

INTERMODAL CONSIDERATIONS

Introduction

One of the critical elements of sound transportation planning is an inventory of the road system in a given rural, urban, or transportation study area. Such an inventory is important with respect to how roads are functionally classified, the traffic counts of these roads, and the condition of each of the roads in the transportation system. The byproduct of a road system inventory is another piece to fit into the puzzle of a comprehensive transportation assessment. Roads can then be understood as part of the framework of an integrated transportation system. That understanding can consequently be important to overall policy and budgetary decisions. The goal is to continue to better prioritize decisions, channel funding, and improve the overall quality of life for the citizens within the area.

Non-Motorized Transportation

Non-motorized transportation can take many forms, such as bicycling, walking, and in-line skating. There are many benefits associated with non-motorized transportation, some of which include increased interaction with neighbors and other community members, improved health as a result of increased physical activity, and a consequential decrease in motorized transportation that improves roadway lifespan and reduces congestion and air pollution. However, despite these benefits and many more, the general public does not choose non-motorized transportation very frequently outside of recreational uses. This lack of participation could possibly stem from the fact that in many areas in the United States, infrastructure is not present for non-motorized transportation to be a safe and viable choice. Nevertheless, as the price of gasoline continues on an upward arc, non-motorized transportation will become an ever more practical choice.

There are a number of funding sources that can provide the means to expand the capacity for non-motorized transportation. The Michigan Land Trust Fund and the Land and Water Conservation Fund, as well as MDOT Transportation Enhancement grants and Congestion Mitigation and Air Quality (CMAQ) funds are all sources of revenue. Additionally, Section 10(K) of Act 51 requires state and local governments to spend at least 1 percent of each year's highway funds, over a ten year period, on non-motorized transportation. Additionally, a five-year program must also be prepared annually that lists improvements to

non-motorized facilities. Such improvements can include separate paths/trails or widened lanes; improved signage, markings, and signals; replacement of sewer grates and rail crossings; provision of bike racks and lockers; and educational programs, maps, guides, etc.

State Trailway Efforts

At the state level, NATS supports the efforts of agencies such as the Michigan Trails and Greenways Alliance (MTGA) and MDOT. MTGA is a non-profit organization that fosters and facilitates the creation of an interconnected statewide system of trails and greenways for recreation, health, transportation, economic development and environmental/cultural preservation purposes. In May of 2007, MTGA launched "Connecting Michigan: A Statewide Trails Vision and Action Plan," a plan that seeks to complete an interconnected statewide system of trailways in Michigan. In August 2007, the NATS TAC and Policy Committee passed a resolution to support the Connecting Michigan Vision. For more information on the Connecting Michigan trailways project, visit the website at <http://www.connectingmichigan.org/>.

In December of 2004, the SWMPC was approached by MDOT to produce a new kind of map for the southwest portion of the state. Recent mapping efforts by MDOT have included a much wider range of transportation modes will be represented and supported through state-wide mapping, and in this case, MDOT worked with SWMPC to produce a non-motorized transportation map to follow a *Bicycle Facility Map Prototype and Feasibility Study*.

The non-motorized map focused primarily on the nine counties of the MDOT Southwest Region (Allegan, Barry, Berrien, Branch, Calhoun, Cass, Kalamazoo, St. Joseph, and Van Buren) but also included portions of neighboring counties. It was intended to be folded for use while using the trails. Extensive effort was put into the labels and symbology, and the map was eventually printed in 2006. Copies were then distributed to SWMPC, local units of government, visitors' bureaus, chambers of commerce, road commissions, trail groups, bike shops, and more. This effort was very popular with the business community and trail enthusiasts alike.

Regional Trailway Efforts

Independent of the state's non-motorized efforts, the SWMPC strives to include non-motorized planning as a part of transportation planning in the region. To that end, the SWMPC has actively organized a regional coalition of individuals and organizations involved in non-motorized transportation and trail development known as the Southwest Michigan Alliance for Recreational Trails (SMART). SMART was created to promote the connection of trails among the nine MDOT Southwest Region counties and with neighboring regions. Regional collaboration allows for trails to expand beyond geographic boundaries and to create a connected system that links people and communities. SMART has allowed member communities and organizations to continue to build trails in their own county in a way that is harmonious with a regional trail.

