# ASSESSMENT OF TRANSPORTATION MODES

Rail service is a vital transportation mode within the study area. Providing interconnectivity between modes for rail passengers to access destinations in the study area is a concern for a truly interconnected transportation system.

# PASSENGER RAIL SERVICE

Amtrak is the only passenger rail service that operates in the study area. The National Railroad Passenger Corporation, doing business as Amtrak (reporting mark AMTK), is operated and managed as a hybrid public/private entity. Amtrak began operations to provide intercity passenger train service in the United States on May 1, 1971. On the public side of its public/private identity, Amtrak receives investment from the federal and state government. The only Amtrak station that is within the study area is in Niles. The structure was built in 1892, is listed on the National Register of Historic Places, and is a well known landmark within the community. Amtrak operates an engineering department branch at the Niles Amtrak station that maintains the 97-mile track segment between Kalamazoo and Porter, Indiana. From their Niles location, Amtrak employees maintain the track for high-speed service.

Michigan's three Amtrak lines are the Blue Water, Pere Marquette, and Wolverine.

LAPEER DURAND PORT FLINT GRAND EAST HURON HOLLAND RAPIDS LANSING PONTIAC BIRMINGHAM ROYAL OAK BATTLE ANN DETROIT BANGOR ALBION ST. JOSEPH/ DEARBORN BENTON HARBOR **JACKSON** KALAMAZOO OWAGIAC NEW Pere Marquette BUFFALO Blue Water Wolverine Route Used by Blue Water and Wolvering To Chicago Station Image courtesy of MDOT http://mdotcf.state.mi.us/public/railstats/

Map 9 - Southwest Michigan Amtrak Passenger Service

Amtrak's three corridor passenger services in the NATS region including the Wolverine and Blue Water that focus on providing rail service between Detroit and Chicago, Illinois, and the Pere Marquette providing service between Chicago and Grand Rapids.

- The Wolverine passenger service is a 304 mile line that offers three daily round trips from Chicago, Illinois to Pontiac, Michigan, with a stop in Niles, Michigan. The Wolverine operates over tracks owned by Norfolk Southern Railway, Amtrak, Conrail, and Canadian National Railway.
- The Blue Water is the second service that makes a daily stop in Niles, Michigan, from Chicago, Illinois to Port Huron, Michigan. The Blue Water operates on a 319-mile line that includes sections owned by Norfolk Southern Railway, Amtrak, and Grand Trunk Western Railroad. The 97-mile segment between Porter, Indiana and Kalamazoo, Michigan, is the longest segment of track owned by Amtrak outside of the northeast corridor.
- The Pere Marquette provides a third train option that travels from Chicago to Grand Rapids daily. The line operates on CSX lines from Grand Rapids to Porter, Indiana then on a line owned by Norfolk Southern to Chicago, Illinois. The one Berrien County stop is in St. Joseph. Advocacy for the promotion of the Pere Marquette is provided by a group consisting of local governments, public transit agencies, chambers of commerce, metropolitan planning organizations, the Michigan Department of Transportation (MDOT), and Amtrak. The organization is called Westrain. The collaborative promotes the Pere Marquette and seeks to enhance the service while addressing service deficiencies.

Table 16 - Ridership and Ticket Revenue

Year	Ridership			Ticket Revenue (In Dollars)		
	Blue Water	Pere Marquette	Wolverine	Blue Water	Pere Marquette	Wolverine
2012	189,193	109,321	484,138	\$ 6,094,659	\$ 3,276,210	\$ 17,704,897
2011	187,065	106,662	503,290	\$ 5,797,878	\$ 3,197,106	\$ 18,769,770
2010	157,709	101,907	479,782	\$ 4,741,560	\$ 2,912,070	\$ 16,909,193
2009	132,851	103,246	444,127	\$ 4,111,375	\$ 2,818,294	\$ 15,041,919
2008	136,538	111,716	472,393	\$ 4,158,742	\$ 2,975,391	\$ 16,243,510

Ridership since 2008 on the Blue Water has increased 38 percent and has increased 2.5 percent on the Wolverine line. A similar trend has been seen in the amount of ticket revenues throughout the system. An increase of 46 percent on the Blue Water and 8.9 percent on the Wolverine represent important gains. The sluggish performance of the Wolverine line may be due in part to the expiration of maintenance contracts between Amtrak and Norfolk Southern. The track conditions subsequently deteoriated and resulted in lower travel speeds along this corridor. The upper limit on passenger rail speed was reduced from 79 to 55 mph. With slower speeds and overall performance reductions, some potential passengers may have found the route to be a less viable choice.

Table 17 - Passenger Rail Boarding and Deboarding

Year		Boarding			Deboarding	
	Blue Water	Pere Marguette	Wolverine	Blue Water	Pere Marquette St. Joseph	Wolverine
	Niles	St. Joseph	Niles	Niles		Niles
	New Buffalo	St. Joseph	New Buffalo	New Buffalo		New Buffalo
2012	3,702	5,118	7,505	2,529	5,700	7,505
	3,260		2,991	3,495		5,071
2011	3,866	4,951	7,663	2,540	5,551	7,663
	3,020		2,291	3,528		4,279
2010	3,606	4,622	6,856	2,278	5,221	6,856
	2,578		1,517	2,647		2,997
2009	3,343	4,030	5,513	2,075	4,296	7,264
	0		0	0		0
2008	3,509	3,963	5,855	2,037	4,387	7,717
	0		1	0		0

There have been consistent increases in those boarding (entering the train to begin a trip) and deboarding (leaving the train to end a trip) at the Niles station for both routes. This information is particularly useful when considering the improved inter-connectedness to which NATS aspires. Currently, there is no transit service for those arriving by train after 5:00 p.m. Monday through Friday. For arrivals by train on Saturday there is the option to take the Niles Dial A Ride (public transit with trips arranged through a call to the dispatch center) between the hours of 10:00 a.m. and 3:00 p.m. However, there are a couple of conditions. The demand response system requires a 24-hour reservation, which could make it difficult for rail passengers to schedule a transit ride if they do not know the exact time that they will arrive. The other issue is that there is no Sunday passenger rail service.

