	4,080	4
2006	0	5,510	3,700	0	0	0	9,210	1
2007	0	5,510	3,700	0	0	0	9,210	2
2008	0	5,510	3,700	0	0	0	9,210	1
2009	0	5,510	3,700	0	0	0	9,210	1
2010	0	5,510	3,700	0	0	0	9,210	3
2011	0	5,510	3,700	0	0	0	9,210	3
2012	0	5,510	3,700	0	0	0	9,210	1
2013	0	5,510	3,700	0	0	0	9,210	1
2014	0	5,510	3,700	0	0	0	9,210	1
2015	0	3,700	500	0	30	0	4,230	1
Projected								
2020	0	3,785	511	0	31	0	4,327	1
2025	0	3,880	524	0	31	0	4,436	1
2030	0	3,991	539	0	32	0	4,563	1
2035	0	4,109	555	0	33	0	4,698	1

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Antrim County (ACB)

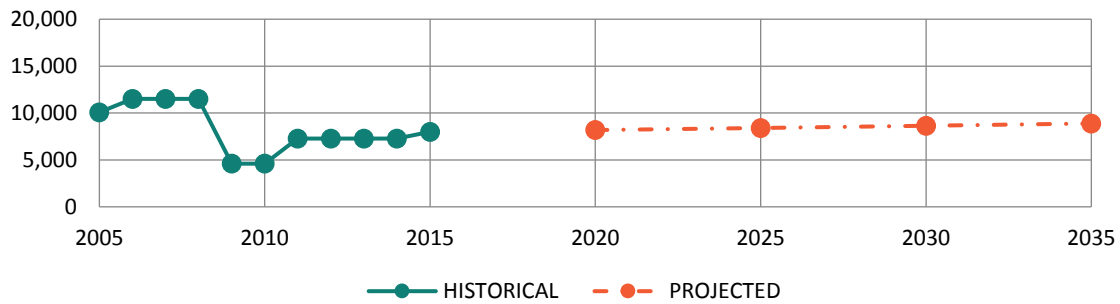
Bellaire, MI

Growth Rate (2015-2035): 0.53%

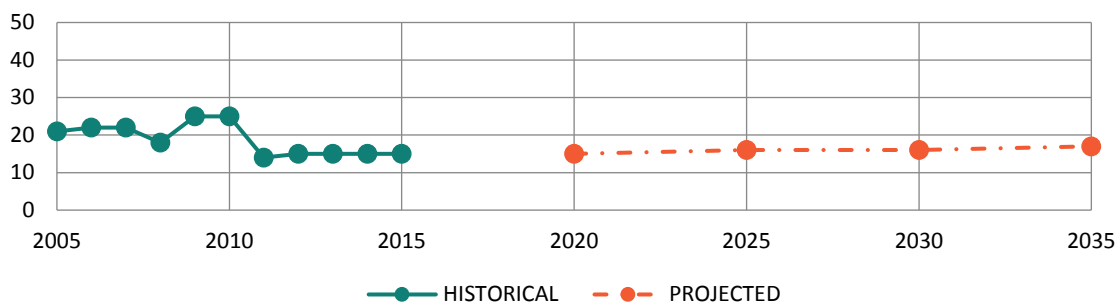
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	800	8,216	70	1,000	0	10,086	21
2006	0	0	10,301	70	1,145	0	11,516	22
2007	0	0	10,301	70	1,145	0	11,516	22
2008	0	0	10,301	70	1,145	0	11,516	18
2009	0	0	2,300	0	2,300	0	4,600	25
2010	0	0	2,300	0	2,300	0	4,600	25
2011	0	0	3,638	0	3,638	0	7,276	14
2012	0	0	3,638	0	3,638	0	7,276	15
2013	0	0	3,638	0	3,638	0	7,276	15
2014	0	0	3,638	0	3,638	0	7,276	15
2015	0	0	3,900	200	3,900	0	8,000	15
Projected								
2020	0	0	3,992	200	3,992	0	8,184	16
2025	0	0	4,095	200	4,095	0	8,390	16
2030	0	0	4,215	200	4,215	0	8,630	17
2035	0	0	4,343	200	4,343	0	8,886	17

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft





## Southwest Michigan Regional (BEH)

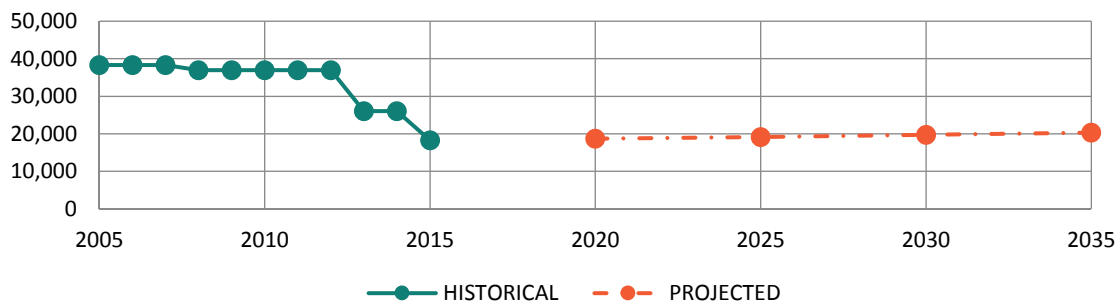
Benton Harbor, MI

Growth Rate (2015-2035): 0.53%

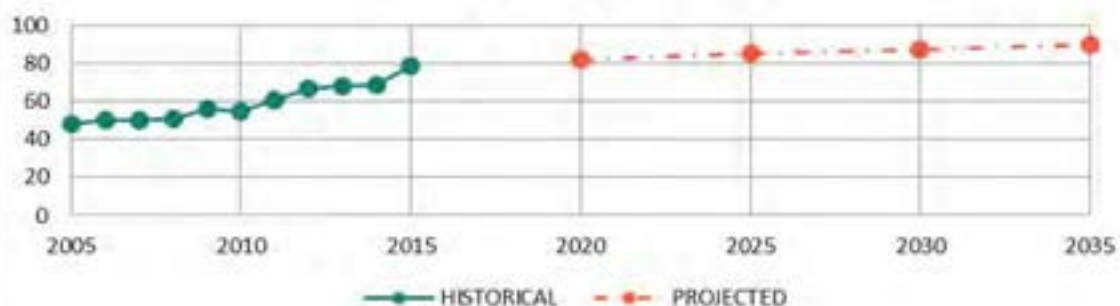
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	3,509	17,787	42	17,003	0	38,341	48
2006	0	3,509	17,787	42	17,003	0	38,341	50
2007	0	3,509	17,787	42	17,003	0	38,341	50
2008	0	600	18,405	0	17,967	0	36,972	51
2009	0	600	18,405	0	17,967	0	36,972	56
2010	0	600	18,405	0	17,967	0	36,972	55
2011	0	600	18,405	0	17,967	0	36,972	61
2012	0	600	18,405	0	17,967	0	36,972	67
2013	0	2,000	12,000	0	12,000	0	26,000	68
2014	0	2,000	12,000	0	12,000	0	26,000	69
2015	0	1,000	8,625	20	8,625	0	18,270	79
Projected								
2020	0	1,023	8,823	20	8,823	0	18,689	82
2025	0	1,049	9,046	20	9,046	0	19,161	85
2030	0	1,079	9,306	20	9,306	0	19,710	87
2035	0	1,111	9,581	20	9,581	0	20,293	90

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



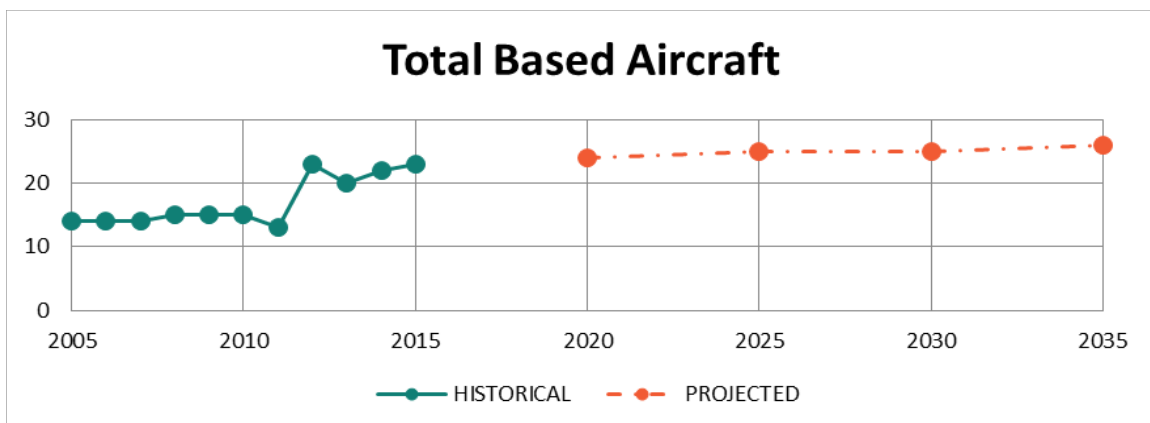
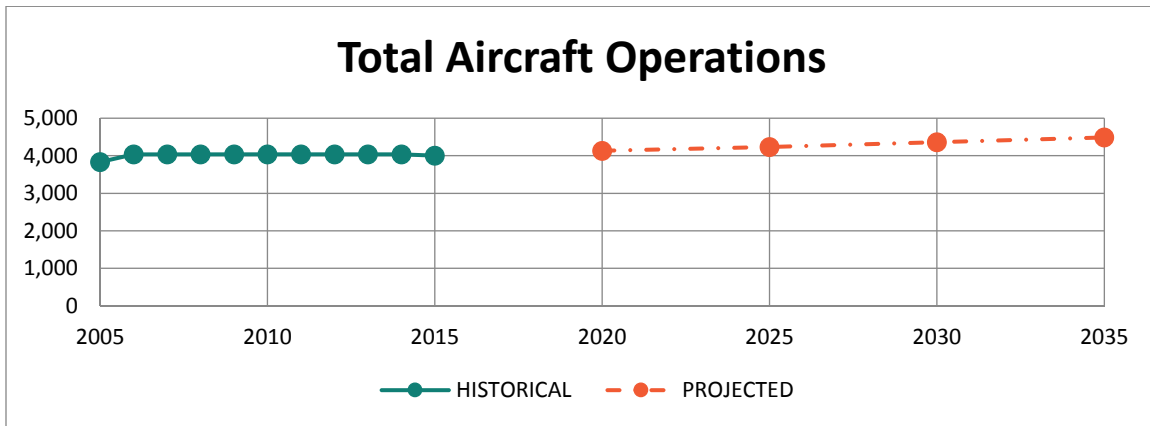
## Roben-Hood (RQB)

Big Rapids, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	2,660	30	1,140	0	3,830	14
2006	0	0	2,020	0	2,020	0	4,040	14
2007	0	0	2,020	0	2,020	0	4,040	14
2008	0	0	2,020	0	2,020	0	4,040	15
2009	0	0	2,020	0	2,020	0	4,040	15
2010	0	0	2,020	0	2,020	0	4,040	15
2011	0	0	2,020	0	2,020	0	4,040	13
2012	0	0	2,020	0	2,020	0	4,040	23
2013	0	0	2,020	0	2,020	0	4,040	20
2014	0	0	2,020	0	2,020	0	4,040	22
2015	0	0	1,100	100	2,800	0	4,000	23
Projected								
2020	0	0	1,126	100	2,866	0	4,092	24
2025	0	0	1,155	100	2,940	0	4,195	25
2030	0	0	1,189	100	3,026	0	4,315	25
2035	0	0	1,225	100	3,118	0	4,443	26

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Bois Blanc Island (6Y1)

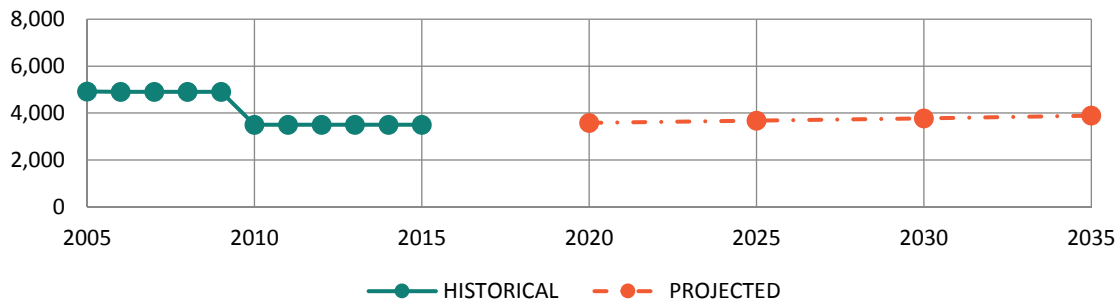
Bois Blanc Island, MI

Growth Rate (2015-2035): 0.53%

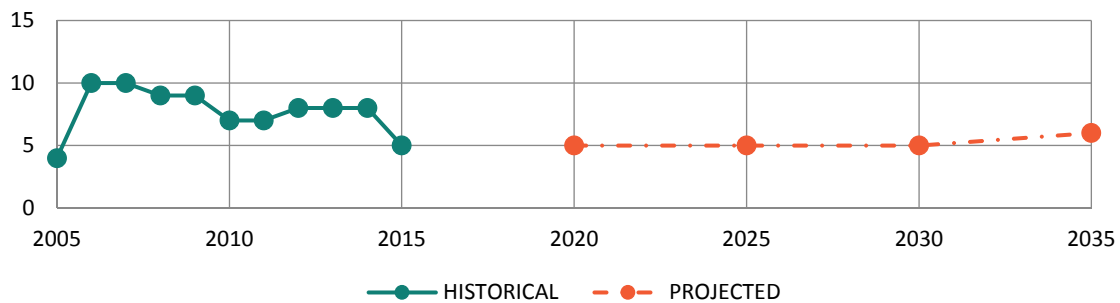
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	500	2,938	0	1,480	0	4,918	4
2006	0	500	2,783	0	1,617	0	4,900	10
2007	0	500	2,783	0	1,617	0	4,900	10
2008	0	500	2,783	0	1,617	0	4,900	9
2009	0	500	2,783	0	1,617	0	4,900	9
2010	0	500	1,500	0	1,500	0	3,500	7
2011	0	500	1,500	0	1,500	0	3,500	7
2012	0	500	1,500	0	1,500	0	3,500	8
2013	0	500	1,500	0	1,500	0	3,500	8
2014	0	500	1,500	0	1,500	0	3,500	8
2015	0	500	1,500	0	1,500	0	3,500	5
Projected								
2020	0	511	1,534	0	1,534	0	3,580	5
2025	0	524	1,573	0	1,573	0	3,671	5
2030	0	539	1,618	0	1,618	0	3,776	5
2035	0	555	1,666	0	1,666	0	3,888	6

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



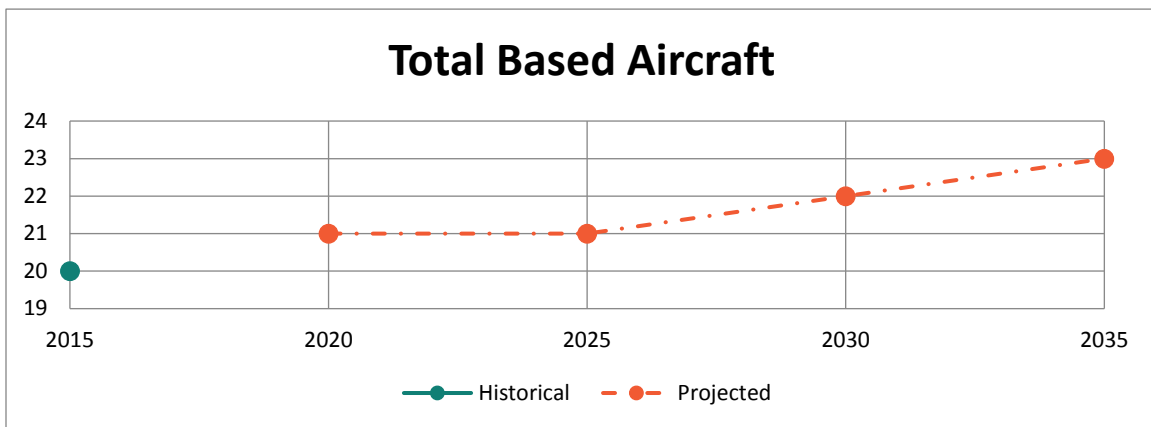
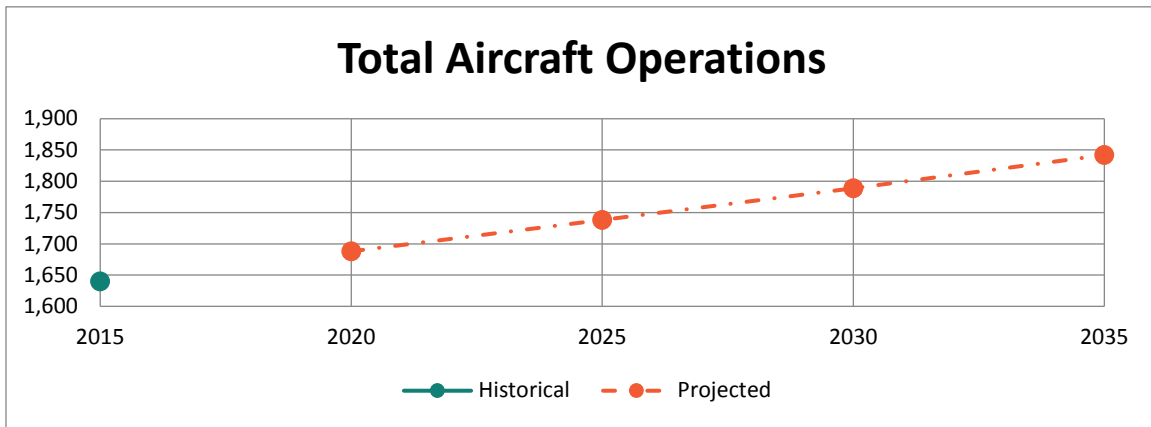
## Brighton (45G)

Brighton, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	8,800				8,800		17,600	91
Projected								
2020	9,059				9,059		18,118	94
2025			9,326		9,326		18,651	98
2030	9,600				9,600		19,200	101
2035			9,883		9,883		19,765	105

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



## Wexford County (CAD)

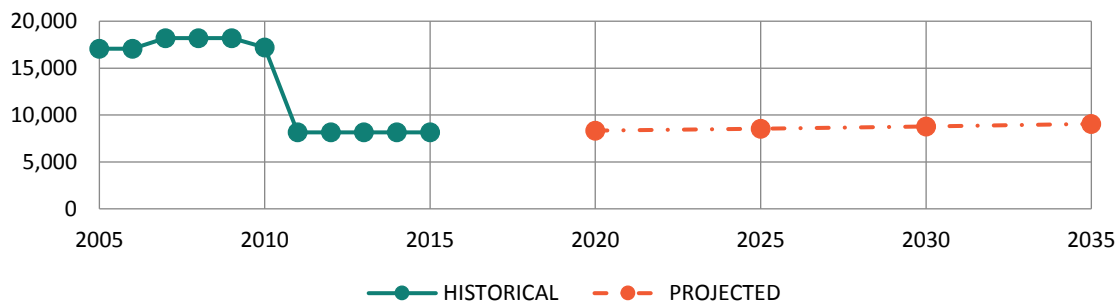
Cadillac, MI

Growth Rate (2015-2035): 11.1%

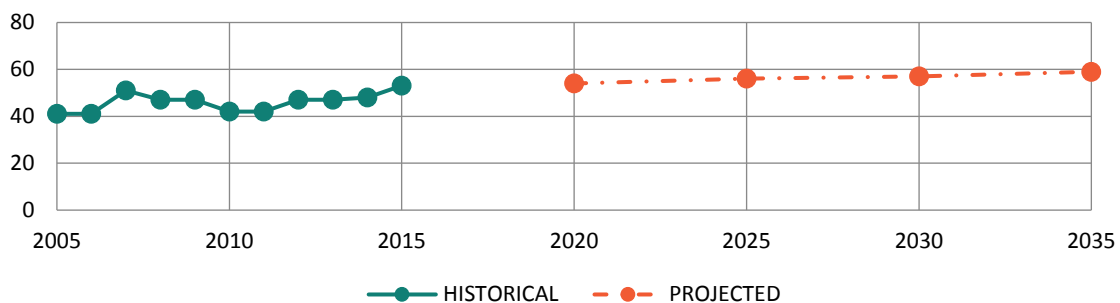
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	2,000	10,005	100	4,954	0	17,059	41
2006	0	2,000	10,005	100	4,954	0	17,059	41
2007	0	2,000	11,100	100	5,000	0	18,200	51
2008	0	2,000	11,100	100	5,000	0	18,200	47
2009	0	2,000	11,100	100	5,000	0	18,200	47
2010	0	1,000	11,100	100	5,000	0	17,200	42
2011	0	100	4,000	50	4,000	0	8,150	42
2012	0	100	4,000	50	4,000	0	8,150	47
2013	0	100	4,000	50	4,000	0	8,150	47
2014	0	100	4,000	50	4,000	0	8,150	48
2015	0	100	4,000	50	4,000	0	8,150	53
Projected								
2020	0	102	4,092	50	4,092	0	8,337	55
2025	0	105	4,196	50	4,196	0	8,547	57
2030	0	108	4,317	50	4,317	0	8,792	59
2035	0	111	4,445	50	4,445	0	9,052	60

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Tuscola Area (CFS)

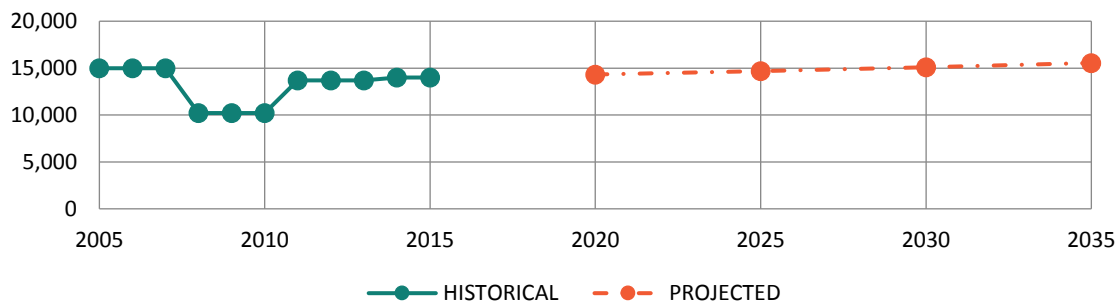
Caro, MI

Growth Rate (2015-2035): 0.53%

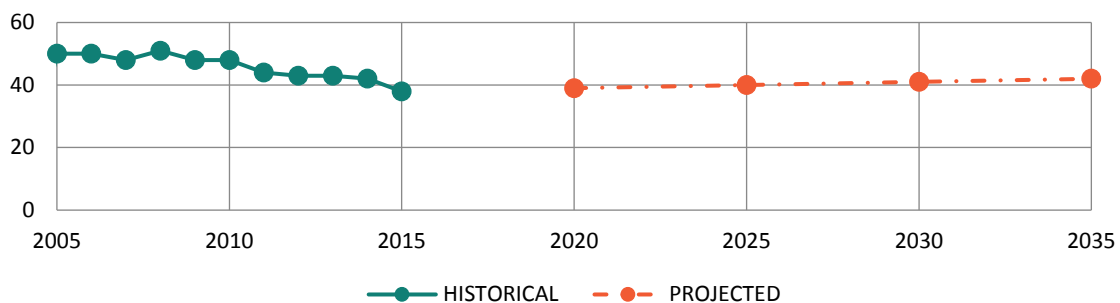
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	7,500	0	7,500	0	15,000	50
2006	0	0	7,500	0	7,500	0	15,000	50
2007	0	0	7,500	0	7,500	0	15,000	48
2008	0	0	5,100	0	5,100	0	10,200	51
2009	0	0	5,100	0	5,100	0	10,200	48
2010	0	0	5,100	0	5,100	0	10,200	48
2011	0	0	6,839	0	6,839	0	13,678	44
2012	0	0	6,839	0	6,839	0	13,678	43
2013	0	0	6,839	0	6,839	0	13,678	43
2014	0	0	7,000	0	7,000	0	14,000	42
2015	0	0	7,000	0	7,000	0	14,000	38
Projected								
2020	0	0	7,161	0	7,161	0	14,321	39
2025	0	0	7,341	0	7,341	0	14,682	41
2030	0	0	7,552	0	7,552	0	15,103	42
2035	0	0	7,775	0	7,775	0	15,550	43

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Charlevoix Municipal (CVX)

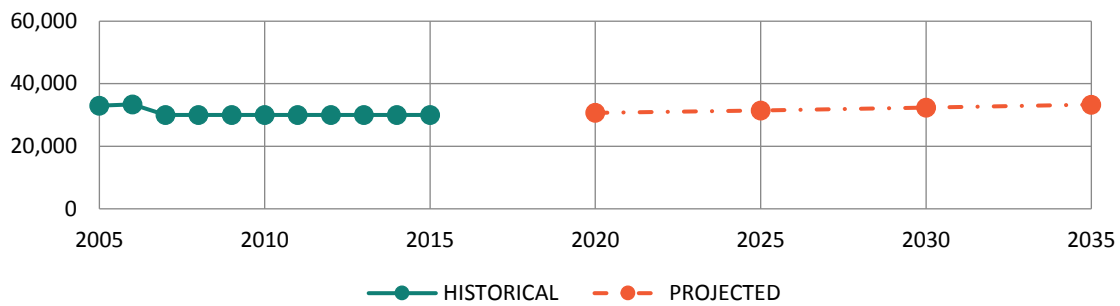
Charlevoix, MI

Growth Rate (2015-2035): 0.53%

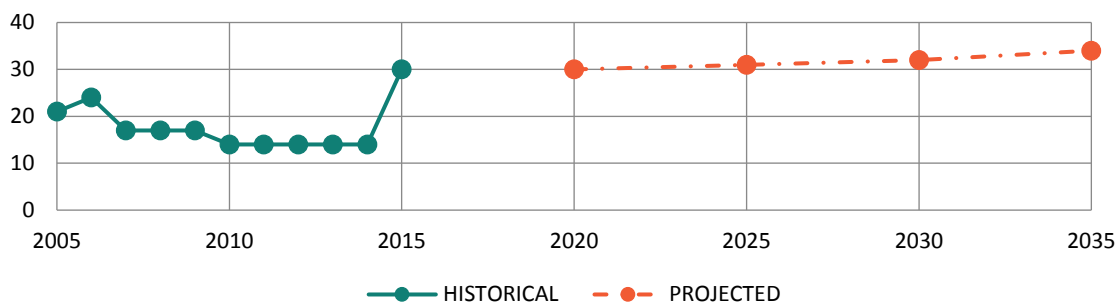
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	11,000	11,000	0	11,000	0	33,000	21
2006	0	11,128	11,120	0	11,120	0	33,368	24
2007	0	12,000	9,500	500	8,000	0	30,000	17
2008	0	12,000	9,500	500	8,000	0	30,000	17
2009	0	12,000	9,500	500	8,000	0	30,000	17
2010	0	12,000	9,500	500	8,000	0	30,000	14
2011	0	12,000	9,500	500	8,000	0	30,000	14
2012	0	12,000	9,500	500	8,000	0	30,000	14
2013	0	12,000	9,500	500	8,000	0	30,000	14
2014	0	12,000	9,500	500	8,000	0	30,000	14
2015	0	12,000	9,500	500	8,000	0	30,000	30
Projected								
2020	0	12,280	9,722	500	8,187	0	30,689	30
2025	0	12,595	9,971	500	8,396	0	31,462	31
2030	0	12,962	10,261	500	8,641	0	32,364	32
2035	0	13,351	10,570	500	8,901	0	33,322	34

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Fitch H Beach (FPK)

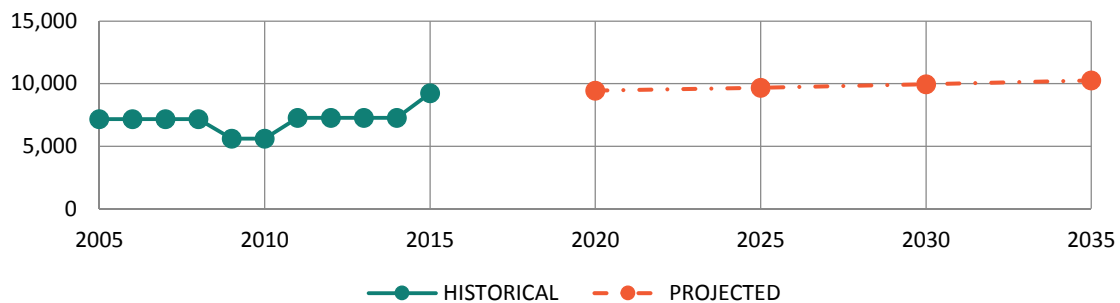
Charlotte, MI

Growth Rate (2015-2035): 0.53%

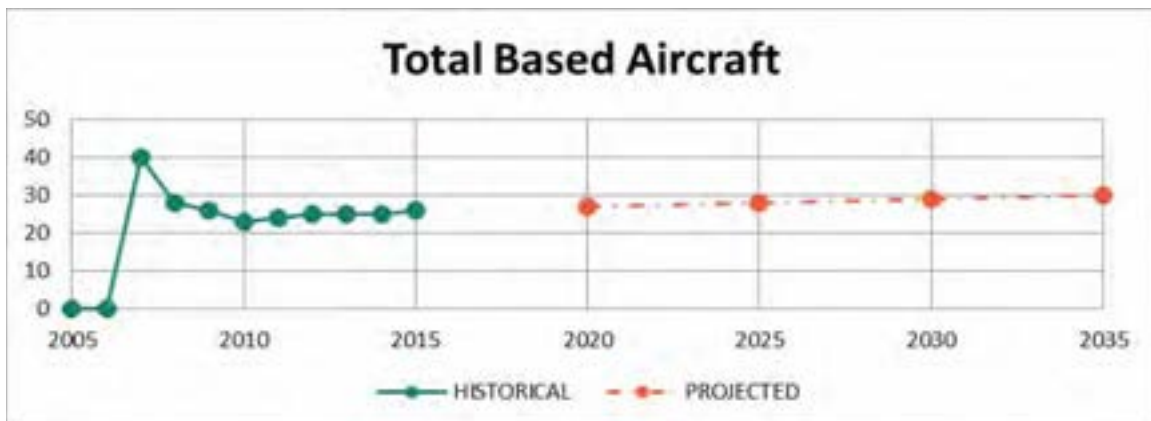
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	4,297	0	2,864	0	7,161	0
2006	0	0	4,297	0	2,864	0	7,161	0
2007	0	0	4,297	0	2,864	0	7,161	40
2008	0	0	4,297	0	2,864	0	7,161	28
2009	0	0	2,800	0	2,800	0	5,600	26
2010	0	0	2,800	0	2,800	0	5,600	23
2011	0	0	4,851	0	2,425	0	7,276	24
2012	0	0	4,851	0	2,425	0	7,276	25
2013	0	0	4,851	0	2,425	0	7,276	25
2014	0	0	4,851	0	2,425	0	7,276	25
2015	0	0	6,570	480	2,190	0	9,240	26
Projected								
2020	0	0	6,729	480	2,243	0	9,452	27
2025	0	0	6,908	480	2,303	0	9,690	28
2030	0	0	7,116	480	2,372	0	9,968	29
2035	0	0	7,337	480	2,446	0	10,263	30

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft





## Cheboygan County (SLH)

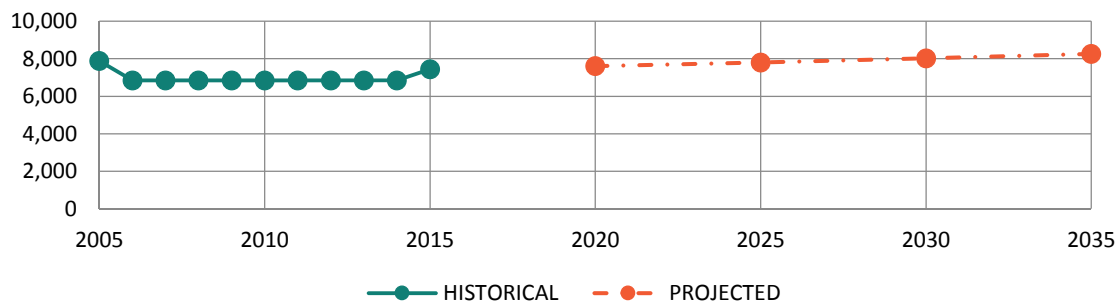
Cheboygan, MI

Growth Rate (2015-2035): 0.53%

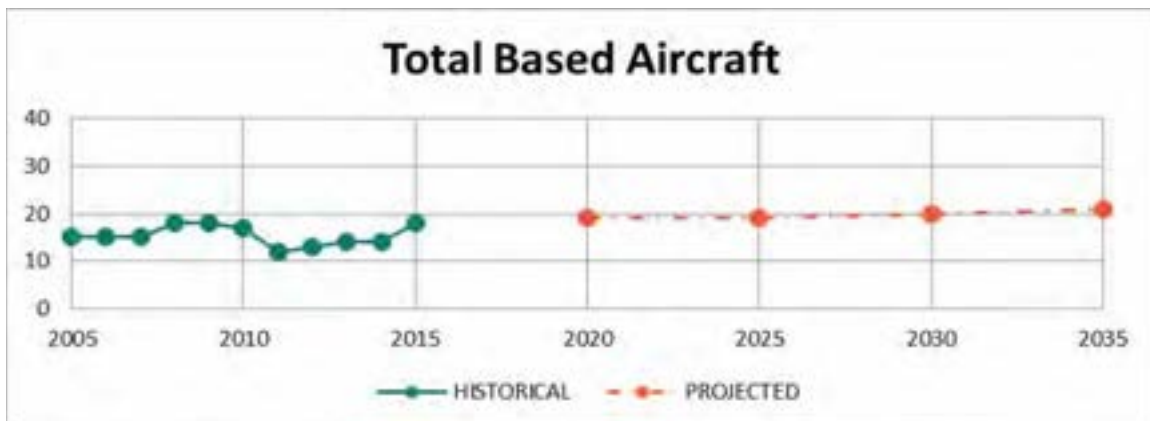
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	5,280	0	2,600	0	7,880	15
2006	0	0	3,427	0	3,427	0	6,854	15
2007	0	0	3,427	0	3,427	0	6,854	15
2008	0	0	3,427	0	3,427	0	6,854	18
2009	0	0	3,427	0	3,427	0	6,854	18
2010	0	0	3,427	0	3,427	0	6,854	17
2011	0	0	3,427	0	3,427	0	6,854	12
2012	0	0	3,427	0	3,427	0	6,854	13
2013	0	0	3,427	0	3,427	0	6,854	14
2014	0	0	3,427	0	3,427	0	6,854	14
2015	0	580	3,427	0	3,427	0	7,434	18
Projected								
2020	0	593	3,506	0	3,506	0	7,605	19
2025	0	608	3,594	0	3,594	0	7,796	19
2030	0	626	3,697	0	3,697	0	8,020	20
2035	0	644	3,806	0	3,806	0	8,257	21

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Clare Municipal (48D)

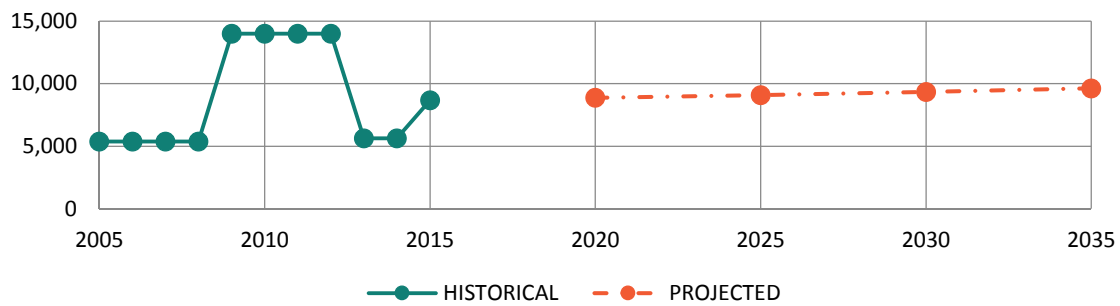
Clare, MI

Growth Rate (2015-2035): 0.53%

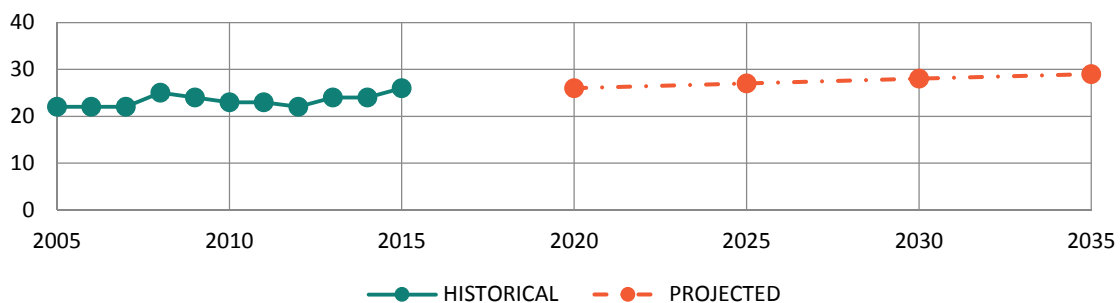
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	2,692	0	2692	0	5,384	22
2006	0	0	2,692	0	2692	0	5,384	22
2007	0	0	2,692	0	2,692	0	5,384	22
2008	0	0	2,692	0	2,692	0	5,384	25
2009	0	0	8,400	0	5,600	0	14,000	24
2010	0	0	8,400	0	5,600	0	14,000	23
2011	0	0	8,400	0	5,600	0	14,000	23
2012	0	0	8,400	0	5,600	0	14,000	22
2013	0	0	3,390	0	2,260	0	5,650	24
2014	0	0	3,390	0	2,260	0	5,650	24
2015	0	0	4,460	0	4,215	0	8,675	26
Projected								
2020	0	0	4,526	0	4,348	0	8,874	26
2025	0	0	4,640	0	4,458	0	9,098	27
2030	0	0	4,773	0	4,586	0	9,359	28
2035	0	0	4,914	0	4,722	0	9,636	29

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Branch Community Memorial (OEB)

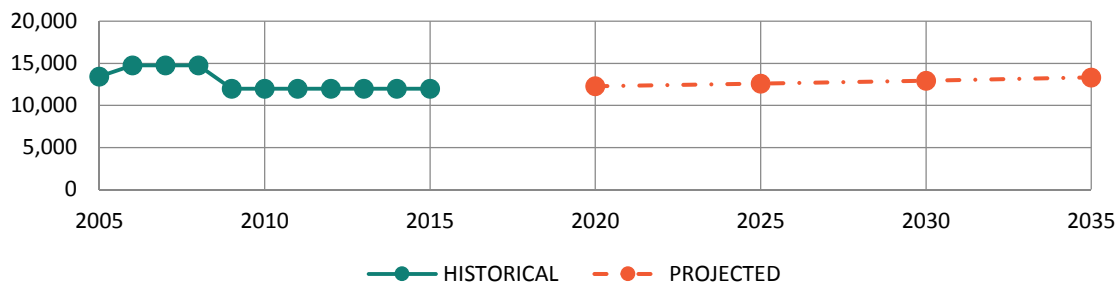
Coldwater, MI

Growth Rate (2015-2035): 0.53%

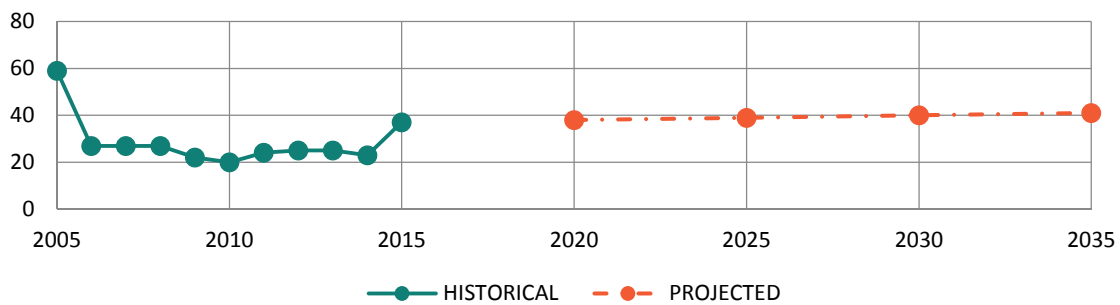
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	5,358	0	8,085	0	13,443	59
2006	0	0	8,857	0	5,904	0	14,761	27
2007	0	0	8,857	0	5,904	0	14,761	27
2008	0	0	8,857	0	5,904	0	14,761	27
2009	0	0	7,000	0	5,000	0	12,000	22
2010	0	0	7,000	0	5,000	0	12,000	20
2011	0	0	7,000	0	5,000	0	12,000	24
2012	0	0	7,000	0	5,000	0	12,000	25
2013	0	0	7,000	0	5,000	0	12,000	25
2014	0	0	7,000	0	5,000	0	12,000	23
2015	0	0	7,000	0	5,000	0	12,000	37
Projected								
2020	0	0	7,160	0	5,115	0	12,275	38
2025	0	0	7,341	0	5,244	0	12,585	39
2030	0	0	7,552	0	5,394	0	12,946	40
2035	0	0	7,775	0	5,554	0	13,329	41

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Coleman A. Young Municipal (DET)

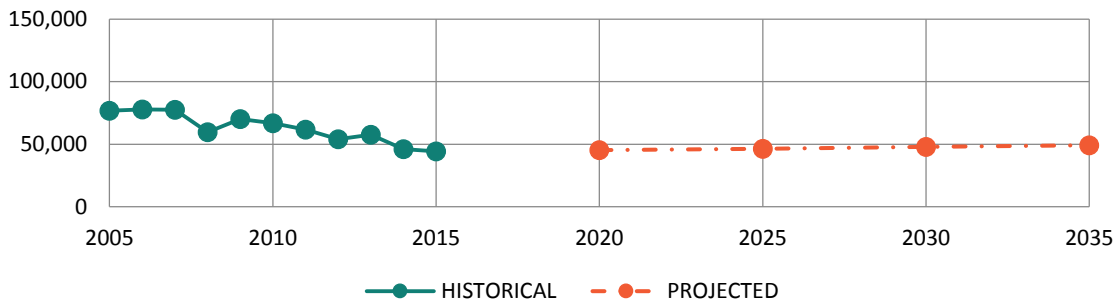
Detroit, MI

Growth Rate (2015-2035): 0.53%

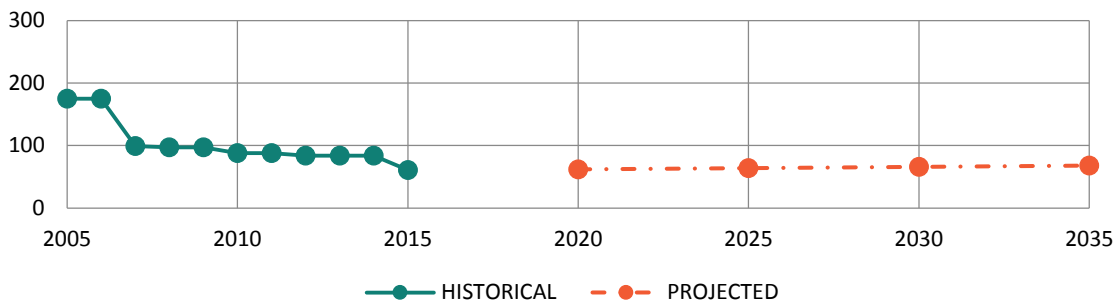
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	158	5,100	38,599	1,408	31,676	8	76,949	175
2006	149	3,463	39,125	1,816	33,354	29	77,936	175
2007	237	3,505	39,663	1,744	32,353	69	77,571	99
2008	14	2,521	27,406	117	29,641	40	59,739	97
2009	2	1,935	26,498	75	41,497	260	70,267	97
2010	5	1,560	26,178	83	38,994	86	66,906	88
2011	4	1,974	23,513	90	36,192	100	61,873	88
2012	2	2,143	20,885	76	30,898	83	54,087	84
2013	1	1,882	21,713	138	33,775	229	57,738	84
2014	61	1,854	18,565	183	25,310	108	46,081	84
2015	0	1,761	17,303	183	24,980	92	44,319	61
Projected								
2020	0	1,802	17,703	183	25,557	92	45,336	62
2025	0	1,847	18,152	183	26,205	92	46,479	64
2030	0	1,901	18,675	183	26,961	92	47,811	66
2035	0	1,957	19,231	183	27,763	92	49,226	68

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Detroit Metropolitan Wayne County (DTW)

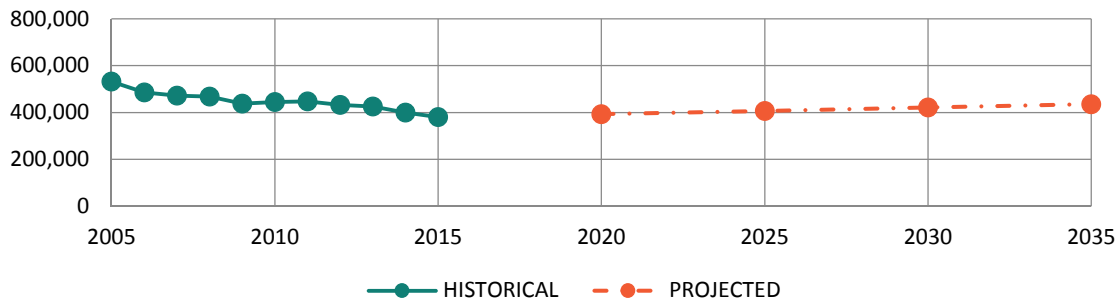
Detroit, MI

Growth Rate (2015-2035): 0.69%

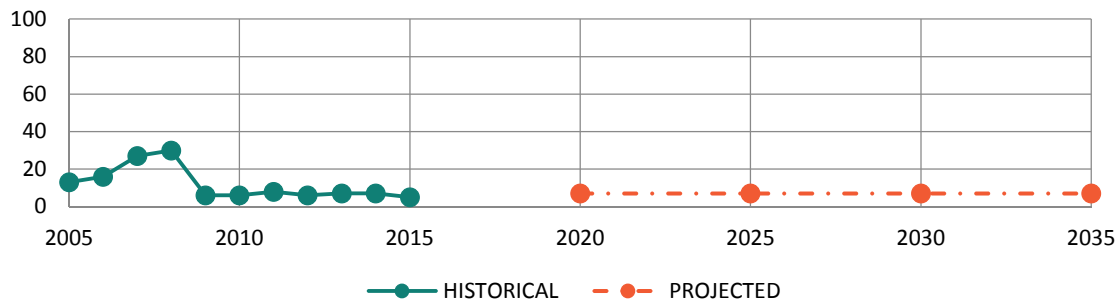
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	325,415	191,394	13,599	229	1,125	15	531,777	13
2006	287,793	185,109	12,280	91	561	14	485,848	16
2007	280,062	181,025	11,335	100	150	53	472,725	27
2008	253,033	203,638	10,565	154	333	9	467,732	30
2009	212,593	218,815	7,032	140	0	0	438,580	6
2010	195,916	242,697	6,777	110	0	0	445,500	6
2011	191,893	248,390	6,662	100	0	0	447,045	8
2012	208,358	217,951	6,127	247	0	0	432,683	6
2013	228,398	191,274	5,855	96	0	0	425,623	7
2014	237,863	155,405	6,511	117	0	0	399,896	7
2015	268,876	105,649	5,540	95	0	0	380,160	5
Projected								
2020	301,190	86,230	5,800	100	0	0	393,320	7
2025	315,020	85,850	5,800	100	0	0	406,770	7
2030	328,010	87,060	5,800	100	0	0	420,970	7
2035	341,120	88,160	5,800	100	0	0	435,912	7

Source: Airport Master Plan Update, Detroit Metropolitan Wayne County Airport, March 2016 (forecast),  
FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Grosse Ile Municipal (ONZ)

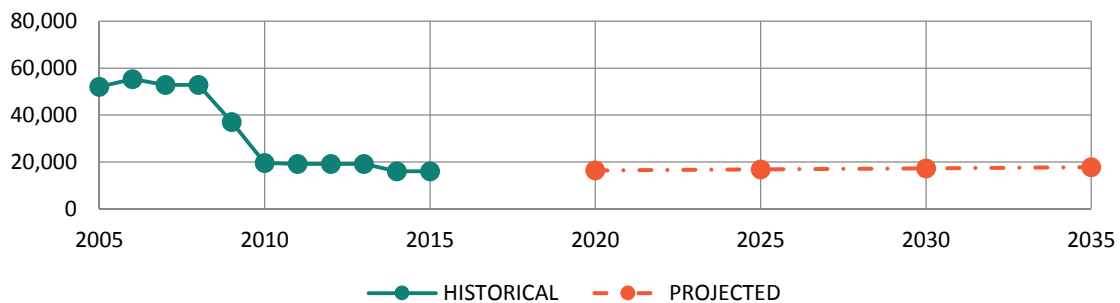
Detroit/Grosse Ile, MI

Growth Rate (2015-2035): 0.53%

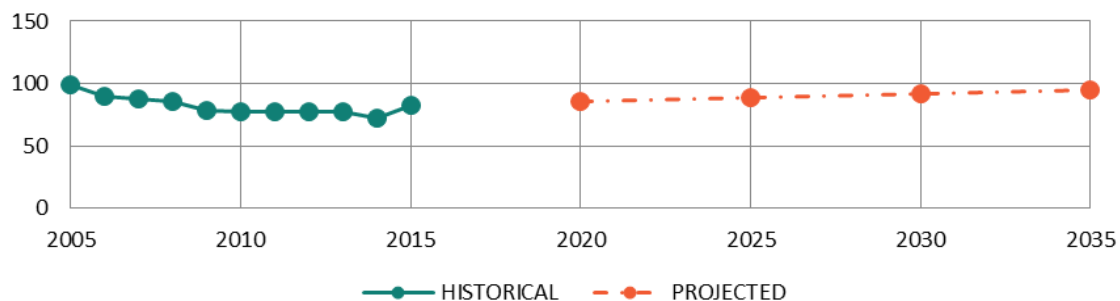
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	20,800	0	31,201	0	52,001	99
2006	0	0	22,111	0	33,166	0	55,277	90
2007	0	0	21,128	0	31,692	0	52,820	88
2008	0	0	21,128	0	31,692	0	52,820	86
2009	0	0	14,794	0	22,180	0	36,974	79
2010	0	0	6,534	0	13,068	0	19,602	77
2011	0	0	6,403	0	12,807	0	19,210	77
2012	0	0	6,403	0	12,807	0	19,210	77
2013	0	0	6,403	0	12,807	0	19,210	77
2014	0	0	6,000	0	10,000	0	16,000	72
2015	0	0	5,260	0	10,488	0	15,748	83
Projected								
2020	0	0	5,316	0	10,793	0	16,109	86
2025	0	0	5,450	0	11,065	0	16,515	89
2030	0	0	5,606	0	11,383	0	16,989	92
2035	0	0	5,772	0	11,720	0	17,492	95

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Willow Run (YIP)

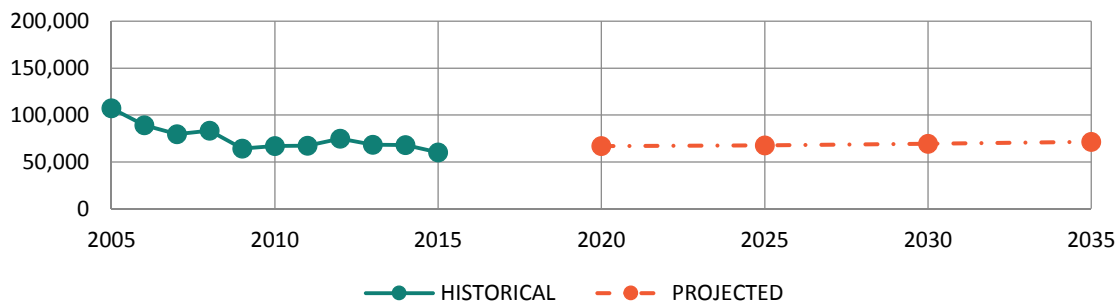
Detroit, MI

Growth Rate (2015-2035): 0.88%

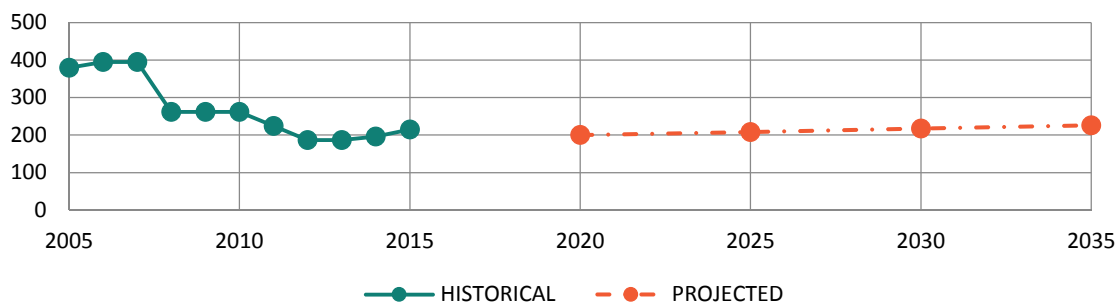
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	4,904	20,219	44,139	25	37,804	17	107,108	379
2006	3,537	16,016	37,742	62	31,745	37	89,139	395
2007	4,682	15,875	32,143	64	26,831	26	79,621	395
2008	2,997	12,325	33,223	93	34,513	119	83,270	262
2009	1,274	8,724	25,610	142	28,240	382	64,372	262
2010	3,099	9,850	26,384	92	27,613	107	67,145	262
2011	4,402	10,331	24,730	308	26,751	753	67,275	224
2012	3,535	9,931	27,394	152	33,650	30	74,692	187
2013	2,703	9,463	25,238	122	30,567	92	68,185	187
2014	3,217	8,438	25,437	162	30,748	58	68,060	196
2015	2,956	9,117	21,452	187	26,206	69	59,987	215
Projected								
2020	4,276	7,728	24,916	170	29,588	175	66,853	200
2025	4,995	6,858	25,369	170	30,155	175	67,722	208
2030	5,428	7,106	25,858	170	30,765	175	69,502	217
2035	5,892	7,374	26,386	170	31,424	175	71,421	226

Source: Willow Run Airport Master Plan Update, April 2016, FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Dowagiac Municipal (C91)

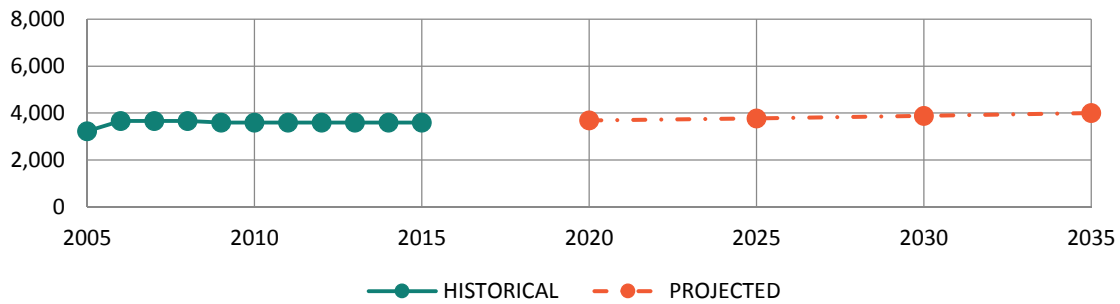
Dowagiac, MI

Growth Rate (2015-2035): 0.53%

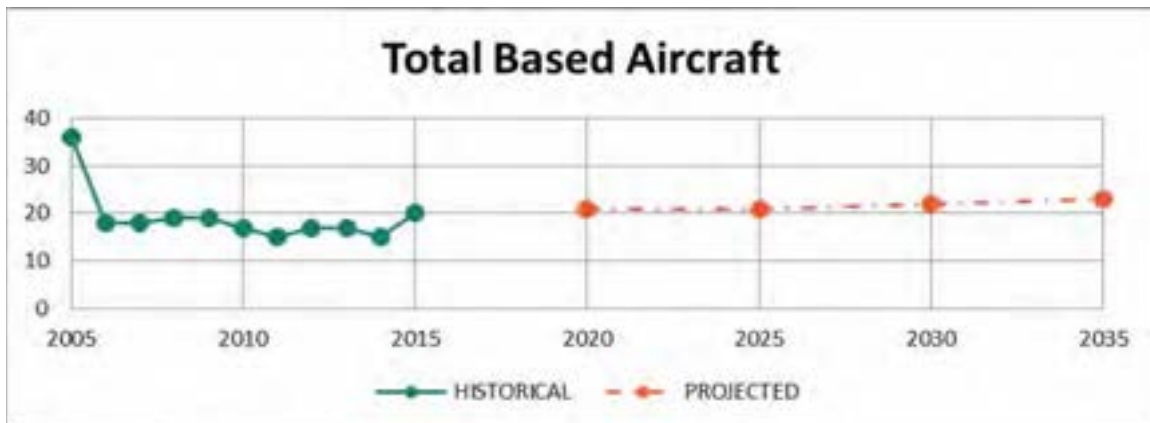
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	1,612	0	1,613	0	3,225	36
2006	0	0	1,829	0	1,829	0	3,658	18
2007	0	0	1,829	0	1,829	0	3,658	18
2008	0	0	1,829	0	1,829	0	3,658	19
2009	0	0	1,800	0	1,800	0	3,600	19
2010	0	0	1,800	0	1,800	0	3,600	17
2011	0	0	1,800	0	1,800	0	3,600	15
2012	0	0	1,800	0	1,800	0	3,600	17
2013	0	0	1,800	0	1,800	0	3,600	17
2014	0	0	1,800	0	1,800	0	3,600	15
2015	0	0	1,800	0	1,800	0	3,600	20
Projected								
2020	0	0	1,842	0	1,841	0	3,683	21
2025	0	0	1,888	0	1,887	0	3,775	21
2030	0	0	1,942	0	1,942	0	3,884	22
2035	0	0	2,000	0	1,999	0	3,999	23

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft





## Drummond Island (DRM)

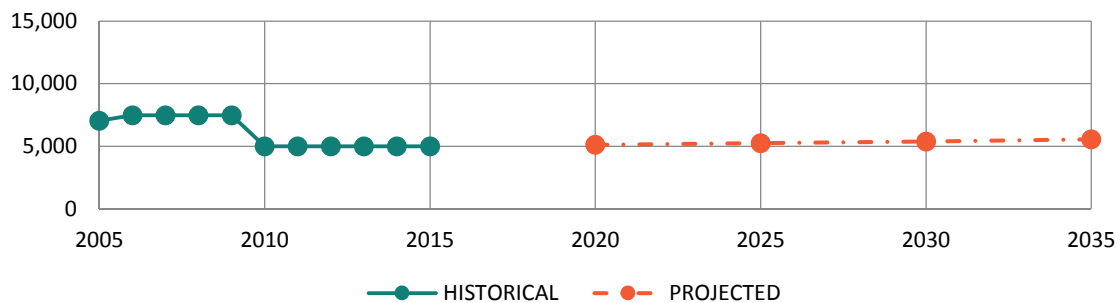
Drummond Island, MI

Growth Rate (2015-2035): 0.53%

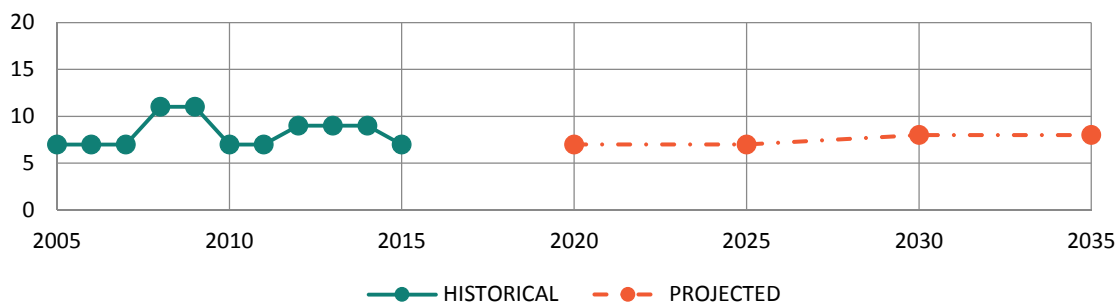
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	4,223	0	2,815	0	7,038	7
2006	0	0	3,741	0	3,741	0	7,482	7
2007	0	0	3,741	0	3,741	0	7,482	7
2008	0	0	3,741	0	3,741	0	7,482	11
2009	0	0	3,741	0	3,741	0	7,482	11
2010	0	0	2,500	0	2,500	0	5,000	7
2011	0	0	2,500	0	2,500	0	5,000	7
2012	0	0	2,500	0	2,500	0	5,000	9
2013	0	0	2,500	0	2,500	0	5,000	9
2014	0	0	2,500	0	2,500	0	5,000	9
2015	0	0	2,500	0	2,500	0	5,000	7
Projected								
2020	0	0	2,558	0	2,558	0	5,115	7
2025	0	0	2,622	0	2,622	0	5,244	7
2030	0	0	2,697	0	2,697	0	5,394	8
2035	0	0	2,777	0	2,777	0	5,554	8

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



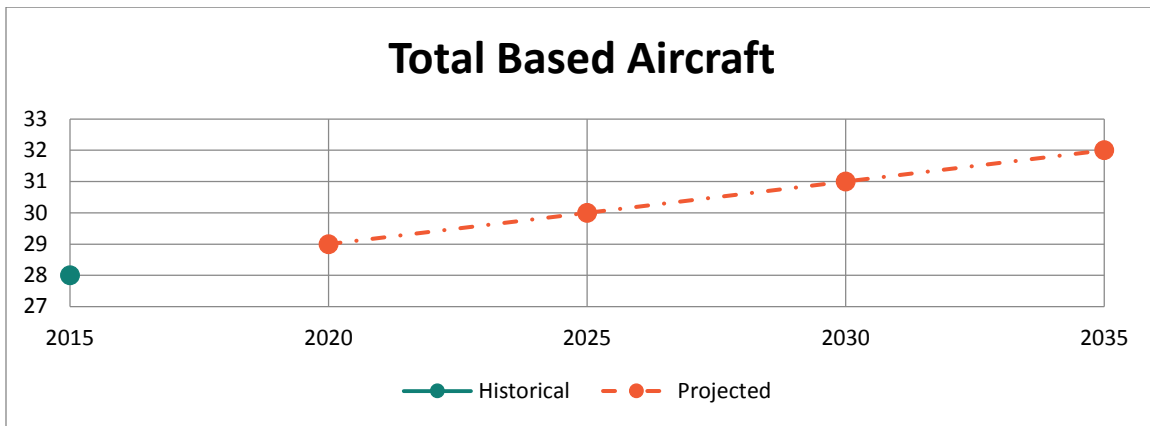
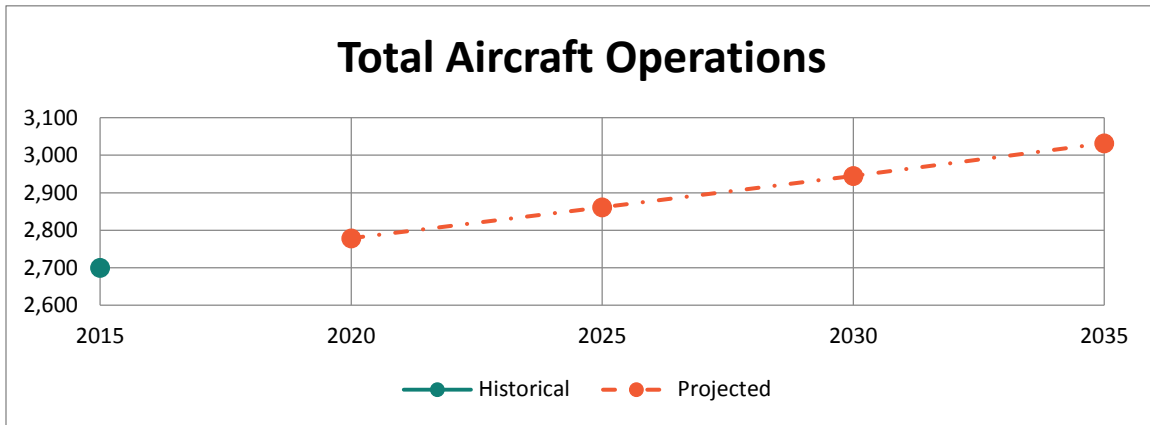
## Iosco County (6D9)

East Tawas, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	1,500				1,200		2,700	28
Projected								
2020	1,556				1,223		2,779	29
2025			1,602		1,259		2,861	30
2030	1,649				1,296		2,945	31
2035			1,698		1,334		3,032	32

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



## Delta County (ESC)

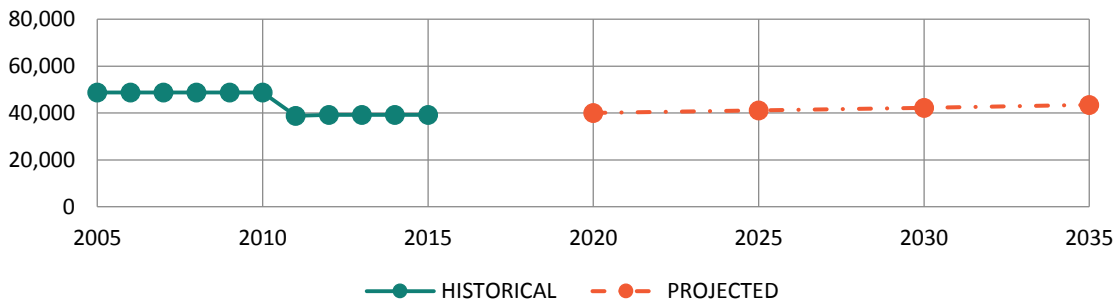
Escanaba, MI

Growth Rate (2015-2035): 0.53%

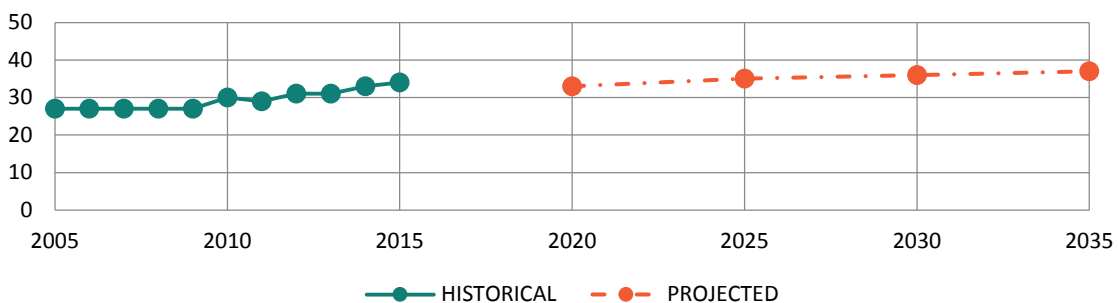
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	8,516	20,000	300	20,000	0	48,816	27
2006	0	8,516	20,000	300	20,000	0	48,816	27
2007	0	8,516	20,000	300	20,000	0	48,816	27
2008	1,040	7,476	20,000	300	20,000	0	48,816	27
2009	1,040	7,476	20,000	300	20,000	0	48,816	27
2010	1,040	7,476	20,000	300	20,000	0	48,816	30
2011	1,040	7,476	10,000	300	20,000	0	38,816	29
2012	1,368	7,476	10,000	300	20,000	0	39,144	31
2013	1,368	7,476	10,000	300	20,000	0	39,144	31
2014	1,368	7,476	10,000	300	20,000	0	39,144	33
2015	1,368	7,476	10,000	300	20,000	0	39,144	34
Projected								
2020	1,201	7,707	10,309	300	20,617	0	40,043	33
2025	1,232	7,901	10,568	300	21,137	0	41,052	35
2030	1,267	8,127	10,871	300	21,743	0	42,229	36
2035	1,304	8,368	11,193	300	22,386	0	43,478	37

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Evart Municipal (9C8)

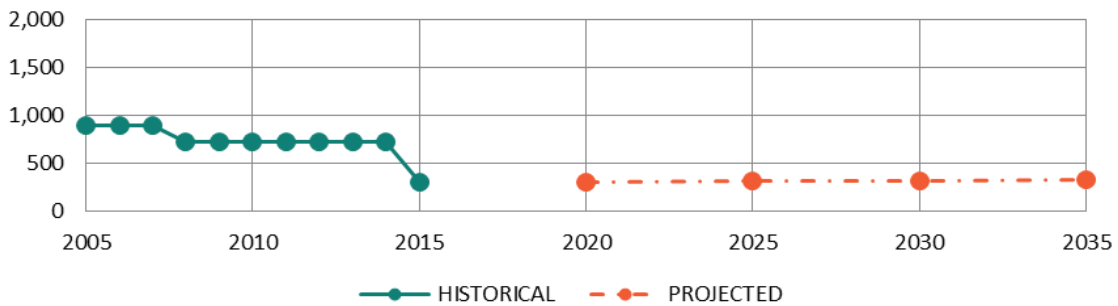
Evart, MI

Growth Rate (2015-2035): 0.52%

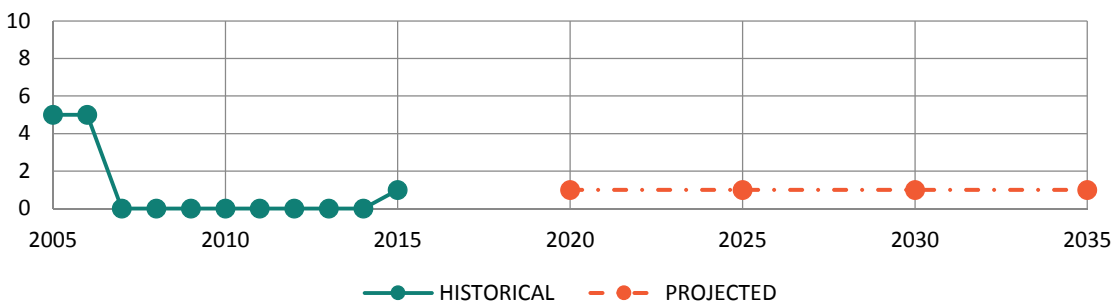
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	902	0	0	0	902	5
2006	0	0	902	0	0	0	902	5
2007	0	0	902	0	0	0	902	0
2008	0	0	724	0	0	0	724	0
2009	0	0	724	0	0	0	724	0
2010	0	0	724	0	0	0	724	0
2011	0	0	724	0	0	0	724	0
2012	0	0	724	0	0	0	724	0
2013	0	0	724	0	0	0	724	0
2014	0	0	724	0	0	0	724	0
2015	0	0	300	0	0	0	300	1
Projected								
2020	0	0	307	0	0	0	307	1
2025	0	0	315	0	0	0	315	1
2030	0	0	324	0	0	0	324	1
2035	0	0	333	0	0	0	333	1

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Bishop International (FNT)

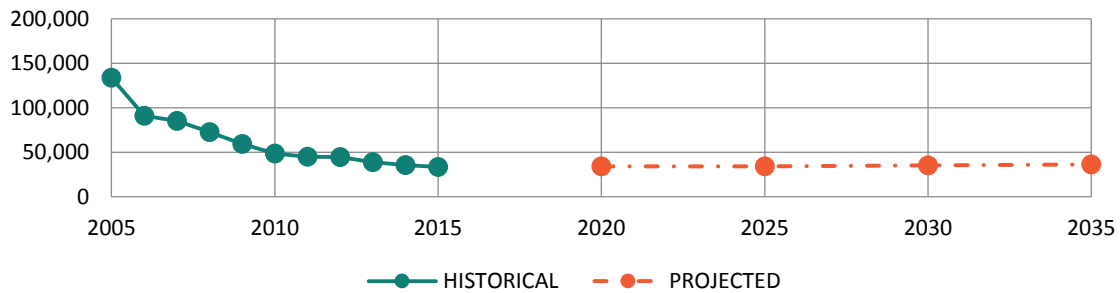
Flint, MI

Growth Rate (2015-2035): 0.42%

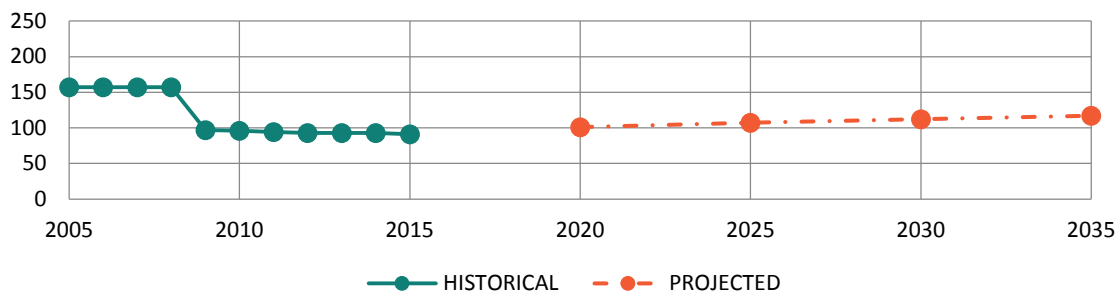
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	13,265	13,841	27,068	175	79,073	392	133,814	157
2006	11,701	12,287	14,085	211	52,459	148	90,891	157
2007	11,283	12,873	27,845	189	32,709	155	85,054	157
2008	11,466	14,465	24,754	228	21,581	208	72,702	157
2009	10,477	10,464	22,361	204	15,849	13	59,368	97
2010	8,281	12,088	17,391	113	10,717	2	48,592	96
2011	6,863	11,616	14,969	202	11,314	16	44,980	94
2012	6,245	9,854	16,215	192	11,886	22	44,414	93
2013	5,907	9,157	15,300	99	8,516	4	38,983	93
2014	6,230	7,891	14,196	322	7,122	0	35,761	93
2015	6,166	7,166	12,915	719	6,321	80	33,367	91
Projected								
2020	7,910	5,613	13,411	759	6,354	80	34,127	101
2025	9,905	3,643	13,521	759	6,384	80	34,292	107
2030	10,543	3,855	13,631	759	6,414	80	35,282	112
2035	11,181	4,067	13,741	759	6,444	80	36,272	117

Source: Master Plan Update, Bishop International Airport, September 2016 forecast),  
FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



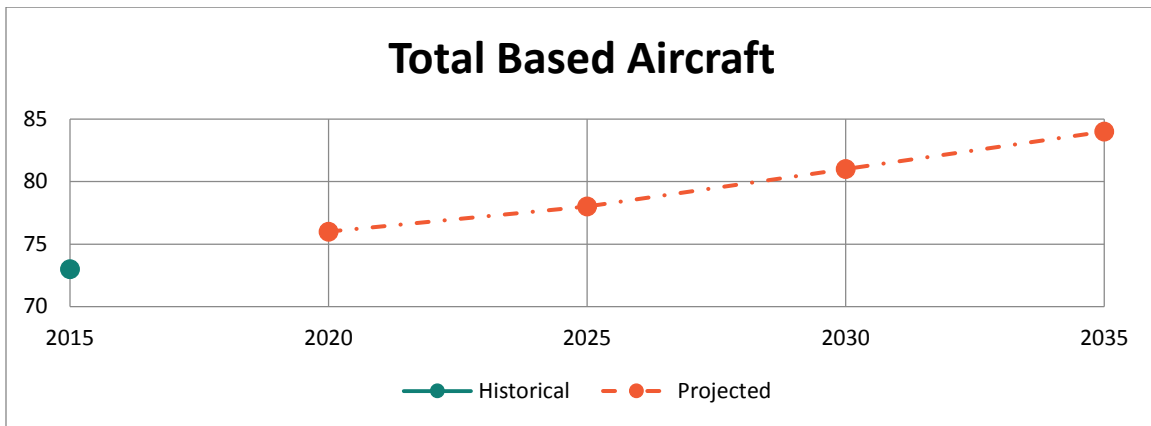
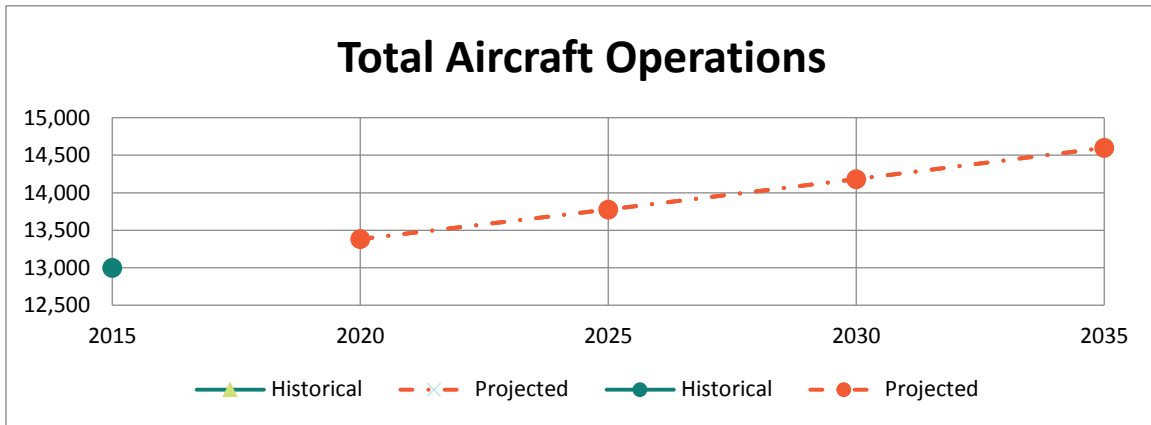
## Dalton (3DA)

Flushing, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	5,720				7,280		13,000	73
Projected								
2020	5,889				7,494		13,383	76
2025			6,061		7,715		13,776	78
2030	6,240				7,942		14,182	81
2035			6,424		8,175		14,599	84

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



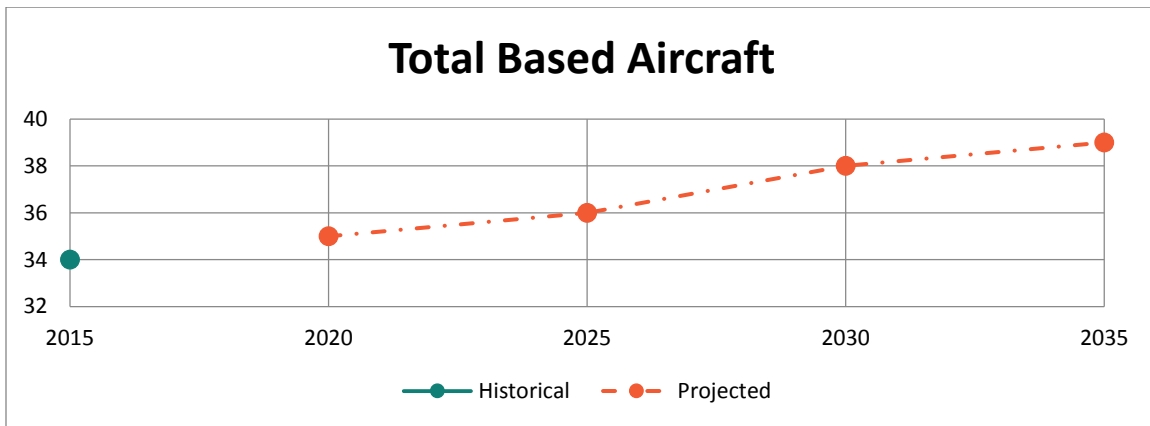
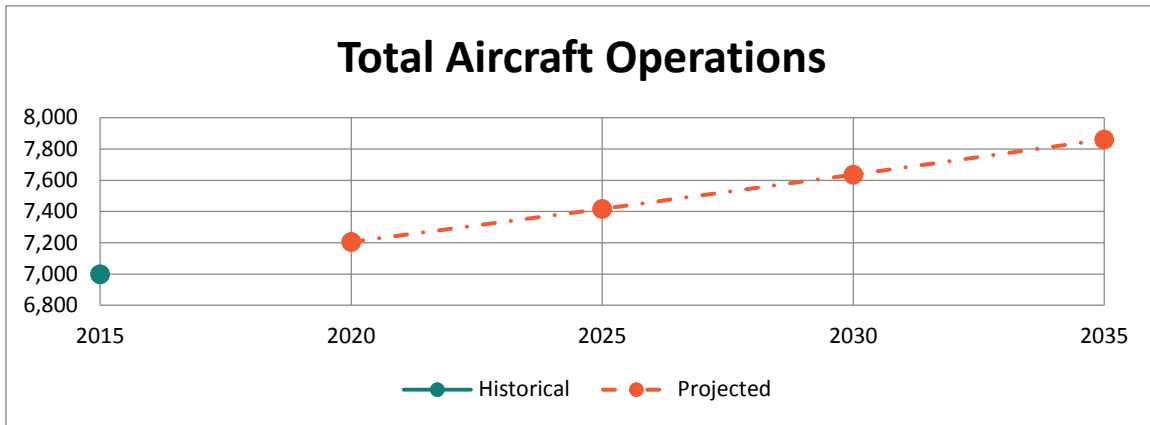
## WM Tiny Zehnder Field (66G)

Frankenmuth, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	3,010				3,990		7,000	34
Projected								
2020	3,099				4,107		7,206	35
2025			3,190		4,228		7,418	36
2030	3,283				4,353		7,636	38
2035			3,380		4,481		7,861	39

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



## Frankfort Dow Memorial Field (FKS)

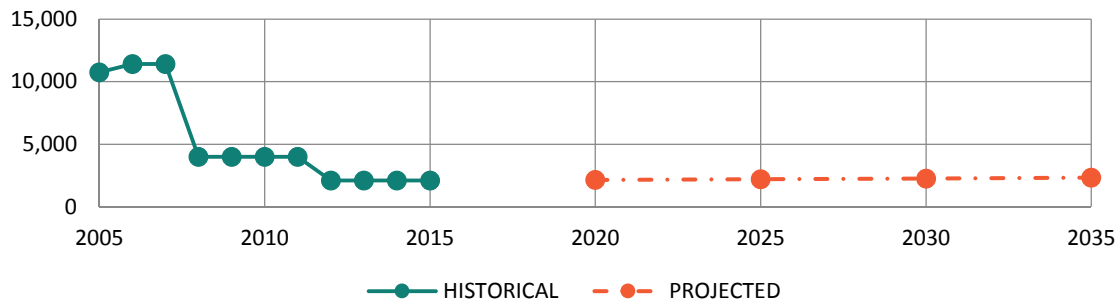
Frankfort, MI

Growth Rate (2015-2035): 0.53%

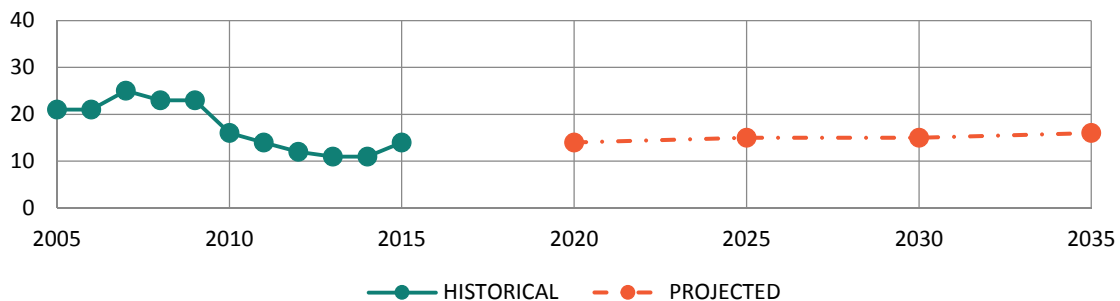
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	7,529	0	3,227	0	10,756	21
2006	0	0	5,716	0	5,716	0	11,432	21
2007	0	0	5,716	0	5,716	0	11,432	25
2008	0	0	2,000	0	2,000	0	4,000	23
2009	0	0	2,000	0	2,000	0	4,000	23
2010	0	0	2,000	0	2,000	0	4,000	16
2011	0	0	2,000	0	2,000	0	4,000	14
2012	0	0	0	0	2,100	0	2,100	12
2013	0	0	0	0	2,100	0	2,100	11
2014	0	0	0	0	2,100	0	2,100	11
2015	0	0	0	0	2,100	0	2,100	14
Projected								
2020	0	0	0	0	2,148	0	2,148	14
2025	0	0	0	0	2,202	0	2,202	15
2030	0	0	0	0	2,265	0	2,265	15
2035	0	0	0	0	2,333	0	2,333	16