SMART seeks to do the following:

- Establish and expand partnerships that aid the development and connection of all types of trailways throughout southwest Michigan.
- Link existing and future trailways into a complete network which connects the southwest Michigan region with neighboring networks.
- Secure resources to sustain success.
- Increase public awareness, understanding, and an appreciation for trailways and the benefits trailways bring to communities.

SMART is currently in the process of updating the original MDOT bicycle map, expanding trailway efforts to include water trails and hiking trails, and organizing educational workshops that focus on planning for and managing trails. Partners are being sought to help fund the printing of the next 9 county non-motorized map, and the target completion date is fall of 2010.

The following **table 3.0** is the compiled existing non-motorized facility information received from the local agencies.

**Table 3.0 Existing Non-Motorized Facility Information
For Federal Aid Eligible Routes**

Municipality	Road Name	Limits	Mileage	Type of facility (i.e. sidewalk, paved shoulder)	Total
City of Niles	Pokagon St.	2 nd St-5 th St.	0.21	Sidewalk	
City of Niles	Third St	Main-Fort	1.27	Sidewalk and Shoulder	
City of Niles	Grant St.	Lincoln-City Limits	0.50	Sidewalk and Shoulder	
City of Niles	Grant St.	River-St. Joseph Ave.	0.20	Sidewalk	
City of Niles	Broadway	River –Main St.	0.48	Sidewalk	
City of Niles	Lake St.	5 th St-Terminal	1.16	Sidewalk	
City of Niles	Terminal Rd.	Lake St.-Airport Rd.	1.06	Sidewalk	
City of Niles	Sycamore ST.	Front St.-13th St.	1.22	Sidewalk	
City of Niles	Seventeenth St.	Main St.-Lake St.	1.21	Sidewalk	
City of Niles	East Main St.	Main St.-17 th St.	0.73	Sidewalk	
City of Niles	Wayne St.	Front St-13 th St.	0.74	Sidewalk	
City of Niles	Thirteenth St.	Oak St-Lake St.	0.97	Sidewalk	
	Red Bud Trail	Buchanan City limit -S. of Moccasin Trail	1.2	paved shoulders	
	Red Bud Trail	Buchanan City limits - Chamberlain Road	0.56	paved shoulders	
	Niles-Buchanan Road	½ mi W. of Mayflower Rd- Niles City limits	3.11	paved shoulders	
	Lake Street	Terminal Rd -Cass County line	0.25	paved shoulders	
	West River Road	Chicago Rd -Niles Twp line	0.37	paved shoulders	
	E. Main Street	Silverbrook Ave-Cass County line	0.75	paved shoulders	
	Third Street Rd	Fort Street-Fukerson Rd	2.01	paved shoulders	
	Fulkerson Road	Third Street -M-51	0.22	paved shoulders	
	Bell Road	Third Street -17 th St	1.02	paved shoulders	
	17 th Street	Bell Road- Bell Road	0.25	paved shoulders	
	Bell Road	17 th Street- Cass County line	0.51	paved shoulders	
	Bertrand Road	St. Joseph River-Cass County line	2.09	paved shoulders	
	Ontario Road	Third Street -Cass County line	1.52	paved shoulders	

Aviation

Jerry Tyler Memorial Airport, owned and operated by the City of Niles, is the only major air facility in the NATS study area. This airport serves as a general utility airport with no commercial flight operations. It has been in existence for over seventy years, since the late 1920s. Located 1.5 miles northeast of downtown Niles it is adjacent to the Niles Industrial Park. The location is beneficial to the industrial park area as well as citizens, businesses, and industry in Niles, Buchanan, and other area communities.