# HIGH SPEED RAIL ALONG THE BLUE WATER AND WOLVERINE LINES

The 97-mile segment between Porter, Indiana and Kalamazoo, Michigan, is the longest segment of track owned by Amtrak outside of the northeast corridor. The Federal Rail Administration (FRA) has designated the Detroit to Chicago corridor as a high-speed corridor. The trains have increased their speeds from 95 mph to 110 mph on 80 miles of track between Kalamazoo and Porter, Indiana. The increased speeds in western Michigan set the stage for the expansion of 110 mph service from Kalamazoo east to near Dearborn on the track segment purchased by the Michigan Department of Transportation from Norfolk Southern Railway in December of 2012. This change will reduce the travel time an additional 30 minutes.

Chicago - Detroit/ Pontiac Passenger Rail Corridor Program

The Michigan Department of Transportation (MDOT) has initiated a program to evaluate passenger rail improvements for the Chicago-Detroit/Pontiac passenger rail corridor. The program is being prepared in partnership with the Indiana Department of Transportation (INDOT) and the Illinois Department of Transportation (IDOT), and in association with the Federal Railroad Administration (FRA).

The purpose of the program is to improve intercity mobility by providing an improved passenger rail service that would be a competitive transportation alternative to automobile, bus and air service between Chicago and Detroit/Pontiac, Michigan. The program will provide sufficient information for the FRA to potentially support future decisions to fund and implement a major investment in the passenger rail corridor.

MONTCALM MUSKEGON **LEGEND** KENT 21 **Existing Stations** Canadian National Ownership Pontiac Conrail Shared Assets Operations 91 ALLEGAN BARRY INGHAM Troy/Birmingham Royal Oak State of Michigan Ownership Battle Creek Amtrak Ownership Ann Arbor Dearborn Kalamazoo Albion Chicago Terminal Area Jackson Detroit VAN BUREN **New Center** WASHTENAV CALHOUN JACKSO Dowagiac Chicago Union Station BRANCH HILLSDALE New Buffalo Niles Hammond -Whiting Michigan City WILLIAMS PORTER INDIANA PORTER NORLE DEFIANCE SANDUSKY WOOD MARSHALL KOSCIUSKO WHITLEY ALLEN SENECA

Map 10 - High Speed Rail Corridor

Source: http://greatlakesrail.org/~grtlakes/

# SOUTH SHORE LINE (SOUTH BEND, IN)

The South Shore Line, operated by the Northern Indiana Commuter Transportation District (NICTD), provides interurban electric commuter train service between South Bend, Indiana and Chicago, Illinois. The South Bend boarding site, located at the South Bend Regional Airport, links the South Shore with domestic airline service and inter- and intra- city bus service. Seven daily trains leave from South Bend bound for Chicago, with five trains offering return service. The weekend and holiday schedule offers eight trains that originate from South Bend and seven trains that provide return service. The South Bend Regional Airport is the only multimodal passenger facility operating in the Michiana area. South Bend Regional Airport offers connecting air service through Chicago, Cincinnati, Detroit, Atlanta and Minneapolis, intercity bus service to Chicago, Indianapolis, commuter rail service to Chicago and local bus service to the South Bend-Mishawaka area. Currently residents within the study area could connect to this system via the Niles Dial A Ride transfer point with Transpo at Auten Road, and then take Transpo to the South Bend Regional Airport where they can board the South Shore Line and travel to Chicago.

#### CAPITOL AND LAKESHORE LIMITED

The Capitol and Lakeshore Limited service has two trains that leave from the South Bend, Indiana train station in the evening and return in the morning. This service provides an additional connection to area residents for travel east to Cleveland, Pittsburgh, Washington D.C., Philadelphia, upstate New York, New York City, and Boston.

# THE FUTURE OF HIGHER-SPEED RAIL

#### **Federal**

Momentum continues to grow across the country for greater investment in passenger rail service amid concerns over rising gas prices, climate change, and traffic congestion. On April 16, 2009, President Obama, together with Vice President Biden, and U.S. Transportation Secretary Ray LaHood, announced a new vision for developing high-speed intercity passenger rail in America. The vision calls for a collaborative effort by the federal government, states, railroads, and other key stakeholders to help transform America's transportation system through the creation of a national network of high-speed rail corridors. To achieve this vision, FRA published the High-Speed Rail Strategic Plan in April 2009 and launched the High Speed Intercity Passenger Rail (HSIPR) Program in June 2009. To realize President Obama's vision of giving 80 percent of Americans access to high-speed rail within the next 25 years, Congress made \$8 billion available through the American Recovery and Reinvestment Act of 2009 (ARRA). Congress continued to build upon the Recovery Act by making available an additional \$2.1 billion through annual appropriations for FY 2009 and 2010, using the framework initially established by the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), bringing the total program funding to \$10.1 billion. Michigan has benefited from this investment in high speed rail through federal funding to purchase the Norfolk Southern line from Kalamazoo to Dearborn. Additional funding has been provided to begin work to increase speeds to 110 mph over the next few years.

#### Regional

The Midwest Regional Rail Initiative (MWRRI) is a cooperative, multi-agency effort that began in 1996 and involves nine Midwest states (Indiana, Illinois, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin) as well as the Federal Railroad Administration. The Midwest Regional Rail System (MWRRS) Plan elements include:

- Use of 3,000 miles of existing rail right of way to connect rural and urban areas
- Operation of a hub and spoke passenger rail system
- Introduction of modern, high-speed trains operating at speeds up to 110 mph
- Provision of multi-modal connections to improve system access

Map 11 - Midwest Regional Rail Initiative



The goal of the initiative is to develop a passenger rail system that offers business and leisure travelers shorter travel times, additional train frequencies, and connections between urban centers and smaller communities.

This study includes the 435-mile corridor from the Twin Cities to Chicago. The Minnesota portion of the study includes approximately 150 miles in southeastern Minnesota from La Crescent to Minneapolis/St. Paul that could accommodate high-speed trains. Today, only one train brings passengers from Minnesota to Chicago in about eight hours travel time. With the MWRRI, Minnesotans could travel to Chicago on an additional six trains in five-and-half hours of travel time.