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft





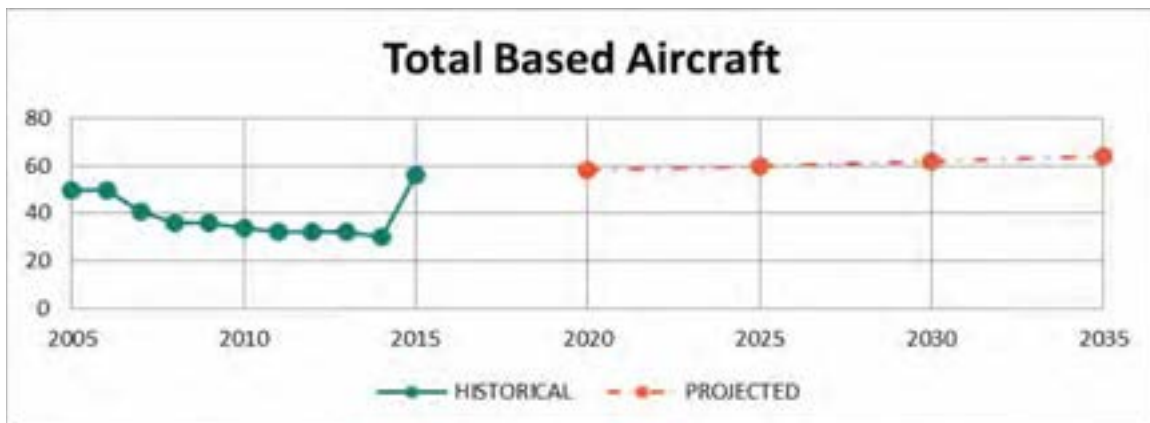
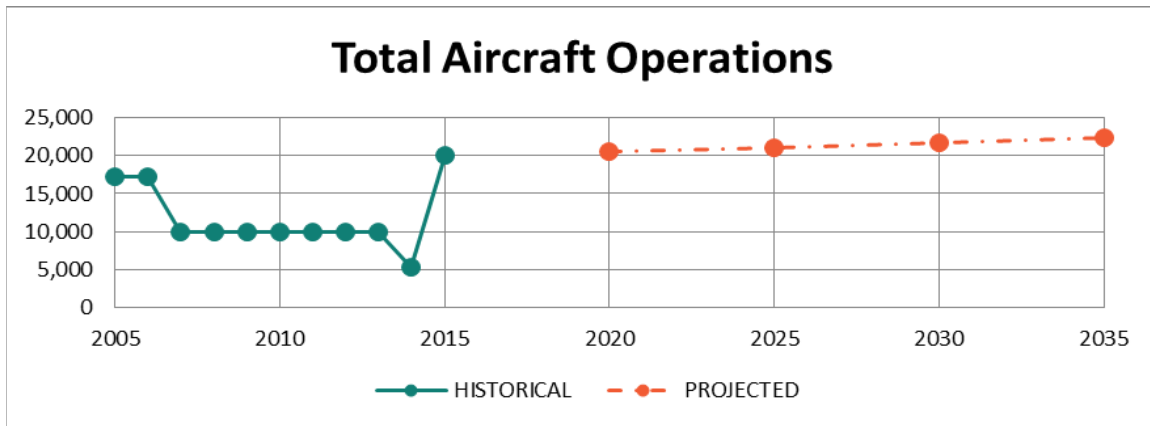
## Fremont Municipal (FFX)

Fremont, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	10,324	20	6,883	0	17,227	50
2006	0	0	10,324	20	6,883	0	17,227	50
2007	0	0	5,000	20	5,000	0	10,020	41
2008	0	0	5,000	20	5,000	0	10,020	36
2009	0	0	5,000	20	5,000	0	10,020	36
2010	0	0	5,000	20	5,000	0	10,020	34
2011	0	0	5,000	20	5,000	0	10,020	32
2012	0	0	5,000	20	5,000	0	10,020	32
2013	0	0	5,000	20	5,000	0	10,020	32
2014	0	0	2,700	20	2,700	0	5,420	30
2015	0	2	14,000	100	6,000	0	20,102	56
Projected								
2020	0	2	14,323	100	6,138	0	20,563	58
2025	0	2	14,686	100	6,294	0	21,082	60
2030	0	2	15,109	100	6,475	0	21,686	62
2035	0	2	15,558	100	6,668	0	22,328	64

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Gaylord Regional (GLR)

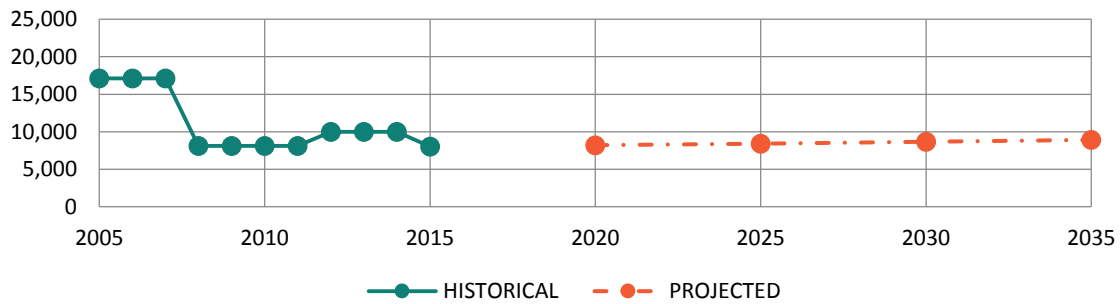
Gaylord, MI

Growth Rate (2015-2035): 0.53%

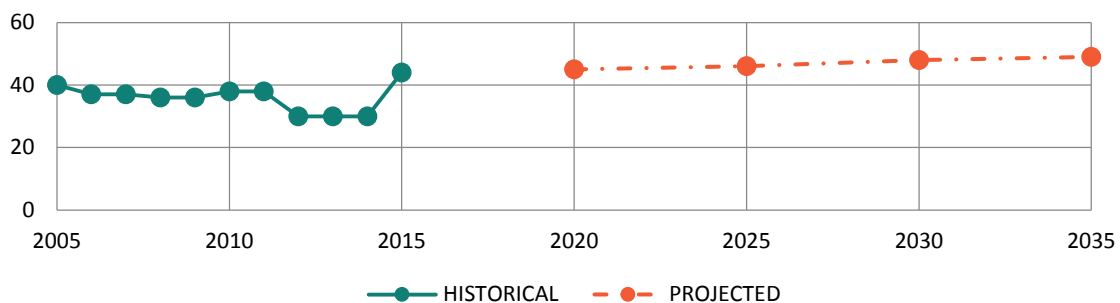
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	3,490	7,438	1,000	5,174	0	17,102	40
2006	0	3,490	7,438	1,000	5,174	0	17,102	37
2007	0	3,490	7,438	1,000	5,174	0	17,102	37
2008	0	0	6,494	0	1,624	0	8,118	36
2009	0	0	6,494	0	1,624	0	8,118	36
2010	0	0	6,494	0	1,624	0	8,118	38
2011	0	0	6,494	0	1,624	0	8,118	38
2012	0	0	8,000	0	2,000	0	10,000	30
2013	0	0	8,000	0	2,000	0	10,000	30
2014	0	0	8,000	0	2,000	0	10,000	30
2015	0	0	6,000	30	2,000	0	8,030	44
Projected								
2020	0	0	6,138	30	2,046	0	8,214	46
2025	0	0	6,293	30	2,098	0	8,421	47
2030	0	0	6,475	30	2,158	0	8,663	49
2035	0	0	6,667	30	2,222	0	8,919	50

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



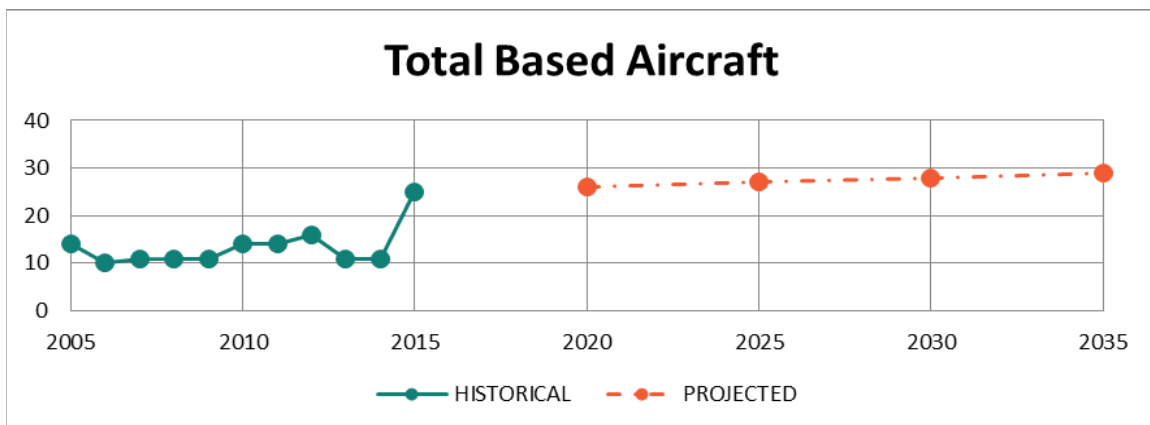
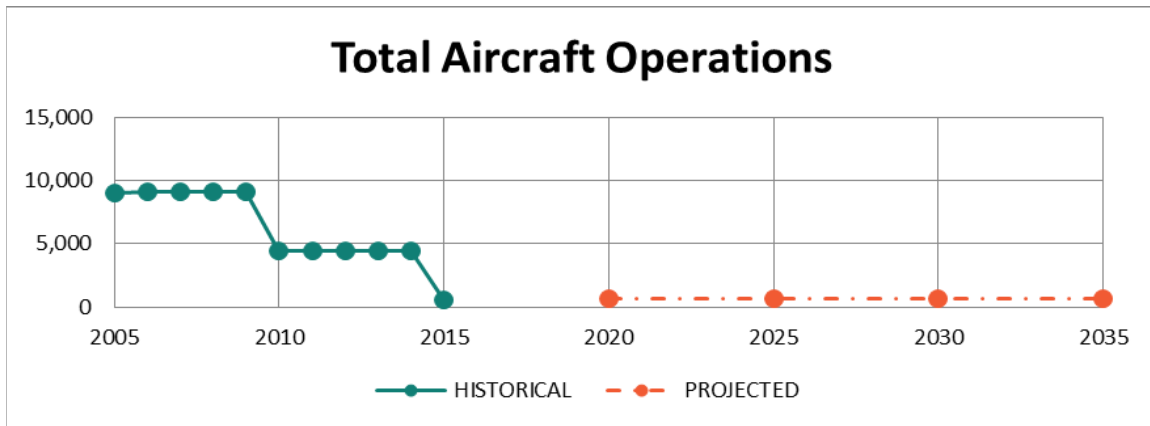
## Gladwin Zettel Memorial (GDW)

Gladwin, MI

Growth Rate (2015-2035): 0.52%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	350	4,307	0	4,307	0	8,964	14
2006	0	0	4,578	0	4,578	0	9,156	10
2007	0	0	4,578	0	4,578	0	9,156	11
2008	0	0	4,578	0	4,578	0	9,156	11
2009	0	0	4,578	0	4,578	0	9,156	11
2010	0	0	2,227	0	2,227	0	4,454	14
2011	0	0	2,227	0	2,227	0	4,454	14
2012	0	0	2,227	0	2,227	0	4,454	16
2013	0	0	2,227	0	2,227	0	4,454	11
2014	0	0	2,227	0	2,227	0	4,454	11
2015	0	0	0	0	600	0	600	25
Projected								
2020	0	0	0	0	614	0	614	26
2025	0	0	0	0	629	0	629	27
2030	0	0	0	0	647	0	647	28
2035	0	0	0	0	666	0	666	29

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Grand Haven Memorial Airpark (3GM)

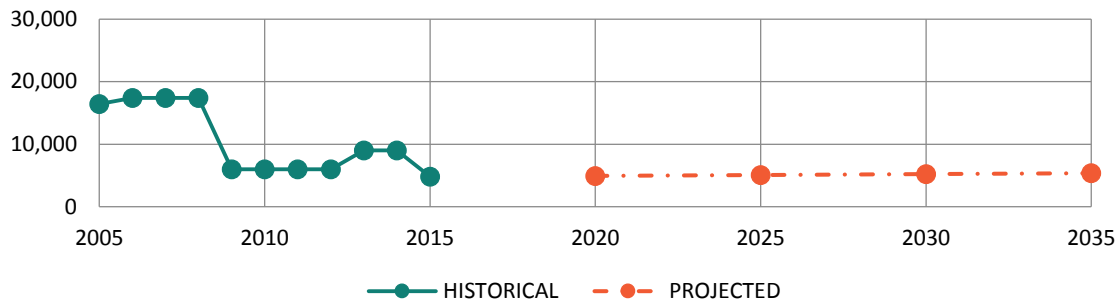
Grand Haven, MI

Growth Rate (2015-2035): 0.53%

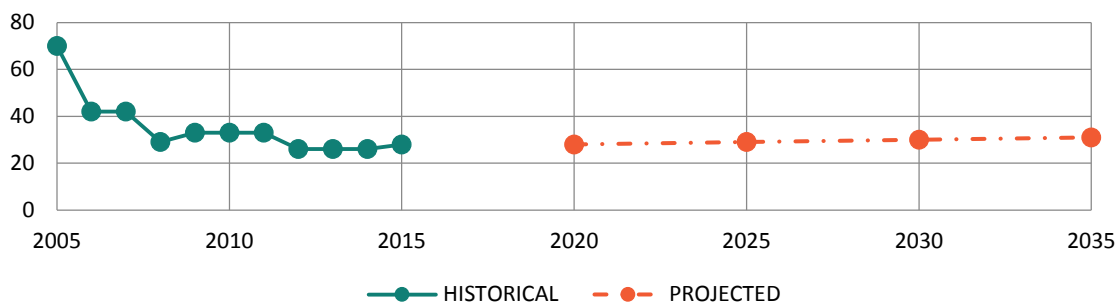
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	8,201	30	8,201	0	16,432	70
2006	0	0	8,673	30	8,703	0	17,406	42
2007	0	0	8,673	30	8,703	0	17,406	42
2008	0	0	8,673	30	8,703	0	17,406	29
2009	0	0	3,000	0	3,000	0	6,000	33
2010	0	0	3,000	0	3,000	0	6,000	33
2011	0	0	3,000	0	3,000	0	6,000	33
2012	0	0	3,000	0	3,000	0	6,000	26
2013	0	0	4,364	0	4,636	0	9,000	26
2014	0	0	4,364	0	4,636	0	9,000	26
2015	0	78	2,405	24	2,330	0	4,837	28
Projected								
2020	0	80	2,460	24	2,384	0	4,948	29
2025	0	82	2,523	24	2,444	0	5,073	30
2030	0	84	2,595	24	2,514	0	5,218	31
2035	0	87	2,673	24	2,589	0	5,373	32

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



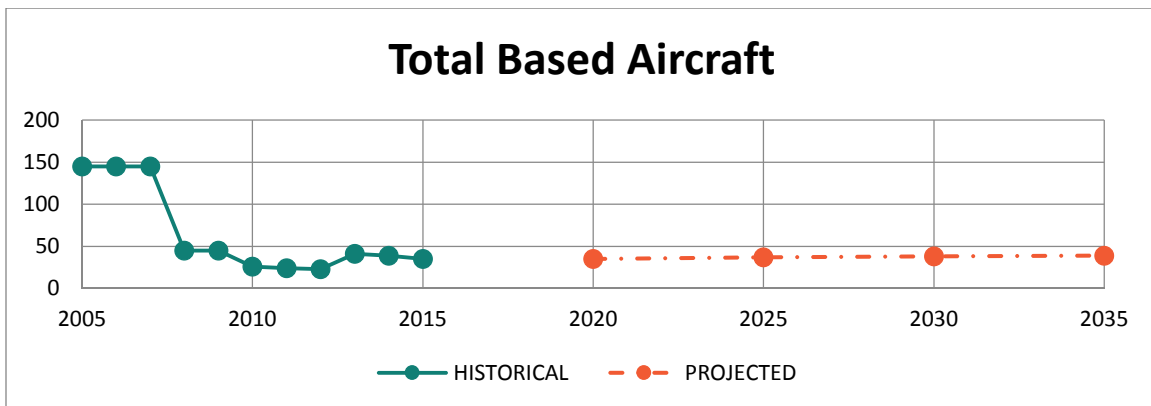
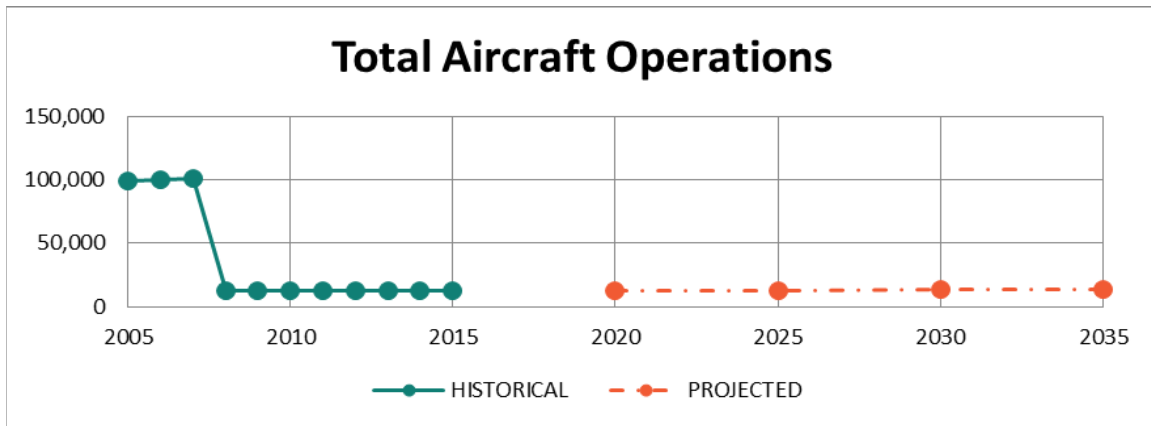
## Abrams Municipal (4D0)

Grand Ledge, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	29,226	30,000	40,472	0	99,698	145
2006	0	0	29,572	30,000	41,071	0	100,643	145
2007	0	0	29,923	30,000	41,678	0	101,601	145
2008	0	0	5,000	2,300	5,000	0	12,300	45
2009	0	0	5,000	2,300	5,000	0	12,300	45
2010	0	0	5,000	2,300	5,000	0	12,300	26
2011	0	0	5,000	2,300	5,000	0	12,300	24
2012	0	0	5,000	2,300	5,000	0	12,300	23
2013	0	0	5,000	2,300	5,000	0	12,300	41
2014	0	0	5,000	2,300	5,000	0	12,300	39
2015	0	0	5,151	2,300	5,116	0	12,567	64
Projected								
2020	0	0	5,269	2,353	5,233	0	12,855	66
2025	0	0	4,992	2,229	4,958	0	12,180	68
2030	0	0	5,557	2,481	5,519	0	13,557	71
2035	0	0	5,721	2,555	5,682	0	13,958	73

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Gerald R. Ford International (GRR)

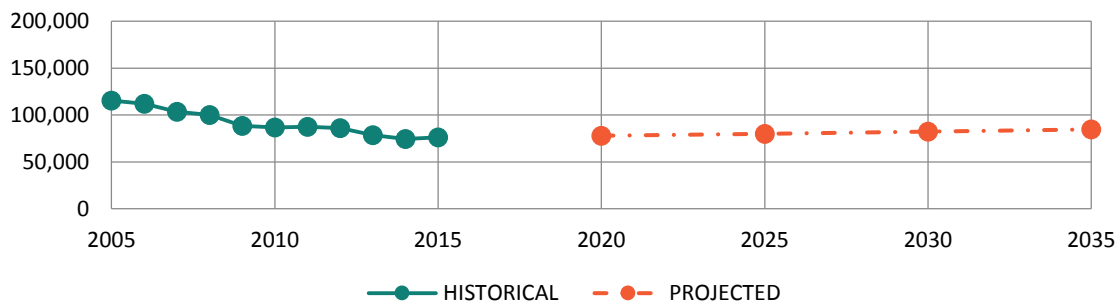
Grand Rapids, MI

Growth Rate (2015-2035): 0.52%

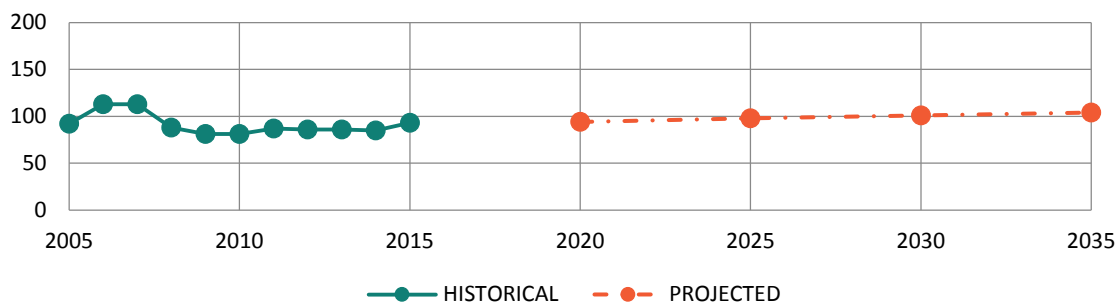
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	20,118	34,319	42,167	1,692	15,212	2,060	115,568	92
2006	15,690	34,487	41,759	1,558	16,434	2,247	112,175	113
2007	15,741	34,515	37,125	1,449	12,870	1,814	103,514	113
2008	15,671	32,367	35,918	1,520	12,759	1,722	99,957	88
2009	14,965	30,352	30,612	848	10,716	811	88,304	81
2010	17,211	28,477	28,944	1,000	10,262	973	86,867	81
2011	17,491	30,584	26,935	890	10,719	970	87,589	87
2012	15,603	29,172	27,975	1,047	11,241	1,044	86,082	86
2013	15,488	28,389	25,157	723	8,251	522	78,530	86
2014	17,515	23,714	23,806	399	8,814	178	74,426	85
2015	22,278	19,233	24,463	428	9,590	264	76,256	93
Projected								
2020	22,772	19,660	25,006	428	9,803	264	77,933	94
2025	23,351	20,160	25,642	428	10,052	264	79,897	98
2030	24,027	20,743	26,383	428	10,343	264	82,187	101
2035	24,744	21,362	27,170	428	10,651	264	84,619	104

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



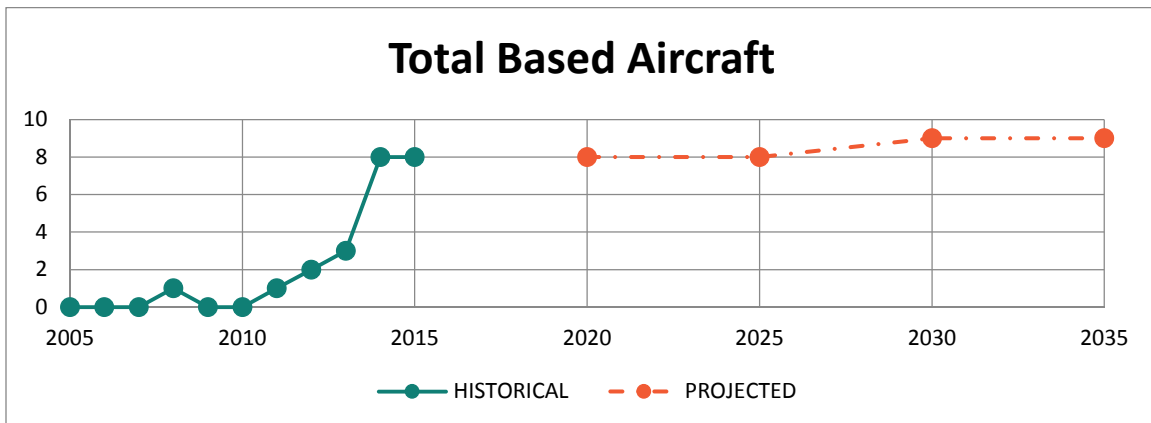
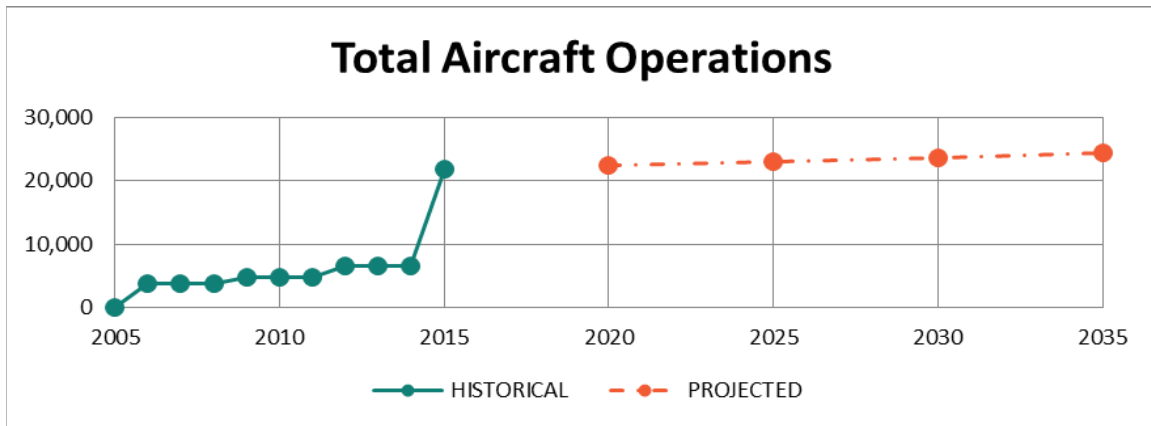
## Grayling AAF (GOV)

Grayling, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	0	0	0	0	0	0
2006	0	0	88	3,700	0	0	3,788	0
2007	0	0	88	3,700	0	0	3,788	0
2008	0	0	88	3,700	0	0	3,788	1
2009	0	0	2,954	1,737	0	0	4,691	0
2010	0	0	2,954	1,737	0	0	4,691	0
2011	0	0	2,954	1,737	0	0	4,691	1
2012	0	0	4,070	1,898	500	0	6,468	2
2013	0	0	4,070	1,898	500	0	6,468	3
2014	0	0	4,070	1,898	500	0	6,468	8
2015	0	0	4,534	8,048	1,114	8,200	21,896	8
Projected								
2020	0	0	4,699	8,048	1,154	8,200	22,399	8
2025	0	0	4,883	8,048	1,200	8,200	22,963	9
2030	0	0	5,099	8,048	1,253	8,200	23,621	9
2035	0	0	5,328	8,048	1,309	8,200	24,320	9

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Greenville Municipal (6D6)

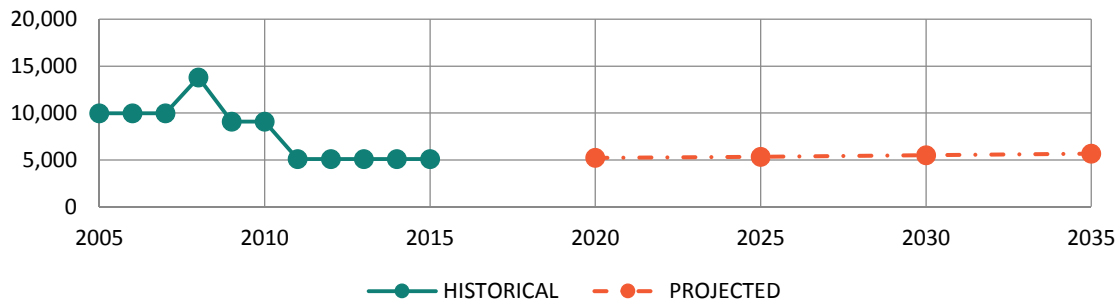
Greenville, MI

Growth Rate (2015-2035): 0.53%

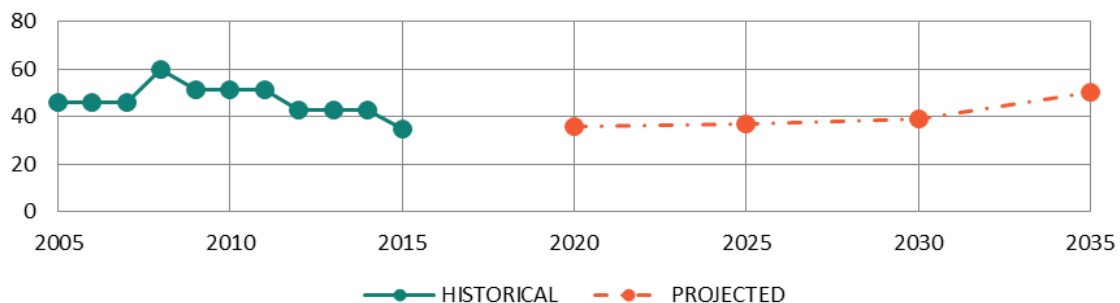
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	1,150	6,175	0	2,646	0	9,971	46
2006	0	1,150	6,175	0	2,646	0	9,971	46
2007	0	1,150	6,175	0	2,646	0	9,971	46
2008	0	0	4,200	150	9,445	0	13,795	60
2009	0	0	3,000	100	6,000	0	9,100	51
2010	0	0	3,000	100	6,000	0	9,100	51
2011	0	0	2,500	100	2,500	0	5,100	51
2012	0	0	2,500	100	2,500	0	5,100	43
2013	0	0	2,500	100	2,500	0	5,100	43
2014	0	0	2,500	100	2,500	0	5,100	43
2015	0	0	2,500	100	2,500	0	5,100	35
Projected								
2020	0	0	2,559	100	2,559	0	5,217	36
2025	0	0	2,625	100	2,625	0	5,349	37
2030	0	0	2,701	100	2,701	0	5,502	39
2035	0	0	2,783	100	2,783	0	5,665	50

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft





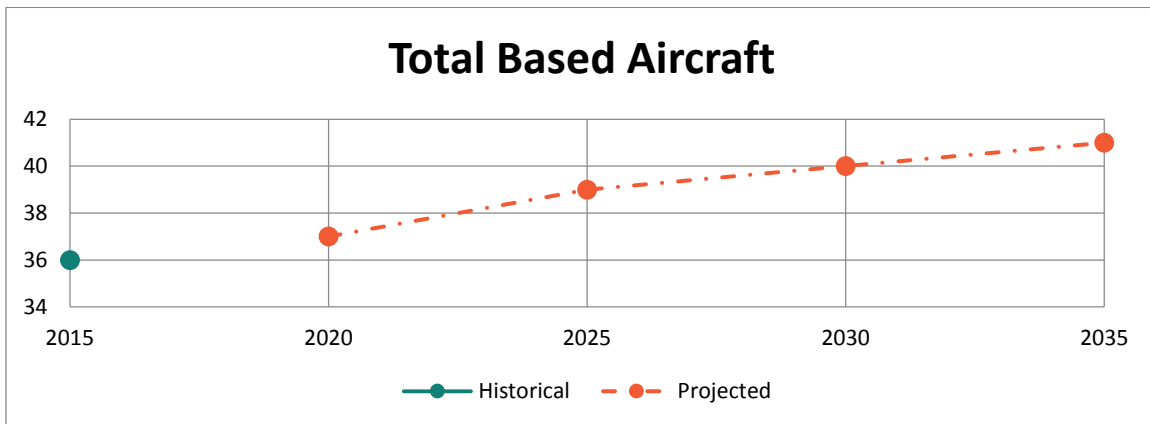
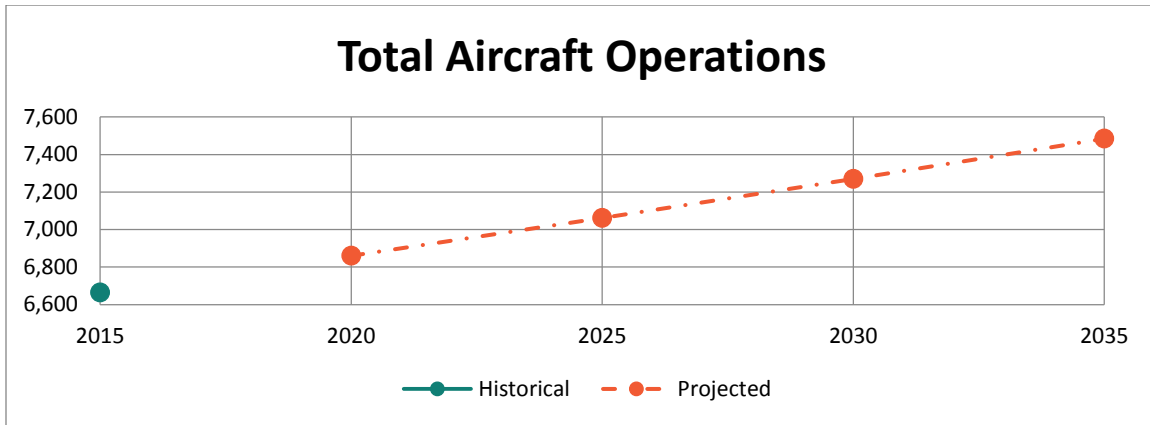
## Richmond Field (69G)

Gregory, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	3,332				3,332		6,664	36
Projected								
2020	3,430				3,430		6,860	37
2025			3,531		3,531		7,062	39
2030	3,635				3,635		7,270	40
2035			3,742		3,742		7,484	41

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



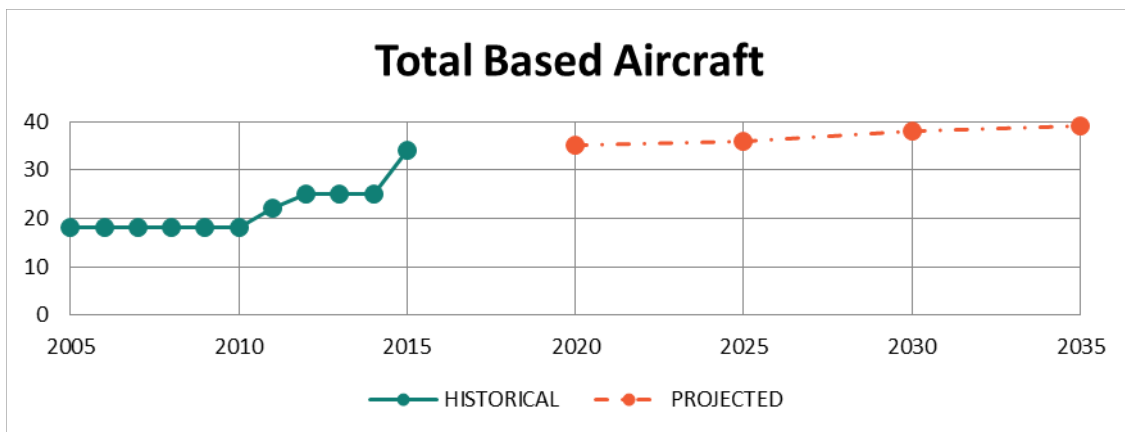
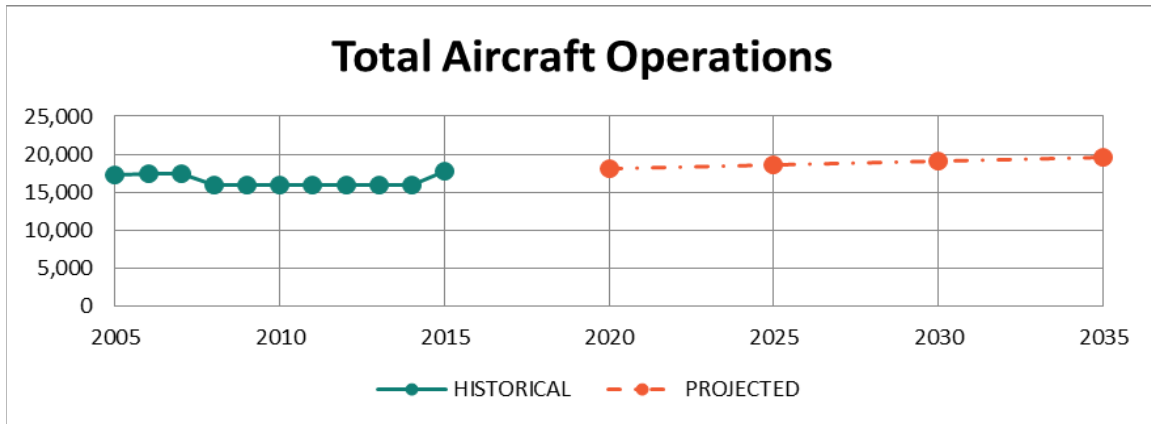
## Houghton County Memorial (CMX)

Hancock, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	6,980	4,000	340	6,000	0	17,320	18
2006	0	7,048	4,000	340	6,000	0	17,388	18
2007	0	7,116	4,000	340	6,000	0	17,456	18
2008	3,000	2,164	4,870	20	6,000	0	16,054	18
2009	3,000	2,164	4,870	20	6,000	0	16,054	18
2010	3,000	2,164	4,870	20	6,000	0	16,054	18
2011	3,000	2,164	4,870	20	6,000	0	16,054	22
2012	3,000	2,164	4,870	20	6,000	0	16,054	25
2013	3,000	2,164	4,870	20	6,000	0	16,054	25
2014	3,000	2,164	4,870	20	6,000	0	16,054	25
2015	8	6,817	4,870	20	6,000	0	17,715	34
Projected								
2020	8	6,974	4,982	20	6,138	0	18,122	35
2025	8	7,149	5,108	20	6,293	0	18,578	36
2030	9	7,355	5,254	20	6,473	0	19,111	38
2035	9	7,572	5,410	20	6,665	0	19,676	39

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Harbor Springs (MGN)

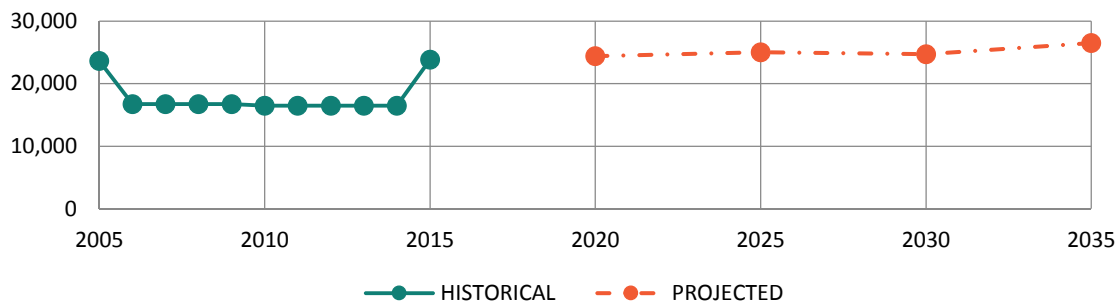
Harbor Springs, MI

Growth Rate (2015-2035): 0.53%

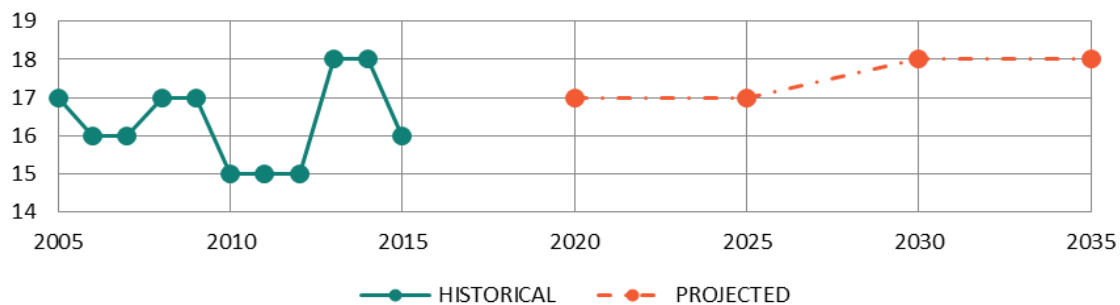
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	18,898	0	4,754	0	23,652	17
2006	0	0	12,165	0	4,577	0	16,742	16
2007	0	0	12,165	0	4,577	0	16,742	16
2008	0	0	12,165	0	4,577	0	16,742	17
2009	0	0	12,165	0	4,577	0	16,742	17
2010	0	0	12,000	0	4,500	0	16,500	15
2011	0	0	12,000	0	4,500	0	16,500	15
2012	0	0	12,000	0	4,500	0	16,500	15
2013	0	0	12,000	0	4,500	0	16,500	18
2014	0	0	12,000	0	4,500	0	16,500	18
2015	0	7,363	12,000	0	4,500	0	23,863	16
Projected								
2020	0	7,532	12,276	0	4,603	0	24,411	17
2025	0	7,722	12,585	0	4,719	0	25,026	17
2030	0	7,635	12,443	0	4,666	0	24,743	18
2035	0	8,178	13,329	0	4,998	0	26,505	18

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



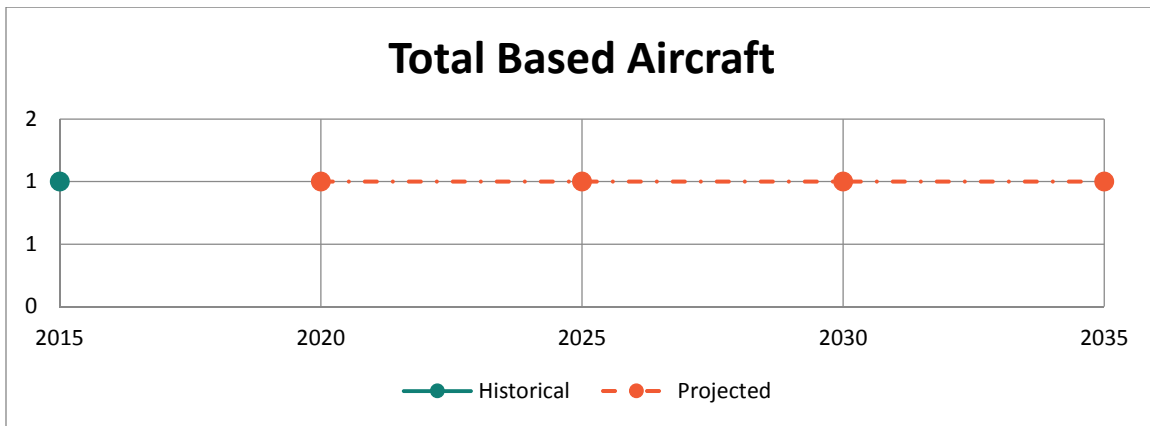
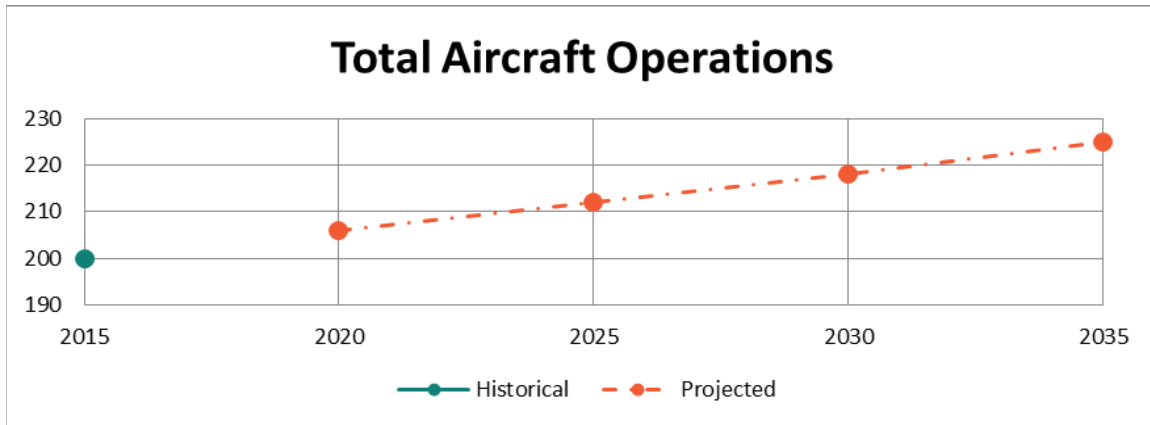
## Harsens Island (Z92)

Harsens Island, MI

Growth Rate (2015-2035): 0.59%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	200						200	1
Projected								
2020	206						206	1
2025			212				212	1
2030	218						218	1
2035			225				225	1

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



## Oceana County (C04)

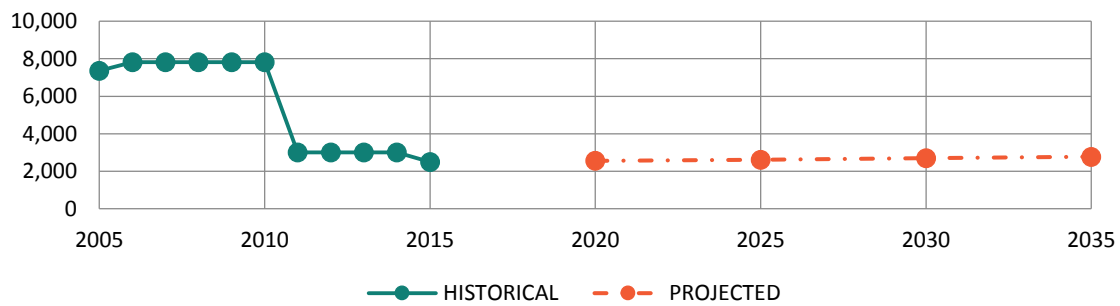
Hart/Shelby, MI

Growth Rate (2015-2035): 0.53%

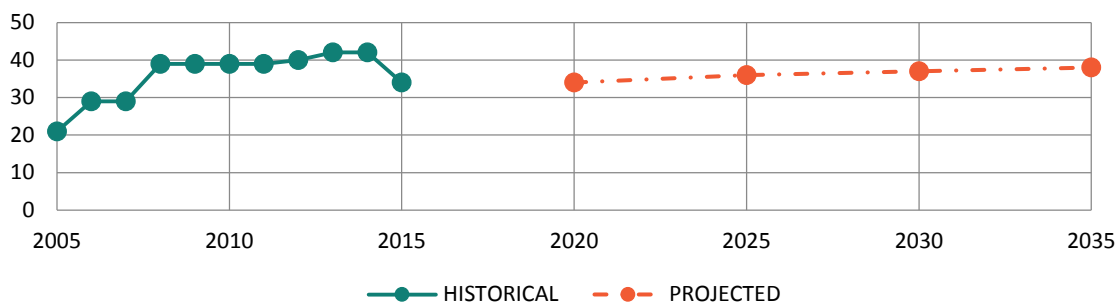
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	3,678	0	3,678	0	7,356	21
2006	0	0	3,910	0	3,910	0	7,820	29
2007	0	0	3,910	0	3,910	0	7,820	29
2008	0	0	3,910	0	3,910	0	7,820	39
2009	0	0	3,910	0	3,910	0	7,820	39
2010	0	0	3,910	0	3,910	0	7,820	39
2011	0	0	1,500	0	1,500	0	3,000	39
2012	0	0	1,500	0	1,500	0	3,000	40
2013	0	0	1,500	0	1,500	0	3,000	42
2014	0	0	1,500	0	1,500	0	3,000	42
2015	0	0	1,250	0	1,250	0	2,500	34
Projected								
2020	0	0	1,279	0	1,279	0	2,557	35
2025	0	0	1,311	0	1,311	0	2,622	36
2030	0	0	1,349	0	1,349	0	2,697	38
2035	0	0	1,389	0	1,389	0	2,777	39

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



# Hastings (9D9)

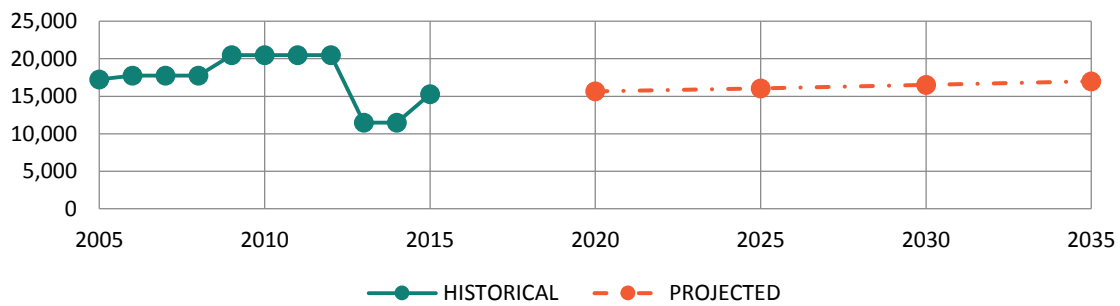
Hastings, MI

Growth Rate (2015-2035): 0.53%

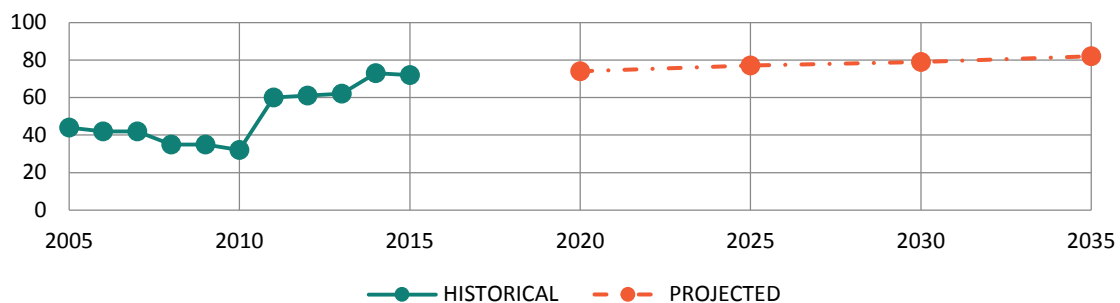
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	5,163	0	12,079	0	17,242	44
2006	0	0	12,427	0	5,325	0	17,752	42
2007	0	0	12,427	0	5,325	0	17,752	42
2008	0	0	12,427	0	5,325	0	17,752	35
2009	0	0	9,500	1,500	9,500	0	20,500	35
2010	0	0	9,500	1,500	9,500	0	20,500	32
2011	0	0	9,500	1,500	9,500	0	20,500	60
2012	0	0	9,500	1,500	9,500	0	20,500	61
2013	0	0	5,000	1,500	5,000	0	11,500	62
2014	0	0	5,000	1,500	5,000	0	11,500	73
2015	0	300	6,000	2,000	7,000	0	15,300	72
Projected								
2020	0	308	6,158	2,000	7,185	0	15,651	74
2025	0	317	6,337	2,000	7,393	0	16,046	77
2030	0	327	6,544	2,000	7,635	0	16,506	80
2035	0	338	6,764	2,000	7,892	0	16,994	82

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

## Total Aircraft Operations



## Total Based Aircraft



## Hillsdale Municipal (JYM)

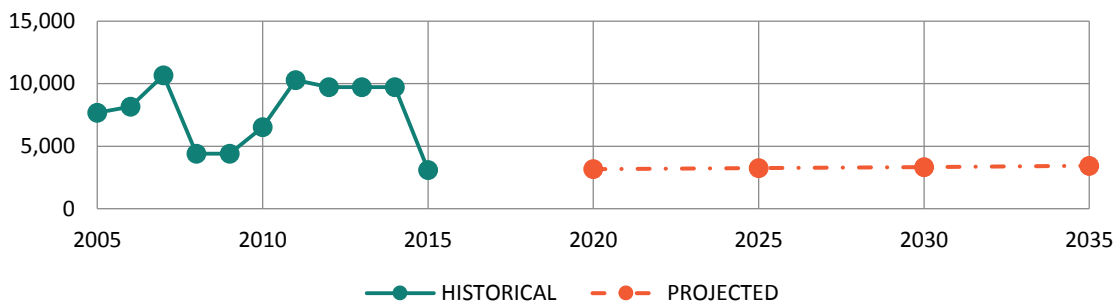
Hillsdale, MI

Growth Rate (2015-2035): 0.53%

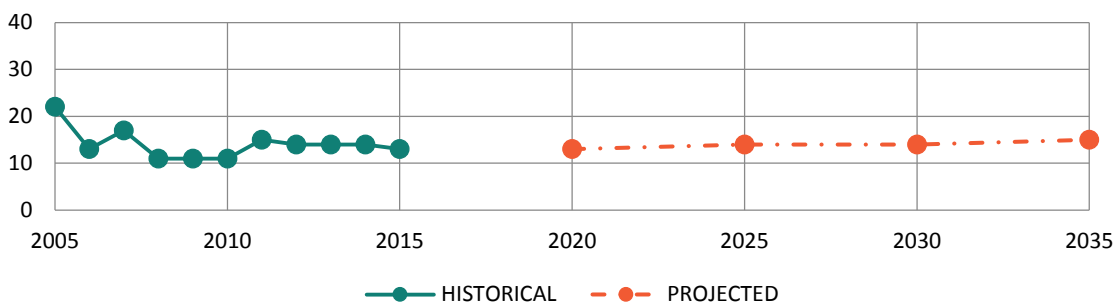
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	3,843	0	3,843	0	7,686	22
2006	0	0	4,085	0	4,085	0	8,170	13
2007	0	0	5,342	0	5,342	0	10,684	17
2008	0	0	2,200	0	2,200	0	4,400	11
2009	0	0	2,200	0	2,200	0	4,400	11
2010	0	0	3,267	0	3,267	0	6,534	11
2011	0	0	5,150	0	5,150	0	10,300	15
2012	0	0	4,868	0	4,867	0	9,735	14
2013	0	0	4,868	0	4,867	0	9,735	14
2014	0	0	4,868	0	4,867	0	9,735	14
2015	0	0	0	100	3,000	0	3,100	13
Projected								
2020	0	0	0	100	3,071	0	3,171	13
2025	0	0	0	100	3,151	0	3,251	14
2030	0	0	0	100	3,244	0	3,344	14
2035	0	0	0	100	3,343	0	3,443	15

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## West Michigan Regional (BIV)

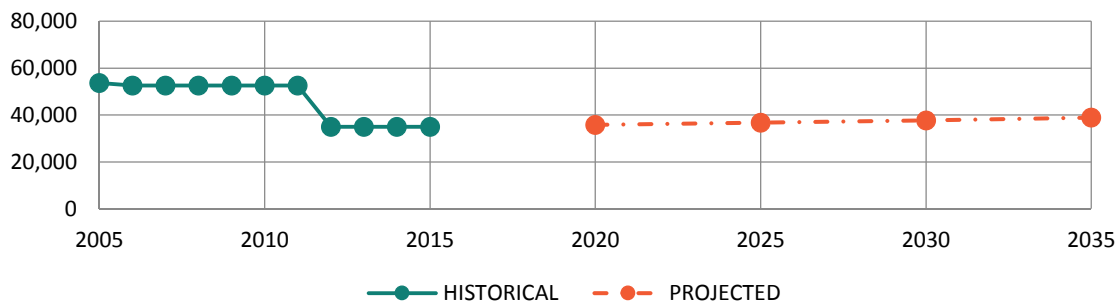
Holland, MI

Growth Rate (2015-2035): 0.53%

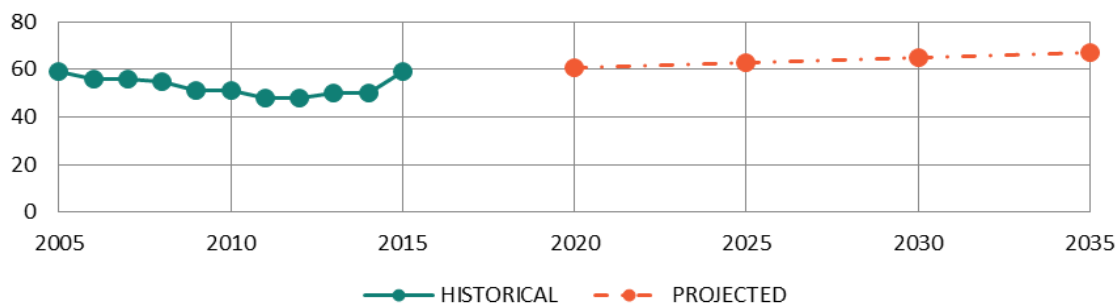
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	4,300	19,763	20	29,644	0	53,727	59
2006	0	4,300	21,940	20	26,260	0	52,520	56
2007	0	4,300	21,940	20	26,260	0	52,520	56
2008	0	4,300	21,940	20	26,260	0	52,520	55
2009	0	4,300	21,940	20	26,260	0	52,520	51
2010	0	4,300	21,940	20	26,260	0	52,520	51
2011	0	4,300	21,940	20	26,260	0	52,520	48
2012	0	2,000	16,325	350	16,325	0	35,000	48
2013	0	2,000	16,325	350	16,325	0	35,000	50
2014	0	2,000	16,325	350	16,325	0	35,000	50
2015	0	2,000	16,325	350	16,325	0	35,000	59
Projected								
2020	0	2,046	16,703	350	16,703	0	35,803	61
2025	0	2,098	17,129	350	17,129	0	36,706	63
2030	0	2,159	17,624	350	17,624	0	37,758	65
2035	0	2,224	18,151	350	18,151	0	38,875	67

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft





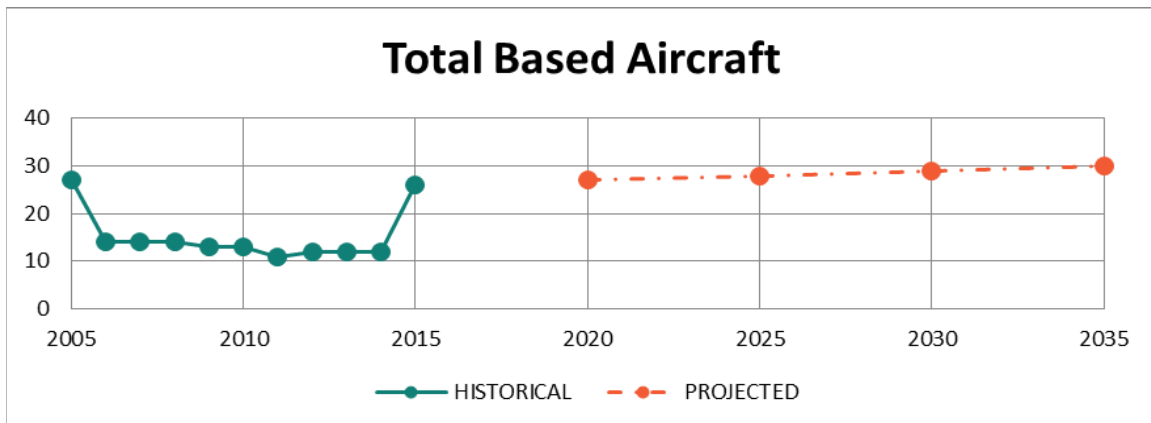
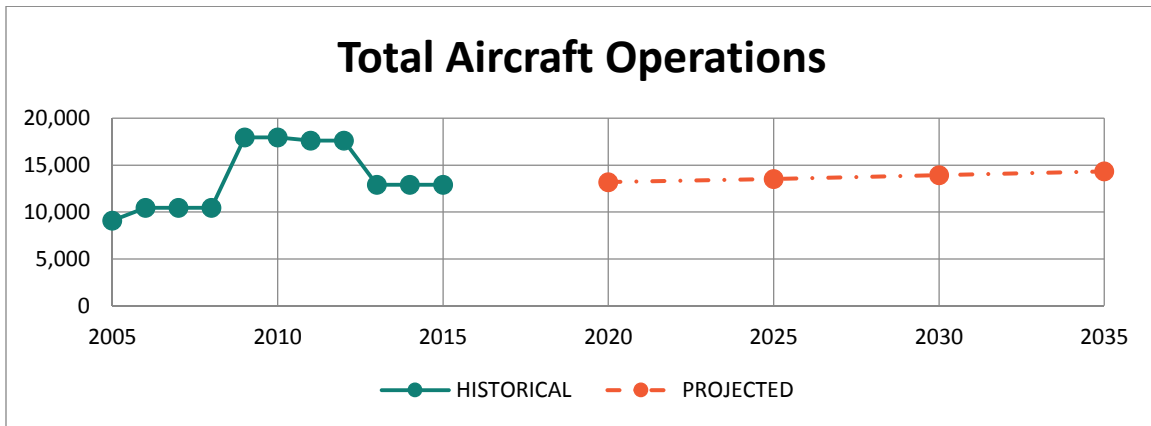
## Roscommon County – Blodgett Memorial (HTL)

Houghton Lake, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	1,200	6,297	0	1,574	0	9,071	27
2006	0	0	2,093	0	8,370	0	10,463	14
2007	0	0	2,093	0	8,370	0	10,463	14
2008	0	0	2,093	0	8,370	0	10,463	14
2009	0	0	3,592	0	14,365	0	17,957	13
2010	0	0	3,592	0	14,365	0	17,957	13
2011	0	0	3,520	0	14,078	0	17,598	11
2012	0	0	3,520	0	14,078	0	17,598	12
2013	0	0	2,580	0	10,320	0	12,900	12
2014	0	0	2,580	0	10,320	0	12,900	12
2015	0	0	2,580	0	10,320	0	12,900	26
Projected								
2020	0	0	2,639	0	10,557	0	13,196	26
2025	0	0	2,706	0	10,823	0	13,529	27
2030	0	0	2,783	0	11,134	0	13,917	28
2035	0	0	2,866	0	11,462	0	14,328	29

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Livingston County Spencer J. Hardy (OZW)

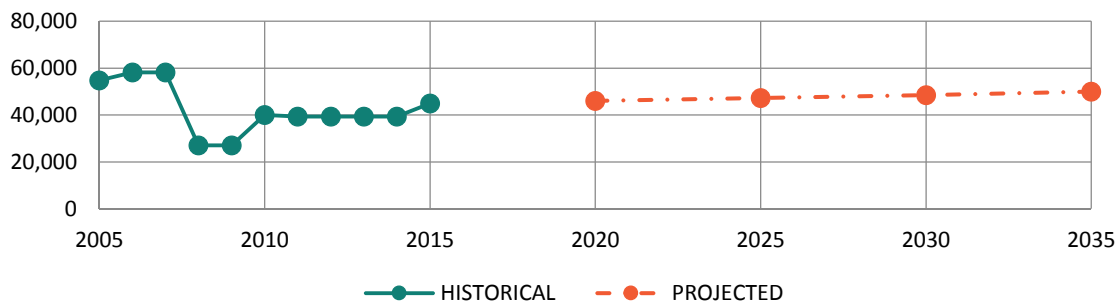
Howell, MI

Growth Rate (2015-2035): 0.53%

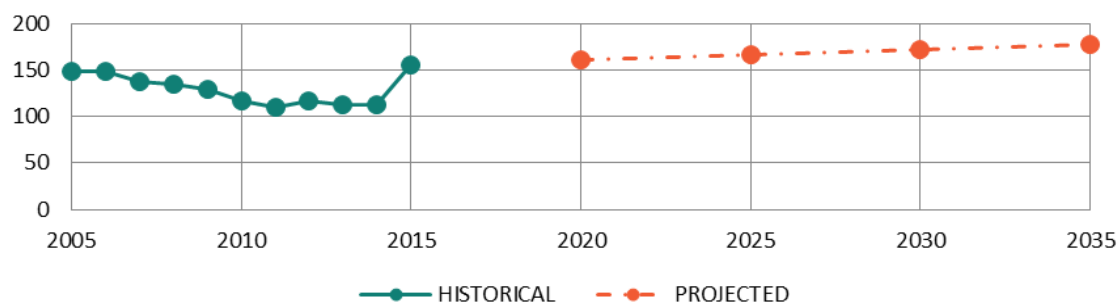
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	21,915	0	32,872	0	54,787	149
2006	0	0	29,119	0	29,119	0	58,238	149
2007	0	0	29,119	0	29,119	0	58,238	137
2008	0	0	13,500	0	13,500	0	27,000	135
2009	0	0	13,500	0	13,500	0	27,000	129
2010	0	0	20,047	0	20,047	0	40,094	117
2011	0	0	19,646	0	19,646	0	39,292	110
2012	0	0	19,646	0	19,646	0	39,292	117
2013	0	0	19,646	0	19,646	0	39,292	113
2014	0	0	19,646	0	19,646	0	39,292	113
2015	0	0	19,000	0	26,000	0	45,000	156
Projected								
2020	0	0	19,436	0	26,597	0	46,033	161
2025	0	0	19,926	0	27,267	0	47,193	167
2030	0	0	20,497	0	28,049	0	48,546	172
2035	0	0	21,104	0	28,879	0	49,983	178

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



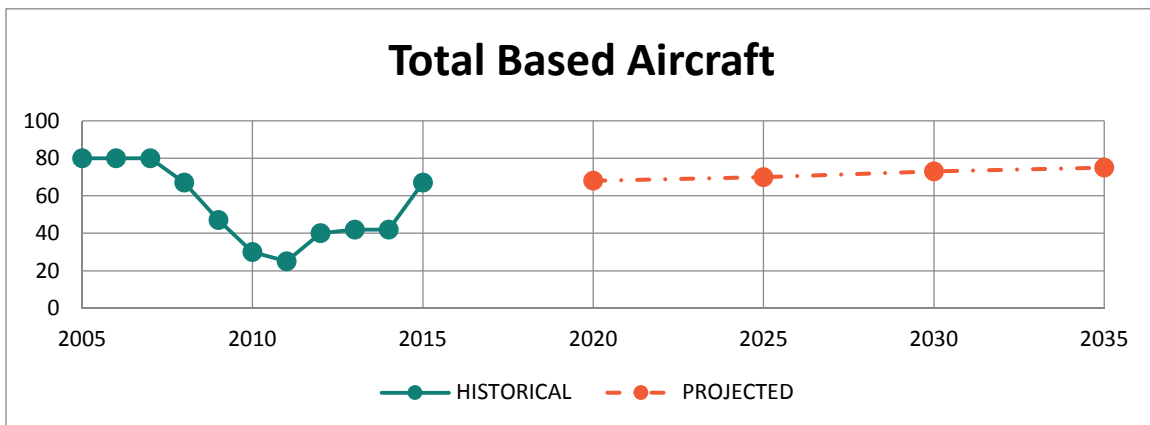
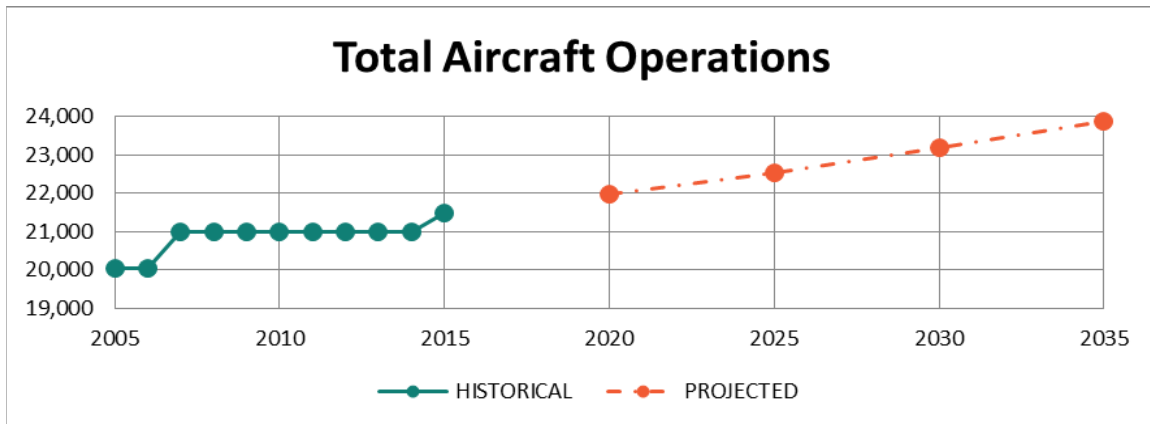
## Ionia County (Y70)

Ionia, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	10,021	0	10,021	0	20,042	80
2006	0	0	10,021	0	10,021	0	20,042	80
2007	0	0	10,500	0	10,500	0	21,000	80
2008	0	0	10,500	0	10,500	0	21,000	67
2009	0	0	10,500	0	10,500	0	21,000	47
2010	0	0	10,500	0	10,500	0	21,000	30
2011	0	0	10,500	0	10,500	0	21,000	25
2012	0	0	10,500	0	10,500	0	21,000	40
2013	0	0	10,500	0	10,500	0	21,000	42
2014	0	0	10,500	0	10,500	0	21,000	42
2015	0	200	10,500	300	10,500	0	21,500	67
Projected								
2020	0	205	10,745	300	10,745	0	21,994	69
2025	0	210	11,019	300	11,019	0	22,548	72
2030	0	216	11,339	300	11,339	0	23,194	74
2035	0	222	11,679	300	11,679	0	23,881	76

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Ford (IMT)

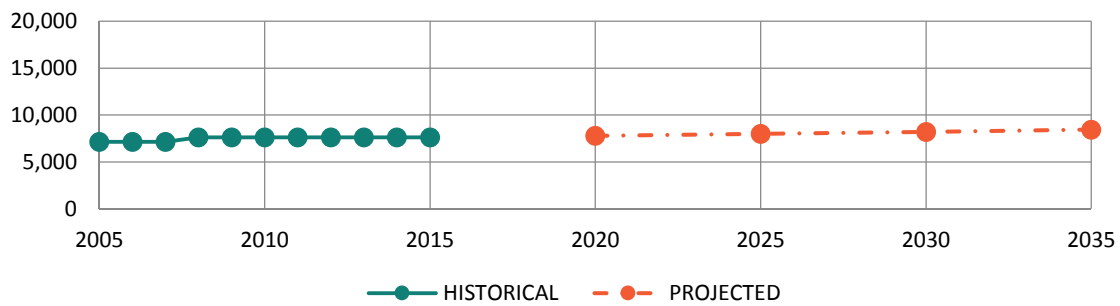
Iron Mountain Kingsford, MI

Growth Rate (2015-2035): 0.52%

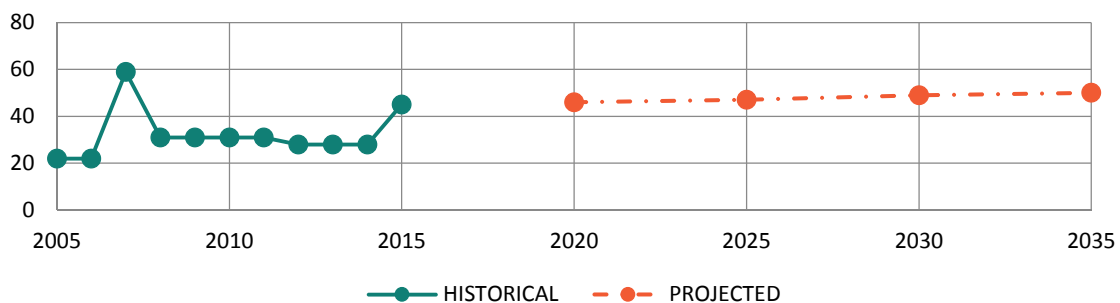
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	5,949	686	10	490	0	7,135	22
2006	0	5,949	686	10	490	0	7,135	22
2007	0	5,949	686	10	490	0	7,135	59
2008	2,080	4,316	700	10	500	0	7,606	31
2009	2,080	4,316	700	10	500	0	7,606	31
2010	2,080	4,316	700	10	500	0	7,606	31
2011	2,080	4,316	700	10	500	0	7,606	31
2012	2,080	4,316	700	10	500	0	7,606	28
2013	2,080	4,316	700	10	500	0	7,606	28
2014	2,080	4,316	700	10	500	0	7,606	28
2015	2,080	4,316	700	10	500	0	7,616	45
Projected								
2020	2,128	4,415	716	10	512	0	7,781	46
2025	2,181	4,527	734	10	524	0	7,977	47
2030	2,244	4,656	755	10	539	0	8,205	49
2035	2,310	4,794	777	10	555	0	8,448	50

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



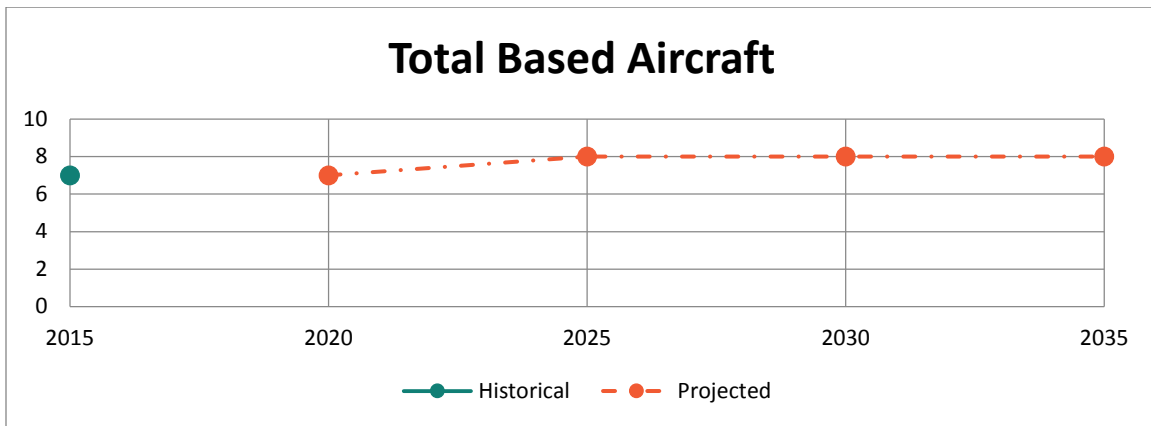
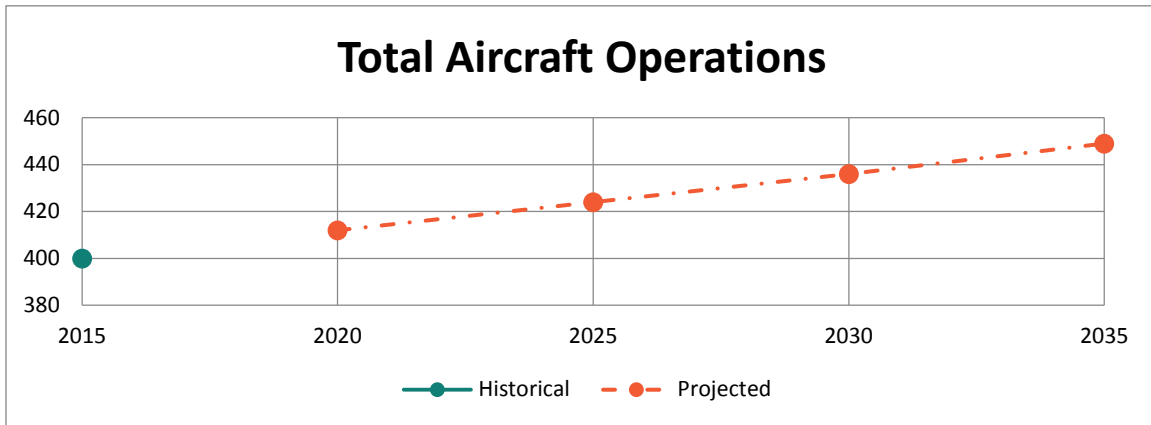
## Stambaugh (Y73)

Iron River, MI

Growth Rate (2015-2035):0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015					400		400	7
Projected								
2020					412		412	7
2025					424		424	8
2030					436		436	8
2035					449		449	8

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



## Gogebic – Iron County (IWD)

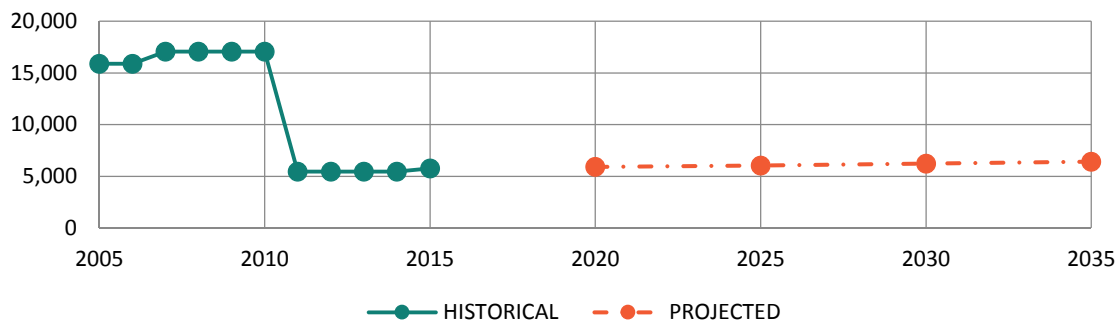
Ironwood, MI

Growth Rate (2015-2035): 0.53%

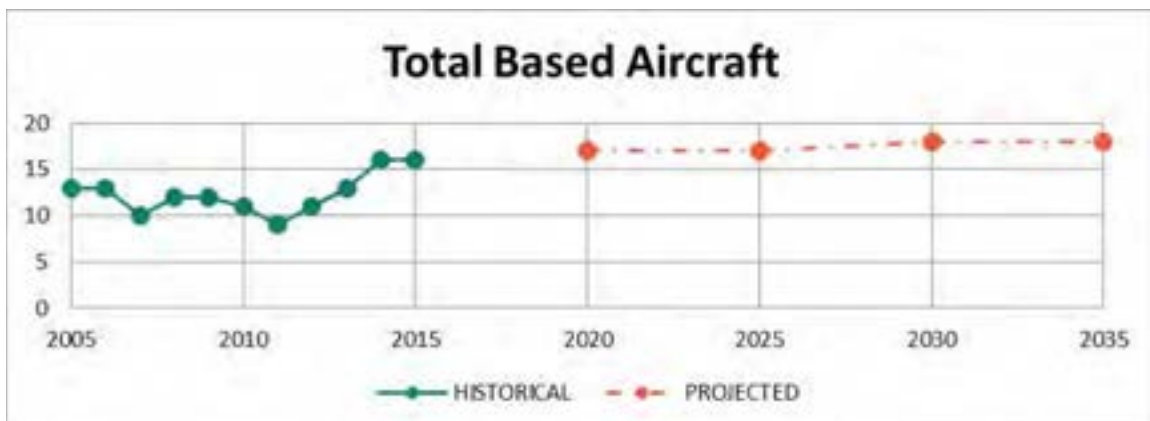
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	1,250	6,600	100	7,950	0	15,900	13
2006	0	1,250	6,600	100	7,950	0	15,900	13
2007	1,404	1,000	6,600	100	7,950	0	17,054	10
2008	1,404	1,000	6,600	100	7,950	0	17,054	12
2009	1,404	1,000	6,600	100	7,950	0	17,054	12
2010	1,404	1,000	6,600	100	7,950	0	17,054	11
2011	1,404	500	1,550	10	2,000	0	5,464	9
2012	1,404	500	1,550	10	2,000	0	5,464	11
2013	1,404	500	1,550	10	2,000	0	5,464	13
2014	1,404	500	1,550	10	2,000	0	5,464	16
2015	0	2,206	1,560	10	2,000	0	5,776	16
Projected								
2020	0	2,257	1,596	10	2,046	0	5,909	17
2025	0	2,314	1,636	10	2,098	0	6,058	17
2030	0	2,380	1,683	10	2,158	0	6,231	18
2035	0	2,451	1,733	10	2,222	0	6,416	18

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Jackson County – Reynolds Field (JXN)

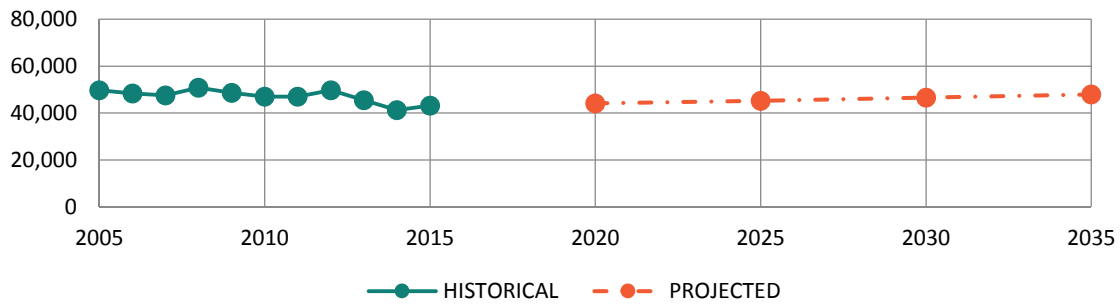
Jackson, MI

Growth Rate (2015-2035): 0.53%

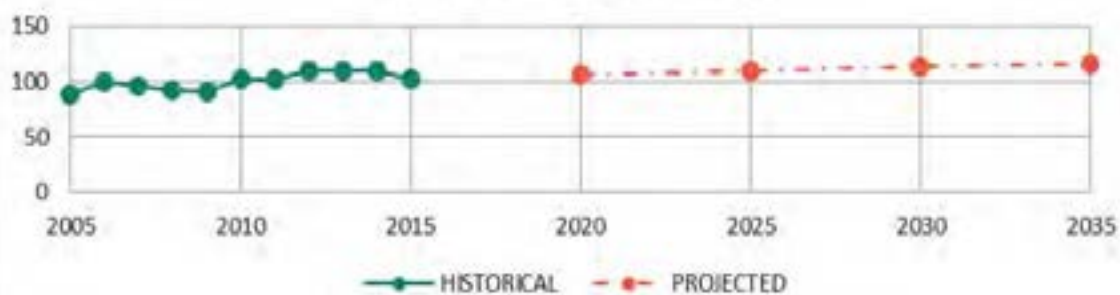
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	4	571	31,681	92	17,300	8	49,656	88
2006	11	938	32,625	188	14,442	144	48,348	100
2007	52	520	30,419	299	16,181	106	47,577	96
2008	92	590	28,205	148	21,716	98	50,849	92
2009	39	523	27,047	108	20,949	14	48,680	91
2010	232	412	24,132	144	21,882	118	46,920	102
2011	144	497	24,259	144	21,884	56	46,984	102
2012	175	525	26,840	283	21,828	81	49,732	109
2013	50	732	25,790	363	18,486	107	45,528	109
2014	42	955	21,909	230	18,073	80	41,289	109
2015	40	1,123	23,153	373	18,326	110	43,125	102
Projected								
2020	41	1,149	23,691	373	18,751	110	44,115	106
2025	42	1,178	24,294	373	19,229	110	45,227	109
2030	43	1,212	24,998	373	19,786	110	46,523	113
2035	44	1,249	25,746	373	20,378	110	47,900	116

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



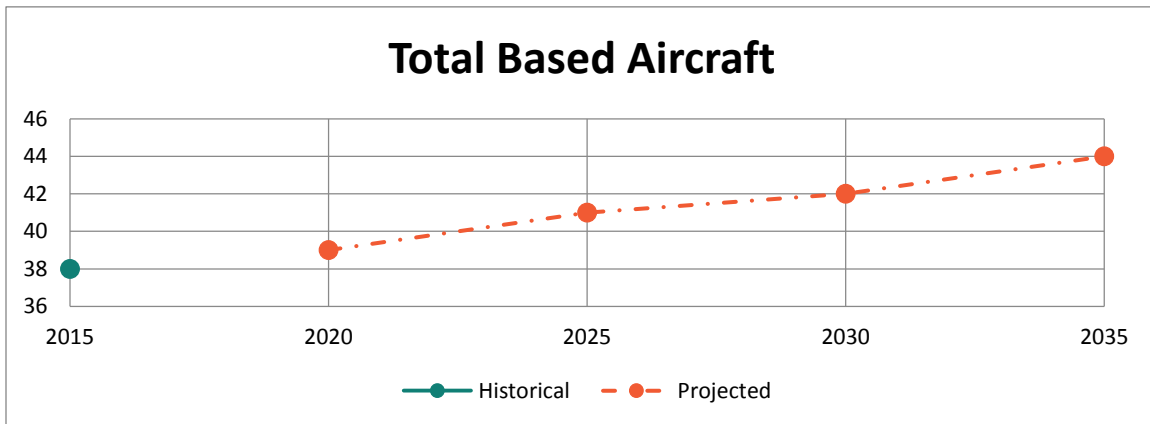
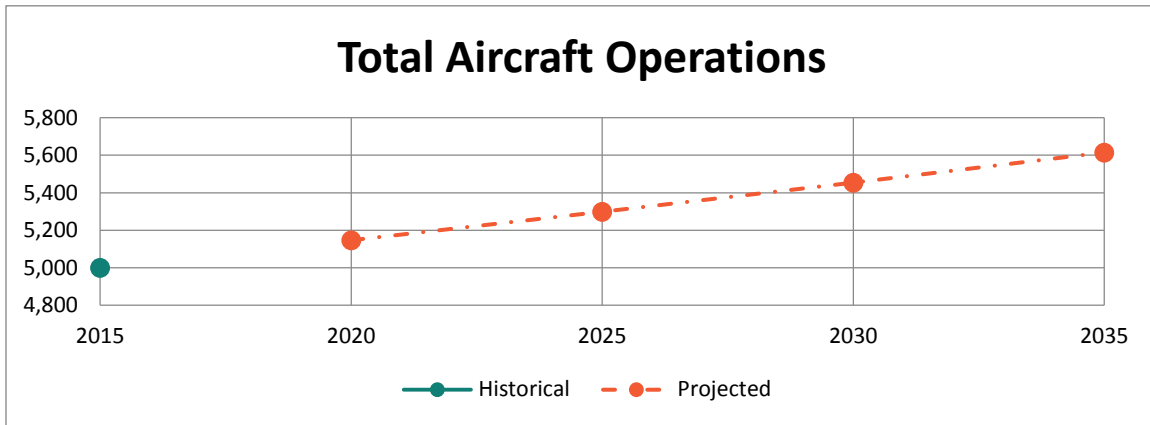
## Riverview (08C)

Jenison, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	2,500				2,500		5,000	38
Projected								
2020	2,574				2,574		5,147	39
2025			2,650		2,650		5,299	41
2030	2,727				2,727		5,454	42
2035			2,808		2,808		5,615	44

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.





