R Flint/Toledo

3.16 R Flint/Toledo

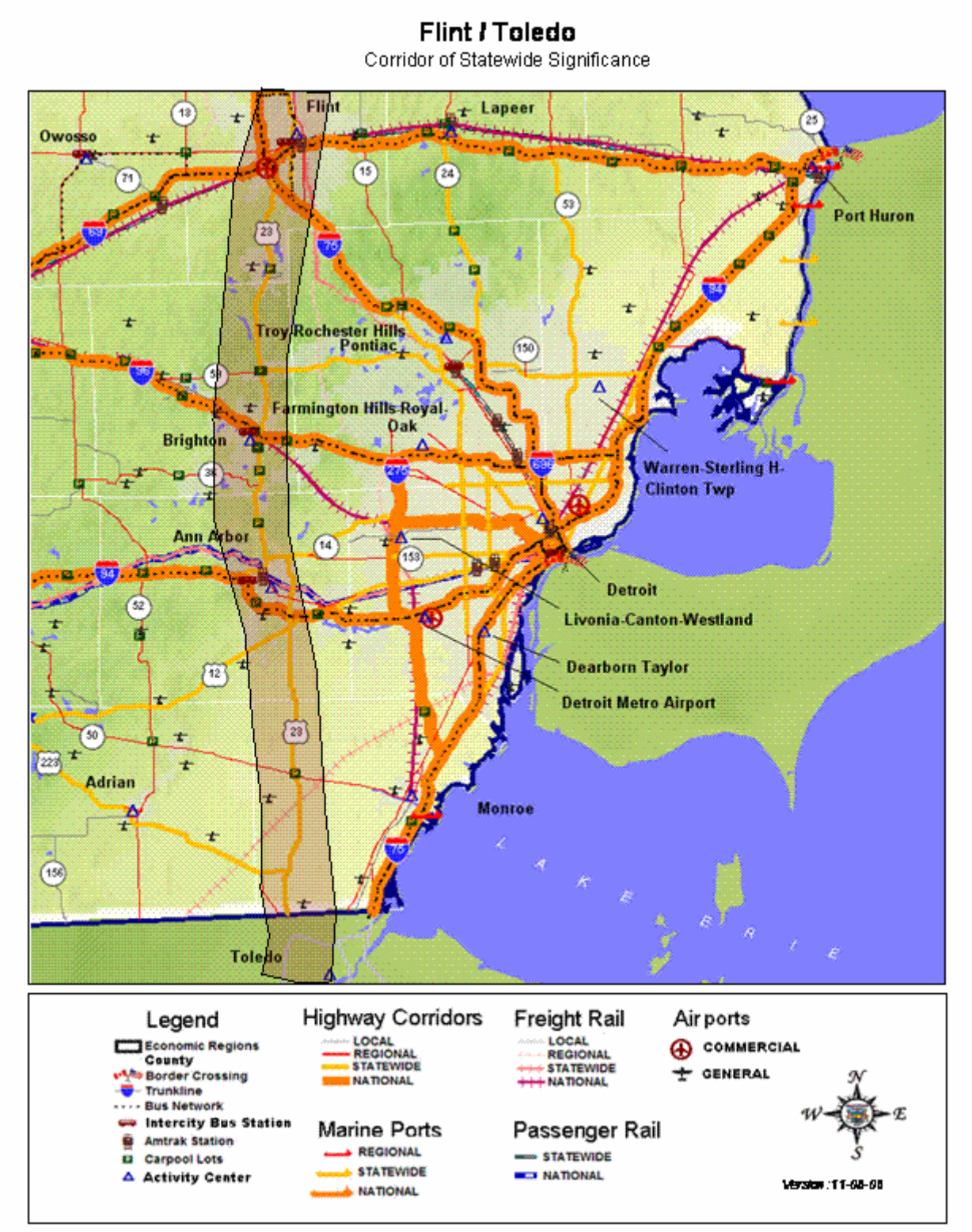
The Flint/Toledo Statewide Corridor of Highest Significance begins at I-75 south of Flint and follows US-23 south through Ann Arbor continuing through to Ohio. It includes Genesee, Livingston, Washtenaw, and Monroe Counties.

3.16.1 Profile and Map

Travel within, between, and through four urban, university, and industrial *MI Transportation Plan* activity centers within Michigan (Flint, Brighton, Ann Arbor, Monroe), and the Toledo metropolitan area is supported by this 90.4-mile corridor.

This *MI Transportation Plan* corridor travels north-south through a densely populated part of southern Michigan. The corridor area includes concentration of trade and technology jobs. In terms of the highway corridor that it includes, it is the most heavily traveled of all of MDOTs Statewide Corridors of Highest Significance.

Figure 19: Flint/Toledo Corridor



3.16.2 Estimate of Corridor Value

The value of this corridor to the state of Michigan is defined based on the people, businesses, industries, and activities it supports together with how it is integrated and connected to the greater Michigan transportation system and activity centers inside and outside the state. In comparing this corridor to the seven other *MI Transportation Plan* Statewide Corridors of Highest Significance it is among the top three in the number of people, jobs, and vehicular travel it supports.

The Flint/Toledo Corridor supports:

- Approximately nine percent of Michigan's population and 11 percent of Michigan jobs are within a 20-mile geographic area around the corridor, this is the second highest of all the Statewide Corridors of Highest Significance;
- The corridor accounts for 5.1 percent of the total statewide ton miles and 4.3 percent of the total statewide value miles of truck freight;
- The corridor accounts for 5.8 percent of total statewide rail-ton miles and 4.2 percent of rail-value miles;
- Four of Michigan's 50 *MI Transportation Plan* activity centers;
- A total average daily traffic (ADT) (corridor average) of 50,100 vehicles the highest of all the Statewide Corridors, it also carries the highest total ADT (76,000), highest passenger ADT (69,000), and highest commercial vehicle ADT (9,400)of all the *MI Transportation Plan* Statewide Corridors of Highest Significance; is projected to have a 51 percent of ADT growth, the third highest as compared to all *MI Transportation Plan* National and Statewide Corridors of Highest Significance;
- Serves close to 11.2 million person days of tourist activity per year;
- Commercial air travel with 560,000 annual enplanements;
- Four state parks, over 105,000 students in post secondary schools, 15 major health care facilities, and 10 prisons.