The MWRRI will provide a large increase in service and will cut travel time between destinations by 30 to 50 percent. In addition, new equipment with reduced maintenance requirements, an advanced train signaling

and control system, and line capacity improvements will help to establish and sustain a high-level of on-time performance.

As a result of faster trip times, more frequent and higher quality on-time service, rail ridership in the routes that encompass the MWRRI will increase greatly. This increase in ridership will help to reduce expected growth in automobile congestion on highways and reduce overcrowding and runway delays at regional airports. As stated in the description of the Pere Marquette line, the MWRRI would replace the Pere Marquette line with a feeder bus route from St. Joseph to Niles to connect to the Wolverine or Blue Water lines. Other alternatives being evaluated are to create a connection at New Buffalo for the Pere Marquette line to benefit from the higher speed line. The other option is to add a route from Grand Rapids to Kalamazoo to connect to the higher speed train in that location. This would offer two routes from Grand Rapids. The station communities along the Pere Marquette continue to monitor the activity with this rail plan.

To explore more about the MWRRI please visit:

http://www.dot.state.mn.us/passengerrail/mwrri/index.html.

#### STATE OF MICHIGAN

The State of Michigan Rail Plan of 2011 highlights the state's commitment to rail. "The Plan is based on the understanding that the maintenance and expansion of rail service is critical to the economic well-being of the citizens and businesses of Michigan. Railroads play a major role in the movement of freight within and throughout the state and provide vital connections to the global marketplace. Because rail access is essential to many companies, improved rail service provides an important tool in Michigan's business development efforts. Passenger rail service provides an alternative for traveling between major economic centers and helps to promote commerce and economic development, particularly in the areas adjacent to stations."

To review or read the plan please visit:

http://www.michigan.gov/documents/mdot/MDOT MI SRP public review draft 2011-05-23 600dpi 353776 7.pdf

The Michigan Department of Transportation (MDOT) has initiated a program to evaluate passenger rail improvements for the Chicago-Detroit/Pontiac passenger rail corridor. The program is being prepared in partnership with the Indiana Department of Transportation (INDOT) and the Illinois Department of Transportation (IDOT), and in association with the Federal Railroad Administration (FRA).

The purpose of the program is to improve intercity mobility by providing an improved passenger rail service that would be a competitive transportation alternative to automobile, bus and air service between Chicago and Detroit/Pontiac, Mich. The program will provide sufficient information for the FRA to potentially support

<sup>&</sup>lt;sup>2</sup> Michigan State Rail Plan, 2011

future decisions to fund and implement a major investment in the passenger rail corridor. To learn more about this effort please visit <a href="www.greatlakesrail.org">www.greatlakesrail.org</a>.

# RAIL ADVOCACY

The Michigan Association of Railroad Passengers, Inc. (MARP) was established in 1973 as a consumer advocacy group to passenger rail services, improved travel conditions for passengers, and the preservation of historic rail stations. MARP is working with the Midwest High Speed Rail Association and National Association of Railroad Passengers (NARP) to achieve high speed rail throughout the Midwest.

# **AIRPORTS**

#### **MICHIGAN**

# Southwest Michigan Regional Airport (Benton Harbor, Michigan)

The Southwest Michigan Regional Airport (SWMRA) is the largest airport in Berrien County, and the only all-

weather airport in Berrien, Cass, and Van-Buren Counties. Additionally, it is one of only twenty Michigan airports to have a full Instrument Landing System (ILS).

The ILS is an internationally normalized system for navigation of aircrafts upon the final approach for landing. It was accepted as a standard system by the International Civil Aviation Organization in 1947<sup>3</sup>.



Founded in 1934, the airport is overseen by the Southwest Michigan Regional Airport Authority formed in 1997. The Authority is responsible for the overall operations of the airport, and its board of directors is composed of representatives from the cities of Benton Harbor and Saint Joseph, townships of Benton Charter, Lincoln Charter, Royalton, and Saint Joseph Charter.

The airport is located in northeast Benton Harbor at an elevation of 649 feet above sea level. There are 66 aircraft based on-site and more than 400 US and Canadian companies use the facility annually. Total aircraft operations for 2010 were 36,372. There are 67 registered aircraft at the airport.

There are three runways. The first is the primary runway 10/28 with 6005 feet long by 100 feet wide to handle corporate jet traffic; the second is 14/32 with dimensions of 3,661 feet by 100 feet; and the third 18/36 with dimensions of 2,498 feet by 100 feet.

Scheduled airline service is not currently available. The Authority is currently involved in land acquisition for Runway Safety Area (RSA) improvements for the crosswind runway 14/42 to provide safety areas at each end of the runway. The SWMRA has on-site parking available for airport users in a completely fenced-in area. Avis and Enterprise offer car rental services at the airport with advance notice. Other operations:

<sup>&</sup>lt;sup>3</sup> http://instrument.landing-system.com/

Military, Coast Guard and State Police activity; Just-In-Time (JIT) delivery; air courier delivery (UPS); and executive travel by local and visiting companies.

In 2012, approximately 429,248 gallons of jet, and aviation fuel were sold at the airfield. Additionally, the airport is used as a logistical base for medical emergencies and search and rescue operations. The majority of airport revenue is derived from fuel sales, hangar leases (both T-hangar and corporate hangars), and millages from participating jurisdictions. The success of the SWMRA provides primary and secondary economic benefits to the community at large. The economic impact (according to the Bureau of Transportation Planning, 91 Intermodal Section of MDOT) of the SWMRA to the community is estimated at slightly below \$10 million as of January 2004. Additionally, the airport is directly linked to 101 full and part-time jobs.

### Jerry Tyler Memorial Airport (Niles, Michigan)

Jerry Tyler Memorial Airport is a general utility airport, owned and operated by the City of Niles. The airport serves general aviation needs in the Michigan and Indiana areas. Situated on the northeast side of the city at 2018 Lake St., the airport features a NW/SE 4,100 foot paved runway and a NE/SW 3,300 paved runway. Approximately 35 aircraft are based at the airport.

The airport provides both corporate and recreational flyers with a conveniently located facility, offering an alternative to the more congested South Bend Regional Airport nearby. Hangar rentals and ground and tie-down leases are available for both private and corporate aircraft. The airport provides both corporate and recreational flyers with a conveniently located facility, thus relieving added congestion at nearby South Bend Regional Airport in South



Bend. Joe Ray, the City's Public Works Director, also serves as the Michigan state-licensed Airport Manager.