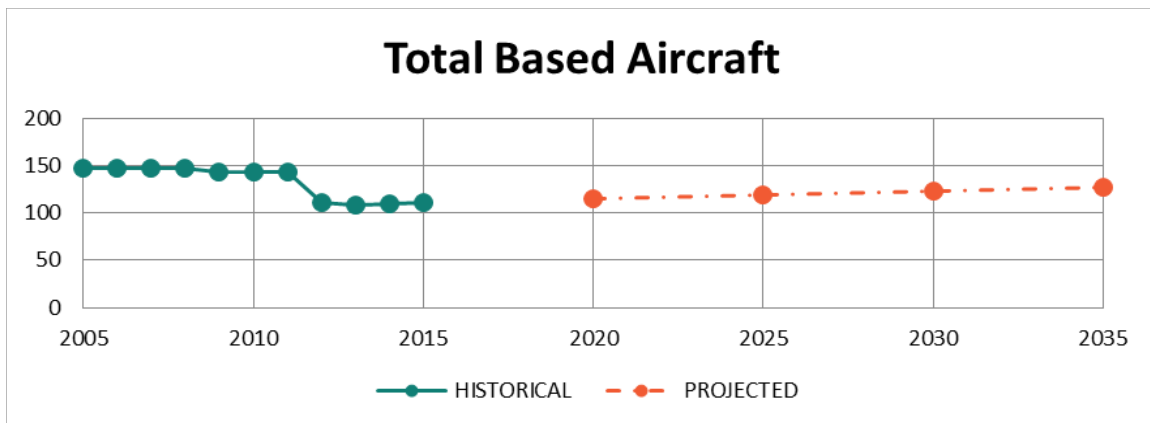
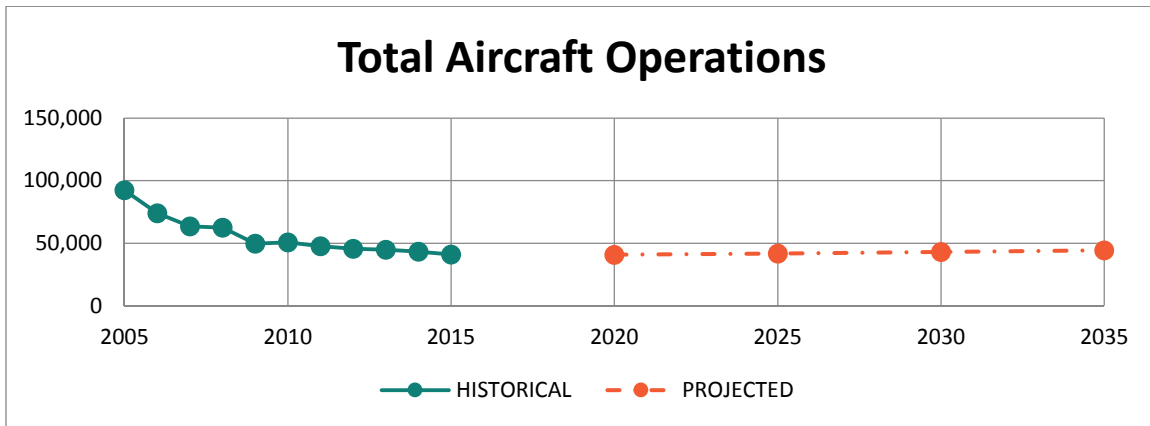
## Kalamazoo/Battle Creek International (AZO)

Kalamazoo, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	2,948	15,180	35,710	121	38,425	40	92,424	148
2006	1,566	15,043	30,841	165	26,483	54	74,152	148
2007	1,290	13,440	25,592	97	23,055	2	63,476	148
2008	1,305	12,387	25,064	108	23,611	0	62,475	148
2009	1,131	9,351	21,279	73	17,947	4	49,785	143
2010	342	9,749	20,275	111	20,219	60	50,756	143
2011	505	10,473	17,482	139	19,006	52	47,657	143
2012	302	9,381	18,442	287	17,275	32	45,719	111
2013	41	9,043	17,662	166	18,036	8	44,956	109
2014	81	8,350	16,488	102	18,219	12	43,252	110
2015	942	6,051	17,524	191	16,181	43	40,932	111
Projected								
2020	964	6,191	17,929	191	16,555	43	41,872	115
2025	988	6,348	18,383	191	16,974	43	42,927	119
2030	1,017	6,531	18,913	191	17,464	43	44,158	123
2035	1,047	6,725	19,475	191	17,983	43	45,464	127

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



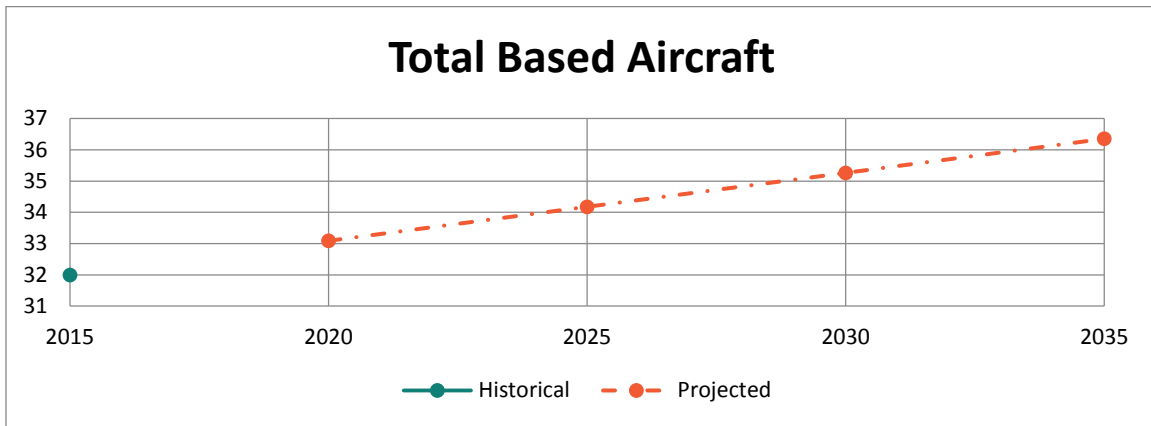
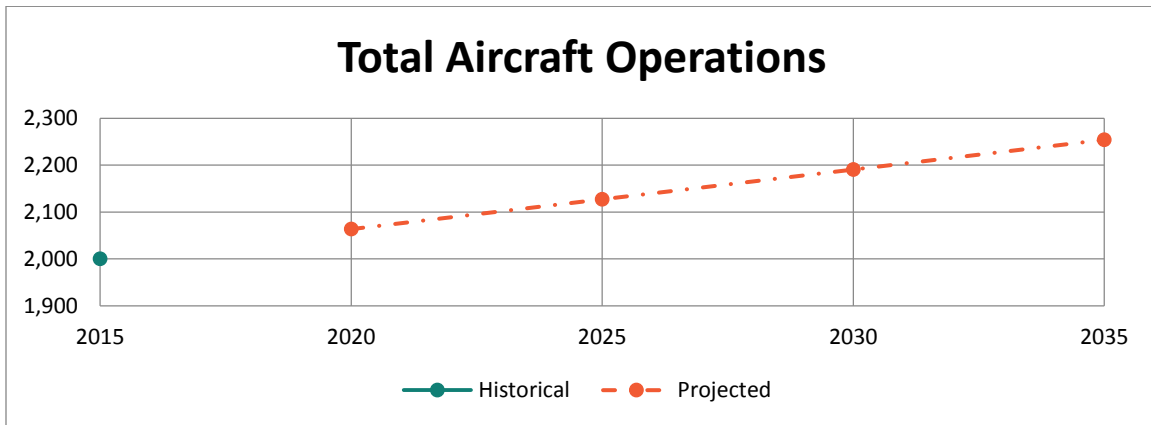
## Home Acres Sky Ranch (Y91)

Lake City, MI

Growth Rate (2015-2035): 0.60%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	1,000				1,000		2,000	32
Projected								
2020	1,032				1,032		2,064	33
2025			1,064		1,064		2,127	34
2030	1,095				1,095		2,191	36
2035			1,127		1,127		2,254	37

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Lakeview-Griffith (13C)

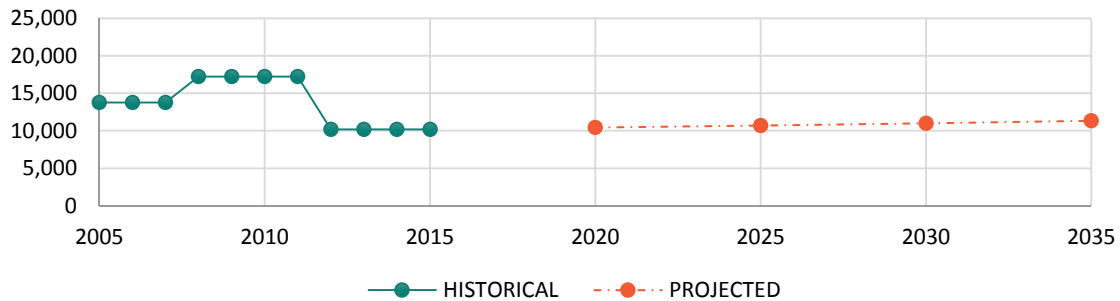
Lakeview, MI

Growth Rate (2015-2035): 0.53%

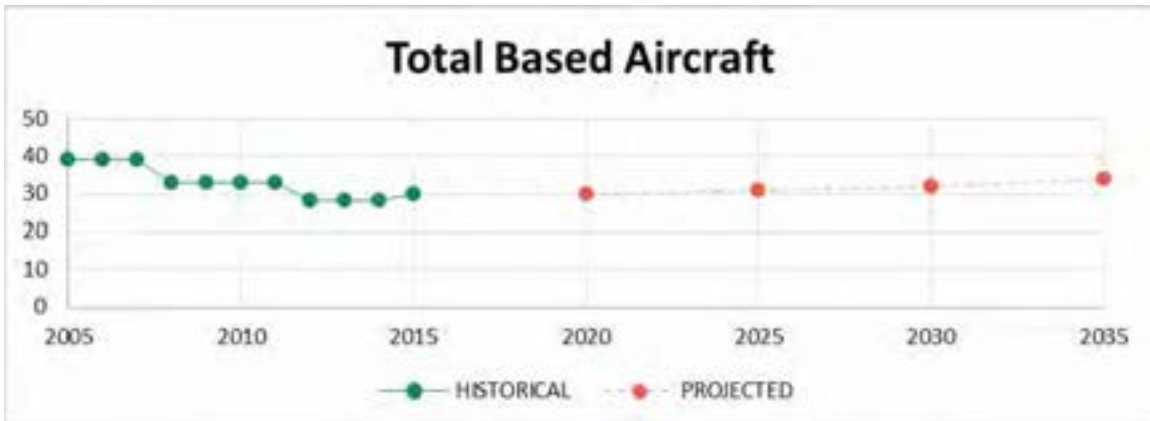
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	9,627	0	4,126	0	13,753	39
2006	0	0	9,627	0	4,126	0	13,753	39
2007	0	0	9,627	0	4,126	0	13,753	39
2008	0	0	11,000	200	6,000	0	17,200	33
2009	0	0	11,000	200	6,000	0	17,200	33
2010	0	0	11,000	200	6,000	0	17,200	33
2011	0	0	11,000	200	6,000	0	17,200	33
2012	0	0	5,000	200	5,000	0	10,200	28
2013	0	0	5,000	200	5,000	0	10,200	28
2014	0	0	5,000	200	5,000	0	10,200	28
2015	0	200	5,000	0	5,000	0	10,200	30
Projected								
2020	0	205	5,115	0	5,115	0	10,434	30
2025	0	210	5,244	0	5,244	0	10,697	31
2030	0	216	5,394	0	5,394	0	11,004	32
2035	0	222	5,553	0	5,553	0	11,329	34

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



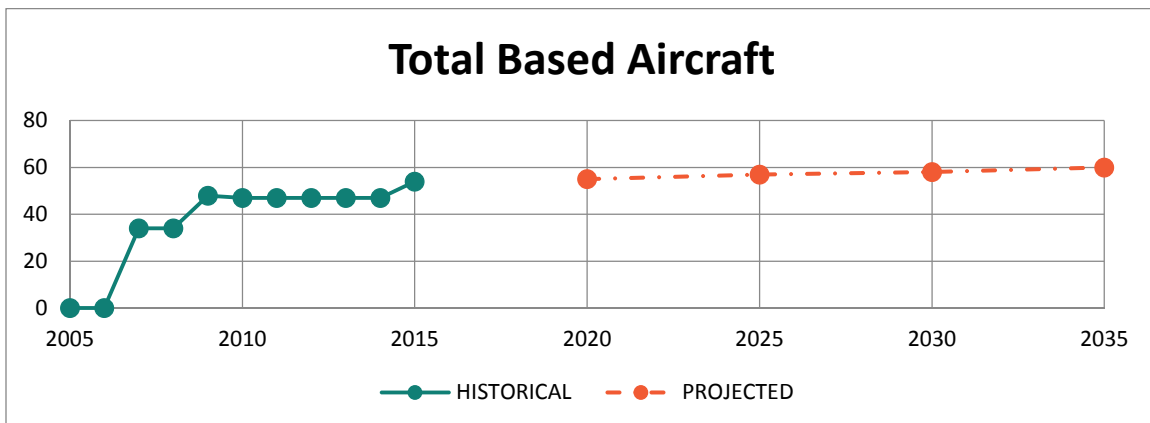
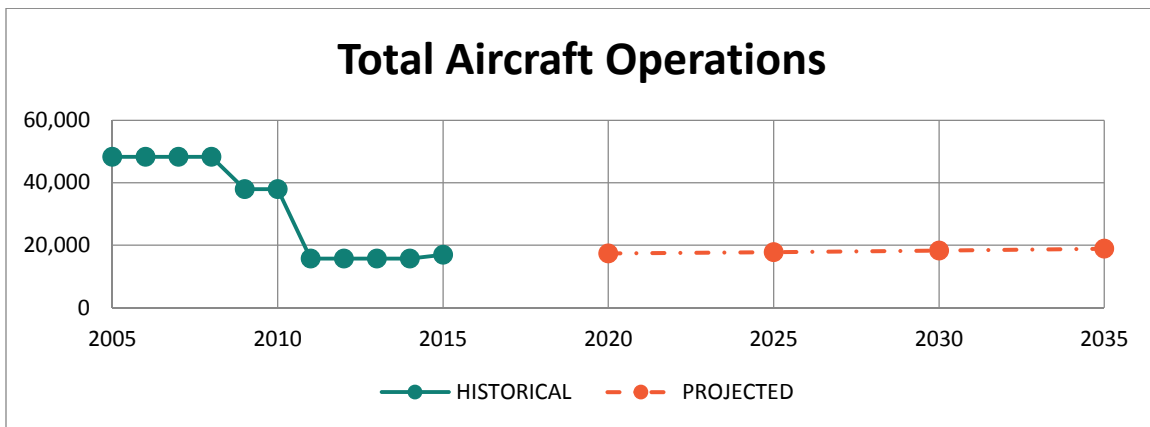
## Toledo Suburban (DUH)

Lambertville, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	14,472	0	33,768	0	48,240	0
2006	0	0	14,472	0	33,768	0	48,240	0
2007	0	0	14,472	0	33,768	0	48,240	34
2008	0	0	14,472	0	33,768	0	48,240	34
2009	0	0	10,000	0	28,000	0	38,000	48
2010	0	0	10,000	0	28,000	0	38,000	47
2011	0	0	3,930	0	11,787	0	15,717	47
2012	0	0	3,930	0	11,787	0	15,717	47
2013	0	0	3,930	0	11,787	0	15,717	47
2014	0	0	3,930	0	11,787	0	15,717	47
2015	0	0	4,000	0	13,000	0	17,000	54
Projected								
2020	0	0	4,174	0	13,216	0	17,390	55
2025	0	0	4,279	0	13,550	0	17,829	57
2030	0	0	4,402	0	13,938	0	18,340	58
2035	0	0	4,532	0	14,350	0	18,882	60

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Capital Regional International (LAN)

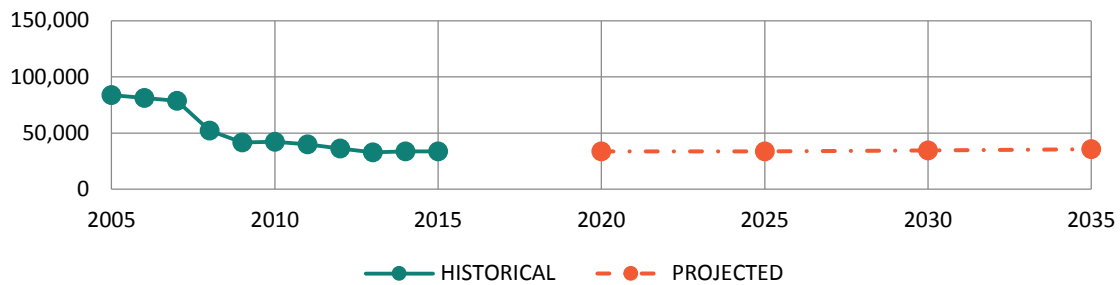
Lansing, MI

Growth Rate (2015-2035): 0.30%

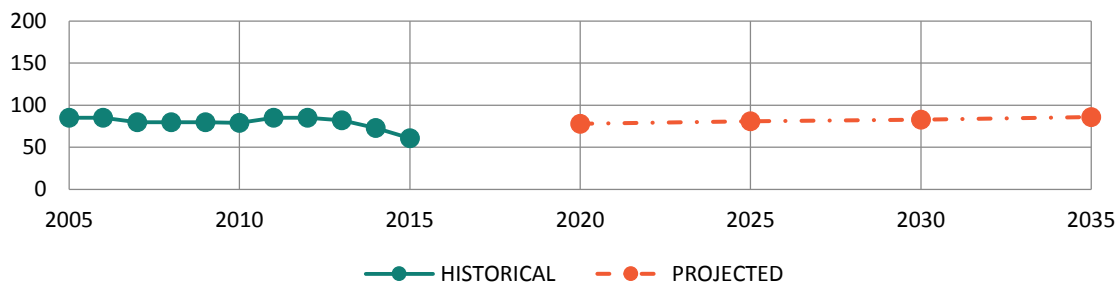
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	12,554	16,194	28,185	1,464	24,099	1,438	83,934	85
2006	10,872	14,667	29,383	716	24,199	1,355	81,192	85
2007	10,081	13,253	27,615	2,313	24,262	1,150	78,674	80
2008	5,630	12,951	19,176	936	12,856	603	52,152	80
2009	3,567	10,517	18,191	612	8,691	110	41,688	80
2010	889	13,946	18,446	818	8,041	92	42,232	79
2011	2,145	14,085	14,575	702	8,280	168	39,955	85
2012	2,739	14,009	14,667	1,176	3,572	143	36,306	85
2013	2,768	13,150	13,037	1,003	2,646	72	32,676	82
2014	2,678	13,300	12,734	1,107	3,831	54	33,704	73
2015	2,314	12,850	12,615	1,279	4,513	50	33,621	61
Projected								
2020	5,236	9,827	12,624	1,279	4,940	50	33,956	78
2025	7,995	6,626	12,841	1,279	5,004	50	33,795	81
2030	8,534	6,727	13,070	1,279	5,093	50	34,752	83
2035	9,072	6,827	13,299	1,279	5,182	50	35,709	86

Source: Runway 6/24 Runway Safety Area Improvements Report, Capital Region International Airport, November 2016 (forecast), FAA Terminal Area Forecast 2016 – 2036 (historical).  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Dupont-Lapeer (D95)

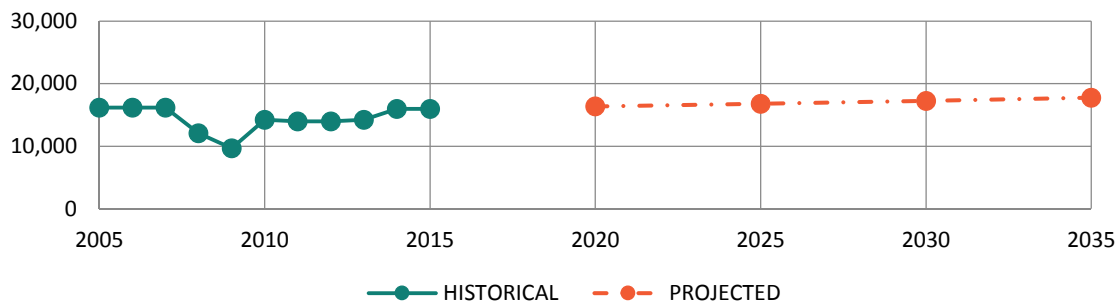
Lapeer, MI

Growth Rate (2015-2035): 0.531%

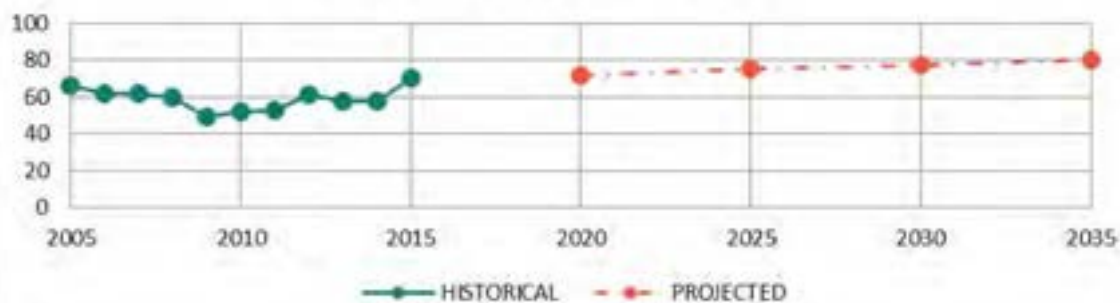
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	300	6,370	0	9,506	0	16,176	66
2006	0	300	6,370	0	9,506	0	16,176	62
2007	0	300	6,370	0	9,506	0	16,176	62
2008	0	0	4,836	0	7,254	0	12,090	60
2009	0	0	3,627	0	6,045	0	9,672	49
2010	0	0	4,752	0	9,504	0	14,256	52
2011	0	0	4,657	0	9,314	0	13,971	53
2012	0	0	4,657	0	9,314	0	13,971	61
2013	0	0	4,752	0	9,504	0	14,256	58
2014	0	0	6,000	0	10,000	0	16,000	58
2015	0	0	6,000	0	10,000	0	16,000	70
Projected								
2020	0	0	6,138	0	10,229	0	16,367	72
2025	0	0	6,293	0	10,488	0	16,780	75
2030	0	0	6,473	0	10,788	0	17,261	77
2035	0	0	6,665	0	11,108	0	17,772	80

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



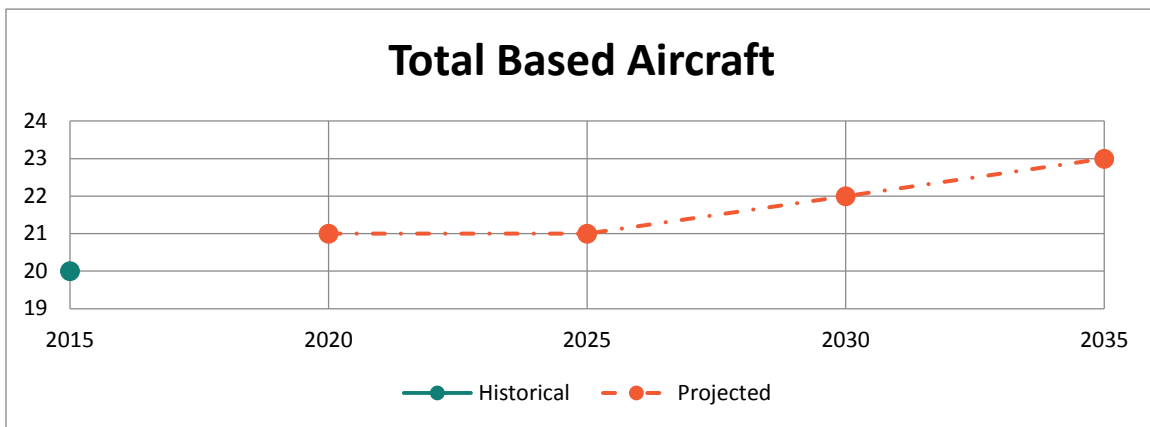
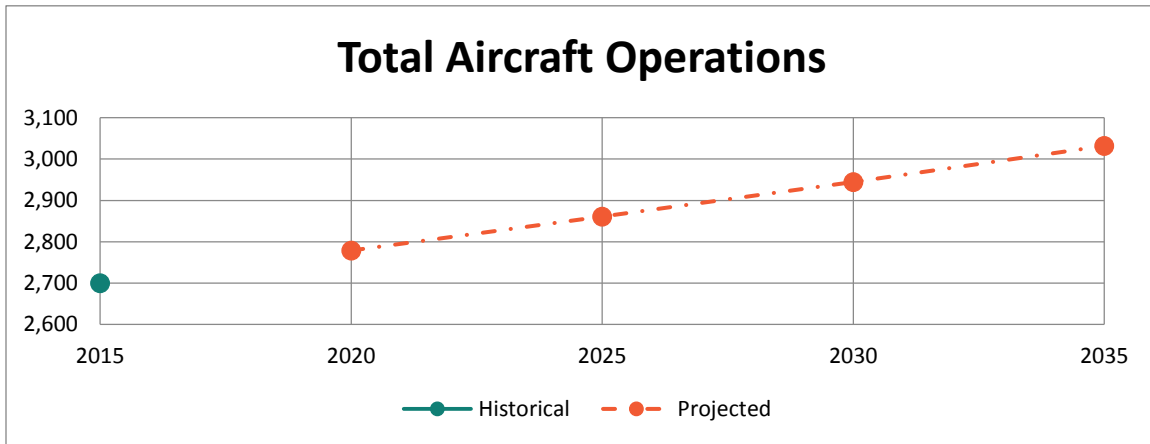
## Price (9G2)

Linden, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	1,188				1,512		2,700	20
Projected								
2020	1,223				1,556		2,779	21
2025			1,259		1,602		2,861	21
2030	1,296				1,649		2,945	22
2035			1,334		1,698		3,032	23

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



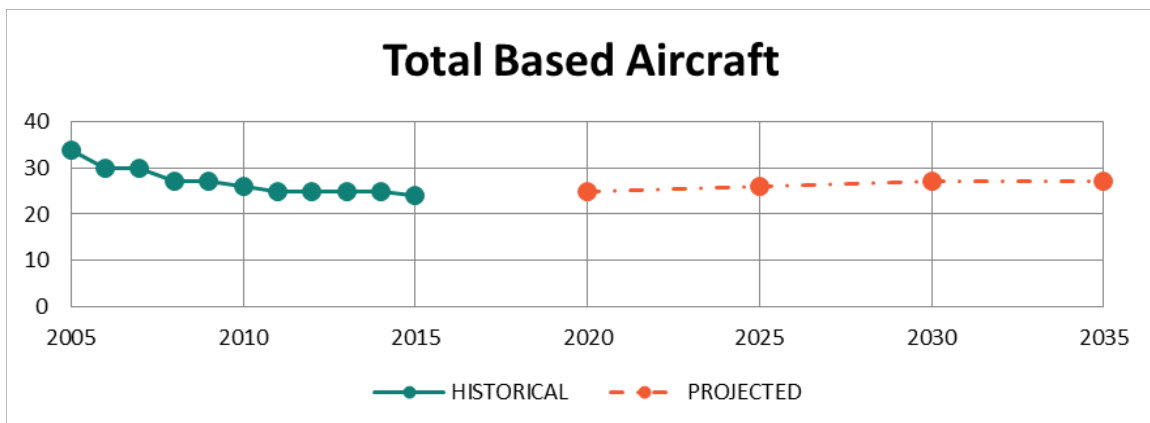
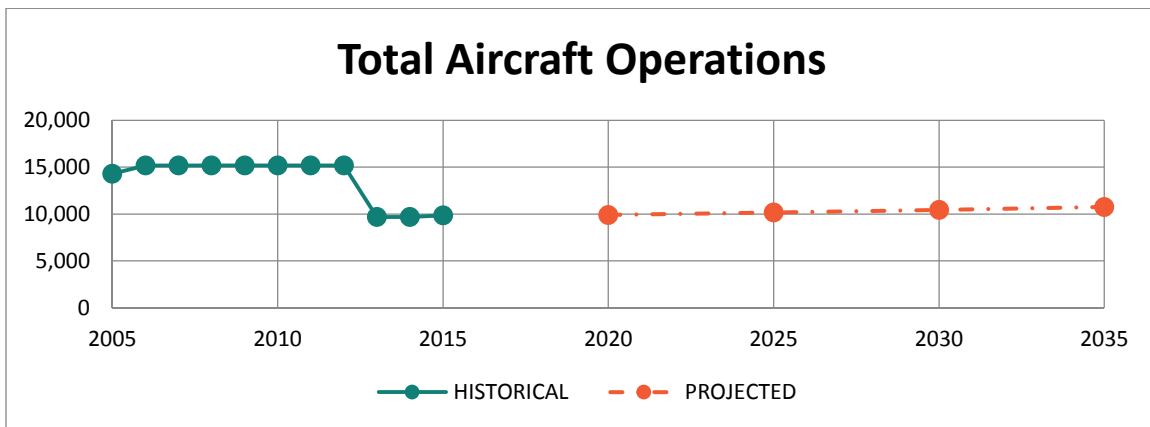
## Mason County (LDM)

Ludington, MI

Growth Rate (2015-2035): 0.43%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	2,000	5,145	0	7,144	0	14,289	34
2006	0	2,000	5,594	0	7,594	0	15,188	30
2007	0	2,000	5,594	0	7,594	0	15,188	30
2008	0	2,000	5,594	0	7,594	0	15,188	27
2009	0	2,000	5,594	0	7,594	0	15,188	27
2010	0	2,000	5,594	0	7,594	0	15,188	26
2011	0	2,000	5,594	0	7,594	0	15,188	25
2012	0	2,000	5,594	0	7,594	0	15,188	25
2013	0	2,000	4,423	0	3,259	0	9,682	25
2014	0	2,000	4,423	0	3,259	0	9,682	25
2015	0	600	5,993	10	3,259	0	9,862	24
Projected								
2020	0	603	6,019	10	3,273	0	9,904	25
2025	0	618	6,171	10	3,356	0	10,154	26
2030	0	636	6,348	10	3,452	0	10,445	27
2035	0	654	6,536	10	3,554	0	10,754	27

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.





## Mackinac Island (MCD)

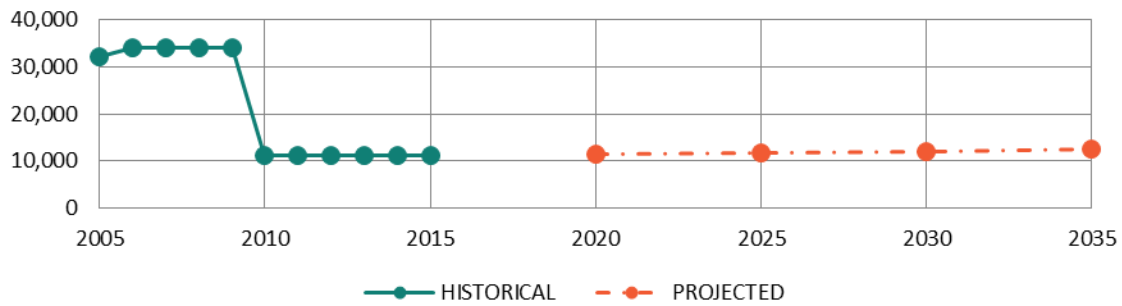
Mackinac Island, MI

Growth Rate (2015-2035): 0.53%

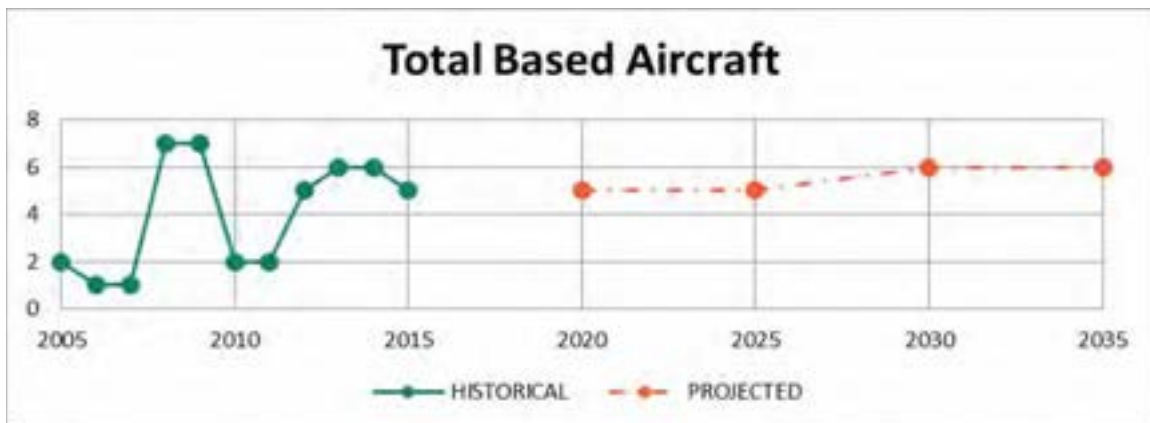
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	6,200	25,721	0	100	0	32,021	2
2006	0	6,200	27,738	0	100	0	34,038	1
2007	0	6,200	27,738	0	100	0	34,038	1
2008	0	6,200	27,738	0	100	0	34,038	7
2009	0	6,200	27,738	0	100	0	34,038	7
2010	0	3,500	7,500	0	100	0	11,100	2
2011	0	3,500	7,500	0	100	0	11,100	2
2012	0	3,500	7,500	0	100	0	11,100	5
2013	0	3,500	7,500	0	100	0	11,100	6
2014	0	3,500	7,500	0	100	0	11,100	6
2015	0	6,546	0	0	4,645	0	11,191	5
Projected								
2020	0	6,640	0	0	4,808	0	11,448	5
2025	0	6,807	0	0	4,929	0	11,736	5
2030	0	7,002	0	0	5,071	0	12,073	6
2035	0	7,209	0	0	5,221	0	12,430	6

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Manistee Co. – Blacker (MBL)

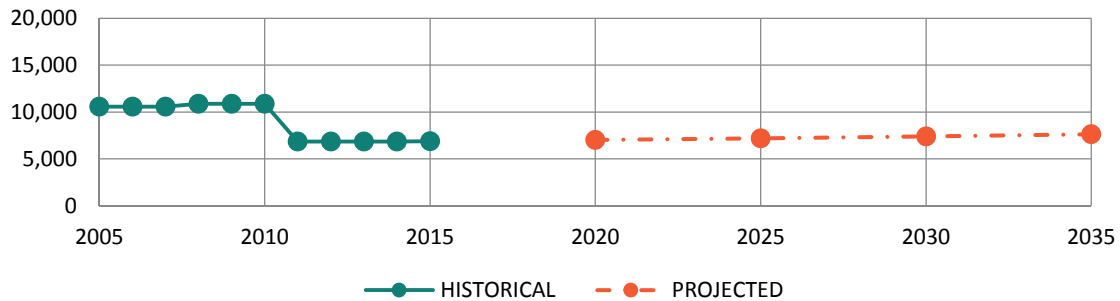
Manistee, MI

Growth Rate (2015-2035): 0.50%

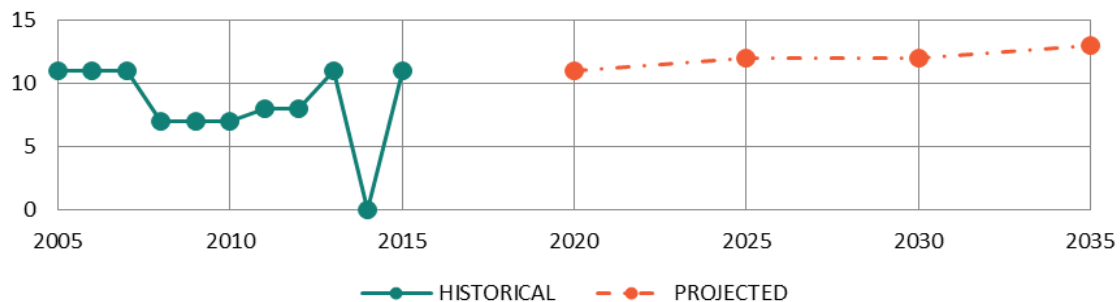
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	1,248	600	4,347	25	4,346	0	10,566	11
2006	1,248	600	4,347	25	4,346	0	10,566	11
2007	1,248	600	4,347	25	4,346	0	10,566	11
2008	1,250	600	4,500	15	4,500	0	10,865	7
2009	1,250	600	4,500	15	4,500	0	10,865	7
2010	1,250	600	4,500	15	4,500	0	10,865	7
2011	1,250	600	2,500	15	2,500	0	6,865	8
2012	1,250	600	2,500	15	2,500	0	6,865	8
2013	1,250	600	2,500	15	2,500	0	6,865	11
2014	1,250	600	2,500	15	2,500	0	6,865	0
2015	1,250	2,600	2,500	50	500	0	6,900	11
Projected								
2020	1,272	2,647	2,545	50	509	0	7,023	11
2025	1,305	2,714	2,609	50	522	0	7,200	12
2030	1,342	2,792	2,685	50	537	0	7,406	12
2035	1,382	2,875	2,765	50	553	0	7,625	13

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



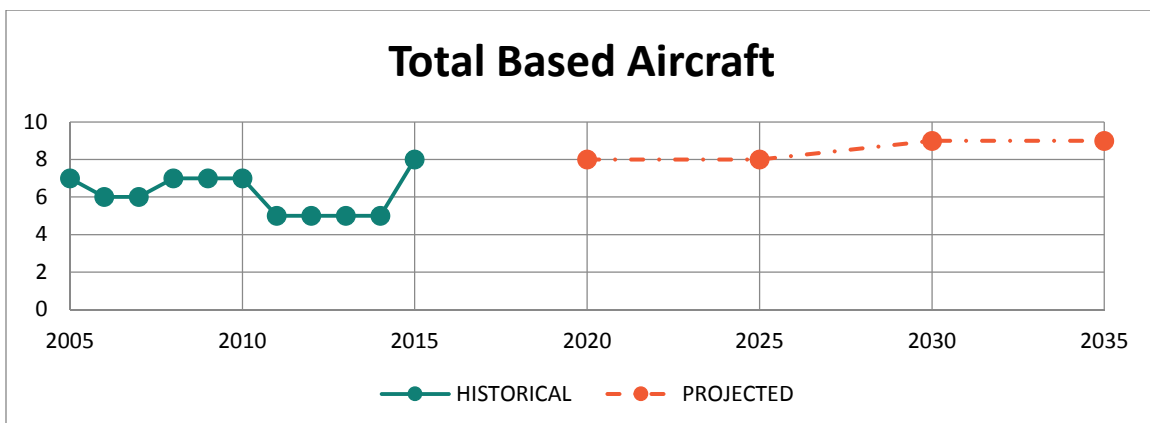
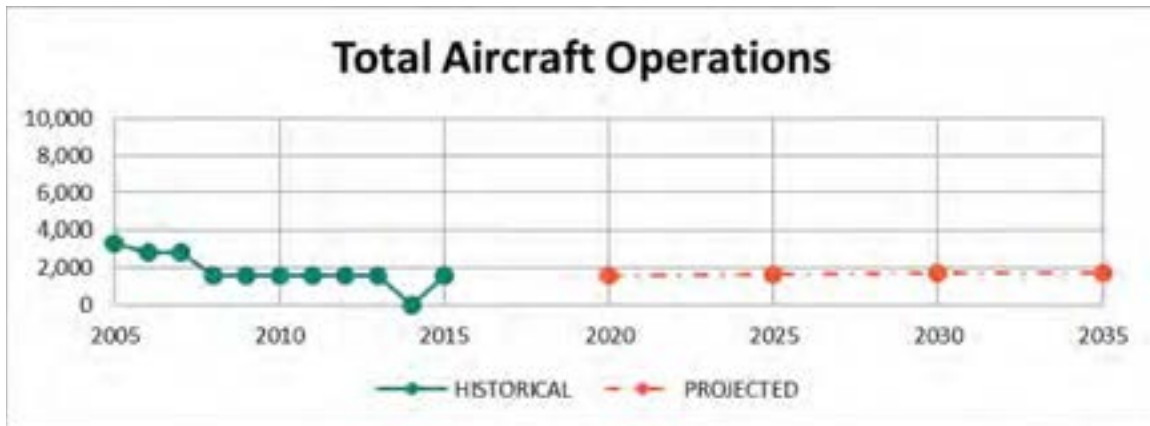
## Schoolcraft County (ISQ)

Manistique, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	1,988	0	1,326	0	3,314	7
2006	0	0	1,409	0	1,409	0	2,818	6
2007	0	0	1,409	0	1,409	0	2,818	6
2008	0	0	500	0	1,050	0	1,550	7
2009	0	0	500	0	1,050	0	1,550	7
2010	0	0	500	0	1,050	0	1,550	7
2011	0	0	500	0	1,050	0	1,550	5
2012	0	0	500	0	1,050	0	1,550	5
2013	0	0	500	0	1,050	0	1,550	5
2014	0	0	0	0	0	0	0	5
2015	0	0	500	0	1,050	0	1,550	8
Projected								
2020	0	0	515	0	1,081	0	1,596	8
2025	0	0	530	0	1,113	0	1,643	8
2030	0	0	545	0	1,146	0	1,691	9
2035	0	0	562	0	1,179	0	1,741	9

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



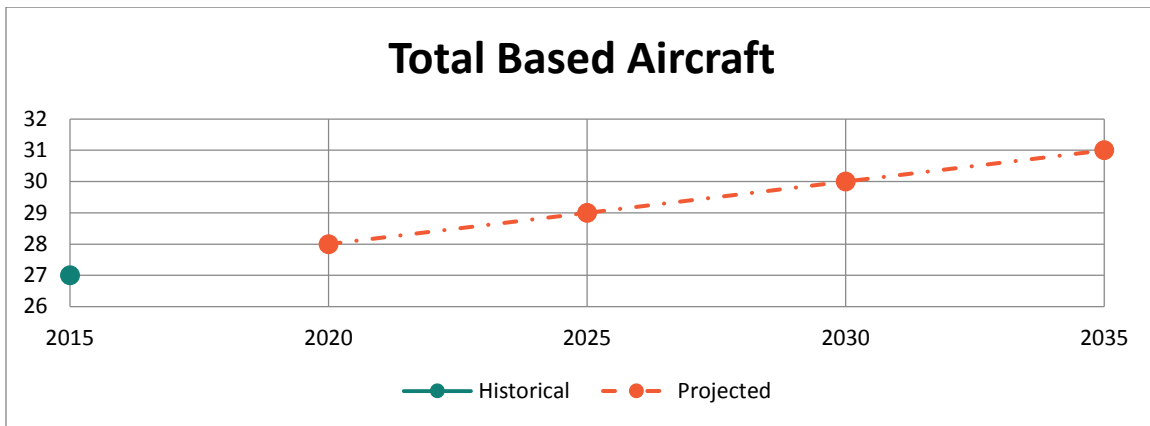
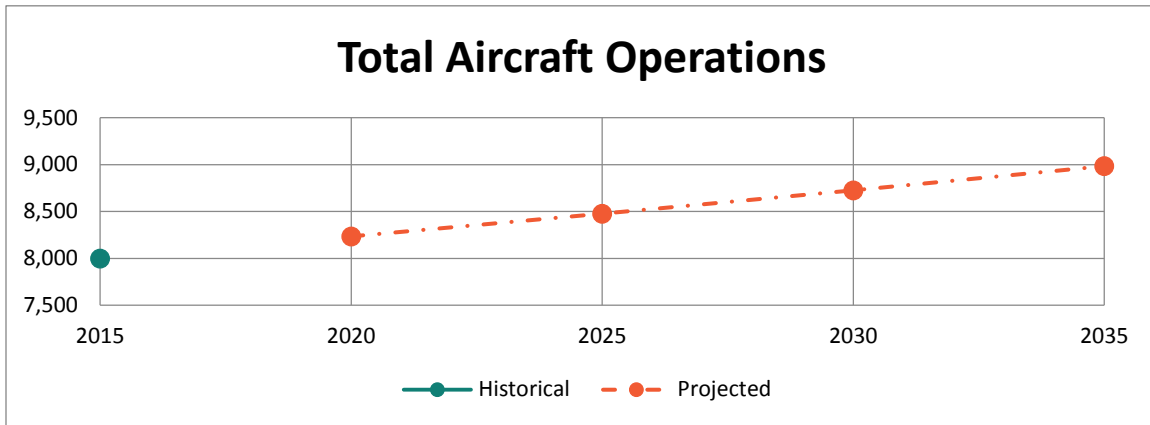
## Marine City (76G)

Marine City, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	4,000				4,000		8,000	27
Projected								
2020	4,118				4,118		8,235	28
2025			4,239		4,239		8,478	29
2030	4,364				4,364		8,727	30
2035			4,492		4,492		8,984	31

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



## Marlette (77G)

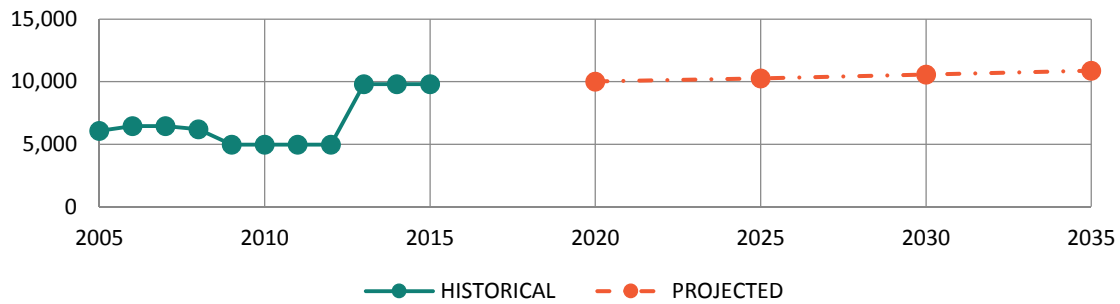
Marlette, MI

Growth Rate (2015-2035): 0.53%

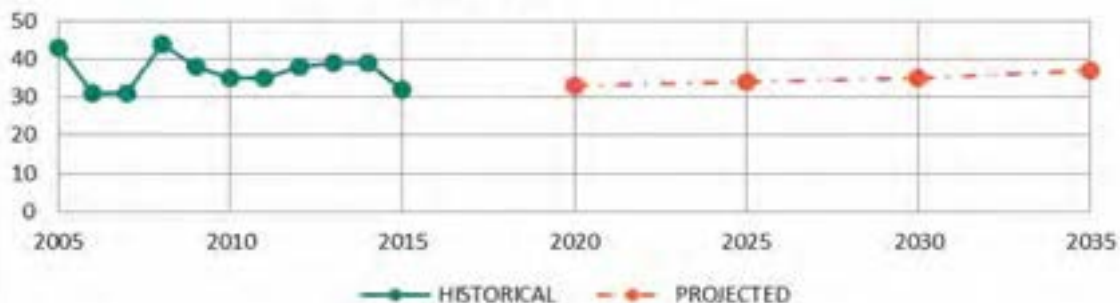
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	3,035	0	3,035	0	6,070	43
2006	0	0	3,226	0	3,226	0	6,452	31
2007	0	0	3,226	0	3,226	0	6,452	31
2008	0	0	3,100	0	3,100	0	6,200	44
2009	0	0	2,480	0	2,480	0	4,960	38
2010	0	0	2,480	0	2,480	0	4,960	35
2011	0	0	2,480	0	2,480	0	4,960	35
2012	0	0	2,480	0	2,480	0	4,960	38
2013	0	0	4,900	0	4,900	0	9,800	39
2014	0	0	4,900	0	4,900	0	9,800	39
2015	0	0	4,900	0	4,900	0	9,800	32
Projected								
2020	0	0	5,013	0	5,013	0	10,025	33
2025	0	0	5,139	0	5,139	0	10,278	34
2030	0	0	5,286	0	5,286	0	10,572	35
2035	0	0	5,443	0	5,443	0	10,885	37

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Sawyer International (SAW)

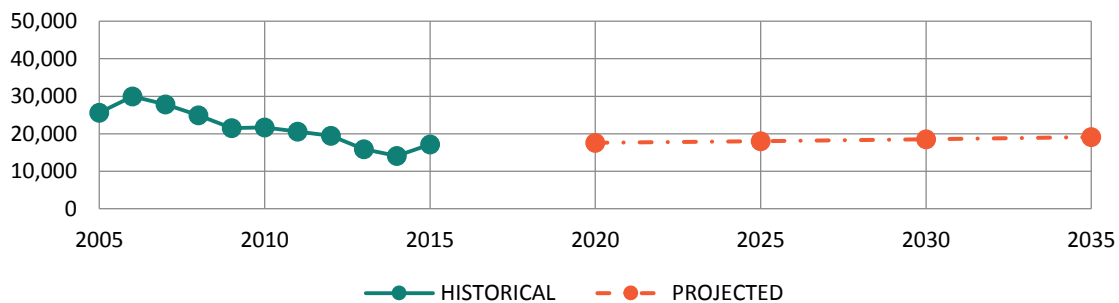
Marquette, MI

Growth Rate (2015-2035): 0.53sx%

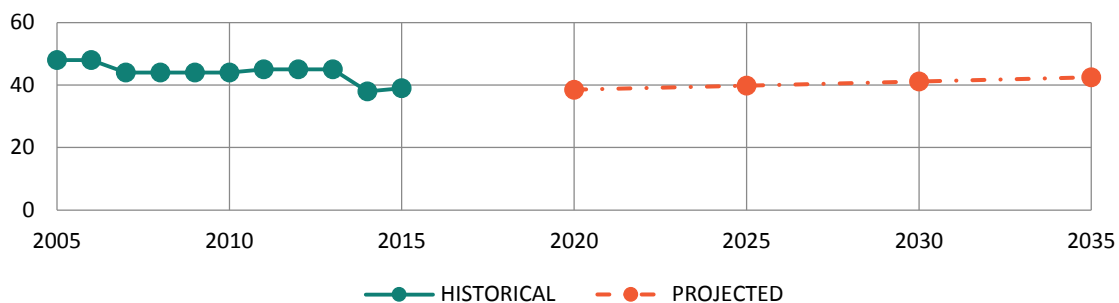
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	10	9,465	8,926	319	6,255	638	25,613	48
2006	3	11,325	9,112	499	7,939	1,071	29,949	48
2007	5	12,429	7,535	393	6,353	1,154	27,869	44
2008	29	10,956	6,903	233	6,207	632	24,960	44
2009	5	10,933	5,067	237	4,813	501	21,556	44
2010	4	10,547	4,560	245	5,954	342	21,652	44
2011	11	10,403	3,799	364	5,055	954	20,586	45
2012	695	7,917	4,397	320	5,583	586	19,498	45
2013	921	7,459	3,867	209	3,197	222	15,875	45
2014	867	6,808	3,449	261	2,438	258	14,081	38
2015	2,290	4,972	4,218	261	3,051	2,416	17,208	39
Projected								
2020	2,774	6,023	5,110	261	3,696	2,416	17,603	39
2025	2,844	6,175	5,239	261	3,789	2,416	18,047	40
2030	2,926	6,352	5,389	261	3,898	2,416	18,564	41
2035	3,012	6,540	5,548	261	4,013	2,416	19,113	42

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Brooks Field (RMY)

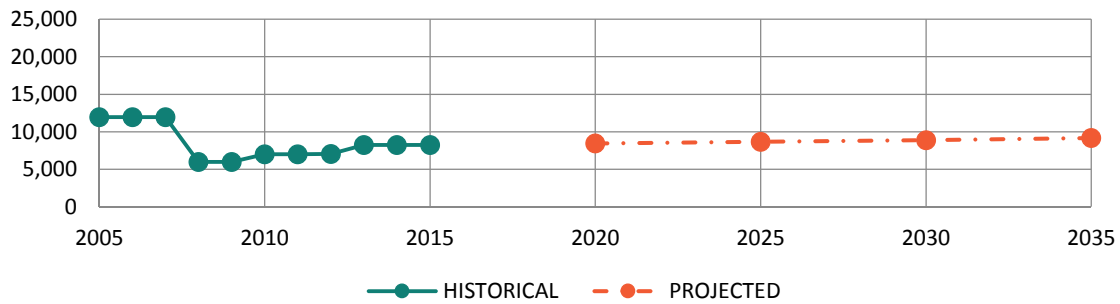
Marshall, MI

Growth Rate (2015-2035): 0.53%

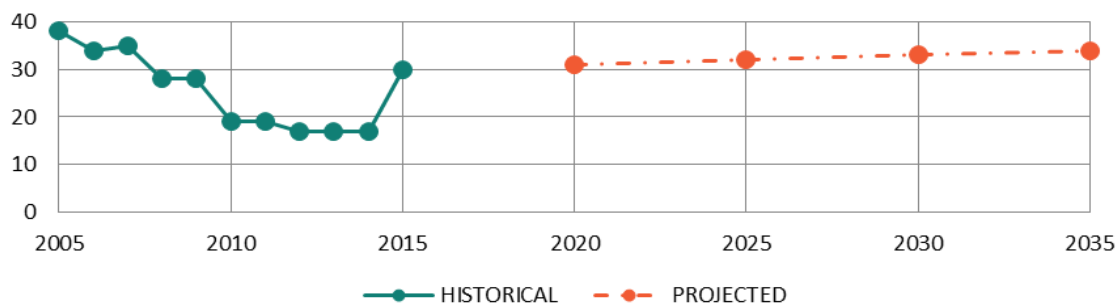
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	5,977	0	5,977	0	11,954	38
2006	0	0	5,977	0	5,977	0	11,954	34
2007	0	0	5,977	0	5,977	0	11,954	35
2008	0	0	3,000	0	3,000	0	6,000	28
2009	0	0	3,000	0	3,000	0	6,000	28
2010	0	0	3,500	0	3,500	0	7,000	19
2011	0	0	3,500	0	3,500	0	7,000	19
2012	0	0	3,500	50	3,500	0	7,050	17
2013	0	0	4,100	50	4,100	0	8,250	17
2014	0	0	4,100	50	4,100	0	8,250	17
2015	0	0	4,100	50	4,100	0	8,250	30
Projected								
2020	0	0	4,195	50	4,195	0	8,439	31
2025	0	0	4,301	50	4,301	0	8,652	32
2030	0	0	4,425	50	4,425	0	8,900	33
2035	0	0	4,557	50	4,557	0	9,163	34

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Mason Jewett Field (TEW)

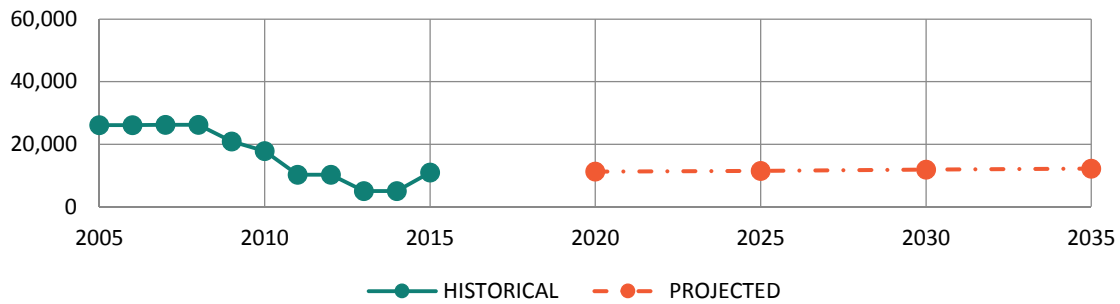
Mason, MI

Growth Rate (2015-2035): 0.53%

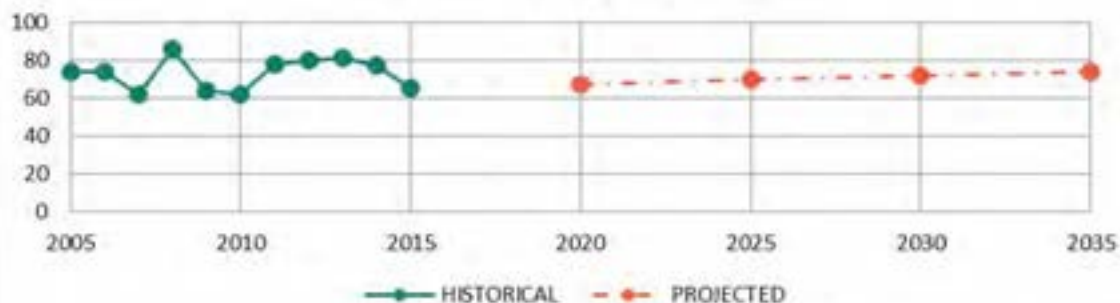
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	300	12,766	300	12,766	0	26,132	74
2006	0	300	12,766	300	12,766	0	26,132	74
2007	0	300	12,800	300	12,800	0	26,200	62
2008	0	300	12,800	300	12,800	0	26,200	86
2009	0	0	10,480	0	10,480	0	20,960	64
2010	0	0	14,256	0	3,564	0	17,820	62
2011	0	0	8,200	0	2,100	0	10,300	78
2012	0	0	8,200	0	2,100	0	10,300	80
2013	0	0	4,000	0	1,000	0	5,000	81
2014	0	0	4,000	0	1,000	0	5,000	77
2015	0	0	8,800	0	2,200	0	11,000	65
Projected								
2020	0	0	9,002	0	2,251	0	11,253	67
2025	0	0	9,229	0	2,307	0	11,536	70
2030	0	0	9,494	0	2,373	0	11,867	72
2035	0	0	9,774	0	2,444	0	12,218	74

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft





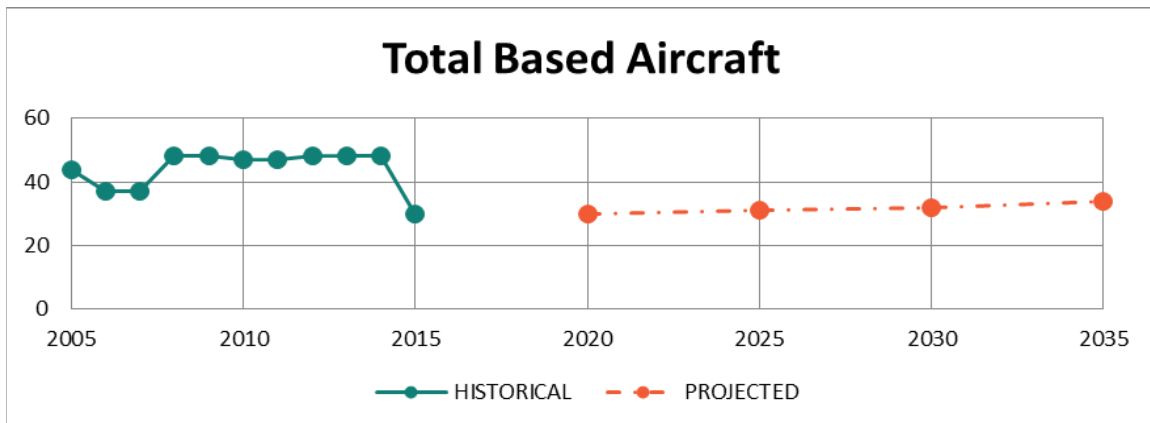
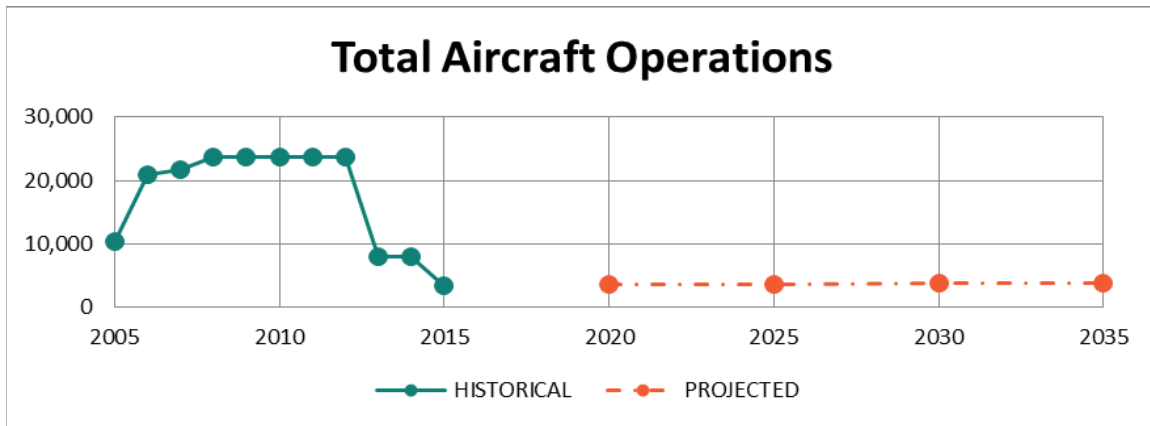
## Menominee-Marinette Twin County (MNM)

Menominee, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	6,100	20	4,250	0	10,370	44
2006	0	0	12,600	0	8,400	0	21,000	37
2007	0	650	12,600	0	8,400	0	21,650	37
2008	0	650	12,600	0	10,360	0	23,610	48
2009	0	650	12,600	0	10,360	0	23,610	48
2010	0	650	12,600	0	10,360	0	23,610	47
2011	0	650	12,600	0	10,360	0	23,610	47
2012	0	650	12,600	0	10,360	0	23,610	48
2013	0	650	3,614	0	3,614	0	7,878	48
2014	0	650	3,614	0	3,614	0	7,878	48
2015	312	0	0	0	3,120	30	3,462	30
Projected								
2020	322	0	0	0	3,219	30	3,541	30
2025	330	0	0	0	3,301	30	3,631	31
2030	340	0	0	0	3,395	30	3,735	32
2035	350	0	0	0	3,495	30	3,845	34

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



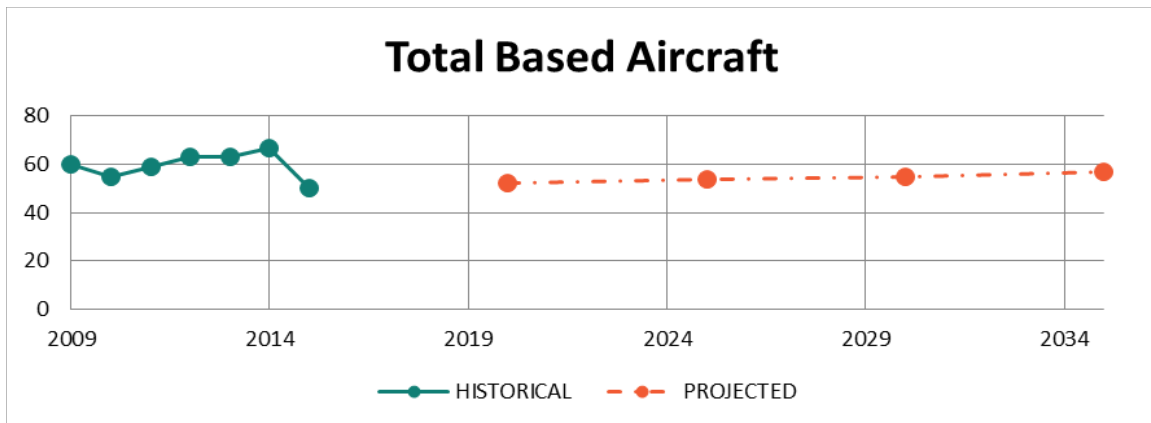
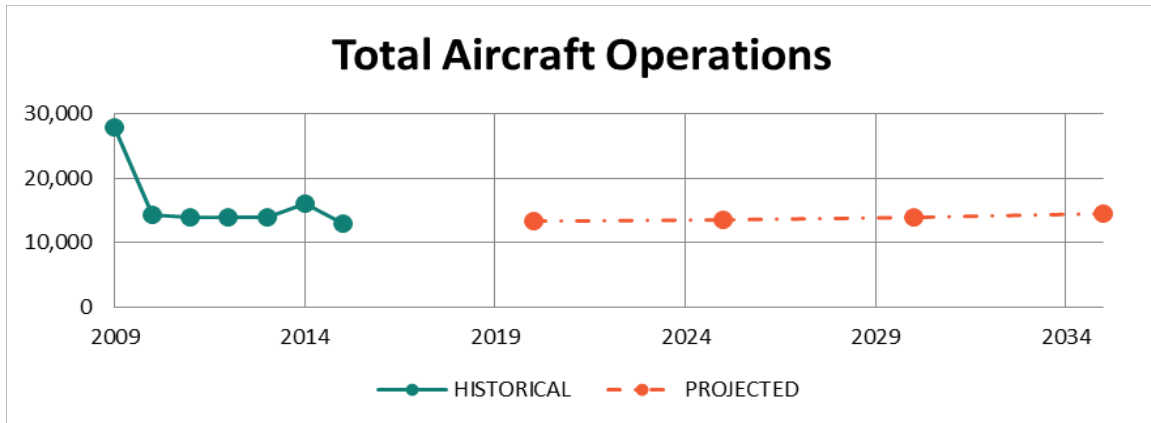
## Jack Barstow (IKW)

Midland, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2009	0	0	14,000	0	14,000	0	28,000	60
2010	0	0	7,128	0	7,128	0	14,256	55
2011	0	0	6,985	0	6,985	0	13,970	59
2012	0	0	6,985	0	6,985	0	13,970	63
2013	0	0	6,985	0	6,985	0	13,970	63
2014	0	0	8,000	0	8,000	0	16,000	67
2015	0	0	6,500	0	6,500	0	13,000	50
Projected								
2020	0	0	6,649	0	6,649	0	13,298	52
2025	0	0	6,817	0	6,817	0	13,634	54
2030	0	0	7,012	0	7,012	0	14,024	55
2035	0	0	7,220	0	7,220	0	14,439	57

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Oscoda County Dennis Kauffman Memorial (51M)

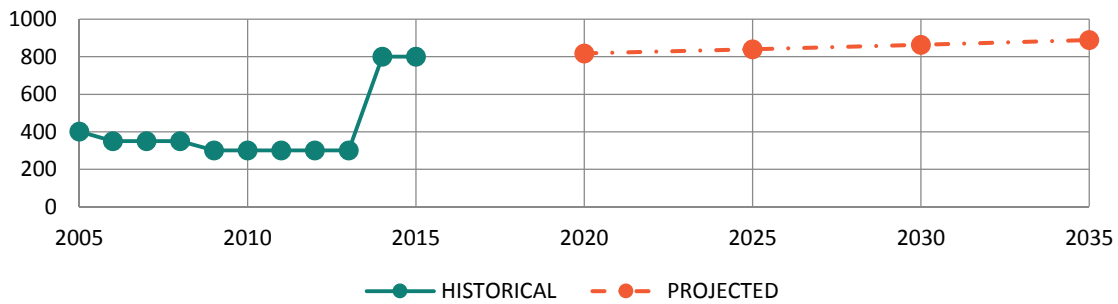
Mio, MI

Growth Rate (2015-2035): 0.53%

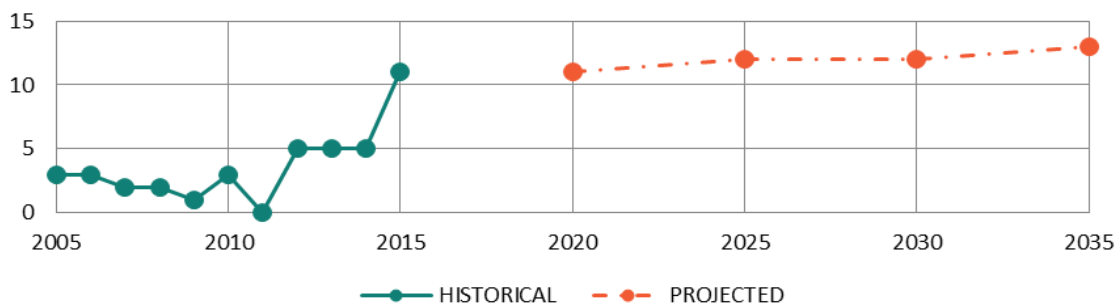
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	161	0	241	0	402	3
2006	0	0	213	0	137	0	350	3
2007	0	0	213	0	137	0	350	2
2008	0	0	213	0	137	0	350	2
2009	0	0	150	0	150	0	300	1
2010	0	0	150	0	150	0	300	3
2011	0	0	150	0	150	0	300	0
2012	0	0	150	0	150	0	300	5
2013	0	0	150	0	150	0	300	5
2014	0	0	400	0	400	0	800	5
2015	0	0	400	0	400	0	800	11
Projected								
2020	0	0	409	0	409	0	818	11
2025	0	0	420	0	419	0	839	12
2030	0	0	432	0	431	0	863	12
2035	0	0	445	0	444	0	889	13

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Custer (TTF)

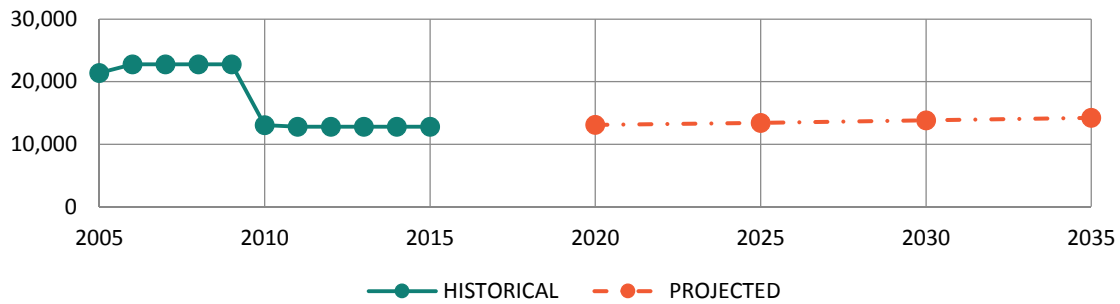
Monroe, MI

Growth Rate (2015-2035): 0.53%

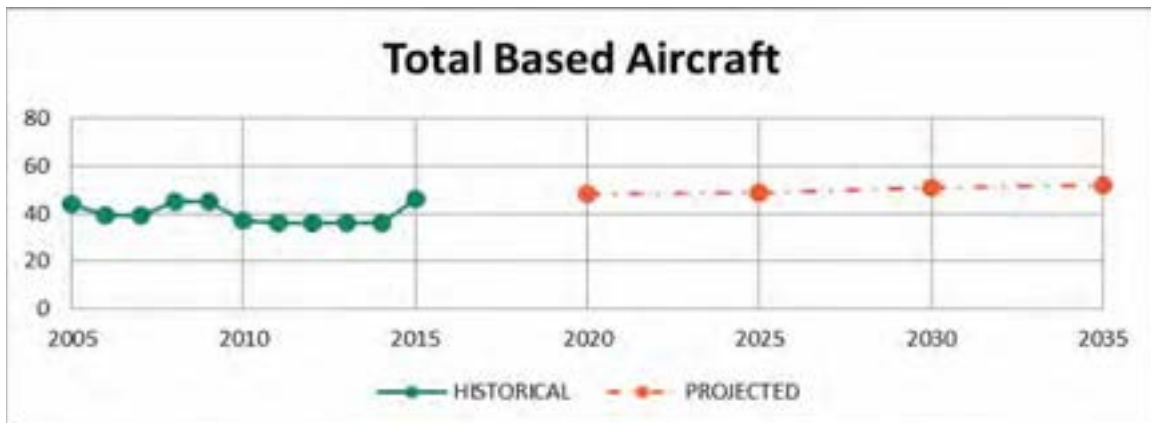
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	10,714	0	10,714	0	21,428	44
2006	0	0	11,389	0	11,389	0	22,778	39
2007	0	0	11,389	0	11,389	0	22,778	39
2008	0	0	11,389	0	11,389	0	22,778	45
2009	0	0	11,389	0	11,389	0	22,778	45
2010	0	0	6,534	0	6,534	0	13,068	37
2011	0	0	6,403	0	6,403	0	12,806	36
2012	0	0	6,403	0	6,403	0	12,806	36
2013	0	0	6,403	0	6,403	0	12,806	36
2014	0	0	6,403	0	6,403	0	12,806	36
2015	0	0	6,403	0	6,403	0	12,806	46
Projected								
2020	0	0	6,550	0	6,550	0	13,100	48
2025	0	0	6,715	0	6,715	0	13,430	49
2030	0	0	6,908	0	6,908	0	13,815	51
2035	0	0	7,112	0	7,112	0	14,224	52

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Mount Pleasant Municipal (MOP)

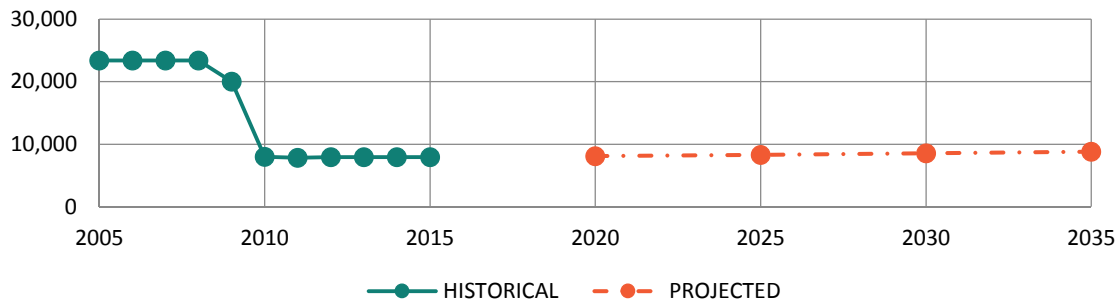
Mount Pleasant, MI

Growth Rate (2015-2035): 0.51%

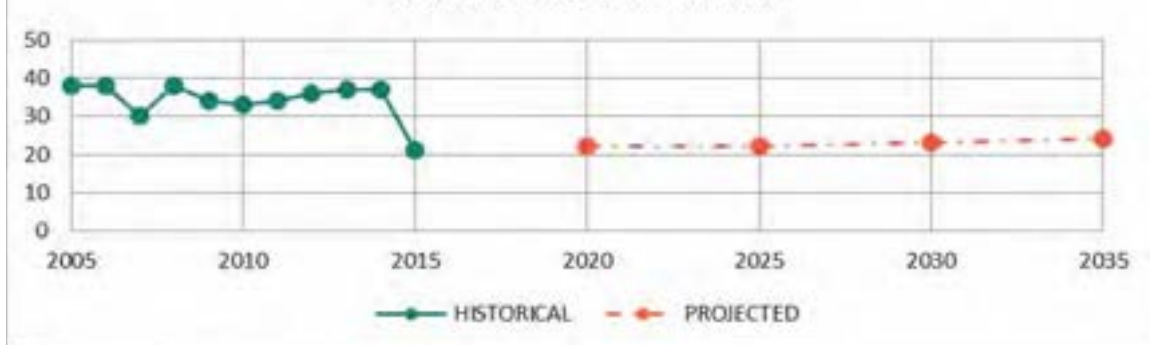
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	1,000	13,389	100	8,926	0	23,415	38
2006	0	1,000	13,389	100	8,926	0	23,415	38
2007	0	1,000	13,389	100	8,926	0	23,415	30
2008	0	1,000	13,389	100	8,926	0	23,415	38
2009	0	0	12,000	0	8,000	0	20,000	34
2010	0	0	4,811	0	3,207	0	8,018	33
2011	0	0	4,715	0	3,143	0	7,858	34
2012	0	0	3,174	0	4,761	0	7,935	36
2013	0	0	3,174	0	4,761	0	7,935	37
2014	0	0	3,174	0	4,761	0	7,935	37
2015	0	0	3,174	28	4,762	0	7,964	21
Projected								
2020	0	0	3,235	28	4,854	0	8,117	22
2025	0	0	3,317	28	4,977	0	8,322	22
2030	0	0	3,412	28	5,120	0	8,560	23
2035	0	0	3,514	28	5,272	0	8,814	24

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Muskegon County (MKG)

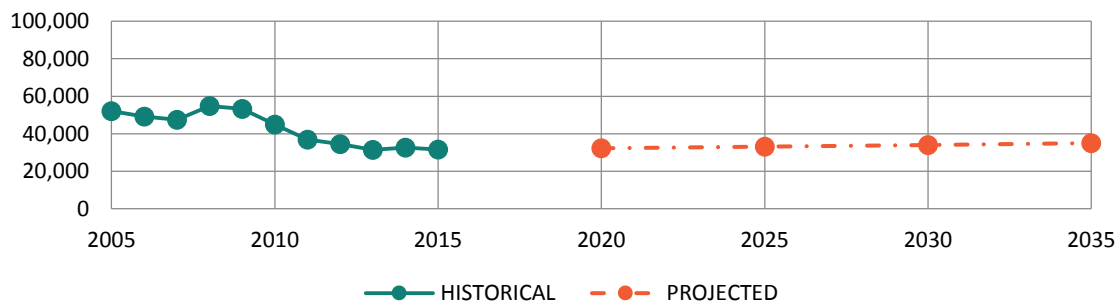
Muskegon, MI

Growth Rate (2015-2035): 0.53%

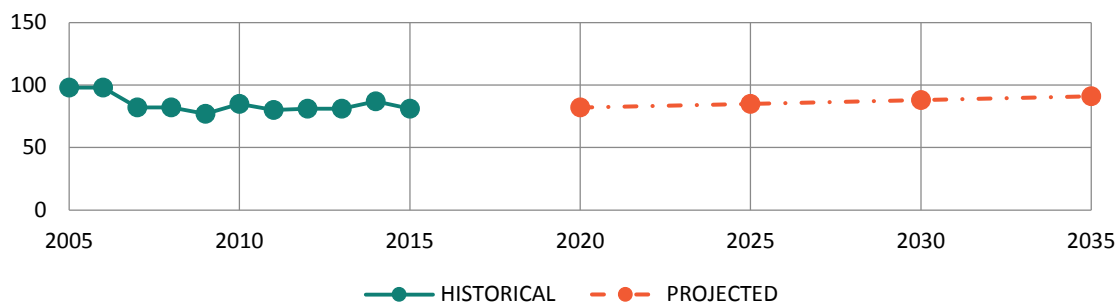
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	130	5,737	24,491	1,035	19,426	1,267	52,086	98
2006	31	6,070	22,549	1,219	17,702	1,559	49,130	98
2007	28	5,292	21,996	770	18,230	1,088	47,404	82
2008	57	5,497	25,290	402	23,162	323	54,731	82
2009	17	3,521	27,028	491	21,840	391	53,288	77
2010	12	2,460	20,515	443	21,250	198	44,878	85
2011	9	2,251	15,594	561	18,176	338	36,929	80
2012	4	2,343	15,899	726	15,314	278	34,564	81
2013	33	2,296	14,221	480	14,196	228	31,454	81
2014	48	2,201	13,872	749	15,265	566	32,701	87
2015	60	2,379	13,369	790	10,808	658	31,524	81
Projected								
2020	61	2,438	13,699	790	11,075	658	32,266	84
2025	63	2,502	14,060	790	11,367	658	33,079	87
2030	65	2,577	14,482	790	11,708	658	34,028	90
2035	67	2,657	14,929	790	12,069	658	35,034	92

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Oakland Southwest (Y47)

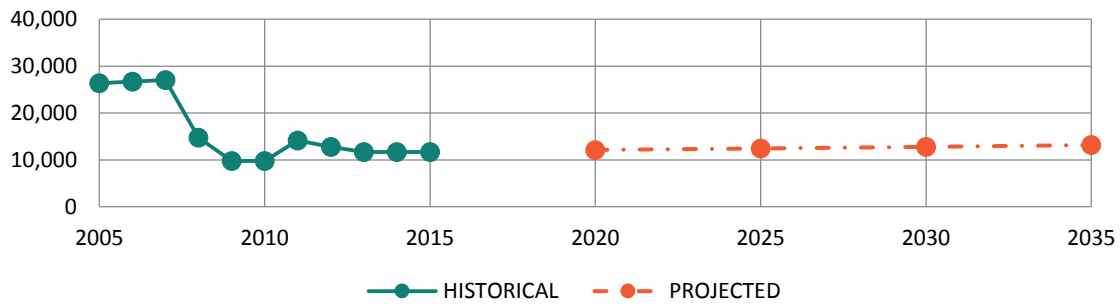
New Hudson, MI

Growth Rate (2015-2035): 0.53%

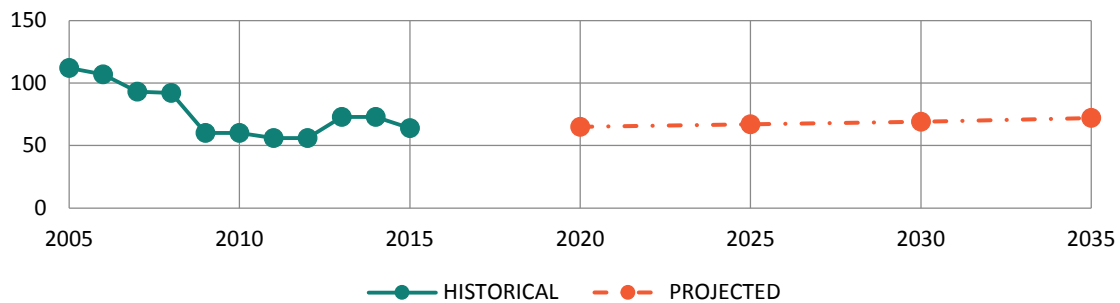
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	2,350	10,522	0	13,488	0	26,360	112
2006	0	2,350	10,647	0	13,688	0	26,685	107
2007	0	2,350	10,773	0	13,890	0	27,013	93
2008	0	0	7,380	0	7,380	0	14,760	92
2009	0	0	4,890	0	4,890	0	9,780	60
2010	0	0	4,890	0	4,890	0	9,780	60
2011	0	0	7,075	0	7,075	0	14,150	56
2012	0	0	6,395	0	6,395	0	12,790	56
2013	0	0	5,850	0	5,850	0	11,700	73
2014	0	0	5,850	0	5,850	0	11,700	73
2015	0	0	5,850	0	5,850	0	11,700	64
Projected								
2020	0	0	6,065	0	6,065	0	12,129	65
2025	0	0	6,217	0	6,217	0	12,435	67
2030	0	0	6,396	0	6,396	0	12,791	69
2035	0	0	6,585	0	6,585	0	13,170	72

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Luce County (ERY)

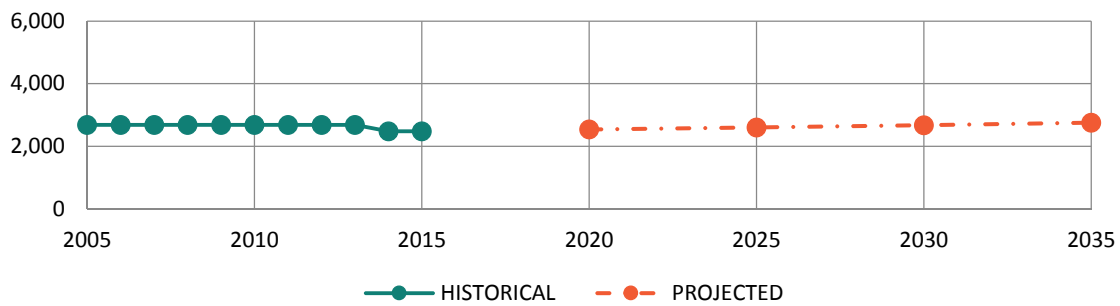
Newberry, MI

Growth Rate (2015-2035): 0.53%

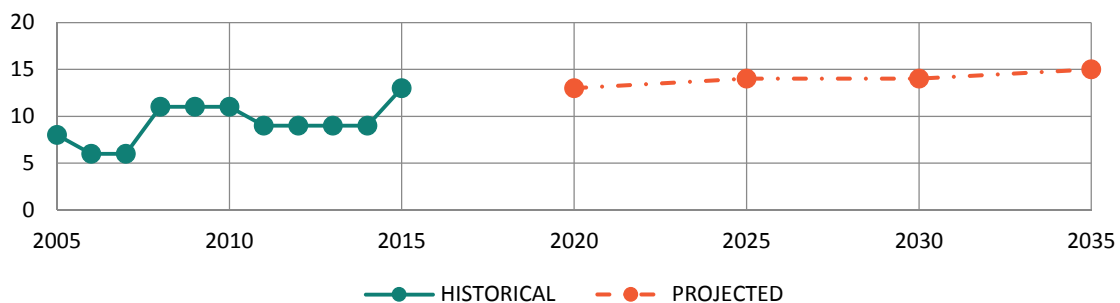
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	1,880	0	806	0	2,686	8
2006	0	0	1,880	0	806	0	2,686	6
2007	0	0	1,880	0	806	0	2,686	6
2008	0	0	1,880	0	806	0	2,686	11
2009	0	0	1,880	0	806	0	2,686	11
2010	0	0	1,880	0	806	0	2,686	11
2011	0	0	1,880	0	806	0	2,686	9
2012	0	0	1,880	0	806	0	2,686	9
2013	0	0	1,880	0	806	0	2,686	9
2014	0	0	1,880	0	600	0	2,480	9
2015	0	0	1,880	0	600	0	2,480	13
Projected								
2020	0	0	1,923	0	614	0	2,537	13
2025	0	0	1,972	0	629	0	2,601	14
2030	0	0	2,028	0	647	0	2,675	14
2035	0	0	2,088	0	667	0	2,755	15

