PLEASE NOTE

In an effort to gather additional comments and suggestions during the 2040 Long Range Transportation Planning process the Southwest Michigan Planning Commission is making the working draft sections of the plan available to the public.

Additional data collection and analysis is still being conducted and this information will be included in the next draft which is to be released mid April 2013.

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Freight

Freight transportation, whether by rail, truck, or ship, contributes significantly to both to traffic and economic activity in the Southwest Michigan region. With the global extent of supply chains, changes in freight movement well outside the region may have tremendous impacts on the quantity and type of freight moving through the region, as well as the types of economic activity in Southwest Michigan.

Freight movement and large-scale infrastructure in nearby major metropolitan centers may have a substantial spillover effect in increasing traffic in Southwest Michigan. Interstate I-290 in Illinois in 2011 was found to have the worst truck bottleneck of any freight significant highway in the United States. Given that I-94, a major transportation link in Berrien County, connects directly to 290, it is likely that a large portion of that traffic travels through this region. In addition, transnational border crossings in Detroit and Port Huron, the busiest in the nation, send a large amount of truck traffic through this region, both into and out of Canada.

This section covers the effects that all modes of freight transport have on the region, including recent projects far beyond the planning boundary of TwinCATS and new federal legislation.

Trucking

The efficient movement of freight within and through the TwinCATS area is important to industry, retail, and agriculture for international and regional trade. On a national scale, over-the-road trucking still makes up the largest modal share of domestic freight transport, both in terms of volume of freight and dollar value. While there has been a reduction in total freight moved by truck in the wake of the 2008 recession, USDOT still projects that trucking movement will increase and continue to be the predominant mode of freight travel in 2040.

The recession did not appear to slow down truck freight movements to and from Canada, as both exports and imports increased between 2005-2011. The Ambassador Bridge in Detroit is currently the most active commercial transnational border crossing in North America. It is likely that much of the freight that crosses the Ambassador Bridge passes through this region before reaching its end user. It is likely that much of the freight that crosses the Ambassador Bridge passes through this region before reaching its end user. With the

proposed Detroit River International Crossing, the capacity to haul freight across the border will increase, likely leading to an increased number of trucks passing through the Southwest Michigan region en-route.

A rendering of the proposed Detroit River International Crossing between Southwest Detroit and Windsor, Ontario.

Regions adjacent to TwinCATS also see a substantial share of truck traffic. The Northern Indiana Planning Commission (NIRPC) found trucking to be the predominant mode of freight movement within its planning boundaries, accounting for nearly double the volume of freight moved through all other modes combined. Similarly, the Michiana Area Council of Governments (MACOG) found in its 2004 study that regional producers of non-metallic minerals, a major economic base in the region, were heavily dependent on trucks to export their goods.

Freight in TwinCATS

Within the TwinCATS region, too, trucking was a significant mode of freight movement. The table below shows average daily traffic volumes of commercial vehicles for selected major roadway segments within the TwinCATS region in 2000, 2007, and 2011. Not surprisingly, I-94 is the dominant roadway on which the commercial traffic travels. The overwhelming dominance of 94 indicates that freight trucks may stop at points off the highway for mandatory rests or to drop off goods at retail establishments. Trucks are also helping move agricultural products to markets both within and beyond our region, and no doubt help connect suppliers in our region with end users. Yet the predominant use of the interstate by freight traffic does suggest that the TwinCATS region is not itself a major hub or distribution center for freight operations.

The table also shows a possible significant effect of the economic recession of the late 2000s on truck freight movement both on I-94 and on regular roadways. While some roadway segments saw an increase in commercial traffic between 2000 and 2007, almost every segment saw a decrease between 2007 and 2011. The closure of additional manufacturing facilities in Chicago, Northern Indiana, and the TwinCATS region in response to the economic downturn may have contributed to the decline in freight movement in recent years.

Table x.x. TwinCATS Region Commercial Average Daily Traffic (CADT): A Sampling of 25 Major Roadway Segments*