Table 62: Population/Employment/ADT within a 20-mile geographic area around Corridor Flint/Toledo

(90.4 miles)	*2005*	*2030*
Population within band	1,031,440	1,293,700
Employment within band	572,870	690,150
Total daily vehicle-miles of travel	4,527,580	6,836,670
Total average daily traffic (average)	50,110	75,660
Highest total ADT	76,360	119,620
Lowest total ADT	27,730	40,370
Passenger average daily traffic (average)	44,200	66,850
Highest passenger ADT	69,320	109,760
Lowest passenger ADT	21,534	31,350
Commercial average daily traffic (average)	5,900	8,820
Highest commercial ADT	9,410	14,800
Lowest commercial ADT	4,180	6,1660

Table 63: Corridor Truck Freight Totals

Flint/Toledo

Miles (90.85)	*2003 Tons*	*2013 Tons*	*2003 Value*	*2013 Value*
Average	29,592,560	32,055,440	$64,295,404,940	$76,363,996,898
High	40,945,060	45,160,260	$115,453,293,258	$139,039,369,392
Low	20,528,850	22,015,280	$38,988,273,751	$45,490,278,112

Table 64: Corridor Rail Freight Totals

Flint/Toledo (multiple lines)

Track Miles (198.22)	*2003 Tons*	*2013 Tons*	*2003 Value*	*2013 Value*
Average	4,412,230	4,900,920	$4,345,117,154	$4,909,520,998
High	12,209,860	13,877,490	$17,924,233,508	$20,879,460,806
Low	299,070	271,650	$1,794,432	$1,629,896

Source: Michigan Department of Transportation Statewide and Urban Travel Analysis Section

Table 65: Flint/Toledo – Activity Centers Summary

Activity	*Measure*	*Year*	*Flint*	*Brighton*	*Ann Arbor*	*Monroe*	*Total Value*
URBAN							
Population	Total Activity Center Population	2005	445,583	181,531	347,821	153,441	1,128,376
COMMERCIAL							
General Economic Activity	Total Employment	2005	222,780	70,537	244,105	58,512	595,934
Retail Activity	Retail Employment	2005	43,652	15,670	39,589	12,532	111,443
TOURISM							
Hotel Capacity	Hotel Units	2000	2,275	616	3,362	618	6,871
Annual Lodging Use Tax revenue	Revenue	2004	387,264	77,355	451,700	110,345	1,026,664
National Park	Number of National Park Locations	2005					
State Park	Number of State Park Locations	2005		2	1	1	4
Gaming	Gaming Centers Employment	2005					
Number of Visitors	Person Trips	2004	2,203,328	654,769	2,218,342	1,151,573	6,228,012
Length of Stay	Person Days	2004	4,288,798	975,687	3,977,178	2,002,442	11,244,105
EDUCATION/TECHNOLOGY CENTER							
Postsecondary Educational Centers	Student Population	2005	24,120		77,020	4,177	105,317
Smart Zones	Number of Technology Centers	2006			1		1
LIFE SCIENCE							
Hospitals	Number of Facilities	2005	5	1	8	1	15
CORRECTIONAL FACILITIES							
Prisons	Number of Facilities	2005	3	1	6		10
MILITARY BASE							
Military Base Center	Number of Facilities	2005					
PASSENGER FACILITIES							
Air Passenger	Passenger Enplanments	2005	557,848				557,848
Amtrak	Passenger Stations	2005	11,384		64,344		75,728
Car Pool	Number of Facilities	2005	4	11	6	3	24
Intercity Bus Station	Passenger Stations	2005	1	1	1		3
FREIGHT FACILITIES							
Air Cargo Ports	Cargo Tonnage	2005	9,609				9,609
Marine Ports	Cargo Tonnage	2003				1,077,000	1,077,000
INTERNATIONAL BORDER CROSSING							
Passenger and Freight	Number of Border Crossings	2005					

3.16.3 Corridor Analysis

This corridor supports approximately 11 percent of Michigan's jobs and travel for local residents, businesses, manufacturing, agriculture, and tourists. Travel is primarily on roadway and rail facilities. This corridor is a major north-south truck freight corridor. The major roadway concern on this *MI Transportation Plan* Corridors of Highest Significance is overall age of the facility and the need for modernization.

The corridor is well served by public transit with a combination of countywide and urban service. Local rideshare offices within the corridor are very active and the MichiVan program is widely used which provides commute alternatives and eases congestion. Intercity bus service is not available within this corridor.

Opportunities for this corridor include the potential for economic growth in the manufacturing industry. Barriers to movement, including missing or deficient links and existing and future physical transportation system gaps include maintaining the quality of the pavement and bridge condition and the need for modernization.

3.16.4 Corridor Objectives

This corridor serves a unique mix of year-round residents, seasonal tourists, and heavy freight traffic passing within and through the region. Objectives for the corridor are to:

- Integrate the transportation needs of differing users;
- Provide for safe and efficient travel;
- Improve roadway and bridge conditions (vertical clearance, weight capacity, lane width) to current design standards;
- Maintain roadway and system conditions consistent with Asset Management strategies MDOT;
- Improve freeway to freeway interchanges;
- Provide for safe and efficient travel by reducing congestion and delay, and improving intersections and interchanges;
- Maintain pavement condition;
- Preserve existing transit and intercity bus services, support expansion of public transit opportunities to include countywide service all counties and expand intercity bus services to the degree state funds are available; and
- Continue to support the MichiVan program to provide commuter alternatives and ease congestion.