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft





## Jerry Tyler Memorial (3TR)

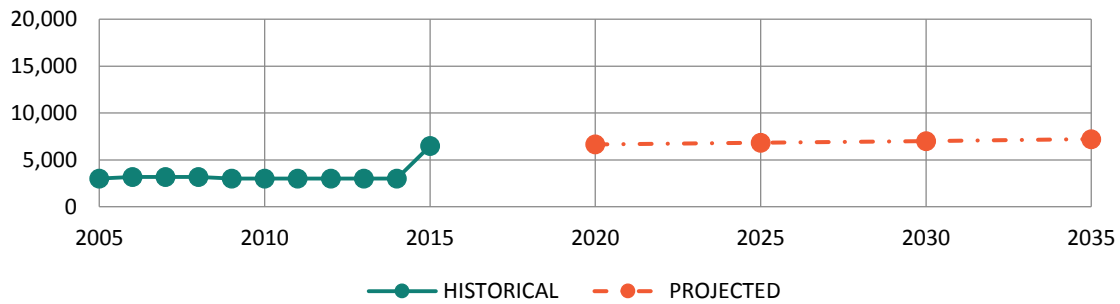
Niles, MI

Growth Rate (2015-2035): 0.53%

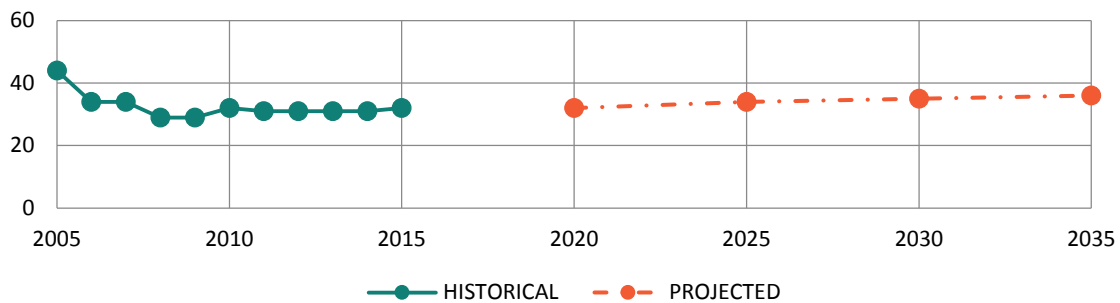
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	2,100	0	900	0	3,000	44
2006	0	0	1,594	0	1,594	0	3,188	34
2007	0	0	1,594	0	1,594	0	3,188	34
2008	0	0	1,594	0	1,594	0	3,188	29
2009	0	0	1,500	0	1,500	0	3,000	29
2010	0	0	1,500	0	1,500	0	3,000	32
2011	0	0	1,500	0	1,500	0	3,000	31
2012	0	0	1,500	0	1,500	0	3,000	31
2013	0	0	1,500	0	1,500	0	3,000	31
2014	0	0	1,500	0	1,500	0	3,000	31
2015	0	0	1,500	0	5,000	0	6,500	32
Projected								
2020	0	0	1,534	0	5,115	0	6,649	33
2025	0	0	1,573	0	5,244	0	6,817	34
2030	0	0	1,618	0	5,394	0	7,012	35
2035	0	0	1,666	0	5,554	0	7,220	37

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



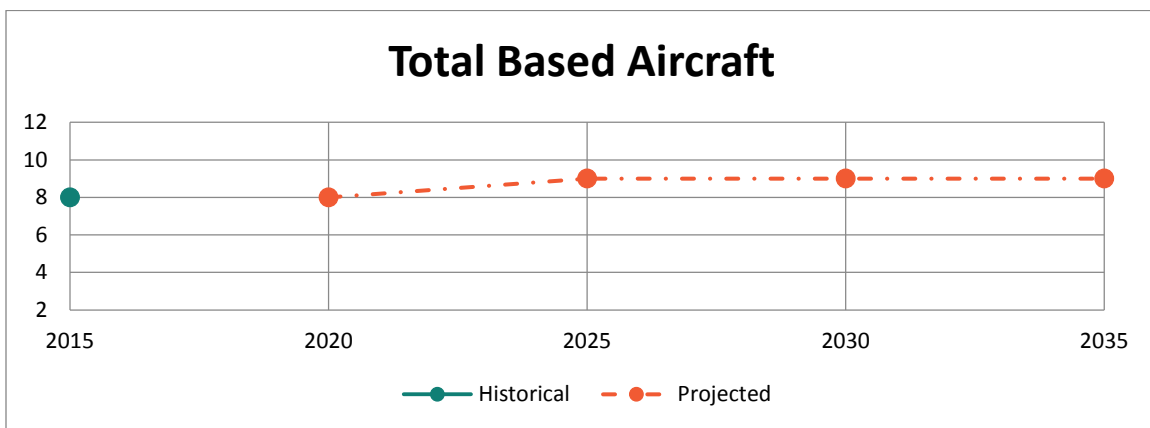
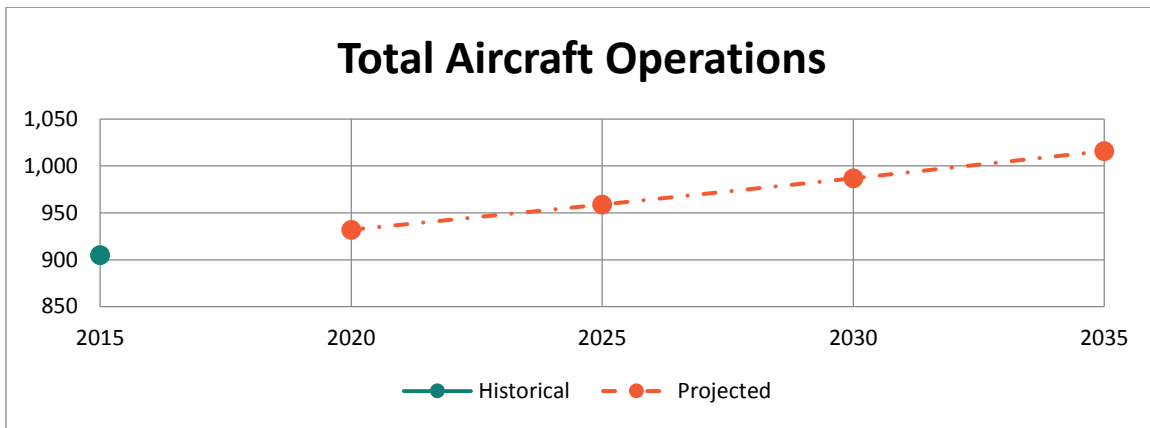
## Woolsey Memorial (5D5)

Northport, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	810				95		905	8
Projected								
2020	839				93		932	8
2025			863		96		959	9
2030	888				99		987	9
2035			914		102		1,016	9

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



## Ontonagon County – Schuster Field (OGM)

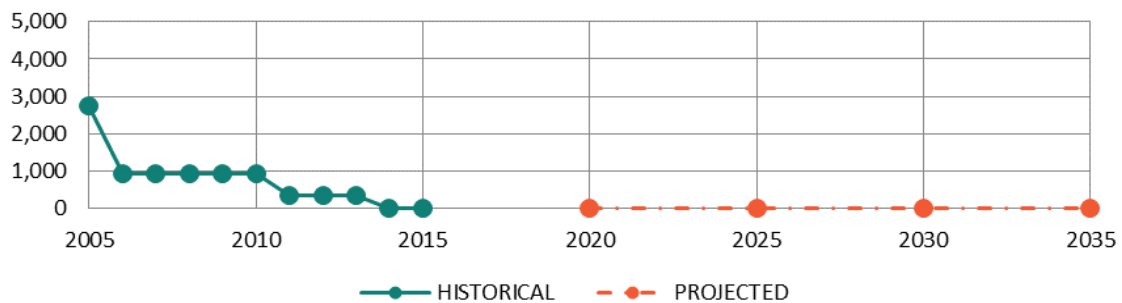
Ontonagon, MI

Growth Rate (2015-2035): 0%

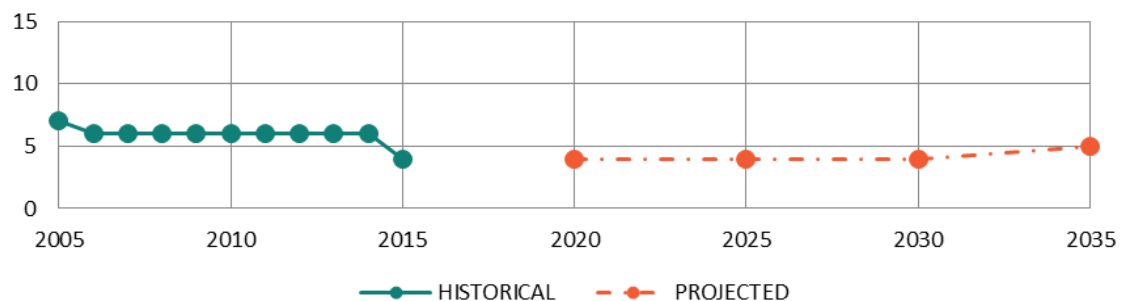
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	1,960	0	776	0	2,736	7
2006	0	0	472	0	472	0	944	6
2007	0	0	472	0	472	0	944	6
2008	0	0	472	0	472	0	944	6
2009	0	0	472	0	472	0	944	6
2010	0	0	472	0	472	0	944	6
2011	0	0	183	0	182	0	365	6
2012	0	0	183	0	182	0	365	6
2013	0	0	183	0	182	0	365	6
2014	0	0	0	0	0	0	0	6
2015	0	0	0	0	0	0	0	4
Projected								
2020	0	0	0	0	0	0	0	4
2025	0	0	0	0	0	0	0	4
2030	0	0	0	0	0	0	0	4
2035	0	0	0	0	0	0	0	5

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Oscoda-Wurtsmith (OSC)

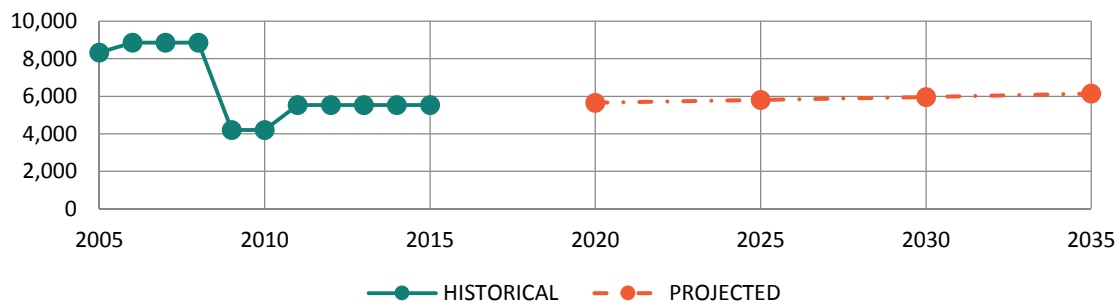
Oscoda, MI

Growth Rate (2015-2035): 11.1%

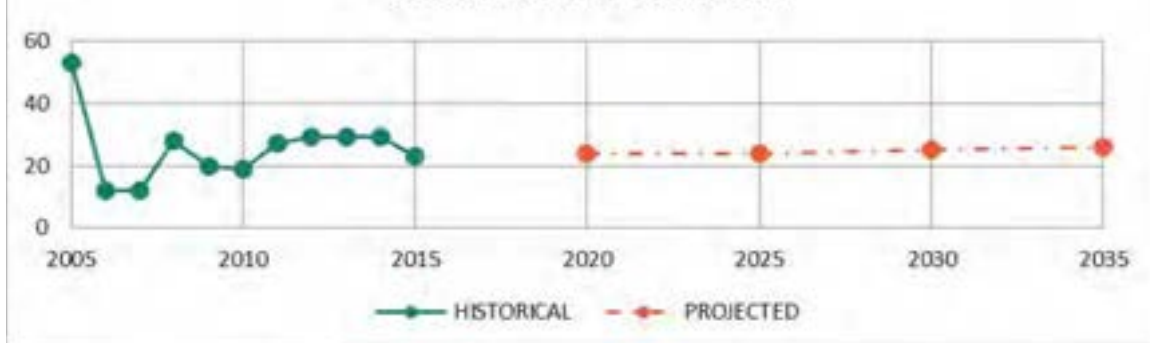
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	4,999	0	3,333	0	8,332	53
2006	0	0	3,543	0	5,314	0	8,857	12
2007	0	0	3,543	0	5,314	0	8,857	12
2008	0	0	3,543	0	5,314	0	8,857	28
2009	0	0	1,575	0	2,625	0	4,200	20
2010	0	0	1,575	0	2,625	0	4,200	19
2011	0	0	1,843	0	3,687	0	5,530	27
2012	0	0	1,843	0	3,687	0	5,530	29
2013	0	0	1,843	0	3,687	0	5,530	29
2014	0	0	1,843	0	3,687	0	5,530	29
2015	0	0	1,843	0	3,687	0	5,530	23
Projected								
2020	0	0	1,885	0	3,772	0	5,657	24
2025	0	0	1,933	0	3,867	0	5,800	24
2030	0	0	1,988	0	3,978	0	5,966	25
2035	0	0	2,047	0	4,095	0	6,142	26

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Owosso Community (RNP)

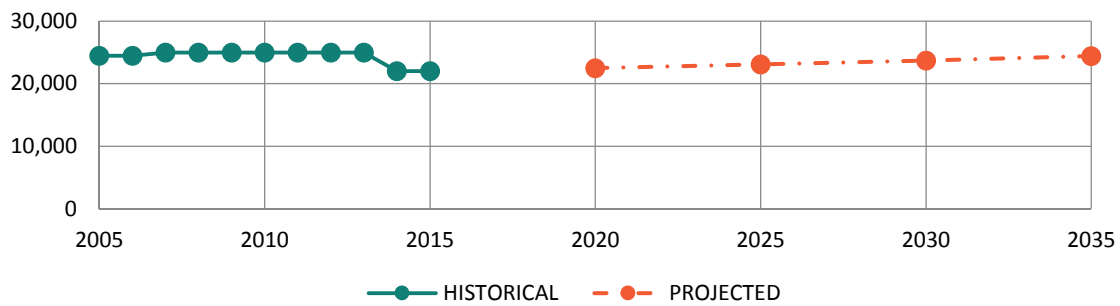
Owosso, MI

Growth Rate (2015-2035): 11.1%

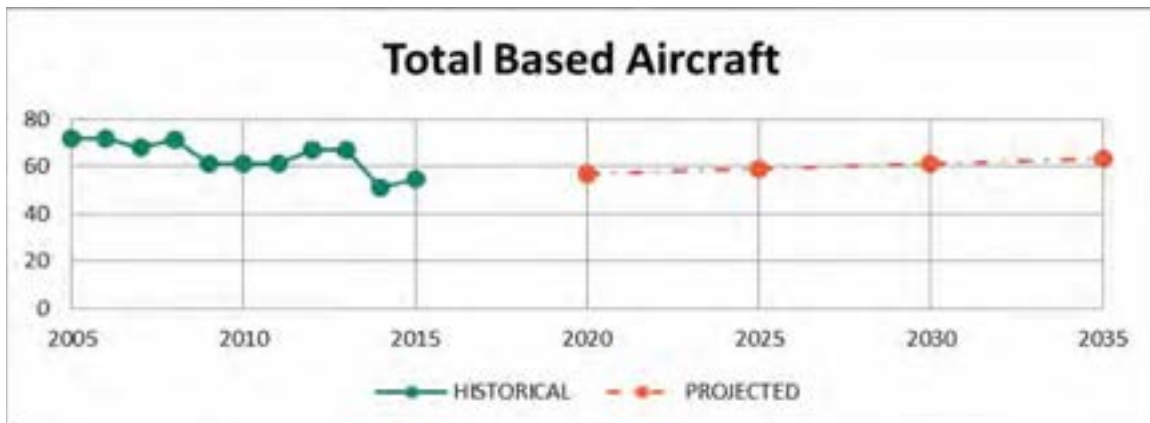
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	8,330	0	16,170	0	24,500	72
2006	0	0	8,330	0	16,170	0	24,500	72
2007	0	0	12,500	0	12,500	0	25,000	68
2008	0	0	12,500	0	12,500	0	25,000	71
2009	0	0	12,500	0	12,500	0	25,000	61
2010	0	0	12,500	0	12,500	0	25,000	61
2011	0	0	12,500	0	12,500	0	25,000	61
2012	0	0	12,500	0	12,500	0	25,000	67
2013	0	0	12,500	0	12,500	0	25,000	67
2014	0	0	10,500	0	11,500	0	22,000	51
2015	0	0	10,500	0	11,500	0	22,000	55
Projected								
2020	0	0	10,741	0	11,764	0	22,505	57
2025	0	0	11,012	0	12,061	0	23,072	59
2030	0	0	11,327	0	12,406	0	23,734	61
2035	0	0	11,663	0	12,773	0	24,436	63

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



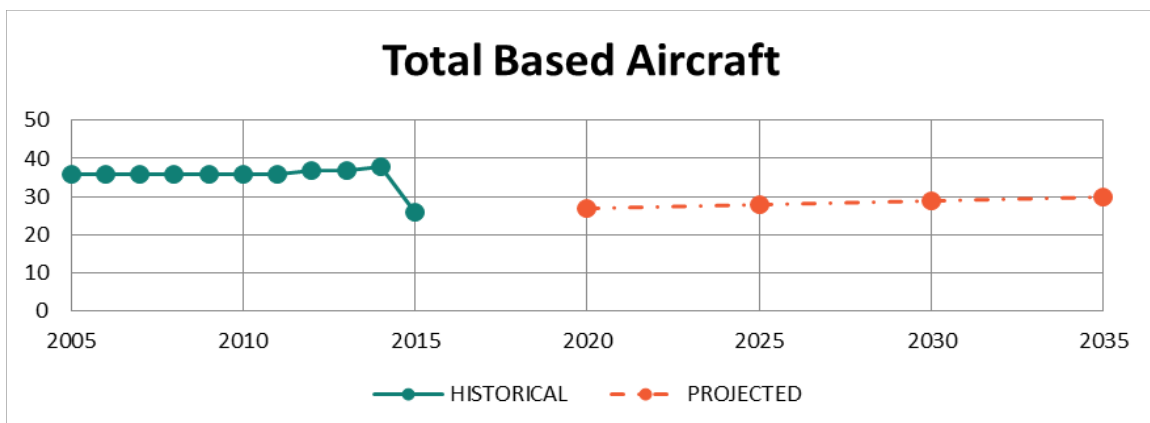
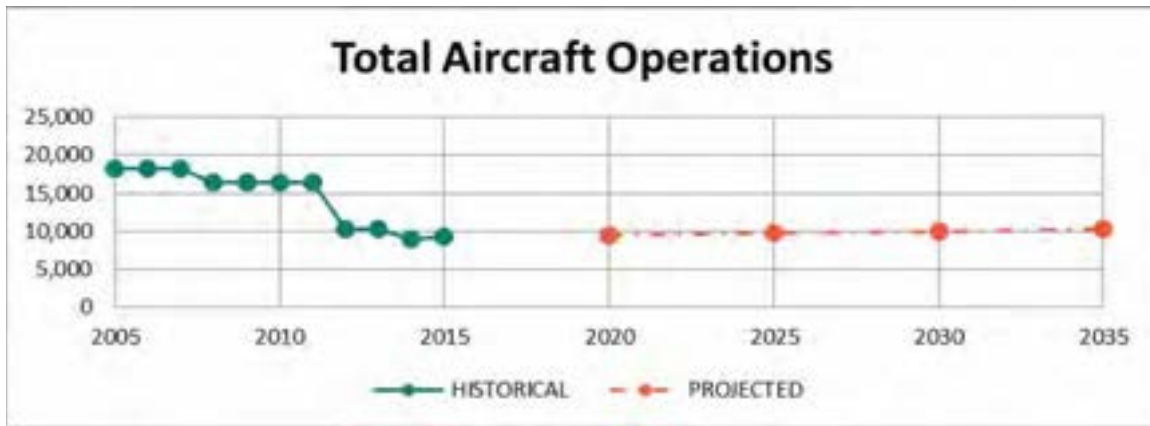
## Pellston Regional Airport of Emmet County (PLN)

Pellston, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	5,118	11,760	100	1,274	0	18,252	36
2006	0	5,118	11,760	100	1,274	0	18,252	36
2007	0	5,118	11,760	100	1,274	0	18,252	36
2008	2,561	0	12,460	100	1,300	0	16,421	36
2009	2,561	0	12,460	100	1,300	0	16,421	36
2010	2,561	0	12,460	100	1,300	0	16,421	36
2011	2,561	0	12,460	100	1,300	0	16,421	36
2012	2,561	0	7,015	100	650	0	10,326	37
2013	2,561	0	7,015	100	650	0	10,326	37
2014	1,585	0	6,750	100	587	0	9,022	38
2015	0	2,011	6,934	36	272	0	9,253	26
Projected								
2020	0	2,057	7,093	36	278	0	9,465	27
2025	0	2,109	7,273	36	285	0	9,704	28
2030	0	2,170	7,482	36	294	0	9,982	29
2035	0	2,235	7,705	36	302	0	10,278	30

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

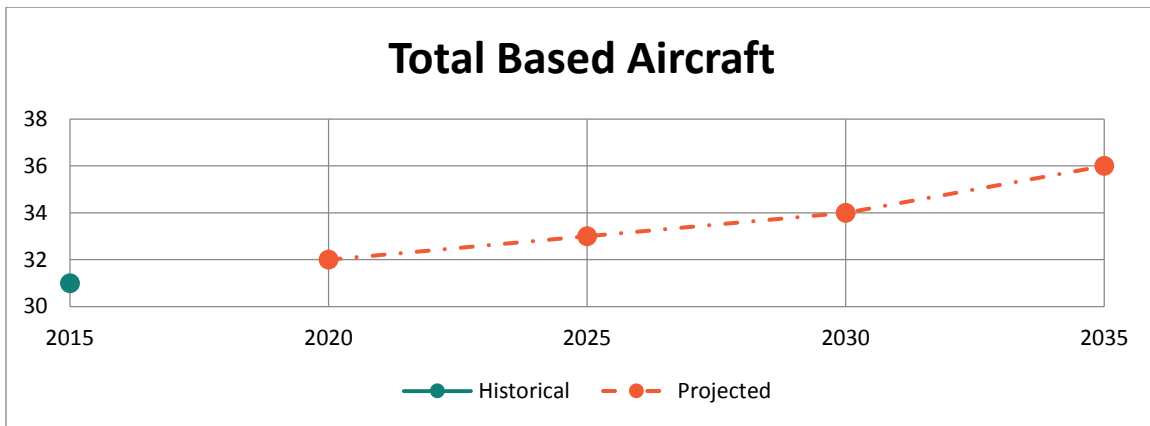
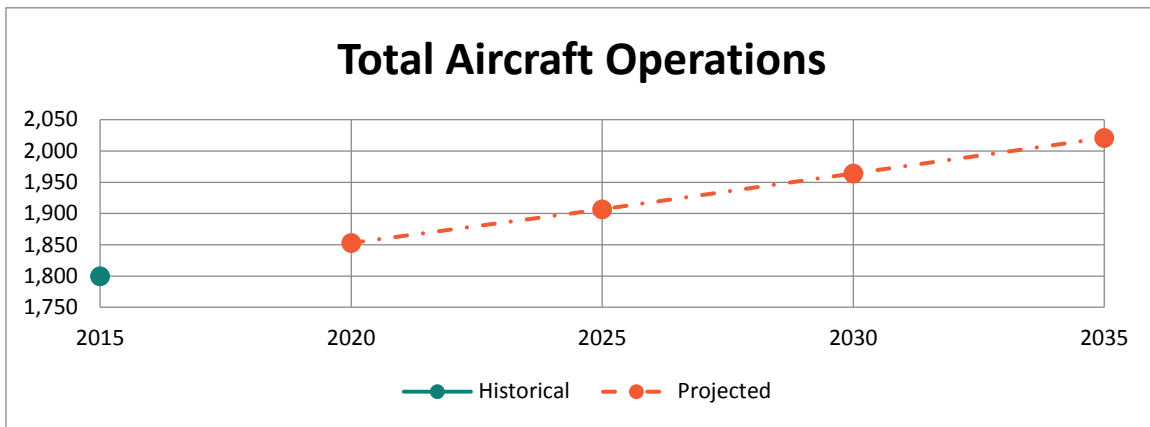


**Gross (52I)****Pinconning, MI**

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	792				1,008		1,800	31
Projected								
2020	815				1,038		1,853	32
2025			839		1,068		1,907	33
2030	864				1,100		1,964	34
2035			889		1,132		2,021	36

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



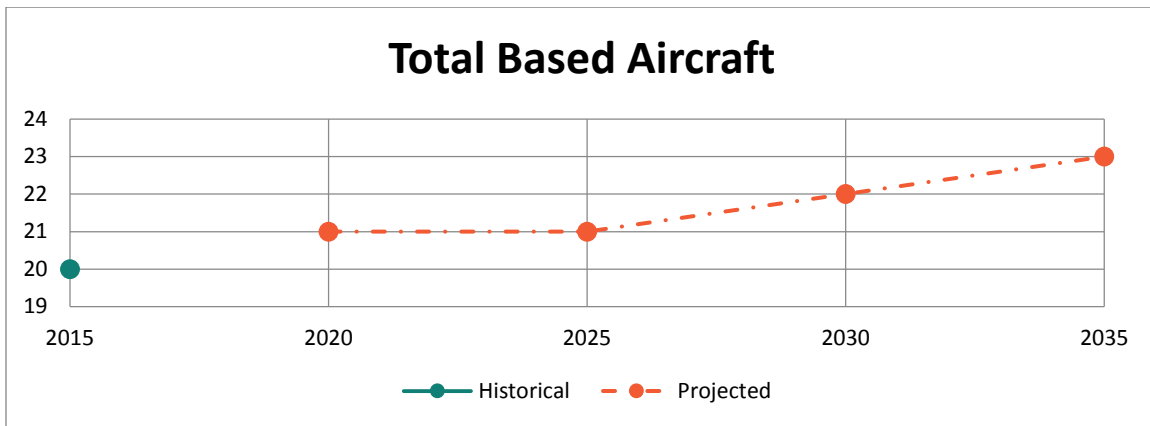
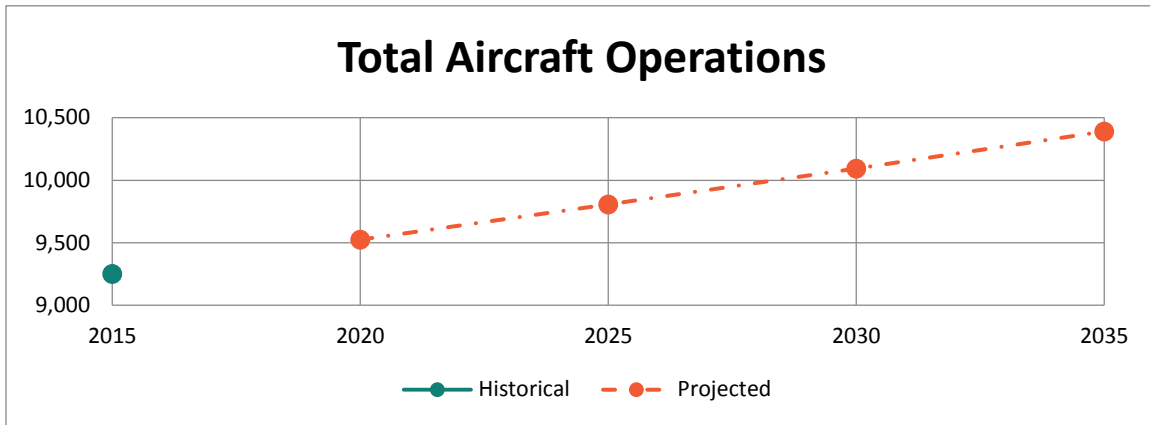
## Plainwell Municipal (61D)

Plainwell, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	5,552				3,701		9,253	20
Projected								
2020	5,715				3,810		9,525	21
2025			5,884		3,922		9,806	21
2030	6,056				4,038		10,094	22
2035			6,235		4,156		10,391	23

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.





## Canton-Plymouth-Mettetal (1D2)

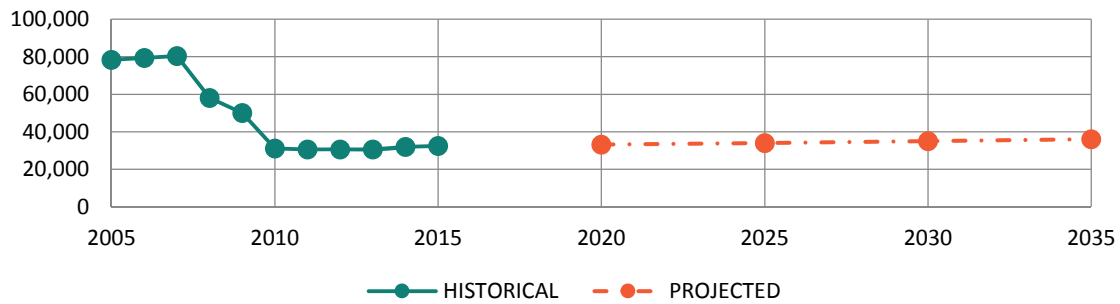
Plymouth, MI

Growth Rate (2015-2035): 0.53%

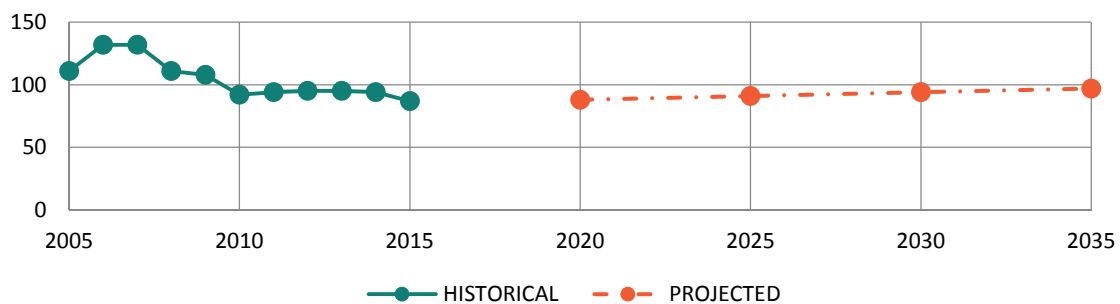
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	500	38,063	0	39,799	0	78,362	111
2006	0	500	38,515	0	40,387	0	79,402	132
2007	0	500	38,972	0	40,985	0	80,457	132
2008	0	0	29,021	0	29,021	0	58,042	111
2009	0	0	25,000	0	25,000	0	50,000	108
2010	0	0	15,592	0	15,592	0	31,184	92
2011	0	0	15,280	0	15,280	0	30,560	94
2012	0	0	15,280	0	15,280	0	30,560	95
2013	0	0	15,280	0	15,280	0	30,560	95
2014	0	0	10,000	0	22,000	0	32,000	94
2015	0	0	10,119	0	22,328	0	32,447	87
2020	0	0	10,351	0	22,841	0	33,192	88
2025	0	0	10,612	0	23,417	0	34,029	91
2030	0	0	10,916	0	24,088	0	35,004	94
2035	0	0	11,240	0	24,800	0	36,040	97

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Oakland County International (PTK)

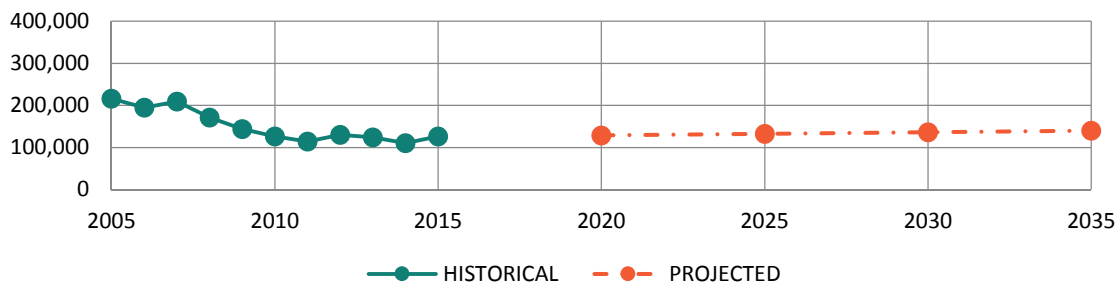
Pontiac, MI

Growth Rate (2015-2035): 0.53%

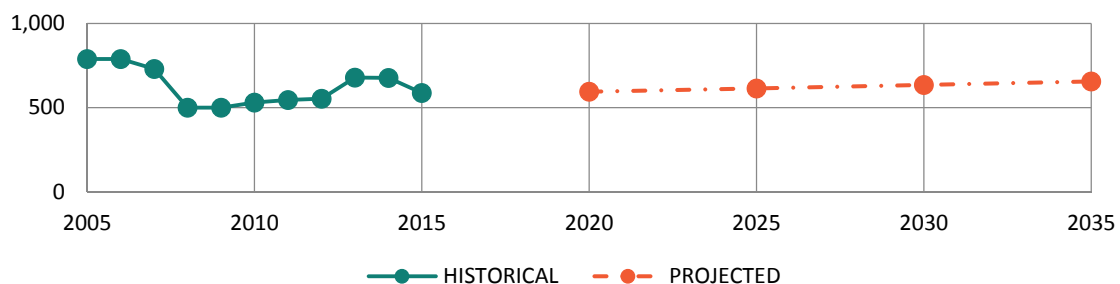
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	2,520	16,069	95,517	108	101,532	4	215,750	790
2006	1,758	14,858	86,116	182	92,143	0	195,057	790
2007	2,748	14,149	90,120	141	102,040	0	209,198	731
2008	1,675	11,506	79,541	133	77,877	428	171,160	500
2009	579	7,373	64,815	113	70,822	0	143,702	500
2010	1,154	7,829	62,760	366	54,669	1	126,779	531
2011	1,542	9,028	58,219	189	45,315	0	114,293	547
2012	1,237	11,554	64,722	174	52,583	0	130,270	554
2013	1,332	10,213	64,585	161	48,109	0	124,400	679
2014	1,208	9,550	59,409	260	40,250	0	110,677	677
2015	910	8,762	65,931	178	50,289	0	126,070	587
Projected								
2020	1,290	8,976	67,061	178	51,586	0	128,964	595
2025	1,322	9,202	68,752	178	52,886	0	132,215	615
2030	1,360	9,466	70,722	178	54,402	0	136,004	635
2035	1,400	9,746	72,815	178	56,012	0	140,029	656

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



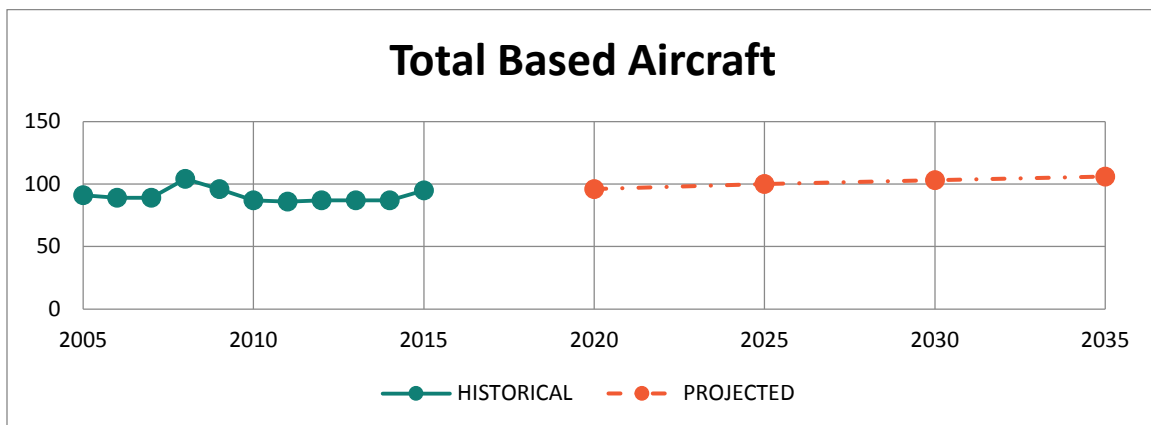
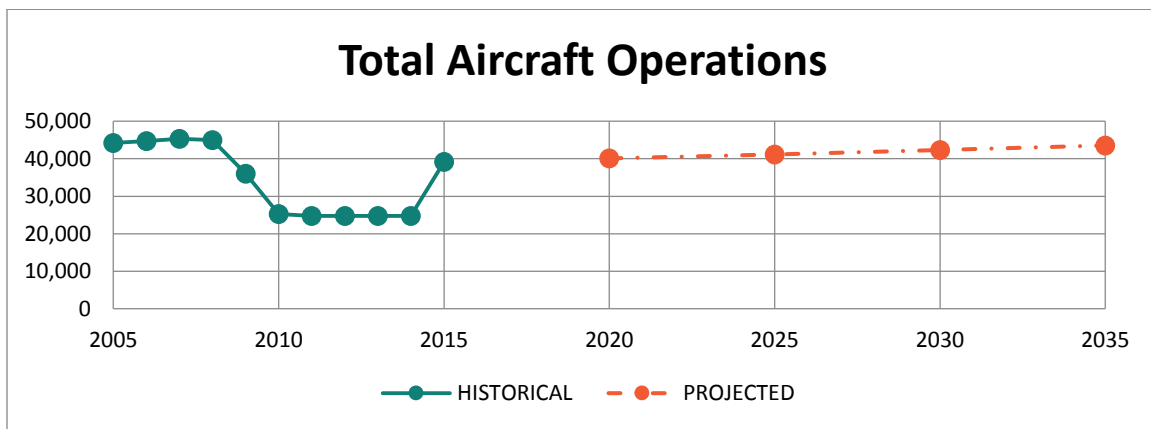
## St. Clair County International (PHN)

Port Huron, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	3,500	24,646	0	16,074	0	44,220	91
2006	0	3,500	24,938	0	16,312	0	44,750	89
2007	0	3,500	25,234	0	16,553	0	45,287	89
2008	0	0	33,750	0	11,250	0	45,000	104
2009	0	0	27,000	0	9,000	0	36,000	96
2010	0	0	18,934	0	6,311	0	25,245	87
2011	0	0	18,555	0	6,185	0	24,740	86
2012	0	0	18,555	0	6,185	0	24,740	87
2013	0	0	18,555	0	6,185	0	24,740	87
2014	0	0	18,555	0	6,185	0	24,740	87
2015	0	13,500	15,100	1,343	8,500	756	39,199	95
Projected								
2020	0	13,827	15,466	1,343	8,706	756	40,099	98
2025	0	14,195	15,878	1,343	8,938	756	41,110	102
2030	0	14,624	16,357	1,343	9,208	756	42,288	105
2035	0	15,079	16,866	1,343	9,494	756	43,539	108

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



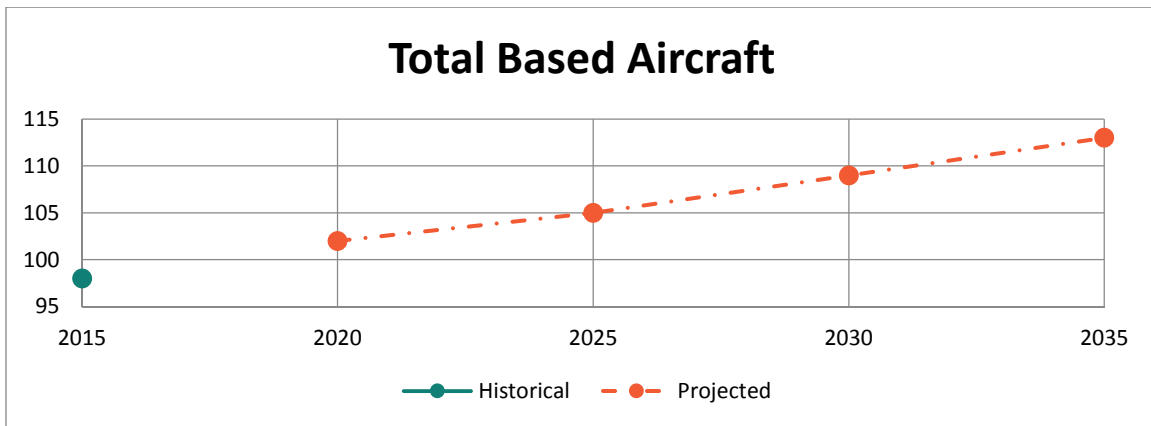
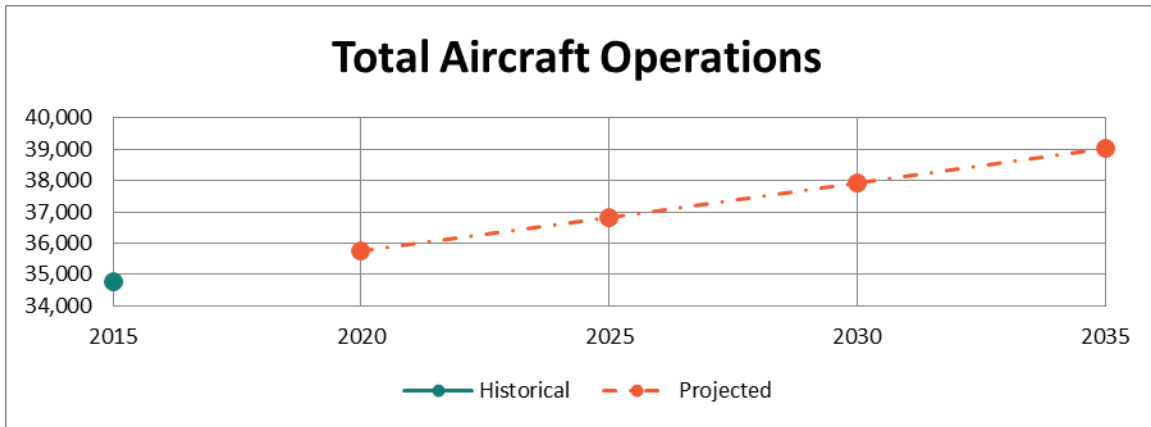
## Ray Community (57D)

Ray, MI

Growth Rate (2015-2035): 19.5%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	50		16,100		16,100	2,500	34,750	98
Projected								
2020	52		16,610		16,610	2,500	35,772	102
2025		53	17,136		17,136	2,500	36,825	105
2030	55		17,677		17,677	2,500	37,909	109
2035		57	18,234		18,234	2,500	39,024	113

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



## Presque Isle County (PZQ)

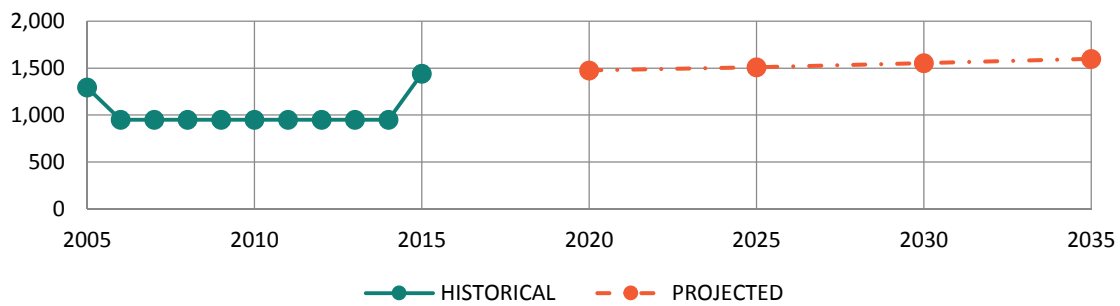
Rogers City, MI

Growth Rate (2015-2035): 0.53%

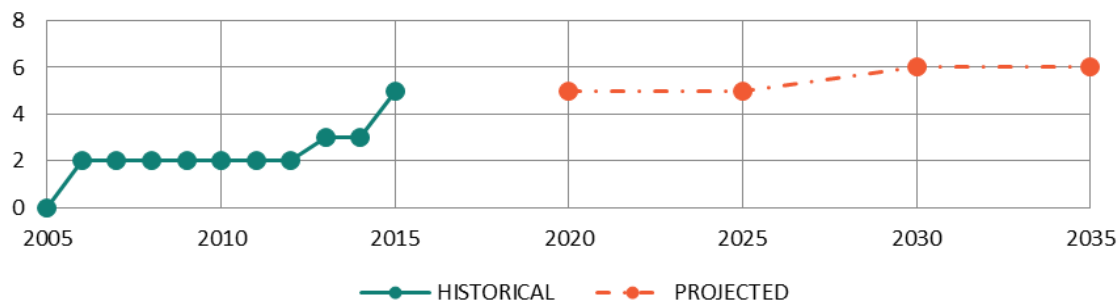
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	779	0	516	0	1,295	0
2006	0	0	380	0	570	0	950	2
2007	0	0	380	0	570	0	950	2
2008	0	0	380	0	570	0	950	2
2009	0	0	380	0	570	0	950	2
2010	0	0	380	0	570	0	950	2
2011	0	0	380	0	570	0	950	2
2012	0	0	380	0	570	0	950	2
2013	0	0	380	0	570	0	950	3
2014	0	0	380	0	570	0	950	3
2015	0	40	400	0	1,000	0	1,440	5
Projected								
2020	0	44	413	0	1,018	0	1,476	5
2025	0	45	423	0	1,042	0	1,510	5
2030	0	47	435	0	1,072	0	1,553	6
2035	0	48	448	0	1,103	0	1,599	6

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Romeo State (D98)

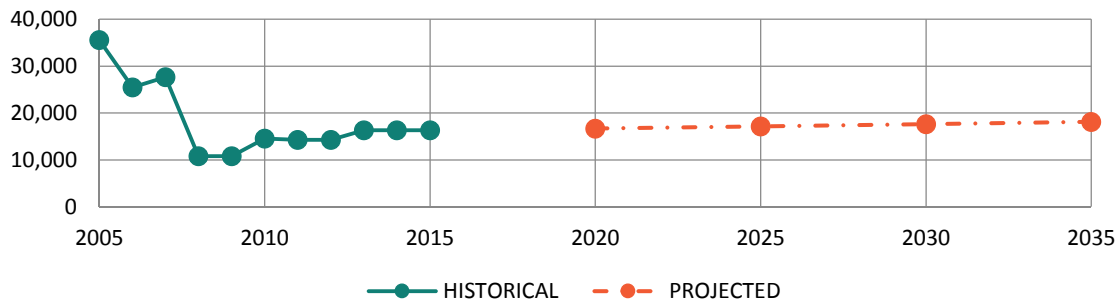
Romeo, MI

Growth Rate (2015-2035): 0.53%

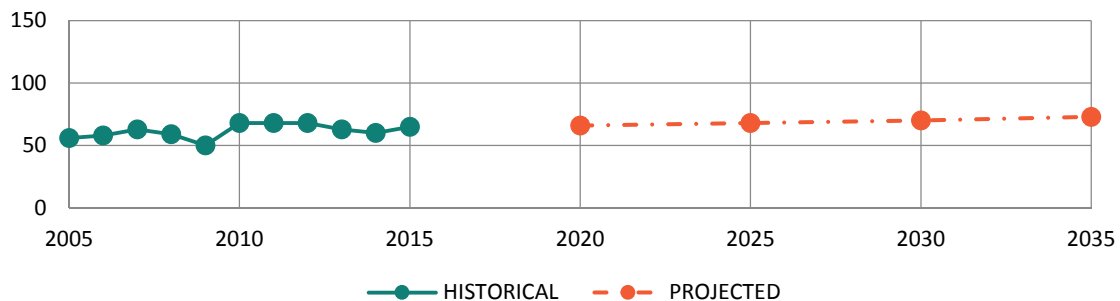
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	10,661	0	24,876	0	35,537	56
2006	0	0	7,652	0	17,792	0	25,444	58
2007	0	0	8,291	0	19,347	0	27,638	63
2008	0	0	5,400	0	5,400	0	10,800	59
2009	0	0	5,400	0	5,400	0	10,800	50
2010	0	0	7,276	0	7,276	0	14,552	68
2011	0	0	7,130	0	7,130	0	14,260	68
2012	0	0	7,130	0	7,130	0	14,260	68
2013	0	0	8,161	0	8,161	0	16,322	63
2014	0	0	8,161	0	8,161	0	16,322	60
2015	0	0	8,161	0	8,161	0	16,322	65
Projected								
2020	0	0	8,349	0	8,349	0	16,697	66
2025	0	0	8,559	0	8,559	0	17,118	68
2030	0	0	8,804	0	8,804	0	17,608	70
2035	0	0	9,065	0	9,065	0	18,129	73

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## MBS International (MBS)

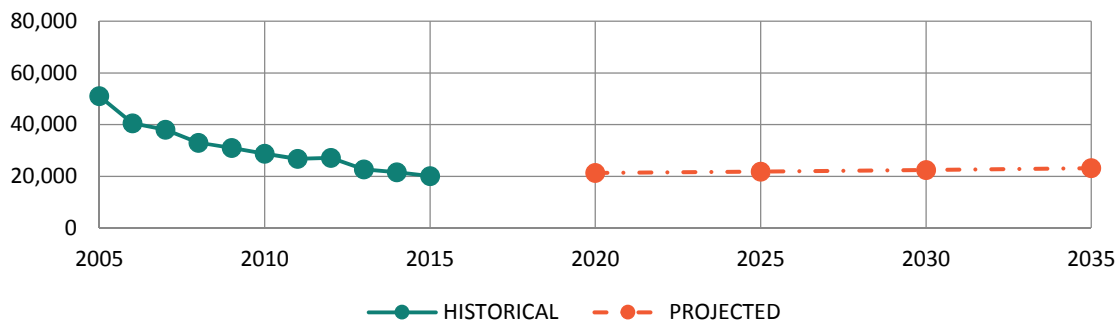
Saginaw, MI

Growth Rate (2015-2035): 0.53%

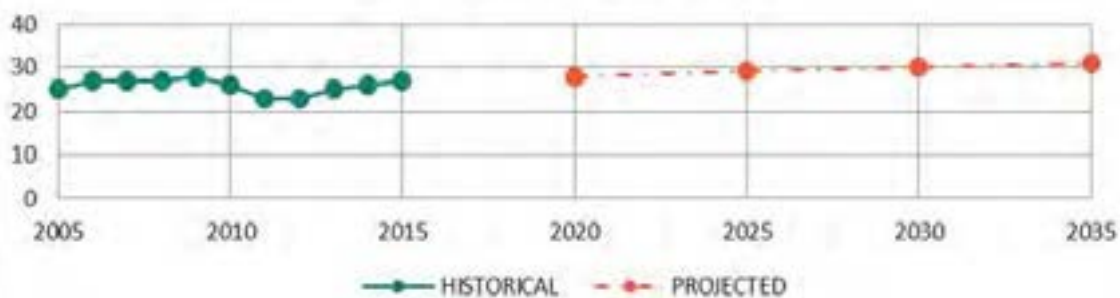
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	11,198	4,998	18,702	165	15,934	106	51,103	25
2006	9,099	3,279	14,839	165	12,938	138	40,458	27
2007	8,942	3,422	14,458	210	10,886	158	38,076	27
2008	8,684	3,876	12,922	181	7,286	58	33,007	27
2009	8,741	3,366	11,246	202	7,451	43	31,049	28
2010	1,609	9,031	9,585	222	8,112	142	28,701	26
2011	358	10,143	9,089	268	6,664	248	26,770	23
2012	331	9,567	9,279	181	7,595	228	27,181	23
2013	90	8,569	8,541	189	5,154	198	22,741	25
2014	113	7,917	8,281	206	4,987	102	21,606	26
2015	879	7,213	8,744	348	2,743	180	20,107	27
Projected								
2020	900	7,383	8,950	348	2,808	180	20,569	28
2025	923	7,574	9,182	348	2,880	180	21,087	29
2030	950	7,797	9,451	348	2,965	180	21,691	30
2035	979	8,033	9,738	348	3,055	180	22,333	31

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Saginaw County H.W. Browne (HYX)

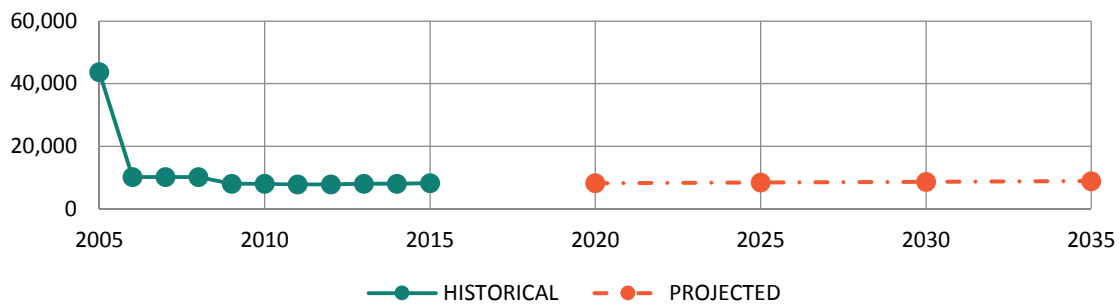
Saginaw, MI

Growth Rate (2015-2035): 0.53%

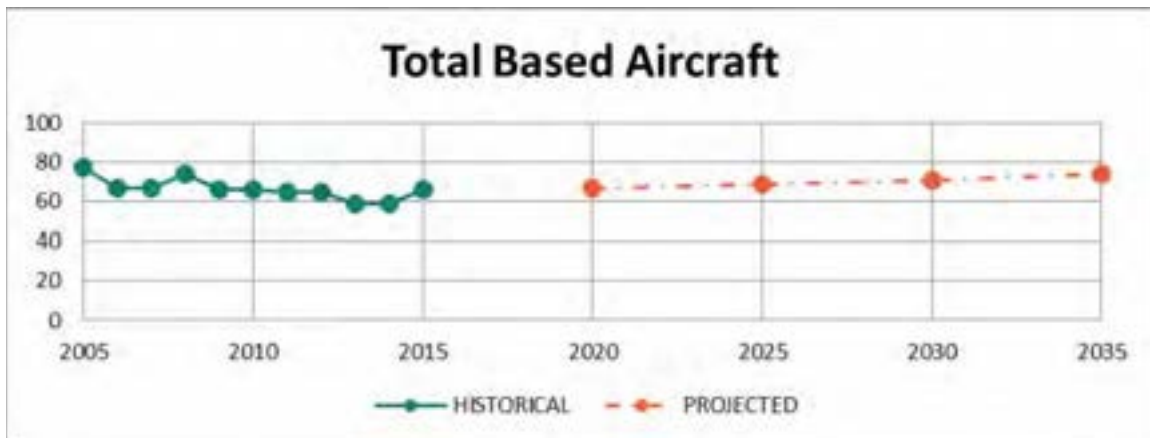
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	4,000	13,298	0	26,472	0	43,770	77
2006	0	0	5,075	0	5,075	0	10,150	67
2007	0	0	5,075	0	5,075	0	10,150	67
2008	0	0	5,075	0	5,075	0	10,150	74
2009	0	0	4,000	0	4,000	0	8,000	66
2010	0	0	4,000	0	4,000	0	8,000	66
2011	0	0	3,920	0	3,920	0	7,840	65
2012	0	0	3,920	0	3,920	0	7,840	65
2013	0	0	4,000	0	4,000	0	8,000	59
2014	0	0	4,000	0	4,000	0	8,000	59
2015	0	0	200	0	8,000	0	8,200	66
Projected								
2020	0	0	205	0	8,183	0	8,388	67
2025	0	0	210	0	8,390	0	8,600	69
2030	0	0	216	0	8,630	0	8,846	71
2035	0	0	222	0	8,886	0	9,108	74

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft





## Sandusky City (Y83)

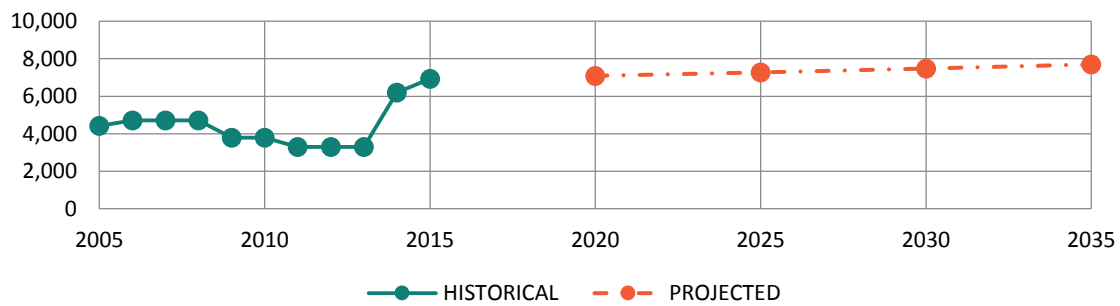
Sandusky, MI

Growth Rate (2015-2035): 0.53%

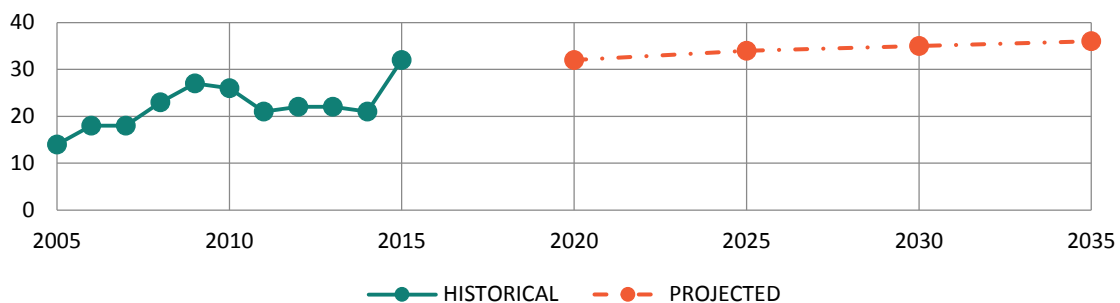
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	2,215	0	2,215	0	4,430	14
2006	0	0	2,355	0	2,355	0	4,710	18
2007	0	0	2,355	0	2,355	0	4,710	18
2008	0	0	2,355	0	2,355	0	4,710	23
2009	0	0	1,900	0	1,900	0	3,800	27
2010	0	0	1,900	0	1,900	0	3,800	26
2011	0	0	800	0	2,500	0	3,300	21
2012	0	0	800	0	2,500	0	3,300	22
2013	0	0	800	0	2,500	0	3,300	22
2014	0	0	1,200	0	5,000	0	6,200	21
2015	0	30	2,900	0	4,000	0	6,930	32
Projected								
2020	0	31	2,967	0	4,092	0	7,089	33
2025	0	31	3,041	0	4,195	0	7,268	34
2030	0	32	3,128	0	4,315	0	7,476	35
2035	0	33	3,221	0	4,443	0	7,697	37

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



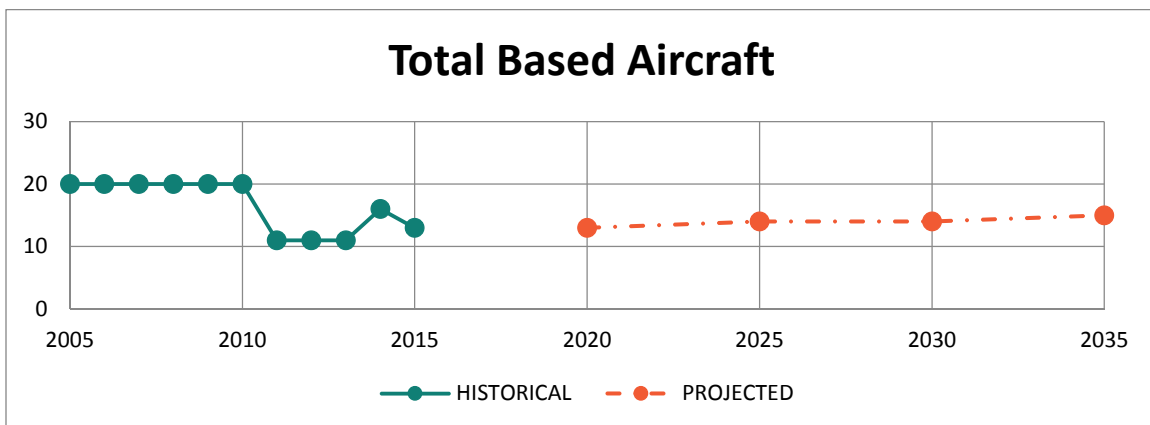
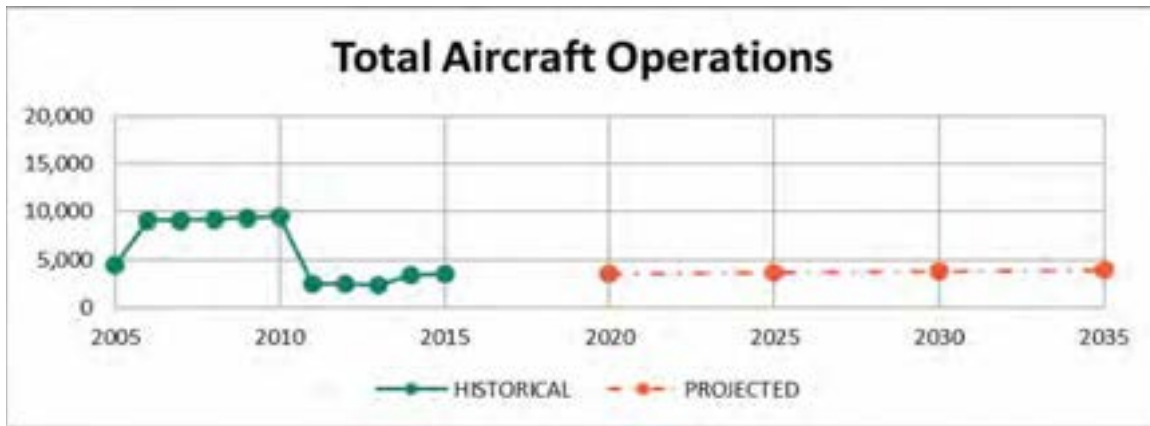
## Chippewa County International (CIU)

Sault Ste Marie, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	3,500	200	300	43	400	0	4,443	20
2006	2	2,480	3,900	50	2,600	0	9,032	20
2007	2	2,480	3,900	50	2,600	0	9,032	20
2008	2	2,512	3,957	43	2,638	0	9,152	20
2009	2	2,544	4,016	43	2,677	0	9,282	20
2010	2	2,576	4,075	43	2,716	0	9,412	20
2011	1,460	200	300	43	400	0	2,403	11
2012	1,460	200	300	43	400	0	2,403	11
2013	1,352	200	300	43	400	0	2,295	11
2014	1,352	1,180	450	50	353	0	3,385	16
2015	728	1,460	500	50	750	0	3,488	13
Projected								
2020	745	1,494	512	50	767	0	3,568	13
2025	764	1,532	525	50	787	0	3,658	14
2030	786	1,577	540	50	810	0	3,763	14
2035	810	1,624	556	50	834	0	3,874	15

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



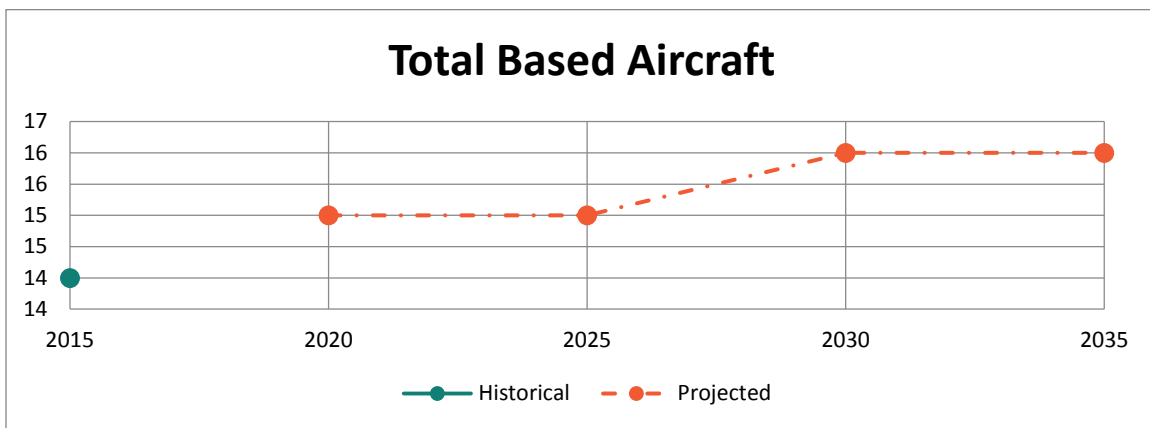
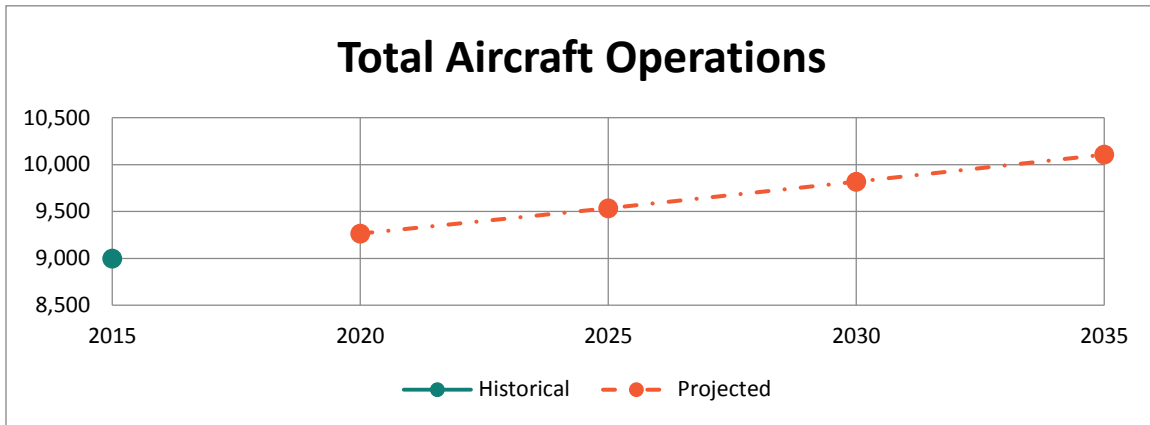
## Sault Ste Marie Municipal/Sanderson Field (ANJ)

Sault Ste Marie, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	4,000			40	4,960		9,000	14
Projected								
2020	4,118			40	5,107		9,265	15
2025			4,240	40	5,257		9,537	15
2030	4,365			40	5,413		9,818	16
2035			4,494	40	5,573		10,107	16

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



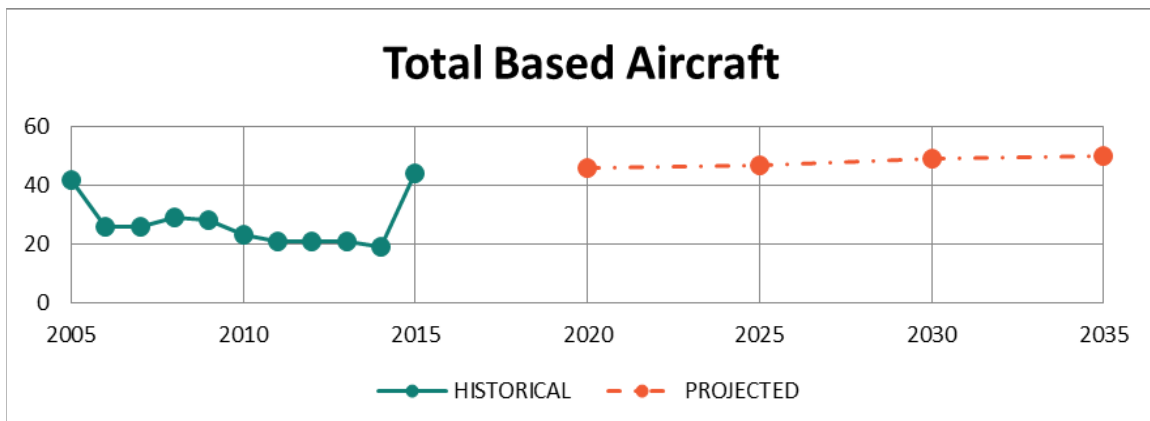
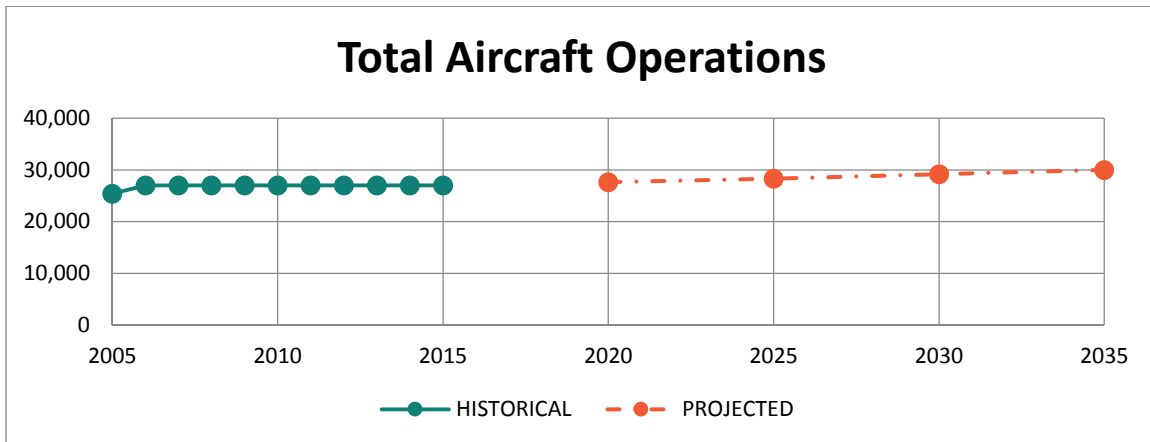
## South Haven Area Regional (LWA)

South Haven, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	10,166	0	15,248	0	25,414	42
2006	0	0	13,508	0	13,508	0	27,016	26
2007	0	0	13,508	0	13,508	0	27,016	26
2008	0	0	13,508	0	13,508	0	27,016	29
2009	0	0	13,508	0	13,508	0	27,016	28
2010	0	0	13,508	0	13,508	0	27,016	23
2011	0	0	13,508	0	13,508	0	27,016	21
2012	0	0	13,508	0	13,508	0	27,016	21
2013	0	0	13,508	0	13,508	0	27,016	21
2014	0	0	13,508	0	13,508	0	27,016	19
2015	0	0	13,508	0	13,508	0	27,016	44
Projected								
2020	0	0	13,818	0	13,818	0	27,636	46
2025	0	0	14,167	0	14,167	0	28,333	47
2030	0	0	14,573	0	14,573	0	29,145	49
2035	0	0	15,004	0	15,004	0	30,007	50

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



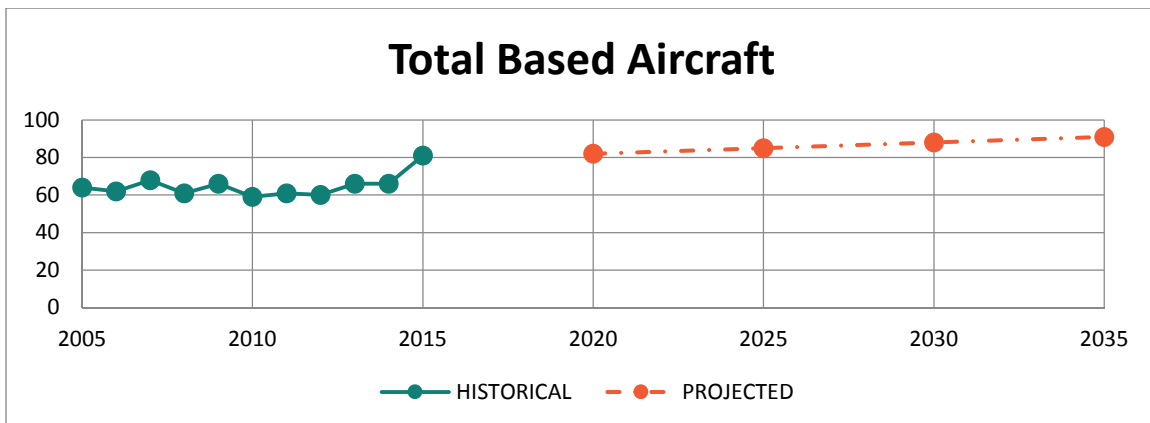
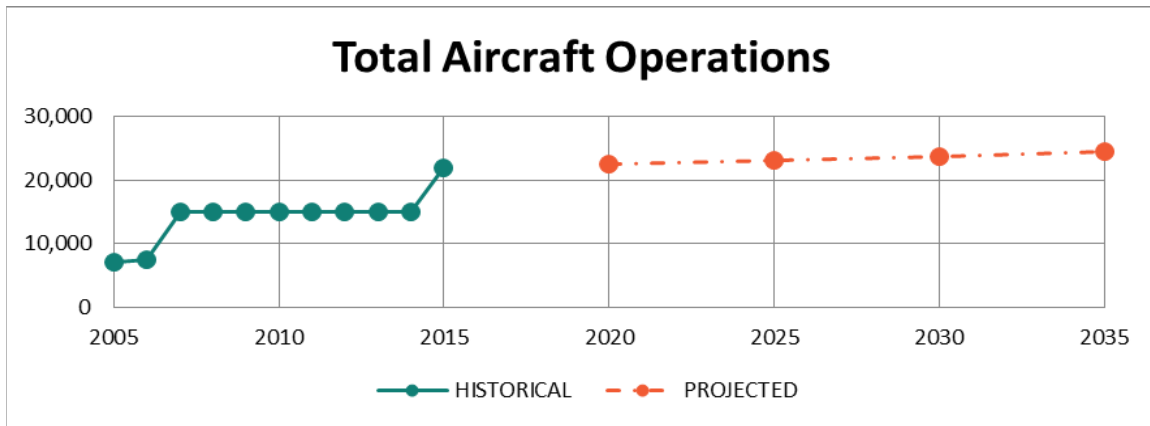
## Paul C. Miller Sparta (8D4)

Sparta, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	710	0	6,388	0	7,098	64
2006	0	0	3,773	0	3,773	0	7,546	62
2007	0	0	500	0	14,500	0	15,000	68
2008	0	0	500	0	14,500	0	15,000	61
2009	0	0	500	0	14,500	0	15,000	66
2010	0	0	500	0	14,500	0	15,000	59
2011	0	0	500	0	14,500	0	15,000	61
2012	0	0	500	0	14,500	0	15,000	60
2013	0	0	14,522	0	503	0	15,025	66
2014	0	0	14,522	0	503	0	15,025	66
2015	0	0	2,000	18	20,000	0	22,018	81
Projected								
2020	0	0	2,046	18	20,459	0	22,523	84
2025	0	0	2,098	18	20,975	0	23,091	87
2030	0	0	2,158	18	21,577	0	23,753	90
2035	0	0	2,222	18	22,216	0	24,456	92

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Mackinac County (83D)

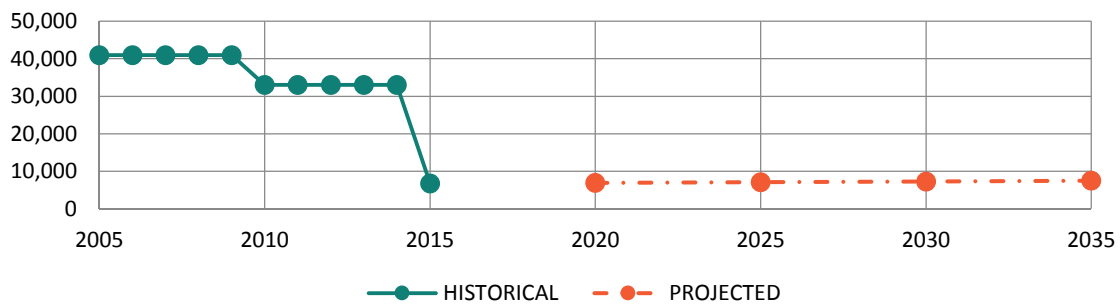
St. Ignace, MI

Growth Rate (2015-2035): 0.53%

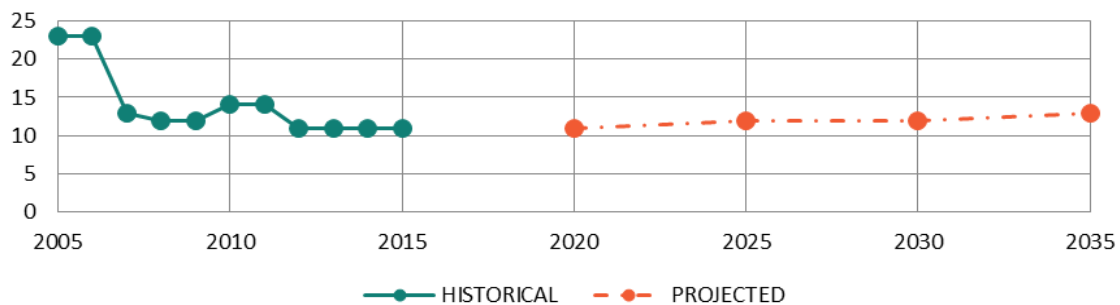
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	20,000	16,900	50	4,050	0	41,000	23
2006	0	20,000	16,900	50	4,050	0	41,000	23
2007	0	20,000	16,900	50	4,050	0	41,000	13
2008	0	20,000	16,900	50	4,050	0	41,000	12
2009	0	20,000	16,900	50	4,050	0	41,000	12
2010	0	15,000	15,000	50	3,000	0	33,050	14
2011	0	15,000	15,000	50	3,000	0	33,050	14
2012	0	15,000	15,000	50	3,000	0	33,050	11
2013	0	15,000	15,000	50	3,000	0	33,050	11
2014	0	15,000	15,000	50	3,000	0	33,050	11
2015	0	0	6,350	100	300	0	6,750	11
Projected								
2020	0	0	6,498	100	307	0	6,905	11
2025	0	0	6,664	100	315	0	7,079	12
2030	0	0	6,858	100	324	0	7,282	12
2035	0	0	7,063	100	334	0	7,497	13

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Kirsch Municipal (IRS)

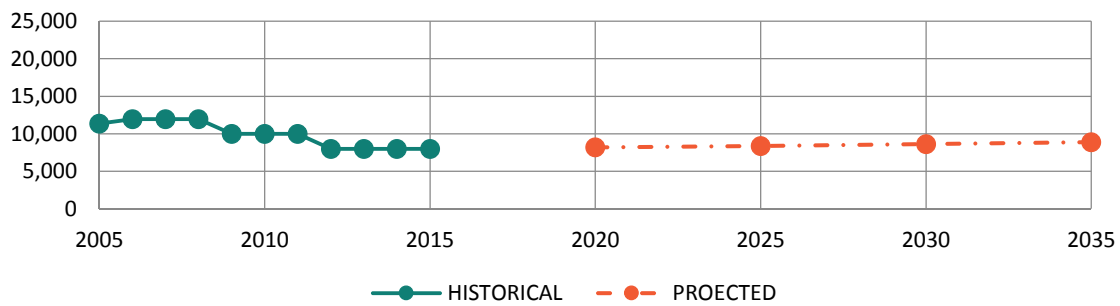
Sturgis, MI

Growth Rate (2015-2035): 0.53%

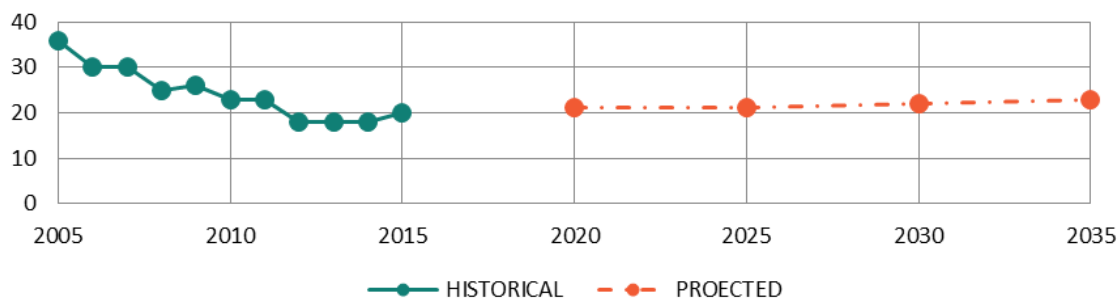
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	9,080	0	2,270	0	11,350	36
2006	0	0	9,562	0	2,413	0	11,975	30
2007	0	0	9,562	0	2,413	0	11,975	30
2008	0	0	9,562	0	2,413	0	11,975	25
2009	0	0	8,000	0	2,000	0	10,000	26
2010	0	0	8,000	0	2,000	0	10,000	23
2011	0	0	8,000	0	2,000	0	10,000	23
2012	0	0	6,000	0	2,000	0	8,000	18
2013	0	0	6,000	0	2,000	0	8,000	18
2014	0	0	6,000	0	2,000	0	8,000	18
2015	0	0	6,000	0	2,000	0	8,000	20
Projected								
2020	0	0	6,138	0	2,046	0	8,184	21
2025	0	0	6,293	0	2,098	0	8,390	21
2030	0	0	6,473	0	2,158	0	8,630	22
2035	0	0	6,665	0	2,222	0	8,886	23

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



## Three Rivers Municipal Dr. Haines (HAI)

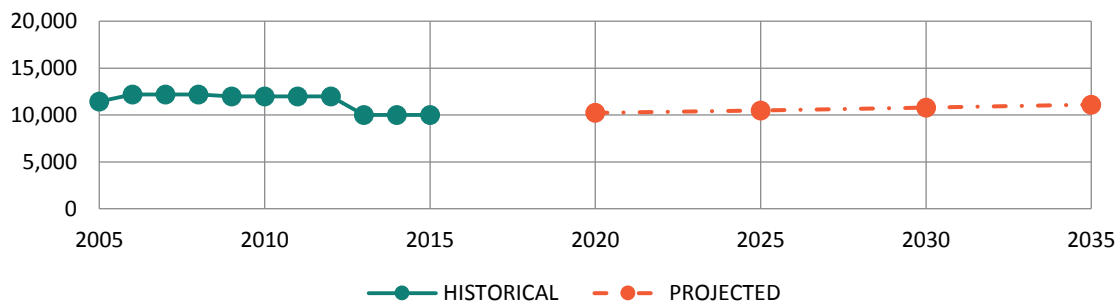
Three Rivers, MI

Growth Rate (2015-2035): 0.53%

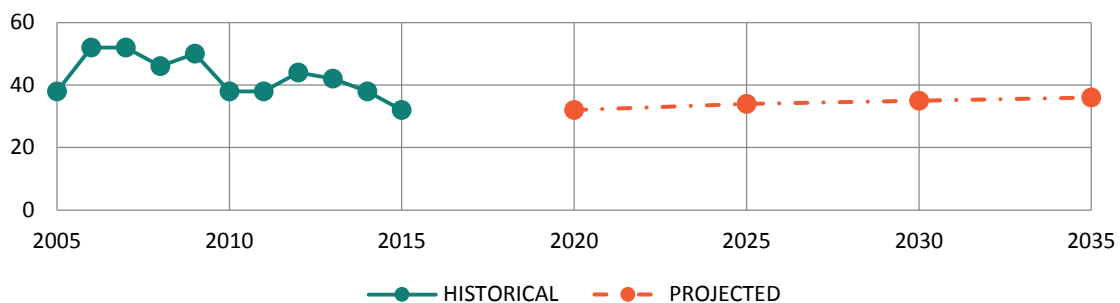
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	5,725	0	5,725	0	11,450	38
2006	0	0	6,086	0	6,089	0	12,175	52
2007	0	0	6,086	0	6,089	0	12,175	52
2008	0	0	6,086	0	6,089	0	12,175	46
2009	0	0	6,000	0	6,000	0	12,000	50
2010	0	0	6,000	0	6,000	0	12,000	38
2011	0	0	6,000	0	6,000	0	12,000	38
2012	0	0	6,000	0	6,000	0	12,000	44
2013	0	0	5,000	0	5,000	0	10,000	42
2014	0	0	5,000	0	5,000	0	10,000	38
2015	0	0	5,000	0	5,000	0	10,000	32
Projected								
2020	0	0	5,115	0	5,115	0	10,230	33
2025	0	0	5,244	0	5,244	0	10,487	34
2030	0	0	5,394	0	5,394	0	10,788	35
2035	0	0	5,554	0	5,554	0	11,107	37

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft





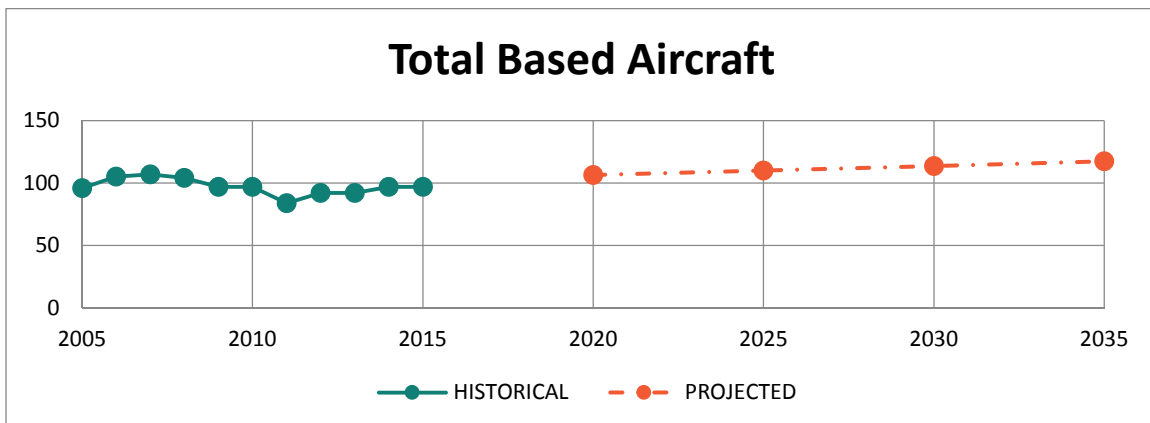
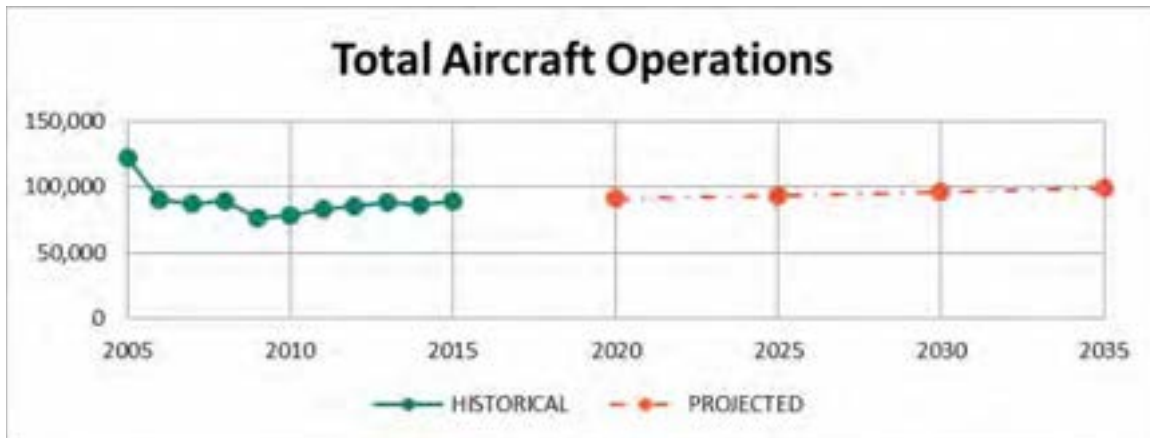
## Cherry Capital (TVC)

Traverse City, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	7,732	14,555	37,860	3,816	47,801	10,598	122,362	96
2006	7,556	11,639	29,884	4,104	29,432	7,827	90,442	105
2007	6,956	11,410	30,433	4,090	27,493	6,559	86,941	107
2008	7,424	11,483	28,865	3,847	31,513	6,271	89,403	104
2009	7,993	8,490	25,240	3,602	25,324	5,005	75,654	97
2010	8,676	7,917	25,763	3,950	27,314	4,879	78,499	97
2011	8,557	7,852	26,505	4,091	30,663	5,768	83,436	84
2012	7,926	7,536	26,265	3,947	34,712	4,731	85,117	92
2013	7,900	7,495	26,940	3,562	36,833	4,823	87,553	92
2014	7,088	8,320	28,432	3,845	34,755	4,040	86,480	97
2015	8,401	8,504	31,710	0	40,212	0	88,827	97
Projected								
2020	8,594	8,699	32,438	0	41,135	0	90,866	100
2025	8,811	8,919	33,256	0	42,172	0	93,157	104
2030	9,063	9,174	34,209	0	43,381	0	95,827	107
2035	9,331	9,446	35,221	0	44,664	0	98,662	111

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## Oakland/Troy (VLL)

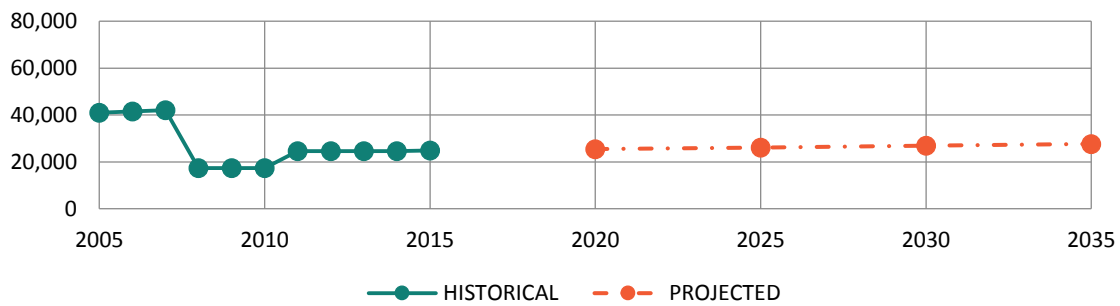
Troy, MI

Growth Rate (2015-2035): 0.53%

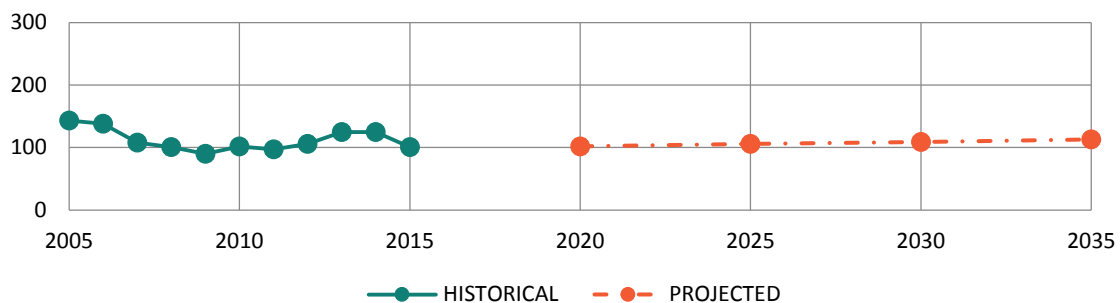
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	12,682	0	28,318	0	41,000	143
2006	0	0	20,742	0	20,742	0	41,484	138
2007	0	0	20,988	0	21,049	0	42,037	108
2008	0	0	8,700	0	8,700	0	17,400	101
2009	0	0	8,700	0	8,700	0	17,400	90
2010	0	0	8,700	0	8,700	0	17,400	102
2011	0	0	12,292	0	12,293	0	24,585	97
2012	0	0	12,292	0	12,293	0	24,585	106
2013	0	0	12,292	0	12,293	0	24,585	125
2014	0	0	12,292	0	12,293	0	24,585	125
2015	0	0	12,292	0	12,293	0	24,585	101
Projected								
2020	0	0	12,574	0	12,575	0	25,149	102
2025	0	0	12,891	0	12,892	0	25,783	106
2030	0	0	13,260	0	13,262	0	26,522	109
2035	0	0	13,653	0	13,654	0	27,307	113

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



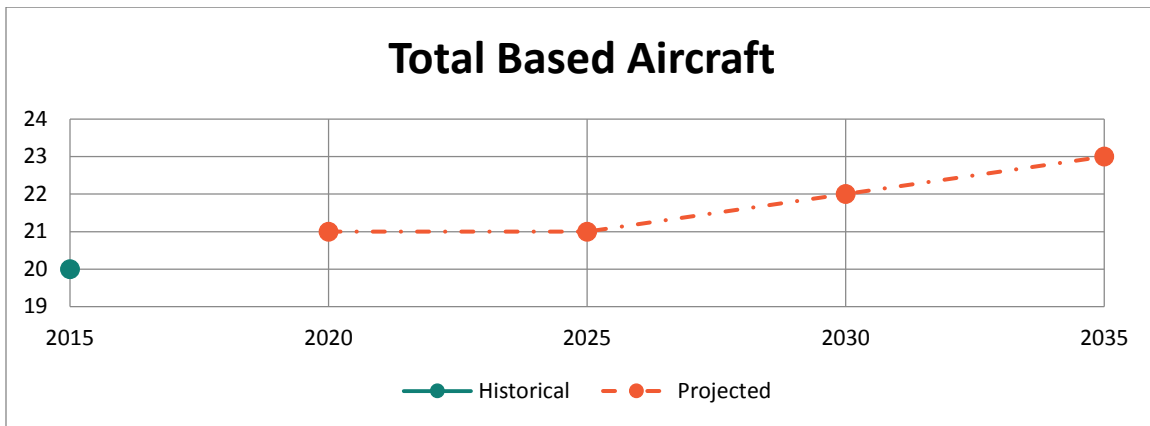
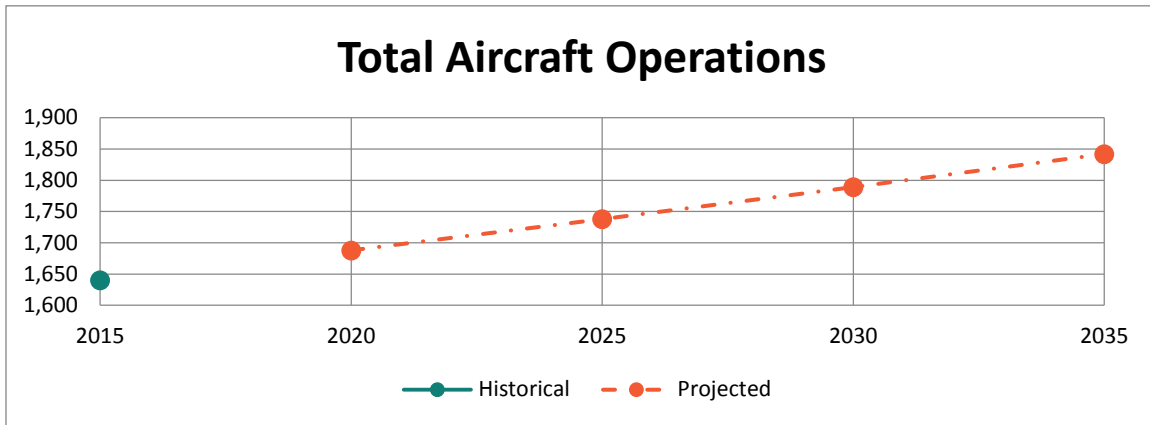
## Watervliet Municipal (40C)

Watervliet, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	640				1,000		1,640	20
Projected								
2020	658				1,030		1,688	21
2025			678		1,060		1,738	21
2030	698				1,091		1,789	22
2035			718		1,124		1,842	23

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.