The airport has undergone numerous improvements over the past few years, through runway rehabilitation, taxiway and apron resurfacing, new taxi street construction, construction of a new snow removal equipment storage building, runway approach clearing, installation of security fencing, and construction of a new hangar development area. New privately-owned hangars have been built in the new hangar development area since construction was completed, with more space available for additional hangar construction. Plans are currently being prepared for construction of a new above-ground fuel storage facility and dispensing area with a 24-hour credit card system to replace the current system. Federal, state, and local funds have been used to fund these projects.

The airport has two runways; RWY 4/22 is 3,315 feet long RWY 15/33 is 4,100 feet long. Approximately 40 aircraft are based at the airport, and, in 2007, there were approximately 3,200 flight operations. The fixed-base operator on-site provides charter flight services, fueling operations, aircraft repairs, and other services.

Rail

Rail use in southwest Michigan is an important link in the transportation network. As the cost of energy increases, alternatives to over-the-road freight and passenger options are more carefully considered. Over-the-road freight volume has increased considerably since the last NATS LRTP was approved. The increased volume drives an increased interest in rail alternatives. (Rail Map in Appendix H)

The southwest Michigan region is impacted by its proximity to Chicago. Chicago is the largest rail hub in the country. According to the Federal Railroad Administration (FRA), more than 1,200 trains pass through the city daily while carrying 75 percent of entire nation's freight. The FRA projects a 79-percent increase in the total number of rail freight cars passing through the city each day (<http://www.fra.dot.gov/us/content/1486>). CSX operates a rail line that runs across Michigan from Detroit to Lansing, Grand Rapids, and south through Benton Harbor. Ultimately the line exits Michigan south of Grand Beach and runs northern Indiana to Chicago.

Over the last thirty years, as the national Gross Domestic Product (GDP) and employment grows, rail freight tends to parallel that growth. The volume of rail freight in the upper Midwest is even more closely tied to manufacturing and agriculture (grain production) than the GDP. As Michigan's manufacturing sector falters, it stands to reason that rail volume will decrease. However, given the potential shift from less fuel efficient means of transporting freight as fuel costs increase, the comparative efficiency of rail freight may counteract the projected downward trend.

Passenger Service

The National Railroad Passenger Corporation (otherwise known as Amtrak) is a government-owned corporation that was organized on May 1, 1971, to provide intercity passenger rail services in the United States. Amtrak connects 500 destinations in 46 states on 21,000 miles of track that are primarily owned by freight railroad companies. Amtrak's fiscal year 2008 statement shows that there was an 11.1 percent total increase in ridership and 14.2 percent total increase in ticket revenues. There are many potential reasons for these increases among them are gasoline cost, highway congestion, airline delays, and environmental concerns.

Michigan's three Amtrak lines are the Wolverine, Blue Water, and Pere Marquette. Together they recorded record-breaking ridership totaling nearly 800,000 in 2007, a 6 percent increase from the previous year. Ticket revenues increased more than 10 percent in 2007. It is understood that figures would have been higher if Amtrak had more cars to add to the lines. Amtrak's request for funding new cars and to repair sidelined cars has not been fully

funded in the past. There is no US assembly line from which to order conventional rail passenger cars; therefore it would take at least two years to produce passenger cars once funding became available.

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 FRA has designated the Detroit to Chicago corridor as a high-speed corridor. The ultimate goal of the high-speed initiative is to reduce the total Detroit-Chicago travel time from the current 5.5 hours to 3.5 hours. In January of 2002, Amtrak began speed increases with the ultimate goal of reaching 110 mph. Currently Amtrak is reaching speeds of 95 mph between Porter, Indiana and Kalamazoo, MI. Speeds are expected to reach 110 mph in early 2009. Amtrak has partnered with the FRA and the State of Michigan to develop a radio-based train communication system, called the Incremental Train Control System (ITCS), which is designed to allow trains to operate safely at higher speeds. The ITCS is currently in place for high-speed revenue service on Amtrak-owned track in Michigan and works to prevent train-to-train collisions, train over speed conditions, and protect on-track roadway workers.