3.16.5 Broad Policy-Based Corridor Strategies

The following strategies may help to advance these corridor-specific objectives. Detailed examples of capital projects, programs, and policies that may be used to implement the strategies identified below are provided in **Appendix D** to the *Corridors and International Borders Report.* MDOT will:

- Apply Asset Management principles;
- Apply Highway strategies;
  - Modernization – bring bridges and roadway geometrics to current design standards;
  - Maintenance and Rehabilitation – implement scheduled and preventive maintenance programs, continue to strive to maintain good pavement conditions along all of its trunkline corridors;
- Install and implement ITS advances in key corridors to improve the overall operations of the region's transportation systems;
- Seek opportunities and implement low-cost operational improvements to increase roadway corridor mobility. These include but are not limited to geometric improvement, interchange improvements, ramp extensions, turning lanes, signal timing, visitor-friendly signage, improved incident management, and maintenance of traffic practices during construction projects;
- Work with local governments to implement Transportation Demand Management (TDM) and Transportation Systems Management and Operations (TSMO) improvements and strategies;
- Work with local governments to implement Access Management on strategic sections of the regional and local roadways;
- Continue to coordinate improvements and management practices with key local stakeholder groups along corridors;
- Add or enhance long-distance bicycle trails;
- Identify opportunities to integrate multi-modal transportation systems throughout this corridor including but not limited to incorporating carpool lot facilities, and bicycle and pedestrian facilities into future projects where feasible;
- Continue to provide financial and technical assistance to local agencies to help them preserve existing transit services;
- Develop strategies that can be implemented at the local level to innovate public transportation services to meet the unique needs/demands of the aging population;
- Support communication and coordination between local transit systems and between transit and intercity bus to improve connectivity and regional public transportation;

- Provide feeder bus services in accordance with the Midwest Regional Rail Initiatives as passenger rail services is improved and funding becomes available;
- Support coordination of transportation services and funding between local human service agencies and local transit agencies; and
- Evaluate potential intercity bus ridership in this corridor in comparison to existing intercity bus services in other northern Michigan corridors to optimize the investment of state resources in intercity bus service.

S Mackinaw City-St. Ignance/Alpena/Standish

3.17 S Mackinaw City–St. Ignace/Alpena/Standish

The Mackinaw City-St. Ignace/Alpena/Standish Statewide Corridor of Highest Significance begins at I-75 in Mackinaw City-St. Ignace and follows US-23 south through Alpena ending at I-75 south of Standish where it joins with the *MI Transportation Plan* National/International Corridors of Highest Significance that follows the general route of I-75. It includes Cheboygan, Presque Isle, Alpena, Alcona, Iosco, and Arenac Counties.

3.17.1 Profile and Map

Travel within, between, and through four *MI Transportation Plan* activity centers within Michigan (Mackinaw City-St. Ignace, Cheboygan, Alpena, and Bay City) is supported by this 198.7-mile corridor. The corridor travels north-south along the eastern shore line of Michigan. Population in this scenic, rural area is sparse and tourism is one of the major industries. This corridor links, at its northern and southern ends, to the Sault Ste. Marie/Bay City Corridor and I-75.

(NOTE: for a discussion of the Mackinaw Bridge that is part of this corridor, please see **Section 3.2**, corridor B, Sault Ste. Marie/Bay City Corridor).

Figure 20: Mackinaw City-St. Ignace/Alpena/Standish Corridor

3.17.2 Estimate of Corridor Value

The value of this corridor to the state of Michigan is defined based on the people, businesses, industries, and activities it supports together with how it is integrated and connected to the greater Michigan transportation system and activity centers inside and outside the state.

The corridor supports:

- Approximately one percent of Michigan's population and one percent of Michigan jobs are within a 20-mile geographic area around the corridor;
- The corridor accounts for 0.4 percent of the total statewide ton miles and 0.2 percent of the total statewide value miles of truck freight;
- The corridor accounts for 0.4 percent of total statewide rail-ton miles and less than 0.01 percent of rail-value miles;
- A corridor average of one million tons and $1.1 billion worth of freight moving in 2003 by truck;
- A corridor average of 527,000 tons and $79 million worth of freight moving in 2003 by rail on one regional short-line traveling between Alpena and Bay City-Saginaw; this is the lowest value of any corridor rail route;
- Four of Michigan's 50 *MI Transportation Plan* activity centers;
- A total average daily traffic (ADT) (corridor average) of 5,100 vehicles one of the two lowest of any of the 19 *MI Transportation Plan* Corridors of Highest Significance;
- Approximately 9.7 million person days of tourism activity per year (the fifth highest in comparison to the eight *MI Transportation Plan* Statewide Corridors of Highest Significance;
- One small commercial airports (9,000 enplanements) at Alpena;
- A joint military/civilian airport at Alpena;
- Major marine cargo ports handling over 17 million tons;
- Seven state parks; and
- Over 1,800 students are enrolled in post-secondary institutions.

Table 66: Population/Employment/ADT within a 20-mile geographic area around Corridor Mackinaw City–St. Ignace/Alpena/Standish

(198.7 miles)	*2005*	*2030*
Population within band	112,860	115,750
Employment within band	62,570	67,200
Total daily vehicle-miles of travel	1,015,770	1,304,270
Total average daily traffic (average)	5,110	6,570
Highest total ADT	18,280	25,260
Lowest total ADT	1,080	1,310
Passenger average daily traffic (average)	4,800	6,160
Highest passenger ADT	18,060	24,610
Lowest passenger ADT	950	1,150
Commercial average daily traffic (average)	310	410
Highest commercial ADT	860	1,310
Lowest commercial ADT	130	140

Table 67: Corridor Truck Freight Totals

Mackinac/Alpena/Standish

Miles (193.56)	*2003 Tons*	*2013 Tons*	*2003 Value*	*2013 Value*
Average	1,065,500	1,141,570	$1,122,055,319	$1,374,584,689
High	3,687,630	3,842,170	$4,378,114,824	$5,420,510,480
Low	62,480	68,320	$50,781,614	$62,208,292

Table 68: Corridor Rail Freight Totals

Alpena/Bay City (no Mack-Alpena)

Track Miles (122.16)	*2003 Tons*	*2013 Tons*	*2003 Value*	*2013 Value*
Average	527,190	529,400	$78,916,424	$78,565,562
High	1,107,550	1,155,550	$187,701,056	$196,663,501
Low	438,290	431,500	$65,717,372	$62,980,383

Source: Michigan Department of Transportation Statewide and Urban Travel Analysis Section