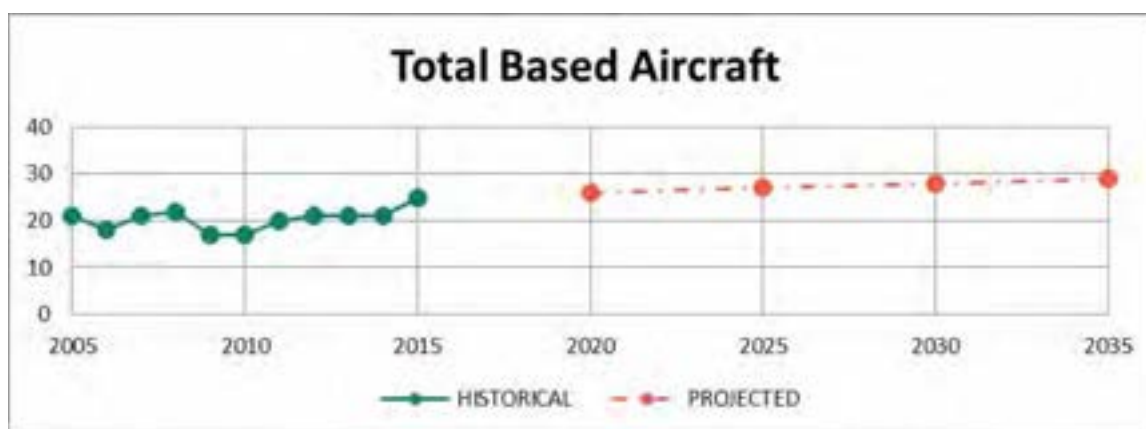
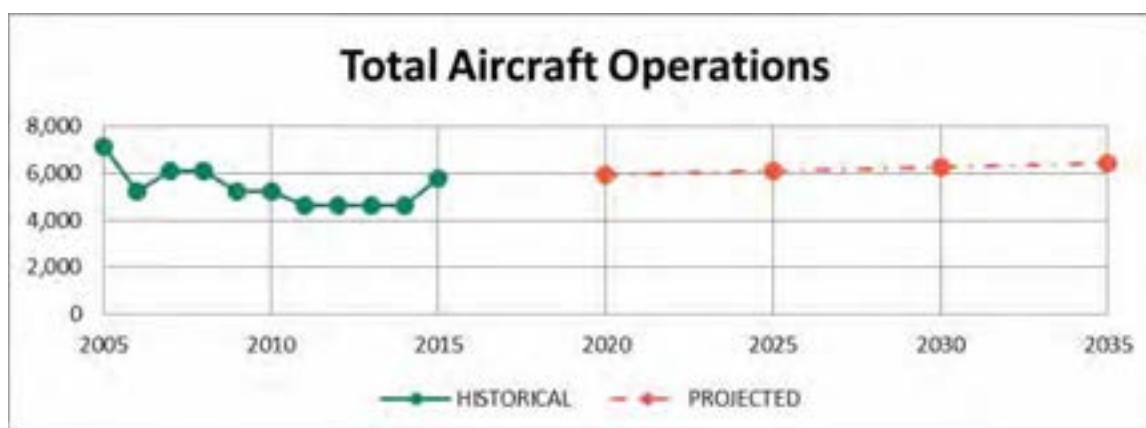
## West Branch Community (Y31)

West Branch, MI

Growth Rate (2015-2035): 0.53%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	2,200	2,958	0	1,972	0	7,130	21
2006	0	0	2,096	0	3,145	0	5,241	18
2007	0	0	2,530	0	3,584	0	6,114	21
2008	0	0	2,530	0	3,584	0	6,114	22
2009	0	0	2,530	0	2,688	0	5,218	17
2010	0	0	2,530	0	2,688	0	5,218	17
2011	0	0	2,328	0	2,328	0	4,656	20
2012	0	0	2,328	0	2,328	0	4,656	21
2013	0	0	2,328	0	2,328	0	4,656	21
2014	0	0	2,328	0	2,328	0	4,656	21
2015	0	500	2,650	0	2,650	0	5,800	25
Projected								
2020	0	511	2,711	0	2,711	0	5,933	26
2025	0	524	2,779	0	2,779	0	6,083	27
2030	0	539	2,859	0	2,859	0	6,257	28
2035	0	555	2,943	0	2,943	0	6,442	29

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.



## White Cloud (42C)

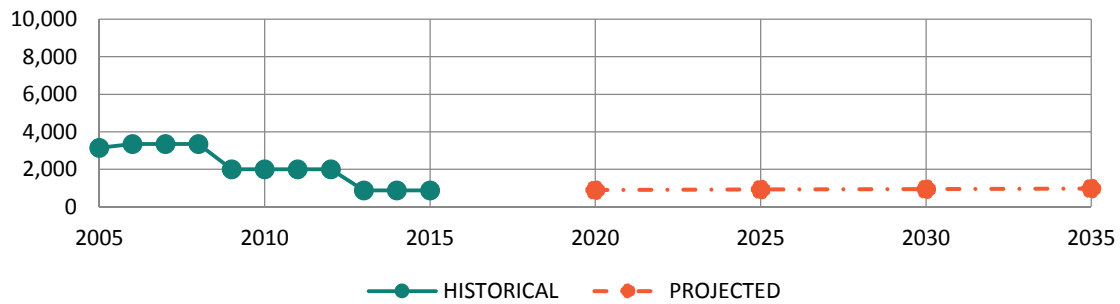
White Cloud, MI

Growth Rate (2015-2035): 0.53%

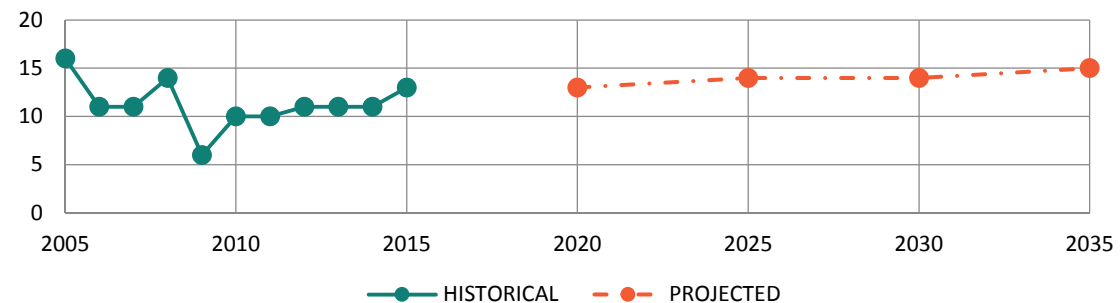
Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2005	0	0	1,574	0	1,574	0	3,148	16
2006	0	0	1,673	0	1,673	0	3,346	11
2007	0	0	1,673	0	1,673	0	3,346	11
2008	0	0	1,673	0	1,673	0	3,346	14
2009	0	0	1,000	0	1,000	0	2,000	6
2010	0	0	1,000	0	1,000	0	2,000	10
2011	0	0	1,000	0	1,000	0	2,000	10
2012	0	0	1,000	0	1,000	0	2,000	11
2013	0	0	438	0	438	0	876	11
2014	0	0	438	0	438	0	876	11
2015	0	0	854	0	22	0	876	13
Projected								
2020	0	0	869	0	27	0	896	13
2025	0	0	891	0	28	0	919	14
2030	0	0	917	0	28	0	945	14
2035	0	0	944	0	29	0	973	15

Source: Jacobsen|Daniels, June 2017 (MASP forecast), FAA Terminal Area Forecast 2016 – 2036 (historical)  
Totals may not add due to rounding.

### Total Aircraft Operations



### Total Based Aircraft



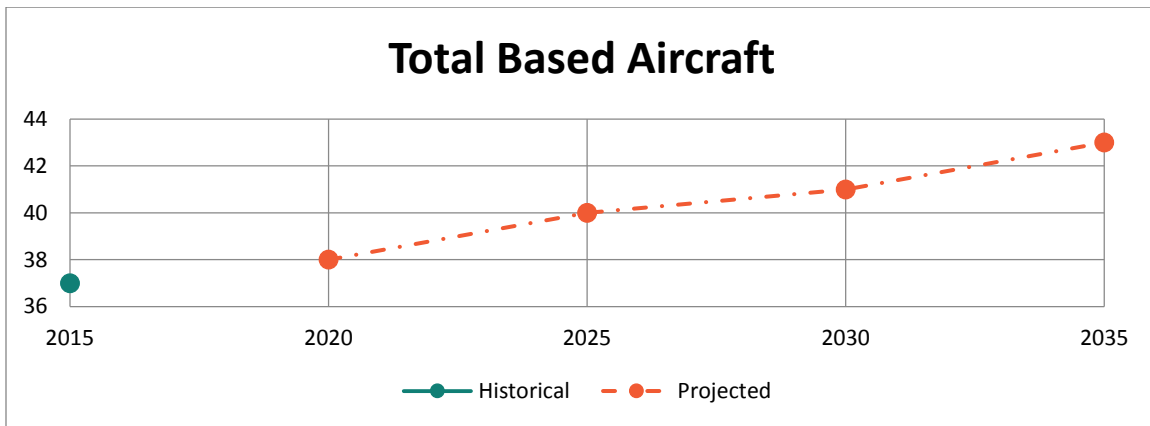
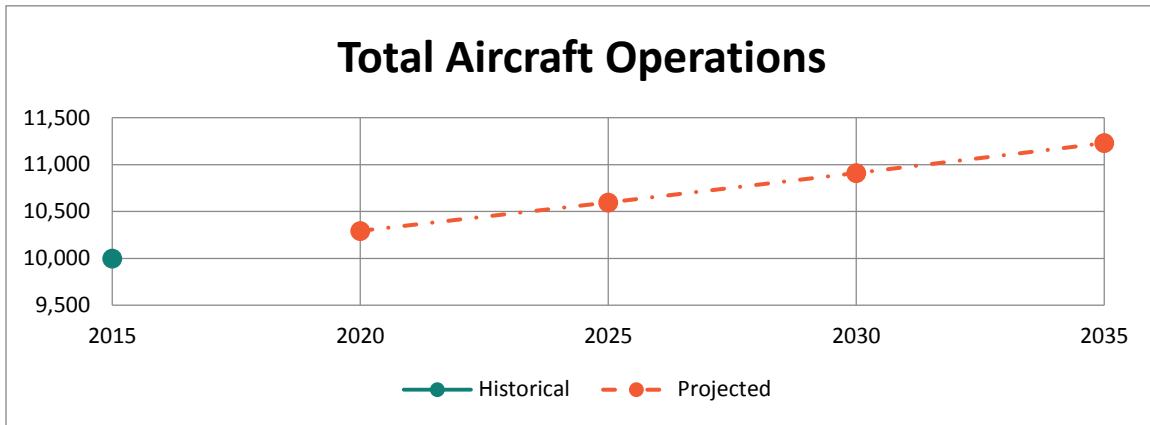
## Ottawa Executive (Z98)

Zeeland, MI

Growth Rate (2015-2035): 0.58%

Year	Itinerant				Local		Total Operations	Based Aircraft
	Air Carrier	Air Taxi	GA	Military	GA	Military		
Historical								
2015	100		4,950		4,950		10,000	37
Projected								
2020	103		5,096		5,096		10,294	38
2025		106	5,246		5,246		10,597	40
2030	109		5,400		5,400		10,909	41
2035		112	5,559		5,559		11,230	43

Source: Jacobsen|Daniels, June 2017 (MASP forecast), Community Benefit Assessment (CBA) Worksheet and AirNav ([www.airnav.com](http://www.airnav.com)) (historical)  
Totals may not add due to rounding.





## Appendix B: Airport Report Cards





## Appendix B: Airport Report Cards

Michigan's system airports are classified using a two-step methodology including airport tiers (1, 2 and 3) and their associated ARCs (ranging from A-I to C-II), known as a MASP ARC. The MASP ARC is an indicator of the type of activity that occurs at an airport, and the role the airport plays in meeting system goals. The MASP ARC helps align the facility goals appropriate to each airport, including:

- Primary Runway System
- Lighting and Visual Aids
- Approach Protection
- Basic Pilot and Aircraft Services
- All-Weather Access
- Year-Round Access
- Landside Access

Each facility goal contains specific development items based on the MASP ARC assigned to an airport. The MASP ARC and the associated facility goals reflect what MDOT Office of Aeronautics (AERO) believes is the appropriate level of development to support each system goal, and is not a justification for individual airports to require funding to meet their MASP ARC designations and associated facility goals.

This appendix includes a Report Card for each of the 114 Tier 1 and Tier 2 airports in the MASP. The Report Cards provide a comparison between the existing facilities and services available at each airport and the facility goals assigned to each airport.

Please note that because the MASP ARC assigned to an airport is independent of their existing FAA design ARC, airports should continue to develop in accordance with their individual airport needs and federal design standards as identified in their airport planning studies and documents. However, the facility development goals assigned to an airport through their MASP ARC should also be recognized and considered during future planning exercises in an effort to meet system goals.

**Section 2** includes a detailed description of each facility goal and associated development items, and **Section 5** contains details on the classification of each system airport and the MASP ARC assigned to them.

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Airport Report Card			Airport Name: Lenawee County Airport	
ADRIAN			FAA Identifier: ADG	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): C-II	
			2017 MASP Airport Reference Code (ARC): C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,001	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	64	60	Meeting goal
	Taxiway	84	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Padgham Field	
ALLEGAN			FAA Identifier: 35D	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,300	4,300	Yes
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	98	55	Meeting goal
	Taxiway	98	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Gratiot Community Airport	
ALMA			FAA Identifier: AMN	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): C-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	5,004	4,300	Yes
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	77	60	Meeting goal
	Taxiway	82	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div> <div>Airport Report Card</div> <div> <div>ALPENA</div> <div> <div>Airport Name: Alpena County Regional Airport</div> <div>FAA Identifier: APN</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): C-IV</div> <div>2017 MASP Airport Reference Code (ARC): C-II <i>(see notes)</i></div> </div> </div> </div>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	9,001	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	66	60	Meeting goal
	Taxiway	99	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>			<b>Airport Name:</b> Ann Arbor Municipal Airport	
<b>ANN ARBOR</b>			<b>FAA Identifier:</b> ARB	
			<b>2017 MASP Tier:</b> 1	
<b>Current FAA Airport Reference Code (ARC):</b> B-II				
<b>2017 MASP Airport Reference Code (ARC):</b> B-II				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,505	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel (see notes)	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Taxiway development standards require full parallel taxiway because airport has more than 20,000 operations annually.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	86	55	Meeting goal
	Taxiway	85	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>ATLANTA</div>			<div>Airport Name: Atlanta Municipal Airport</div> <div>FAA Identifier: Y93</div> <div>2017 MASP Tier: 2</div> <div>Current FAA Airport Reference Code (ARC): B-I</div> <div>2017 MASP Airport Reference Code (ARC): B-I</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-I Development Goals	Met?
Primary Runway System	Length (feet)	3,000	3,500	No
	Width (feet)	60	60	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	LIRL	MIRL	No
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	No	Yes	No
	Lighted Wind Indicator	No - Unlit	Yes	No
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Visual	Non-Precision	No
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	No	No	Yes

**Notes:**  
 For A-I airports with paved runways, the standard width is 60 feet.  
 Runway length goal shown is subject to FAA/AERO justification determination.  
 A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable.  
 An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.  
 Aircraft parking consists of either a hangar, tie-down, or parking area.  
 Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.

**Additional Airport Notes:**  
 Primary runway is paved but all taxiways are turf surface.

Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	64	55	Meeting goal
	Taxiway	TURF	N/A	Meeting goal

Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)



<div>Airport Report Card</div> <div>BAD AXE</div>			<div>Airport Name: Huron County Memorial Airport</div> <div>FAA Identifier: BAX</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,009	5,000	Yes
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	62	55	Meeting goal
	Taxiway	97	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Baldwin Municipal Airport	
BALDWIN			FAA Identifier: 7D3	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,800	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	No Lighting	MIRL	No
	PAPI	No	Yes	No
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	No	Yes	No
	Lighted Wind Indicator	No - Unlit	Yes	No
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	No	Yes	No
	Fuel	No	Yes	No
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	No	Yes	No
	Snow Removal	No	Yes	No
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> PCI not available (NA), airport does not participate in statewide Airport Pavement Management System (APMS).				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	N/A	55	N/A
	Taxiway	N/A	45	N/A
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: W. K. Kellogg Airport	
BATTLE CREEK			FAA Identifier: BTL	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): D-III	
			2017 MASP Airport Reference Code (ARC): C-II (see notes)	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	10,004	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	100	65	Meeting goal
	Taxiway	100	55	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

## BAY CITY

**Airport Name: James Clements Airport & S.P.B**

FAA Identifier: 3CM

**2017 MASP Tier: 1**

**Current FAA Airport Reference Code (ARC):** B-II

2017 MASP Airport Reference Code (ARC): B-II

**Notes:**  
For A-I airports with paved runways, the standard width is 60 feet.  
Runway length goal shown is subject to FAA/AERO justification determination.  
A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable.  
An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.  
Aircraft parking consists of either a hangar, tie-down, or parking area.  
Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.

**Additional Airport Notes:**

Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	69	55	Meeting goal
	Taxiway	48	45	Meeting goal

Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)

Airport Report Card			Airport Name: Beaver Island Airport	
BEAVER ISLAND			FAA Identifier: SJX	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	4,299	5,000	No
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	63	55	Meeting goal
	Taxiway	82	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Antrim County Airport	
BELLAIRE			FAA Identifier: ACB	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,999	4,300	Yes
	Width (feet)	100	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	33	55	Below goal
	Taxiway	31	45	Below goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>			<b>Airport Name: Southwest Michigan Regional Airport</b>	
<b>BENTON HARBOR</b>			<b>FAA Identifier: BEH</b>	
			<b>2017 MASP Tier: 1</b>	
<b>Current FAA Airport Reference Code (ARC): C-II</b>				
<b>2017 MASP Airport Reference Code (ARC): C-II</b>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,005	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	69	60	Meeting goal
	Taxiway	66	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<div>Airport Report Card</div> <div> <div>BIG RAPIDS</div> <div> <div>Airport Name: Roben - Hood Airport</div> <div> <div>FAA Identifier: RQB</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div> </div> </div> </div>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	4,300	5,000	No
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	88	55	Meeting goal
	Taxiway	78	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<div> <div>Airport Report Card</div> <div>BOIS BLANC ISLAND</div> </div>			<div> <div>Airport Name: Bois Blanc Island Airport</div> <div> <div>FAA Identifier: 6Y1</div> <div>2017 MASP Tier: 1</div> </div> <div> <div>Current FAA Airport Reference Code (ARC): B-I</div> <div>2017 MASP Airport Reference Code (ARC): B-I</div> </div> </div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-I Development Goals	Met?
Primary Runway System	Length (feet)	3,498	3,500	No
	Width (feet)	75	60	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	No	Yes	No
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes

**Notes:**

For A-I airports with paved runways, the standard width is 60 feet.

Runway length goal shown is subject to FAA/AERO justification determination.

A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable.

An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.

Aircraft parking consists of either a hangar, tie-down, or parking area.

Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.

**Additional Airport Notes:**

Transportation mode available is bicycle.

Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	66	55	Meeting goal
	Taxiway	87	45	Meeting goal

Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)

Airport Report Card			Airport Name: Brighton Field	
BRIGHTON			FAA Identifier: 45G	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): A-I	
			2017 MASP Airport Reference Code (ARC): A-I	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	3,124	2,500	Yes
	Width (feet)	24	60	No
	Surface Type	Paved	Turf	Yes
	Primary Taxiway System	Partial Parallel	None	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	Markers	Yes
	PAPI	Yes	No	Yes
	REIL	No	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	No	Yes
	Lighted Wind Indicator	Yes	No - Unlit	Yes
	Segmented Circle	No	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	No	Yes
	Fuel	Yes	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	No	No	Yes
All-Weather Access	Instrument Approach	Visual	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	No	Preferred	No
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MIRL Non-Standard; Fuel available by prior arrangement only; Weather briefing/cell service status unknown. PCI not available (NA), airport does not participate in statewide Airport Pavement Management System (APMS).				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	N/A	55	N/A
	Taxiway	N/A	45	N/A
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Wexford County Airport	
CADILLAC			FAA Identifier: CAD	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): C-II	
			2017 MASP Airport Reference Code (ARC): C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,000	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	Yes	No
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	67	60	Meeting goal
	Taxiway	88	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Tuscola Area Airport	
CARO			FAA Identifier: CFS	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,302	4,300	Yes
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	60	55	Meeting goal
	Taxiway	80	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>CHARLEVOIX</div>			<div>Airport Name: Charlevoix Municipal Airport</div> <div>FAA Identifier: CVX</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	4,549	5,000	No
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	100	55	Meeting goal
	Taxiway	56	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>CHARLOTTE</div>			<div>Airport Name: Fitch H. Beach Airport</div> <div>FAA Identifier: FPK</div> <div>2017 MASP Tier: 2</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): B-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,510	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	74	55	Meeting goal
	Taxiway	82	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Cheboygan County Airport	
CHEBOYGAN			FAA Identifier: SLH	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,005	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	60	55	Meeting goal
	Taxiway	59	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Clare Municipal Airport	
CLARE			FAA Identifier: 48D	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,500	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	70	55	Meeting goal
	Taxiway	73	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Branch County Memorial	
COLDWATER			FAA Identifier: OEB	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,350	5,000	Yes
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	79	55	Meeting goal
	Taxiway	89	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>DETROIT</div>			<div>Airport Name: Coleman A. Young Municipal</div> <div>FAA Identifier: DET</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): C-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,090	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	Yes	No
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	50	60	Below goal
	Taxiway	91	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>			<b>Airport Name:</b> Detroit Metro Wayne County	
<b>DETROIT</b>			<b>FAA Identifier:</b> DTW	
			<b>2017 MASP Tier:</b> 1	
			<b>Current FAA Airport Reference Code (ARC):</b> D-V	
			<b>2017 MASP Airport Reference Code (ARC):</b> C-II <i>(see notes)</i>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	12,003	5,000	Yes
	Width (feet)	200	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	No	Yes	No
	REIL	No	Yes	No
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Approach Lighting System (ALS) on both ends of primary runway in lieu of REIL; Approach Protection Plan approval date unknown. Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	100	65	Meeting goal
	Taxiway	94	55	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>DETROIT</div>			<div>Airport Name: Willow Run Airport</div> <div>FAA Identifier: YIP</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): D-IV</div> <div>2017 MASP Airport Reference Code (ARC): C-II <i>(see notes)</i></div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	7,543	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Approach Lighting System (ALS) on both ends of primary runway in lieu of REIL. Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	82	65	Meeting goal
	Taxiway	N/A	55	N/A
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>  <b>DETROIT / GROSSE ILE</b>			<b>Airport Name: Grosse Ile Municipal Airport</b>  <b>FAA Identifier: ONZ</b> <b>2017 MASP Tier: 1</b>  <b>Current FAA Airport Reference Code (ARC): B-II</b> <b>2017 MASP Airport Reference Code (ARC): B-I</b>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-I Development Goals	Met?
Primary Runway System	Length (feet)	4,846	3,500	Yes
	Width (feet)	100	60	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	No	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Preferred	Yes
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	100	55	Meeting goal
	Taxiway	95	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>DOWAGIAC</div>			<div>Airport Name: Dowagiac Municipal Airport</div> <div>FAA Identifier: C91</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	4,700	5,000	No
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes

**Notes:**  
 For A-I airports with paved runways, the standard width is 60 feet.  
 Runway length goal shown is subject to FAA/AERO justification determination.  
 A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable.  
 An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.  
 Aircraft parking consists of either a hangar, tie-down, or parking area.  
 Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.

**Additional Airport Notes:**  
 MALSR is not a development goal for C-II airports without an existing precision approach.

Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	75	55	Meeting goal
	Taxiway	67	45	Meeting goal

Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)

<div> <div>Airport Report Card</div> <div> <div>DRUMMOND ISLAND</div> <div> <div>Airport Name: Drummond Island Airport</div> <div> <div>FAA Identifier: DRM</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): B-I</div> </div> </div> </div> </div>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-I Development Goals	Met?
Primary Runway System	Length (feet)	4,000	3,500	Yes
	Width (feet)	75	60	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Preferred	Yes
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Maintenance on call and seasonal only.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	77	55	Meeting goal
	Taxiway	77	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<div> <div>Airport Report Card</div> <div>EAST TAWAS</div> </div>			<div> <div>Airport Name: Iosco County Airport</div> <div>FAA Identifier: 6D9</div> <div>2017 MASP Tier: 2</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): A-I</div> </div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	4,802	2,500	Yes
	Width (feet)	75	60	Yes
	Surface Type	Paved	Turf	Yes
	Primary Taxiway System	Direct Connector	None	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	Markers	Yes
	PAPI	Yes	No	Yes
	REIL	Yes	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	No	Yes
	Lighted Wind Indicator	Yes	No - Unlit	Yes
	Segmented Circle	Yes	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	No	No	Yes
	Fuel	Yes	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	No	Yes
	Available Staff	No	No	Yes
All-Weather Access	Instrument Approach	Non-Precision	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Maintenance by prior arrangement only.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	90	55	Meeting goal
	Taxiway	92	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Delta County Airport	
ESCANABA			FAA Identifier: ESC	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): C-III	
			2017 MASP Airport Reference Code (ARC): C-II (see notes)	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,498	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	39	60	Below goal
	Taxiway	75	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Evart Municipal Airport	
EVART			FAA Identifier: 9C8	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-I	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,804	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	No	Yes	No
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	No	Yes	No
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Visual	Non-Precision	No
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	No	Yes	No
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	74	55	Meeting goal
	Taxiway	78	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>		<b>Airport Name:</b> Bishop International Airport		
<b>FLINT</b>		<b>FAA Identifier:</b> FNT		
		<b>2017 MASP Tier:</b> 1		
<b>Current FAA Airport Reference Code (ARC):</b> D-IV				
<b>2017 MASP Airport Reference Code (ARC):</b> C-II <i>(see notes)</i>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	7,201	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Approach Lighting System (ALS) on both ends of primary runway in lieu of REIL. Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	79	65	Meeting goal
	Taxiway	71	55	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Dalton Airport	
FLUSHING			FAA Identifier: 3DA	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): A-I	
			2017 MASP Airport Reference Code (ARC): A-I	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	2,510	2,500	Yes
	Width (feet)	50	60	No
	Surface Type	Paved	Turf	Yes
	Primary Taxiway System	Partial Parallel	None	Yes
Lighting and Visual Aids	Runway Lighting System	LIRL	Markers	Yes
	PAPI	No	No	Yes
	REIL	No	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	No	Yes
	Lighted Wind Indicator	No - Unlit	No - Unlit	Yes
	Segmented Circle	No	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	No	No	Yes
	Fuel	Yes	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	No	No	Yes
All-Weather Access	Instrument Approach	Visual	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	No	Preferred	No
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Weather briefing/cell service status unknown. PCI not available (NA), airport does not participate in statewide Airport Pavement Management System (APMS).				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	N/A	55	N/A
	Taxiway	N/A	45	N/A
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: WM 'Tiny' Zehnder Field	
FRANKENMUTH			FAA Identifier: 66G	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): A-I	
			2017 MASP Airport Reference Code (ARC): A-I	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	2,530	2,500	Yes
	Width (feet)	100	100	Yes
	Surface Type	Turf	Turf	Yes
	Primary Taxiway System	Direct Connector	None	Yes
Lighting and Visual Aids	Runway Lighting System	LIRL	Markers	Yes
	PAPI	No	No	Yes
	REIL	No	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	No	No	Yes
	Lighted Wind Indicator	Yes	No - Unlit	Yes
	Segmented Circle	No	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	No	Yes
	Fuel	No	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	No	No	Yes
All-Weather Access	Instrument Approach	Visual	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	No	Preferred	No
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> LIRL not for public use; Snow removal intermittent.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	TURF	N/A	Meeting goal
	Taxiway	TURF	N/A	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div> <div>Airport Report Card</div> <div> <div>FRANKFORT</div> <div> <div>Airport Name: Frankfort Dow Memorial Field</div> <div>FAA Identifier: FKS</div> <div>2017 MASP Tier: 2</div> <div>Current FAA Airport Reference Code (ARC): B-I</div> <div>2017 MASP Airport Reference Code (ARC): B-II</div> </div> </div> </div>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,050	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes

**Notes:**

For A-I airports with paved runways, the standard width is 60 feet.

Runway length goal shown is subject to FAA/AERO justification determination.

A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable.

An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.

Aircraft parking consists of either a hangar, tie-down, or parking area.

Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.

**Additional Airport Notes:**

Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	87	55	Meeting goal
	Taxiway	90	45	Meeting goal

Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)

Airport Report Card			Airport Name: Fremont Municipal Airport	
FREMONT			FAA Identifier: FFX	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): C-II	
			2017 MASP Airport Reference Code (ARC): C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,501	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	No	Yes	No
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	67	60	Meeting goal
	Taxiway	98	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<div>Airport Report Card</div> <div>GAYLORD</div>			<div>Airport Name: Gaylord Regional Airport</div> <div>FAA Identifier: GLR</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): C-III</div> <div>2017 MASP Airport Reference Code (ARC): C-II (see notes)</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,579	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes

**Notes:**  
 For A-I airports with paved runways, the standard width is 60 feet.  
 Runway length goal shown is subject to FAA/AERO justification determination.  
 A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable.  
 An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.  
 Aircraft parking consists of either a hangar, tie-down, or parking area.  
 Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.

**Additional Airport Notes:**  
 Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.

Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	73	60	Meeting goal
	Taxiway	72	50	Meeting goal

Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)



<div>Airport Report Card</div> <div>GLADWIN</div>			<div>Airport Name: Gladwin Zettel Memorial</div> <div>FAA Identifier: GDW</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	4,699	5,000	No
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	79	55	Meeting goal
	Taxiway	84	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>GRAND HAVEN</div>			<div>Airport Name: Memorial Airpark</div> <div>FAA Identifier: 3GM</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): B-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,752	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	71	55	Meeting goal
	Taxiway	86	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Abrams Municipal Airport	
GRAND LEDGE			FAA Identifier: 4D0	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,199	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	57	55	Meeting goal
	Taxiway	37	45	Below goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>		<b>Airport Name: Gerald R. Ford International Airport</b>		
<b>GRAND RAPIDS</b>		<b>FAA Identifier: GRR</b>		
		<b>2017 MASP Tier: 1</b>		
<b>Current FAA Airport Reference Code (ARC): D-IV</b>				
<b>2017 MASP Airport Reference Code (ARC): C-II (see notes)</b>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	10,000	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Approach Lighting System (ALS) on both ends of primary runway in lieu of REIL. Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	88	65	Meeting goal
	Taxiway	80	55	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Grayling Army Airfield	
GRAYLING			FAA Identifier: GOV	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,005	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	63	55	Meeting goal
	Taxiway	45	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>  <b>GREENVILLE</b>			<b>Airport Name: Greenville Municipal Airport</b>  <b>FAA Identifier: 6D6</b> <b>2017 MASP Tier: 1</b>  <b>Current FAA Airport Reference Code (ARC): B-II</b> <b>2017 MASP Airport Reference Code (ARC): B-II</b>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,199	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	No	Yes	No
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	87	55	Meeting goal
	Taxiway	73	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Richmond Field	
GREGORY			FAA Identifier: 69G	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): A-I	
			2017 MASP Airport Reference Code (ARC): A-I	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	2,471	2,500	No
	Width (feet)	100	100	Yes
	Surface Type	Turf	Turf	Yes
	Primary Taxiway System	Direct Connector	None	Yes
Lighting and Visual Aids	Runway Lighting System	Markers	Markers	Yes
	PAPI	No	No	Yes
	REIL	No	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	No	No	Yes
	Lighted Wind Indicator	No - Unlit	No - Unlit	Yes
	Segmented Circle	Yes	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	No	No	Yes
	Fuel	No	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	No	No	Yes
All-Weather Access	Instrument Approach	Visual	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	No	Preferred	No
Year-Round Access	Open Year-Round	No	Yes	No
	Snow Removal	No	Yes	No
Landside Access	Public/Private Transportation	No	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	TURF	N/A	Meeting goal
	Taxiway	TURF	N/A	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Houghton County Memorial	
HANCOCK			FAA Identifier: CMX	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): C-III	
			2017 MASP Airport Reference Code (ARC): C-II (see notes)	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,500	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	No	Yes	No
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	70	60	Meeting goal
	Taxiway	42	50	Below goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<b>Airport Report Card</b>			<b>Airport Name:</b> Harbor Springs Municipal Airport	
<b>HARBOR SPRINGS</b>			<b>FAA Identifier:</b> MGN	
			<b>2017 MASP Tier:</b> 2	
			<b>Current FAA Airport Reference Code (ARC):</b> B-II	
			<b>2017 MASP Airport Reference Code (ARC):</b> B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,149	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel (see notes)	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Maintenance on call Taxiway development standards require full parallel taxiway because airport has more than 20,000 operations annually.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	67	55	Meeting goal
	Taxiway	71	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>HARSENS ISLAND</div>			<div>Airport Name: Harsens Island Airport</div> <div>FAA Identifier: Z92</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): A-I</div> <div>2017 MASP Airport Reference Code (ARC): B-I</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-I Development Goals	Met?
Primary Runway System	Length (feet)	2,200	3,500	No
	Width (feet)	60	60	Yes
	Surface Type	Turf	Paved	No
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	Markers	MIRL	No
	PAPI	No	Yes	No
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	No	Yes	No
	Lighted Wind Indicator	No - Unlit	Yes	No
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	No	Yes	No
	Fuel	No	Yes	No
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Visual	Non-Precision	No
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	No	Yes	No
	Snow Removal	No	Yes	No
Landside Access	Public/Private Transportation	No	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	TURF	N/A	Meeting goal
	Taxiway	TURF	N/A	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Oceana County Airport	
HART/SHELBY			FAA Identifier: C04	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-I	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,500	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	No	Yes	No
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Maintenance by prior arrangement only. Transportation (courtesy car) by prior arrangement only. AWOS-A (altimeter only) available on CTAF.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	63	55	Meeting goal
	Taxiway	95	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>HASTINGS</div>			<div>Airport Name: Hastings City / Barry County Airport</div> <div>FAA Identifier: 9D9</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	4,502	5,000	No
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	79	55	Meeting goal
	Taxiway	100	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>HILLSDALE</div>			<div>Airport Name: Hillsdale Municipal Airport</div> <div>FAA Identifier: JYM</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,000	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	No	Yes	No
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes

**Notes:**  
 For A-I airports with paved runways, the standard width is 60 feet.  
 Runway length goal shown is subject to FAA/AERO justification determination.  
 A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable.  
 An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.  
 Aircraft parking consists of either a hangar, tie-down, or parking area.  
 Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.

**Additional Airport Notes:**  
 MALSR is not a development goal for C-II airports without an existing precision approach.

Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	95	55	Meeting goal
	Taxiway	100	45	Meeting goal

Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)

<div>Airport Report Card</div> <div>HOLLAND</div>			<div>Airport Name: West Michigan Regional Airport</div> <div>FAA Identifier: BIV</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): D-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II (see notes)</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,002	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	70	65	Meeting goal
	Taxiway	77	55	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>  <b>HOUGHTON LAKE</b>			<b>Airport Name:</b> Roscommon County, Blodgett Memorial Airport  <b>FAA Identifier:</b> HTL <b>2017 MASP Tier:</b> 1  <b>Current FAA Airport Reference Code (ARC):</b> B-II <b>2017 MASP Airport Reference Code (ARC):</b> B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,000	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	49	55	Below goal
	Taxiway	69	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<div> <div>Airport Report Card</div> <div> <div>HOWELL</div> <div> <div>Airport Name: Livingston County-Spencer J. Hardy</div> <div>FAA Identifier: OZW</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): C-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div> </div> </div> </div>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,002	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	93	60	Meeting goal
	Taxiway	70	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Ionia County Airport	
IONIA			FAA Identifier: Y70	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	4,298	5,000	No
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	75	55	Meeting goal
	Taxiway	79	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Ford Airport	
IRON MOUNTAIN KINGSFORD			FAA Identifier: IMT	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): C-III	
			2017 MASP Airport Reference Code (ARC): C-II (see notes)	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,501	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	47	60	Below goal
	Taxiway	53	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Stambaugh Airport	
IRON RIVER			FAA Identifier: Y73	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): A-I	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	2,000	4,300	No
	Width (feet)	40	75	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	LIRL	MIRL	No
	PAPI	No	Yes	No
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	No	Yes	No
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Visual	Non-Precision	No
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> LIRL Non-Standard; Jet A fuel only, requires prior notice; Call airport with transportation needs. PCI not available (NA), airport does not participate in statewide Airport Pavement Management System (APMS).				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	N/A	55	N/A
	Taxiway	N/A	45	N/A
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div> <div>Airport Report Card</div> <div> <div>IRONWOOD</div> <div> <div>Airport Name: Gogebic Iron County Airport</div> <div>FAA Identifier: IWD</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): C-II</div> <div>2017 MASP Airport Reference Code (ARC): B-II</div> </div> </div> </div>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	6,502	4,300	Yes
	Width (feet)	120	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	60	60	Meeting goal
	Taxiway	100	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>			<b>Airport Name:</b> Jackson County - Reynolds Field	
<b>JACKSON</b>			<b>FAA Identifier:</b> JXN	
			<b>2017 MASP Tier:</b> 1	
			<b>Current FAA Airport Reference Code (ARC):</b> C-II	
			<b>2017 MASP Airport Reference Code (ARC):</b> C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,349	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	100	60	Meeting goal
	Taxiway	100	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Riverview Airport	
JENISON			FAA Identifier: 08C	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-I	
			2017 MASP Airport Reference Code (ARC): C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	3,920	5,000	No
	Width (feet)	49	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	No	Yes	No
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Visual	Precision	No
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> PCI not available (NA), airport does not participate in statewide Airport Pavement Management System (APMS).				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	N/A	55	N/A
	Taxiway	N/A	45	N/A
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>KALAMAZOO</div>			<div>Airport Name: Kalamazoo/Battle Creek International</div> <div>FAA Identifier: AZO</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): C-III</div> <div>2017 MASP Airport Reference Code (ARC): C-II (see notes)</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,502	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	38	60	Below goal
	Taxiway	81	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Home Acres Sky Ranch	
LAKE CITY			FAA Identifier: Y91	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): A-I	
			2017 MASP Airport Reference Code (ARC): A-I	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	3,830	2,500	Yes
	Width (feet)	160	100	Yes
	Surface Type	Turf	Turf	Yes
	Primary Taxiway System	Direct Connector	None	Yes
Lighting and Visual Aids	Runway Lighting System	LIRL	Markers	Yes
	PAPI	No	No	Yes
	REIL	No	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	No	Yes
	Lighted Wind Indicator	No - Unlit	No - Unlit	Yes
	Segmented Circle	Yes	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	No	Yes
	Fuel	No	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	No	No	Yes
All-Weather Access	Instrument Approach	Visual	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	No	Preferred	No
Year-Round Access	Open Year-Round	No	Yes	No
	Snow Removal	No	Yes	No
Landside Access	Public/Private Transportation	No	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Cell phone service unknown				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	TURF	N/A	Meeting goal
	Taxiway	TURF	N/A	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Lakeview - Griffith Field	
LAKEVIEW			FAA Identifier: 13C	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-I	
			2017 MASP Airport Reference Code (ARC): B-I	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-I Development Goals	Met?
Primary Runway System	Length (feet)	3,499	3,500	No
	Width (feet)	75	60	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	No	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	No	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	100	55	Meeting goal
	Taxiway	89	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div> <div>Airport Report Card</div> <div>LAMBERTVILLE</div> </div>			<div> <div>Airport Name: Toledo Suburban Airport</div> <div>FAA Identifier: DUH</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-I</div> <div>2017 MASP Airport Reference Code (ARC): B-II</div> </div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,807	4,300	Yes
	Width (feet)	50	75	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	No	Yes	No
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	65	55	Meeting goal
	Taxiway	85	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>LANSING</div>			<div>Airport Name: Capital Region International</div> <div>FAA Identifier: LAN</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): D-IV</div> <div>2017 MASP Airport Reference Code (ARC): C-II (see notes)</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	8,506	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Approach Lighting System (ALS) on both ends of primary runway in lieu of REIL; Approach Protection Plan approval date unknown. Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	79	65	Meeting goal
	Taxiway	100	55	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: DuPont - Lapeer Airport	
LAPEER			FAA Identifier: D95	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,800	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	68	55	Meeting goal
	Taxiway	76	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Price's Airport	
LINDEN			FAA Identifier: 9G2	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): A-I	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	3,999	2,500	Yes
	Width (feet)	75	60	Yes
	Surface Type	Paved	Turf	Yes
	Primary Taxiway System	Partial Parallel	None	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	Markers	Yes
	PAPI	No	No	Yes
	REIL	Yes	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	No	Yes
	Lighted Wind Indicator	Yes	No - Unlit	Yes
	Segmented Circle	Yes	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	No	Yes
	Fuel	Yes	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	No	Yes
	Available Staff	No	No	Yes
All-Weather Access	Instrument Approach	Non-Precision	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Maintenance by prior arrangement only.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	80	55	Meeting goal
	Taxiway	85	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>LUDINGTON</div>			<div>Airport Name: Mason County Airport</div> <div>FAA Identifier: LDM</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,003	5,000	Yes
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	68	55	Meeting goal
	Taxiway	95	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Mackinac Island Airport	
MACKINAC ISLAND			FAA Identifier: MCD	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,501	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	No	Yes	No
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Ground transportation provided by horse carriage taxi (automobiles not permitted on island).				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	62	55	Meeting goal
	Taxiway	87	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Manistee County - Blacker	
MANISTEE			FAA Identifier: MBL	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): C-II	
			2017 MASP Airport Reference Code (ARC): C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,501	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	38	60	Below goal
	Taxiway	45	50	Below goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Schoolcraft County Airport	
MANISTIQUE			FAA Identifier: ISQ	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): C-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	5,001	4,300	Yes
	Width (feet)	100	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	65	60	Meeting goal
	Taxiway	90	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>MARINE CITY</div>			<div>Airport Name: Marine City Airport</div> <div>FAA Identifier: 76G</div> <div>2017 MASP Tier: 2</div> <div>Current FAA Airport Reference Code (ARC): B-I</div> <div>2017 MASP Airport Reference Code (ARC): A-I</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	3,100	2,500	Yes
	Width (feet)	60	60	Yes
	Surface Type	Paved	Turf	Yes
	Primary Taxiway System	Direct Connector	None	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	Markers	Yes
	PAPI	Yes	No	Yes
	REIL	Yes	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	No	Yes
	Lighted Wind Indicator	Yes	No - Unlit	Yes
	Segmented Circle	No	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	No	Yes
	Fuel	Yes	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	No	Yes
	Available Staff	Yes	No	Yes
All-Weather Access	Instrument Approach	Visual	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MIRL Non-Standard.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	72	55	Meeting goal
	Taxiway	81	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>MARLETTE</div>			<div>Airport Name: Marlette Township Airport</div> <div>FAA Identifier: 77G</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): B-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,796	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	No	Yes	No
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MIRL Non-Standard; Maintenance on call.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	49	55	Below goal
	Taxiway	50	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div> <div>Airport Report Card</div> <div>MARQUETTE</div> </div>			<div> <div>Airport Name: Sawyer International</div> <div>FAA Identifier: SAW</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): D-III</div> <div>2017 MASP Airport Reference Code (ARC): C-II (see notes)</div> </div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	12,366	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	68	65	Meeting goal
	Taxiway	24	55	Below goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Brooks Field	
MARSHALL			FAA Identifier: RMY	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-I	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-I Development Goals	Met?
Primary Runway System	Length (feet)	3,501	3,500	Yes
	Width (feet)	75	60	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	No	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Preferred	Yes
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	86	55	Meeting goal
	Taxiway	93	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Mason Jewett Field	
MASON			FAA Identifier: TEW	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-I	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-I Development Goals	Met?
Primary Runway System	Length (feet)	4,004	3,500	Yes
	Width (feet)	75	60	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	No	Yes
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Preferred	Yes
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	53	55	Below goal
	Taxiway	78	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>MENOMINEE</div>			<div>Airport Name: Menominee - Marinette Twin County Airport</div> <div>FAA Identifier: MNM</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,999	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	48	55	Below goal
	Taxiway	51	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Jack Barstow Airport	
MIDLAND			FAA Identifier: IKW	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,801	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	77	55	Meeting goal
	Taxiway	74	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Oscoda County Dennis Kauffman Memorial Airport	
MIO			FAA Identifier: 51M 2017 MASP Tier: 1	
Current FAA Airport Reference Code (ARC): B-I 2017 MASP Airport Reference Code (ARC): B-II				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,000	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Visual	Non-Precision	No
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	No	Yes	No
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	94	55	Meeting goal
	Taxiway	91	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Monroe Custer Airport	
MONROE			FAA Identifier: TTF	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	4,997	5,000	No
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	No	Yes	No
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	85	55	Meeting goal
	Taxiway	70	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>MOUNT PLEASANT</div>			<div>Airport Name: Mt. Pleasant Municipal Airport</div> <div>FAA Identifier: MOP</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): C-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,000	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	59	60	Below goal
	Taxiway	64	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Muskegon County Airport	
MUSKEGON			FAA Identifier: MKG	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): C-III	
			2017 MASP Airport Reference Code (ARC): C-II (see notes)	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,501	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> 24-hr Restroom available by request only; regular hours 0600-2200 local. Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	54	60	Below goal
	Taxiway	52	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>NEW HUDSON</div>			<div>Airport Name: Oakland / Southwest Airport</div> <div>FAA Identifier: Y47</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-I</div> <div>2017 MASP Airport Reference Code (ARC): B-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,128	4,300	No
	Width (feet)	40	75	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	LIRL	MIRL	No
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	27	55	Below goal
	Taxiway	46	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Luce County Airport	
NEWBERRY			FAA Identifier: ERY	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,304	4,300	Yes
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	62	55	Meeting goal
	Taxiway	68	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Jerry Tyler Memorial Airport	
NILES			FAA Identifier: 3TR	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,100	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	49	55	Below goal
	Taxiway	59	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



Airport Report Card			Airport Name: Woolsey Memorial Airport	
NORTHPORT			FAA Identifier: 5D5	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): A-I	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,663	4,300	No
	Width (feet)	120	75	Yes
	Surface Type	Turf	Paved	No
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	LIRL	MIRL	No
	PAPI	No	Yes	No
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	No	Yes	No
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	No	Yes	No
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Visual	Non-Precision	No
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	No	Yes	No
	Snow Removal	No	Yes	No
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Cell service for weather briefing GSM network only; Transportation mode available is bicycle.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	TURF	N/A	Meeting goal
	Taxiway	TURF	N/A	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



# ONTONAGON

**Airport Name:** Ontonagon County Airport  
- Schuster Field

FAA Identifier: OGM

**2017 MASP Tier: 1**

**Current FAA Airport Reference Code (ARC):** B-I

2017 MASP Airport Reference Code (ARC): B-II

Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,503	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes

**Notes:**

For A-I airports with paved runways, the standard width is 60 feet.

Runway length goal shown is subject to FAA/AERO justification determination.

A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable.

An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan.

Aircraft parking consists of either a hangar, tie-down, or parking area.

Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.

**Additional Airport Notes:**

Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	79	55	Meeting goal
	Taxiway	38	45	Below goal

Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)

Airport Report Card			Airport Name: Oscoda - Wurtsmith Airport	
OSCODA			FAA Identifier: OSC	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): D-V	
			2017 MASP Airport Reference Code (ARC): C-II (see notes)	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	11,800	5,000	Yes
	Width (feet)	200	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	57	65	Below goal
	Taxiway	79	55	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div> <div>Airport Report Card</div> <div>OWOSSO</div> </div>			<div> <div>Airport Name: Owosso Community Airport</div> <div>FAA Identifier: RNP</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div> </div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	4,300	5,000	No
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	87	55	Meeting goal
	Taxiway	92	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>			<b>Airport Name: Pellston Regional Airport Of Emmet County</b>	
<b>PELLSTON</b>			<b>FAA Identifier: PLN</b>	
			<b>2017 MASP Tier: 1</b>	
<b>Current FAA Airport Reference Code (ARC): C-II</b>				
<b>2017 MASP Airport Reference Code (ARC): C-II</b>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,513	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Maintenance on call.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	66	60	Meeting goal
	Taxiway	60	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div> <div>Airport Report Card</div> <div> <div>Airport Name: Gross Airport</div> <div> <div>FAA Identifier: 52I</div> <div>2017 MASP Tier: 2</div> <div>Current FAA Airport Reference Code (ARC): A-I</div> <div>2017 MASP Airport Reference Code (ARC): A-I</div> </div> </div> </div>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	2,565	2,500	Yes
	Width (feet)	100	100	Yes
	Surface Type	Turf	Turf	Yes
	Primary Taxiway System	Direct Connector	None	Yes
Lighting and Visual Aids	Runway Lighting System	LIRL	Markers	Yes
	PAPI	No	No	Yes
	REIL	No	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	No	No	Yes
	Lighted Wind Indicator	No - Unlit	No - Unlit	Yes
	Segmented Circle	No	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	No	No	Yes
	Fuel	No	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	No	No	Yes
All-Weather Access	Instrument Approach	Visual	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	No	Preferred	No
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Snow removal irregular - call ahead. Transportation by prior arrangement only; Fuel available for emergency use only. Weather briefing/cell service status unknown; 24-hour restroom status unknown.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	TURF	N/A	Meeting goal
	Taxiway	TURF	N/A	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>PLAINWELL</div>			<div>Airport Name: Plainwell Municipal</div> <div>FAA Identifier: 61D</div> <div>2017 MASP Tier: 2</div> <div>Current FAA Airport Reference Code (ARC): A-I</div> <div>2017 MASP Airport Reference Code (ARC): A-I</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	2,650	2,500	Yes
	Width (feet)	50	60	No
	Surface Type	Paved	Turf	Yes
	Primary Taxiway System	Direct Connector	None	Yes
Lighting and Visual Aids	Runway Lighting System	LIRL	Markers	Yes
	PAPI	No	No	Yes
	REIL	No	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	No	No	Yes
	Lighted Wind Indicator	Yes	No - Unlit	Yes
	Segmented Circle	No	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	No	Yes
	Fuel	Yes	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	No	Yes
	Available Staff	No	No	Yes
All-Weather Access	Instrument Approach	Visual	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	No	Preferred	No
Year-Round Access	Open Year-Round	No	Yes	No
	Snow Removal	No	Yes	No
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> PCI not available (NA), airport does not participate in statewide Airport Pavement Management System (APMS).				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	N/A	55	N/A
	Taxiway	N/A	45	N/A
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>			<b>Airport Name:</b> Canton - Plymouth - Mettetal Airport	
<b>PLYMOUTH</b>			<b>FAA Identifier:</b> 1D2	
			<b>2017 MASP Tier:</b> 1	
<b>Current FAA Airport Reference Code (ARC):</b> A-I				
<b>2017 MASP Airport Reference Code (ARC):</b> B-I				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-I Development Goals	Met?
Primary Runway System	Length (feet)	2,303	3,500	No
	Width (feet)	75	60	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel (see notes)	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Taxiway development standards require full parallel taxiway because airport has more than 20,000 operations annually.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	65	55	Meeting goal
	Taxiway	59	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<div>Airport Report Card</div> <div>PONTIAC</div>			<div>Airport Name: Oakland County International Airport</div> <div>FAA Identifier: PTK</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): D-III</div> <div>2017 MASP Airport Reference Code (ARC): C-II (see notes)</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,521	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	66	65	Meeting goal
	Taxiway	41	55	Below goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<b>Airport Report Card</b>  <b>PORT HURON</b>			<b>Airport Name: St. Clair County International Airport</b>  <b>FAA Identifier: PHN</b> <b>2017 MASP Tier: 1</b>  <b>Current FAA Airport Reference Code (ARC): C-II</b> <b>2017 MASP Airport Reference Code (ARC): C-II</b>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,104	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	64	60	Meeting goal
	Taxiway	66	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>RAY</div>			<div>Airport Name: Ray Community Airport</div> <div>FAA Identifier: 57D</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): A-I</div> <div>2017 MASP Airport Reference Code (ARC): A-I</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	2,495	2,500	No
	Width (feet)	60	60	Yes
	Surface Type	Paved	Turf	Yes
	Primary Taxiway System	Full Parallel	None	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	Markers	Yes
	PAPI	Yes	No	Yes
	REIL	Yes	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	No	Yes
	Lighted Wind Indicator	Yes	No - Unlit	Yes
	Segmented Circle	Yes	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	No	Yes
	Fuel	Yes	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	No	Yes
	Available Staff	Yes	No	Yes
All-Weather Access	Instrument Approach	Non-Precision	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Maintenance by prior arrangement only.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	71	55	Meeting goal
	Taxiway	84	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>			<b>Airport Name:</b> Presque Isle County / Rogers City Airport	
<b>ROGERS CITY</b>			<b>FAA Identifier:</b> PZQ	
			<b>2017 MASP Tier:</b> 1	
			<b>Current FAA Airport Reference Code (ARC):</b> B-II	
			<b>2017 MASP Airport Reference Code (ARC):</b> B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,106	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Fuel available on call only.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	84	55	Meeting goal
	Taxiway	93	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Romeo State Airport	
ROMEO			FAA Identifier: D98	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): C-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	4,000	5,000	No
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	Yes	No
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	No	Yes	No
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Weather briefing/cell service status unknown. MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	74	55	Meeting goal
	Taxiway	85	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: M B S International Airport	
SAGINAW			FAA Identifier: MBS	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): D-IV	
			2017 MASP Airport Reference Code (ARC): C-II (see notes)	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	8,002	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Approach Lighting System (ALS) on both ends of primary runway in lieu of REIL. Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	69	65	Meeting goal
	Taxiway	55	55	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>			<b>Airport Name:</b> Saginaw County H. W. Browne Airport	
<b>SAGINAW</b>			<b>FAA Identifier:</b> HYX	
			<b>2017 MASP Tier:</b> 1	
<b>Current FAA Airport Reference Code (ARC):</b> C-II				
<b>2017 MASP Airport Reference Code (ARC):</b> C-II				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,002	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	Yes	No
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSF approach lighting system. Approach Protection Plan approval date unknown.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	54	60	Below goal
	Taxiway	52	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Mackinac County Airport	
SAINT IGNACE			FAA Identifier: 83D	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,800	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	85	55	Meeting goal
	Taxiway	94	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<div>Airport Report Card</div> <div>SANDUSKY</div>			<div>Airport Name: Sandusky City Airport</div> <div>FAA Identifier: Y83</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-I</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	3,501	5,000	No
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Visual	Precision	No
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Maintenance availability irregular; Weather briefing/cell service status unknown.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	61	55	Meeting goal
	Taxiway	65	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<b>Airport Report Card</b>		<b>Airport Name:</b> Chippewa County International Airport		
<b>SAULT STE MARIE</b>		<b>FAA Identifier:</b> CIU		
		<b>2017 MASP Tier:</b> 1		
<b>Current FAA Airport Reference Code (ARC):</b> D-III				
<b>2017 MASP Airport Reference Code (ARC):</b> C-II <i>(see notes)</i>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	7,201	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Restroom open 0800-2100 local; after hours call out available. Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'D'	Runway	65	65	Meeting goal
	Taxiway	68	55	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<b>Airport Report Card</b>  <b>SAULT STE MARIE</b>			<b>Airport Name: Sault Ste. Marie Municipal - Sanderson Airport</b>  <b>FAA Identifier: ANJ</b> <b>2017 MASP Tier: 2</b> <b>Current FAA Airport Reference Code (ARC): B-II</b> <b>2017 MASP Airport Reference Code (ARC): B-II</b>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	5,234	4,300	Yes
	Width (feet)	100	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	No	Yes	No
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
<b>Pavement Condition Index (PCI)</b>		<b>Existing PCI</b>	<b>Minimum PCI Goal</b>	<b>PCI Performance</b>
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	62	55	Meeting goal
	Taxiway	18	45	Below goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: South Haven Area Regional	
SOUTH HAVEN			FAA Identifier: LWA	
			2017 MASP Tier: 1	
			Current FAA Airport Reference Code (ARC): B-II	
			2017 MASP Airport Reference Code (ARC): B-II	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	4,801	4,300	Yes
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel (see notes)	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Taxiway development standards require full parallel taxiway because airport has more than 20,000 operations annually.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	74	55	Meeting goal
	Taxiway	74	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>SPARTA</div>			<div>Airport Name: Paul C. Miller - Sparta Airport</div> <div>FAA Identifier: 8D4</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	4,032	5,000	No
	Width (feet)	75	100	No
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	No	Yes	No
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	79	55	Meeting goal
	Taxiway	82	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>STURGIS</div>			<div>Airport Name: Kirsch Municipal Airport</div> <div>FAA Identifier: IRS</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,201	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	67	55	Meeting goal
	Taxiway	79	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>THREE RIVERS</div>			<div>Airport Name: Three Rivers Muni, Dr. Haines</div> <div>FAA Identifier: HAI</div> <div>2017 MASP Tier: 2</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): B-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-II Development Goals	Met?
Primary Runway System	Length (feet)	3,999	4,300	No
	Width (feet)	75	75	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b>				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	57	55	Meeting goal
	Taxiway	53	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>TRaverse City</div>			<div>Airport Name: Cherry Capital Airport</div> <div>FAA Identifier: TVC</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): C-III</div> <div>2017 MASP Airport Reference Code (ARC): C-II (see notes)</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	6,901	5,000	Yes
	Width (feet)	150	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel	Yes
Lighting and Visual Aids	Runway Lighting System	HIRL	HIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	Yes	Yes	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Precision	Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Actual ARC is higher than MASP ARC (C-II) due to needs and conditions identified during the Master Plan process.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'C'	Runway	37	60	Below goal
	Taxiway	86	50	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<div>Airport Report Card</div> <div>TROY</div>			<div>Airport Name: Oakland / Troy Airport</div> <div>FAA Identifier: VLL</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-I</div> <div>2017 MASP Airport Reference Code (ARC): B-I</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-I Development Goals	Met?
Primary Runway System	Length (feet)	3,549	3,500	Yes
	Width (feet)	60	60	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Full Parallel	Full Parallel (see notes)	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	Yes	Yes	Yes
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	No	Yes	No
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Non-Precision	Yes
	Weather Reporting (AWOS/ASOS)	Yes	Preferred	Yes
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Taxiway development standards require full parallel taxiway because airport has more than 20,000 operations annually.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	98	55	Meeting goal
	Taxiway	42	45	Below goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



<div> <div>Airport Report Card</div> <div> <div>WATERVLIET</div> <div> <div>Airport Name: Watervliet Municipal Airport</div> <div>FAA Identifier: 40C</div> <div>2017 MASP Tier: 2</div> <div>Current FAA Airport Reference Code (ARC): A-I</div> <div>2017 MASP Airport Reference Code (ARC): A-I</div> </div> </div> </div>				
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	2,600	2,500	Yes
	Width (feet)	200	100	Yes
	Surface Type	Turf	Turf	Yes
	Primary Taxiway System	Direct Connector	None	Yes
Lighting and Visual Aids	Runway Lighting System	Markers	Markers	Yes
	PAPI	No	No	Yes
	REIL	No	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	No	No	Yes
	Lighted Wind Indicator	No - Unlit	No - Unlit	Yes
	Segmented Circle	Yes	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	No	Yes
	Fuel	No	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	No	No	Yes
	Available Staff	No	No	Yes
All-Weather Access	Instrument Approach	Visual	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	No	Preferred	No
Year-Round Access	Open Year-Round	No	Yes	No
	Snow Removal	No	Yes	No
Landside Access	Public/Private Transportation	No	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Weather briefing/cell service status unknown.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	TURF	N/A	Meeting goal
	Taxiway	TURF	N/A	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

<div>Airport Report Card</div> <div>WEST BRANCH</div>			<div>Airport Name: West Branch Community Airport</div> <div>FAA Identifier: Y31</div> <div>2017 MASP Tier: 1</div> <div>Current FAA Airport Reference Code (ARC): B-II</div> <div>2017 MASP Airport Reference Code (ARC): C-II</div>	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			C-II Development Goals	Met?
Primary Runway System	Length (feet)	5,000	5,000	Yes
	Width (feet)	100	100	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Partial Parallel	Full Parallel	No
Lighting and Visual Aids	Runway Lighting System	MIRL	HIRL	No
	PAPI	Yes	Yes	Yes
	REIL	Yes	Yes	Yes
	MALSR	No	No	Yes
	Rotating Beacon	Yes	Yes	Yes
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	Yes	Yes
	Available Staff	Yes	Yes	Yes
All-Weather Access	Instrument Approach	Non-Precision	Precision	No
	Weather Reporting (AWOS/ASOS)	Yes	Yes	Yes
	Weather Briefing Access	Yes	Yes	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	Yes	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> MALSR is not a development goal for C-II airports without an existing precision approach.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	72	55	Meeting goal
	Taxiway	72	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: White Cloud Airport	
WHITE CLOUD			FAA Identifier: 42C	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): A-I	
			2017 MASP Airport Reference Code (ARC): B-I	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			B-I Development Goals	Met?
Primary Runway System	Length (feet)	2,916	3,500	No
	Width (feet)	60	60	Yes
	Surface Type	Paved	Paved	Yes
	Primary Taxiway System	Direct Connector	Full Parallel if >20,000 ops	Yes
Lighting and Visual Aids	Runway Lighting System	MIRL	MIRL	Yes
	PAPI	No	Yes	No
	REIL	No	Yes	No
	MALSR	No	No	Yes
	Rotating Beacon	No	Yes	No
	Lighted Wind Indicator	Yes	Yes	Yes
	Segmented Circle	Yes	Yes	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	Yes	Yes
	Fuel	Yes	Yes	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	No	Yes
	Available Staff	No	Yes	No
All-Weather Access	Instrument Approach	Visual	Non-Precision	No
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	No	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Maintenance on call.				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'A'	Runway	86	55	Meeting goal
	Taxiway	96	45	Meeting goal
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				

Airport Report Card			Airport Name: Ottawa Executive Airport	
ZEELAND			FAA Identifier: Z98	
			2017 MASP Tier: 2	
			Current FAA Airport Reference Code (ARC): B-I	
			2017 MASP Airport Reference Code (ARC): A-I	
Facility Goal	Airport Development Item	Currently Has	2017 MASP ARC	
			A-I Development Goals	Met?
Primary Runway System	Length (feet)	3,800	2,500	Yes
	Width (feet)	60	60	Yes
	Surface Type	Paved	Turf	Yes
	Primary Taxiway System	Partial Parallel	None	Yes
Lighting and Visual Aids	Runway Lighting System	LIRL	Markers	Yes
	PAPI	No	No	Yes
	REIL	No	No	Yes
	MALSR	No	No	Yes
	Rotating Beacon	No	No	Yes
	Lighted Wind Indicator	Yes	No - Unlit	Yes
	Segmented Circle	Yes	No	Yes
Approach Protection	Approach Protection Plan	Yes	Yes	Yes
Basic Pilot and Aircraft Services	Restrooms (24 hours)	Yes	No	Yes
	Fuel	Yes	No	Yes
	Aircraft Parking	Yes	Yes	Yes
	Aircraft Maintenance	Yes	No	Yes
	Available Staff	Yes	No	Yes
All-Weather Access	Instrument Approach	Visual	Visual	Yes
	Weather Reporting (AWOS/ASOS)	No	Preferred	No
	Weather Briefing Access	Yes	Preferred	Yes
Year-Round Access	Open Year-Round	Yes	Yes	Yes
	Snow Removal	Yes	Yes	Yes
Landside Access	Public/Private Transportation	Yes	No	Yes
<b>Notes:</b> For A-I airports with paved runways, the standard width is 60 feet. Runway length goal shown is subject to FAA/AERO justification determination. A VASI in lieu of a PAPI is acceptable. VASI/PAPI/REIL on one runway end is acceptable. An Airport Zoning Ordinance is considered an acceptable Approach Protection Plan. Aircraft parking consists of either a hangar, tie-down, or parking area. Weather briefing access may be provided by a Weather Briefing System, computer, internet access, or cell phone coverage.				
<b>Additional Airport Notes:</b> Transportation (courtesy car) by arrangement only. PCI not available (NA), airport does not participate in statewide Airport Pavement Management System (APMS).				
Pavement Condition Index (PCI)		Existing PCI	Minimum PCI Goal	PCI Performance
Based on FAA Aircraft Approach Category (AAC): 'B'	Runway	N/A	55	N/A
	Taxiway	N/A	45	N/A
Source: ASM/Facility Information Worksheets/MDOT Airport Directory/FAA Form 5010/MDOT APMS/FAA Digital-Chart Supplement (d-CS)				



## Appendix C: Visitor Spending Survey Summary



# Appendix C: Visitor Spending Survey Summary

## Introduction

The Michigan Department of Transportation (MDOT), Office of Aeronautics (AERO) commissioned the 2017 Michigan Aviation System Plan (MASP) to provide an update to the 2008 plan. As a way to measure the value of Michigan airports to their communities and the State as a whole, surveys were developed to query airport visitors on their spending when visiting Michigan. These surveys were distributed to commercial service and general aviation (GA) airports throughout Michigan. Commercial service airports are publicly owned airports that receive regularly scheduled passenger service, while GA airports are public use airports that do not have scheduled service. GA airports generally serve private aircraft and small aircraft charter operations.

## Methodology

Two surveys (see **Attachment 7** and **Attachment 8**) were created for visitors arriving or departing at commercial service and GA airports in Michigan. Some of the surveys were conducted in-person by Mead & Hunt staff, while the others were sent to the 108 Tier 1 and Tier 2 airports identified in the 2008 plan<sup>1</sup> and the individual airports were asked to facilitate the completion of these surveys at their facilities.

108 airports received GA surveys to collect info on GA passenger spending. For the commercial service airports, MDOT AERO selected the sites where in-person surveys were conducted and remaining commercial service airports were offered the opportunity to disseminate the surveys on their own if they chose to distribute them. Four commercial service airports had an in-person visitor survey effort conducted by Mead & Hunt (Bishop International Airport, Cherry Capital Airport, Gerald R. Ford International Airport, and Sawyer International Airport). These surveys were conducted during the late summer and early fall of 2016. Five commercial service airports elected to distribute commercial service surveys on their own. These airports were Alpena County Regional Airport, Capital Region International Airport, Delta County Airport, Manistee County – Blacker Airport, and Muskegon County Airport. These surveys were collected by mail, through individual responses and by packages sent by airport managers, and through an online Survey Monkey tool.

## Survey Responses

A total of 742 commercial service visitor surveys and 748 GA visitor surveys were used in the spending calculations provided in tables that follow. Ten of the 18 commercial service airports and 63 of the 108 airports supporting GA operations provided usable visitor surveys. These survey results are summarized in the following tables by the following categories and provide different ways of reviewing the data:

<sup>1</sup> At the onset of the project, the 108 Tier 1 and Tier 2 airports from the 2008 plan received survey boxes to capture the most traffic traveling to and from Michigan during the summer months. Later in this study, the number of Tier 1 and Tier 2 airports increased to 114 after the survey period closed.

## 2017 MICHIGAN AVIATION SYSTEM PLAN

**Table 1:** Average Visitor Spending by Airport Type (Commercial Airports vs. General Aviation)

**Table 2:** Average Visitor Spending by Airport Reference Code (ARC)

**Table 3:** Average Visitor Spending by MDOT Prosperity Regions

**Table 4:** Average Visitor Spending by MDOT Prosperity Regions, ARC, and Airport Type

Airports with spending categories listed as a dash (-) means the airport did not submit any visitor surveys, or the submitted surveys did not include any spending information. Those airports with missing information will be assessed by MDOT staff, and will be assigned an average visitor spending total by comparing other airports of similar size and location.

**Table 1: Average Visitor Spending by Airport Type (Commercial Service vs. General Aviation)**

Type of Airport	# of Surveys Received	Average Spending per Visitor
Commercial Service	742	\$486
General Aviation	748	\$293

**Table 2: Average Visitor Spending by FAA Airport Reference Code (ARC)**

FAA Airport Reference Code (ARC)	# of Surveys Received	Average Spending per Visitor
A-I	11	\$254
B-I	64	\$192
B-II	376	\$292
C-II	153	\$400
C-III	306	\$341
C-IV	11	\$494
D-II	6	\$604
D-III	65	\$324
D-IV	492	\$409
D-V	6	\$105

**Table 3: Average Visitor Spending by MDOT Prosperity Regions**

MDOT Prosperity Region	# of Surveys Received	Average Spending per Visitor
Central UP	64	\$357
Detroit Metro	33	\$321
East Central	46	\$358
East Michigan	233	\$257
Eastern UP	88	\$286
Northeast	133	\$342
Northwest	429	\$364
South Central	65	\$369
Southeast	38	\$227
Southwest	51	\$247
West Central	26	\$118
West Michigan	276	\$369
Western UP	11	\$164



**Table 4: Average Visitor Spending by MDOT Prosperity Regions, FAA ARC, and Airport Type**

MDOT Prosperity Region	FAA ARC	# of Surveys Received	Average Spending per Visitor
Central UP	A-I	4	\$525
	B-II	4	\$144
	C-II	2	\$213
	C-III GA	12	\$164
	C-III CS	17	\$479
	D-III CS	17	\$472
	D-III GA	8	\$500
Detroit Metro	A-I	3	\$214
	B-I	12	\$325
	B-II	1	\$400
	C-II	10	\$805
	D-III	-	-
	D-IV	6	\$208
	D-V GA	-	-
	D-V CS	1	\$25
East Central	B-II	31	\$222
	C-II	15	\$449
	D-IV CS	-	-
	D-IV GA	-	-
East Michigan	A-I	-	-
	B-I	21	\$140
	B-II	8	\$262
	C-II	23	\$349
	D-IV CS	180	\$214
	D-IV GA	1	\$550
Eastern UP	B-I	2	\$125
	B-II	59	\$379
	D-III CS	-	-
	D-III GA	27	\$73
Northeast	B-I	15	\$145
	B-II	48	\$345
	C-III	54	\$532
	C-IV CS	11	\$494
	C-IV GA	-	-
	D-V	5	\$185
Northwest	A-I	-	-
	B-I	-	-
	B-II	146	\$387
	C-II GA	23	\$427
	C-II CS	51	\$577
	C-III GA	23	\$103
	C-III CS	183	\$752
South Central	B-II	9	\$42
	D-IV CS	28	\$558
	D-IV GA	28	\$507
Southeast	A-I	-	-
	B-I	13	\$355

**Table 4: Average Visitor Spending by MDOT Prosperity Regions, FAA ARC, and Airport Type**

MDOT Prosperity Region	FAA ARC	# of Surveys Received	Average Spending per Visitor
Southeast	B-II	7	\$246
	C-II	18	\$59
Southwest	B-II	36	\$285
	C-II	-	-
	C-III CS	-	-
	C-III GA	2	\$90
	D-III	13	\$252
West Central	A-I	4	\$8
	B-I	-	-
	B-II	22	\$227
	C-II	-	-
West Michigan	B-I	1	\$50
	B-II	5	\$128
	C-III CS	5	\$873
	C-III GA	10	\$145
	D-II	6	\$604
	D-IV CS	249	\$416
	D-IV GA	-	-
Western UP	A-I	-	-
	B-I	-	-
	C-II CS	-	-
	C-II GA	11	\$164
	C-III CS	-	-
	C-III GA	-	-

**Summary**

The average visitor spending at an airport in Michigan is \$320. At commercial service airports specifically, the average spending per visitor rises to \$486, while at GA airports, the average spending per visitor is \$293. These amounts demonstrate that there is a significant amount of money spent in Michigan at system airports. The information collected from these surveys will be used as part of the Community Benefits Assessment Tool to determine the value of each of the airports within the Michigan aviation system and the economic benefit that visitors contribute to Michigan.

**Attachments**

**Attachments 1-6** on the following pages summarize the spending information provided on visitor surveys, sorted in six ways:

1. Alphabetically by airport name
2. FAA Airport Reference Codes (ARCs)
3. MDOT Prosperity Regions
4. Commercial Service Airports
5. GA Airports
6. MDOT Prosperity Regions, ARC, and Type

**Attachment 7** and **Attachment 8** include copies of the Commercial Service Visitor Survey and GA Visitor Survey, respectively.

**Attachment 1: Average Visitor Spending by Airport**

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## 2017 MICHIGAN AVIATION SYSTEM PLAN

**Attachment 1** provides a summary of visitor spending collected through the survey effort at the 108 MASP airports, listed alphabetically by airport name. Airports that support both GA and commercial service were given both GA and commercial service visitor surveys and are listed as such in the following table with “GA” and “CS” to distinguish the two categories.