A seven member airport advisory board assists with airport operations issues. The board meets on the 2nd Thursday of each month at 4:30 pm at the airport administration building<sup>4</sup>.

A full list of the Jerry Tyler Memorial Airport projects for the next ten years can be found in Appendix D.

<sup>4</sup> http://www.ci.niles.mi.us/DeptsAndServices/DPW/JerryTylerMemorialAirport.htm

# INDIANA

# South Bend Regional Airport (South Bend, Indiana)

The airport offers commercial and freight service, and also offers aircraft fueling, servicing, storage and charter services from Atlantic Aviation. The airport is governed by the St. Joseph County Port Authority, which is a municipality in the State of Indiana. Its four bipartisan board members are appointed by the St. Joseph County Commissioners. The Airport Authority employs approximately 60 staff members. The mission of the St. Joseph County Airport Authority is; "to maximize the safety, service, efficiency and effectiveness of South Bend Airport for the traveling public, and to promote the value of the airport to the community." In addition to serving our commercial passengers, South Bend Airport also offers services and amenities to small, private aircraft. Passenger air travel is offered by Allegiant, Frontier, Delta, and United. Map 12 highlights the vast passenger connectivity that the airport provides throughout the country.

South bend airport

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Map 12 - South Bend Regional Airport Flight Locations

Sources: <a href="http://www.flysbn.com/">http://www.flysbn.com/</a>

# NON-MOTORIZED TRANSPORTATION

Increased interest and attention has been building over the years on the incorporation of bicycling and walking into the transportation network. This section will focus on the non-motorized network that includes:

- Sidewalks-where information is available
- Four foot paved shoulders
- Five foot bicycle lanes
- Trails

#### FEDERAL EFFORTS

# **US Department of Transportation (US DOT)**

"The DOT encourages states, local governments, and other government agencies, to adopt similar policy statements on bicycle and pedestrian accommodation as an indication of their commitment to accommodating bicyclists and pedestrians as an integral element of the transportation system. Transportation agencies and local communities should go beyond minimum design standards and requirements to create safe, attractive, sustainable, accessible, and convenient bicycling and walking networks. Such actions should include:

- Considering walking and bicycling as equals with other transportation modes.
- Ensuring that there are transportation choices for people of all ages and abilities, especially children.
- Going beyond minimum design standards.
- Integrating bicycle and pedestrian accommodation on new, rehabilitated, and limited-access bridges.
- Collecting data on walking and biking trips.
- Setting mode share targets for walking and bicycling and tracking them over time.
- Removing snow from sidewalks and shared-use paths.
- Improving non-motorized facilities during maintenance projects.

US DOT recognizes that safe and convenient walking and bicycling facilities may look different depending on the context — appropriate facilities in a rural community may be different from a dense, urban area. However, regardless of regional, climate, and population density differences, it is important that pedestrian and bicycle facilities be integrated into transportation systems. While DOT leads the effort to provide safe

"Increased commitment to and investment in bicycle facilities and walking networks can help meet goals for cleaner, healthier air; less congested roadways; and more livable, safe, cost-efficient communities. Walking and bicycling provide low-cost mobility options that place fewer demands on local roads and highways."

Ray LaHood, US Secretary of Transportation

and convenient accommodations for pedestrians and bicyclists, success will ultimately depend on transportation agencies across the country embracing and implementing this policy<sup>5</sup>."

#### STATEWIDE EFFORTS

#### **MICHIGAN**

- Michigan Transportation Law-"Michigan's state transportation law requires that a minimum of one percent of state transportation funds be spent for non-motorized transportation. Section 10k of Public Act 51 of 1951, as amended, allows for non-motorized plans, services, and improvements to a road, street, or highway, which facilitates non-motorized transportation by the widening of lanes, striping to designate bike lanes, or any other appropriate measure considered a qualified non-motorized facility for the purpose of this section. State law allows bicyclists to ride on all public roads except where restricted or on limited access highways. Therefore, bicyclists are found in travel lanes on streets, road shoulders, bike lanes, and shared use paths across the state". Source Michigan Department of Transportation State Long-Range Transportation Plan 2005-2030 Non-Motorized Technical Report, 2007.
- Michigan Department of Transportation (MDOT)-"The Michigan Department of Transportation is demonstrating its commitment to an integrated system through the inclusion of non-motorized projects in MDOT's standard operating procedures. The Fiscal Year (FY) 2018 Integrated Call for Projects (CFP) encourages project managers to integrate non-motorized solutions with roadwork when appropriate". In addition, the CFP emphasizes context sensitive solutions that support the state's Complete Streets Policy discussed below. Sources: Michigan Department of Transportation State Long-Range Transportation Plan 2005-2030 Non-Motorized Technical Report, 2007; Michigan Department of Transportation 2018 Integrated Call for Projects, 2012.
- Michigan Trails at the Crossroads: A Vision for Connecting Michigan, 2007.

  This document was produced by the Michigan Department of Natural Resources and the Michigan Department of Transportation. The document seeks to foster a connected shared use path system in Michigan by building new facilities and upgrading existing facilities throughout the state. The document also promotes the creation of an interconnected statewide system of shared use paths called "Discover Michigan Trails." The system would connect natural, tourist, and urban destinations. Modeled after the Michigan Trailways Act, a designation of the initial set of shared use paths would

<sup>&</sup>lt;sup>5</sup>Ray LaHood, United States Secretary of Transportation http://www.fhwa.dot.gov/environment/bicycle\_pedestrian/overview/policy\_accom.cfm ).

be established and then an appointed council of diverse interests would be charged to create a strategy and action plan to achieve the vision for the "Discover Michigan Trails" network, including developing guiding principles for public trail investments and a dedicated funding source for multiuse shared use paths. In accordance with this document and other initiatives, in 2012, Governor Snyder laid out his vision for a continuous 924-mile trail stretching from Detroit, to the border with Wisconsin in the UP, across the heart of the state. The trail would be accessible to hikers, bicyclists, and snowmobilers.