Table 69: Mackinaw City-St. Ignace/Alpena/Standish – Activity Centers Summary

Activity	*Measure*	*Year*	*Mackinaw City-St.Ignace*	*Cheboygan*	*Alpena*	*Total Value*
URBAN						
Population	Total Activity Center Population	2005	5,381	27,753	31,034	64,168
COMMERCIAL						
General Economic Activity	Total Employment	2005	7,780	10,922	18,368	37,070
Retail Activity	Retail Employment	2005	2,419	2,464	3,442	8,325
TOURISM						
Hotel Capacity	Hotel Units	2000	3,203	344	152	3,699
Annual Lodging Use Tax revenue	Revenue	2004	1,632,556	58,795	84,996	1,776,347
National Park	Number of National Park Locations	2005				
State Park	Number of State Park Locations	2005	3	4		7
Gaming	Gaming Centers Employment	2005	325			325
Number of Visitors	Person Trips	2004	804,310	1,956,223	642,008	3,402,541
Length of Stay	Person Days	2004	2,328,451	5,343,399	1,999,004	9,670,854
EDUCATION/TECHNOLOGY CENTER						
Postsecondary Educational Centers	Student Population	2005			1,853	1,853
Smart Zones	Number of Technology	2006				
LIFE SCIENCE						
Hospitals	Number of Facilities	2005	1	1	1	3
CORRECTIONAL FACILITIES						
Prisons	Number of Facilities	2005				
MILITARY BASE						
Military Base Center	Number of Facilities	2005				
PASSENGER FACILITIES						
Air Passenger	Passenger Enplanments	2005			9,724	9,724
Amtrak	Passenger Stations	2005				
Car Pool	Number of Facilities	2005		1	2	3
Intercity Bus Station	Passenger Stations	2005	1			1
FREIGHT FACILITIES						
Air Cargo Ports	Cargo Tonnage	2005			622	622
Marine Ports	Cargo Tonnage	2003	9,000	241,000	3,010,000	3,260,000
INTERNATIONAL BORDER CROSSING						
Passenger and Freight	Number of Border Crossings	2005				

3.17.3 Corridor Analysis

(NOTE: For a discussion of the Mackinaw Bridge, please see **Section 6.2**., corridor B Sault Ste. Marie/Bay City Corridor).

This corridor supports approximately one percent of Michigan's jobs. US-23, the principal highway along this corridor, is a Scenic and a Heritage Route. As such, its rural and scenic character is to be preserved.

This corridor supports north-south long-distance tourist and freight travel from inside Michigan and other states. Travel is primarily on roadway facilities. Roadway concerns are that this is primarily a north-south corridor with few corridors crossing east-west and the need for maintenance and modernization of the older roadways. The primary freight moving along this corridor is comprised of non-metallic minerals, agriculture, and cement based products in Alpena.

There is countywide, demand-response transit in a good portion of the corridor. Intercity bus service is available within the entire corridor however; there are no intercity passenger facilities.

Opportunities for this corridor include the potential for economic growth in the tourist industry and potential for land development as vacation and retirement homes similar to the development on the western shore. Barriers to movement, including missing or deficient links and existing and future physical transportation system gaps include maintaining the quality of the pavement and bridge condition and the limited availability and connectivity to alternative modes of transportation beyond roadway facilities.

3.17.4 Corridor Objectives

This corridor serves a unique mix of year-round residents, seasonal tourists, and freight traffic passing through the region. Objectives for the corridor are to:

- Integrate the transportation needs of differing users;
- Re-route freight traffic onto M-65;
- Provide for safe and efficient travel;
- Improve and modernize roadway and bridge conditions (vertical clearance, weight capacity, lane width) to current design standards;
- Maintain roadway and system conditions consistent with Asset Management strategies MDOT;
- Provide for safe and efficient travel by reducing congestion and delay, and improving intersections and interchanges;
- Maintain pavement condition; and

- Preserve existing transit and intercity bus services; support expansion of public transit opportunities to include countywide service all counties and expand intercity bus services to the degree state funds are available.

3.17.5 Broad Policy-Based Corridor Strategies

The following strategies may help to advance these corridor-specific objectives. Detailed examples of capital projects, programs, and policies that may be used to implement the strategies identified below are provided in **Appendix D** to the *Corridors and International Borders Report*. MDOT will:

- Apply Asset Management principles;
- Apply Highway strategies;
  - Modernization – bring bridges and roadway geometrics to current design standards;
  - Maintenance and Rehabilitation – implement scheduled and preventive maintenance programs, continue to strive to maintain good pavement conditions along all of its trunkline corridors;
- Seek opportunities and implement low-cost operational improvements to increase roadway corridor mobility. These include but are not limited to geometric improvement, interchange improvements, ramp extensions, turning lanes, signal timing, visitor-friendly signage, improved incident management, and maintenance of traffic practices during construction projects;
- Work with local governments to implement Access Management on strategic sections of the regional and local roadways;
- Continue to coordinate improvements and management practices with key local stakeholder groups along corridors;
- Add or enhance long-distance bicycle trails;
- Identify opportunities to integrate multi-modal transportation systems throughout this corridor including but not limited to incorporating carpool lot facilities, and bicycle and pedestrian facilities into future projects where feasible;
- Continue to provide financial and technical assistance to local agencies to help them preserve existing transit services;
- Develop strategies that can be implemented at the local level to innovate public transportation services to meet the unique needs/demands of the aging population;
- Support communication and coordination between local transit systems and between transit and intercity bus to improve connectivity and regional public transportation;
- Work with intercity carriers and Travel Michigan to promote Michigan as a travel destination;

- Support coordination of transportation services and funding between local human service agencies and local transit agencies; and
- Evaluate potential intercity bus ridership in this corridor in comparison to existing intercity bus services in other northern Michigan corridors to optimize the investment of state resources in intercity bus service.

T Grayling/Jackson

3.18 T Grayling/Jackson

The Grayling/Jackson Statewide Corridor of Highest Significance begins in Grayling at the south end of BL-75 and follows I-75 south to US-127 continuing to follow US-127 through Lansing ending at I-94 in Jackson. It includes Crawford, Roscommon, Clare, Isabella, Gratiot, Clinton, Ingham, and Jackson Counties.

3.18.1 Profile and Map

Travel within, between, and through five *MI Transportation Plan* activity centers within Michigan (Grayling, Mt. Pleasant, Alma, Lansing, and Jackson) is supported by this 174.6-mile corridor. The corridor travels north-south through central Michigan connecting the population and businesses of central Michigan to several *MI Transportation Plan* National/International Corridors of Highest Significance. Employment in the northern portion this corridor is in agriculture. As the corridor moves south to Lansing and Jackson, the employment changes to service and the land use is urban and suburban. This corridor is a principle link to the Nationally Significant Corridors that follow I-75, I-69, and I-94.