**Attachment 1: Average Visitor Spending by Airport**

Airport Name	FAA ID	Region	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total
Abrams Municipal Airport	4D0	South Central	B-II	-	-	-	-	-	-	-	-
Alpena County Regional Airport – CS	APN	Northeast	C-IV	11	\$68	\$129	\$74	\$55	\$153	\$15	\$494
Alpena County Regional Airport – GA	APN	Northeast	C-IV	-	-	-	-	-	-	-	-
Ann Arbor Municipal Airport	ARB	Southeast	B-II	2	\$0	\$50	\$0	\$25	\$25	\$0	\$100
Antrim County Airport	ACB	Northwest	B-II	31	\$100	\$102	\$19	\$77	\$75	\$24	\$398
Atlanta Municipal Airport	Y93	Northeast	B-I	-	-	-	-	-	-	-	-
Baldwin Municipal Airport	7D3	West Central	B-II	-	-	-	-	-	-	-	-
Beaver Island Airport	SJX	Northwest	B-II	-	-	-	-	-	-	-	-
Bishop International Airport – CS	FNT	East Michigan	D-IV	180	\$33	\$118	\$36	\$10	\$16	\$0	\$214
Bishop International Airport – GA	FNT	East Michigan	D-IV	1	\$300	\$100	\$50	\$0	\$100	\$0	\$550
Bois Blanc Island Airport	6Y1	Eastern UP	B-I	2	\$75	\$50	\$0	\$0	\$0	\$0	\$125
Branch County Memorial Airport	OEB	Southwest	B-II	-	-	-	-	-	-	-	-
Brooks Field Airport	RMY	Southwest	B-II	1	\$0	\$15	\$0	\$0	\$0	\$0	\$15
Canton-Plymouth Mettetal Airport	1D2	Detroit Metro	A-I	1	\$0	\$100	\$0	\$0	\$50	\$150	\$300
Capital Region International Airport – CS	LAN	South Central	D-IV	28	\$175	\$164	\$30	\$24	\$147	\$18	\$558
Capital Region International Airport – GA	LAN	South Central	D-IV	28	\$136	\$188	\$53	\$28	\$30	\$71	\$507
Charlevoix Municipal Airport – CS	CVX	Northwest	B-II	-	-	-	-	-	-	-	-
Charlevoix Municipal Airport – GA	CVX	Northwest	B-II	1	\$0	\$40	\$0	\$0	\$20	\$0	\$60
Cheboygan County Airport	SLH	Northeast	B-II	4	\$78	\$45	\$0	\$0	\$80	\$0	\$203
Cherry Capital Airport – CS	TVC	Northwest	C-III	183	\$289	\$247	\$76	\$70	\$69	\$1	\$752
Cherry Capital Airport – GA	TVC	Northwest	C-III	23	\$39	\$46	\$7	\$0	\$11	\$0	\$103
Chippewa County International Airport – CS	CIU	Eastern UP	D-III	-	-	-	-	-	-	-	-
Chippewa County International Airport – GA	CIU	Eastern UP	D-III	27	\$11	\$17	\$10	\$4	\$27	\$4	\$73
Clare Municipal Airport	48D	East Central	B-II	15	\$93	\$62	\$4	\$3	\$33	\$0	\$196
Coleman A. Young Municipal Airport	DET	Detroit Metro	C-II	10	\$400	\$265	\$140	\$0	\$0	\$0	\$805
Custer Airport	TTF	Southeast	B-II	-	-	-	-	-	-	-	-
Delta County Airport – CS	ESC	Central UP	C-III	17	\$172	\$129	\$66	\$41	\$26	\$44	\$479
Delta County Airport – GA	ESC	Central UP	C-III	-	-	-	-	-	-	-	-
Detroit Metropolitan Wayne County Airport – CS	DTW	Detroit Metro	D-V	1	\$0	\$25	\$0	\$0	\$0	\$0	\$25
Detroit Metropolitan Wayne County Airport – GA	DTW	Detroit Metro	D-V	-	-	-	-	-	-	-	-

# 2017 MICHIGAN AVIATION SYSTEM PLAN

## Attachment 1: Average Visitor Spending by Airport

Airport Name	FAA ID	Region	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total
Dowagiac Municipal Airport	C91	Southwest	B-II	3	\$133	\$370	\$0	\$0	\$92	\$0	\$595
Drummond Island Airport	DRM	Eastern UP	B-II	-	-	-	-	-	-	-	-
DuPont-Lapeer Airport	D95	East Michigan	B-II	-	-	-	-	-	-	-	-
Evart Municipal Airport	9C8	West Central	B-I	-	-	-	-	-	-	-	-
Fitch H. Beach Airport	FPK	South Central	B-II	-	-	-	-	-	-	-	-
Ford Airport – CS	IMT	Central UP	C-III	-	-	-	-	-	-	-	-
Ford Airport – GA	IMT	Central UP	C-III	12	\$21	\$53	\$0	\$26	\$65	\$0	\$164
Frankfort Dow Memorial Field	FKS	Northwest	B-I	-	-	-	-	-	-	-	-
Fremont Municipal Airport	FFX	West Central	C-II	-	-	-	-	-	-	-	-
Gaylord Regional Airport	GLR	Northeast	C-III	54	\$111	\$106	\$57	\$25	\$137	\$96	\$532
Gerald R. Ford International Airport - CS	GRR	West Michigan	D-IV	249	\$191	\$131	\$56	\$18	\$10	\$10	\$416
Gerald R. Ford International Airport - GA	GRR	West Michigan	D-IV	-	-	-	-	-	-	-	-
Gladwin Zettel Memorial Airport	GDW	East Central	B-II	-	-	-	-	-	-	-	-
Gogebic-Iron County Airport – CS	IWD	Western UP	C-II	-	-	-	-	-	-	-	-
Gogebic-Iron County Airport – GA	IWD	Western UP	C-II	11	\$105	\$43	\$12	\$0	\$5	\$0	\$164
Grand Haven Memorial Airpark	3GM	West Michigan	B-II	-	-	-	-	-	-	-	-
Gratiot Community Airport	AMN	East Central	C-II	8	\$81	\$49	\$6	\$0	\$8	\$0	\$196
Grayling Army Airfield	GOV	Northeast	B-II	3	\$67	\$67	\$0	\$0	\$133	\$0	\$267
Greenville Municipal Airport	6D6	West Michigan	B-II	5	\$80	\$40	\$8	\$0	\$0	\$0	\$128
Grosse Ile Municipal Airport	ONZ	Detroit Metro	B-II	-	-	-	-	-	-	-	-
Hanley Field	5Y7	Central UP	A-I	4	\$175	\$125	\$25	\$50	\$50	\$100	\$525
Harbor Springs Airport	MGN	Northwest	B-II	114	\$263	\$181	\$61	\$64	\$127	\$6	\$702
Harsens Island Airport	Z92	East Michigan	A-I	-	-	-	-	-	-	-	-
Hastings Airport	9D9	West Michigan	B-II	-	-	-	-	-	-	-	-
Hillsdale Municipal Airport	JYM	Southeast	B-II	5	\$80	\$138	\$30	\$60	\$84	\$0	\$392
Houghton County Memorial Airport – CS	CMX	Western UP	C-III	-	-	-	-	-	-	-	-
Houghton County Memorial Airport – GA	CMX	Western UP	C-III	-	-	-	-	-	-	-	-
Huron County Memorial Airport	BAX	East Michigan	B-II	6	\$125	\$160	\$18	\$58	\$24	\$0	\$386
Ionia County Airport	Y70	West Michigan	B-II	-	-	-	-	-	-	-	-
Iosco County Airport	6D9	Northeast	B-II	11	\$218	\$170	\$109	\$45	\$55	\$0	\$597
Jack Barstow Airport	IKW	East Central	B-II	-	-	-	-	-	-	-	-
Jackson County - Reynolds Field	JXN	Southeast	C-II	18	\$19	\$34	\$0	\$6	\$0	\$0	\$59
James Clements Municipal Airport	3CM	East Central	B-II	16	\$154	\$51	\$8	\$9	\$14	\$13	\$248
Jerry Tyler Memorial Airport	3TR	Southwest	B-II	12	\$0	\$12	\$0	\$0	\$0	\$8	\$20

# 2017 MICHIGAN AVIATION SYSTEM PLAN

## Attachment 1: Average Visitor Spending by Airport

Airport Name	FAA ID	Region	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total
Kalamazoo/Battle Creek International Airport – CS	AZO	Southwest	C-III	-	-	-	-	-	-	-	-
Kalamazoo/Battle Creek International Airport – GA	AZO	Southwest	C-III	2	\$65	\$25	\$0	\$0	\$0	\$0	\$90
Kirsch Municipal Airport	IRS	Southwest	B-II	-	-	-	-	-	-	-	-
Lakeview Airport - Griffith Field Airport	13C	West Michigan	B-I	-	-	-	-	-	-	-	-
Lenawee County Airport	ADG	Southeast	C-II	-	-	-	-	-	-	-	-
Livingston County - Spencer J. Hardy Airport	OZW	Southeast	C-II	-	-	-	-	-	-	-	-
Luce County Airport	ERY	Eastern UP	B-II	12	\$103	\$84	\$8	\$0	\$8	\$17	\$220
Mackinac County Airport	83D	Eastern UP	B-II	2	\$75	\$38	\$0	\$3	\$125	\$0	\$240
Mackinac Island Airport	MCD	Eastern UP	B-II	39	\$305	\$115	\$33	\$12	\$37	\$0	\$503
Manistee County - Blacker Airport – CS	MBL	Northwest	C-II	51	\$60	\$272	\$37	\$101	\$102	\$5	\$577
Manistee County - Blacker Airport – GA	MBL	Northwest	C-II	12	\$88	\$321	\$100	\$71	\$192	\$25	\$796
Marine City Airport	76G	East Michigan	B-I	8	\$38	\$69	\$6	\$25	\$13	\$0	\$150
Marlette Township Airport	77G	East Michigan	B-I	7	\$103	\$29	\$23	\$37	\$0	\$21	\$213
Mason County Airport	LDM	West Central	B-II	-	-	-	-	-	-	-	-
Mason Jewett Field	TEW	South Central	B-II	9	\$0	\$32	\$0	\$0	\$10	\$0	\$42
MBS International Airport – CS	MBS	East Central	D-IV	-	-	-	-	-	-	-	-
MBS International Airport – GA	MBS	East Central	D-IV	-	-	-	-	-	-	-	-
Menominee - Marinette Twin County Airport	MNM	Central UP	B-II	4	\$88	\$31	\$25	\$0	\$0	\$0	\$144
Meyers-Diver's Airport	3TE	Southeast	A-I	-	-	-	-	-	-	-	-
Mount Pleasant Municipal Airport	MOP	East Central	C-II	3	\$70	\$62	\$17	\$83	\$8	\$0	\$240
Muskegon County Airport - CS	MKG	West Michigan	C-III	5	\$240	\$200	\$115	\$90	\$228	\$0	\$873
Muskegon County Airport - GA	MKG	West Michigan	C-III	10	\$44	\$56	\$25	\$20	\$0	\$0	\$145
Oakland County International Airport	PTK	Detroit Metro	D-III	-	-	-	-	-	-	-	-
Oakland Southwest Airport	Y47	Detroit Metro	B-I	1	\$0	\$100	\$0	\$100	\$0	\$0	\$200
Oakland Troy Airport	VLL	Detroit Metro	B-I	11	\$191	\$114	\$45	\$55	\$36	\$9	\$450
Oceana County Airport	C04	West Central	B-I	-	-	-	-	-	-	-	-
Ontonagon County - Schuster Field	OGM	Western UP	B-I	-	-	-	-	-	-	-	-
Oscoda County Dennis Kauffman Memorial Airport	51M	Northeast	B-I	15	\$0	\$91	\$0	\$51	\$4	\$0	\$145
Oscoda-Wurtsmith Airport	OSC	Northeast	D-V	5	\$0	\$105	\$0	\$60	\$20	\$0	\$185
Ottawa Executive Airport	Z98	West Michigan	B-I	-	-	-	-	-	-	-	-
Owosso Community Airport	RNP	East Michigan	B-II	2	\$0	\$75	\$0	\$38	\$25	\$0	\$138
Padgham Field	35D	West Michigan	B-II	-	-	-	-	-	-	-	-
Paul C. Miller-Sparta Airport	8D4	West Michigan	B-II	-	-	-	-	-	-	-	-

# 2017 MICHIGAN AVIATION SYSTEM PLAN

## Attachment 1: Average Visitor Spending by Airport

Airport Name	FAA ID	Region	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total
Pellston Regional Airport Of Emmet County - CS	PLN	Northwest	C-II	-	-	-	-	-	-	-	-
Pellston Regional Airport Of Emmet County - GA	PLN	Northwest	C-II	4	\$250	\$100	\$25	\$0	\$50	\$0	\$425
Presque Isle County Airport	PZQ	Northeast	B-II	-	-	-	-	-	-	-	-
Prices Airport	9G2	East Michigan	B-II	-	-	-	-	-	-	-	-
Ray Community Airport	57D	Detroit Metro	A-I	2	\$182	\$0	\$0	\$0	\$0	\$0	\$182
Riverview Airport	08C	West Michigan	B-I	1	\$0	\$50	\$0	\$0	\$0	\$0	\$50
Roben-Hood Airport	RQB	West Central	B-II	22	\$78	\$79	\$5	\$6	\$36	\$23	\$227
Romeo State Airport	D98	Detroit Metro	B-II	1	\$0	\$300	\$0	\$100	\$0	\$0	\$400
Roscommon County, Blodgett Memorial Airport	HTL	Northeast	B-II	-	-	-	-	-	-	-	-
Saginaw County H. W. Browne Airport	HYX	East Central	C-II	4	\$465	\$215	\$81	\$75	\$75	\$0	\$911
Sandusky City Airport	Y83	East Michigan	B-I	6	\$0	\$32	\$0	\$17	\$8	\$0	\$57
Sault Ste. Marie Municipal Airport/Sanderson Field	ANJ	Eastern UP	B-II	6	\$167	\$110	\$8	\$33	\$67	\$167	\$552
Sawyer International Airport – CS	SAW	Central UP	D-III	17	\$181	\$141	\$114	\$0	\$25	\$11	\$472
Sawyer International Airport – GA	SAW	Central UP	D-III	8	\$175	\$134	\$31	\$38	\$56	\$67	\$500
Schoolcraft County Airport	ISQ	Central UP	C-II	2	\$113	\$75	\$25	\$0	\$0	\$0	\$213
South Haven Area Regional Airport	LWA	Southwest	B-II	20	\$305	\$125	\$22	\$25	\$33	\$0	\$509
Southwest Michigan Regional Airport	BEH	Southwest	C-II	-	-	-	-	-	-	-	-
St. Clair County International Airport	PHN	East Michigan	C-II	23	\$172	\$104	\$48	\$12	\$13	\$0	\$349
Stambaugh Airport	Y73	Western UP	A-I	-	-	-	-	-	-	-	-
Three Rivers Municipal, Dr. Haines Airport	HAI	Southwest	B-II	-	-	-	-	-	-	-	-
Toledo Suburban Airport	DUH	Southeast	B-I	13	\$110	\$162	\$46	\$12	\$27	\$0	\$355
Tuscola Area Airport	CFS	East Michigan	B-II	-	-	-	-	-	-	-	-
W. K. Kellogg Airport	BTL	Southwest	D-III	13	\$177	\$22	\$23	\$23	\$8	\$0	\$252
West Branch Community Airport	Y31	Northeast	B-II	30	\$85	\$95	\$63	\$2	\$67	\$0	\$312
West Michigan Regional Airport	BIV	West Michigan	D-II	6	\$174	\$83	\$13	\$0	\$83	\$250	\$604
Wexford County Airport	CAD	Northwest	C-II	7	\$0	\$31	\$0	\$0	\$0	\$29	\$60
White Cloud Airport	42C	West Central	A-I	4	\$0	\$8	\$0	\$0	\$0	\$0	\$8
Willow Run Airport	YIP	Detroit Metro	D-IV	6	\$100	\$67	\$42	\$0	\$0	\$0	\$208
Woolsey Memorial Airport	5D5	Northwest	A-I	-	-	-	-	-	-	-	-

Source: Commercial Service and General Aviation Visitor Surveys, Michigan Aviation System Plan 2017.

Note: Airports with spending categories labeled with a dash (-) either means the airport did not submit any visitor surveys, or the submitted surveys did not provide any spending information.



**Attachment 2: Average Visitor Spending by FAA Airport Reference Code (ARC)**

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# 2017 MICHIGAN AVIATION SYSTEM PLAN

**Attachment 2** provides a summary of visitor spending collected through the survey effort at the 108 MASP airports, listed by FAA ARC. The Avg. column includes the average spending by FAA ARC. As shown in the table, average spending generally increases as the FAA ARC category increases. FAA ARC categories C-IV and D-II are seeing the largest visitor spending amounts of \$494 and \$604.

**Attachment 2: Average Visitor Spending by FAA Airport Reference Code (ARC)**

FAA ARC	Airport	FAA ID	Region	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
A-I	Canton-Plymouth Mettetal Airport	1D2	Detroit Metro	1	\$0	\$100	\$0	\$0	\$50	\$150	\$300	\$254
	Hanley Field	5Y7	Central UP	4	\$175	\$125	\$25	\$50	\$50	\$100	\$525	
	Harsens Island Airport	Z92	East Michigan	-	-	-	-	-	-	-	-	
	Meyers-Diver's Airport	3TE	Southeast	-	-	-	-	-	-	-	-	
	Ray Community Airport	57D	Detroit Metro	2	\$182	\$0	\$0	\$0	\$0	\$0	\$182	
	Stambaugh Airport	Y73	Western UP	-	-	-	-	-	-	-	-	
	White Cloud Airport	42C	West Central	4	\$0	\$8	\$0	\$0	\$0	\$0	\$8	
	Woolsey Memorial Airport	5D5	Northwest	-	-	-	-	-	-	-	-	
B-I	Atlanta Municipal Airport	Y93	Northeast	-	-	-	-	-	-	-	-	\$192
	Bois Blanc Island Airport	6Y1	Eastern UP	2	\$75	\$50	\$0	\$0	\$0	\$0	\$125	
	Evart Municipal Airport	9C8	West Central	-	-	-	-	-	-	-	-	
	Frankfort Dow Memorial Field	FKS	Northwest	-	-	-	-	-	-	-	-	
	Lakeview Airport - Griffith Field Airport	13C	West Michigan	-	-	-	-	-	-	-	-	
	Marine City Airport	76G	East Michigan	8	\$38	\$69	\$6	\$25	\$13	\$0	\$150	
	Marlette Township Airport	77G	East Michigan	7	\$103	\$29	\$23	\$37	\$0	\$21	\$213	
	Oakland Southwest Airport	Y47	Detroit Metro	1	\$0	\$100	\$0	\$100	\$0	\$0	\$200	
	Oakland Troy Airport	VLL	Detroit Metro	11	\$191	\$114	\$45	\$55	\$36	\$9	\$450	
	Oceana County Airport	C04	West Central	-	-	-	-	-	-	-	-	
	Ontonagon County - Schuster Field	OGM	Western UP	-	-	-	-	-	-	-	-	
	Oscoda County Dennis Kauffman Memorial Airport	51M	Northeast	15	\$0	\$91	\$0	\$51	\$4	\$0	\$145	
	Ottawa Executive Airport	Z98	West Michigan	-	-	-	-	-	-	-	-	
	Riverview Airport	08C	West Michigan	1	\$0	\$50	\$0	\$0	\$0	\$0	\$50	
	Sandusky City Airport	Y83	East Michigan	6	\$0	\$32	\$0	\$17	\$8	\$0	\$57	
	Toledo Suburban Airport	DUH	Southeast	13	\$110	\$162	\$46	\$12	\$27	\$0	\$355	
B-II	Abrams Municipal Airport	4D0	South Central	-	-	-	-	-	-	-	-	\$292
	Ann Arbor Municipal Airport	ARB	Southeast	2	\$0	\$50	\$0	\$25	\$25	\$0	\$100	
	Antrim County Airport	ACB	Northwest	31	\$100	\$102	\$19	\$77	\$75	\$24	\$398	
	Baldwin Municipal Airport	7D3	West Central	-	-	-	-	-	-	-	-	

2017 MICHIGAN AVIATION SYSTEM PLAN

Attachment 2: Average Visitor Spending by FAA Airport Reference Code (ARC)

FAA ARC	Airport	FAA ID	Region	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
B-II	Beaver Island Airport	SJX	Northwest	-	-	-	-	-	-	-	-	\$292
	Branch County Memorial Airport	OEB	Southwest	-	-	-	-	-	-	-	-	
	Brooks Field Airport	RMV	Southwest	1	\$0	\$15	\$0	\$0	\$0	\$0	\$15	
	Charlevoix Municipal Airport – CS	CVX	Northwest	-	-	-	-	-	-	-	-	
	Charlevoix Municipal Airport – GA	CVX	Northwest	1	\$0	\$40	\$0	\$0	\$20	\$0	\$60	
	Cheboygan County Airport	SLH	Northeast	4	\$78	\$45	\$0	\$0	\$80	\$0	\$203	
	Clare Municipal Airport	48D	East Central	15	\$93	\$62	\$4	\$3	\$33	\$0	\$196	
	Custer Airport	TTF	Southeast	-	-	-	-	-	-	-	-	
	Dowagiac Municipal Airport	C91	Southwest	3	\$133	\$370	\$0	\$0	\$92	\$0	\$595	
	Drummond Island Airport	DRM	Eastern UP	-	-	-	-	-	-	-	-	
	DuPont-Lapeer Airport	D95	East Michigan	-	-	-	-	-	-	-	-	
	Fitch H. Beach Airport	FPK	South Central	-	-	-	-	-	-	-	-	
	Gladwin Zettel Memorial Airport	GDW	East Central	-	-	-	-	-	-	-	-	
	Grand Haven Memorial Airpark	3GM	West Michigan	-	-	-	-	-	-	-	-	
	Grayling Army Airfield	GOV	Northeast	3	\$67	\$67	\$0	\$0	\$133	\$0	\$267	
	Greenville Municipal Airport	6D6	West Michigan	5	\$80	\$40	\$8	\$0	\$0	\$0	\$128	
	Grosse Ile Municipal Airport	ONZ	Detroit Metro	-	-	-	-	-	-	-	-	
	Harbor Springs Airport	MGN	Northwest	114	\$263	\$181	\$61	\$64	\$127	\$6	\$702	
	Hastings Airport	9D9	West Michigan	-	-	-	-	-	-	-	-	
	Hillsdale Municipal Airport	JYM	Southeast	5	\$80	\$138	\$30	\$60	\$84	\$0	\$392	
	Huron County Memorial Airport	BAX	East Michigan	6	\$125	\$160	\$18	\$58	\$24	\$0	\$386	
	Ionia County Airport	Y70	West Michigan	-	-	-	-	-	-	-	-	
	Iosco County Airport	6D9	Northeast	11	\$218	\$170	\$109	\$45	\$55	\$0	\$597	
	Jack Barstow Airport	IKW	East Central	-	-	-	-	-	-	-	-	
	James Clements Municipal Airport	3CM	East Central	16	\$154	\$51	\$8	\$9	\$14	\$13	\$248	
	Jerry Tyler Memorial Airport	3TR	Southwest	12	\$0	\$12	\$0	\$0	\$0	\$8	\$20	
	Kirsch Municipal Airport	IRS	Southwest	-	-	-	-	-	-	-	-	
	Luce County Airport	ERY	Eastern UP	12	\$103	\$84	\$8	\$0	\$8	\$17	\$220	
	Mackinac County Airport	83D	Eastern UP	2	\$75	\$38	\$0	\$3	\$125	\$0	\$240	
	Mackinac Island Airport	MCD	Eastern UP	39	\$305	\$115	\$33	\$12	\$37	\$0	\$503	
	Mason County Airport	LDM	West Central	-	-	-	-	-	-	-	-	
	Mason Jewett Field	TEW	South Central	9	\$0	\$32	\$0	\$0	\$10	\$0	\$42	
	Menominee - Marinette Twin County Airport	MNM	Central UP	4	\$88	\$31	\$25	\$0	\$0	\$0	\$144	

2017 MICHIGAN AVIATION SYSTEM PLAN

Attachment 2: Average Visitor Spending by FAA Airport Reference Code (ARC)

FAA ARC	Airport	FAA ID	Region	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
B-II	Owosso Community Airport	RNP	East Michigan	2	\$0	\$75	\$0	\$38	\$25	\$0	\$138	\$292
	Padgham Field	35D	West Michigan	-	-	-	-	-	-	-	-	
	Paul C. Miller-Sparta Airport	8D4	West Michigan	-	-	-	-	-	-	-	-	
	Presque Isle County Airport	PZQ	Northeast	-	-	-	-	-	-	-	-	
	Prices Airport	9G2	East Michigan	-	-	-	-	-	-	-	-	
	Roben-Hood Airport	RQB	West Central	22	\$78	\$79	\$5	\$6	\$36	\$23	\$227	
	Romeo State Airport	D98	Detroit Metro	1	\$0	\$300	\$0	\$100	\$0	\$0	\$400	
	Roscommon County, Blodgett Memorial Airport	HTL	Northeast	-	-	-	-	-	-	-	-	
	Sault Ste. Marie Municipal Airport/Sanderson Field	ANJ	Eastern UP	6	\$167	\$110	\$8	\$33	\$67	\$167	\$552	
	South Haven Area Regional Airport	LWA	Southwest	20	\$305	\$125	\$22	\$25	\$33	\$0	\$509	
	Three Rivers Municipal, Dr. Haines Airport	HAI	Southwest	-	-	-	-	-	-	-	-	
	Tuscola Area Airport	CFS	East Michigan	-	-	-	-	-	-	-	-	
	West Branch Community Airport	Y31	Northeast	30	\$85	\$95	\$63	\$2	\$67	\$0	\$312	
C-II	Coleman A. Young Municipal Airport	DET	Detroit Metro	10	\$400	\$265	\$140	\$0	\$0	\$0	\$805	\$400
	Fremont Municipal Airport	FFX	West Central	-	-	-	-	-	-	-	-	
	Gogebic-Iron County Airport – CS	IWD	Western UP	-	-	-	-	-	-	-	-	
	Gogebic-Iron County Airport – GA	IWD	Western UP	11	\$105	\$43	\$12	\$0	\$5	\$0	\$164	
	Gratiot Community Airport	AMN	East Central	8	\$81	\$49	\$6	\$0	\$8	\$0	\$196	
	Jackson County - Reynolds Field	JXN	Southeast	18	\$19	\$34	\$0	\$6	\$0	\$0	\$59	
	Lenawee County Airport	ADG	Southeast	-	-	-	-	-	-	-	-	
	Livingston County - Spencer J. Hardy Airport	OZW	Southeast	-	-	-	-	-	-	-	-	
	Manistee County - Blacker Airport – CS	MBL	Northwest	51	\$60	\$272	\$37	\$101	\$102	\$5	\$577	
	Manistee County - Blacker Airport – GA	MBL	Northwest	12	\$88	\$321	\$100	\$71	\$192	\$25	\$796	
	Mount Pleasant Municipal Airport	MOP	East Central	3	\$70	\$62	\$17	\$83	\$8	\$0	\$240	
	Pellston Regional Airport Of Emmet County - CS	PLN	Northwest	-	-	-	-	-	-	-	-	
	Pellston Regional Airport Of Emmet County - GA	PLN	Northwest	4	\$250	\$100	\$25	\$0	\$50	\$0	\$425	
	Saginaw County H. W. Browne Airport	HYX	East Central	4	\$465	\$215	\$81	\$75	\$75	\$0	\$911	
	Schoolcraft County Airport	ISQ	Central UP	2	\$113	\$75	\$25	\$0	\$0	\$0	\$213	
	Southwest Michigan Regional Airport	BEH	Southwest	-	-	-	-	-	-	-	-	
	St. Clair County International Airport	PHN	East Michigan	23	\$172	\$104	\$48	\$12	\$13	\$0	\$349	
	Wexford County Airport	CAD	Northwest	7	\$0	\$31	\$0	\$0	\$0	\$29	\$60	
C-III	Cherry Capital Airport – CS	TVC	Northwest	183	\$289	\$247	\$76	\$70	\$69	\$1	\$752	\$341

2017 MICHIGAN AVIATION SYSTEM PLAN

Attachment 2: Average Visitor Spending by FAA Airport Reference Code (ARC)

FAA ARC	Airport	FAA ID	Region	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
C-III	Cherry Capital Airport – GA	TVC	Northwest	23	\$39	\$46	\$7	\$0	\$11	\$0	\$103	\$341
	Delta County Airport – CS	ESC	Central UP	17	\$172	\$129	\$66	\$41	\$26	\$44	\$479	
	Delta County Airport – GA	ESC	Central UP	-	-	-	-	-	-	-	-	
	Ford Airport – CS	IMT	Central UP	-	-	-	-	-	-	-	-	
	Ford Airport – GA	IMT	Central UP	12	\$21	\$53	\$0	\$26	\$65	\$0	\$164	
	Gaylord Regional Airport	GLR	Northeast	54	\$111	\$106	\$57	\$25	\$137	\$96	\$532	
	Houghton County Memorial Airport – CS	CMX	Western UP	-	-	-	-	-	-	-	-	
	Houghton County Memorial Airport – GA	CMX	Western UP	-	-	-	-	-	-	-	-	
	Kalamazoo/Battle Creek International Airport – CS	AZO	Southwest	-	-	-	-	-	-	-	-	
	Kalamazoo/Battle Creek International Airport – GA	AZO	Southwest	2	\$65	\$25	\$0	\$0	\$0	\$0	\$90	
	Muskegon County Airport – CS	MKG	West Michigan	5	\$240	\$200	\$115	\$90	\$228	\$0	\$873	
	Muskegon County Airport – GA	MKG	West Michigan	10	\$44	\$56	\$25	\$20	\$0	\$0	\$145	
C-IV	Alpena County Regional Airport – CS	APN	Northeast	11	\$68	\$129	\$74	\$55	\$153	\$15	\$494	\$494
	Alpena County Regional Airport – GA	APN	Northeast	-	-	-	-	-	-	-	-	
D-II	West Michigan Regional Airport	BIV	West Michigan	6	\$174	\$83	\$13	\$0	\$83	\$250	\$604	\$604
D-III	Chippewa County International Airport – CS	CIU	Eastern UP	-	-	-	-	-	-	-	-	\$324
	Chippewa County International Airport – GA	CIU	Eastern UP	27	\$11	\$17	\$10	\$4	\$27	\$4	\$73	
	Oakland County International Airport	PTK	Detroit Metro	-	-	-	-	-	-	-	-	
	Sawyer International Airport – CS	SAW	Central UP	17	\$181	\$141	\$114	\$0	\$25	\$11	\$472	
	Sawyer International Airport – GA	SAW	Central UP	8	\$175	\$134	\$31	\$38	\$56	\$67	\$500	
	W. K. Kellogg Airport	BTL	Southwest	13	\$177	\$22	\$23	\$23	\$8	\$0	\$252	
D-IV	Bishop International Airport – CS	FNT	East Michigan	180	\$33	\$118	\$36	\$10	\$16	\$0	\$214	\$409
	Bishop International Airport – GA	FNT	East Michigan	1	\$300	\$100	\$50	\$0	\$100	\$0	\$550	
	Capital Region International Airport – CS	LAN	South Central	28	\$175	\$164	\$30	\$24	\$147	\$18	\$558	
	Capital Region International Airport – GA	LAN	South Central	28	\$136	\$188	\$53	\$28	\$30	\$71	\$507	
	Gerald R. Ford International Airport - CS	GRR	West Michigan	249	\$191	\$131	\$56	\$18	\$10	\$10	\$416	
	Gerald R. Ford International Airport - GA	GRR	West Michigan	-	-	-	-	-	-	-	-	
	MBS International Airport – CS	MBS	East Central	-	-	-	-	-	-	-	-	
	MBS International Airport – GA	MBS	East Central	-	-	-	-	-	-	-	-	
	Willow Run Airport	YIP	Detroit Metro	6	\$100	\$67	\$42	\$0	\$0	\$0	\$208	

# 2017 MICHIGAN AVIATION SYSTEM PLAN

## Attachment 2: Average Visitor Spending by FAA Airport Reference Code (ARC)

FAA ARC	Airport	FAA ID	Region	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
D-V	Detroit Metropolitan Wayne County Airport – CS	DTW	Detroit Metro	1	\$0	\$25	\$0	\$0	\$0	\$0	\$25	\$105
	Detroit Metropolitan Wayne County Airport – GA	DTW	Detroit Metro	-	-	-	-	-	-	-	-	
	Oscoda-Wurtsmith Airport	OSC	Northeast	5	\$0	\$105	\$0	\$60	\$20	\$0	\$185	

Source: Commercial Service and General Aviation Visitor Surveys, Michigan Aviation System Plan 2017.

Note: Airports with spending categories labeled with a dash (-) either means the airport did not submit any visitor surveys, or the submitted surveys did not provide any spending information.

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**Attachment 3: Average Visitor Spending by Prosperity Region**

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## 2017 MICHIGAN AVIATION SYSTEM PLAN

**Attachment 3** provides a summary of visitor spending collected through the survey effort at the 108 MASP airports, listed by MDOT prosperity region. The Avg. column includes the average spending by prosperity region. Most regions have very similar spending amounts with the South Central and West Michigan regions seeing the highest values of visitor spending amounts at \$369.

**Attachment 3: Average Visitor Spending by Prosperity Region**

Region	Airport	FAA ID	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
Western UP	Stambaugh Airport	Y73	A-I	-	-	-	-	-	-	-	-	\$164
	Ontonagon County - Schuster Field	OGM	B-I	-	-	-	-	-	-	-	-	
	Gogebic-Iron County Airport – CS	IWD	C-II	-	-	-	-	-	-	-	-	
	Gogebic-Iron County Airport – GA	IWD	C-II	11	\$105	\$43	\$12	\$0	\$5	\$0	\$164	
	Houghton County Memorial Airport – CS	CMX	C-III	-	-	-	-	-	-	-	-	
	Houghton County Memorial Airport – GA	CMX	C-III	-	-	-	-	-	-	-	-	
Central UP	Hanley Field	5Y7	A-I	4	\$175	\$125	\$25	\$50	\$50	\$100	\$525	\$357
	Menominee - Marinette Twin County Airport	MNM	B-II	4	\$88	\$31	\$25	\$0	\$0	\$0	\$144	
	Schoolcraft County Airport	ISQ	C-II	2	\$113	\$75	\$25	\$0	\$0	\$0	\$213	
	Delta County Airport – CS	ESC	C-III	17	\$172	\$129	\$66	\$41	\$26	\$44	\$479	
	Delta County Airport – GA	ESC	C-III	-	-	-	-	-	-	-	-	
	Ford Airport – CS	IMT	C-III	-	-	-	-	-	-	-	-	
	Ford Airport – GA	IMT	C-III	12	\$21	\$53	\$0	\$26	\$65	\$0	\$164	
	Sawyer International Airport – CS	SAW	D-III	17	\$181	\$141	\$114	\$0	\$25	\$11	\$472	
	Sawyer International Airport – GA	SAW	D-III	8	\$175	\$134	\$31	\$38	\$56	\$67	\$500	
Eastern UP	Bois Blanc Island Airport	6Y1	B-I	2	\$75	\$50	\$0	\$0	\$0	\$0	\$125	\$286
	Drummond Island Airport	DRM	B-II	-	-	-	-	-	-	-	-	
	Luce County Airport	ERY	B-II	12	\$103	\$84	\$8	\$0	\$8	\$17	\$220	
	Mackinac County Airport	83D	B-II	2	\$75	\$38	\$0	\$3	\$125	\$0	\$240	
	Mackinac Island Airport	MCD	B-II	39	\$305	\$115	\$33	\$12	\$37	\$0	\$503	
	Sault Ste. Marie Municipal Airport/Sanderson Field	ANJ	B-II	6	\$167	\$110	\$8	\$33	\$67	\$167	\$552	
	Chippewa County International Airport – CS	CIU	D-III	-	-	-	-	-	-	-	-	
	Chippewa County International Airport – GA	CIU	D-III	27	\$11	\$17	\$10	\$4	\$27	\$4	\$73	
Northwest	Woolsey Memorial Airport	5D5	A-I	-	-	-	-	-	-	-	-	\$364
	Frankfort Dow Memorial Field	FKS	B-I	-	-	-	-	-	-	-	-	
	Antrim County Airport	ACB	B-II	31	\$100	\$102	\$19	\$77	\$75	\$24	\$398	
	Beaver Island Airport	SJX	B-II	-	-	-	-	-	-	-	-	
	Charlevoix Municipal Airport – CS	CVX	B-II	-	-	-	-	-	-	-	-	
	Charlevoix Municipal Airport – GA	CVX	B-II	1	\$0	\$40	\$0	\$0	\$20	\$0	\$60	

2017 MICHIGAN AVIATION SYSTEM PLAN

Attachment 3: Average Visitor Spending by Prosperity Region

Region	Airport	FAA ID	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
Northwest	Harbor Springs Airport	MGN	B-II	114	\$263	\$181	\$61	\$64	\$127	\$6	\$702	\$364
	Manistee County - Blacker Airport – CS	MBL	C-II	51	\$60	\$272	\$37	\$101	\$102	\$5	\$577	
	Manistee County - Blacker Airport – GA	MBL	C-II	12	\$88	\$321	\$100	\$71	\$192	\$25	\$796	
	Pellston Regional Airport Of Emmet County - CS	PLN	C-II	-	-	-	-	-	-	-	-	
	Pellston Regional Airport Of Emmet County - GA	PLN	C-II	4	\$250	\$100	\$25	\$0	\$50	\$0	\$425	
	Wexford County Airport	CAD	C-II	7	\$0	\$31	\$0	\$0	\$0	\$29	\$60	
	Cherry Capital Airport – CS	TVC	C-III	183	\$289	\$247	\$76	\$70	\$69	\$1	\$752	
	Cherry Capital Airport – GA	TVC	C-III	23	\$39	\$46	\$7	\$0	\$11	\$0	\$103	
Northeast	Atlanta Municipal Airport	Y93	B-I	-	-	-	-	-	-	-	-	\$342
	Oscoda County Dennis Kauffman Memorial Airport	51M	B-I	15	\$0	\$91	\$0	\$51	\$4	\$0	\$145	
	Cheboygan County Airport	SLH	B-II	4	\$78	\$45	\$0	\$0	\$80	\$0	\$203	
	Grayling Army Airfield	GOV	B-II	3	\$67	\$67	\$0	\$0	\$133	\$0	\$267	
	Iosco County Airport	6D9	B-II	11	\$218	\$170	\$109	\$45	\$55	\$0	\$597	
	Presque Isle County Airport	PZQ	B-II	-	-	-	-	-	-	-	-	
	Roscommon County, Blodgett Memorial Airport	HTL	B-II	-	-	-	-	-	-	-	-	
	West Branch Community Airport	Y31	B-II	30	\$85	\$95	\$63	\$2	\$67	\$0	\$312	
	Gaylord Regional Airport	GLR	C-III	54	\$111	\$106	\$57	\$25	\$137	\$96	\$532	
	Alpena County Regional Airport – CS	APN	C-IV	11	\$68	\$129	\$74	\$55	\$153	\$15	\$494	
	Alpena County Regional Airport – GA	APN	C-IV	-	-	-	-	-	-	-	-	
	Oscoda-Wurtsmith Airport	OSC	D-V	5	\$0	\$105	\$0	\$60	\$20	\$0	\$185	
West Central	White Cloud Airport	42C	A-I	4	\$0	\$8	\$0	\$0	\$0	\$0	\$8	\$118
	Evart Municipal Airport	9C8	B-I	-	-	-	-	-	-	-	-	
	Oceana County Airport	C04	B-I	-	-	-	-	-	-	-	-	
	Baldwin Municipal Airport	7D3	B-II	-	-	-	-	-	-	-	-	
	Mason County Airport	LDM	B-II	-	-	-	-	-	-	-	-	
	Roben-Hood Airport	RQB	B-II	22	\$78	\$79	\$5	\$6	\$36	\$23	\$227	
	Fremont Municipal Airport	FFX	C-II	-	-	-	-	-	-	-	-	
West Michigan	Lakeview Airport - Griffith Field Airport	13C	B-I	-	-	-	-	-	-	-	-	\$369
	Ottawa Executive Airport	Z98	B-I	-	-	-	-	-	-	-	-	
	Riverview Airport	08C	B-I	1	\$0	\$50	\$0	\$0	\$0	\$0	\$50	
	Grand Haven Memorial Airpark	3GM	B-II	-	-	-	-	-	-	-	-	
	Greenville Municipal Airport	6D6	B-II	5	\$80	\$40	\$8	\$0	\$0	\$0	\$128	
	Hastings Airport	9D9	B-II	-	-	-	-	-	-	-	-	
	Ionia County Airport	Y70	B-II	-	-	-	-	-	-	-	-	

2017 MICHIGAN AVIATION SYSTEM PLAN

Attachment 3: Average Visitor Spending by Prosperity Region

Region	Airport	FAA ID	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
West Michigan	Padgham Field	35D	B-II	-	-	-	-	-	-	-	-	\$369
	Paul C. Miller-Sparta Airport	8D4	B-II	-	-	-	-	-	-	-	-	
	Muskegon County Airport - CS	MKG	C-III	5	\$240	\$200	\$115	\$90	\$228	\$0	\$873	
	Muskegon County Airport - GA	MKG	C-III	10	\$44	\$56	\$25	\$20	\$0	\$0	\$145	
	West Michigan Regional Airport	BIV	D-II	6	\$174	\$83	\$13	\$0	\$83	\$250	\$604	
	Gerald R. Ford International Airport - CS	GRR	D-IV	249	\$191	\$131	\$56	\$18	\$10	\$10	\$416	
	Gerald R. Ford International Airport - GA	GRR	D-IV	-	-	-	-	-	-	-	-	
East Central	Clare Municipal Airport	48D	B-II	15	\$93	\$62	\$4	\$3	\$33	\$0	\$196	\$358
	Gladwin Zettel Memorial Airport	GDW	B-II	-	-	-	-	-	-	-	-	
	Jack Barstow Airport	IKW	B-II	-	-	-	-	-	-	-	-	
	James Clements Municipal Airport	3CM	B-II	16	\$154	\$51	\$8	\$9	\$14	\$13	\$248	
	Gratiot Community Airport	AMN	C-II	8	\$81	\$49	\$6	\$0	\$8	\$0	\$196	
	Mount Pleasant Municipal Airport	MOP	C-II	3	\$70	\$62	\$17	\$83	\$8	\$0	\$240	
	Saginaw County H. W. Browne Airport	HYX	C-II	4	\$465	\$215	\$81	\$75	\$75	\$0	\$911	
	MBS International Airport – CS	MBS	D-IV	-	-	-	-	-	-	-	-	
	MBS International Airport – GA	MBS	D-IV	-	-	-	-	-	-	-	-	
East Michigan	Harsens Island Airport	Z92	A-I	-	-	-	-	-	-	-	-	\$257
	Marine City Airport	76G	B-I	8	\$38	\$69	\$6	\$25	\$13	\$0	\$150	
	Marlette Township Airport	77G	B-I	7	\$103	\$29	\$23	\$37	\$0	\$21	\$213	
	Sandusky City Airport	Y83	B-I	6	\$0	\$32	\$0	\$17	\$8	\$0	\$57	
	DuPont-Lapeer Airport	D95	B-II	-	-	-	-	-	-	-	-	
	Huron County Memorial Airport	BAX	B-II	6	\$125	\$160	\$18	\$58	\$24	\$0	\$386	
	Owosso Community Airport	RNP	B-II	2	\$0	\$75	\$0	\$38	\$25	\$0	\$138	
	Prices Airport	9G2	B-II	-	-	-	-	-	-	-	-	
	Tuscola Area Airport	CFS	B-II	-	-	-	-	-	-	-	-	
	St. Clair County International Airport	PHN	C-II	23	\$172	\$104	\$48	\$12	\$13	\$0	\$349	
	Bishop International Airport – CS	FNT	D-IV	180	\$33	\$118	\$36	\$10	\$16	\$0	\$214	
	Bishop International Airport – GA	FNT	D-IV	1	\$300	\$100	\$50	\$0	\$100	\$0	\$550	
South Central	Abrams Municipal Airport	4D0	B-II	-	-	-	-	-	-	-	-	\$369
	Fitch H. Beach Airport	FPK	B-II	-	-	-	-	-	-	-	-	
	Mason Jewett Field	TEW	B-II	9	\$0	\$32	\$0	\$0	\$10	\$0	\$42	
	Capital Region International Airport – CS	LAN	D-IV	28	\$175	\$164	\$30	\$24	\$147	\$18	\$558	
	Capital Region International Airport – GA	LAN	D-IV	28	\$136	\$188	\$53	\$28	\$30	\$71	\$507	

# 2017 MICHIGAN AVIATION SYSTEM PLAN

## Attachment 3: Average Visitor Spending by Prosperity Region

Region	Airport	FAA ID	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
Southwest	Branch County Memorial Airport	OEB	B-II	-	-	-	-	-	-	-	-	\$247
	Brooks Field Airport	RMV	B-II	1	\$0	\$15	\$0	\$0	\$0	\$0	\$15	
	Dowagiac Municipal Airport	C91	B-II	3	\$133	\$370	\$0	\$0	\$92	\$0	\$595	
	Jerry Tyler Memorial Airport	3TR	B-II	12	\$0	\$12	\$0	\$0	\$0	\$8	\$20	
	Kirsch Municipal Airport	IRS	B-II	-	-	-	-	-	-	-	-	
	South Haven Area Regional Airport	LWA	B-II	20	\$305	\$125	\$22	\$25	\$33	\$0	\$509	
	Three Rivers Municipal, Dr. Haines Airport	HAI	B-II	-	-	-	-	-	-	-	-	
	Southwest Michigan Regional Airport	BEH	C-II	-	-	-	-	-	-	-	-	
	Kalamazoo/Battle Creek International Airport – CS	AZO	C-III	-	-	-	-	-	-	-	-	
	Kalamazoo/Battle Creek International Airport – GA	AZO	C-III	2	\$65	\$25	\$0	\$0	\$0	\$0	\$90	
	W. K. Kellogg Airport	BTL	D-III	13	\$177	\$22	\$23	\$23	\$8	\$0	\$252	
Southeast	Meyers-Diver's Airport	3TE	A-I	-	-	-	-	-	-	-	-	\$227
	Toledo Suburban Airport	DUH	B-I	13	\$110	\$162	\$46	\$12	\$27	\$0	\$355	
	Ann Arbor Municipal Airport	ARB	B-II	2	\$0	\$50	\$0	\$25	\$25	\$0	\$100	
	Custer Airport	TTF	B-II	-	-	-	-	-	-	-	-	
	Hillsdale Municipal Airport	JYM	B-II	5	\$80	\$138	\$30	\$60	\$84	\$0	\$392	
	Jackson County - Reynolds Field	JXN	C-II	18	\$19	\$34	\$0	\$6	\$0	\$0	\$59	
	Lenawee County Airport	ADG	C-II	-	-	-	-	-	-	-	-	
	Livingston County - Spencer J. Hardy Airport	OZW	C-II	-	-	-	-	-	-	-	-	
Detroit Metro	Canton-Plymouth Mettetal Airport	1D2	A-I	1	\$0	\$100	\$0	\$0	\$50	\$150	\$300	\$321
	Ray Community Airport	57D	A-I	2	\$182	\$0	\$0	\$0	\$0	\$0	\$182	
	Oakland Southwest Airport	Y47	B-I	1	\$0	\$100	\$0	\$100	\$0	\$0	\$200	
	Oakland Troy Airport	VLL	B-I	11	\$191	\$114	\$45	\$55	\$36	\$9	\$450	
	Grosse Ile Municipal Airport	ONZ	B-II	-	-	-	-	-	-	-	-	
	Romeo State Airport	D98	B-II	1	\$0	\$300	\$0	\$100	\$0	\$0	\$400	
	Coleman A. Young Municipal Airport	DET	C-II	10	\$400	\$265	\$140	\$0	\$0	\$0	\$805	
	Oakland County International Airport	PTK	D-III	-	-	-	-	-	-	-	-	
	Willow Run Airport	YIP	D-IV	6	\$100	\$67	\$42	\$0	\$0	\$0	\$208	
	Detroit Metropolitan Wayne County Airport – CS	DTW	D-V	1	\$0	\$25	\$0	\$0	\$0	\$0	\$25	
	Detroit Metropolitan Wayne County Airport – GA	DTW	D-V	-	-	-	-	-	-	-	-	

Source: Commercial Service and General Aviation Visitor Surveys, Michigan Aviation System Plan 2017.

Note: Airports with spending categories labeled with a dash (-) either means the airport did not submit any visitor surveys, or the submitted surveys did not provide any spending information.

**Attachment 4: Average Visitor Spending for Commercial Service Airports**

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## 2017 MICHIGAN AVIATION SYSTEM PLAN

**Attachment 4** provides a summary of visitor spending collected through the survey effort at the 18 commercial service airports in the MASP, listed alphabetically by name. The average amount spent at a commercial service airport in Michigan is \$486. A few of the commercial service airports in this table have a noticeably higher number of surveys submitted, which is a result of the in-person visitor survey effort conducted by Mead & Hunt. The remaining airports were offered the opportunity to conduct surveys and only five of them elected to participate. A single survey was received for Detroit Metropolitan Wayne County Airport, which was conducted via on-line submission, not distributed by the airport.

### Attachment 4: Average Visitor Spending for Commercial Service Airports

Airport Name	FAA ID	Region	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
Alpena County Regional Airport – CS	APN	Northeast	C-IV	11	\$68	\$129	\$74	\$55	\$153	\$15	\$494	\$486
Bishop International Airport – CS	FNT	East Michigan	D-IV	180	\$33	\$118	\$36	\$10	\$16	\$0	\$214	
Capital Region International Airport – CS	LAN	South Central	D-IV	28	\$175	\$164	\$30	\$24	\$147	\$18	\$558	
Charlevoix Municipal Airport – CS	CVX	Northwest	B-II	-	-	-	-	-	-	-	-	
Cherry Capital Airport – CS	TVC	Northwest	C-III	183	\$289	\$247	\$76	\$70	\$69	\$1	\$752	
Chippewa County International Airport – CS	CIU	Eastern UP	D-III	-	-	-	-	-	-	-	-	
Delta County Airport – CS	ESC	Central UP	C-III	17	\$172	\$129	\$66	\$41	\$26	\$44	\$479	
Detroit Metropolitan Wayne County Airport – CS	DTW	Detroit Metro	D-V	1	\$0	\$25	\$0	\$0	\$0	\$0	\$25	
Ford Airport – CS	IMT	Central UP	C-III	-	-	-	-	-	-	-	-	
Gerald R. Ford International Airport – CS	GRR	West Michigan	D-IV	249	\$191	\$131	\$56	\$18	\$10	\$10	\$416	
Gogebic-Iron County Airport – CS	IWD	Western Up	C-II	-	-	-	-	-	-	-	-	
Houghton County Memorial Airport – CS	CMX	Western UP	C-III	-	-	-	-	-	-	-	-	
Kalamazoo/Battle Creek International Airport – CS	AZO	Southwest	C-III	-	-	-	-	-	-	-	-	
Manistee County - Blacker Airport – CS	MBL	Northwest	C-II	51	\$60	\$272	\$37	\$101	\$102	\$5	\$577	
MBS International Airport – CS	MBS	East Central	D-IV	-	-	-	-	-	-	-	-	
Muskegon County Airport - CS	MKG	West Michigan	C-III	5	\$240	\$200	\$115	\$90	\$228	\$0	\$873	
Pellston Regional Airport Of Emmet County - CS	PLN	Northwest	C-II	-	-	-	-	-	-	-	-	
Sawyer International Airport – CS	SAW	Central UP	D-III	17	\$181	\$141	\$114	\$0	\$25	\$11	\$472	

Source: Commercial Service Visitor Surveys, Michigan Aviation System Plan 2017

Note: Airports with spending categories labeled with a dash (-) either means the airport did not submit any visitor surveys, or the submitted surveys did not provide any spending information.

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**Attachment 5: Average Visitor Spending for GA Airports**

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## 2017 MICHIGAN AVIATION SYSTEM PLAN

**Attachment 5** provides a summary of visitor spending collected through the survey effort at the 108 airports in the MASP that support GA operations, listed alphabetically by name. The average amount spent at a GA airport is \$293.

### Attachment 5: Average Visitor Spending for GA Airports

Airport Name	FAA ID	Region	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
Abrams Municipal Airport	4D0	South Central	B-II	-	-	-	-	-	-	-	-	\$293
Alpena County Regional Airport – GA	APN	Northeast	C-IV	-	-	-	-	-	-	-	-	
Ann Arbor Municipal Airport	ARB	Southeast	B-II	2	\$0	\$50	\$0	\$25	\$25	\$0	\$100	
Antrim County Airport	ACB	Northwest	B-II	31	\$100	\$102	\$19	\$77	\$75	\$24	\$398	
Atlanta Municipal Airport	Y93	Northeast	B-I	-	-	-	-	-	-	-	-	
Baldwin Municipal Airport	7D3	West Central	B-II	-	-	-	-	-	-	-	-	
Beaver Island Airport	SJX	Northwest	B-II	-	-	-	-	-	-	-	-	
Bishop International Airport – GA	FNT	East Michigan	D-IV	1	\$300	\$100	\$50	\$0	\$100	\$0	\$550	
Bois Blanc Island Airport	6Y1	Eastern UP	B-I	2	\$75	\$50	\$0	\$0	\$0	\$0	\$125	
Branch County Memorial Airport	OEB	Southwest	B-II	-	-	-	-	-	-	-	-	
Brooks Field Airport	RMV	Southwest	B-II	1	\$0	\$15	\$0	\$0	\$0	\$0	\$15	
Canton-Plymouth Mettetal Airport	1D2	Detroit Metro	A-I	1	\$0	\$100	\$0	\$0	\$50	\$150	\$300	
Capital Region International Airport – GA	LAN	South Central	D-IV	28	\$136	\$188	\$53	\$28	\$30	\$71	\$507	
Charlevoix Municipal Airport – GA	CVX	Northwest	B-II	1	\$0	\$40	\$0	\$0	\$20	\$0	\$60	
Cheboygan County Airport	SLH	Northeast	B-II	4	\$78	\$45	\$0	\$0	\$80	\$0	\$203	
Cherry Capital Airport – GA	TVC	Northwest	C-III	23	\$39	\$46	\$7	\$0	\$11	\$0	\$103	
Chippewa County International Airport – GA	CIU	Eastern UP	D-III	27	\$11	\$17	\$10	\$4	\$27	\$4	\$73	
Clare Municipal Airport	48D	East Central	B-II	15	\$93	\$62	\$4	\$3	\$33	\$0	\$196	
Coleman A. Young Municipal Airport	DET	Detroit Metro	C-II	10	\$400	\$265	\$140	\$0	\$0	\$0	\$805	
Custer Airport	TTF	Southeast	B-II	-	-	-	-	-	-	-	-	
Delta County Airport – GA	ESC	Central UP	C-III	-	-	-	-	-	-	-	-	
Detroit Metropolitan Wayne County Airport – GA	DTW	Detroit Metro	D-V	-	-	-	-	-	-	-	-	
Dowagiac Municipal Airport	C91	Southwest	B-II	3	\$133	\$370	\$0	\$0	\$92	\$0	\$595	
Drummond Island Airport	DRM	Eastern UP	B-II	-	-	-	-	-	-	-	-	
DuPont-Lapeer Airport	D95	East Michigan	B-II	-	-	-	-	-	-	-	-	
Evart Municipal Airport	9C8	West Central	B-I	-	-	-	-	-	-	-	-	
Fitch H. Beach Airport	FPK	South Central	B-II	-	-	-	-	-	-	-	-	
Ford Airport – GA	IMT	Central UP	C-III	12	\$21	\$53	\$0	\$26	\$65	\$0	\$164	
Frankfort Dow Memorial Field	FKS	Northwest	B-I	-	-	-	-	-	-	-	-	
Fremont Municipal Airport	FFX	West Central	C-II	-	-	-	-	-	-	-	-	
Gaylord Regional Airport	GLR	Northeast	C-III	54	\$111	\$106	\$57	\$25	\$137	\$96	\$532	

# 2017 MICHIGAN AVIATION SYSTEM PLAN

## Attachment 5: Average Visitor Spending for GA Airports

Airport Name	FAA ID	Region	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
Gerald R. Ford International Airport - GA	GRR	West Michigan	D-IV	-	-	-	-	-	-	-	-	\$293
Gladwin Zettel Memorial Airport	GDW	East Central	B-II	-	-	-	-	-	-	-	-	
Gogebic-Iron County Airport – GA	IWD	Western UP	C-II	11	\$105	\$43	\$12	\$0	\$5	\$0	\$164	
Grand Haven Memorial Airpark	3GM	West Michigan	B-II	-	-	-	-	-	-	-	-	
Gratiot Community Airport	AMN	East Central	C-II	8	\$81	\$49	\$6	\$0	\$8	\$0	\$196	
Grayling Army Airfield	GOV	Northeast	B-II	3	\$67	\$67	\$0	\$0	\$133	\$0	\$267	
Greenville Municipal Airport	6D6	West Michigan	B-II	5	\$80	\$40	\$8	\$0	\$0	\$0	\$128	
Grosse Ile Municipal Airport	ONZ	Detroit Metro	B-II	-	-	-	-	-	-	-	-	
Hanley Field	5Y7	Central UP	A-I	4	\$175	\$125	\$25	\$50	\$50	\$100	\$525	
Harbor Springs Airport	MGN	Northwest	B-II	114	\$263	\$181	\$61	\$64	\$127	\$6	\$702	
Harsens Island Airport	Z92	East Michigan	A-I	-	-	-	-	-	-	-	-	
Hastings Airport	9D9	West Michigan	B-II	-	-	-	-	-	-	-	-	
Hillsdale Municipal Airport	JYM	Southeast	B-II	5	\$80	\$138	\$30	\$60	\$84	\$0	\$392	
Houghton County Memorial Airport – GA	CMX	Western UP	C-III	-	-	-	-	-	-	-	-	
Huron County Memorial Airport	BAX	East Michigan	B-II	6	\$125	\$160	\$18	\$58	\$24	\$0	\$386	
Ionia County Airport	Y70	West Michigan	B-II	-	-	-	-	-	-	-	-	
Iosco County Airport	6D9	Northeast	B-II	11	\$218	\$170	\$109	\$45	\$55	\$0	\$597	
Jack Barstow Airport	IKW	East Central	B-II	-	-	-	-	-	-	-	-	
Jackson County - Reynolds Field	JXN	Southeast	C-II	18	\$19	\$34	\$0	\$6	\$0	\$0	\$59	
James Clements Municipal Airport	3CM	East Central	B-II	16	\$154	\$51	\$8	\$9	\$14	\$13	\$248	
Jerry Tyler Memorial Airport	3TR	Southwest	B-II	12	\$0	\$12	\$0	\$0	\$0	\$8	\$20	
Kalamazoo/Battle Creek International Airport – GA	AZO	Southwest	C-III	2	\$65	\$25	\$0	\$0	\$0	\$0	\$90	
Kirsch Municipal Airport	IRS	Southwest	B-II	-	-	-	-	-	-	-	-	
Lakeview Airport - Griffith Field Airport	13C	West Michigan	B-I	-	-	-	-	-	-	-	-	
Lenawee County Airport	ADG	Southeast	C-II	-	-	-	-	-	-	-	-	
Livingston County - Spencer J. Hardy Airport	OZW	Southeast	C-II	-	-	-	-	-	-	-	-	
Luce County Airport	ERY	Eastern UP	B-II	12	\$103	\$84	\$8	\$0	\$8	\$17	\$220	
Mackinac County Airport	83D	Eastern UP	B-II	2	\$75	\$38	\$0	\$3	\$125	\$0	\$240	
Mackinac Island Airport	MCD	Eastern UP	B-II	39	\$305	\$115	\$33	\$12	\$37	\$0	\$503	
Manistee County - Blacker Airport – GA	MBL	Northwest	C-II	12	\$88	\$321	\$100	\$71	\$192	\$25	\$796	
Marine City Airport	76G	East Michigan	B-I	8	\$38	\$69	\$6	\$25	\$13	\$0	\$150	
Marlette Township Airport	77G	East Michigan	B-I	7	\$103	\$29	\$23	\$37	\$0	\$21	\$213	
Mason County Airport	LDM	West Central	B-II	-	-	-	-	-	-	-	-	

# 2017 MICHIGAN AVIATION SYSTEM PLAN

## Attachment 5: Average Visitor Spending for GA Airports

Airport Name	FAA ID	Region	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
Mason Jewett Field	TEW	South Central	B-II	9	\$0	\$32	\$0	\$0	\$10	\$0	\$42	\$293
MBS International Airport – GA	MBS	East Central	D-IV	-	-	-	-	-	-	-	-	
Menominee - Marinette Twin County Airport	MNM	Central UP	B-II	4	\$88	\$31	\$25	\$0	\$0	\$0	\$144	
Meyers-Diver's Airport	3TE	Southeast	A-I	-	-	-	-	-	-	-	-	
Mount Pleasant Municipal Airport	MOP	East Central	C-II	3	\$70	\$62	\$17	\$83	\$8	\$0	\$240	
Muskegon County Airport - GA	MKG	West Michigan	C-III	10	\$44	\$56	\$25	\$20	\$0	\$0	\$145	
Oakland County International Airport	PTK	Detroit Metro	D-III	-	-	-	-	-	-	-	-	
Oakland Southwest Airport	Y47	Detroit Metro	B-I	1	\$0	\$100	\$0	\$100	\$0	\$0	\$200	
Oakland Troy Airport	VLL	Detroit Metro	B-I	11	\$191	\$114	\$45	\$55	\$36	\$9	\$450	
Oceana County Airport	C04	West Central	B-I	-	-	-	-	-	-	-	-	
Ontonagon County - Schuster Field	OGM	Western UP	B-I	-	-	-	-	-	-	-	-	
Oscoda County Dennis Kauffman Memorial Airport	51M	Northeast	B-I	15	\$0	\$91	\$0	\$51	\$4	\$0	\$145	
Oscoda-Wurtsmith Airport	OSC	Northeast	D-V	5	\$0	\$105	\$0	\$60	\$20	\$0	\$185	
Ottawa Executive Airport	Z98	West Michigan	B-I	-	-	-	-	-	-	-	-	
Owosso Community Airport	RNP	East Michigan	B-II	2	\$0	\$75	\$0	\$38	\$25	\$0	\$138	
Padgham Field	35D	West Michigan	B-II	-	-	-	-	-	-	-	-	
Paul C. Miller-Sparta Airport	8D4	West Michigan	B-II	-	-	-	-	-	-	-	-	
Pellston Regional Airport Of Emmet County - GA	PLN	Northwest	C-II	4	\$250	\$100	\$25	\$0	\$50	\$0	\$425	
Presque Isle County Airport	PZQ	Northeast	B-II	-	-	-	-	-	-	-	-	
Prices Airport	9G2	East Michigan	B-II	-	-	-	-	-	-	-	-	
Ray Community Airport	57D	Detroit Metro	A-I	2	\$182	\$0	\$0	\$0	\$0	\$0	\$182	
Riverview Airport	08C	West Michigan	B-I	1	\$0	\$50	\$0	\$0	\$0	\$0	\$50	
Roben-Hood Airport	RQB	West Central	B-II	22	\$78	\$79	\$5	\$6	\$36	\$23	\$227	
Romeo State Airport	D98	Detroit Metro	B-II	1	\$0	\$300	\$0	\$100	\$0	\$0	\$400	
Roscommon County, Blodgett Memorial Airport	HTL	Northeast	B-II	-	-	-	-	-	-	-	-	
Saginaw County H. W. Browne Airport	HYX	East Central	C-II	4	\$465	\$215	\$81	\$75	\$75	\$0	\$911	
Sandusky City Airport	Y83	East Michigan	B-I	6	\$0	\$32	\$0	\$17	\$8	\$0	\$57	
Sault Ste. Marie Municipal Airport/Sanderson Field	ANJ	Eastern UP	B-II	6	\$167	\$110	\$8	\$33	\$67	\$167	\$552	
Sawyer International Airport – GA	SAW	Central UP	D-III	8	\$175	\$134	\$31	\$38	\$56	\$67	\$500	
Schoolcraft County Airport	ISQ	Central UP	C-II	2	\$113	\$75	\$25	\$0	\$0	\$0	\$213	
South Haven Area Regional Airport	LWA	Southwest	B-II	20	\$305	\$125	\$22	\$25	\$33	\$0	\$509	
Southwest Michigan Regional Airport	BEH	Southwest	C-II	-	-	-	-	-	-	-	-	

# 2017 MICHIGAN AVIATION SYSTEM PLAN

## Attachment 5: Average Visitor Spending for GA Airports

Airport Name	FAA ID	Region	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	Avg.
St. Clair County International Airport	PHN	East Michigan	C-II	23	\$172	\$104	\$48	\$12	\$13	\$0	\$349	\$293
Stambaugh Airport	Y73	Western UP	A-I	-	-	-	-	-	-	-	-	
Three Rivers Municipal, Dr. Haines Airport	HAI	Southwest	B-II	-	-	-	-	-	-	-	-	
Toledo Suburban Airport	DUH	Southeast	B-I	13	\$110	\$162	\$46	\$12	\$27	\$0	\$355	
Tuscola Area Airport	CFS	East Michigan	B-II	-	-	-	-	-	-	-	-	
W. K. Kellogg Airport	BTL	Southwest	D-III	13	\$177	\$22	\$23	\$23	\$8	\$0	\$252	
West Branch Community Airport	Y31	Northeast	B-II	30	\$85	\$95	\$63	\$2	\$67	\$0	\$312	
West Michigan Regional Airport	BIV	West Michigan	D-II	6	\$174	\$83	\$13	\$0	\$83	\$250	\$604	
Wexford County Airport	CAD	Northwest	C-II	7	\$0	\$31	\$0	\$0	\$0	\$29	\$60	
White Cloud Airport	42C	West Central	A-I	4	\$0	\$8	\$0	\$0	\$0	\$0	\$8	
Willow Run Airport	YIP	Detroit Metro	D-IV	6	\$100	\$67	\$42	\$0	\$0	\$0	\$208	
Woolsey Memorial Airport	5D5	Northwest	A-I	-	-	-	-	-	-	-	-	

Source: General Aviation Visitor Surveys, Michigan Aviation System Plan 2017.

Note: Airports with spending categories labeled with a dash (-) either means the airport did not submit any visitor surveys, or the submitted surveys did not provide any spending information.



**Attachment 6: Average Visitor Spending by MDOT Prosperity Region, FAA ARC, and Type**

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# 2017 MICHIGAN AVIATION SYSTEM PLAN

**Attachment 6** provides a summary of visitor spending collected through the survey effort at the 108 MASP airports, sorted by a combination of MDOT prosperity region, FAA ARC, and airport type.

**Attachment 6: Average Visitor Spending by MDOT Prosperity Region, FAA ARC and Type**

Region	Airport	FAA ID	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	ARC	FAA ARC Avg.	Region Avg.
Central UP	Hanley Field	5Y7	A-I	4	\$175	\$125	\$25	\$50	\$50	\$100	\$525	A-I	\$525	\$357
	Menominee - Marinette Twin County Airport	MNM	B-II	4	\$88	\$31	\$25	\$0	\$0	\$0	\$144	B-II	\$144	
	Schoolcraft County Airport	ISQ	C-II	2	\$113	\$75	\$25	\$0	\$0	\$0	\$213	C-II	\$213	
	Delta County Airport – GA	ESC	C-III	-	-	-	-	-	-	-	-	C-III GA	\$164	
	Ford Airport – GA	IMT	C-III	12	\$21	\$53	\$0	\$26	\$65	\$0	\$164	C-III CS	\$479	
	Ford Airport – CS	IMT	C-III	-	-	-	-	-	-	-	-		\$479	
	Delta County Airport – CS	ESC	C-III	17	\$172	\$129	\$66	\$41	\$26	\$44	\$479		\$479	
	Sawyer International Airport – CS	SAW	D-III	17	\$181	\$141	\$114	\$0	\$25	\$11	\$472	D-III CS	\$472	
	Sawyer International Airport – GA	SAW	D-III	8	\$175	\$134	\$31	\$38	\$56	\$67	\$500	D-III GA	\$500	
Detroit Metro	Canton-Plymouth Mettetal Airport	1D2	A-I	1	\$0	\$100	\$0	\$0	\$50	\$150	\$300	A-I	\$214	\$321
	Ray Community Airport	57D	A-I	2	\$182	\$0	\$0	\$0	\$0	\$0	\$182	B-I	\$325	
	Oakland Southwest Airport	Y47	B-I	1	\$0	\$100	\$0	\$100	\$0	\$0	\$200		\$325	
	Oakland Troy Airport	VLL	B-I	11	\$191	\$114	\$45	\$55	\$36	\$9	\$450	B-II	\$400	
	Grosse Ile Municipal Airport	ONZ	B-II	-	-	-	-	-	-	-	-		\$400	
	Romeo State Airport	D98	B-II	1	\$0	\$300	\$0	\$100	\$0	\$0	\$400	C-II	\$805	
	Coleman A. Young Municipal Airport	DET	C-II	10	\$400	\$265	\$140	\$0	\$0	\$0	\$805	D-III	-	
	Oakland County International Airport	PTK	D-III	-	-	-	-	-	-	-	-	D-IV	\$208	
	Willow Run Airport	YIP	D-IV	6	\$100	\$67	\$42	\$0	\$0	\$0	\$208	D-V GA	-	
	Detroit Metropolitan Wayne County Airport – GA	DTW	D-V	-	-	-	-	-	-	-	-	D-V CS	\$25	
	Detroit Metropolitan Wayne County Airport – CS	DTW	D-V	1	\$0	\$25	\$0	\$0	\$0	\$0	\$25			

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Attachment 6: Average Visitor Spending by MDOT Prosperity Region, FAA ARC and Type

Region	Airport	FAA ID	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	ARC	FAA ARC Avg.	Region Avg.
East Central	Clare Municipal Airport	48D	B-II	15	\$93	\$62	\$4	\$3	\$33	\$0	\$196	B-II	\$222	\$358
	Gladwin Zettel Memorial Airport	GDW	B-II	-	-	-	-	-	-	-	-			
	Jack Barstow Airport	IKW	B-II	-	-	-	-	-	-	-	-			
	James Clements Municipal Airport	3CM	B-II	16	\$154	\$51	\$8	\$9	\$14	\$13	\$248			
	Gratiot Community Airport	AMN	C-II	8	\$81	\$49	\$6	\$0	\$8	\$0	\$196	C-II	\$449	
	Mount Pleasant Municipal Airport	MOP	C-II	3	\$70	\$62	\$17	\$83	\$8	\$0	\$240			
	Saginaw County H. W. Browne Airport	HYX	C-II	4	\$465	\$215	\$81	\$75	\$75	\$0	\$911			
	MBS International Airport – CS	MBS	D-IV	-	-	-	-	-	-	-	-			
	MBS International Airport – GA	MBS	D-IV	-	-	-	-	-	-	-	-	D-IV GA	-	
East Michigan	Harsens Island Airport	Z92	A-I	-	-	-	-	-	-	-	-	A-I	-	\$257
	Marine City Airport	76G	B-I	8	\$38	\$69	\$6	\$25	\$13	\$0	\$150	B-I	\$140	
	Marlette Township Airport	77G	B-I	7	\$103	\$29	\$23	\$37	\$0	\$21	\$213			
	Sandusky City Airport	Y83	B-I	6	\$0	\$32	\$0	\$17	\$8	\$0	\$57			
	DuPont-Lapeer Airport	D95	B-II	-	-	-	-	-	-	-	-	B-II	\$262	
	Huron County Memorial Airport	BAX	B-II	6	\$125	\$160	\$18	\$58	\$24	\$0	\$386			
	Owosso Community Airport	RNP	B-II	2	\$0	\$75	\$0	\$38	\$25	\$0	\$138			
	Prices Airport	9G2	B-II	-	-	-	-	-	-	-	-			
	Tuscola Area Airport	CFS	B-II	-	-	-	-	-	-	-	-			
	St Clair County International Airport	PHN	C-II	23	\$172	\$104	\$48	\$12	\$13	\$0	\$349	C-II	\$349	
	Bishop International Airport – CS	FNT	D-IV	180	\$33	\$118	\$36	\$10	\$16	\$0	\$214	D-IV CS	\$214	
	Bishop International Airport – GA	FNT	D-IV	1	\$300	\$100	\$50	\$0	\$100	\$0	\$550	D-IV GA	\$550	
Eastern UP	Bois Blanc Island Airport	6Y1	B-I	2	\$75	\$50	\$0	\$0	\$0	\$0	\$125	B-I	\$125	\$286
	Drummond Island Airport	DRM	B-II	-	-	-	-	-	-	-	-	B-II	\$379	
	Luce County Airport	ERY	B-II	12	\$103	\$84	\$8	\$0	\$8	\$17	\$220			

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Attachment 6: Average Visitor Spending by MDOT Prosperity Region, FAA ARC and Type

Region	Airport	FAA ID	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	ARC	FAA ARC Avg.	Region Avg.
Eastern UP	Mackinac County Airport	83D	B-II	2	\$75	\$38	\$0	\$3	\$125	\$0	\$240	B-II	\$379	\$286
	Mackinac Island Airport	MCD	B-II	39	\$305	\$115	\$33	\$12	\$37	\$0	\$503			
	Sault Ste. Marie Municipal Airport/Sanderson Field	ANJ	B-II	6	\$167	\$110	\$8	\$33	\$67	\$167	\$552			
	Chippewa County International Airport – CS	CIU	D-III	-	-	-	-	-	-	-	-	D-III CS	-	
	Chippewa County International Airport – GA	CIU	D-III	27	\$11	\$17	\$10	\$4	\$27	\$4	\$73	D-III GA	\$73	
Northeast	Atlanta Municipal Airport	Y93	B-I	-	-	-	-	-	-	-	-	B-I	\$145	\$342
	Oscoda County Dennis Kauffman Memorial Airport	51M	B-I	15	\$0	\$91	\$0	\$51	\$4	\$0	\$145			
	Cheboygan County Airport	SLH	B-II	4	\$78	\$45	\$0	\$0	\$80	\$0	\$203	B-II	\$345	
	Grayling Army Airfield	GOV	B-II	3	\$67	\$67	\$0	\$0	\$133	\$0	\$267			
	Iosco County Airport	6D9	B-II	11	\$218	\$170	\$109	\$45	\$55	\$0	\$597			
	Presque Isle County Airport	PZQ	B-II	-	-	-	-	-	-	-	-			
	Roscommon County, Blodgett Memorial Airport	HTL	B-II	-	-	-	-	-	-	-	-			
	West Branch Community Airport	Y31	B-II	30	\$85	\$95	\$63	\$2	\$67	\$0	\$312			
	Gaylord Regional Airport	GLR	C-III	54	\$111	\$106	\$57	\$25	\$137	\$96	\$532	C-III	\$532	
	Alpena County Regional Airport – CS	APN	C-IV	11	\$68	\$129	\$74	\$55	\$153	\$15	\$494	C-IV CS	\$494	
	Alpena County Regional Airport – GA	APN	C-IV	-	-	-	-	-	-	-	-	C-IV GA	-	
	Oscoda-Wurtsmith Airport	OSC	D-V	5	\$0	\$105	\$0	\$60	\$20	\$0	\$185	D-V	\$185	
Northwest	Woolsey Memorial Airport	5D5	A-I	-	-	-	-	-	-	-	-	A-I	-	\$364
	Frankfort Dow Memorial Field	FKS	B-I	-	-	-	-	-	-	-	-	B-I	-	
	Antrim County Airport	ACB	B-II	31	\$100	\$102	\$19	\$77	\$75	\$24	\$398	B-II	\$387	
	Beaver Island Airport	SJX	B-II	-	-	-	-	-	-	-	-			
	Charlevoix Municipal Airport – CS	CVX	B-II	-	-	-	-	-	-	-	-			
	Charlevoix Municipal Airport – GA	CVX	B-II	1	\$0	\$40	\$0	\$0	\$20	\$0	\$60			

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Attachment 6: Average Visitor Spending by MDOT Prosperity Region, FAA ARC and Type

Region	Airport	FAA ID	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	ARC	FAA ARC Avg.	Region Avg.	
Northwest	Harbor Springs Airport	MGN	B-II	114	\$263	\$181	\$61	\$64	\$127	\$6	\$702	B-II	\$387	\$364	
	Manistee County - Blacker Airport – GA	MBL	C-II	12	\$88	\$321	\$100	\$71	\$192	\$25	\$796	C-II	\$465		
	Pellston Regional Airport Of Emmet County - GA	PLN	C-II	4	\$250	\$100	\$25	\$0	\$50	\$0	\$425				
	Wexford County Airport	CAD	C-II	7	\$0	\$31	\$0	\$0	\$0	\$29	\$60				
	Manistee County - Blacker Airport – CS	MBL	C-II	51	\$60	\$272	\$37	\$101	\$102	\$5	\$577				
	Pellston Regional Airport Of Emmet County - CS	PLN	C-II	-	-	-	-	-	-	-	-				
	Cherry Capital Airport – CS	TVC	C-III	183	\$289	\$247	\$76	\$70	\$69	\$1	\$752	C-III CS	\$752		
	Cherry Capital Airport – GA	TVC	C-III	23	\$39	\$46	\$7	\$0	\$11	\$0	\$103	C-III GA	\$103		
South Central	Abrams Municipal Airport	4D0	B-II	-	-	-	-	-	-	-	-	B-II	\$42	\$369	
	Fitch H. Beach Airport	FPK	B-II	-	-	-	-	-	-	-	-				
	Mason Jewett Field	TEW	B-II	9	\$0	\$32	\$0	\$0	\$10	\$0	\$42				
	Capital Region International Airport – CS	LAN	D-IV	28	\$175	\$164	\$30	\$24	\$147	\$18	\$558	D-IV CS	\$558		
	Capital Region International Airport – GA	LAN	D-IV	28	\$136	\$188	\$53	\$28	\$30	\$71	\$507	D-IV GA	\$507		
Southeast	Meyers-Diver's Airport	3TE	A-I	-	-	-	-	-	-	-	-	A-I	-	\$227	
	Toledo Suburban Airport	DUH	B-I	13	\$110	\$162	\$46	\$12	\$27	\$0	\$355	B-I	\$355		
	Ann Arbor Municipal Airport	ARB	B-II	2	\$0	\$50	\$0	\$25	\$25	\$0	\$100	B-II	\$246		
	Custer Airport	TTF	B-II	-	-	-	-	-	-	-	-				
	Hillsdale Municipal Airport	JYM	B-II	5	\$80	\$138	\$30	\$60	\$84	\$0	\$392				
	Jackson County - Reynolds Field	JXN	C-II	18	\$19	\$34	\$0	\$6	\$0	\$0	\$59	C-II	\$59		
	Lenawee County Airport	ADG	C-II	-	-	-	-	-	-	-	-				
	Livingston County - Spencer J. Hardy Airport	OZW	C-II	-	-	-	-	-	-	-	-				
Southwest	Branch County Memorial Airport	OEB	B-II	-	-	-	-	-	-	-	-	B-II	\$285	\$247	
	Brooks Field Airport	RMV	B-II	1	\$0	\$15	\$0	\$0	\$0	\$0	\$15				
	Dowagiac Municipal Airport	C91	B-II	3	\$133	\$370	\$0	\$0	\$92	\$0	\$595				

2017 MICHIGAN AVIATION SYSTEM PLAN

Attachment 6: Average Visitor Spending by MDOT Prosperity Region, FAA ARC and Type

Region	Airport	FAA ID	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	ARC	FAA ARC Avg.	Region Avg.
Southwest	Jerry Tyler Memorial Airport	3TR	B-II	12	\$0	\$12	\$0	\$0	\$0	\$8	\$20	B-II	\$285	\$247
	Kirsch Municipal Airport	IRS	B-II	-	-	-	-	-	-	-	-			
	South Haven Area Regional Airport	LWA	B-II	20	\$305	\$125	\$22	\$25	\$33	\$0	\$509			
	Three Rivers Municipal, Dr. Haines Airport	HAI	B-II	-	-	-	-	-	-	-	-			
	Southwest Michigan Regional Airport	BEH	C-II	-	-	-	-	-	-	-	-	C-II	-	
	Kalamazoo/Battle Creek International Airport – CS	AZO	C-III	-	-	-	-	-	-	-	-	C-III CS	-	
	Kalamazoo/Battle Creek International Airport – GA	AZO	C-III	2	\$65	\$25	\$0	\$0	\$0	\$0	\$90	C-III GA	\$90	
	W. K. Kellogg Airport	BTL	D-III	13	\$177	\$22	\$23	\$23	\$8	\$0	\$252	D-III	\$252	
West Central	White Cloud Airport	42C	A-I	4	\$0	\$8	\$0	\$0	\$0	\$0	\$8	A-I	\$8	\$118
	Evart Municipal Airport	9C8	B-I	-	-	-	-	-	-	-	-	B-I	-	
	Oceana County Airport	C04	B-I	-	-	-	-	-	-	-	-			
	Baldwin Municipal Airport	7D3	B-II	-	-	-	-	-	-	-	-	B-II	\$227	
	Mason County Airport	LDM	B-II	-	-	-	-	-	-	-	-			
	Roben-Hood Airport	RQB	B-II	22	\$78	\$79	\$5	\$6	\$36	\$23	\$227			
	Fremont Municipal Airport	FFX	C-II	-	-	-	-	-	-	-	-	C-II	-	
West Michigan	Lakeview Airport - Griffith Field Airport	13C	B-I	-	-	-	-	-	-	-	-	B-I	\$50	\$369
	Ottawa Executive Airport	Z98	B-I	-	-	-	-	-	-	-	-			
	Riverview Airport	08C	B-I	1	\$0	\$50	\$0	\$0	\$0	\$0	\$50			
	Grand Haven Memorial Airpark	3GM	B-II	-	-	-	-	-	-	-	-	B-II	\$128	
	Greenville Municipal Airport	6D6	B-II	5	\$80	\$40	\$8	\$0	\$0	\$0	\$128			
	Hastings Airport	9D9	B-II	-	-	-	-	-	-	-	-			
	Ionia County Airport	Y70	B-II	-	-	-	-	-	-	-	-			
	Padgham Field	35D	B-II	-	-	-	-	-	-	-	-			
	Paul C. Miller-Sparta Airport	8D4	B-II	-	-	-	-	-	-	-	-			
	Muskegon County Airport - CS	MKG	C-III	5	\$240	\$200	\$115	\$90	\$228	\$0	\$873	C-III CS	\$873	

# 2017 MICHIGAN AVIATION SYSTEM PLAN

## Attachment 6: Average Visitor Spending by MDOT Prosperity Region, FAA ARC and Type

Region	Airport	FAA ID	FAA ARC	# of Surveys Received	Lodging	Food & Bev.	Local Trans.	Entertain.	Retail	Other	Total	ARC	FAA ARC Avg.	Region Avg.
West Michigan	Muskegon County Airport - GA	MKG	C-III	10	\$44	\$56	\$25	\$20	\$0	\$0	\$145	C-III GA	\$145	\$369
	West Michigan Regional Airport	BIV	D-II	6	\$174	\$83	\$13	\$0	\$83	\$250	\$604	D-II	\$604	
	Gerald R. Ford International Airport - CS	GRR	D-IV	249	\$191	\$131	\$56	\$18	\$10	\$10	\$416	D-IV CS	\$416	
	Gerald R. Ford International Airport - GA	GRR	D-IV	-	-	-	-	-	-	-	-	D-IV GA	-	
Western UP	Stambaugh Airport	Y73	A-I	-	-	-	-	-	-	-	-	A-I	-	\$164
	Ontonagon County - Schuster Field	OGM	B-I	-	-	-	-	-	-	-	-	B-I	-	
	Gogebic-Iron County Airport – CS	IWD	C-II	-	-	-	-	-	-	-	-	C-II CS	-	
	Gogebic-Iron County Airport – GA	IWD	C-II	11	\$105	\$43	\$12	\$0	\$5	\$0	\$164	C-II GA	\$164	
	Houghton County Memorial Airport – CS	CMX	C-III	-	-	-	-	-	-	-	-	C-III CS	-	
	Houghton County Memorial Airport – GA	CMX	C-III	-	-	-	-	-	-	-	-	C-III GA	-	

Source: Commercial Service and General Aviation Visitor Surveys, Michigan Aviation System Plan 2017.


Note: Airports with spending categories labeled with a dash (-) either means the airport did not submit any visitor surveys, or the submitted surveys did not provide any spending information.