Amtrak has two corridor passenger services in Michigan's NATS region including the Wolverine, and the Blue Water. The Wolverine passenger service is a 304 mile line that offers three daily round trips from Chicago 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 another service that makes a daily stop in Niles, Michigan, from Chicago, to Port Huron, Michigan. A new station is expected to be opened in New Buffalo with stops on both the Blue Water and Wolverine services. The Blue Water operates on a 319-mile line that Norfolk Southern Railway, Amtrak, and Grand Trunk Western Railroad own. The 97-mile segment between Porter, Indiana and Kalamazoo, Michigan, is the longest segment of track owned by Amtrak outside of the Northeast Corridor.

Amtrak Fiscal Year 2008 (Oct. 1, 2007 through Sept. 30, 2008)						
Corridors	Ridership			Ticket Revenue		
	FY08	FY07	% change	FY08	FY07	% change
Wolverine Service	472,393	449,107	+5.2	\$16,243,510	\$14,934,656	+8.8
Blue Water	136,538	127,642	+7.0	\$4,158,742	\$3,557,216	+16.9

Niles train station formerly know as Michigan Central Railroad station is located on Dey Street and services the Wolverine and the Blue Water lines connecting Illinois, and Indiana to Michigan. The structure was built in 1892 and is listed in the National Register of Historic Places. Amtrak operates an engineering department branch that maintains the 97-mile track segment between Kalamazoo and Porter, Indiana. Here, employees maintain the track for high-speed service and are continuing work on increasing speeds along the Amtrak-owned segment.

Boarding and Alighting			
	FY07	FY08	Increase %
Niles	18,061	19,286	6.80%

The Future of High-Speed Rail

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 to achieve high speed rail throughout the Midwest. They hope to achieve this by creating a national proposal and by campaigning to our legislature for help. MARP has two key focuses at this time:

1. To increase capacity on each train (additional passenger cars), and to mitigate sold-out conditions on many trains.
2. Increase the frequency of trains on each route to provide more consumer options. The first priority is to add a morning train from Chicago to Grand Rapids with return in the evening.

3. To expand the high speed corridor east and west. Amtrak has designated the high speed corridor as one of its top priority investments. Further improvements will continue to reduce travel time on this popular line between Detroit and Chicago.

Momentum is growing across the Midwest and in Congress for greater investment in passenger rail service amid concerns over rising gas prices, climate change, and traffic congestion. On October 16, 2008, President Bush signed into law H.R. 2095, a combined rail safety and Amtrak reauthorization bill. The bill enabled \$12.9 billion in funding for the FY 2009-2013 period. This amount almost doubled the current annual spending for Amtrak, intercity passenger rail, and high-speed rail programs. The authorization includes \$1.9 billion for state grant programs for capital investment in intercity passenger rail programs. (Note: Congress will have to appropriate the funds in the FY 2008/09 budget).

Governor Granholm convened the Transportation Funding Task Force (TF2) to review the adequacy of surface transportation, aeronautics service provision, and their finance in Michigan (see the website www.michigan.gov/tf2). The Intermodal Passenger Subcommittee of the TF2 Citizen Advisory Committee acknowledges several factors favoring expansion of urban transit and intercity passenger rail: gasoline prices, aging population, road congestion, air pollution, and the need to attract young college-educated professionals to our urban centers. Recommendations include: (1) expansion of intercity rail over a 10-year period, doubling both capacity and frequency for the Blue Water and the Pere Marquette routes and (2) new facilities serving intercity bus and rail as a stimulus to community redevelopment. This scenario would require an annual increase in funding of \$532 million over the current \$241 million. To achieve a "significantly enhanced regional (interstate) passenger rail service" would require a doubling of that amount.