3.18.2 Estimate of corridor value

The value of this corridor to the state of Michigan is defined based on the people, businesses, industries, and activities it supports together with how it is integrated and connected to the greater Michigan transportation system and activity centers inside and outside the state.

The Grayling/Jackson Corridor supports:

- Approximately six percent of Michigan's population and seven percent of Michigan jobs are within a 20- mile total bandwidth of the corridor;
- The corridor accounts for 1.9 percent of the total statewide ton miles and 1.5 percent of the total statewide value miles of truck freight;
- The corridor accounts for 0.3 percent of total statewide rail-ton miles and 0.4 percent of rail-value miles;
- Five of Michigan's 50 *MI Transportation Plan* activity centers;

- A total average daily traffic (ADT) (corridor average) of 20,200 vehicles the third highest of the *MI Transportation Plan* Statewide Corridors of Highest Significance, also the third highest total ADT (67,000);
- Connections to three *MI Transportation Plan* National/International Corridors of Highest Significance at Grayling, Lansing and Jackson;
- Approximately 15 million person days of tourism activity per year;
- The Lansing airport with 311,000 passenger enplanements and 15,000 air cargo tons;
- Three state parks, 10 major medical facilities, one military base, 20 prisons; and
- A post-secondary student population of 110,000.

Figure 21: Grayling/Jackson Corridor

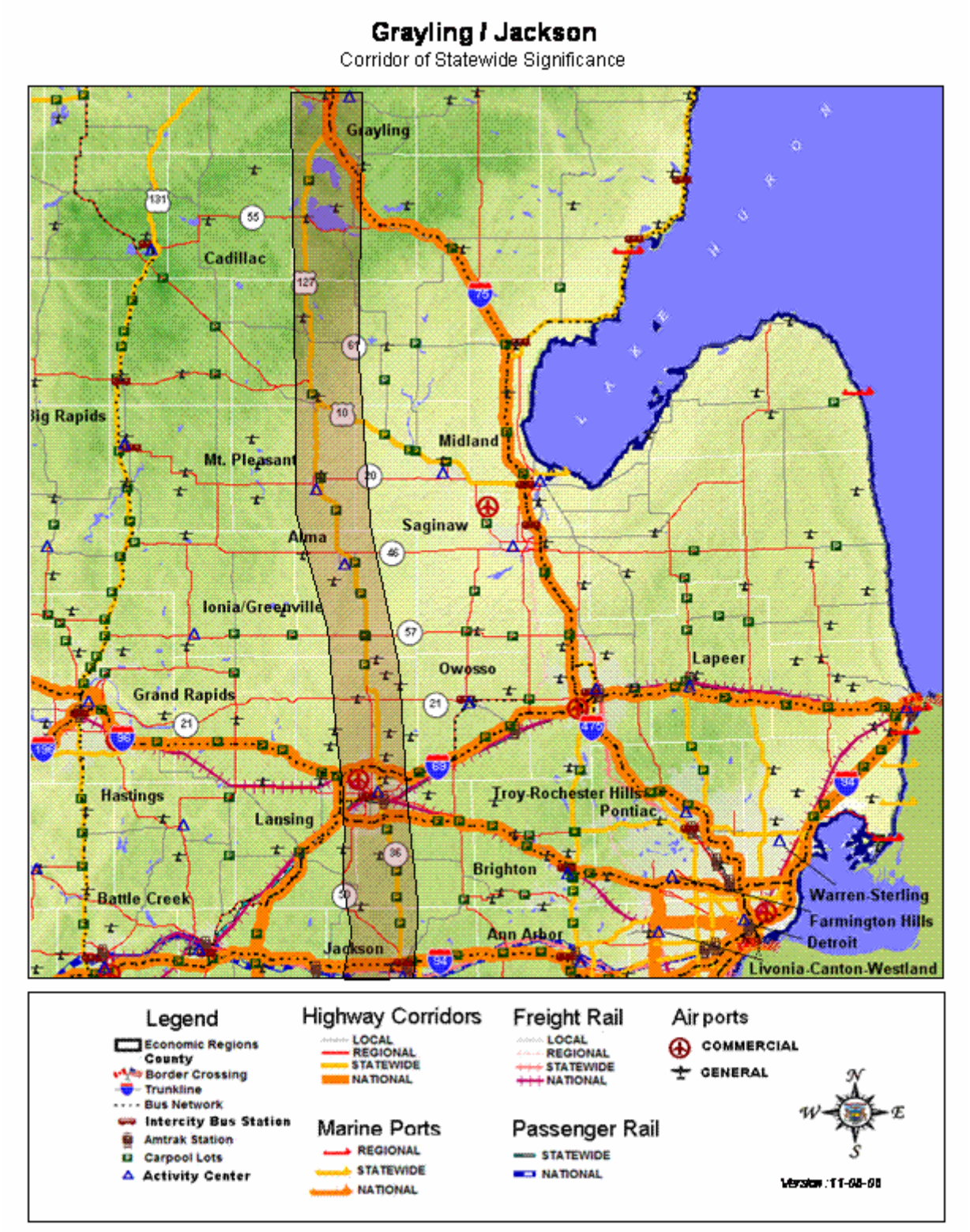


Table 70: Population/Employment/ADT within a 20-mile geographic area around Corridor Grayling/Jackson

(174.6 miles)	*2005*	*2030*
Population within band	679,340	753,380
Employment within band	422,170	490,540
Total daily vehicle-miles of travel	3,535,800	4,942,930
Total average daily traffic (average)	20,250	28,310
Highest total ADT	67,340	102,940
Lowest total ADT	6,960	8,840
Passenger average daily traffic (average)	18,580	25,980
Highest passenger ADT	63,740	97,250
Lowest passenger ADT	6,290	7,990
Commercial average daily traffic (average)	1,670	2,330
Highest commercial ADT	5,180	6,920
Lowest commercial ADT	670	810

