

The development of the State Rail Plan will guide the state's passenger and freight rail system over the next twenty years.

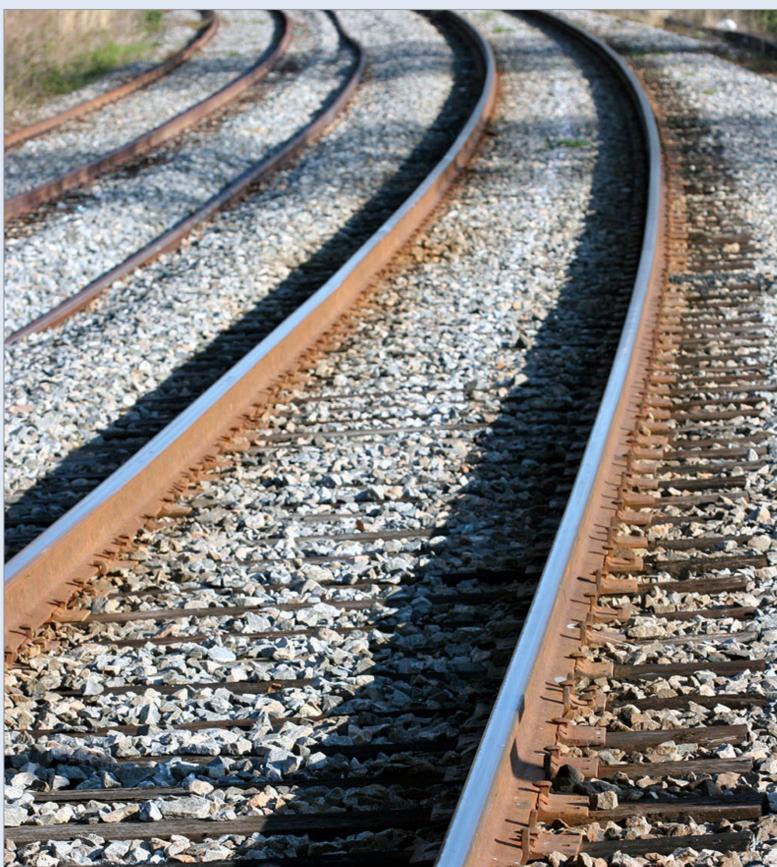
	<i>Phase 1 Data Collection and Visioning</i>					<i>Phase 2 Policy Development</i>			<i>Phase 3 Draft Plan</i>						<i>Phase 4 Final Plan</i>	
	MAY 2010	JUN 2010	JUL 2010	AUG 2010	SEP 2010	OCT 2010	NOV 2010	DEC 2010	JAN 2011	FEB 2011	MAR 2011	APR 2011	MAY 2011	JUN 2011	JUL 2011	AUG 2011
<b>PLAN ELEMENTS</b>	Identify opportunities and challenges Inventory rail facilities and services Establish goals and objectives Develop a framework for prioritizing improvements					Establish investment needs Conduct benefits analysis Identify federal, state and private funding sources for plan activities Develop plan recommendations			Refine policies Draft plan chapters						Refine plan recommendations Approve document Distribute document	
<b>PUBLIC OUTREACH ACTIVITIES</b>	Public information meetings Stakeholder meetings Website updates and comments					Stakeholder meetings Website updates and comments			Public information meetings Stakeholder meetings Website updates and comments						Website updates and comments	