Michigan participates as a member of the Midwest Regional Rail Initiative and the States for Passenger Rail Coalition to coordinate technical and policy issues. MDOT, the Governor's office, the legislature, and the public have representatives on this body (see www.miprc.org). An economic analysis completed in 2007 projects benefits to users and communities over the 40-year life of the expansion project of \$1.80 for every \$1.00 invested – benefits that translate directly into jobs and economic development (see Michigan brochure at http://miprc.org/Portals/0/pdfs/MWRRRI_Michigan_brochure_2007.pdf)

The Passenger Rail Work Group (PRWG) convened by Frank Busalacchi, Wisconsin DOT, released the report "Vision for the Future: U.S. Intercity Passenger Rail Network Through 2050," which specifically calls for upgrading the existing Chicago-Detroit route to 79-100 mph on a separate track (see www.dot.wisconsin.gov/projects/state/rail-vision-2050.htm). Recommendations of the PRWG were incorporated into the final report of the National Surface Transportation Policy and Revenue Study Commission. The Commission is a bipartisan organization formed in 2007 with 12 members appointed by the president and Congressional leaders to examine national surface transportation needs and mechanisms for funding these needs (see www.transportationfortomorrow.org).

Speaking to the annual meeting of the MARP in September 2008, Ross Capon, Executive Director on the National Association of Railroad Passengers, stated that development of rail corridors – such as the Chicago-Detroit corridor – is a national priority expressed in the Amtrak reauthorization bill. This bill was subsequently combined with a rail safety act, approved by large majorities in both houses, and signed into law by President Bush on October 16, 2008.⁴

Trucking

The movement of freight from one point to another is an important part of the NATS transportation system. Efficient movement of freight within and through the NATS area is important to industry, retail, and agriculture, international and regional trade. Trucking is a vital component of the freight movement process. It provides important direct and indirect contribution to the local economy. **Table 4.0** provides commercial annual average daily traffic in the years 2000, 2004, 2007 and the percentage of change from year 2000 to 2007.

⁴ Michigan Association of Rail Road Passengers, Rich Vavra-Musser
Amtrak Southwest Michigan, James Derrick

Table 4.0 NATS Region Commercial Annual Average Daily Traffic

Route	From	To	2000 CADT	2004 CADT	2007 CADT	Percent Change from 2000-2007
US 31	BUCHANAN RD.	US 31 BR (WALTON RD)	12890	14943	9922	-23.03
US 31	JCT US-12	BUCHANAN RD.	14360	14851	16244	13.12
US 31	SNOW RD.	JCT M-139/OLD-31	9830	14014	11983	21.90
US 31	US-31 BR (WALTON RD,)	SNOW RD.	11490	15219	15718	36.80
US 12	JCT M-40	JCT M-103	6193	4991	4813	-22.28
US 12	JCT M-51 (Old US-33)	JCT M-60	11851	13060	12807	8.07
US 12	JCT M-60	WCL EDWARDSBURG	6814	8685	7438	9.16
US 12	JCT M-62	JCT M-205	6799	7207	8072	18.72
US 12	MASON ST	JCT M-40	6229	7436	6967	11.85
US 12	WCL EDWARDSBURG	JCT M-62	5883	7402	7217	22.68
M 60	END DIVIDED S OF LEET RD	SCL CASSOPOLIS	4126	4239	4227	2.45
M 60	JCT M-60 BR NILES	SURF CHG 0.2 W OF BARON LK RD	10407	6967	10434	0.26
M 60	JCT US-12	JCT M-60BR NILES	8556	8830	9347	9.24
M 60	N JCT M-62	ECL CASSOPOLIS	8893	8190	9021	1.44
M 60	S JCT M-62	N JCT M-62	7629	7159	7142	-6.38
M 60	SCL CASSOPOLIS	S JCT M-62	3792	3668	3297	-13.05
M 60	SURF CHG 0.2 W OF BARON LK RD	END DIVIDED S OF LEET RD	6606	5167	7029	6.40
M 62	JCT US-12	NCL EDWARDSBURG	6268	6000	5580	-10.98
M 62	N JCT M-60	NCL CASSOPOLIS	4990	4388	4298	-13.87
M 62	NCL EDWARDSBURG	SCL CASSOPOLIS	6300	5884	5589	-11.29
M 62	SCL CASSOPOLIS	S JCT M-60	6224	6360	6042	-2.92
M 62	SCL EDWARDSBURG	JCT US-12	8058	9741	8269	2.62

* Source: Michigan Department of Transportation Traffic Monitoring Information System (TMIS). The estimated mean daily traffic volume for commercial vehicles. Values are calculated using the same procedures as AADT.