Table 71: Corridor Truck Freight Totals

Grayling/Jackson

Miles (170.97)	*2003 Tons*	*2013 Tons*	*2003 Value*	*2013 Value*
Average	5,999,600	6,752,370	$11,665,207,223	$13,981,408,609
High	10,115,380	11,217,960	$20,117,551,405	$23,706,970,374
Low	2,534,960	2,755,270	$5,109,195,694	$6,047,585,730

Table 72: Corridor Rail Freight Totals

Lansing/Jackson (no Grayling-Lansing)

Track Miles (35.85)	*2003 Tons*	*2013 Tons*	*2003 Value*	*2013 Value*
Average	1,069,040	1,275,860	$2,544,185,856	$2,956,761,005
High	1,069,040	1,275,860	$2,544,185,856	$2,956,761,005
Low	1,069,040	1,275,860	$2,544,185,856	$2,956,761,005

Source: Michigan Department of Transportation Statewide and Urban Travel Analysis Section

Table 73: Grayling/Jackson – Activity Centers Summary

Activity	*Measure*	*Year*	*Grayling*	*Mt Pleasant*	*Alma*	*Lansing*	*Jackson*	*Total Value*
URBAN								
Population	Total Activity Center Population	2005	15,585	65,538	42,309	463,240	164,922	751,594
COMMERCIAL								
General Economic Activity	Total Employment	2005	6,982	37,910	20,568	291,917	80,102	437,479
Retail Activity	Retail Employment	2005	1,344	6,520	3,269	51,735	15,878	78,746
TOURISM								
Hotel Capacity	Hotel Units	2000	420	1,488	207	3,846	680	6,641
Annual Lodging Use Tax revenue	Revenue	2004	199,549	343,417	60,195	557,604	158,407	1,319,172
National Park	Number of National Park Locations	2005						
State Park	Number of State Park Locations	2005	1			1	1	3
Gaming	Gaming Centers Employment	2005		4,000				4,000
Number of Visitors	Person Trips	2004	437,944	1,950,402	348,611	4,448,262	1,830,425	9,015,644
Length of Stay	Person Days	2004	1,227,795	2,700,445	823,608	6,770,637	3,629,479	15,151,964
EDUCATION/TECHNOLOGY CENTER								
Postsecondary Educational Centers	Student Population	2005		27,792	1,268	69,570	10,951	109,581
Smart Zones	Number of Technology Centers	2006		1	1	1		3
LIFE SCIENCE								
Hospitals	Number of Facilities	2005	1	1	2	3	3	10
CORRECTIONAL FACILITIES								
Prisons	Number of Facilities	2005	1		2	6	11	20
MILITARY BASE								
Military Base Center	Number of Facilities	2005	1					1
PASSENGER FACILITIES								
Air Passenger	Passenger Enplanments	2005				310,924		310,924
Amtrak	Passenger Stations	2005				20,396	12,346	32,742
Car Pool	Number of Facilities	2005		2	4	13	4	23
Intercity Bus Station	Passenger Stations	2005			1	1	1	3
FREIGHT FACILITIES								
Air Cargo Ports	Cargo Tonnage	2005				14,779		14,779
Marine Ports	Cargo Tonnage	2003						
INTERNATIONAL BORDER CROSSING								
Passenger and Freight	Number of Border Crossings	2005						

3.18.3 Corridor Analysis

This corridor connects the north central portion of the Lower Peninsula of Michigan to south central Michigan. Travel is available primarily by highway (US-127) and transit within the activity centers in the corridor. The corridor supports seven percent of Michigan's jobs and travel for local residents, businesses, and tourists from inside Michigan and outside the state. Through its connectivity with other *MI Transportation Plan* Corridors of Highest Significance, it supports north-south long-distance travel.

Intercity bus is currently absent from much of the corridor due to Greyhound Lines service cutbacks that began in 2004. Intermodal facilities are located in Lansing and Jackson. Restoration of intercity bus service between Grayling and Lansing, via state subsidy, is being considered. Public transit service within the corridor is a combination of countywide, small community, and urban service. Ridesharing and MichiVan services are utilized in the southern portion of the corridor as a commute alternative.

Primary roadway concerns are the need for modernization. Opportunities for this corridor include the potential for economic growth in areas of health care and tourism. Barriers to movement, including missing or deficient links and existing and future physical transportation system gaps include the quality of the pavement and bridge condition throughout the corridor.

3.18.4 Corridor Objectives

This corridor serves a unique mix of year-round residents, seasonal tourists, and freight traffic passing through the region. Objectives for the corridor are to:

- Integrate the transportation needs of differing users;
- Provide for safe and efficient travel;
- Improve roadway and bridge conditions (vertical clearance, weight capacity, lane width) to current design standards;
- Maintain roadway and system conditions consistent with Asset Management strategies MDOT;
- Maintain pavement condition; and
- Preserve existing transit and intercity bus services; support expansion of public transit opportunities to include countywide service for all counties and expand intercity bus services to the degree state funds are available.

3.18.5 Broad Policy-Based Corridor Strategies

The following strategies may help to advance these corridor-specific objectives. Detailed examples of capital projects, programs, and policies that may be used to implement the strategies identified below are provided in **Appendix D** to the *Corridors and International Borders Report.* MDOT will:

- Apply Asset Management principles;
- Apply Highway strategies;
  - Modernization – bring bridges and roadway geometrics to current design standards;
  - Maintenance and Rehabilitation – implement scheduled and preventive maintenance programs, continue to strive to maintain good pavement conditions along all of its trunkline corridors;
- Seek opportunities and implement low-cost operational improvements to increase roadway corridor mobility. These include but are not limited to geometric improvement, interchange improvements, ramp extensions, turning lanes, signal timing, visitor-friendly signage, improved incident management, and maintenance of traffic practices during construction projects;
- Work with local governments to implement Access Management on strategic sections of the regional and local roadways;
- Continue to coordinate improvements and management practices with key local stakeholder groups along corridors;
- Add or enhance long-distance bicycle trails;
- Continue to provide financial and technical assistance to local agencies to help them preserve existing transit services;
- Develop strategies that can be implemented at the local level to innovate public transportation services to meet the unique needs/demands of the aging population;
- Encourage local transit agencies to evaluate the potential to expand to countywide service to increase transit availability and connectivity;
- Continue to support the MichiVan program to provide commuter alternatives;
- Provide feeder bus services in accordance with the Midwest Regional Rail Initiatives as passenger rail services is improved and funding becomes available;
- Support communication and coordination between local transit systems and between transit and intercity bus to improve connectivity and regional public transportation;
- Support coordination of transportation services and funding between local human service agencies and local transit agencies; and
- Evaluate potential intercity bus ridership in this corridor in comparison to existing intercity bus services in other northern Michigan corridors to optimize the investment of state resources in intercity bus service.