## Michigan Complete Streets Legislation: August 2010

Complete Streets legislation signed on Aug. 1, 2010 gives new project planning and coordination responsibilities to city, county and state transportation agencies across Michigan. The legislation defines Complete Streets as "roadways planned, designed, and constructed to provide appropriate access to all legal users...whether by car, truck, transit, assistive device, foot or bicycle." The law further requires Complete Streets policies be sensitive to the local context, and consider the functional class, cost, and mobility needs of all legal users. Michigan leads the nation in the number of communities that have enacted Complete Streets policies. The State Transportation Commission officially adopted a Complete Streets policy on July 26, 2012, as required by PA 134 and PA 135 of 2010. The primary purpose of the new laws is to encourage development of Complete Streets as appropriate to the context and cost of a project. The focus on streets that serve all legal users is intended to increase transportation accessibility for all modes and all users without significantly impacting traffic movements. MDOT created a Complete Streets internal team to help implement the policy and work through the department's Context Sensitive Solutions (CSS) process. MDOT also participates in the statewide Michigan Complete Streets Advisory Council. This activity complements the goals of the MITP<sup>6</sup>.

#### **INDIANA**

Michiana Area Council of Governments (MACOG)

MACOG shares a border with Berrien, Cass, and St. Joseph counties in northern Indiana. MACOG provides planning expertise to St. Joseph, Marshall, and Elkhart counties. In 2001, they released their Regional Bicycle Facilities Map which outlines all off and on-road bike routes in the MACOG region. Routes which were planned to remain unsigned were also identified. This plan serves as an excellent resource for those looking to connect to points surrounding the region and to southwest Michigan<sup>7</sup>.

<sup>&</sup>lt;sup>6</sup> http://www.michigan.gov/documents/mdot/MDOT NewPolicyIntegrationWhitePaperFinal 397570 7.pdf

<sup>&</sup>lt;sup>7</sup> www.macog.com/

Map 13 that follows shows the projects that are on the ground currently (the solid lines) and those projects that are being proposed (dashed lines) in the areas that would impact the NATS planning area. The three projects that the MPO should monitor would include:

- 1. Laurel Road (signed route), North South Route,
- 2. Barryknoll Way (unsigned route), West East Route,
- 3. Gumwood (proposed multi-use path) North South Route.

As more projects come closer to connecting the two states, communication with our partner organization to the south will be important to ensuring that a seamless non-motorized transition from Michigan to Indiana occurs.

Map 13 - South Bend and Mishawaka Non-Motorized and Pedestrian Facilities



Source: Michiana Area Council of Governments Non-Motorized Transportation Plan

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# **Regional Efforts**

Southwest Michigan Non-Motorized Transportation Plan

In 2011, the Southwest Michigan Planning Commission completed a nine-county non-motorized transportation plan on behalf of the Michigan Department of Transportation, which covered the nine

counties in the MDOT southwest region (Allegan, Barry, Berrien, Branch, Calhoun, Cass, Kalamazoo, St. Joseph, and Van Buren counties). The plan was intended to guide MDOT's investment in non-motorized facilities in the southwest region for five years.

The plan provided a region-wide vision for a connected system of off-road shared use paths and on-road facilities (paved shoulders/bike lanes); encouraged dialogue and more coordinated planning among state, county, and local entities; and enhanced partnerships and increased communication among state, county, and local agencies regarding the implementation and operation (construction, maintenance, marketing, etc.) of non-motorized facilities.



Mud Lake Bog is owned and operated by Buchanan Township.

This Plan highlights the major gaps in southwest Michigan to achieving a connected region-wide system. With extensive public participation, desired and planned non-motorized facilities were solicited and mapped. Regional priority corridors were identified along with local priority routes for each of the counties. There are five north-south and four west-east priority regional corridors and many of the local/county priority routes correspond to the regional corridors.

To complete a non-motorized system for the proposed corridors, a combination of on-road and off-road facilities will probably be necessary. The corridors are meant to be conceptual and for the most part do not pinpoint exact streets or sections of land. These corridors will serve as connectors for the region and to the surrounding regions as well. The priority corridors were grouped into two categories - north-south and west-east corridors. Below is a description of the priority regional corridors and Map 14 displays the corridors.

#### **North-South Corridors:**

Lakeshore/USBR 35 (Dark Gray) - This corridor follows the Lake Michigan shoreline and would also provide a portion of the United States Bicycle Route 35. In southwest Michigan, the route traverses through Saugatuck and Douglas in Allegan County, South Haven in Van Buren County and St. Joseph and New Buffalo in Berrien County.

- M-40 (Pink) This corridor would follow M-40 connecting the communities of Allegan in Allegan County, Gobles and Paw Paw in Van Buren County, and Marcellus in Cass County.
- M-66 (Green) This corridor would follow M-66 connecting the communities of Woodland and Nashville in Barry County, Battle Creek and Athens in Calhoun County, and Mendon and Sturgis in St. Joseph County.
- I-69/Old US-27 (Light Gray) This corridor would follow I-69/Old US-27 as it traverses through the communities of Marshall and Tekonsha in Calhoun County and Coldwater in Branch County.
- Wayland/Sturgis (Purple) This corridor would begin in Sturgis and connect to Mendon in St. Joseph County then proceed northwest connecting through

Kalamazoo County and through the communities of Parchment and Kalamazoo, and finally head into Allegan County connecting Plainwell and Wayland.