Route	From	To	2000 CADT	2007 CADT	2011 CADT	% Change from 2000-2011
I-94	GRANDMERE RD/JOHN BEERS	W JCT I-94 BL ST. JOSEPH	13100	13631	10636	-18.81
I-94	JCT I-196 UAL ST JOE	FRIDAY RD	10500	8205	6661	-36.56
I-94	NAPIER AVE	E JCT I-94 BL ST. JOSEPH	14400	13332	10404	-27.75
I-94	PIPESTONE RD	NAPIER AVE	14400	13332	10404	-27.75
I-94	RED ARROW HWY SCL BRIDGMAN	GRANDMERE RD SCL STEVENSVILLE	13100	13631	10636	-18.81
I-94	SAWYER RD	RED ARROW HWY SCL BRIDGMAN	13100	13631	10636	-18.81
I-94	W JCT I-94 BL ST JOSEPH	JCT M-63	14400	13745	10726	-25.51
M-63	JCT US-31	JCT I-94	399	574	524	31.33
M-63	SCL ST. JOSEPH	NAPIER AVE	683	720	367	-46.27
M-63	SCL BENTON HARBOR	NCL BENTON HARBOR	839	885	152	-81.88
M-63	UAL BENTON HARBOR @MAPLE	JCT I-196	590	117	100	-83.05
M-139	JCT I-94	NAPIER AVE.	627	427	389	-37.96
M-139	NAPIER AVE.	PIPESTONE AVE.	627	427	389	-37.96
M-139	PIPESTONE AVE	BEGIN DIVIDED N OF EMPIRE ST	627	380	348	-44.50

M-139 SB	SCL BENTON HARBOR	JCT I-94BL BENTON HARBOR	627	380	173	-72.41
BR-94	CLEVELAND ST.	LAKE BLVD	500	843	770	54.00
BR-94	ECL BENTON HARBOR	JCT M-139	380	401	270	-28.95
BR-94	JCT M-139	BEGIN DIVIDED @ URBANDALE	252	266	270	7.14
BR-94	LAKE BLVD	S JCT M-63	500	843	770	54.00
BR-94 EB	N JCT M-63	WAYNE ST	300	316	270	-10.00
BR-94 WB	N JCT M-63	WAYNE ST	300	316	270	-10.00
BR-94	PAW PAW ST	ECL BENTON HARBOR	380	401	270	-28.95
BR-94	PIPESTONE AVE.	PAW PAW ST	394	416	270	-31.47
BR-94	SCL SHOREHAM	NCL SHOREHAM, SCL ST JOSEPH	412	843	770	86.89
BR-94	W JCT I-94 ST JOSEPH	SCL SHOREHAM	412	843	770	86.89

* 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. Major Roadway Segments were defined as roads with AADT of over 10,000.

Freight Rail

The CSX Corporation is based in Jacksonville Florida and is one of the nation's largest rail transportation providers. There are operations and networks in 23 states, the District of Columbia, and the Canadian provinces of Ontario and Quebec. (Rail Map in Appendix H)

In Michigan, the CSX line is a class one carrier that connects the east to the west making many stops including Detroit, Lansing, and Grand Rapids. The CSX line from Grand Rapids travels along the lakeshore through southwest Michigan and on to Chicago. There are seven to eight trains traveling along the tracks on a daily bases. There is a mix of both passenger and freight. Use of CSX tracks continues to decline in Southwest Michigan. CSX still transports a wide variety of products including coal, iron, steel, passenger vehicles, and auto parts to points both east and west. Coal is the most heavily shipped product by rail. Major companies in the area that use CSX include TechniSand Inc. in Bridgman and Arlington Metals Corporation in Sawyer. In addition, Amtrak operates its Blue Water, Wolverine, and Pere Marquette passenger routes on CSX tracks consistently.

On a national scale, two major railroad expansions may already be increasing the amount of freight that enters the Southwest Michigan region. CSX's National Gateway Project, completed in 2011, allows freight trains from Maryland, Virginia, North Carolina Pennsylvania, West Virginia and Ohio to be double-stacked with containers, dramatically increasing the amount of freight that can be moved. As part of the project, CSX also opened a new multi-modal freight terminal in North Baltimore, Ohio (NIRPC Plan). In addition, the Heartland Corridor allow the routing of double-stacked trains from the port of Norfolk, Virginia to Columbus Ohio, and then onward to Chicago.

While neither of these projects will directly impact railroad tracks or services in Southwest Michigan, they will each substantially increase the quantity of freight that moves across the country. Some of the increased number of trucks needed to move that freight away from their rail destinations will no doubt cross through or deliver freight into the Southwest Michigan region, perhaps along with an increased number of freight ships on the St. Joseph River or Lake Michigan.

The St. Joseph River Harbor

Despite also being a major recreational site and cultural amenity for the region, the St. Joseph River Harbor is also still an active port. In 2012, the Harbor handled 293,748 tons of cement, limestone, and other bulk commodities, an increase of 29% from the previous year. The freight came in on 41 vessels. While larger storage capacity on one of the docks has increased the Harbor's ability to process goods, storm events cause shoals to build up near the shoreline, making it difficult for larger ships to dock in shallower water. Environmental limits of dredging, coupled with depleted funds for dredging from the Army Corps of Engineers, continue to pose challenges for the Harbor as it attempts to remain open year.