U Jackson/Toledo

3.19 U Jackson/Toledo

The Jackson/Toledo Statewide Corridor of Highest Significance begins at I-94 northeast of Jackson and follows US-127 south to US-223, follows US-223 through Adrian to US-23 then follows US-23 south through to Ohio. It includes Jackson, Lenawee, and Monroe Counties.

3.19.1 Profile and Map

Travel within, between, and through three *MI Transportation Plan* activity centers within Michigan (Jackson, Adrian, Monroe), the Toledo metropolitan area, and US states to the south of Michigan is supported by this 62.6-mile corridor. This corridor travels through a densely populated part of southern Michigan. Because it links to several *MI Transportation Plan* Corridors of National Significance, it carries significant vehicular freight traffic traveling through the corridor's regional area.

3.19.2 Estimate of Corridor Value

The value of this corridor to the state of Michigan is defined based on the people, businesses, industries, and activities it supports together with how it is integrated and connected to the greater Michigan transportation system and activity centers inside and outside the state. As mentioned, this corridor provides an important connection for Michigan and pass through freight travel.

The corridor supports:

- Approximately two percent of Michigan's population and two percent of Michigan jobs are within a 20-mile geographic area around this corridor;
- The corridor accounts for 0.1 percent of the total statewide ton miles and 0.5 percent of the total statewide value miles of truck freight;
- Three of Michigan's 50 *MI Transportation Plan* activity centers;
- A total average daily traffic (ADT) (corridor average) of 16,000 vehicles, the corridor average commercial ADT is 2,213 vehicles, the third highest of the *MI Transportation Plan* Statewide Corridors of Highest Significance;
- Key linkages nationally to locations in the midwest and southern US;
- Approximately 6.7 million person days of tourism activity per year; and
- Five state parks, 18,000 students in post-secondary schools, and 14 prisons.

Figure 22: Jackson/Toledo Corridor

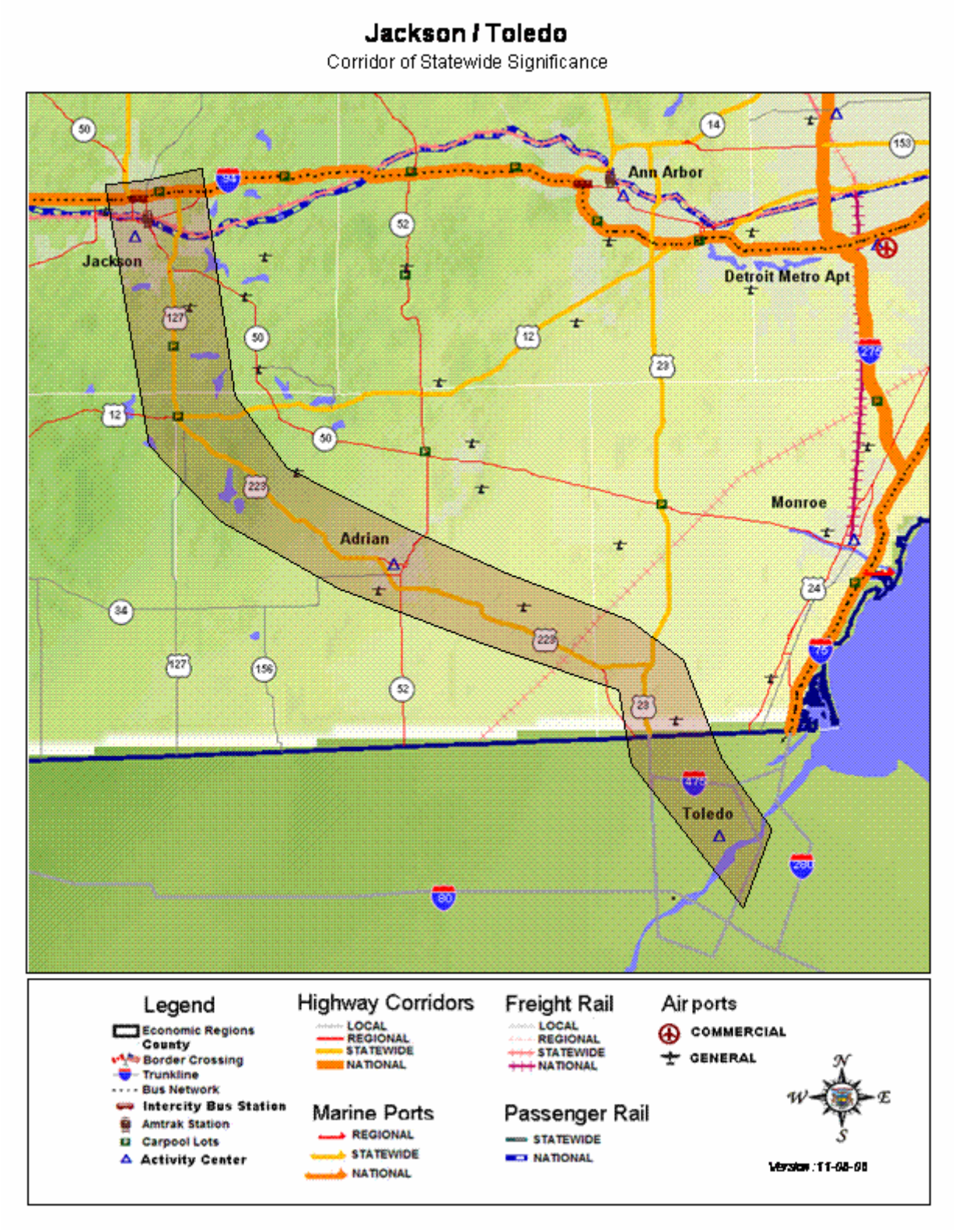


Table 74: Population/Employment/ADT within a 20-mile geographic area around Corridor Jackson/Toledo