#### **West-East Corridors:**

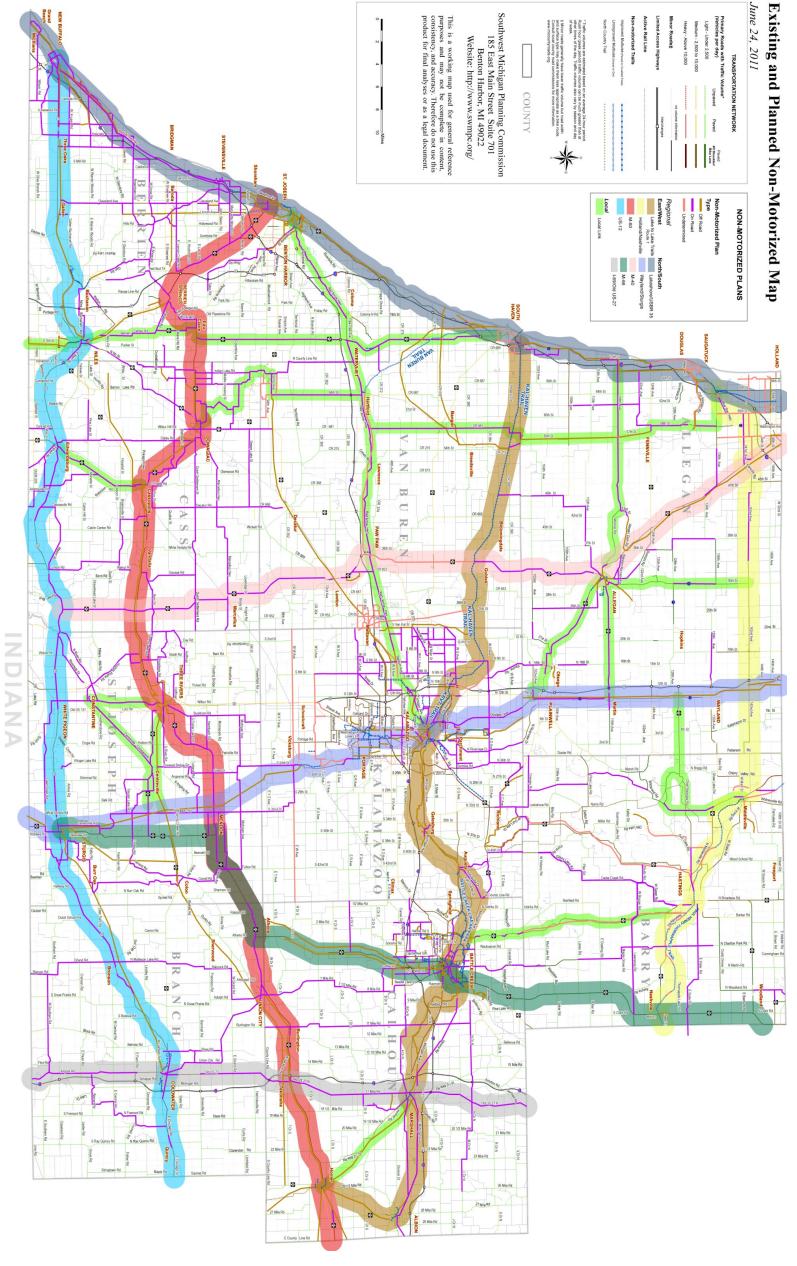
Great Lake to Lake Trail Route #1 (Brown) - This is a statewide priority corridor that would connect the segments of the Kal-Haven Trail beginning in South Haven in Van Buren County to the Kalamazoo River Valley Trail and the City of Kalamazoo in Kalamazoo County, and the Battle Creek Linear Park in Calhoun County as it heads east to connect with Port Huron on Lake Huron.



Bicycling is a great way to see the beauty of our region.

- **US-12 (Blue)** This corridor would follow the US-12 Heritage Route as it starts in New Buffalo in Berrien County and connects to Edwardsburg in Cass County, White Pigeon in St. Joseph County and shifting slightly northwest past Sturgis in St. Joseph County before heading to Coldwater in Branch County.
- Holland-Nashville (Yellow) This corridor would follow 142<sup>nd</sup> Avenue in Allegan County, just outside of Saugatuck and would head east connecting Middleville, Hastings, and Nashville in Barry County.
- M-60 (Red) This corridor would follow M-60, starting near the lakeshore in St. Joseph in Berrien County. It would head east through Dowagiac and Cassopolis in Cass County, and then connect Three Rivers and Mendon in St. Joseph County, and on to Athens and Union City in Branch County. It would pass through Burlington and Homer in Calhoun County before continuing east beyond the southwest Michigan region.

Map 14 - Regional Non-Motorized Routes



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#### **Priority Local Routes**

The 9 county plan also highlighted the local priority routes as identified in Table 18. For the purposes of this plan, the local priority routes for Berrien and Cass Counties are listed.

**Table 18 - Local Priority Routes** 

County	High	Medium	Low
Berrien	-Lakeshore Trail/USBR 35 (priority is off-road and connecting to the Marquette Greenway in IN)*  -US-12 corridor*  -St. Joseph to Niles (following M-63 corridor from St. Joseph to Berrien Springs to the state line connecting to IN)*	-Hickory Creek corridor (Stevensville to St. Joseph River to Silver Beach in St. Joseph City) -Along Ox Creek (Benton Harbor)	None identified
Cass	-Along Airline Railroad from Cassopolis to Vandalia to Three Rivers -Dowagiac River Water Trail (not shown on map)	None identified	None identified

<sup>\*</sup>Denotes if local project is also identified as a priority regional corridor

#### **Local Efforts**

# **Indiana-Michigan River Valley Trail, Niles**

The partners are working to create a 34-mile trail connecting Niles, Michigan to Mishawaka, Indiana. The completed trail would be used by commuters, students, families and tourists. The trail would connect people to universities, schools, downtowns, parks, hospitals, historical and cultural areas, and businesses. In 2010, the City of Niles completed 2.25 miles of trail from Plym Park to 3rd/Fort Street. The trail needs to be completed south of the City of Niles. The Niles Township Parks Committee is actively working with partners to make this connection from Niles City to the Indiana state line. Niles Township has secured a 20 year lease agreement with Indiana-Michigan Power along the utility corridor to make this trail a reality. Funding has been secured and the trail will be constructed in 2014. In Indiana, the St. Joseph County Parks Department and partners are working to continue the trail to Roseland and onto South Bend and Mishawaka. St. Joseph County Parks and Michiana Council of Governments have conducted a traffic study at Cleveland Avenue and have found an affordable solution for getting trail users across this busy road. In South Bend, Indiana, an extension of the section known as the Northside Trail has been built. The extension will more-or-less parallel Northside Blvd. from 21<sup>st</sup> Street to Logan St. where it will link up with Mishawaka's Riverwalk.