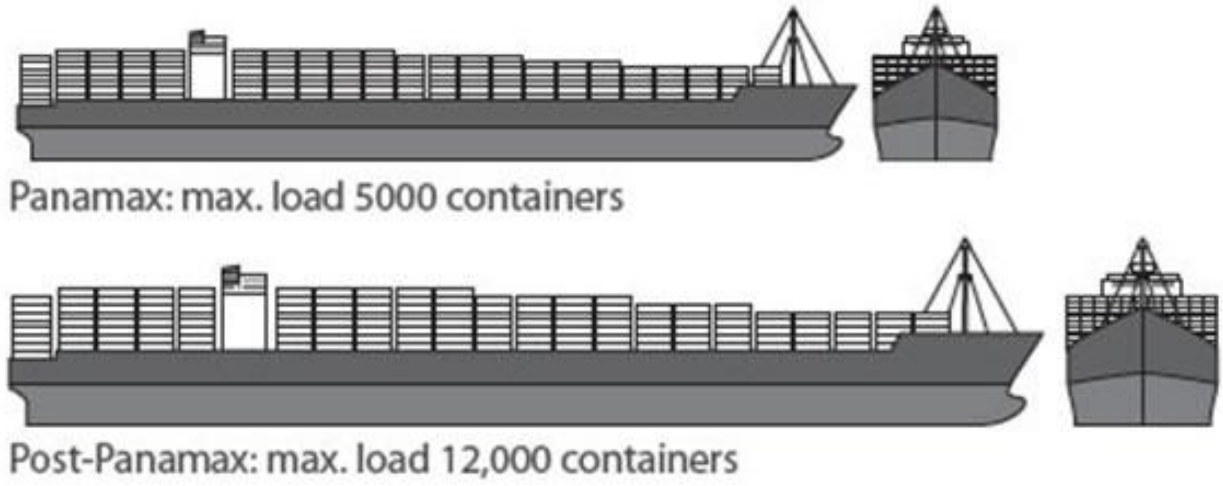
The Chicago Effect

The proximity of this region to Chicago will continue to have profound impacts on freight movement through the TwinCATS region. Chicago is in a unique position nationally as it continues to be both a rail and trucking hub. Chicago is the busiest port in the Western Hemisphere in terms of twenty-foot equivalent unit (TEU) container traffic. According to CMAP's Freight Drill-Down Report, Chicago's status as a freight center allows it to experience a multiplier effect. For example, when there is growth in the air transport sector, demand in the rail transport sector. With this multiplier effect, many products seen in

Chicago's freight distribution facilities will pass through the TwinCATS region, or reach end users here, at some point in the supply chain.

The Panama Effect

Unlike Chicago, Panama may seem a world away from Southwest Michigan. Yet an ongoing expansion of the Panama Canal, known as Panamax, will increase the speed and efficiency of freight movement across the globe, and will create significant new freight traffic in Southwest Michigan. With the expansion of the Panama Canal, larger ships will be able to pass through, doubling the number of containers that can be sent in a single shipment. By 2015, the ports of Norfolk, Baltimore, New York, and Miami will all have the capacity to accommodate these larger container ships in their ports, earning the designation of post-Panamax ready. The arrival of these larger ships will also increase demand among suppliers to quickly and cost-effectively distribute those goods to their end destination, over road, rail, air and inland waterways. Global supply chains mean that the end markets or destinations for these goods are increasingly dispersed. In Southwest Michigan, the Panamax expansion would likely mean a greater number of trucks on the road, and possibly increased weight carried by these trucks.



A diagram of post-Panamax ship capacity

Within the region, portions of US-31 and I-94 are already showing wear from constant traffic of heavy trucks. In order to maintain these important routes for suppliers and other roadway users alike, careful monitoring and enforcement of established truck weight limits will be necessary.

MAP-21's Focus on Freight

Moving Ahead for Progress in the 21st Century (MAP-21), which took effect on October 1, 2012, includes a renewed focus on the efficient movement of freight, and a goal of using effective freight planning to spur and support economic growth across the country. Freight provisions open up new possibilities for funding as well as promote the creation of a national framework for freight. In particular, MAP-21 provides for the following:

- The development of a report by USDOT by October 1, 2014 which assesses the current condition and performance of the nation's freight system.
- The development of national performance goals related to freight by April 1, 2014.
- The development of state performance measures related to freight movement on the Interstate system by one year after federal goals and measures are released.
- The development of state freight plans and progress reports on performance measures every 4 years.
- New freight activity eligibility under core highway programs.
- The completion of a nationwide truck parking facility survey by April 1, 2014
- Funding opportunities for states, MPOs, and local agencies that wish to upgrade truck parking facilities.
- An expansion of the Marine Highways program, and increased funding for harbor upgrades.
- The establishment of a National Freight Policy Council, made up of state DOT officials and other freight stakeholders, to help develop a national freight policy.

Sources (to be footnoted):

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