(62.6 miles)	*2005*	*2030*
Population within band	285,460	323,210
Employment within band	126,060	140,150
Total daily vehicle-miles of travel	1,000,060	1,177,500
Total average daily traffic (average)	15,970	18,810
Highest total ADT	43,040	54,460
Lowest total ADT	6,150	6,680
Passenger average daily traffic (average)	13,760	16,210
Highest passenger ADT	36,000	45,550
Lowest passenger ADT	4,790	5,200
Commercial average daily traffic (average)	2,210	2,600
Highest commercial ADT	7,040	9,030
Lowest commercial ADT	1,360	1,400

Table 75: Corridor Truck Freight Totals

Jackson/Toledo

Miles (64.44)	*2003 Tons*	*2013 Tons*	*2003 Value*	*2013 Value*
Average	4,341,590	4,710,390	$10,220,000,050	$12,417,726,767
High	38,386,010	41,485,850	$85,844,896,714	$102,843,316,400
Low	1,212,210	1,404,770	$3,638,949,795	$4,275,252,090

Source: Michigan Department of Transportation Statewide and Urban Travel Analysis Section

Table 76: Jackson/Toledo – Activity Centers Summary

Activity	*Measure*	*Year*	*Jackson*	*Adrian*	*Monroe*	*Total Value*
URBAN						
Population	Total Activity Center Population	2005	164,922	102,015	153,441	420,378
COMMERCIAL						
General Economic Activity	Total Employment	2005	80,102	46,189	58,512	184,803
Retail Activity	Retail Employment	2005	15,878	9,622	12,532	38,032
TOURISM						
Hotel Capacity	Hotel Units	2000	680	308	618	1,606
Annual Lodging Use Tax revenue	Revenue	2004	158,407	17,385	110,345	286,137
National Park	Number of National Park Locations	2005				
State Park	Number of State Park Locations	2005	1	3	1	5
Gaming	Gaming Centers Employment	2005				
Number of Visitors	Person Trips	2004	1,830,425	677,999	1,151,573	3,659,997
Length of Stay	Person Days	2004	3,629,479	1,078,964	2,002,442	6,710,885
EDUCATION/TECHNOLOGY CENTER						
Postsecondary Educational Centers	Student Population	2005	10,951	3,168	4,177	18,296
Smart Zones	Number of Technology Centers	2006				
LIFE SCIENCE						
Hospitals	Number of Facilities	2005	3	1	1	5
CORRECTIONAL FACILITIES						
Prisons	Number of Facilities	2005	11	3		14
MILITARY BASE						
Military Base Center	Number of Facilities	2005				
PASSENGER FACILITIES						
Air Passenger	Passenger Enplanments	2005				
Amtrak	Passenger Stations	2005	12,346			12,346
Car Pool	Number of Facilities	2005	4	2	3	9
Intercity Bus Station	Passenger Stations	2005	1			1
FREIGHT FACILITIES						
Air Cargo Ports	Cargo Tonnage	2005				
Marine Ports	Cargo Tonnage	2003			1,077,000	1,077,000
INTERNATIONAL BORDER CROSSING						
Passenger and Freight	Number of Border Crossings	2005				

3.19.3 Corridor Analysis

This corridor supports two percent of Michigan's jobs and travel for local residents, businesses, manufacturing, and tourists. Travel is primarily on roadway facilities. The major roadway concern on this *MI Transportation Plan* Corridor of Highest Significance is overall age of the facility and the need for modernization.

The corridor is not served by intercity bus. There is an intermodal facility in Jackson. Public transit within the corridor is primarily countywide in nature. Ridesharing and MichiVan services are also available to promote commute alternatives.

Opportunities for this corridor include the potential for economic growth in the manufacturing industry because of its links to I-94 and US-23. Barriers to movement, including missing or deficient links and existing and future physical transportation system gaps include maintaining the quality of the pavement and bridge condition and the need for modernization.

3.19.4 Corridor Objectives

Objectives for the corridor are to:

- Provide for safe and efficient travel;
- Improve roadway and bridge conditions (vertical clearance, weight capacity, lane width) to current design standards;
- Maintain roadway and system conditions consistent with Asset Management strategies MDOT;
- Provide for safe and efficient travel by reducing congestion and delay, and improving intersections and interchanges;
- Maintain pavement condition; and
- Preserve existing transit, support expansion of public transit opportunities to include countywide service all counties and expand intercity bus services to the degree state funds are available.

3.19.5 Broad Policy-Based Corridor Strategies

The following strategies may help to advance these corridor-specific objectives. Detailed examples of capital projects, programs, and policies that may be used to implement the strategies identified below are provided in **Appendix D** to the *Corridors and International Borders Report.* MDOT will:

- Apply Asset Management principles;
- Apply Highway strategies;

  - Modernization – bring bridges and roadway geometrics to current design standards;
  - Maintenance and Rehabilitation – implement scheduled and preventive maintenance programs, continue to strive to maintain good pavement conditions along all of its trunkline corridors;

- Seek opportunities and implement low-cost operational improvements to increase roadway corridor mobility. These include but are not limited to geometric improvement, interchange improvements, ramp extensions, turning lanes, signal timing, visitor-friendly signage, improved incident management, and maintenance of traffic practices during construction projects;
- Work with local governments to implement Transportation Demand Management (TDM) and Transportation Systems Management and Operations (TSMO) improvements and strategies;
- Work with local governments to implement Access Management on strategic sections of the regional and local roadways;
- Continue to coordinate improvements and management practices with key local stakeholder groups along corridors;
- Add or enhance long-distance bicycle trails;
- Identify opportunities to integrate multi-modal transportation systems throughout this corridor including but not limited to incorporating carpool lot facilities, and bicycle and pedestrian facilities into future projects where feasible;
- Continue to provide financial and technical assistance to local agencies to help them preserve existing transit services;
- Develop strategies that can be implemented at the local level to innovate public transportation services to meet the unique needs/demands of the aging population;
- Continue to support the MichiVan program to provide commuter alternatives and congestion relief;
- Support communication and coordination between local transit systems and between transit and intercity bus to improve connectivity and regional public transportation; and
- Support coordination of transportation services and funding between local human service agencies and local transit agencies.

MDOT

Providing the highest quality integrated transportation services for economic benefit and improved quality of life.

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