# Friends of McCoy Creek Trail, Buchanan

Friends of McCoy's Creek Trail was established by Resolution of the City of Buchanan in April 2004 as a subcommittee of the Buchanan Area Recreation Board. They have developed pathways through E. B. Clark Woods on the south side of McCoy's Creek and have continued the shared use path to downtown Buchanan along McCoy Creek and are now working to connect to Niles and New Buffalo.

#### INVENTORY OF FACILITIES

Table 19 outlines the total inventory of facilities in the NATS planning area. As more detailed mapping inventory is completed for the NATS Walk and Roll Plan, it will be easier to determine where the gaps in facilities are throughout the region. This will better help the MPO and member communities target areas that need to be completed to make the system more easily accessible for pedestrians and non-motorized users. The MPO does not have a map showing where all the local facilities are currently located.

**Table 19 - Inventory of Non-Motorized Facilities** 

Community	Sidewalks Paved Shoulders a Bicycle Lanes		Trails
City of Niles	87	0.25	2.25
City of Buchanan	38	X	4.3
Village of Edwardsburg (called)		Х	Х
Bertrand Township	NI	NI	NI
Buchanan Township	Х	2.2	Х
Howard Township	NI	NI	NI
Mason Township	Х	Х	Х
Milton Township	Х	Х	Х
Ontwa Township	Х	Х	Х
Niles Township	15.14	11.85	Х

NI=No information provided to MPO

# BENEFITS OF NON-MOTORIZED TRANSPORTATION

Non-motorized transportation has become increasingly important as many people come to understand the numerous benefits that these facilities bring to a community. The benefits are very diverse and include advantages in economic, social, environmental, health, and overall quality of life.

The economic vitality of a community can be greatly affected by an environment that is supportive of non-motorized travel. Non-motorized facilities such as shared use paths provide a means of interacting with nature, neighbors, and businesses within a community. Many studies have shown the economic benefits of

# Health and Quality of Life Benefits of Non-Motorized Facilities

- Reduces air pollution
- Encourages physical fitness
- Helps prevent obesity related chronic diseases
- Creates safer neighborhoods
- Provides safe alternative transportation options
- Helps connect people, neighborhoods and communities with each other and the outdoors

shared use paths to local businesses. In Michigan studies show that out-of-town shared use path users spend anywhere from \$949 to \$1,269 on lodging, restaurant, groceries, gas, and equipment per trip. Further, shared use paths can positively impact property values. For example, realtors indicated that homes along the Paint Creek Trail in Michigan were selling for about 10 percent more than comparable homes not located along the path.

Non-motorized facilities provide an alternative form of transportation to the automobile. This can help reduce the amount of congestion on our roadways and reduces the amount of air pollution from vehicles. Poor air quality can contribute to respiratory problems and overall health issues in the population. Non-motorized facilities can also provide transportation options for the elderly, mobility challenged and those who cannot afford or chose not to have an automobile. Non-motorized transportation choices can also help people connect to public transit options such as train and bus stops.

Further, a connected non-motorized network will offer numerous health and safety benefits for the residents of southwest Michigan. As the obesity epidemic is quickly becoming one of the largest health problems facing Americans today, these facilities can provide a place for community members to easily and inexpensively engage in physical activity. Non-motorized facilities can also provide a safer route for students to walk or bike to school with less pedestrian-vehicular conflicts at intersections.

Despite the known benefits to non-motorized transportation, the general public does not choose non-motorized transportation very frequently outside of recreational uses. According to the American Community Survey the primary means of transportation to work in Michigan and within the NATS study area continues to be those driving alone. Table 20 shows that driving alone to work is a slightly more dominant commute mode in southwest Michigan than in the state as a whole.

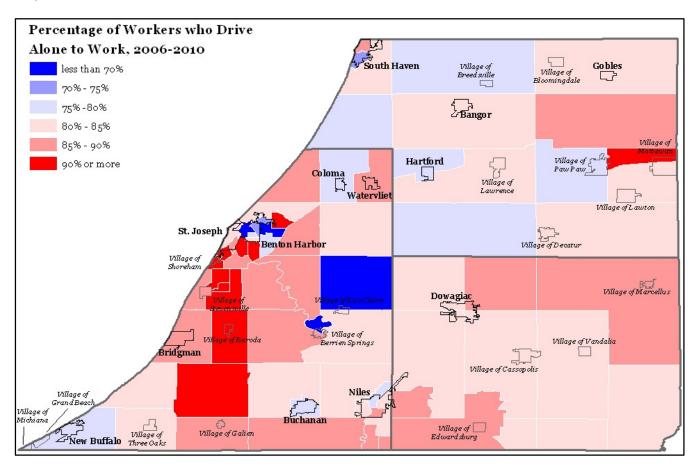
**Table 20 - Percentage of People Who Drive Alone** 

	Michigan	<b>Berrien County</b>	Cass County	
Total Number of Workers	4 225 557	60 07E	22,914	
(Age 16 and older)	4,225,557	68,875		
Drove alone	82%	84%	85%	
Carpooled (2-3 person)	9%	8%	9%	
Public Transportation	1%	.004	.002	
Walked	2%	.026	.014	
Bike	.004	.003	.000	
Taxi, Motorcycle, and	007	.007	.005	
Other means	.007			

Source: 2006-2010 American Community Survey Federal Information Processing Standards Codes (FIPS): 26027, 26, 26021

Still, the dominance of driving alone is not uniform throughout the study area. Map 15 highlights that certain areas of southwest Michigan contain higher concentrations of residents who tend to use a mode other than the personal automobile for their daily commute.

Map 15 Percent of Workers Who Drive Alone to Work



Commuting patterns alone do not fully explain the need for transportation alternatives to the personal automobile. Changes in demographics and market demand also contribute to a desire for infrastructure that supports a variety of forms of transportation.

#### CHANGING DEMOGRAPHICS

#### **Elderly and Disabled Populations**

Figures 15-16 demonstrates a clear increase in the population aged 50-74 between 2000 and 2010, and a clear decrease in the population aged 25-44 over that time. The trends suggest that while Southwest Michigan has a large number of people of working age, the population of the state and the study area will continue to age. As more people are unwilling or unable to drive alone, they will likely rely less on single occupancy vehicles as their primary means of travel. As an MPO, NATS needs to ensure that the transportation system is complete to provide all people the opportunity to travel by modes other than automobile. A particular challenge in this region is that the population is continuing generally to disperse from incorporated cities and villages into townships. In many cases, this shift in population increases the distance that residents have to travel to access vital resources such as food, healthcare, and employment. For senior citizens and persons with disabilities who are unable or uncomfortable with driving on their own, these distances can become prohibitive where alternatives do not exist.