**Attachment 7: Commercial Service Visitor Survey**

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Attachment 7 – Commercial Service Visitor Survey



## Commercial Service Visitor Survey

### Michigan Aviation System Plan 2017

[www.mdotmasp.com](http://www.mdotmasp.com)



The Michigan Department of Transportation, Office of Aeronautics recently launched a study to measure the value of Michigan airports to their communities and to the State. An important part of this study involves surveying passengers. The Airport Visitor Survey is intended to gain an understanding of how visitors use the airports of the State, and the economic benefit that visitors contribute to Michigan. Please feel free to complete the survey online if you prefer, at: [https://www.surveymonkey.com/r/MASP\\_CS\\_Visitor\\_Survey](https://www.surveymonkey.com/r/MASP_CS_Visitor_Survey)

Please return surveys by Friday, September 9<sup>th</sup>, via online or by mailing this survey

- Please identify the airport where you received this survey: (Example: 3-Letter ID, City, or Airport Name)  
\_\_\_\_\_
- At the time you are filling out this survey, are you (check one):  
☐ Arriving      ☐ Departing
- With respect to the State of Michigan, are you a (check one):  
☐ Visitor      ☐ Resident
- Please identify the number of people traveling in your party in each category:  
☐ Infants – 12 years      ☐ 12 – 18 years      ☐ Adults
- What is the primary purpose of your trip (check one)?  
☐ Business      ☐ Convention      ☐ Personal      ☐ Vacation      ☐ Other (specify) \_\_\_\_\_
- If your trip is business related, please answer the following questions:  
 6a. What is the major product or service provided by your company/entity?  
 (examples: retail, manufacturing, government, etc.)  
 \_\_\_\_\_  
 6b. What is the major product or service provided by the company/entity you are visiting?  
 (examples: retail, manufacturing, government, etc.)  
 \_\_\_\_\_  
 6c. Please list the name of the company/entity you are visiting  
 \_\_\_\_\_
- Are you here for a special event? If so, please identify:  
 \_\_\_\_\_
- How many nights did you, or will you spend in Michigan during this trip? \_\_\_\_\_  
 If staying one or more nights, please indicate the type of lodging:  
☐ Commercial lodging (Hotel/Motel, Bed & Breakfast, short-term condo rental)  
☐ Private residence  
☐ Other (specify) \_\_\_\_\_
- Approximately how much money did you, or will you spend during this trip? Please list only those expenditures made in the State of Michigan. If traveling as a family or group, if possible, please estimate the total expenditures made by everyone in your party as noted in question 4. Please round to the nearest dollar.
 


Airfare	\$	
Lodging:	\$	
Food & Beverage:	\$	
Local Transportation (rental car, taxis, etc.):	\$	
Entertainment:	\$	
Retail:	\$	
Other (please specify): _____	\$	

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**Attachment 8: GA Visitor Survey**

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Attachment 8 – GA Visitor Survey



## General Aviation Visitor Survey

### Michigan Aviation System Plan 2017

[www.mdotmasp.com](http://www.mdotmasp.com)



The Michigan Department of Transportation, Office of Aeronautics recently launched a study to measure the value of Michigan airports to their communities and to the State. An important part of this study involves surveying passengers. The Airport Visitor Survey is intended to gain an understanding of how visitors use the airports of the State, and the economic benefit that visitors contribute to Michigan. Please feel free to complete the survey online if you prefer, at: [https://www.surveymonkey.com/r/MASP\\_GA\\_Visitor\\_Survey](https://www.surveymonkey.com/r/MASP_GA_Visitor_Survey)

Please return surveys by Friday, September 9<sup>th</sup>, via online or mailing this survey

- Please identify the airport where you received this survey: (Example: 3-Letter ID, City, or Airport Name)  
\_\_\_\_\_
- At the time you are filling out this survey, are you (check one):      ☐ Arriving      ☐ Departing
- With respect to the State of Michigan, are you a (check one):      ☐ Visitor      ☐ Resident
- Please identify the number of people traveling in your party in each category:  
                          ☐ Infants – 12 years      ☐ 12 – 18 years      ☐ Adults
- What is the primary purpose of your trip (check one)?      ☐ Business      ☐ Pleasure  
    ☐ Other (specify) \_\_\_\_\_
- If your trip is business related, please answer the following questions:
  - What is the major product or service provided by your company/entity? (examples: retail, manufacturing, government, etc.)  
\_\_\_\_\_
  - What is the major product or service provided by the company/entity you are visiting? (example: retail, manufacturing, government, etc.)  
\_\_\_\_\_
  - Please list the name of the company/entity you are visiting  
\_\_\_\_\_
- Are you here for a special event? If so, please identify:  
\_\_\_\_\_
- How many nights did you, or will you spend in Michigan during this trip? \_\_\_\_\_  
 If staying one or more nights, please indicate the type of lodging:  
☐ Commercial lodging (Hotel/Motel, Bed & Breakfast, short-term condo rental)  
☐ Private residence  
☐ Other (specify) \_\_\_\_\_
- Approximately how much money did you, or will you spend during this trip? Please list only those expenditures made in the State of Michigan. If traveling as a family or group, if possible, please estimate the total expenditures made by everyone in your party as noted in question 4. Please round to the nearest whole number.
 

Aircraft (charter, fuel, landing fees, etc.)	\$	
Lodging:	\$	
Food & Beverage:	\$	
Local Transportation (rental car, taxis, etc.):	\$	
Entertainment:	\$	
Retail:	\$	
Other (please specify): _____	\$	

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## Appendix D: Airport CBA Reports



# Appendix D: Airport CBA Reports

Based upon a 2017 study, the contribution of Michigan airports to the state economy is nearly \$22 billion in business sales and budget expenditures (economic output) that includes more than \$7 billion in labor income to Michigan residents and supports almost 184,000 full-time and part-time jobs across the state. These totals are based on findings from 114 of the nearly 230 airports in Michigan. Surveys were distributed to 111 airports that are identified as Tier 1 and Tier 2 levels (see **Page D-3** through **Page D-7** for a copy of the survey) and three Tier 1 airports provided their own recently completed economic studies that were used as part of the calculation.

Findings from the survey effort of the 111 airports were entered in to the MDOT Office of Aeronautics' (AERO) Community Benefit Assessment (CBA) Tool. The CBA enables the Office of Aeronautics to record aviation activities and the direct economic contributions of Michigan airports, including: (1) aviation reliant and non-aviation reliant activities on airports; (2) off-airport related and/or reliant activity; (3) economic impacts to Michigan from out-of-state visitor spending facilitated by airports (and separated from #2 to avoid double counting); and (4) the impacts of construction on airport.

Reports generated by the CBA list each of these four segments of Michigan's aviation economy and separate direct impacts (initial transactions) from the multiplier impacts of both sales by Michigan suppliers that support the direct impacts, and spending of wages earned from the direct and supplier transactions (see sample CBA Report on the following page). The CBA analysis was completed for 111 airports. In addition, Detroit Metropolitan Wayne County Gerald Ford International, and Willow Run had completed economic impact studies in 2013 (DTW) and 2014 (GRR and YIP). To minimize costs and burdens on these airports, AERO used these studies and the totals were added to the findings from the CBA base analysis.

	<b>Jobs</b>	<b>Labor Income</b>	<b>Output</b>
111 System Airports with CBA Reports	55,757	\$2,244,280,000	\$7,906,093,000
<b>Airport Economic Impact Studies Provided for Airports without CBA Reports<sup>1</sup></b>			
Grand Rapids - Gerald R Ford Int'l (GRR) <sup>2</sup>	40,582	\$1,537,670,000	\$3,244,928,000
Detroit – Willow Run (YIP) <sup>3</sup>	950	\$41,372,000	\$126,164,000
Detroit – Detroit Metro Wayne County (DTW) <sup>4</sup>	86,308	\$3,226,185,000	\$10,630,255,000
<b>TOTAL</b>	<b>183,597</b>	<b>7,049,507,000</b>	<b>\$21,907,440,000</b>

Notes:

<sup>1</sup>Dollars updated to 2016 using BEA price deflators for GDP

<sup>2</sup>Study published January, 2015. Dollars updated from 2014 to 2016. **Study region:** Barry, Kent, Montcalm, Muskegon and Ottawa counties.

<sup>3</sup>Study published in 2014. Dollars updated from 2014 to 2016. **Study region:** Genesee, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne counties.

<sup>4</sup>Study published in 2013. Dollars updated from 2013 to 2016. **Study region:** State of Michigan.

Source: CBA Tool, Economic Impact Studies from GRR, YIP, DTW

The CBA Reports that were generated by the CBA Tool include the following components outlined below:

This section includes information about the airport, such as location, ownership, date the report was run, airport features (runway length, width, approach), evaluation year, and activity statistics. The total passengers listed in this section include both GA and commercial service passengers.

### On-going Contribution to the County Economy

This section includes economic impact data for the airport, including:

- **Direct effects:** jobs, income and output as a direct result of on and off-airport activity. For example, jobs at the airport and in retail and services that support aviation activity (such as airport managers, FBO staff, etc.) are counted here.
- **Supplier and income re-spending effects:** indirect and induced jobs, income and output that result from the recycling of dollars in the community. For example, the spending of airport employee income on consumer purchases that leads to sales at other businesses that support other jobs & income to workers
- **Total Impact:** a combination of direct and indirect impacts in the form of jobs, income and output.
- **Tax Generated by Aviation-Related Activities:** income tax levied on wages of jobs supported by aviation activity and sales tax levied on visitor spending and more. Fuel tax is also calculated for airports that sell fuel and is based on gallons of fuel sold.

All impacts shown are based on information provided by each airport manager on jobs reliant on their airport and annual activity, such as the number of operations and visitor portion of passengers. This information is collected by MDOT on a periodic basis.

Michigan Department of Transportation - Office of Aeronautics

## CBA Community Benefits Assessment

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### Airport Role in Economy

Airport: <b>Rich Beach Hens</b> City: <b>Charlotte</b> Current FAA ARC: <b>8-E</b> County: <b>Essex</b> Ownership: <b>Public</b> Scenario: <b>Current</b> Service Area: <b>Essex</b> Run Date: <b>3/28/2017 11:46:18 AM</b>	MASP Tier: <b>Tier 2</b> MASP ARC: <b>8-E</b>	Evaluated for Year: <b>2016</b>  <b>Activity Data</b> Total Operations: <b>5,760</b> Total Aircraft: <b>26</b> Total Passengers: <b>20,805</b> Total Cargo Tons: <b>0</b>
--	--	---

Airport Features	
Primary Runway Length:	<b>3,510</b>
Primary Runway Width:	<b>75</b>
Instrument Approach:	<b>Non-Enroute</b>

### On-going Contributions to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
1. Airport (incl. FBO and air-related tenants)	0	0	\$683,000	\$683,000	\$2,662,000	\$2,662,000
2. Airport tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	4	4	\$100,000	\$100,000	\$110,000	\$110,000
4. Off-Site: Mail or Cargo Related	17	17	\$1,362,000	\$1,362,000	\$22,489,000	\$22,489,000
Supplier and income re-spending effects:						
5. -due to Airport and Related Activities**	0	10	\$416,000	\$416,000	\$1,111,000	\$1,572,000
6. -due to Visitor Spending	1	2	\$31,000	\$69,000	\$94,000	\$236,000
7. -due to Reliance on Air Transport	17	50	\$647,000	\$2,112,000	\$1,920,000	\$13,134,000
8. Total Impact from Airport Activities	55	91	\$3,229,000	\$4,790,000	\$28,586,000	\$40,297,000

Tax Generated by Aviation-Related Activity	
	At-Airport
9. State Income Tax	\$28,000
10. State Sales Tax	\$254,000
11. Tax generated by fuel sales	\$0
	Off-Site
	\$79,000
	\$1,382,000

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,733	8,734

2017 MASP Goals		Other Attributes	
Serve Significant Population Centers	Tier 2		
Serve Significant Business Centers	Tier 2		
Serve Significant Tourism/Convention Centers	Tier 2		
Provide Access to the General Population	Tier 3		
Provide Adequate Land Area Coverage	Tier 3		
Preserve Regional Capacity	Tier 2		
Serve Seasonally Isolated Areas	Tier 3		
Inclusion in NPSAS			

\* on the Service-area economy as defined by the user  
\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code  
 NPSAS = National Plan of Integrated Airport Systems  
 Average visitor spending (per visitor): \$42.00  
 Visitor spending source: Prosperity Region & Class

Page 1 of 1      Developed by Economic Development Research Group, Inc., Broken, PA

### Annual Capital Expenditures

This section includes a breakdown of annual capital expenditures into federal, state and local amounts. The year for which the capital expenditures are reported is also provided.

### 2017 MASP Goals

This section includes the airport's role in meeting each of the 8 goals established in the 2017 Michigan Aviation System Plan (MASP).

### Other Attributes

Any other attributes or pertinent notes about the CBA Report are also included in this section.

The following pages (**Pages D-3 – D-7**) include a copy of the CBA survey and associated instructions that were distributed to the 111 airport managers of Tier 1 and Tier 2 airports. Information provided on this CBA survey was entered into the CBA Tool to generate the CBA Reports that are included in this appendix, starting on **Page D-9**.

## Community Benefits Assessment Worksheet

### Instructions

Please use the enclosed instructions to guide you through completing the Community Benefits Assessment (CBA) Worksheet. Your responses are part of a larger effort to update the Michigan Aviation System Plan (MASP) and to refine the Community Benefits Assessment model which is used to determine what economic impact your airport has on the local community and the State of Michigan.

The information obtained through this worksheet will be used to identify:

- On and off-airport airport-related employment dedicated to airport management, operation, and administration
- On-airport tenants/business
- Off airport businesses whose operation is reliant on the airport
- The portion of the airport's annual general aviation aircraft arrivals that are visiting in nature, including types (fleet mix) of visiting aircraft they serve and the number of passengers/pilots that typically arrive

This information may be summarized to develop the technical report, the executive summaries and the individual airport reports. The data collected in this task will also be used as a basis to document airport users. Collecting and documenting examples of the ways each airport supports the communities it serves is important to educating each community and others on all airport benefits.

**Please complete the CBA Worksheet and return it no later than September 9<sup>th</sup>, 2018.**

Completed worksheets should be sent to:

*By US Mail:*

Michigan Department of Transportation  
Office of Aeronautics  
Attn: Linn Smith  
2700 Port Lansing Rd  
Lansing, MI 48906

*Electronically by email:*

[SmithL50@michigan.gov](mailto:SmithL50@michigan.gov)

If you have any questions, please contact Stephanie Ward at our consultant, Mead & Hunt, Inc. Stephanie can be reached by email at [stephanie.ward@meadhunt.com](mailto:stephanie.ward@meadhunt.com) or by phone directly at 517-908-3121. Thank you for completing the CBA Worksheet.

## Community Benefits Assessment Worksheet Instructions

### Table A, Table B, and Table C – Jobs on, related to, or Reliant on the Airport

**Instructions:** Enter the number of jobs for each category. The description column is used to provide a brief explanation or detail about the jobs – enter the name or type of the company, agency, or other employer that is responsible for the jobs. It may be necessary to contact individual companies or agencies to determine the number of jobs. How do you determine airport users who may contribute to these jobs? You may have on-airport businesses such as your FBO or based aircraft tenants who use their aircraft for business, you may have businesses in the community that charter flights or companies that have business partners fly in to your airport to do business in your community. You may want to reach out to your local chamber of commerce or economic development group to see if they know of users. You will likely need to make contact with these businesses/groups to find out how they are impacted by their use of the airport. As an example, if a business has a based aircraft at your airport, you should contact them and ask how many employees they attribute to the use of the airport. This may just be the pilot of the aircraft or they may say that 40% or 50% of their business occurs because they are able to fly to conduct business. In this case, you will want to ask them how many employees they would attribute to that 40% or 50% of dependence on the airport and report that as the number of jobs.

**Please note:** The number of jobs should be total jobs (even if they are not full-time). Each job should only be counted once in the worksheet. For example, do not count the exact same job/position for: local government – aviation related job at the airport AND municipal offices – non-aviation related jobs at the airport.

**Table A – Aviation Related Jobs at the Airport:** This table includes jobs that are directly related to supporting aviation operations and activity at the airport. **Exhibit 1** contains directions and a brief description of what should be entered in each category.

#### Exhibit 1 – Table A Instructions

<b>A1.</b> Federal Government (FAA, TSA, CBP)	Enter federal government jobs at your airport that directly support aviation. This includes agencies such as Federal Aviation Administration (FAA), Transportation Security Administration (TSA), and Customs and Border Protection (CBP).
<b>A2.</b> State and Local Government	Enter the number of jobs in local government at your airport. This includes jobs in areas such as airport management, operations, and maintenance. The employer may include a municipal government, airport authority or commission.
<b>A3.</b> FBO and Private Contractors	Enter the number of jobs that are the result of FBO or other businesses that support aviation operations.
<b>A4.</b> Airline and Other Aviation Businesses	Enter the number of jobs directly related to airline operations or other aviation businesses/operators at the airport. Consider corporate/private flight departments.
<b>A5.</b> Shipping and Warehousing	Enter the number of jobs at the airport that are related to shipping or warehousing. This includes cargo shippers such as FedEx, UPS and their contractors.
<b>A6.</b> Terminal Concessions	Enter the number of jobs that are created by in-terminal concessions such as stores and restaurants.
<b>A7.</b> Other	Enter any additional jobs at your airport created by aviation-related activity.

**Table B – Non-Aviation Related Jobs at the Airport:** This table includes jobs that are at the airport, but not directly associated with supporting aviation operations. Consider non-aviation employers and government agencies that use space, buildings, or property at the airport. **Exhibit 2** contains directions and a brief description of entries for each category.



Exhibit 2 – Table B Instructions

B1. Municipal Offices	Enter the number of jobs at your airport that in in local government, but not directly related to aviation support. Consider employees using airport buildings or property. This would include transportation agencies such as "dial-a-ride."
B2. Professional Services	Enter any jobs at the airport that provide services. This includes professional jobs such as lawyers, engineers, accountants, etc.
B3. Manufacturing	If there are jobs that support manufacturing at your airport, include them in this column. This only includes jobs on the airport property. If there are off-airport manufacturing reliant business, see Table C.
B4. Other	Enter non-aviation related jobs at the airport that do not fit into the three above categories.

**Table C – Off Airport Air-Reliant Business.** This table includes the number of employees and/or jobs that directly depend and rely on your airport, but are not located on your airport. There may be several employers within the community that fit into this category. It may be necessary to learn more about the users of the airport to determine what jobs, and how many jobs, are airport-reliant. When requesting job counts, please ask the employer to consider what portion of the workforce is dependent on the airport. The number of reliant jobs may only be a few individuals or a portion of the workforce.

Exhibit 3 – Table C Instructions

C1. Shipping / Warehousing	Enter the number of jobs in the shipping or warehousing industry that rely on the airport, but are not located at the airport.
C2. Airline Catering and other Services	Enter airline jobs that are off-airport but reliant on the airport, including catering services.
C3. Reliant Manufacturers	Enter manufacturing jobs that rely on the airport.
C4. Reliant Services	Enter the number of jobs that rely on the airport to provide a service.
C5. Reliant Government Activities	Enter the number of jobs that rely on the airport as a result of government activities.
C6. Other	Enter any other off-airport jobs that rely on the airport. Please provide a description.

#### Table D, Table E, and Table F – Aviation Activity

**Instructions.** Table D and Table E include information about aviation activity at your airport. Both tables require a breakdown of activity estimates by additional categories. This process is explained below.

**Table D – Operations.** Information entered in this table includes the number of aircraft operations at your airport, plus the associated passenger, cargo, and visitors for each operation. For each question, the information entered is separated into five (5) different categories depending on the type of operation. A description of each operation category is presented in **Exhibit 4**. This information is available from the [FAA Terminal Area Forecast \(TAF\)](http://taf.faa.gov) (<http://taf.faa.gov>), and from air traffic control towers (ATCT) at controlled airports. A description of each question in Table D is presented in **Exhibit 5**.

**Exhibit 4 – Description of Operation Categories**

GA Local	Itinerant general aviation and local civil operations represent all civil (non-military) aviation aircraft takeoffs and landings not classified as commercial. Local Operations are aircraft operating in the traffic pattern or within sight of the tower, or aircraft known to be departing or arriving from flight in local practice areas, or aircraft executing practice instrument approaches at the airport. Aircraft operations other than local operations are itinerant. Essentially, these represent takeoffs and landings of aircraft going from one airport to another.
GA Itinerant	
Air Taxi (Commuter)	Commuter/air taxi operations are one category. Commuter operations include takeoffs and landings by aircraft with 60 or fewer seats that transport regional passengers on scheduled commercial flights. Air taxi operations include takeoffs and landings by aircraft with 60 or fewer seats conducted on non-scheduled or for-hire flights.
Air Carrier	Air carrier operations represent either takeoffs or landings of commercial aircraft with seating capacity of more than 60 seats.
Military	Military operations represent take-offs and landings by military aircraft. Operations are either itinerant or local flights.

Source: FAA Terminal Area Forecast Summary FY 2015-2040, Appendix A

**Exhibit 5 – Table D Instructions**

D1. Number of Annual Operations	Enter the number of annual aircraft operations by category. An operation is defined as either a takeoff or a landing. For example, if an aircraft lands, drops-off passengers, and departs, this is considered two (2) operations. Airport operation counts may be available from the <a href="http://ataf.faa.gov">FAA Terminal Area Forecast (TAF)</a> ( <a href="http://ataf.faa.gov">http://ataf.faa.gov</a> ), or if available, your airport's air traffic control tower (ATCT).
D2. Passengers per Operation (incl. Pilot)	Enter the average number of passengers per operation, by operations category, including the pilot.
D3. Visitor Portion of Passengers	Enter the number of passengers in each operation category that are considered visitors (not residents) to your city, county, or region.
D4. Cargo Tons per Operation	Enter the number of average tons of cargo per aircraft operation in each category. (Note: There is no entry for local GA for this question.)

**Table E – Based Aircraft:** This table catalogues aircraft based at your airport. This number can be obtained from [basedaircraft.com](http://basedaircraft.com), the Michigan Department of Transportation Office of Aeronautics (AERO), or the airport manager. Please break-down the number of based aircraft by type, as described in **Exhibit 6**. Please only include aircraft that are operational (airworthy).

**Exhibit 6 – Aircraft Types**

Single Engine	Single engine propeller driven aircraft (either reciprocal engine or turboprop)
Multi-Engine	Multi-engine propeller-driven aircraft (either reciprocal engine or turboprop)
Jet	Jet aircraft (do not include turboprop aircraft)
Rotorcraft	Helicopters / Rotorcraft
Other / Military / Gliders	Gliders (non powered aircraft), military aircraft, ultra-light aircraft, or other types of aircraft

Source: FAA Advisory Circular (AC) 150/5200-35A Submitting the Airport Master Record In Order To Activate a New Airport

**Table F – Fuel Sales:** Use this table to record the volume of aviation fuel (in gallons) sold at your airport in the previous 12 months. This data is available from airport fuel sales receipts. Please enter "n/a" or "0" if your airport does not sell a particular fuel type. A description of fuel types is shown in **Exhibit 7**.

**Exhibit 7 – Fuel Types**

100LL (Avgas)	100 octane low-leaded aviation gasoline-used in most piston engine GA aircraft.
Jet A	Fuel for turboprop and jet aircraft.
Other	Enter any other types of fuel sold, such as automotive gasoline (MoGas)



### Community Benefits Assessment Worksheet

**Table A – Aviation Related Jobs at the Airport**

Category	# of Jobs	Description
A1. Federal Government (FAA, TSA, CBP)		
A2. Local Government		
A3. FBO and Private Contractors		
A4. Airline and Other Aviation Businesses		
A5. Shipping and Warehousing		
A6. Terminal Concessions		
A7. Other (specify)		

**Table B – Non-Aviation Related Jobs at the Airport**

Category	# of Jobs	Description
B1. Municipal Offices		
B2. Professional Services		
B3. Manufacturing		
B4. Other (specify)		

**Table C – Off Airport Air-Reliant Business**

Category	# of Jobs	Description
C1. Shipping / Warehousing		
C2. Airline Catering and other Services		
C3. Reliant Manufacturers		
C4. Reliant Services		
C5. Reliant Government Activities		
C6. Other (specify)		

**Table D – Operations**

Operations	GA Local	GA Itinerant	Air Taxi (Commuter)	Air Carrier	Military
D1. Annual Operations*					
D2. Passengers per Operation (incl. Pilot)					
D3. Visitor Portion of Passengers					
D4. Cargo Tons per Operation					

NOTE: If items marked with an asterisks (\*) are left blank, System Plan forecast numbers will be used

**Table E – Based Aircraft**

Based Aircraft	Single Engine	Multi-Engine	Jet	Rotorcraft	Other / Military / Gliders
E1. Number of Based Aircraft					

NOTE: If left blank, System Plan forecast numbers will be used

**Table F – Fuel Sales**

Fuel Type	100LL (Avgas)	Jet A	Other (specify)
F1. Fuel sold in past 12 months (gallons)			

Please Return by  
**September 9, 2016** to:  
Michigan Department of Transportation  
Office of Aeronautics  
Attn: Linn Smith  
2700 Port Lansing Rd  
Lansing, MI 48906

You may also email worksheet to:  
[SmithL50@michigan.gov](mailto:SmithL50@michigan.gov)

Worksheet Completed by (print name): \_\_\_\_\_ Title: \_\_\_\_\_

Airport Name: \_\_\_\_\_ 3-Letter Airport ID: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

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ADRIAN

**CBA Community Benefits Assessment****Airport Role in Economy**

Airport: Lenawee County  
 City: Adrian  
 Current FAA ARC: C-II  
 County: Lenawee  
 Ownership: *Public*  
 Scenario: Current  
 Service Area: Lenawee  
 Run Date: 3/31/2017 8:31:57 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	5,001
Primary Runway Width	100
Instrument Approach	LPV

**Activity Data**

Total Operations:	14,970
Total Aircraft:	59
Total Passengers:	30,345
Total Cargo Tons:	0

**On-going Contribution to the County Economy**

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	28	28	\$2,211,000	\$2,211,000	\$6,465,000	\$6,465,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	14	14	\$342,000	\$342,000	\$1,049,000	\$1,049,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	20	25	\$1,010,000	\$1,030,000	\$2,697,000	\$3,817,000
6. -due to Visitor Spending	3	6	\$104,000	\$238,000	\$328,000	\$778,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	65	73	\$3,667,000	\$3,821,000	\$10,539,000	\$12,109,000

**Tax Generated by Aviation-Related Activity**

	At-Airport	Off-Site
9. State Income Tax	\$83,000	\$15,000
10. State Sales Tax	\$617,000	\$110,000
11. Tax generated by fuel sales	\$11,752	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

2017 MASP Goals:		Other Attributes
Serve Significant Population Centers	Tier 1	
Serve Significant Business Centers	Tier 1	
Serve Significant Tourism/Convention Centers	Tier 2	
Provide Access to the General Population	Tier 1	
Provide Adequate Land Area Coverage	Tier 1	
Preserve Regional Capacity	Tier 1	
Serve Seasonally Isolated Areas	Tier 3	
Inclusion in NPIAS	Tier 2	

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$227.00

Visitor spending source: SURVEY - SE Michigan

## ALLEGAN

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Padgham Field  
 City: Allegan  
 Current FAA ARC: B-II  
 County: Allegan  
 Ownership: Public  
 Scenario: Current  
 Service Area: Allegan  
 Run Date: 3/31/2017 8:37:14 AM

MASP Tier	Tier 2
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	4,300
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	10,100
Total Aircraft:	26
Total Passengers:	25,400
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	22	22	\$1,036,000	\$1,036,000	\$6,117,000	\$6,117,000
2. Airport Tenants: non-air related	3	3	\$135,000	\$135,000	\$367,000	\$367,000
3. Off-Site: Supported by Visitor Spending	10	10	\$249,000	\$249,000	\$653,000	\$653,000
4. Off-Site: Staff or Cargo Reliant	4	4	\$292,000	\$292,000	\$2,577,000	\$2,577,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	19	28	\$838,000	\$589,000	\$3,220,000	\$3,612,000
6. -due to Visitor Spending	2	4	\$83,000	\$173,000	\$225,000	\$484,000
7. -due to Reliance on Air Transport	6	13	\$203,000	\$469,000	\$539,000	\$1,497,000
8. Total Impact from Airport Activities	66	84	\$2,836,000	\$2,943,000	\$13,698,000	\$15,307,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$45,000	\$18,000
10. State Sales Tax	\$606,000	\$223,000
11. Tax generated by fuel sales	\$4,500	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 2
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$128.00

Visitor spending source: West Michigan Survey

## ALMA

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Gratiot Community  
 City: Alma  
 Current FAA ARC: C-II  
 County: Gratiot  
 Ownership: Public  
 Scenario: Current  
 Service Area: Gratiot  
 Run Date: 3/31/2017 8:45:55 AM

MASP Tier	Tier 1
MASP ARC	-B-II
<b>Airport Features</b>	
Primary Runway Length	5,000
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	10,295
Total Aircraft:	39
Total Passengers:	18,732
Total Cargo Tons:	1,320

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	15	15	\$1,035,000	\$1,035,000	\$3,178,000	\$3,178,000
2. Airport Tenants: non-air related	3	3	\$203,000	\$203,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	12	12	\$298,000	\$298,000	\$902,000	\$902,000
4. Off-Site: Staff or Cargo Reliant	43	43	\$2,476,000	\$2,476,000	\$2,407,000	\$2,407,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	12	14	\$455,000	\$469,000	\$1,493,000	\$2,003,000
6. -due to Visitor Spending	3	5	\$112,000	\$207,000	\$301,000	\$669,000
7. -due to Reliance on Air Transport	17	34	\$612,000	\$1,224,000	\$762,000	\$1,548,000
8. Total Impact from Airport Activities	105	126	\$5,191,000	\$5,912,000	\$9,043,000	\$10,707,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$44,000	\$77,000
10. State Sales Tax	\$311,000	\$239,000
11. Tax generated by fuel sales	\$11,387	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$196.00

Visitor spending source: -RETURNED SURVEY

## ALPENA

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Alpena County Regional  
 City: Alpena  
 Current FAA ARC: C-IV  
 County: Alpena  
 Ownership: Public  
 Scenario: Current  
 Service Area: Alpena  
 Run Date: 3/31/2017 8:56:36 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	9,001
Primary Runway Width	150
Instrument Approach	ILS

## Activity Data

Total Operations:	3,321
Total Aircraft:	19
Total Passengers:	22,396
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	45	45	\$2,381,000	\$2,381,000	\$11,035,000	\$11,035,000
2. Airport Tenants: non-air related	150	150	\$9,806,000	\$9,806,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	32	32	\$1,200,000	\$1,200,000	\$2,808,000	\$2,808,000
4. Off-Site: Staff or Cargo Reliant	54	54	\$2,419,000	\$2,419,000	\$7,390,000	\$7,390,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	71	95	\$3,148,000	\$2,883,000	\$8,521,000	\$12,695,000
6. -due to Visitor Spending	11	14	\$390,000	\$834,000	\$1,100,000	\$2,081,000
7. -due to Reliance on Air Transport	2	5	\$41,000	\$52,000	\$143,000	\$268,000
8. Total Impact from Airport Activities	365	395	\$19,385,000	\$19,575,000	\$30,997,000	\$36,277,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$387,000	\$114,000
10. State Sales Tax	\$1,424,000	\$737,000
11. Tax generated by fuel sales	\$65,591	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	1,050,000	1,000,000	25,000	25,000

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$494.00

Visitor spending source: -returned survey

## ANN ARBOR

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Ann Arbor Municipal  
 City: Ann Arbor  
 Current FAA ARC: B-11  
 County: Washtenaw  
 Ownership: *Public*  
 Scenario: Current  
 Service Area: Washtenaw  
 Run Date: 3/31/2017 9:01:07 AM

MASP Tier	Tier 1
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,505
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	56,854
Total Aircraft:	183
Total Passengers:	120,680
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	80	80	\$7,664,000	\$7,664,000	\$23,952,000	\$23,952,000
2. Airport Tenants: non-air related	2	2	\$168,000	\$168,000	\$810,000	\$810,000
3. Off-Site: Supported by Visitor Spending	257	257	\$7,024,000	\$7,024,000	\$20,251,000	\$20,251,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	70	89	\$3,384,000	\$4,036,000	\$9,335,000	\$14,141,000
6. -due to Visitor Spending	75	110	\$3,640,000	\$4,884,000	\$10,271,000	\$15,011,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	484	538	\$21,880,000	\$23,776,000	\$64,619,000	\$74,165,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$305,000	\$306,000
10. State Sales Tax	\$2,334,000	\$2,116,000
11. Tax generated by fuel sales	\$88,186	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 2
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$150.00

Visitor spending source: -Survey

## ATLANTA

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Atlanta Municipal  
 City: Atlanta  
 Current FAA ARC: B-I  
 County: Montmorency  
 Ownership: Public  
 Scenario: Current  
 Service Area: Montmorency  
 Run Date: 3/31/2017 9:41:56 AM

MASP Tier	Tier 2
MASP ARC	B-I
<b>Airport Features</b>	
Primary Runway Length	3,000
Primary Runway Width	60
Instrument Approach	visual

Evaluated for Year: 2016

## Activity Data

Total Operations:	1,400
Total Aircraft:	10
Total Passengers:	2,800
Total Cargo Tons:	700

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	0	0	\$0	\$0	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	2	2	\$72,000	\$72,000	\$121,000	\$121,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	0	1	\$10,000	\$50,000	\$26,000	\$90,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	2	3	\$82,000	\$122,000	\$147,000	\$211,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$0	\$3,000
10. State Sales Tax	\$0	\$13,000
11. Tax generated by fuel sales	\$118	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$192.00

Visitor spending source: Appendix 2



## BAD AXE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Huron County Mem.  
 City: Bad Axe  
 Current FAA ARC: B-II  
 County: Huron  
 Ownership: *Private*  
 Scenario: Current  
 Service Area: Huron  
 Run Date: 3/31/2017 10:23:30 AM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	5,009
Primary Runway Width	75
Instrument Approach	Non-Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	12,000
Total Aircraft:	23
Total Passengers:	28,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	7	7	\$403,000	\$403,000	\$1,296,000	\$1,296,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	34	34	\$868,000	\$868,000	\$2,374,000	\$2,374,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	3	6	\$131,000	\$154,000	\$390,000	\$765,000
6. -due to Visitor Spending	8	15	\$327,000	\$604,000	\$924,000	\$1,760,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	52	62	\$1,729,000	\$2,029,000	\$4,984,000	\$6,195,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$14,000	\$38,000
10. State Sales Tax	\$124,000	\$248,000
11. Tax generated by fuel sales	\$8,100	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$386.00

Visitor spending source: Survey

## BALDWIN

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Baldwin Municipal  
 City: Baldwin  
 Current FAA ARC: B-II  
 County: Lake  
 Ownership: Public  
 Scenario: Current  
 Service Area: Lake  
 Run Date: 3/31/2017 10:36:35 AM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	3,800
Primary Runway Width	75
Instrument Approach	Circling

Evaluated for Year: 2016

## Activity Data

Total Operations:	350
Total Aircraft:	1
Total Passengers:	1,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	2	2	\$112,000	\$112,000	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	2	2	\$37,000	\$37,000	\$92,000	\$92,000
4. Off-Site: Staff or Cargo Reliant	4	4	\$182,000	\$182,000	\$433,000	\$433,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	0	1	\$12,000	\$25,000	\$24,000	\$68,000
7. -due to Reliance on Air Transport	2	5	\$48,000	\$122,000	\$146,000	\$394,000
8. Total Impact from Airport Activities	10	14	\$391,000	\$478,000	\$695,000	\$987,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$3,000	\$6,000
10. State Sales Tax	\$0	\$36,000
11. Tax generated by fuel sales	\$0	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$227.00

Visitor spending source: Prosperity Region &amp; Class

## BATTLE CREEK

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: W. K. Kellogg  
 City: Battle Creek  
 Current FAA ARC: D-III  
 County: Calhoun  
 Ownership: Public  
 Scenario: Current  
 Service Area: Calhoun  
 Run Date: 3/31/2017 10:45:41 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2015

Airport Features	
Primary Runway Length	10,004
Primary Runway Width	150
Instrument Approach	Precision

## Activity Data

Total Operations:	83,016
Total Aircraft:	101
Total Passengers:	200,542
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	788	788	\$52,827,000	\$52,827,000	\$262,722,000	\$262,722,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	150	150	\$3,419,000	\$3,419,000	\$11,262,000	\$11,262,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	889	1,109	\$44,128,000	\$35,116,000	\$129,269,000	\$155,990,000
6. -due to Visitor Spending	32	64	\$1,493,000	\$2,377,000	\$3,829,000	\$8,347,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	1,859	2,111	\$101,867,000	\$93,739,000	\$407,082,000	\$438,321,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$2,260,000	\$149,000
10. State Sales Tax	\$25,123,000	\$1,177,000
11. Tax generated by fuel sales	\$234,326	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

Showing just the non-primary entitlements

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$252.00

Visitor spending source: Visitor Survey

## BAY CITY

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: James Clements & S.P.B.  
 City: Bay City  
 Current FAA ARC: B-II  
 County: Bay  
 Ownership: Public  
 Scenario: Current  
 Service Area: Bay  
 Run Date: 3/31/2017 10:50:27 AM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	3,800
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	9,006
Total Aircraft:	70
Total Passengers:	22,515
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	2	2	\$132,000	\$132,000	\$353,000	\$353,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	23	23	\$463,000	\$463,000	\$1,508,000	\$1,508,000
4. Off-Site: Staff or Cargo Reliant	10	10	\$717,000	\$717,000	\$4,596,000	\$4,596,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1	1	\$48,000	\$48,000	\$160,000	\$208,000
6. -due to Visitor Spending	5	10	\$207,000	\$322,000	\$617,000	\$1,117,000
7. -due to Reliance on Air Transport	12	32	\$458,000	\$1,152,000	\$1,345,000	\$2,670,000
8. Total Impact from Airport Activities	53	78	\$2,025,000	\$2,834,000	\$8,579,000	\$10,452,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$5,000	\$39,000
10. State Sales Tax	\$34,000	\$433,000
11. Tax generated by fuel sales	\$5,750	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 2
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$248.00

Visitor spending source: visitor survey

## BEAVER ISLAND

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Beaver Island Airport  
 City: Beaver Island  
 Current FAA ARC: B-II  
 County: Charlevoix  
 Ownership: Public  
 Scenario: Current  
 Service Area: Charlevoix  
 Run Date: 3/9/2017 8:43:02 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,300
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	4,230
Total Aircraft:	1
Total Passengers:	12,660
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	6	6	\$371,000	\$371,000	\$1,049,000	\$1,049,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	27	27	\$740,000	\$740,000	\$2,184,000	\$2,184,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	3	4	\$78,000	\$131,000	\$274,000	\$619,000
6. -due to Visitor Spending	7	12	\$229,000	\$514,000	\$764,000	\$1,619,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	43	49	\$1,418,000	\$1,756,000	\$4,271,000	\$5,471,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$13,000	\$32,000
10. State Sales Tax	\$100,000	\$228,000
11. Tax generated by fuel sales	\$1,650	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	165,000	150,000	7,500	7,500

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 1
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$427.00

Visitor spending source: Prosperity Region &amp; Class

## BELLAIRE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Antrim County  
 City: Bellaire  
 Current FAA ARC: B-II  
 County: Antrim  
 Ownership: Public  
 Scenario: Current  
 Service Area: Antrim  
 Run Date: 3/28/2017 1:26:30 PM

MASP Tier	Tier 2
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	5,000
Primary Runway Width	100
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	7,800
Total Aircraft:	15
Total Passengers:	23,400
Total Cargo Tons:	19,500

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	11	11	\$553,000	\$553,000	\$140,000	\$140,000
2. Airport Tenants: non-air related	9	9	\$458,000	\$458,000	\$151,000	\$151,000
3. Off-Site: Supported by Visitor Spending	42	42	\$905,000	\$905,000	\$3,104,000	\$3,104,000
4. Off-Site: Staff or Cargo Reliant	27	27	\$952,000	\$952,000	\$5,303,000	\$5,303,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1	2	\$16,000	\$55,000	\$67,000	\$186,000
6. -due to Visitor Spending	9	18	\$189,000	\$629,000	\$791,000	\$2,301,000
7. -due to Reliance on Air Transport	15	59	\$379,000	\$1,227,000	\$1,121,000	\$3,270,000
8. Total Impact from Airport Activities	114	168	\$3,452,000	\$4,779,000	\$10,677,000	\$14,455,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$27,000	\$64,000
10. State Sales Tax	\$29,000	\$642,000
11. Tax generated by fuel sales	\$12,285	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$398.00

Visitor spending source: visitor Survey

## BENTON HARBOR

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: SW MI Regional  
 City: Benton Harbor  
 Current FAA ARC: C-II  
 County: Berrien  
 Ownership: Public  
 Scenario: Current  
 Service Area: Berrien  
 Run Date: 3/22/2017 8:09:24 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	6,005
Primary Runway Width	100
Instrument Approach	Precision

## Activity Data

Total Operations:	18,250
Total Aircraft:	80
Total Passengers:	39,500
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	100	100	\$10,460,000	\$10,460,000	\$36,672,000	\$36,672,000
2. Airport Tenants: non-air related	21	21	\$1,951,000	\$1,951,000	\$9,839,000	\$9,839,000
3. Off-Site: Supported by Visitor Spending	21	21	\$494,000	\$494,000	\$1,559,000	\$1,559,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	144	131	\$5,158,000	\$6,805,000	\$16,457,000	\$21,746,000
6. -due to Visitor Spending	6	9	\$233,000	\$343,000	\$690,000	\$1,156,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	292	282	\$18,296,000	\$20,053,000	\$65,217,000	\$70,972,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$494,000	\$22,000
10. State Sales Tax	\$4,095,000	\$163,000
11. Tax generated by fuel sales	\$144,000	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$247.00

Visitor spending source: Prosperity Region

## BIG RAPIDS

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Roben-Hood  
 City: Big Rapids  
 Current FAA ARC: B-II  
 County: Mecosta  
 Ownership: Public  
 Scenario: Current  
 Service Area: Mecosta  
 Run Date: 3/9/2017 9:24:17 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,300
Primary Runway Width	75
Instrument Approach	Circling

## Activity Data

Total Operations:	3,900
Total Aircraft:	23
Total Passengers:	9,750
Total Cargo Tons:	55

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	15	15	\$678,000	\$678,000	\$4,878,000	\$4,878,000
2. Airport Tenants: non-air related	9	9	\$568,000	\$568,000	\$1,802,000	\$1,802,000
3. Off-Site: Supported by Visitor Spending	4	4	\$88,000	\$88,000	\$281,000	\$281,000
4. Off-Site: Staff or Cargo Reliant	1,700	1,700	\$87,008,000	\$87,008,000	\$257,051,000	\$257,051,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	90	114	\$3,291,000	\$5,486,000	\$9,550,000	\$17,680,000
6. -due to Visitor Spending	1	2	\$32,000	\$61,000	\$96,000	\$208,000
7. -due to Reliance on Air Transport	1,110	2,264	\$34,722,000	\$67,663,000	\$87,706,000	\$176,824,000
8. Total Impact from Airport Activities	2,929	4,108	\$126,387,000	\$161,552,000	\$361,364,000	\$458,724,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$173,000	\$2,240,000
10. State Sales Tax	\$1,462,000	\$15,452,000
11. Tax generated by fuel sales	\$16,740	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	165,000	150,000	7,500	7,500

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$227.00

Visitor spending source: Passenger Survey



**BOIS BLANC  
ISLAND****CBA Community Benefits Assessment****Airport Role in Economy**

Airport: Bois Blanc Island Airport  
 City: Bois Blanc Island  
 Current FAA ARC: B-I  
 County: Mackinac  
 Ownership: *Public*  
 Scenario: Current  
 Service Area: Mackinac  
 Run Date: 4/4/2017 11:32:09 AM

MASP Tier	Tier 1
MASP ARC	B-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,498
Primary Runway Width	75
Instrument Approach	NPI

**Activity Data**

Total Operations:	3,000
Total Aircraft:	9
Total Passengers:	7,500
Total Cargo Tons:	0

**On-going Contribution to the County Economy**

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	1	1	\$85,000	\$85,000	\$377,000	\$377,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	3	3	\$82,000	\$82,000	\$253,000	\$253,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1	1	\$37,000	\$59,000	\$142,000	\$223,000
6. -due to Visitor Spending	1	1	\$19,000	\$57,000	\$77,000	\$188,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	6	6	\$223,000	\$283,000	\$849,000	\$1,041,000

**Tax Generated by Aviation-Related Activity**

	At-Airport	Off-Site
9. State Income Tax	\$4,000	\$4,000
10. State Sales Tax	\$36,000	\$26,000
11. Tax generated by fuel sales	\$0	

**Annual Capital Expenditures**

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

**2017 MASP Goals:**

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 1
Inclusion in NPIAS	Tier 2

**Other Attributes**

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$125.00

Visitor spending source: visitor survey

## BRIGHTON

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Brighton Field  
 City: Brighton  
 Current FAA ARC: A-I  
 County: Livingston  
 Ownership: *Private*  
 Scenario: Current  
 Service Area: Livingston  
 Run Date: 4/6/2017 10:32:27 AM

MASP Tier	Tier 1
MASP ARC	A-I
<b>Airport Features</b>	
Primary Runway Length	3,120
Primary Runway Width	24
Instrument Approach	circling

Evaluated for Year: 2016

**Activity Data**

Total Operations: 17,600  
 Total Aircraft: 102  
 Total Passengers: 26,400  
 Total Cargo Tons: 0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	0	0	\$0	\$0	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	34	34	\$743,000	\$743,000	\$2,376,000	\$2,376,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	9	15	\$342,000	\$517,000	\$1,068,000	\$1,761,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	43	49	\$1,085,000	\$1,260,000	\$3,444,000	\$4,137,000

**Tax Generated by Aviation-Related Activity**

	At-Airport	Off-Site
9. State Income Tax	\$0	\$32,000
10. State Sales Tax	\$0	\$248,000
11. Tax generated by fuel sales	\$0	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	0	0	0	0

**2017 MASP Goals:**

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

**Other Attributes**

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$200.00

Visitor spending source: classification

**CADILLAC****CBA Community Benefits Assessment****Airport Role in Economy**

Airport: Wexford County

City: Cadillac

Current FAA ARC C-II

County: Wexford

Ownership: *Public*

Scenario: Current

Service Area: Wexford

Run Date: 6/14/2017 1:42:51 PM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	5,000
Primary Runway Width	100
Instrument Approach	Precision

**Activity Data**

Total Operations:	5,250
Total Aircraft:	51
Total Passengers:	12,250
Total Cargo Tons:	125

**On-going Contribution to the County Economy**

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	11	11	\$600,000	\$600,000	\$2,310,000	\$2,310,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	1	1	\$23,000	\$23,000	\$63,000	\$63,000
4. Off-Site: Staff or Cargo Reliant	5	5	\$328,000	\$328,000	\$873,000	\$873,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	11	15	\$540,000	\$479,000	\$1,375,000	\$2,121,000
6. -due to Visitor Spending	0	0	\$8,000	\$16,000	\$19,000	\$47,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	28	32	\$1,499,000	\$1,446,000	\$4,640,000	\$5,414,000

**Tax Generated by Aviation-Related Activity**

	At-Airport	Off-Site
9. State Income Tax	\$28,000	\$9,000
10. State Sales Tax	\$266,000	\$59,000
11. Tax generated by fuel sales	\$1,155	

**Annual Capital Expenditures**

	Total	Federal \$	State \$	Local \$
2015 Budget:	647,000	582,000	32,000	33,000

**2017 MASP Goals:**

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

**Other Attributes**

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$60.00

Visitor spending source: passenger survey

## CARO

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Tuscola Area Airport

City: Caro

Current FAA ARC B-II

County: Tuscola

Ownership: PUB

Scenario: Current

Service Area: Tuscola

Run Date: 4/3/2017 12:28:12 PM

MASP Tier	Tier 2
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,302
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	14,000
Total Aircraft:	38
Total Passengers:	35,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	3	3	\$196,000	\$196,000	\$353,000	\$353,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	42	42	\$871,000	\$871,000	\$2,476,000	\$2,476,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1	1	\$48,000	\$48,000	\$160,000	\$208,000
6. -due to Visitor Spending	6	18	\$196,000	\$606,000	\$616,000	\$1,835,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	52	64	\$1,311,000	\$1,721,000	\$3,605,000	\$4,872,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$6,000	\$38,000
10. State Sales Tax	\$34,000	\$259,000
11. Tax generated by fuel sales	\$184	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$262.00

Visitor spending source: Prosperity Region &amp; Class

## CHARLEVOIX

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Charlevoix Mun.  
 City: Charlevoix  
 Current FAA ARC B-II  
 County: Charlevoix  
 Ownership: Public  
 Scenario: Current  
 Service Area: Charlevoix  
 Run Date: 4/4/2017 2:56:30 PM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	4,549
Primary Runway Width	75
Instrument Approach	Non-Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	29,500
Total Aircraft:	30
Total Passengers:	80,500
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	46	46	\$2,755,000	\$2,755,000	\$11,675,000	\$11,675,000
2. Airport Tenants: non-air related	12	12	\$725,000	\$725,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	22	22	\$603,000	\$603,000	\$1,742,000	\$1,742,000
4. Off-Site: Staff or Cargo Reliant	47	47	\$1,304,000	\$1,304,000	\$4,366,000	\$4,366,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	34	60	\$1,047,000	\$1,728,000	\$3,592,000	\$8,197,000
6. -due to Visitor Spending	5	9	\$186,000	\$419,000	\$609,000	\$1,291,000
7. -due to Reliance on Air Transport	19	37	\$449,000	\$631,000	\$1,408,000	\$2,602,000
8. Total Impact from Airport Activities	185	233	\$7,069,000	\$8,165,000	\$23,392,000	\$29,873,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$134,000	\$60,000
10. State Sales Tax	\$1,192,000	\$444,000
11. Tax generated by fuel sales	\$6,331	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	1,100,000	1,000,000	50,000	50,000

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$60.00

Visitor spending source: visitor survey

## CHARLOTTE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Fitch H. Beach  
 City: Charlotte  
 Current FAA ARC: B-II  
 County: Eaton  
 Ownership: Public  
 Scenario: Current  
 Service Area: Eaton  
 Run Date: 3/28/2017 11:46:16 AM

MASP Tier	Tier 2
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	3,510
Primary Runway Width	75
Instrument Approach	Non-Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	8,760
Total Aircraft:	26
Total Passengers:	20,805
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	8	8	\$683,000	\$683,000	\$2,662,000	\$2,662,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	4	4	\$100,000	\$100,000	\$310,000	\$310,000
4. Off-Site: Staff or Cargo Reliant	17	17	\$1,362,000	\$1,362,000	\$22,489,000	\$22,489,000
<b>Supplier and income re-spending effects**</b>						
5. -due to Airport and Related Activities**	8	10	\$416,000	\$424,000	\$1,111,000	\$1,572,000
6. -due to Visitor Spending	1	2	\$31,000	\$69,000	\$94,000	\$230,000
7. -due to Reliance on Air Transport	17	50	\$647,000	\$2,112,000	\$1,920,000	\$13,134,000
8. Total Impact from Airport Activities	55	91	\$3,239,000	\$4,750,000	\$28,586,000	\$40,397,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$28,000	\$39,000
10. State Sales Tax	\$254,000	\$1,382,000
11. Tax generated by fuel sales	\$0	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 2
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$42.00

Visitor spending source: Prosperity Region & Class

## CHEBOYGAN

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Cheboygan County  
 City: Cheboygan  
 Current FAA ARC: B-II  
 County: Cheboygan  
 Ownership: Public  
 Scenario: Current  
 Service Area: Cheboygan  
 Run Date: 4/5/2017 11:08:40 AM

MASP Tier	Tier 2
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,005
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	7,434
Total Aircraft:	18
Total Passengers:	18,875
Total Cargo Tons:	6

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	6	6	\$323,000	\$323,000	\$1,320,000	\$1,320,000
2. Airport Tenants: non-air related	17	17	\$1,036,000	\$1,036,000	\$88,000	\$88,000
3. Off-Site: Supported by Visitor Spending	15	15	\$360,000	\$360,000	\$1,056,000	\$1,056,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	4	6	\$236,000	\$136,000	\$578,000	\$779,000
6. -due to Visitor Spending	4	6	\$98,000	\$251,000	\$335,000	\$783,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	46	50	\$2,053,000	\$2,106,000	\$3,377,000	\$4,026,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$38,000	\$16,000
10. State Sales Tax	\$131,000	\$110,000
11. Tax generated by fuel sales	\$398	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$203.00

Visitor spending source: visitor survey

CLARE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Clare Municipal  
 City: Clare  
 Current FAA ARC: B-II  
 County: Clare  
 Ownership: Public  
 Scenario: Current  
 Service Area: Clare  
 Run Date: 4/4/2017 2:58:38 PM

MASP Tier	Tier 2
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	3,500
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	8,675
Total Aircraft:	31
Total Passengers:	21,810
Total Cargo Tons:	2,230

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	5	5	\$344,000	\$344,000	\$1,412,000	\$1,412,000
2. Airport Tenants: non-air related	1	1	\$39,000	\$39,000	\$97,000	\$97,000
3. Off-Site: Supported by Visitor Spending	17	17	\$366,000	\$366,000	\$1,180,000	\$1,180,000
4. Off-Site: Staff or Cargo Reliant	2	2	\$91,000	\$91,000	\$233,000	\$233,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	6	7	\$223,000	\$231,000	\$705,000	\$952,000
6. -due to Visitor Spending	4	7	\$122,000	\$255,000	\$404,000	\$875,000
7. -due to Reliance on Air Transport	1	1	\$14,000	\$26,000	\$45,000	\$88,000
8. Total Impact from Airport Activities	36	40	\$1,199,000	\$1,352,000	\$4,076,000	\$4,837,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$16,000	\$18,000
10. State Sales Tax	\$148,000	\$137,000
11. Tax generated by fuel sales	\$1,268	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$196.00

Visitor spending source: visitor survey



## COLDWATER

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Branch Co. Mem.  
 City: Coldwater  
 Current FAA ARC: B-II  
 County: Branch  
 Ownership: Public  
 Scenario: Current  
 Service Area: Branch  
 Run Date: 4/4/2017 3:00:01 PM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	5,350
Primary Runway Width	75
Instrument Approach	Non-Precision

## Activity Data

Total Operations:	12,000
Total Aircraft:	37
Total Passengers:	27,500
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	11	11	\$740,000	\$740,000	\$1,393,000	\$1,393,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	35	35	\$816,000	\$816,000	\$2,494,000	\$2,494,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	5	6	\$234,000	\$184,000	\$686,000	\$823,000
6. -due to Visitor Spending	8	15	\$306,000	\$567,000	\$823,000	\$1,848,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	59	67	\$2,096,000	\$2,307,000	\$5,396,000	\$6,558,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$24,000	\$36,000
10. State Sales Tax	\$133,000	\$261,000
11. Tax generated by fuel sales	\$864	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$285.00

Visitor spending source: Prosperity Region &amp; Class

## DETROIT

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Coleman A .Young  
 City: Detroit  
 Current FAA ARC C-II  
 County: Wayne  
 Ownership: Public  
 Scenario: Current  
 Service Area: Wayne  
 Run Date: 4/5/2017 11:10:59 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	5,090
Primary Runway Width	100
Instrument Approach	Precision

## Activity Data

Total Operations:	52,678
Total Aircraft:	69
Total Passengers:	190,749
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	79	79	\$8,045,000	\$8,045,000	\$22,787,000	\$22,787,000
2. Airport Tenants: non-air related	37	37	\$3,042,000	\$3,042,000	\$9,440,000	\$9,440,000
3. Off-Site: Supported by Visitor Spending	126	126	\$4,060,000	\$4,060,000	\$11,390,000	\$11,390,000
4. Off-Site: Staff or Cargo Reliant	7	7	\$154,000	\$154,000	\$410,000	\$410,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	99	86	\$5,070,000	\$4,646,000	\$14,674,000	\$14,256,000
6. -due to Visitor Spending	46	54	\$2,491,000	\$2,823,000	\$6,396,000	\$8,442,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	394	389	\$22,862,000	\$22,770,000	\$65,097,000	\$66,725,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$404,000	\$181,000
10. State Sales Tax	\$2,789,000	\$1,215,000
11. Tax generated by fuel sales	\$34,328	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$200.00

Visitor spending source: Airport Reported

## DOWAGIAC

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Dowagiac Municipal  
 City: Dowagiac  
 Current FAA ARC: B-II  
 County: Cass  
 Ownership: Public  
 Scenario: Current  
 Service Area: Cass  
 Run Date: 4/4/2017 3:03:33 PM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,700
Primary Runway Width	100
Instrument Approach	NPI

## Activity Data

Total Operations:	3,600
Total Aircraft:	20
Total Passengers:	9,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	2	2	\$134,000	\$134,000	\$697,000	\$697,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	24	24	\$493,000	\$493,000	\$1,446,000	\$1,446,000
4. Off-Site: Staff or Cargo Reliant	3	3	\$181,000	\$181,000	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	2	3	\$117,000	\$92,000	\$343,000	\$411,000
6. -due to Visitor Spending	4	10	\$126,000	\$343,000	\$405,000	\$1,072,000
7. -due to Reliance on Air Transport	0	2	\$12,000	\$68,000	\$0	\$0
8. Total Impact from Airport Activities	35	44	\$1,063,000	\$1,311,000	\$2,891,000	\$3,626,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$6,000	\$26,000
10. State Sales Tax	\$66,000	\$151,000
11. Tax generated by fuel sales	\$240	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$595.00

Visitor spending source: visitor survey

**DRUMMOND  
ISLAND****CBA Community Benefits Assessment****Airport Role in Economy**

Airport: Drummond Island Airport  
 City: Drummond Island  
 Current FAA ARC: B-II  
 County: Chippewa  
 Ownership: *PUB*  
 Scenario: Current  
 Service Area: Chippewa  
 Run Date: 4/3/2017 12:42:43 PM

MASP Tier	Tier 1
MASP ARC	B-I
<b>Airport Features</b>	
Primary Runway Length	4,000
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

**Activity Data**

Total Operations:	5,300
Total Aircraft:	8
Total Passengers:	14,000
Total Cargo Tons:	0

**On-going Contribution to the County Economy**

	<b>Jobs</b>		<b>Income (\$)</b>		<b>Output (\$)</b>	
	<u>Local</u>	<u>State</u>	<u>Local</u>	<u>State</u>	<u>Local</u>	<u>State</u>
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	7	7	\$564,000	\$564,000	\$788,000	\$788,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	22	22	\$485,000	\$485,000	\$1,507,000	\$1,507,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	3	3	\$77,000	\$134,000	\$294,000	\$465,000
6. -due to Visitor Spending	4	9	\$140,000	\$337,000	\$468,000	\$1,117,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	36	41	\$1,266,000	\$1,520,000	\$3,057,000	\$3,877,000

**Tax Generated by Aviation-Related Activity**

	<b>At-Airport</b>	<b>Off-Site</b>
9. State Income Tax	\$18,000	\$21,000
10. State Sales Tax	\$75,000	\$157,000
11. Tax generated by fuel sales	\$95	

**Annual Capital Expenditures**

	<b>Total</b>	<b>Federal \$</b>	<b>State \$</b>	<b>Local \$</b>
2015 Budget:	166,667	150,000	8,333	8,334

**2017 MASP Goals:**

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 1
Inclusion in NPIAS	Tier 2

**Other Attributes**

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$379.00

Visitor spending source: Prosperity Region &amp; Class

## EAST TAWAS

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Iosco County  
 City: East Tawas  
 Current FAA ARC: B-II  
 County: Iosco  
 Ownership: Public  
 Scenario: Current  
 Service Area: Iosco  
 Run Date: 4/5/2017 10:10:00 AM

MASP Tier	Tier 2
MASP ARC	A-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,802
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	2,700
Total Aircraft:	28
Total Passengers:	5,400
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	1	1	\$49,000	\$49,000	\$330,000	\$330,000
2. Airport Tenants: non-air related	9	9	\$465,000	\$465,000	\$349,000	\$349,000
3. Off-Site: Supported by Visitor Spending	4	4	\$84,000	\$84,000	\$259,000	\$259,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1	1	\$59,000	\$34,000	\$144,000	\$195,000
6. -due to Visitor Spending	1	2	\$26,000	\$58,000	\$73,000	\$192,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	16	17	\$683,000	\$690,000	\$1,155,000	\$1,325,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$14,000	\$4,000
10. State Sales Tax	\$52,000	\$27,000
11. Tax generated by fuel sales	\$186	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$345.00

Visitor spending source: Prosperity Region & Class

## ESCANABA

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Delta County  
 City: Escanaba  
 Current FAA ARC: C-III  
 County: Delta  
 Ownership: Public  
 Scenario: Current  
 Service Area: Delta  
 Run Date: 4/4/2017 2:21:32 PM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	6,498
Primary Runway Width	150
Instrument Approach	Precision

## Activity Data

Total Operations:	38,844
Total Aircraft:	34
Total Passengers:	95,260
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	30	30	\$1,306,000	\$1,306,000	\$3,866,000	\$3,866,000
2. Airport Tenants: non-air related	1	1	\$63,000	\$63,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	122	122	\$2,326,000	\$2,326,000	\$8,414,000	\$8,414,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	10	20	\$363,000	\$252,000	\$1,079,000	\$2,387,000
6. -due to Visitor Spending	27	52	\$848,000	\$1,617,000	\$2,625,000	\$6,236,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	190	225	\$4,906,000	\$5,564,000	\$15,984,000	\$20,903,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$42,000	\$101,000
10. State Sales Tax	\$375,000	\$879,000
11. Tax generated by fuel sales	\$7,962	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	1,050,000	1,000,000	25,000	25,000

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$479.00

Visitor spending source: Visitor Survey

## EVART

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Evert Municipal  
 City: Evert  
 Current FAA ARC: B-I  
 County: Osceola  
 Ownership: Public  
 Scenario: Current  
 Service Area: Osceola  
 Run Date: 4/5/2017 11:12:50 AM

MASP Tier	Tier 2
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	3,804
Primary Runway Width	75
Instrument Approach	Visual

Evaluated for Year: 2016

## Activity Data

Total Operations:	724
Total Aircraft:	1
Total Passengers:	1,872
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	1	1	\$60,000	\$60,000	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	2	2	\$32,000	\$32,000	\$110,000	\$110,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	0	1	\$7,000	\$22,000	\$24,000	\$81,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	3	4	\$99,000	\$114,000	\$134,000	\$191,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$2,000	\$1,000
10. State Sales Tax	\$0	\$11,000
11. Tax generated by fuel sales	\$0	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$192.00

Visitor spending source: Airport Reference Code Avg

## FLINT

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Bishop International  
 City: Flint  
 Current FAA ARC: D-IV  
 County: Genesee  
 Ownership: Public  
 Scenario: Current  
 Service Area: Genesee  
 Run Date: 4/5/2017 11:15:53 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	7,201
Primary Runway Width	150
Instrument Approach	Precision

## Activity Data

Total Operations:	39,088
Total Aircraft:	91
Total Passengers:	1,670,815
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	563	563	\$33,237,000	\$33,237,000	\$94,762,000	\$94,762,000
2. Airport Tenants: non-air related	12	12	\$769,000	\$769,000	\$916,000	\$916,000
3. Off-Site: Supported by Visitor Spending	1,882	1,882	\$46,255,000	\$46,255,000	\$142,354,000	\$142,354,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	467	459	\$19,034,000	\$17,992,000	\$54,341,000	\$63,636,000
6. -due to Visitor Spending	706	805	\$28,001,000	\$32,163,000	\$77,073,000	\$105,514,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	3,630	3,721	\$127,296,000	\$130,416,000	\$369,446,000	\$407,182,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$1,336,000	\$2,015,000
10. State Sales Tax	\$9,559,000	\$14,872,000
11. Tax generated by fuel sales	\$145,265	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$214.00

Visitor spending source: Visitor Survey



## FLUSHING

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Dalton  
 City: Flushing  
 Current FAA ARC: A-I  
 County: Genesee  
 Ownership: *Private*  
 Scenario: Current  
 Service Area: Genesee  
 Run Date: 4/11/2017 12:11:13 PM

MASP Tier	Tier 1
MASP ARC	A-I
<b>Airport Features</b>	
Primary Runway Length	2,510
Primary Runway Width	50
Instrument Approach	visual

Evaluated for Year: 2016

## Activity Data

Total Operations:	13,000
Total Aircraft:	57
Total Passengers:	32,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	0	0	\$0	\$0	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	15	15	\$369,000	\$369,000	\$1,143,000	\$1,143,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	6	6	\$223,000	\$256,000	\$619,000	\$847,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	21	21	\$592,000	\$625,000	\$1,762,000	\$1,990,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$0	\$16,000
10. State Sales Tax	\$0	\$119,000
11. Tax generated by fuel sales	\$285	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	0	0	0	0

2017 MASP Goals:		Other Attributes
Serve Significant Population Centers	Tier 3	
Serve Significant Business Centers	Tier 3	
Serve Significant Tourism/Convention Centers	Tier 3	
Provide Access to the General Population	Tier 3	
Provide Adequate Land Area Coverage	Tier 3	
Preserve Regional Capacity	Tier 1	
Serve Seasonally Isolated Areas	Tier 3	
Inclusion in NPIAS	Tier 3	

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$254.00

Visitor spending source: Airport Reference Code

## FRANKENMUTH

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: WM "Tiny" Zehnder Field  
 City: Frankenmuth  
 Current FAA ARC: A-I  
 County: Saginaw  
 Ownership: Private  
 Scenario: Current  
 Service Area: Saginaw  
 Run Date: 4/11/2017 2:44:48 PM

MASP Tier	Tier 2
MASP ARC	A-1

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	2,530
Primary Runway Width	100
Instrument Approach	visual

## Activity Data

Total Operations:	7,000
Total Aircraft:	28
Total Passengers:	17,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	0	0	\$0	\$0	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	15	15	\$319,000	\$319,000	\$1,000,000	\$1,000,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	4	6	\$161,000	\$222,000	\$416,000	\$741,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	19	21	\$480,000	\$541,000	\$1,416,000	\$1,741,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$0	\$14,000
10. State Sales Tax	\$0	\$104,000
11. Tax generated by fuel sales	\$0	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	0	0	0	0

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$247.00

Visitor spending source: Airport Reference Code

## FRANKFORT

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Frankfort Dow Memorial Field  
 City: Frankfort  
 Current FAA ARC: B-I  
 County: Benzie  
 Ownership: *PUB*  
 Scenario: Current  
 Service Area: Benzie  
 Run Date: 4/3/2017 12:51:41 PM

MASP Tier	Tier 2
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	4,194
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	4,000
Total Aircraft:	14
Total Passengers:	10,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	1	1	\$49,000	\$49,000	\$330,000	\$330,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	7	7	\$152,000	\$152,000	\$518,000	\$518,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1	1	\$59,000	\$34,000	\$144,000	\$195,000
6. -due to Visitor Spending	2	3	\$36,000	\$106,000	\$149,000	\$384,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	11	12	\$296,000	\$341,000	\$1,141,000	\$1,427,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$2,000	\$7,000
10. State Sales Tax	\$32,000	\$54,000
11. Tax generated by fuel sales	\$183	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$192.00

Visitor spending source: Prosperity Region

## FREMONT

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Fremont Municipal

City: Fremont

Current FAA ARC C-II

County: Newaygo

Ownership: Public

Scenario: Current

Service Area: Newaygo

Run Date: 4/3/2017 12:53:01 PM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	6,501
Primary Runway Width	100
Instrument Approach	NPI

## Activity Data

Total Operations:	20,002
Total Aircraft:	56
Total Passengers:	96,072
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	4	4	\$57,000	\$57,000	\$1,129,000	\$1,129,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	99	99	\$2,190,000	\$2,190,000	\$6,678,000	\$6,678,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects**</b>						
5. -due to Airport and Related Activities**	2	6	\$71,000	\$39,000	\$237,000	\$666,000
6. -due to Visitor Spending	17	42	\$563,000	\$1,523,000	\$1,809,000	\$4,950,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	122	151	\$2,881,000	\$3,809,000	\$9,853,000	\$13,423,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$2,000	\$95,000
10. State Sales Tax	\$108,000	\$698,000
11. Tax generated by fuel sales	\$1,080	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$227.00

Visitor spending source: Prosperity Region &amp; Class

## GAYLORD

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Gaylord Regional Airport  
 City: Gaylord  
 Current FAA ARC: C-III  
 County: Otsego  
 Ownership: Public  
 Scenario: Current  
 Service Area: Otsego  
 Run Date: 4/5/2017 11:28:12 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	6,579
Primary Runway Width	150
Instrument Approach	Precision

## Activity Data

Total Operations:	8,030
Total Aircraft:	44
Total Passengers:	16,720
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	172	172	\$3,872,000	\$3,872,000	\$48,085,000	\$48,085,000
2. Airport Tenants: non-air related	702	702	\$36,202,000	\$36,202,000	\$237,051,000	\$237,051,000
3. Off-Site: Supported by Visitor Spending	249	249	\$7,306,000	\$7,306,000	\$20,056,000	\$20,056,000
4. Off-Site: Staff or Cargo Reliant	776	776	\$40,342,000	\$40,342,000	\$248,013,000	\$248,013,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	222	300	\$9,456,000	\$5,097,000	\$24,377,000	\$37,185,000
6. -due to Visitor Spending	71	107	\$2,483,000	\$5,080,000	\$7,435,000	\$14,866,000
7. -due to Reliance on Air Transport	682	2,224	\$26,344,000	\$58,233,000	\$67,067,000	\$138,506,000
8. Total Impact from Airport Activities	2,874	4,530	\$126,005,000	\$156,132,000	\$652,084,000	\$743,762,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$1,161,000	\$1,355,000
10. State Sales Tax	\$19,339,000	\$16,976,000
11. Tax generated by fuel sales	\$5,700	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

2017 MASP Goals:		Other Attributes
Serve Significant Population Centers	Tier 3	
Serve Significant Business Centers	Tier 1	
Serve Significant Tourism/Convention Centers	Tier 2	
Provide Access to the General Population	Tier 1	
Provide Adequate Land Area Coverage	Tier 1	
Preserve Regional Capacity	Tier 1	
Serve Seasonally Isolated Areas	Tier 3	
Inclusion in NPIAS	Tier 2	

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$532.00

Visitor spending source: visitor survey

## GLADWIN

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Zettel Memorial  
 City: Gladwin  
 Current FAA ARC: B-II  
 County: Gladwin  
 Ownership: Public  
 Scenario: Current  
 Service Area: Gladwin  
 Run Date: 4/5/2017 11:30:02 AM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	4,699
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	4,454
Total Aircraft:	14
Total Passengers:	11,135
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	0	0	\$0	\$0	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	10	10	\$238,000	\$238,000	\$667,000	\$667,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	1	4	\$36,000	\$165,000	\$120,000	\$495,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	11	14	\$274,000	\$403,000	\$787,000	\$1,162,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$0	\$10,000
10. State Sales Tax	\$0	\$70,000
11. Tax generated by fuel sales	\$120	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,666	150,000	8,333	8,333

2017 MASP Goals:		Other Attributes
Serve Significant Population Centers	Tier 3	
Serve Significant Business Centers	Tier 1	
Serve Significant Tourism/Convention Centers	Tier 3	
Provide Access to the General Population	Tier 3	
Provide Adequate Land Area Coverage	Tier 3	
Preserve Regional Capacity	Tier 3	
Serve Seasonally Isolated Areas	Tier 3	
Inclusion in NPIAS	Tier 2	

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$222.00

Visitor spending source: Prosperity Region &amp; Class

## GRAND HAVEN

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Grand Haven Memorial  
 City: Grand Haven  
 Current FAA ARC: B-II  
 County: Ottawa  
 Ownership: Public  
 Scenario: Current  
 Service Area: Ottawa  
 Run Date: 4/5/2017 11:31:25 AM

MASP Tier	Tier 1
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,752
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	4,813
Total Aircraft:	29
Total Passengers:	8,306
Total Cargo Tons:	26

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	6	6	\$291,000	\$291,000	\$1,626,000	\$1,626,000
2. Airport Tenants: non-air related	3	3	\$169,000	\$169,000	\$403,000	\$403,000
3. Off-Site: Supported by Visitor Spending	4	4	\$98,000	\$98,000	\$321,000	\$321,000
4. Off-Site: Staff or Cargo Reliant	572	572	\$39,432,000	\$39,432,000	\$208,674,000	\$208,674,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	29	54	\$1,226,000	\$1,772,000	\$3,434,000	\$7,426,000
6. -due to Visitor Spending	1	2	\$36,000	\$68,000	\$116,000	\$238,000
7. -due to Reliance on Air Transport	543	1,604	\$28,448,000	\$58,569,000	\$55,042,000	\$117,791,000
8. Total Impact from Airport Activities	1,158	2,245	\$69,700,000	\$100,399,000	\$269,616,000	\$336,479,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$57,000	\$1,018,000
10. State Sales Tax	\$567,000	\$12,554,000
11. Tax generated by fuel sales	\$210	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$128.00

Visitor spending source: Prosperity Region & Class

## GRAND LEDGE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Abrams Municipal  
 City: Grand Ledge  
 Current FAA ARC: B-II  
 County: Clinton  
 Ownership: Public  
 Scenario: Current  
 Service Area: Ingham  
 Run Date: 4/5/2017 11:34:04 AM

MASP Tier	Tier 2
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,199
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	10,267
Total Aircraft:	60
Total Passengers:	25,685
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	588	588	\$39,242,000	\$39,242,000	\$4,126,000	\$4,126,000
2. Airport Tenants: non-air related	25	25	\$1,668,000	\$1,668,000	\$10,490,000	\$10,490,000
3. Off-Site: Supported by Visitor Spending	4	4	\$78,000	\$78,000	\$292,000	\$292,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects**</b>						
5. -due to Airport and Related Activities**	17	19	\$318,000	\$353,000	\$1,778,000	\$2,436,000
6. -due to Visitor Spending	1	2	\$45,000	\$54,000	\$148,000	\$216,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	635	638	\$41,351,000	\$41,395,000	\$16,834,000	\$17,560,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$1,060,000	\$3,000
10. State Sales Tax	\$1,023,000	\$30,000
11. Tax generated by fuel sales	\$616	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$42.00

Visitor spending source: Prosperity Region & Class



## GRAYLING

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Army Airfield  
 City: Grayling  
 Current FAA ARC: B-II  
 County: Crawford  
 Ownership:  
 Scenario: Current  
 Service Area: Crawford  
 Run Date: 3/14/2017 12:05:12 PM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	5,005
Primary Runway Width	150
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	5,568
Total Aircraft:	8
Total Passengers:	15,590
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	9	9	\$463,000	\$463,000	\$285,000	\$285,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	23	23	\$458,000	\$458,000	\$1,605,000	\$1,605,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1	2	\$37,000	\$78,000	\$97,000	\$219,000
6. -due to Visitor Spending	5	10	\$159,000	\$318,000	\$479,000	\$1,190,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	38	44	\$1,117,000	\$1,317,000	\$2,466,000	\$3,299,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$14,000	\$20,000
10. State Sales Tax	\$30,000	\$168,000
11. Tax generated by fuel sales	\$843	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	165,000	150,000	7,500	7,500

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$267.00

Visitor spending source: visitor survey

## GREENVILLE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Greenville Municipal  
 City: Greenville  
 Current FAA ARC: B-II  
 County: Montcalm  
 Ownership: *Public*  
 Scenario: Current  
 Service Area: Montcalm  
 Run Date: 4/5/2017 11:36:08 AM

MASP Tier	Tier 1
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,199
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	5,000
Total Aircraft:	35
Total Passengers:	12,500
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	3	3	\$136,000	\$136,000	\$976,000	\$976,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	6	6	\$129,000	\$129,000	\$432,000	\$432,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	2	4	\$112,000	\$93,000	\$280,000	\$576,000
6. -due to Visitor Spending	1	3	\$42,000	\$89,000	\$135,000	\$320,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	12	16	\$419,000	\$447,000	\$1,823,000	\$2,304,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$6,000	\$6,000
10. State Sales Tax	\$93,000	\$45,000
11. Tax generated by fuel sales	\$396	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 2
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$128.00

Visitor spending source: visitor survey

GREGORY

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Richmond Field  
 City: Gregory  
 Current FAA ARC: A-I  
 County: Livingston  
 Ownership: *Private*  
 Scenario: Current  
 Service Area: Livingston  
 Run Date: 4/14/2017 1:27:50 PM

MASP Tier	Tier 2
MASP ARC	A-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	2,471
Primary Runway Width	100
Instrument Approach	visual

## Activity Data

Total Operations:	6,664
Total Aircraft:	36
Total Passengers:	16,660
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	1	1	\$117,000	\$117,000	\$420,000	\$420,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	5	5	\$109,000	\$109,000	\$374,000	\$374,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1	1	\$57,000	\$81,000	\$207,000	\$248,000
6. -due to Visitor Spending	1	2	\$50,000	\$76,000	\$168,000	\$277,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	8	9	\$333,000	\$383,000	\$1,169,000	\$1,319,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$5,000	\$5,000
10. State Sales Tax	\$40,000	\$39,000
11. Tax generated by fuel sales	\$0	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	0	0	0	0

2017 MASP Goals:	
Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$227.00

Visitor spending source: Prosperity Region

DETROIT /  
GROSSE ILE.

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Grosse Ile Mun.  
 City: Grosse Ile  
 Current FAA ARC: B-II  
 County: Wayne  
 Ownership: Public  
 Scenario: Current  
 Service Area: Wayne  
 Run Date: 4/4/2017 3:02:20 PM

MASP Tier	Tier 1
MASP ARC	B-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,846
Primary Runway Width	100
Instrument Approach	Non-Precision

## Activity Data

Total Operations:	15,748
Total Aircraft:	83
Total Passengers:	36,756
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	14	14	\$1,318,000	\$1,318,000	\$2,930,000	\$2,930,000
2. Airport Tenants: non-air related	82	82	\$7,350,000	\$7,350,000	\$16,262,000	\$16,262,000
3. Off-Site: Supported by Visitor Spending	31	31	\$999,000	\$999,000	\$2,840,000	\$2,840,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	12	10	\$622,000	\$559,000	\$1,824,000	\$1,730,000
6. -due to Visitor Spending	11	13	\$613,000	\$695,000	\$1,595,000	\$2,105,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	150	150	\$10,902,000	\$10,921,000	\$25,451,000	\$25,867,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$237,000	\$44,000
10. State Sales Tax	\$1,255,000	\$297,000
11. Tax generated by fuel sales	\$891	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$400.00

Visitor spending source: Prosperity Region &amp; Class

HANCOCK

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Houghton Co. Mem.  
 City: Hancock  
 Current FAA ARC: C-III  
 County: Houghton  
 Ownership: Public  
 Scenario: Current  
 Service Area: Houghton  
 Run Date: 4/6/2017 11:40:45 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	6,500
Primary Runway Width	150
Instrument Approach	Precision

## Activity Data

Total Operations:	17,695
Total Aircraft:	34
Total Passengers:	378,544
Total Cargo Tons:	55

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	69	69	\$4,192,000	\$4,192,000	\$12,302,000	\$12,302,000
2. Airport Tenants: non-air related	2	2	\$149,000	\$149,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	94	94	\$1,856,000	\$1,856,000	\$6,444,000	\$6,444,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	39	57	\$1,550,000	\$1,699,000	\$4,108,000	\$7,569,000
6. -due to Visitor Spending	19	40	\$579,000	\$1,291,000	\$1,992,000	\$4,776,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	223	262	\$8,326,000	\$9,187,000	\$24,846,000	\$31,091,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$155,000	\$81,000
10. State Sales Tax	\$1,192,000	\$673,000
11. Tax generated by fuel sales	\$2,262	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	1,100,000	1,000,000	50,000	50,000

2017 MASP Goals:	
Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$164.00

Visitor spending source: Prosperity Region

## HARBOR SPRINGS

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Harbor Springs Mun  
 City: Harbor Springs  
 Current FAA ARC: B-II  
 County: Emmet  
 Ownership: Public  
 Scenario: Current  
 Service Area: Emmet  
 Run Date: 4/5/2017 11:37:44 AM

MASP Tier	Tier 2
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,149
Primary Runway Width	75
Instrument Approach	Non-Precision

## Activity Data

Total Operations:	16,500
Total Aircraft:	18
Total Passengers:	61,500
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	9	9	\$557,000	\$557,000	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	187	187	\$4,926,000	\$4,926,000	\$15,163,000	\$15,163,000
4. Off-Site: Staff or Cargo Reliant	22	22	\$703,000	\$703,000	\$1,958,000	\$1,958,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	5	6	\$179,000	\$252,000	\$512,000	\$856,000
6. -due to Visitor Spending	57	80	\$2,113,000	\$3,425,000	\$6,110,000	\$11,239,000
7. -due to Reliance on Air Transport	7	12	\$202,000	\$223,000	\$539,000	\$828,000
8. Total Impact from Airport Activities	287	316	\$8,680,000	\$10,086,000	\$24,282,000	\$30,044,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$21,000	\$233,000
10. State Sales Tax	\$51,000	\$1,702,000
11. Tax generated by fuel sales	\$2,340	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 2
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$702.00

Visitor spending source: visitor survey

## HARSENS ISLAND

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Harsens Island Airport  
 City: Harsens Island  
 Current FAA ARC: A-I  
 County: St. Clair  
 Ownership: *Private*  
 Scenario: Current  
 Service Area: St. Clair  
 Run Date: 4/5/2017 11:39:21 AM

MASP Tier	Tier 1
MASP ARC	-B-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	2,200
Primary Runway Width	60
Instrument Approach	visual

## Activity Data

Total Operations:	200
Total Aircraft:	1
Total Passengers:	600
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	0	0	\$0	\$0	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	1	1	\$21,000	\$21,000	\$76,000	\$76,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	0	0	\$9,000	\$14,000	\$31,000	\$56,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	1	1	\$30,000	\$35,000	\$107,000	\$132,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$0	\$900
10. State Sales Tax	\$0	\$8,000
11. Tax generated by fuel sales	\$0	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 1
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$254.00

Visitor spending source: Airport Class

## HART-SHELBY

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Oceana County  
 City: Hart-Shelby  
 Current FAA ARC: B-I  
 County: Oceana  
 Ownership: Public  
 Scenario: Current  
 Service Area: Oceana  
 Run Date: 4/5/2017 11:42:02 AM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	3,500
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

**Activity Data**

Total Operations:	2,500
Total Aircraft:	34
Total Passengers:	5,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	1	1	\$57,000	\$57,000	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	2	2	\$41,000	\$41,000	\$120,000	\$120,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	0	1	\$9,000	\$28,000	\$26,000	\$89,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	3	4	\$107,000	\$126,000	\$146,000	\$209,000

**Tax Generated by Aviation-Related Activity**

	At-Airport	Off-Site
9. State Income Tax	\$1,000	\$2,000
10. State Sales Tax	\$0	\$13,000
11. Tax generated by fuel sales	\$120	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

**2017 MASP Goals:**

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

**Other Attributes**

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$192.00

Visitor spending source: Airport Class



## HASTINGS

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Hastings Airport  
 City: Hastings  
 Current FAA ARC: B-II  
 County: Barry  
 Ownership: Public  
 Scenario: Current  
 Service Area: Barry  
 Run Date: 4/5/2017 11:43:22 AM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	4,502
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	13,300
Total Aircraft:	72
Total Passengers:	33,500
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	19	19	\$1,336,000	\$1,336,000	\$6,426,000	\$6,426,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	19	19	\$405,000	\$405,000	\$1,114,000	\$1,114,000
4. Off-Site: Staff or Cargo Reliant	4	4	\$131,000	\$131,000	\$653,000	\$653,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	22	28	\$1,193,000	\$918,000	\$2,957,000	\$3,794,000
6. -due to Visitor Spending	4	8	\$130,000	\$281,000	\$400,000	\$825,000
7. -due to Reliance on Air Transport	3	7	\$54,000	\$159,000	\$183,000	\$456,000
8. Total Impact from Airport Activities	71	85	\$3,249,000	\$3,230,000	\$11,733,000	\$13,268,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$58,000	\$21,000
10. State Sales Tax	\$613,000	\$156,000
11. Tax generated by fuel sales	\$990	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$128.00

Visitor spending source: Prosperity Region &amp; Class

## HILLSDALE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Hillsdale Municipal  
 City: Hillsdale  
 Current FAA ARC B-II  
 County: Hillsdale  
 Ownership: Public  
 Scenario: Current  
 Service Area: Hillsdale  
 Run Date: 4/5/2017 11:44:33 AM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	5,000
Primary Runway Width	100
Instrument Approach	Non-Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	3,100
Total Aircraft:	13
Total Passengers:	7,750
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	4	4	\$325,000	\$325,000	\$1,141,000	\$1,141,000
2. Airport Tenants: non-air related	7	7	\$223,000	\$223,000	\$718,000	\$718,000
3. Off-Site: Supported by Visitor Spending	12	12	\$254,000	\$254,000	\$820,000	\$820,000
4. Off-Site: Staff or Cargo Reliant	6	6	\$340,000	\$340,000	\$1,943,000	\$1,943,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	4	4	\$178,000	\$182,000	\$476,000	\$674,000
6. -due to Visitor Spending	2	5	\$79,000	\$176,000	\$241,000	\$608,000
7. -due to Reliance on Air Transport	5	15	\$141,000	\$487,000	\$446,000	\$1,196,000
8. Total Impact from Airport Activities	40	53	\$1,540,000	\$1,987,000	\$5,785,000	\$7,100,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$19,000	\$20,000
10. State Sales Tax	\$152,000	\$202,000
11. Tax generated by fuel sales	\$360	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

2017 MASP Goals:		Other Attributes
Serve Significant Population Centers	Tier 1	
Serve Significant Business Centers	Tier 1	
Serve Significant Tourism/Convention Centers	Tier 3	
Provide Access to the General Population	Tier 3	
Provide Adequate Land Area Coverage	Tier 3	
Preserve Regional Capacity	Tier 3	
Serve Seasonally Isolated Areas	Tier 1	
Inclusion in NPIAS	Tier 2	

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$392.00

Visitor spending source: visitor survey

## HOLLAND

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: West Michigan Regional  
 City: Holland  
 Current FAA ARC: D-II  
 County: Allegan  
 Ownership: Public  
 Scenario: Current  
 Service Area: Ottawa  
 Run Date: 4/21/2017 9:18:49 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	6,002
Primary Runway Width	100
Instrument Approach	Precision

## Activity Data

Total Operations:	34,650
Total Aircraft:	59
Total Passengers:	126,275
Total Cargo Tons:	54,975

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	73	73	\$3,270,000	\$3,270,000	\$20,745,000	\$20,745,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	419	419	\$10,453,000	\$10,453,000	\$28,274,000	\$28,274,000
4. Off-Site: Staff or Cargo Reliant	1,690	1,690	\$95,622,000	\$95,622,000	\$334,958,000	\$334,958,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	809	1,485	\$41,639,000	\$63,132,000	\$99,829,000	\$216,788,000
6. -due to Visitor Spending	103	179	\$3,868,000	\$7,269,000	\$10,203,000	\$20,957,000
7. -due to Reliance on Air Transport	178	502	\$9,017,000	\$18,422,000	\$27,444,000	\$58,381,000
8. Total Impact from Airport Activities	3,272	4,348	\$163,869,000	\$198,168,000	\$521,453,000	\$680,103,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$1,707,000	\$2,913,000
10. State Sales Tax	\$14,252,000	\$23,051,000
11. Tax generated by fuel sales	\$18,229	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$604.00

Visitor spending source: Passenger Survey

## HOUGHTON LAKE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Roscommon County  
 City: Houghton Lake  
 Current FAA ARC: B-II  
 County: Roscommon  
 Ownership: Public  
 Scenario: Current  
 Service Area: Roscommon  
 Run Date: 4/5/2017 11:47:17 AM

MASP Tier	Tier 1
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,000
Primary Runway Width	75
Instrument Approach	Non-Precision

## Activity Data

Total Operations:	12,900
Total Aircraft:	26
Total Passengers:	38,700
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	7	7	\$357,000	\$357,000	\$1,650,000	\$1,650,000
2. Airport Tenants: non-air related	5	5	\$199,000	\$199,000	\$164,000	\$164,000
3. Off-Site: Supported by Visitor Spending	18	18	\$395,000	\$395,000	\$1,202,000	\$1,202,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	6	7	\$295,000	\$170,000	\$722,000	\$974,000
6. -due to Visitor Spending	3	8	\$85,000	\$274,000	\$286,000	\$891,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	39	45	\$1,331,000	\$1,395,000	\$4,024,000	\$4,881,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$19,000	\$17,000
10. State Sales Tax	\$167,000	\$126,000
11. Tax generated by fuel sales	\$360	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$345.00

Visitor spending source: Prosperity Region & Class

HOWELL

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Livingston County  
 City: Howell  
 Current FAA ARC: C-II  
 County: Livingston  
 Ownership: Public  
 Scenario: Current  
 Service Area: Livingston  
 Run Date: 4/5/2017 11:49:16 AM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	5,002
Primary Runway Width	100
Instrument Approach	Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	45,000
Total Aircraft:	156
Total Passengers:	99,500
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	22	22	\$2,374,000	\$2,374,000	\$7,559,000	\$7,559,000
2. Airport Tenants: non-air related	35	35	\$1,675,000	\$1,675,000	\$3,728,000	\$3,728,000
3. Off-Site: Supported by Visitor Spending	14	14	\$306,000	\$306,000	\$981,000	\$981,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	23	26	\$1,029,000	\$1,451,000	\$3,720,000	\$4,463,000
6. -due to Visitor Spending	4	6	\$141,000	\$213,000	\$441,000	\$727,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	98	103	\$5,525,000	\$6,019,000	\$16,429,000	\$17,458,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$141,000	\$13,000
10. State Sales Tax	\$945,000	\$102,000
11. Tax generated by fuel sales	\$7,350	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$59.00

Visitor spending source: Prosperity Region &amp; Class

## IONIA

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Ionia County  
 City: Ionia  
 Current FAA ARC: B-II  
 County: Ionia  
 Ownership: Public  
 Scenario: Current  
 Service Area: Ionia  
 Run Date: 4/5/2017 11:50:28 AM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	4,298
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	21,100
Total Aircraft:	67
Total Passengers:	52,800
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	43	43	\$1,398,000	\$1,398,000	\$10,443,000	\$10,443,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	30	30	\$681,000	\$681,000	\$2,035,000	\$2,035,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	16	51	\$423,000	\$575,000	\$1,445,000	\$6,166,000
6. -due to Visitor Spending	6	13	\$158,000	\$473,000	\$543,000	\$1,509,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	95	137	\$2,660,000	\$3,127,000	\$14,466,000	\$20,153,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$51,000	\$30,000
10. State Sales Tax	\$997,000	\$213,000
11. Tax generated by fuel sales	\$825	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$128.00

Visitor spending source: Prosperity Region & Class

## IRON MOUNTAIN

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Ford  
 City: Iron Mountain  
 Current FAA ARC C-III  
 County: Dickinson  
 Ownership: *Public*  
 Scenario: Current  
 Service Area: Dickinson  
 Run Date: 4/6/2017 6:56:03 AM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	6,501
Primary Runway Width	150
Instrument Approach	Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	3,324
Total Aircraft:	45
Total Passengers:	26,768
Total Cargo Tons:	461

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	70	70	\$4,724,000	\$4,724,000	\$17,357,000	\$17,357,000
2. Airport Tenants: non-air related	4	4	\$133,000	\$133,000	\$390,000	\$390,000
3. Off-Site: Supported by Visitor Spending	35	35	\$704,000	\$704,000	\$2,610,000	\$2,610,000
4. Off-Site: Staff or Cargo Reliant	43	43	\$2,450,000	\$2,450,000	\$13,523,000	\$13,523,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	40	77	\$1,420,000	\$2,362,000	\$4,326,000	\$10,842,000
6. -due to Visitor Spending	7	15	\$236,000	\$490,000	\$760,000	\$1,935,000
7. -due to Reliance on Air Transport	33	91	\$1,157,000	\$3,002,000	\$3,553,000	\$7,881,000
8. Total Impact from Airport Activities	232	335	\$10,824,000	\$13,865,000	\$42,519,000	\$54,538,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$186,000	\$94,000
10. State Sales Tax	\$1,715,000	\$1,084,000
11. Tax generated by fuel sales	\$10,661	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	1,050,000	1,000,000	25,000	25,000

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$479.00

Visitor spending source: Prosperity Region &amp; Class

## IRON RIVER

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Stambaugh  
 City: Stambaugh  
 Current FAA ARC: A-I  
 County: Iron  
 Ownership: Public  
 Scenario: Current  
 Service Area: Iron  
 Run Date: 4/5/2017 11:51:54 AM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	2,000
Primary Runway Width	40
Instrument Approach	visual

Evaluated for Year: 2016

**Activity Data**

Total Operations:	2,300
Total Aircraft:	7
Total Passengers:	6,600
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	1	1	\$56,000	\$56,000	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	10	10	\$207,000	\$207,000	\$686,000	\$686,000
4. Off-Site: Staff or Cargo Reliant	600	600	\$17,164,000	\$17,164,000	\$58,920,000	\$58,920,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	2	4	\$76,000	\$144,000	\$249,000	\$508,000
7. -due to Reliance on Air Transport	365	694	\$7,992,000	\$11,452,000	\$26,907,000	\$53,670,000
8. Total Impact from Airport Activities	978	1,309	\$25,495,000	\$29,023,000	\$86,762,000	\$113,784,000

**Tax Generated by Aviation-Related Activity**

	At-Airport	Off-Site
9. State Income Tax	\$1,000	\$450,000
10. State Sales Tax	\$0	\$3,607,000
11. Tax generated by fuel sales	\$900	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

**2017 MASP Goals:**

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

**Other Attributes**

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$254.00

Visitor spending source: Airport Class



## IRONWOOD

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Gogebic County  
 City: Ironwood  
 Current FAA ARC: C-II  
 County: Gogebic  
 Ownership: Public  
 Scenario: Current  
 Service Area: Gogebic  
 Run Date: 4/5/2017 10:32:51 AM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	6,502
Primary Runway Width	130
Instrument Approach	Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	6,100
Total Aircraft:	16
Total Passengers:	25,200
Total Cargo Tons:	375

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	41	41	\$2,205,000	\$2,205,000	\$3,803,000	\$3,803,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	17	17	\$423,000	\$423,000	\$1,266,000	\$1,266,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	12	20	\$484,000	\$608,000	\$1,435,000	\$2,703,000
6. -due to Visitor Spending	3	7	\$123,000	\$294,000	\$415,000	\$938,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	73	85	\$3,235,000	\$3,530,000	\$6,919,000	\$8,710,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$72,000	\$18,000
10. State Sales Tax	\$390,000	\$132,000
11. Tax generated by fuel sales	\$4,374	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	157,895	150,000	3,947	3,948

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$164.00

Visitor spending source: visitor survey

## JACKSON

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Jackson County-Reynolds Field  
 City: Jackson  
 Current FAA ARC: C-II  
 County: Jackson  
 Ownership: Public  
 Scenario: Current  
 Service Area: Jackson  
 Run Date: 4/5/2017 10:35:05 AM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	5,349
Primary Runway Width	150
Instrument Approach	Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	42,642
Total Aircraft:	102
Total Passengers:	114,609
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	41	41	\$3,035,000	\$3,035,000	\$11,252,000	\$11,252,000
2. Airport Tenants: non-air related	31	31	\$1,841,000	\$1,841,000	\$5,461,000	\$5,461,000
3. Off-Site: Supported by Visitor Spending	28	28	\$676,000	\$676,000	\$2,005,000	\$2,005,000
4. Off-Site: Staff or Cargo Reliant	13	13	\$888,000	\$888,000	\$4,300,000	\$4,300,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	36	46	\$1,786,000	\$1,898,000	\$4,806,000	\$6,867,000
6. -due to Visitor Spending	7	12	\$286,000	\$470,000	\$859,000	\$1,486,000
7. -due to Reliance on Air Transport	12	33	\$460,000	\$1,223,000	\$1,277,000	\$2,464,000
8. Total Impact from Airport Activities	168	204	\$8,972,000	\$10,031,000	\$29,960,000	\$33,835,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$174,000	\$52,000
10. State Sales Tax	\$1,415,000	\$467,000
11. Tax generated by fuel sales	\$5,100	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	157,895	150,000	3,947	3,948

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$59.00

Visitor spending source: visitor survey

## JENISON

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Riverview  
 City: Jenison  
 Current FAA ARC: B-I  
 County: Ottawa  
 Ownership: *Private*  
 Scenario: Current  
 Service Area: Kent  
 Run Date: 4/5/2017 11:55:54 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,920
Primary Runway Width	49
Instrument Approach	visual

## Activity Data

Total Operations:	5,000
Total Aircraft:	38
Total Passengers:	6,250
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	3	3	\$136,000	\$136,000	\$976,000	\$976,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	1	1	\$24,000	\$24,000	\$47,000	\$47,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	4	4	\$158,000	\$93,000	\$486,000	\$576,000
6. -due to Visitor Spending	0	0	\$15,000	\$17,000	\$26,000	\$35,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	8	8	\$333,000	\$270,000	\$1,535,000	\$1,634,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$6,000	\$1,000
10. State Sales Tax	\$93,000	\$5,000
11. Tax generated by fuel sales	\$0	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	18,167	1,500	8,333	8,334

2017 MASP Goals:		Other Attributes
Serve Significant Population Centers	Tier 1	
Serve Significant Business Centers	Tier 3	
Serve Significant Tourism/Convention Centers	Tier 3	
Provide Access to the General Population	Tier 3	
Provide Adequate Land Area Coverage	Tier 3	
Preserve Regional Capacity	Tier 2	
Serve Seasonally Isolated Areas	Tier 3	
Inclusion in NPIAS	Tier 3	

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$50.00

Visitor spending source: visitor survey

## KALAMAZOO

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Kalamazoo/Battle Creek Int  
 City: Kalamazoo  
 Current FAA ARC: C-III  
 County: Kalamazoo  
 Ownership: Public  
 Scenario: Current  
 Service Area: Kalamazoo  
 Run Date: 4/14/2017 9:17:29 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	6,502
Primary Runway Width	150
Instrument Approach	Precision

## Activity Data

Total Operations:	40,698
Total Aircraft:	111
Total Passengers:	344,638
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	114	114	\$6,393,000	\$6,393,000	\$8,554,000	\$8,554,000
2. Airport Tenants: non-air related	7	7	\$434,000	\$434,000	\$1,015,000	\$1,015,000
3. Off-Site: Supported by Visitor Spending	107	107	\$2,747,000	\$2,747,000	\$8,245,000	\$8,245,000
4. Off-Site: Staff or Cargo Reliant	10	10	\$454,000	\$454,000	\$1,338,000	\$1,338,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	39	48	\$1,870,000	\$1,723,000	\$5,455,000	\$6,493,000
6. -due to Visitor Spending	36	46	\$1,530,000	\$1,910,000	\$4,547,000	\$6,111,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	313	332	\$13,428,000	\$13,661,000	\$29,154,000	\$31,756,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$220,000	\$131,000
10. State Sales Tax	\$964,000	\$942,000
11. Tax generated by fuel sales	\$0	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	1,600,000	1,500,000	50,000	50,000

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$90.00

Visitor spending source: Visitor Survey

## LAKE CITY

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Home Acres  
 City: Lake City  
 Current FAA ARC: A-I  
 County: Missaukee  
 Ownership: *Private*  
 Scenario: Current  
 Service Area: Missaukee  
 Run Date: 4/11/2017 1:12:32 PM

MASP Tier	Tier 2
MASP ARC	A-I
<b>Airport Features</b>	
Primary Runway Length	3,860
Primary Runway Width	60
Instrument Approach	visual

Evaluated for Year: 2016

## Activity Data

Total Operations:	2,000
Total Aircraft:	0
Total Passengers:	5,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	0	0	\$0	\$0	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	6	6	\$92,000	\$92,000	\$343,000	\$343,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	1	2	\$67,000	\$64,000	\$80,000	\$254,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	7	8	\$159,000	\$156,000	\$423,000	\$597,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$0	\$4,000
10. State Sales Tax	\$0	\$36,000
11. Tax generated by fuel sales	\$0	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	0	0	0	0

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$254.00

Visitor spending source: Airport Reference Code

## LAKEVIEW

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Griffith Field  
 City: Lakeview  
 Current FAA ARC: B-I  
 County: Montcalm  
 Ownership: Public  
 Scenario: Current  
 Service Area: Montcalm  
 Run Date: 4/5/2017 12:18:21 PM

MASP Tier	Tier 2
MASP ARC	B-I
<b>Airport Features</b>	
Primary Runway Length	3,499
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	10,000
Total Aircraft:	30
Total Passengers:	25,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	21	21	\$1,012,000	\$1,012,000	\$5,853,000	\$5,853,000
2. Airport Tenants: non-air related	8	8	\$694,000	\$694,000	\$3,600,000	\$3,600,000
3. Off-Site: Supported by Visitor Spending	5	5	\$107,000	\$107,000	\$338,000	\$338,000
4. Off-Site: Staff or Cargo Reliant	10	10	\$614,000	\$614,000	\$2,016,000	\$2,016,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	17	30	\$761,000	\$758,000	\$1,946,000	\$4,016,000
6. -due to Visitor Spending	1	2	\$35,000	\$75,000	\$105,000	\$250,000
7. -due to Reliance on Air Transport	4	11	\$144,000	\$392,000	\$357,000	\$951,000
8. Total Impact from Airport Activities	66	87	\$3,367,000	\$3,652,000	\$14,215,000	\$17,024,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$63,000	\$20,000
10. State Sales Tax	\$808,000	\$156,000
11. Tax generated by fuel sales	\$280	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$50.00

Visitor spending source: Prosperity Region &amp; Class

## LAMBERTVILLE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Toledo Suburban  
 City: Lambertville  
 Current FAA ARC: B-I  
 County: Monroe  
 Ownership: Private  
 Scenario: Current  
 Service Area: Monroe  
 Run Date: 4/5/2017 12:39:26 PM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	4,807
Primary Runway Width	50
Instrument Approach	visual

Evaluated for Year: 2016

## Activity Data

Total Operations:	17,000
Total Aircraft:	54
Total Passengers:	55,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	12	12	\$1,058,000	\$1,058,000	\$4,564,000	\$4,564,000
2. Airport Tenants: non-air related	20	20	\$1,038,000	\$1,038,000	\$2,288,000	\$2,288,000
3. Off-Site: Supported by Visitor Spending	38	38	\$813,000	\$813,000	\$2,556,000	\$2,556,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	14	18	\$713,000	\$727,000	\$1,904,000	\$2,694,000
6. -due to Visitor Spending	9	16	\$354,000	\$566,000	\$968,000	\$1,895,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	93	104	\$3,976,000	\$4,202,000	\$12,280,000	\$13,997,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$73,000	\$35,000
10. State Sales Tax	\$573,000	\$267,000
11. Tax generated by fuel sales	\$870	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$355.00

Visitor spending source: visitor survey

## LANSING

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Capital Region Int'l Airport  
 City: Lansing  
 Current FAA ARC: D-IV  
 County: Clinton  
 Ownership: Public  
 Scenario: Current  
 Service Area: Ingham  
 Run Date: 4/14/2017 1:46:39 PM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	8,506
Primary Runway Width	150
Instrument Approach	Precision

## Activity Data

Total Operations:	32,292
Total Aircraft:	61
Total Passengers:	448,965
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	523	523	\$30,019,000	\$30,019,000	\$68,295,000	\$68,295,000
2. Airport Tenants: non-air related	299	299	\$5,220,000	\$5,220,000	\$24,983,000	\$24,983,000
3. Off-Site: Supported by Visitor Spending	1,401	1,401	\$27,442,000	\$27,442,000	\$99,250,000	\$99,250,000
4. Off-Site: Staff or Cargo Reliant	16	16	\$266,000	\$266,000	\$1,245,000	\$1,245,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	293	339	\$8,909,000	\$11,496,000	\$33,976,000	\$47,287,000
6. -due to Visitor Spending	416	599	\$15,716,000	\$19,082,000	\$50,418,000	\$73,565,000
7. -due to Reliance on Air Transport	16	18	\$163,000	\$177,000	\$904,000	\$1,134,000
8. Total Impact from Airport Activities	2,964	3,195	\$87,735,000	\$93,702,000	\$279,071,000	\$315,759,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$1,201,000	\$1,203,000
10. State Sales Tax	\$8,434,000	\$10,444,000
11. Tax generated by fuel sales	\$88,113	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2016 Budget:	2,098,811	1,908,010	95,400	95,401

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$558.00

Visitor spending source: visitor survey



## LAPEER

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Dupont-Lapeer  
 City: Lapeer  
 Current FAA ARC: B-II  
 County: Lapeer  
 Ownership: Public  
 Scenario: Current  
 Service Area: Lapeer  
 Run Date: 4/5/2017 12:40:53 PM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	3,800
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	16,000
Total Aircraft:	70
Total Passengers:	38,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	16	16	\$1,119,000	\$1,119,000	\$5,649,000	\$5,649,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	33	33	\$675,000	\$675,000	\$2,122,000	\$2,122,000
4. Off-Site: Staff or Cargo Reliant	25	25	\$1,413,000	\$1,413,000	\$9,133,000	\$9,133,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	20	23	\$773,000	\$769,000	\$2,553,000	\$3,335,000
6. -due to Visitor Spending	7	14	\$230,000	\$470,000	\$649,000	\$1,573,000
7. -due to Reliance on Air Transport	18	79	\$612,000	\$2,268,000	\$1,763,000	\$5,306,000
8. Total Impact from Airport Activities	119	190	\$4,822,000	\$6,714,000	\$21,869,000	\$27,118,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$49,000	\$66,000
10. State Sales Tax	\$539,000	\$770,000
11. Tax generated by fuel sales	\$743	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 2
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$262.00

Visitor spending source: Prosperity Region &amp; Class

## LINDEN

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Price's  
 City: Linden  
 Current FAA ARC: B-II  
 County: Genesee  
 Ownership: Public  
 Scenario: Current  
 Service Area: Genesee  
 Run Date: 4/3/2017 1:03:36 PM

MASP Tier	Tier 2
MASP ARC	A-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,999
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	2,600
Total Aircraft:	22
Total Passengers:	7,100
Total Cargo Tons:	10

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	6	6	\$293,000	\$293,000	\$1,060,000	\$1,060,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	2	2	\$49,000	\$49,000	\$172,000	\$172,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	5	5	\$204,000	\$208,000	\$571,000	\$682,000
6. -due to Visitor Spending	1	1	\$30,000	\$34,000	\$93,000	\$128,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	14	14	\$576,000	\$584,000	\$1,896,000	\$2,042,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$13,000	\$2,000
10. State Sales Tax	\$105,000	\$18,000
11. Tax generated by fuel sales	\$360	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$262.00

Visitor spending source: Prosperity Region &amp; Class

## LUDINGTON

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Mason County  
 City: Ludington  
 Current FAA ARC: B-II  
 County: Mason  
 Ownership: Public  
 Scenario: Current  
 Service Area: Mason  
 Run Date: 4/3/2017 1:05:04 PM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	5,003
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	9,862
Total Aircraft:	24
Total Passengers:	29,586
Total Cargo Tons:	91

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	5	5	\$247,000	\$247,000	\$1,650,000	\$1,650,000
2. Airport Tenants: non-air related	7	7	\$336,000	\$336,000	\$520,000	\$520,000
3. Off-Site: Supported by Visitor Spending	30	30	\$656,000	\$656,000	\$2,023,000	\$2,023,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects**</b>						
5. -due to Airport and Related Activities**	6	7	\$295,000	\$170,000	\$722,000	\$974,000
6. -due to Visitor Spending	8	13	\$287,000	\$456,000	\$811,000	\$1,500,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	56	62	\$1,821,000	\$1,865,000	\$5,726,000	\$6,667,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$19,000	\$29,000
10. State Sales Tax	\$189,000	\$211,000
11. Tax generated by fuel sales	\$1,500	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$227.00

Visitor spending source: Prosperity Region &amp; Class

## MACKINAC

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Mackinac Island  
 City: Mackinac  
 Current FAA ARC: B-II  
 County: Mackinac  
 Ownership: Public  
 Scenario: Current  
 Service Area: Mackinac  
 Run Date: 4/3/2017 1:09:01 PM

MASP Tier	Tier 1
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,501
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	11,201
Total Aircraft:	0
Total Passengers:	44,373
Total Cargo Tons:	301,116

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	5	5	\$266,000	\$266,000	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	100	100	\$2,740,000	\$2,740,000	\$8,170,000	\$8,170,000
4. Off-Site: Staff or Cargo Reliant	50	50	\$1,977,000	\$1,977,000	\$5,223,000	\$5,223,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	5	9	\$172,000	\$275,000	\$587,000	\$1,065,000
6. -due to Visitor Spending	22	43	\$620,000	\$1,905,000	\$2,476,000	\$6,055,000
7. -due to Reliance on Air Transport	20	46	\$486,000	\$1,069,000	\$1,668,000	\$3,640,000
8. Total Impact from Airport Activities	202	253	\$6,261,000	\$8,232,000	\$18,124,000	\$24,153,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$14,000	\$170,000
10. State Sales Tax	\$64,000	\$1,167,000
11. Tax generated by fuel sales	\$0	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 1
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$503.00

Visitor spending source: visitor survey

## MANISTEE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Blacker  
 City: Manistee  
 Current FAA ARC: C-II  
 County: Manistee  
 Ownership: Public  
 Scenario: Current  
 Service Area: Manistee  
 Run Date: 3/21/2017 12:28:42 PM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	5,501
Primary Runway Width	100
Instrument Approach	ILS

Evaluated for Year: 2016

## Activity Data

Total Operations: 6,850  
 Total Aircraft: 11  
 Total Passengers: 34,300  
 Total Cargo Tons: 0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	33	33	\$2,068,000	\$2,068,000	\$5,747,000	\$5,747,000
2. Airport Tenants: non-air related	3	3	\$189,000	\$189,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	156	156	\$3,308,000	\$3,308,000	\$10,256,000	\$10,256,000
4. Off-Site: Staff or Cargo Reliant	93	93	\$6,613,000	\$6,613,000	\$46,824,000	\$46,824,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	15	24	\$486,000	\$772,000	\$1,869,000	\$3,444,000
6. -due to Visitor Spending	27	67	\$810,000	\$2,300,000	\$2,707,000	\$7,602,000
7. -due to Reliance on Air Transport	97	271	\$2,633,000	\$10,296,000	\$8,794,000	\$27,524,000
8. Total Impact from Airport Activities	424	647	\$16,107,000	\$25,546,000	\$76,197,000	\$101,397,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$78,000	\$314,000
10. State Sales Tax	\$551,000	\$3,881,000
11. Tax generated by fuel sales	\$27,139	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	157,895	150,000	3,947	3,948

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$796.00

Visitor spending source: visitor survey

## MANISTIQUE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Schoolcraft County  
 City: Manistique  
 Current FAA ARC: C-II  
 County: Schoolcraft  
 Ownership: Public  
 Scenario: Current  
 Service Area: Schoolcraft  
 Run Date: 3/23/2017 9:08:48 AM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	5,001
Primary Runway Width	100
Instrument Approach	NPI

Evaluated for Year: 2015

## Activity Data

Total Operations:	2,000
Total Aircraft:	8
Total Passengers:	5,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	6	6	\$319,000	\$319,000	\$621,000	\$621,000
2. Airport Tenants: non-air related	6	6	\$288,000	\$288,000	\$1,037,000	\$1,037,000
3. Off-Site: Supported by Visitor Spending	2	2	\$40,000	\$40,000	\$106,000	\$106,000
4. Off-Site: Staff or Cargo Reliant	4	4	\$152,000	\$152,000	\$102,000	\$102,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	2	4	\$70,000	\$81,000	\$247,000	\$444,000
6. -due to Visitor Spending	0	1	\$9,000	\$28,000	\$24,000	\$79,000
7. -due to Reliance on Air Transport	1	1	\$26,000	\$44,000	\$0	\$0
8. Total Impact from Airport Activities	21	24	\$904,000	\$952,000	\$2,137,000	\$2,389,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$18,000	\$6,000
10. State Sales Tax	\$126,000	\$17,000
11. Tax generated by fuel sales	\$3,750	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$213.00

Visitor spending source: Visitor Survey

## MARINE CITY

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Marine City  
 City: Marine City  
 Current FAA ARC: B-I  
 County: St. Clair  
 Ownership: Private  
 Scenario: Current  
 Service Area: St. Clair  
 Run Date: 3/23/2017 9:14:29 AM

MASP Tier	Tier 2
MASP ARC	A-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,100
Primary Runway Width	60
Instrument Approach	visual

## Activity Data

Total Operations:	8,000
Total Aircraft:	27
Total Passengers:	16,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	3	3	\$336,000	\$336,000	\$1,236,000	\$1,236,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	8	8	\$164,000	\$164,000	\$540,000	\$540,000
4. Off-Site: Staff or Cargo Reliant	50	50	\$3,257,000	\$3,257,000	\$22,922,000	\$22,922,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	5	4	\$247,000	\$231,000	\$697,000	\$730,000
6. -due to Visitor Spending	2	3	\$73,000	\$114,000	\$218,000	\$400,000
7. -due to Reliance on Air Transport	58	158	\$2,241,000	\$5,229,000	\$5,854,000	\$13,317,000
8. Total Impact from Airport Activities	126	226	\$6,318,000	\$9,331,000	\$31,467,000	\$39,145,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$15,000	\$91,000
10. State Sales Tax	\$118,000	\$1,432,000
11. Tax generated by fuel sales	\$3,600	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	0	0	0	0

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$150.00

Visitor spending source: Visitor Survey

## MARLETTE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Marlette Township  
 City: Marlette  
 Current FAA ARC: B-II  
 County: Sanilac  
 Ownership: Public  
 Scenario: Current  
 Service Area: Sanilac  
 Run Date: 3/23/2017 9:29:09 AM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	3,796
Primary Runway Width	75
Instrument Approach	Non-Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	9,800
Total Aircraft:	32
Total Passengers:	24,500
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	0	0	\$0	\$0	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	20	20	\$465,000	\$465,000	\$1,409,000	\$1,409,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	4	9	\$122,000	\$323,000	\$401,000	\$1,044,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	24	29	\$587,000	\$788,000	\$1,810,000	\$2,453,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$0	\$20,000
10. State Sales Tax	\$0	\$147,000
11. Tax generated by fuel sales	\$1,500	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$213.00

Visitor spending source: Visitor Survey



## MARQUETTE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Sawyer International  
 City: Marquette  
 Current FAA ARC: D-III  
 County: Marquette  
 Ownership: Public  
 Scenario: Current  
 Service Area: Marquette  
 Run Date: 3/23/2017 9:39:02 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	12,366
Primary Runway Width	150
Instrument Approach	Precision

## Activity Data

Total Operations:	14,531
Total Aircraft:	39
Total Passengers:	265,994
Total Cargo Tons:	8,193

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	297	297	\$20,075,000	\$20,075,000	\$89,932,000	\$89,932,000
2. Airport Tenants: non-air related	525	525	\$23,765,000	\$23,765,000	\$73,984,000	\$73,984,000
3. Off-Site: Supported by Visitor Spending	436	436	\$9,188,000	\$9,188,000	\$31,862,000	\$31,862,000
4. Off-Site: Staff or Cargo Reliant	9	9	\$295,000	\$295,000	\$1,156,000	\$1,156,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	271	377	\$9,489,000	\$12,486,000	\$31,855,000	\$54,302,000
6. -due to Visitor Spending	123	187	\$4,257,000	\$6,389,000	\$14,149,000	\$23,616,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	1,661	1,831	\$67,069,000	\$72,198,000	\$242,938,000	\$274,852,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$1,448,000	\$408,000
10. State Sales Tax	\$13,093,000	\$3,398,000
11. Tax generated by fuel sales	\$244,586	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	1,100,000	1,000,000	50,000	50,000

2017 MASP Goals:	
Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$472.00

Visitor spending source: Visitor Survey

## MARSHALL

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Brooks  
 City: Marshall  
 Current FAA ARC B-II  
 County: Calhoun  
 Ownership: Public  
 Scenario: Current  
 Service Area: Calhoun  
 Run Date: 3/23/2017 12:53:01 PM

MASP Tier	Tier 2
MASP ARC	B-I
<b>Airport Features</b>	
Primary Runway Length	3,501
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	8,200
Total Aircraft:	30
Total Passengers:	16,400
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	6	6	\$395,000	\$395,000	\$1,393,000	\$1,393,000
2. Airport Tenants: non-air related	4	4	\$342,000	\$342,000	\$738,000	\$738,000
3. Off-Site: Supported by Visitor Spending	0	0	\$0	\$0	\$31,000	\$31,000
4. Off-Site: Staff or Cargo Reliant	2	2	\$143,000	\$143,000	\$946,000	\$946,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	5	6	\$234,000	\$184,000	\$686,000	\$823,000
6. -due to Visitor Spending	0	0	\$0	\$0	\$10,000	\$23,000
7. -due to Reliance on Air Transport	2	6	\$96,000	\$229,000	\$230,000	\$550,000
8. Total Impact from Airport Activities	19	24	\$1,210,000	\$1,293,000	\$4,034,000	\$4,504,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$24,000	\$4,000
10. State Sales Tax	\$177,000	\$60,000
11. Tax generated by fuel sales	\$3,150	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$15.00

Visitor spending source: Visitor Survey

## MASON

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Jewett  
 City: Mason  
 Current FAA ARC: B-II  
 County: Ingham  
 Ownership: Public  
 Scenario: Current  
 Service Area: Ingham  
 Run Date: 3/23/2017 10:11:56 AM

MASP Tier	Tier 1
MASP ARC	B-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,004
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	11,000
Total Aircraft:	65
Total Passengers:	17,600
Total Cargo Tons:	8,800

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	3	3	\$272,000	\$272,000	\$782,000	\$782,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	2	2	\$48,000	\$48,000	\$185,000	\$185,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	3	3	\$123,000	\$137,000	\$337,000	\$462,000
6. -due to Visitor Spending	1	1	\$27,000	\$33,000	\$94,000	\$137,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	9	9	\$470,000	\$490,000	\$1,398,000	\$1,566,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$11,000	\$2,000
10. State Sales Tax	\$75,000	\$19,000
11. Tax generated by fuel sales	\$8,835	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$42.00

Visitor spending source: Visitor Survey

## MENOMINEE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Marinette Twin County  
 City: Menominee  
 Current FAA ARC: B-II  
 County: Menominee  
 Ownership: Public  
 Scenario: Current  
 Service Area: Menominee  
 Run Date: 3/23/2017 10:23:25 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	5,999
Primary Runway Width	100
Instrument Approach	Precision

## Activity Data

Total Operations:	3,432
Total Aircraft:	30
Total Passengers:	22,464
Total Cargo Tons:	312

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	4	4	\$203,000	\$203,000	\$481,000	\$481,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	11	11	\$204,000	\$204,000	\$775,000	\$775,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1	2	\$56,000	\$72,000	\$161,000	\$322,000
6. -due to Visitor Spending	2	5	\$55,000	\$142,000	\$196,000	\$574,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	18	22	\$518,000	\$621,000	\$1,613,000	\$2,152,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$7,000	\$9,000
10. State Sales Tax	\$48,000	\$81,000
11. Tax generated by fuel sales	\$10,345	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$144.00

Visitor spending source: Visitor Survey

## MIDLAND

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Jack Barstow Airport  
 City: Midland  
 Current FAA ARC: B-II  
 County: Midland  
 Ownership: Public  
 Scenario: Current  
 Service Area: Midland  
 Run Date: 4/3/2017 1:10:46 PM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	3,801
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	10,300
Total Aircraft:	50
Total Passengers:	22,300
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	19	19	\$1,233,000	\$1,233,000	\$5,649,000	\$5,649,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	6	6	\$161,000	\$161,000	\$509,000	\$509,000
4. Off-Site: Staff or Cargo Reliant	7	7	\$671,000	\$671,000	\$4,815,000	\$4,815,000
<b>Supplier and income re-spending effects**</b>						
5. -due to Airport and Related Activities**	20	23	\$773,000	\$769,000	\$2,553,000	\$3,335,000
6. -due to Visitor Spending	2	3	\$67,000	\$112,000	\$191,000	\$378,000
7. -due to Reliance on Air Transport	11	22	\$440,000	\$1,077,000	\$1,211,000	\$2,797,000
8. Total Impact from Airport Activities	65	80	\$3,345,000	\$4,023,000	\$14,928,000	\$17,483,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$51,000	\$24,000
10. State Sales Tax	\$539,000	\$342,000
11. Tax generated by fuel sales	\$1,020	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$222.00

Visitor spending source: Prosperity Region and Class

MIO

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Oscoda County  
 City: Mio  
 Current FAA ARC: B-I  
 County: Oscoda  
 Ownership: Public  
 Scenario: Current  
 Service Area: Oscoda  
 Run Date: 4/5/2017 12:48:49 PM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	3,000
Primary Runway Width	75
Instrument Approach	Visual

Evaluated for Year: 2016

## Activity Data

Total Operations:	800
Total Aircraft:	11
Total Passengers:	2,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	1	1	\$49,000	\$49,000	\$330,000	\$330,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	1	1	\$22,000	\$22,000	\$78,000	\$78,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1	1	\$59,000	\$34,000	\$144,000	\$195,000
6. -due to Visitor Spending	0	1	\$3,000	\$15,000	\$18,000	\$58,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	3	4	\$133,000	\$120,000	\$570,000	\$661,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$2,000	\$951
10. State Sales Tax	\$32,000	\$8,000
11. Tax generated by fuel sales	\$49	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$145.00

Visitor spending source: visitor survey

## MONROE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Monroe Custer  
 City: Monroe  
 Current FAA ARC: B-II  
 County: Monroe  
 Ownership: Public  
 Scenario: Current  
 Service Area: Monroe  
 Run Date: 3/23/2017 1:07:20 PM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	4,997
Primary Runway Width	100
Instrument Approach	Non-Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	12,806
Total Aircraft:	46
Total Passengers:	25,612
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	6	6	\$505,000	\$505,000	\$1,902,000	\$1,902,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	12	12	\$257,000	\$257,000	\$788,000	\$788,000
4. Off-Site: Staff or Cargo Reliant	40	40	\$2,380,000	\$2,380,000	\$8,289,000	\$8,289,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	12	17	\$528,000	\$706,000	\$1,489,000	\$2,283,000
6. -due to Visitor Spending	3	5	\$112,000	\$179,000	\$298,000	\$584,000
7. -due to Reliance on Air Transport	28	55	\$985,000	\$1,965,000	\$2,435,000	\$4,793,000
8. Total Impact from Airport Activities	101	135	\$4,767,000	\$5,992,000	\$15,201,000	\$18,639,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$31,000	\$72,000
10. State Sales Tax	\$251,000	\$580,000
11. Tax generated by fuel sales	\$9,900	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$246.00

Visitor spending source: Prosperity Region & Class

## MT. PLEASANT

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Mt. Pleasant Mun.  
 City: Mt. Pleasant  
 Current FAA ARC C-II  
 County: Isabella  
 Ownership: Public  
 Scenario: Current  
 Service Area: Isabella  
 Run Date: 3/23/2017 1:13:28 PM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	5,000
Primary Runway Width	100
Instrument Approach	Non-Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	7,935
Total Aircraft:	21
Total Passengers:	23,805
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	7	7	\$477,000	\$477,000	\$2,118,000	\$2,118,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	5	5	\$110,000	\$110,000	\$377,000	\$377,000
4. Off-Site: Staff or Cargo Reliant	7	7	\$421,000	\$421,000	\$2,896,000	\$2,896,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	7	9	\$290,000	\$288,000	\$957,000	\$1,251,000
6. -due to Visitor Spending	1	2	\$44,000	\$76,000	\$145,000	\$279,000
7. -due to Reliance on Air Transport	9	20	\$257,000	\$635,000	\$879,000	\$1,721,000
8. Total Impact from Airport Activities	36	50	\$1,599,000	\$2,007,000	\$7,372,000	\$8,642,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$20,000	\$16,000
10. State Sales Tax	\$202,000	\$213,000
11. Tax generated by fuel sales	\$14,018	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$240.00

Visitor spending source: visitor survey



## MUSKEGON

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Muskegon County  
 City: Muskegon  
 Current FAA ARC: C-III  
 County: Muskegon  
 Ownership: Public  
 Scenario: Current  
 Service Area: Muskegon  
 Run Date: 4/5/2017 10:40:19 AM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	6,501
Primary Runway Width	150
Instrument Approach	Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	26,616
Total Aircraft:	81
Total Passengers:	133,954
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	93	93	\$6,045,000	\$6,045,000	\$14,945,000	\$14,945,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	72	72	\$1,534,000	\$1,534,000	\$5,235,000	\$5,235,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	42	59	\$1,399,000	\$2,456,000	\$4,594,000	\$8,972,000
6. -due to Visitor Spending	18	31	\$627,000	\$1,066,000	\$1,849,000	\$3,881,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	225	255	\$9,605,000	\$11,101,000	\$26,623,000	\$33,033,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$218,000	\$67,000
10. State Sales Tax	\$1,435,000	\$547,000
11. Tax generated by fuel sales	\$14,444	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	1,050,000	1,000,000	25,000	25,000

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$145.00

Visitor spending source: visitor survey

## NEW HUDSON

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Oakland/Southwest

City: New Hudson

Current FAA ARC B-I

County: Oakland

Ownership: Public

Scenario: Current

Service Area: Oakland

Run Date: 4/5/2017 12:51:24 PM

MASP Tier	Tier 1
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,128
Primary Runway Width	40
Instrument Approach	NPI

## Activity Data

Total Operations:	13,000
Total Aircraft:	64
Total Passengers:	32,500
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	6	6	\$725,000	\$725,000	\$2,545,000	\$2,545,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	21	21	\$620,000	\$620,000	\$1,755,000	\$1,755,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	10	9	\$567,000	\$498,000	\$1,524,000	\$1,503,000
6. -due to Visitor Spending	8	9	\$465,000	\$431,000	\$1,211,000	\$1,301,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	45	45	\$2,377,000	\$2,274,000	\$7,035,000	\$7,104,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$31,000	\$27,000
10. State Sales Tax	\$243,000	\$183,000
11. Tax generated by fuel sales	\$931	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 2
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$200.00

Visitor spending source: Visitor Survey

## NEWBERRY

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Luce County  
 City: Newberry  
 Current FAA ARC: B-II  
 County: Luce  
 Ownership: Public  
 Scenario: Current  
 Service Area: Luce  
 Run Date: 3/23/2017 1:38:40 PM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	4,304
Primary Runway Width	75
Instrument Approach	Non-Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	2,480
Total Aircraft:	13
Total Passengers:	6,840
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	3	3	\$189,000	\$189,000	\$1,038,000	\$1,038,000
2. Airport Tenants: non-air related	2	2	\$133,000	\$133,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	8	8	\$180,000	\$180,000	\$558,000	\$558,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	3	4	\$121,000	\$130,000	\$337,000	\$613,000
6. -due to Visitor Spending	1	4	\$29,000	\$125,000	\$141,000	\$414,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	17	21	\$652,000	\$757,000	\$2,074,000	\$2,623,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$12,000	\$8,000
10. State Sales Tax	\$99,000	\$58,000
11. Tax generated by fuel sales	\$5,700	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$220.00

Visitor spending source: Visitor Survey

## NILES

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Jerry Tyler Memorial Airport  
 City: Niles  
 Current FAA ARC: B-II  
 County: Berrien  
 Ownership: Public  
 Scenario: Current  
 Service Area: Berrien  
 Run Date: 3/28/2017 1:59:54 PM

MASP Tier	Tier 2
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	4,100
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	6,500
Total Aircraft:	32
Total Passengers:	16,250
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	6	6	\$670,000	\$670,000	\$2,477,000	\$2,477,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	0	0	\$0	\$0	\$19,000	\$19,000
4. Off-Site: Staff or Cargo Reliant	37	37	\$2,232,000	\$2,232,000	\$8,380,000	\$8,380,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	11	11	\$396,000	\$496,000	\$1,249,000	\$1,662,000
6. -due to Visitor Spending	0	0	\$0	\$0	\$8,000	\$14,000
7. -due to Reliance on Air Transport	35	60	\$1,176,000	\$2,350,000	\$3,188,000	\$5,822,000
8. Total Impact from Airport Activities	89	114	\$4,474,000	\$5,748,000	\$15,321,000	\$18,374,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$30,000	\$57,000
10. State Sales Tax	\$248,000	\$505,000
11. Tax generated by fuel sales	\$5,373	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 2
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$20.00

Visitor spending source: visitor survey

## NORTHPORT

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Woolsey  
 City: Northport  
 Current FAA ARC: A-I  
 County: Leelanau  
 Ownership: Public  
 Scenario: Current  
 Service Area: Leelanau  
 Run Date: 4/5/2017 12:54:23 PM

MASP Tier	Tier 2
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,663
Primary Runway Width	120
Instrument Approach	visual

## Activity Data

Total Operations:	905
Total Aircraft:	8
Total Passengers:	2,620
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	4	4	\$241,000	\$241,000	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	3	3	\$76,000	\$76,000	\$204,000	\$204,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	1	1	\$21,000	\$53,000	\$65,000	\$151,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	8	8	\$338,000	\$370,000	\$269,000	\$355,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$6,000	\$3,000
10. State Sales Tax	\$0	\$21,000
11. Tax generated by fuel sales	\$0	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$254.00

Visitor spending source: Airport Reference Code

## ONTONAGON

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Ontonagon County  
 City: Ontonagon  
 Current FAA ARC: B-I  
 County: Ontonagon  
 Ownership: *Public*  
 Scenario: Current  
 Service Area: Ontonagon  
 Run Date: 3/23/2017 3:00:48 PM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	3,503
Primary Runway Width	75
Instrument Approach	circling

Evaluated for Year: 2016

## Activity Data

Total Operations:	13,173
Total Aircraft:	4
Total Passengers:	32,942
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	2	2	\$114,000	\$114,000	\$0	\$0
2. Airport Tenants: non-air related	2	2	\$114,000	\$114,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	28	28	\$500,000	\$500,000	\$1,710,000	\$1,710,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	5	12	\$175,000	\$348,000	\$512,000	\$1,267,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	37	44	\$903,000	\$1,076,000	\$2,222,000	\$2,977,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$6,000	\$22,000
10. State Sales Tax	\$0	\$179,000
11. Tax generated by fuel sales	\$77	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

2017 MASP Goals:		Other Attributes
Serve Significant Population Centers	Tier 3	
Serve Significant Business Centers	Tier 3	
Serve Significant Tourism/Convention Centers	Tier 3	
Provide Access to the General Population	Tier 3	
Provide Adequate Land Area Coverage	Tier 1	
Preserve Regional Capacity	Tier 3	
Serve Seasonally Isolated Areas	Tier 3	
Inclusion in NPIAS	Tier 2	

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$192.00

Visitor spending source: Airport Reference Code

## OSCODA

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Oscoda-Wurtsmith Airport  
 City: Oscoda  
 Current FAA ARC: D-V  
 County: Iosco  
 Ownership: Public  
 Scenario: Current  
 Service Area: Iosco  
 Run Date: 6/14/2017 10:26:42 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	11,800
Primary Runway Width	200
Instrument Approach	Precision

## Activity Data

Total Operations:	5,530
Total Aircraft:	23
Total Passengers:	12,903
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	1,120	1,120	\$55,413,000	\$55,413,000	\$363,810,000	\$363,810,000
2. Airport Tenants: non-air related	92	92	\$4,390,000	\$4,390,000	\$27,214,000	\$27,214,000
3. Off-Site: Supported by Visitor Spending	7	7	\$146,000	\$146,000	\$511,000	\$511,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1,216	1,617	\$65,071,000	\$37,821,000	\$159,125,000	\$215,462,000
6. -due to Visitor Spending	2	3	\$45,000	\$102,000	\$144,000	\$379,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	2,437	2,839	\$125,065,000	\$97,872,000	\$550,804,000	\$607,376,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$2,509,000	\$6,000
10. State Sales Tax	\$36,389,000	\$53,000
11. Tax generated by fuel sales	\$2,720	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$185.00

Visitor spending source: Visitor Survey

## OWOSSO

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Owosso Community Airpo  
 City: Owosso  
 Current FAA ARC: B-II  
 County: Shiawassee  
 Ownership: *PUB*  
 Scenario: Current  
 Service Area: Shiawassee  
 Run Date: 4/5/2017 9:54:37 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,300
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	25,200
Total Aircraft:	69
Total Passengers:	60,800
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	18	18	\$1,324,000	\$1,324,000	\$4,341,000	\$4,341,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	17	17	\$399,000	\$399,000	\$1,281,000	\$1,281,000
4. Off-Site: Staff or Cargo Reliant	2	2	\$55,000	\$55,000	\$190,000	\$190,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	13	17	\$671,000	\$711,000	\$1,801,000	\$2,590,000
6. -due to Visitor Spending	4	7	\$128,000	\$277,000	\$417,000	\$949,000
7. -due to Reliance on Air Transport	1	2	\$25,000	\$37,000	\$77,000	\$173,000
8. Total Impact from Airport Activities	55	63	\$2,602,000	\$2,803,000	\$8,107,000	\$9,524,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$52,000	\$19,000
10. State Sales Tax	\$416,000	\$145,000
11. Tax generated by fuel sales	\$960	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$138.00

Visitor spending source: Prosperity Region & Class



## PELLSTON

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Pellston Regional  
 City: Pellston  
 Current FAA ARC: C-II  
 County: Emmet  
 Ownership: *Public*  
 Scenario: Current  
 Service Area: Emmet  
 Run Date: 4/13/2017 12:42:05 PM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	6,513
Primary Runway Width	150
Instrument Approach	Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	9,217
Total Aircraft:	26
Total Passengers:	50,192
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	101	101	\$4,474,000	\$4,474,000	\$15,200,000	\$15,200,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	162	162	\$4,268,000	\$4,268,000	\$13,123,000	\$13,123,000
4. Off-Site: Staff or Cargo Reliant	90	90	\$4,228,000	\$4,228,000	\$12,129,000	\$12,129,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	118	154	\$5,287,000	\$5,285,000	\$13,927,000	\$20,140,000
6. -due to Visitor Spending	49	69	\$1,830,000	\$2,967,000	\$5,288,000	\$9,727,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	520	576	\$20,087,000	\$21,222,000	\$59,667,000	\$70,319,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$251,000	\$295,000
10. State Sales Tax	\$2,120,000	\$2,099,000
11. Tax generated by fuel sales	\$19,126	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	1,050,000	1,000,000	25,000	25,000

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$577.00

Visitor spending source: Prosperity Region & Class

## PINCONNING

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Gross  
 City: Pinconning  
 Current FAA ARC: A-I  
 County: Bay  
 Ownership: Private  
 Scenario: Current  
 Service Area: Bay  
 Run Date: 4/11/2017 1:24:46 PM

MASP Tier	Tier 2
MASP ARC	A-I
<b>Airport Features</b>	
Primary Runway Length	2,565
Primary Runway Width	100
Instrument Approach	visual

Evaluated for Year: 2016

## Activity Data

Total Operations:	1,800
Total Aircraft:	20
Total Passengers:	4,400
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	0	0	\$0	\$0	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	2	2	\$40,000	\$40,000	\$152,000	\$152,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	1	1	\$18,000	\$28,000	\$62,000	\$113,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	3	3	\$58,000	\$68,000	\$214,000	\$265,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$0	\$2,000
10. State Sales Tax	\$0	\$16,000
11. Tax generated by fuel sales	\$0	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	0	0	0	0

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$254.00

Visitor spending source: Airport Reference Code

## PLAINWELL

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Plainwell Municipal

City: Plainwell

Current FAA ARC A-I

County: Allegan

Ownership: Public

Scenario: Current

Service Area: Allegan

Run Date: 4/14/2017 1:11:45 PM

MASP Tier	Tier 2
MASP ARC	A-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	2,650
Primary Runway Width	50
Instrument Approach	visual

## Activity Data

Total Operations:	9,253
Total Aircraft:	20
Total Passengers:	24,058
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	1	1	\$45,000	\$45,000	\$322,000	\$322,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	16	16	\$399,000	\$399,000	\$1,058,000	\$1,058,000
4. Off-Site: Staff or Cargo Reliant	5	5	\$226,000	\$226,000	\$611,000	\$611,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	1	1	\$44,000	\$31,000	\$169,000	\$190,000
6. -due to Visitor Spending	4	7	\$132,000	\$278,000	\$365,000	\$784,000
7. -due to Reliance on Air Transport	4	6	\$82,000	\$151,000	\$274,000	\$557,000
8. Total Impact from Airport Activities	31	36	\$928,000	\$1,130,000	\$2,799,000	\$3,522,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$2,000	\$23,000
10. State Sales Tax	\$31,000	\$147,000
11. Tax generated by fuel sales	\$0	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	0	0	0	0

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$254.00

Visitor spending source: Airport Reference Code

## PLYMOUTH

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Canton-Plymouth-Mettetal  
 City: Plymouth  
 Current FAA ARC: A-I  
 County: Wayne  
 Ownership: Public  
 Scenario: Current  
 Service Area: Wayne  
 Run Date: 3/28/2017 2:14:17 PM

MASP Tier	Tier 1
MASP ARC	B-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	2,303
Primary Runway Width	75
Instrument Approach	Circling

## Activity Data

Total Operations:	32,447
Total Aircraft:	84
Total Passengers:	56,260
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	5	5	\$452,000	\$452,000	\$1,333,000	\$1,333,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	38	38	\$1,225,000	\$1,225,000	\$3,415,000	\$3,415,000
4. Off-Site: Staff or Cargo Reliant	14	14	\$1,361,000	\$1,361,000	\$4,671,000	\$4,671,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	6	5	\$289,000	\$263,000	\$831,000	\$801,000
6. -due to Visitor Spending	14	16	\$751,000	\$852,000	\$1,918,000	\$2,531,000
7. -due to Reliance on Air Transport	20	22	\$1,019,000	\$1,180,000	\$2,410,000	\$3,416,000
8. Total Impact from Airport Activities	97	100	\$5,097,000	\$5,333,000	\$14,578,000	\$16,167,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$18,000	\$88,000
10. State Sales Tax	\$128,000	\$637,000
11. Tax generated by fuel sales	\$0	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

2017 MASP Goals:		Other Attributes
Serve Significant Population Centers	Tier 3	
Serve Significant Business Centers	Tier 3	
Serve Significant Tourism/Convention Centers	Tier 3	
Provide Access to the General Population	Tier 3	
Provide Adequate Land Area Coverage	Tier 3	
Preserve Regional Capacity	Tier 1	
Serve Seasonally Isolated Areas	Tier 3	
Inclusion in NPIAS	Tier 2	

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$300.00

Visitor spending source: visitor survey

## PONTIAC

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Oakland Co. Int'l  
 City: Pontiac  
 Current FAA ARC: D-III  
 County: Oakland  
 Ownership: Public  
 Scenario: Current  
 Service Area: Oakland  
 Run Date: 3/28/2017 2:27:55 PM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	6,521
Primary Runway Width	150
Instrument Approach	Precision

## Activity Data

Total Operations:	125,892
Total Aircraft:	569
Total Passengers:	289,509
Total Cargo Tons:	204,122,376

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	850	850	\$99,967,000	\$99,967,000	\$339,355,000	\$339,355,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	296	296	\$8,733,000	\$8,733,000	\$24,558,000	\$24,558,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects**</b>						
5. -due to Airport and Related Activities**	1,335	1,170	\$75,613,000	\$66,409,000	\$203,249,000	\$200,348,000
6. -due to Visitor Spending	113	126	\$6,557,000	\$6,073,000	\$16,939,000	\$18,203,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	2,594	2,442	\$190,870,000	\$181,182,000	\$584,101,000	\$582,464,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$4,276,000	\$381,000
10. State Sales Tax	\$32,382,000	\$2,566,000
11. Tax generated by fuel sales	\$2,950,413	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$324.00

Visitor spending source: Airport Reference Code

## PORT HURON

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: St. Clair Co. Int'l  
 City: Port Huron  
 Current FAA ARC: C-II  
 County: St. Clair  
 Ownership: Public  
 Scenario: Current  
 Service Area: St. Clair  
 Run Date: 3/28/2017 2:33:46 PM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	5,104
Primary Runway Width	100
Instrument Approach	Precision

## Activity Data

Total Operations:	37,100
Total Aircraft:	95
Total Passengers:	242,600
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	95	95	\$9,915,000	\$9,915,000	\$25,133,000	\$25,133,000
2. Airport Tenants: non-air related	161	161	\$8,564,000	\$8,564,000	\$53,150,000	\$53,150,000
3. Off-Site: Supported by Visitor Spending	184	184	\$3,774,000	\$3,774,000	\$12,616,000	\$12,616,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	99	89	\$5,013,000	\$4,690,000	\$14,168,000	\$14,838,000
6. -due to Visitor Spending	45	79	\$1,671,000	\$2,624,000	\$5,092,000	\$9,351,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	584	608	\$28,937,000	\$29,567,000	\$110,159,000	\$115,088,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$595,000	\$164,000
10. State Sales Tax	\$5,587,000	\$1,318,000
11. Tax generated by fuel sales	\$34,388	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$349.00

Visitor spending source: visitor survey

RAY

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Ray Community Airport  
 City: Ray  
 Current FAA ARC: A-I  
 County: Macomb  
 Ownership: PVT  
 Scenario: Current  
 Service Area: Macomb  
 Run Date: 5/25/2017 12:32:12 PM

MASP Tier	Tier 1
MASP ARC	A-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	2,495
Primary Runway Width	60
Instrument Approach	NPI

## Activity Data

Total Operations:	32,250
Total Aircraft:	94
Total Passengers:	56,600
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	8	8	\$790,000	\$790,000	\$3,146,000	\$3,146,000
2. Airport Tenants: non-air related	2	2	\$175,000	\$175,000	\$686,000	\$686,000
3. Off-Site: Supported by Visitor Spending	15	15	\$363,000	\$363,000	\$1,117,000	\$1,117,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	12	12	\$518,000	\$543,000	\$1,478,000	\$1,858,000
6. -due to Visitor Spending	4	6	\$206,000	\$252,000	\$547,000	\$828,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	41	43	\$2,052,000	\$2,123,000	\$6,974,000	\$7,635,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$39,000	\$16,000
10. State Sales Tax	\$341,000	\$117,000
11. Tax generated by fuel sales	\$1,196	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$182.00

Visitor spending source: visitor survey

## ROGERS CITY

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Presque Isle  
 City: Rogers City  
 Current FAA ARC: B-II  
 County: Presque Isle  
 Ownership: Public  
 Scenario: Current  
 Service Area: Presque Isle  
 Run Date: 3/28/2017 2:48:20 PM

MASP Tier	Tier 1
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	4,106
Primary Runway Width	75
Instrument Approach	NPI

Evaluated for Year: 2015

## Activity Data

Total Operations:	1,440
Total Aircraft:	5
Total Passengers:	3,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	2	2	\$99,000	\$99,000	\$660,000	\$660,000
2. Airport Tenants: non-air related	3	3	\$167,000	\$167,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	2	2	\$36,000	\$36,000	\$152,000	\$152,000
4. Off-Site: Staff or Cargo Reliant	2	2	\$70,000	\$70,000	\$504,000	\$504,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	2	3	\$118,000	\$68,000	\$289,000	\$390,000
6. -due to Visitor Spending	0	1	\$10,000	\$25,000	\$44,000	\$113,000
7. -due to Reliance on Air Transport	2	6	\$66,000	\$113,000	\$177,000	\$293,000
8. Total Impact from Airport Activities	13	19	\$566,000	\$578,000	\$1,826,000	\$2,112,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$9,000	\$3,000
10. State Sales Tax	\$63,000	\$46,000
11. Tax generated by fuel sales	\$17	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$345.00

Visitor spending source: Prosperity Region &amp; Class



## ROMEO

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Romeo  
 City: Ray  
 Current FAA ARC: B-II  
 County: Macomb  
 Ownership: Public  
 Scenario: Current  
 Service Area: Macomb  
 Run Date: 3/22/2017 10:54:00 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,000
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	16,322
Total Aircraft:	51
Total Passengers:	32,644
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	6	6	\$592,000	\$592,000	\$2,360,000	\$2,360,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	39	39	\$943,000	\$943,000	\$2,938,000	\$2,938,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	9	9	\$388,000	\$407,000	\$1,109,000	\$1,393,000
6. -due to Visitor Spending	12	17	\$535,000	\$656,000	\$1,437,000	\$2,178,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	66	71	\$2,458,000	\$2,598,000	\$7,844,000	\$8,869,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$26,000	\$41,000
10. State Sales Tax	\$225,000	\$307,000
11. Tax generated by fuel sales	\$6,537	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$400.00

Visitor spending source: visitor survey

## SAGINAW

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Saginaw County H.W. Browne  
 City: Saginaw  
 Current FAA ARC: C-II  
 County: Saginaw  
 Ownership: Public  
 Scenario: Current  
 Service Area: Saginaw  
 Run Date: 3/28/2017 2:55:48 PM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	5,002
Primary Runway Width	100
Instrument Approach	Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	8,000
Total Aircraft:	66
Total Passengers:	24,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	7	7	\$466,000	\$466,000	\$2,251,000	\$2,251,000
2. Airport Tenants: non-air related	20	20	\$1,259,000	\$1,259,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	95	95	\$2,023,000	\$2,023,000	\$6,559,000	\$6,559,000
4. Off-Site: Staff or Cargo Reliant	60	60	\$2,451,000	\$2,451,000	\$8,344,000	\$8,344,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	55	65	\$2,218,000	\$2,123,000	\$7,466,000	\$8,579,000
6. -due to Visitor Spending	24	41	\$1,017,000	\$1,407,000	\$2,728,000	\$4,862,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	261	288	\$9,434,000	\$9,729,000	\$27,348,000	\$30,595,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$99,000	\$151,000
10. State Sales Tax	\$650,000	\$1,186,000
11. Tax generated by fuel sales	\$16,500	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$911.00

Visitor spending source: visitor survey

## SAGINAW

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: MBS International  
 City: Saginaw  
 Current FAA ARC: D-IV  
 County: Saginaw  
 Ownership: Public  
 Scenario: Current  
 Service Area: Saginaw  
 Run Date: 3/23/2017 8:56:03 AM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	8,002
Primary Runway Width	150
Instrument Approach	Precision

Evaluated for Year: 2016

## Activity Data

Total Operations:	19,579
Total Aircraft:	27
Total Passengers:	257,642
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	329	329	\$21,493,000	\$21,493,000	\$61,982,000	\$61,982,000
2. Airport Tenants: non-air related	10	10	\$669,000	\$669,000	\$1,368,000	\$1,368,000
3. Off-Site: Supported by Visitor Spending	132	132	\$2,811,000	\$2,811,000	\$9,118,000	\$9,118,000
4. Off-Site: Staff or Cargo Reliant	330	330	\$21,699,000	\$21,699,000	\$49,661,000	\$49,661,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	228	270	\$9,387,000	\$9,541,000	\$34,696,000	\$38,476,000
6. -due to Visitor Spending	34	57	\$1,413,000	\$1,955,000	\$3,792,000	\$6,759,000
7. -due to Reliance on Air Transport	252	394	\$9,766,000	\$15,383,000	\$26,136,000	\$41,681,000
8. Total Impact from Airport Activities	1,315	1,522	\$67,238,000	\$73,551,000	\$186,753,000	\$209,045,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$815,000	\$680,000
10. State Sales Tax	\$6,110,000	\$3,932,000
11. Tax generated by fuel sales	\$758,314	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	1,548,341	1,407,583	70,379	70,379

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$358.00

Visitor spending source: Prosperity Region

## SANDUSKY

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Sandusky City Airport  
 City: Sandusky  
 Current FAA ARC: B-I  
 County: Sanilac  
 Ownership: Private  
 Scenario: Current  
 Service Area: Sanilac  
 Run Date: 3/29/2017 9:14:17 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,500
Primary Runway Width	75
Instrument Approach	visual

## Activity Data

Total Operations:	6,930
Total Aircraft:	32
Total Passengers:	20,500
Total Cargo Tons:	60,000

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	5	5	\$341,000	\$341,000	\$1,412,000	\$1,412,000
2. Airport Tenants: non-air related	5	5	\$64,000	\$64,000	\$345,000	\$345,000
3. Off-Site: Supported by Visitor Spending	4	4	\$93,000	\$93,000	\$249,000	\$249,000
4. Off-Site: Staff or Cargo Reliant	11	11	\$520,000	\$520,000	\$2,453,000	\$2,453,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	8	10	\$280,000	\$372,000	\$910,000	\$1,472,000
6. -due to Visitor Spending	1	2	\$24,000	\$65,000	\$71,000	\$184,000
7. -due to Reliance on Air Transport	6	17	\$264,000	\$430,000	\$517,000	\$1,020,000
8. Total Impact from Airport Activities	40	54	\$1,586,000	\$1,885,000	\$5,957,000	\$7,135,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$20,000	\$17,000
10. State Sales Tax	\$194,000	\$173,000
11. Tax generated by fuel sales	\$4,200	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$57.00

Visitor spending source: visitor survey

# SAULT STE. MARIE CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Chippewa Co. Int'l  
 City: Sault Ste. Marie  
 Current FAA ARC: D-III  
 County: Chippewa  
 Ownership: *Public*  
 Scenario: Current  
 Service Area: Chippewa  
 Run Date: 4/14/2017 2:21:17 PM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	7,201
Primary Runway Width	150
Instrument Approach	Precision

### Activity Data

Total Operations:	3,468
Total Aircraft:	13
Total Passengers:	47,134
Total Cargo Tons:	767,930

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	72	72	\$5,100,000	\$5,100,000	\$10,255,000	\$10,255,000
2. Airport Tenants: non-air related	970	970	\$53,992,000	\$53,992,000	\$103,748,000	\$103,748,000
3. Off-Site: Supported by Visitor Spending	12	12	\$264,000	\$264,000	\$823,000	\$823,000
4. Off-Site: Staff or Cargo Reliant	110	110	\$1,855,000	\$1,855,000	\$8,593,000	\$8,593,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	79	126	\$2,119,000	\$3,054,000	\$7,804,000	\$13,674,000
6. -due to Visitor Spending	2	5	\$76,000	\$184,000	\$256,000	\$610,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	1,245	1,295	\$63,406,000	\$64,449,000	\$131,479,000	\$137,703,000

### Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$1,597,000	\$59,000
10. State Sales Tax	\$7,661,000	\$602,000
11. Tax generated by fuel sales	\$6,066	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	1,050,000	1,000,000	25,000	25,000

### 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

### Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$73.00

Visitor spending source: visitor survey

# SAULT STE. MARIE CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Sanderson  
 City: Sault Ste. Marie  
 Current FAA ARC: B-II  
 County: Chippewa  
 Ownership: Public  
 Scenario: Current  
 Service Area: Chippewa  
 Run Date: 3/29/2017 9:28:56 AM

MASP Tier	Tier 2
MASP ARC	B-II
<b>Airport Features</b>	
Primary Runway Length	5,234
Primary Runway Width	100
Instrument Approach	NPI

Evaluated for Year: 2016

### Activity Data

Total Operations:	9,000
Total Aircraft:	14
Total Passengers:	23,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	19	19	\$1,237,000	\$1,237,000	\$2,544,000	\$2,544,000
2. Airport Tenants: non-air related	3	3	\$116,000	\$116,000	\$363,000	\$363,000
3. Off-Site: Supported by Visitor Spending	53	53	\$1,168,000	\$1,168,000	\$3,726,000	\$3,726,000
4. Off-Site: Staff or Cargo Reliant	3	3	\$63,000	\$63,000	\$161,000	\$161,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	9	12	\$268,000	\$463,000	\$1,020,000	\$1,674,000
6. -due to Visitor Spending	11	23	\$336,000	\$812,000	\$1,158,000	\$2,762,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	98	113	\$3,188,000	\$3,859,000	\$8,972,000	\$11,230,000

### Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$47,000	\$53,000
10. State Sales Tax	\$275,000	\$399,000
11. Tax generated by fuel sales	\$14,360	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

2017 MASP Goals:	Other Attributes
Serve Significant Population Centers Tier 2	
Serve Significant Business Centers Tier 3	
Serve Significant Tourism/Convention Centers Tier 3	
Provide Access to the General Population Tier 3	
Provide Adequate Land Area Coverage Tier 3	
Preserve Regional Capacity Tier 3	
Serve Seasonally Isolated Areas Tier 3	
Inclusion in NPIAS Tier 3	

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$552.00

Visitor spending source: visitor survey

## SOUTH HAVEN

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: South Haven Area Regional  
 City: South Haven  
 Current FAA ARC: B-II  
 County: Van Buren  
 Ownership: *Public*  
 Scenario: Current  
 Service Area: Van Buren  
 Run Date: 4/3/2017 1:26:47 PM

MASP Tier	Tier 1
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,801
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	27,016
Total Aircraft:	44
Total Passengers:	54,032
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	16	16	\$1,056,000	\$1,056,000	\$3,135,000	\$3,135,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	108	108	\$2,328,000	\$2,328,000	\$6,876,000	\$6,876,000
4. Off-Site: Staff or Cargo Reliant	21	21	\$1,246,000	\$1,246,000	\$4,128,000	\$4,128,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	11	13	\$526,000	\$414,000	\$1,543,000	\$1,851,000
6. -due to Visitor Spending	16	46	\$645,000	\$1,619,000	\$1,789,000	\$5,096,000
7. -due to Reliance on Air Transport	13	26	\$490,000	\$885,000	\$1,392,000	\$3,631,000
8. Total Impact from Airport Activities	185	230	\$6,291,000	\$7,548,000	\$18,863,000	\$24,717,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$38,000	\$133,000
10. State Sales Tax	\$299,000	\$966,000
11. Tax generated by fuel sales	\$877	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$509.00

Visitor spending source: visitor survey

## SPARTA

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Sparta  
 City: Sparta  
 Current FAA ARC: B-II  
 County: Kent  
 Ownership: Public  
 Scenario: Current  
 Service Area: Kent  
 Run Date: 3/29/2017 9:50:36 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	4,032
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	4,000
Total Aircraft:	81
Total Passengers:	10,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	16	16	\$1,010,000	\$1,010,000	\$2,372,000	\$2,372,000
2. Airport Tenants: non-air related	1	1	\$77,000	\$77,000	\$401,000	\$401,000
3. Off-Site: Supported by Visitor Spending	0	0	\$0	\$0	\$38,000	\$38,000
4. Off-Site: Staff or Cargo Reliant	15	15	\$1,009,000	\$1,009,000	\$2,442,000	\$2,442,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	20	21	\$1,001,000	\$843,000	\$2,648,000	\$3,134,000
6. -due to Visitor Spending	0	0	\$0	\$0	\$21,000	\$28,000
7. -due to Reliance on Air Transport	3	3	\$148,000	\$148,000	\$343,000	\$403,000
8. Total Impact from Airport Activities	55	56	\$3,245,000	\$3,087,000	\$8,265,000	\$8,818,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$50,000	\$26,000
10. State Sales Tax	\$354,000	\$150,000
11. Tax generated by fuel sales	\$11,055	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$128.00

Visitor spending source: Prosperity Region and Class



## ST. IGNACE

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Mackinac County  
 City: St. Ignace  
 Current FAA ARC: B-II  
 County: Mackinac  
 Ownership: Public  
 Scenario: Current  
 Service Area: Mackinac  
 Run Date: 3/28/2017 3:02:05 PM

MASP Tier	Tier 2
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,800
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	6,650
Total Aircraft:	11
Total Passengers:	26,000
Total Cargo Tons:	107,950

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	8	8	\$618,000	\$618,000	\$2,263,000	\$2,263,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	34	34	\$932,000	\$932,000	\$2,743,000	\$2,743,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	8	9	\$224,000	\$352,000	\$853,000	\$1,336,000
6. -due to Visitor Spending	8	14	\$211,000	\$648,000	\$831,000	\$2,033,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	58	65	\$1,985,000	\$2,550,000	\$6,690,000	\$8,375,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$25,000	\$41,000
10. State Sales Tax	\$216,000	\$287,000
11. Tax generated by fuel sales	\$26,252	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$240.00

Visitor spending source: visitor survey

## STURGIS

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Kirsch Municipal  
 City: Sturgis  
 Current FAA ARC: B-II  
 County: St. Joseph  
 Ownership: Public  
 Scenario: Current  
 Service Area: St. Joseph  
 Run Date: 4/4/2017 9:47:12 AM

MASP Tier	Tier 1
MASP ARC	C-II
<b>Airport Features</b>	
Primary Runway Length	5,201
Primary Runway Width	100
Instrument Approach	NPI

Evaluated for Year: 2016

## Activity Data

Total Operations:	10,000
Total Aircraft:	20
Total Passengers:	25,000
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	28	28	\$1,163,000	\$1,163,000	\$8,653,000	\$8,653,000
2. Airport Tenants: non-air related	2	2	\$121,000	\$121,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	27	27	\$602,000	\$602,000	\$1,924,000	\$1,924,000
4. Off-Site: Staff or Cargo Reliant	25	25	\$1,589,000	\$1,589,000	\$11,501,000	\$11,501,000
<b>Supplier and income re-spending effects**</b>						
5. -due to Airport and Related Activities**	26	39	\$1,212,000	\$757,000	\$4,628,000	\$5,109,000
6. -due to Visitor Spending	5	12	\$156,000	\$418,000	\$493,000	\$1,426,000
7. -due to Reliance on Air Transport	25	79	\$803,000	\$2,552,000	\$2,114,000	\$6,682,000
8. Total Impact from Airport Activities	138	212	\$5,646,000	\$7,202,000	\$29,313,000	\$35,295,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$52,000	\$67,000
10. State Sales Tax	\$826,000	\$891,000
11. Tax generated by fuel sales	\$1,740	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$285.00

Visitor spending source: Prosperity Region &amp; Class

## THREE RIVERS

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Three Rivers Municipal  
 City: Three Rivers  
 Current FAA ARC: B-II  
 County: St. Joseph  
 Ownership: Public  
 Scenario: Current  
 Service Area: St. Joseph  
 Run Date: 4/18/2017 1:24:48 PM

MASP Tier	Tier 2
MASP ARC	B-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,999
Primary Runway Width	75
Instrument Approach	NPI

## Activity Data

Total Operations:	7,194
Total Aircraft:	32
Total Passengers:	16,891
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	16	16	\$693,000	\$693,000	\$4,487,000	\$4,487,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	12	12	\$267,000	\$267,000	\$892,000	\$892,000
4. Off-Site: Staff or Cargo Reliant	18	18	\$920,000	\$920,000	\$2,428,000	\$2,428,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	13	20	\$629,000	\$393,000	\$2,400,000	\$2,649,000
6. -due to Visitor Spending	2	5	\$69,000	\$186,000	\$228,000	\$661,000
7. -due to Reliance on Air Transport	9	24	\$244,000	\$711,000	\$555,000	\$1,604,000
8. Total Impact from Airport Activities	70	95	\$2,822,000	\$3,170,000	\$10,990,000	\$12,721,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$28,000	\$35,000
10. State Sales Tax	\$428,000	\$239,000
11. Tax generated by fuel sales	\$415	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 2
Serve Significant Business Centers	Tier 2
Serve Significant Tourism/Convention Centers	Tier 2
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$285.00

Visitor spending source: Prosperity Region & Class

## TRAVERSE CITY

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Cherry Capital  
 City: Traverse City  
 Current FAA ARC: C-III  
 County: Grand Traverse  
 Ownership: *Public*  
 Scenario: Current  
 Service Area: Grand Traverse  
 Run Date: 5/2/2017 9:38:03 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	6,901
Primary Runway Width	150
Instrument Approach	Precision

## Activity Data

Total Operations:	88,827
Total Aircraft:	97
Total Passengers:	1,032,971
Total Cargo Tons:	2,210,505

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	775	775	\$43,086,000	\$43,086,000	\$124,530,000	\$124,530,000
2. Airport Tenants: non-air related	602	602	\$30,649,000	\$30,649,000	\$139,379,000	\$139,379,000
3. Off-Site: Supported by Visitor Spending	2,471	2,471	\$63,612,000	\$63,612,000	\$193,387,000	\$193,387,000
4. Off-Site: Staff or Cargo Reliant	698	698	\$33,821,000	\$33,821,000	\$195,326,000	\$195,326,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	740	716	\$36,758,000	\$18,717,000	\$112,190,000	\$93,030,000
6. -due to Visitor Spending	908	1,057	\$36,644,000	\$44,232,000	\$112,091,000	\$143,340,000
7. -due to Reliance on Air Transport	521	1,726	\$19,515,000	\$44,169,000	\$44,708,000	\$102,372,000
8. Total Impact from Airport Activities	6,715	8,045	\$264,085,000	\$278,286,000	\$921,611,000	\$991,364,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$2,376,000	\$3,641,000
10. State Sales Tax	\$21,416,000	\$31,923,000
11. Tax generated by fuel sales	\$79,003	

Annual Capital Expenditures				
	Total	Federal \$	State \$	Local \$
2015 Budget:	1,942,763	1,766,149	88,307	88,307

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 1
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 1
Provide Access to the General Population	Tier 1
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 1

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$752.00

Visitor spending source: Visitor Survey

TROY

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Oakland / Troy Airport  
 City: Troy  
 Current FAA ARC: B-I  
 County: Oakland  
 Ownership: Pub  
 Scenario: Current  
 Service Area: Oakland  
 Run Date: 4/3/2017 11:12:59 AM

MASP Tier	Tier 1
MASP ARC	B-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,549
Primary Runway Width	60
Instrument Approach	NPI

## Activity Data

Total Operations:	24,585
Total Aircraft:	101
Total Passengers:	61,463
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	16	16	\$1,642,000	\$1,642,000	\$4,242,000	\$4,242,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	90	90	\$2,655,000	\$2,655,000	\$7,468,000	\$7,468,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	17	15	\$945,000	\$830,000	\$2,541,000	\$2,504,000
6. -due to Visitor Spending	34	38	\$1,994,000	\$1,846,000	\$5,151,000	\$5,536,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	157	159	\$7,236,000	\$6,973,000	\$19,402,000	\$19,750,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$64,000	\$116,000
10. State Sales Tax	\$405,000	\$780,000
11. Tax generated by fuel sales	\$2,789	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 1
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$450.00

Visitor spending source: visitor survey

## WATERVLIIET

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Watervliet Municipal  
 City: Watervliet  
 Current FAA ARC: A-I  
 County: Berrien  
 Ownership: Public  
 Scenario: Current  
 Service Area: Berrien  
 Run Date: 4/14/2017 12:45:36 PM

MASP Tier	Tier 2
MASP ARC	A-I
<b>Airport Features</b>	
Primary Runway Length	2,600
Primary Runway Width	200
Instrument Approach	visual

Evaluated for Year: 2016

## Activity Data

Total Operations:	1,640
Total Aircraft:	19
Total Passengers:	4,278
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	0	0	\$0	\$0	\$0	\$0
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	5	5	\$118,000	\$118,000	\$342,000	\$342,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	1	2	\$55,000	\$82,000	\$151,000	\$254,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	6	7	\$173,000	\$200,000	\$493,000	\$596,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$0	\$5,000
10. State Sales Tax	\$0	\$36,000
11. Tax generated by fuel sales	\$0	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	0	0	0	0

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$254.00

Visitor spending source: Airport Reference Code

## WEST BRANCH

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: West Branch Community  
 City: West Branch  
 Current FAA ARC: B-II  
 County: Ogemaw  
 Ownership: Public  
 Scenario: Current  
 Service Area: Ogemaw  
 Run Date: 4/3/2017 11:18:25 AM

MASP Tier	Tier 1
MASP ARC	C-II

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	5,000
Primary Runway Width	100
Instrument Approach	NPI

## Activity Data

Total Operations:	5,800
Total Aircraft:	25
Total Passengers:	18,400
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	5	5	\$254,000	\$254,000	\$990,000	\$990,000
2. Airport Tenants: non-air related	1	1	\$31,000	\$31,000	\$98,000	\$98,000
3. Off-Site: Supported by Visitor Spending	57	57	\$1,387,000	\$1,387,000	\$3,956,000	\$3,956,000
4. Off-Site: Staff or Cargo Reliant	95	95	\$3,615,000	\$3,615,000	\$19,972,000	\$19,972,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	24	37	\$816,000	\$998,000	\$2,497,000	\$4,287,000
6. -due to Visitor Spending	12	24	\$404,000	\$964,000	\$1,349,000	\$2,932,000
7. -due to Reliance on Air Transport	63	190	\$6,388,000	\$3,847,000	\$5,882,000	\$9,124,000
8. Total Impact from Airport Activities	257	409	\$12,895,000	\$11,096,000	\$34,744,000	\$41,359,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$33,000	\$153,000
10. State Sales Tax	\$322,000	\$1,612,000
11. Tax generated by fuel sales	\$256	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 1
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 1
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$604.00

Visitor spending source: visitor survey

## WHITE CLOUD

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: White Cloud  
 City: White Cloud  
 Current FAA ARC: A-I  
 County: Newaygo  
 Ownership: Public  
 Scenario: Current  
 Service Area: Newaygo  
 Run Date: 4/5/2017 1:35:49 PM

MASP Tier	Tier 2
MASP ARC	B-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	2,916
Primary Runway Width	60
Instrument Approach	visual

## Activity Data

Total Operations:	876
Total Aircraft:	13
Total Passengers:	2,190
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	0	0	\$0	\$0	\$0	\$0
2. Airport Tenants: non-air related	5	5	\$307,000	\$307,000	\$0	\$0
3. Off-Site: Supported by Visitor Spending	0	0	\$0	\$0	\$5,000	\$5,000
4. Off-Site: Staff or Cargo Reliant	4	4	\$263,000	\$263,000	\$1,696,000	\$1,696,000
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	0	0	\$0	\$0	\$0	\$0
6. -due to Visitor Spending	0	0	\$0	\$0	\$1,000	\$4,000
7. -due to Reliance on Air Transport	4	11	\$119,000	\$362,000	\$337,000	\$1,033,000
8. Total Impact from Airport Activities	13	20	\$689,000	\$932,000	\$2,039,000	\$2,738,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$8,000	\$7,000
10. State Sales Tax	\$0	\$102,000
11. Tax generated by fuel sales	\$17	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
2015 Budget:	166,667	150,000	8,333	8,334

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 3
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 2

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$8.00

Visitor spending source: visitor survey



## ZEELAND

## CBA Community Benefits Assessment

## Airport Role in Economy

Airport: Ottawa Executive  
 City: Zeeland  
 Current FAA ARC: B-I  
 County: Ottawa  
 Ownership: Private  
 Scenario: Current  
 Service Area: Ottawa  
 Run Date: 4/5/2017 1:37:52 PM

MASP Tier	Tier 2
MASP ARC	A-I

Evaluated for Year: 2016

Airport Features	
Primary Runway Length	3,800
Primary Runway Width	60
Instrument Approach	visual

## Activity Data

Total Operations:	10,000
Total Aircraft:	37
Total Passengers:	25,200
Total Cargo Tons:	0

## On-going Contribution to the County Economy

	Jobs		Income (\$)		Output (\$)	
	Local	State	Local	State	Local	State
<b>Direct Effect</b>						
1. Airport (incl. FBO and air related tenants)	7	7	\$316,000	\$316,000	\$2,276,000	\$2,276,000
2. Airport Tenants: non-air related	0	0	\$0	\$0	\$0	\$0
3. Off-Site: Supported by Visitor Spending	4	4	\$98,000	\$98,000	\$341,000	\$341,000
4. Off-Site: Staff or Cargo Reliant	0	0	\$0	\$0	\$0	\$0
<b>Supplier and income re-spending effects*</b>						
5. -due to Airport and Related Activities**	6	10	\$262,000	\$217,000	\$653,000	\$1,344,000
6. -due to Visitor Spending	1	2	\$36,000	\$68,000	\$123,000	\$253,000
7. -due to Reliance on Air Transport	0	0	\$0	\$0	\$0	\$0
8. Total Impact from Airport Activities	18	23	\$712,000	\$699,000	\$3,393,000	\$4,214,000

## Tax Generated by Aviation-Related Activity

	At-Airport	Off-Site
9. State Income Tax	\$14,000	\$4,000
10. State Sales Tax	\$217,000	\$36,000
11. Tax generated by fuel sales	\$600	

## Annual Capital Expenditures

	Total	Federal \$	State \$	Local \$
Budget:	0	0	0	0

## 2017 MASP Goals:

Serve Significant Population Centers	Tier 3
Serve Significant Business Centers	Tier 3
Serve Significant Tourism/Convention Centers	Tier 3
Provide Access to the General Population	Tier 3
Provide Adequate Land Area Coverage	Tier 3
Preserve Regional Capacity	Tier 2
Serve Seasonally Isolated Areas	Tier 3
Inclusion in NPIAS	Tier 3

## Other Attributes

\* on the Service-area economy as defined by the user

\*\* Supplier and income re-spending effects pertain only to air-related and air support activities

ARC = Airport Reference Code

NPIAS = National Plan of Integrated Airport Systems

Average visitor spending (per visitor): \$50.00

Visitor spending source: Prosperity Region & Class

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