Figure 15 - Berrien County Population Tree

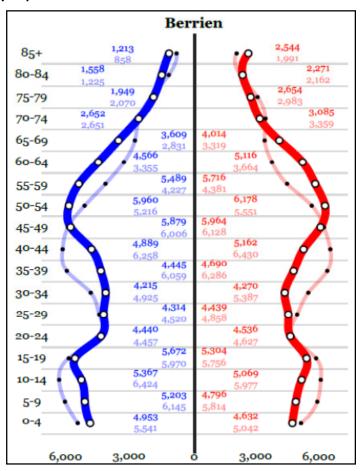
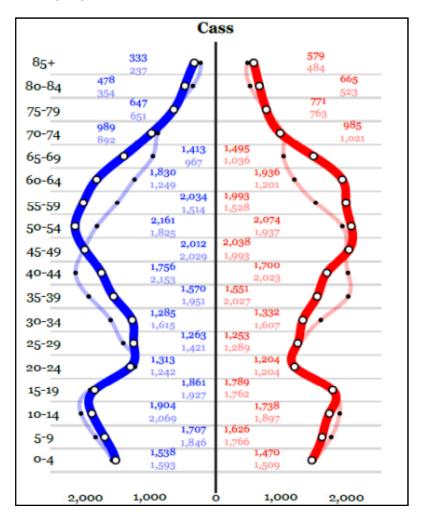


Figure 16 - Cass County Population Tree



#### Youth

A shortage of alternative facilities to the automobile creates challenges for more than just the elderly and disabled. One interesting change that has become more apparent is that many younger people now desire to live in communities where they do not have to own an automobile, or do not need to travel by car to meet their daily needs. These young people might wish to live in an area with good public transit and pedestrian and bicycle facilities that connect them with employment and cultural attractions.

A survey by the National Association of Realtors conducted in March 2011 revealed that 62 percent of people ages 18-29 said they would prefer to live in a communities with a mix of single family homes, condos and apartments, nearby retail shops, restaurants, cafes and bars, as well as workplaces, libraries, and schools served by public transportation.

http://www.theatlanticcities.com/

The ability for southwest Michigan to once again attract working age people to the region may hinge not just on availability of jobs, but on provision of these amenities. Certain nationwide findings support the provision of these amenities to retain and attract young workers:

- **Driving Restrictions**-Recent restrictions on driving -- later ages for licenses, limits on how many people can be in the car, restrictions on cell phone use and this has resulted in the share of 14 to 34-year-olds without a driver's license increased by 5 percentage points, rising from 21 percent in 2000 to 26 percent in 2010, according to the Federal Highway Administration<sup>8</sup>.
- Multi-Modal Youth-Young people are also making more use of transit, bikes, and foot power to get around. In 2009, 16 to 34-year-olds took 24 percent more bike trips than they took in 2001. They walked to their destinations 16 percent more often, while their passenger miles on transit jumped by 40 percent. But money doesn't explain everything. Sixteen to 34-year-olds in households with incomes of more than \$70,000 per year are increasingly choosing not to drive as well, according to the report. They have increased their use of public transit by 100 percent, biking by 122 percent, and walking by 37 percent<sup>9</sup>.
- Walkable Communities-A separate 2011 Urban Land Institute survey found that nearly two-thirds of 18 to 32-year-olds polled preferred to live in walkable communities. The re-urbanization of America is giving more people access to public transportation. The advent of Zipcar and other car-on-demand businesses is eliminating the need to own and insure an expensive vehicle that often isn't driven much.

<sup>&</sup>lt;sup>8</sup>http://www.theatlantic.com/business/archive/2012/08/why-are-young-people-ditching-cars-for-smartphones/260801/

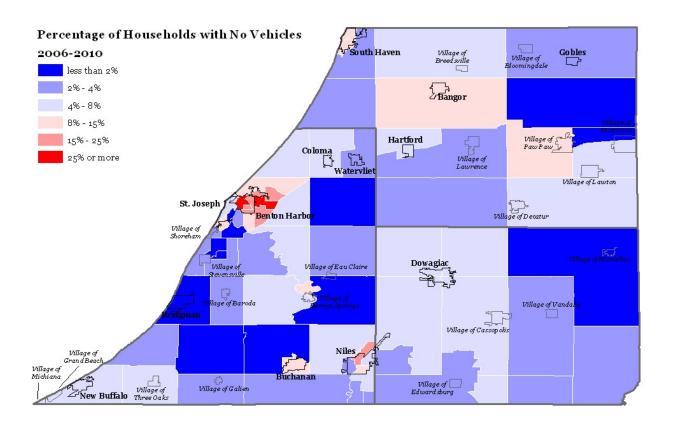
<sup>&</sup>lt;sup>9</sup>http://www.theatlanticcities.com/commute/2012/04/why-young-americans-are-driving-so-much-less-their-parents/1712/

# **Low Income Populations**

Another demographic group may require, and indeed, want personal automobiles to navigate their daily needs, but may be unable to afford the cost of owning a car, a cost which continues to rise. The total average cost of owning and operating a car is approximately \$8,700 per year, and this figure assumes that gasoline prices remain under \$4.00 per gallon.

The provision of sidewalks is intermittent and may be absent in many situations. Some of the jobs in these areas may also demand that employees reach and depart work during the evening hours, when transit is unavailable, and when walking and bicycling in the traffic lanes themselves may be even more unsafe than during daylight hours.

Aging and disability, a desire for less automobile-oriented living, and insufficient incomes all lead to a need to consider alternative modes to the automobile. Map 16 shows the percentage of zero-car households in each Census Tract of the southwest Michigan region. While the small urban centers appear to have generally higher percentages of zero-car households than more rural areas, this might not always be the case as the population continues to age. One of the stated goals of this plan is to improve the accessibility that these households have to critical services, employment and cultural attractions, regardless of the circumstances that lead to them not owning or operating a vehicle.



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