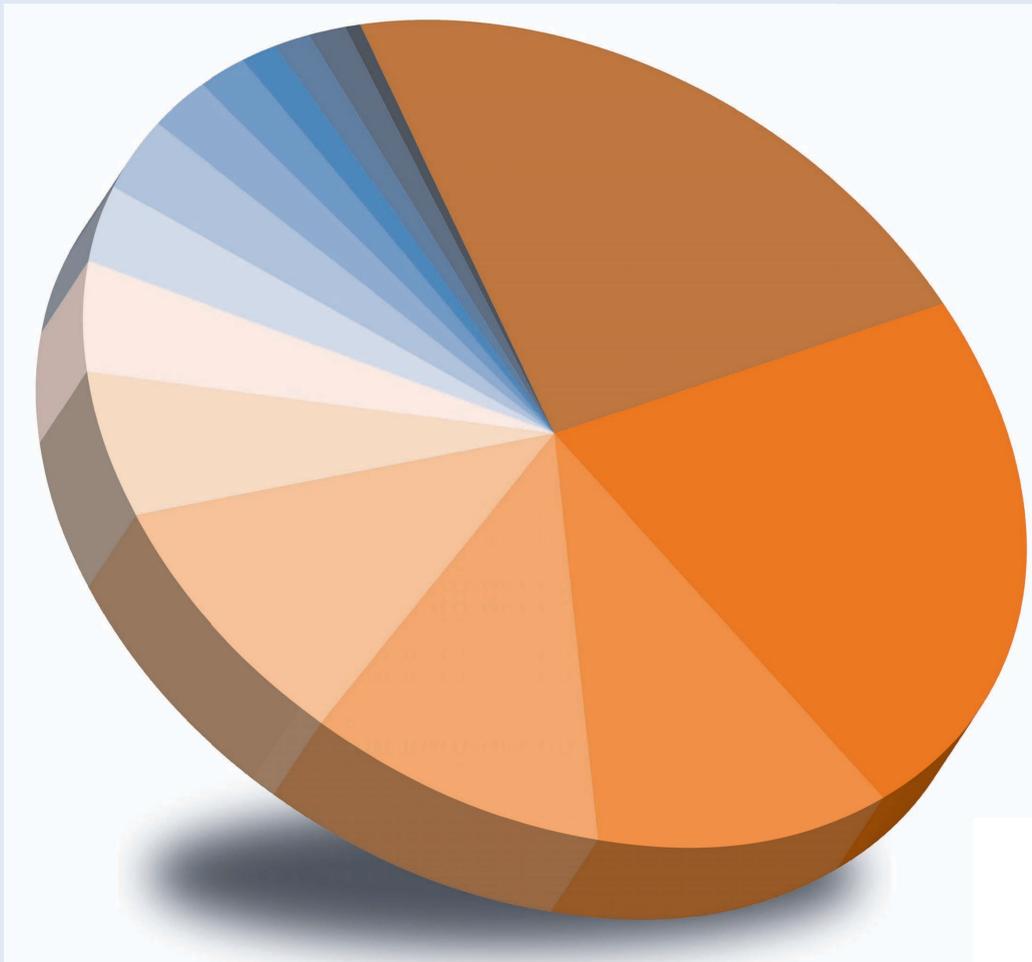
Michigan's vision for railroads is:

*“A rail system that provides enhanced mobility for travelers and the efficient movement of goods while supporting economic development and environmental sustainability.”*

The plan's goals are to:

- Promote the Efficient Movement of Passengers
- Promote the Efficient Movement of Freight
- Encourage Intermodal Connectivity
- Enhance State and Local Economic Development
- Promote Environmental Sustainability
- Promote Safe and Secure Railroad Operations





## LEGEND

### Public Outreach Common Themes

RAIL SERVICE, 197	ENVIRONMENT AND ENERGY, 49	SAFETY, 17
RAIL CORRIDOR, 196	HIGH-SPEED RAIL, 39	ABANDONMENTS AND RIGHT OF WAY, 13
MULTI-MODAL CONNECTIONS, 96	FUNDING, 31	OUTREACH, 12
QUALITY OF LIFE, 85	INFRASTRUCTURE NEEDS, 28	PROJECT SCHEDULE AND PUBLIC PROCESS, 11
ECONOMIC DEVELOPMENT, 80	COORDINATION, 23	PLAN GOALS AND OBJECTIVES, 4

*A public outreach strategy was developed to make sure interested persons and organizations have an opportunity to be informed, consulted and involved during the State Rail Plan process.*

## THE OUTREACH STRATEGY

- A dedicated project Web page for online comments and plan information.
- Two rounds of statewide public meetings.
- Over 25 meetings with organizations and companies involved in freight movements.
- Coordination with Michigan by Rail.

## COMMON THEMES

- Passenger rail topics focused on expanding service, increasing the frequency and speed of service and enhancing amenities such as allowing bicycles on passenger trains.
- Freight rail topics focused on expanding service to encourage economic development, reduce highway congestion, improve the environment and decrease roadway maintenance. Several comments also expressed concern about railroad abandonments.
- Other comments expressed support for the plan and encouraged MDOT to move forward with implementation quickly.

*Michigan has the 12th highest number of track miles in the nation transporting commodities that support businesses and employment in the state.*

## RAILROAD SYSTEM FACTS

- 4,317 miles of track operated and 3,418 miles owned by 29 companies.
- 530 miles of track owned by the State of Michigan.
- Intermodal terminals concentrated in the Detroit area.
- Three border crossings with Canada.
- Two port facilities that transport iron ore mined in the Upper Peninsula.

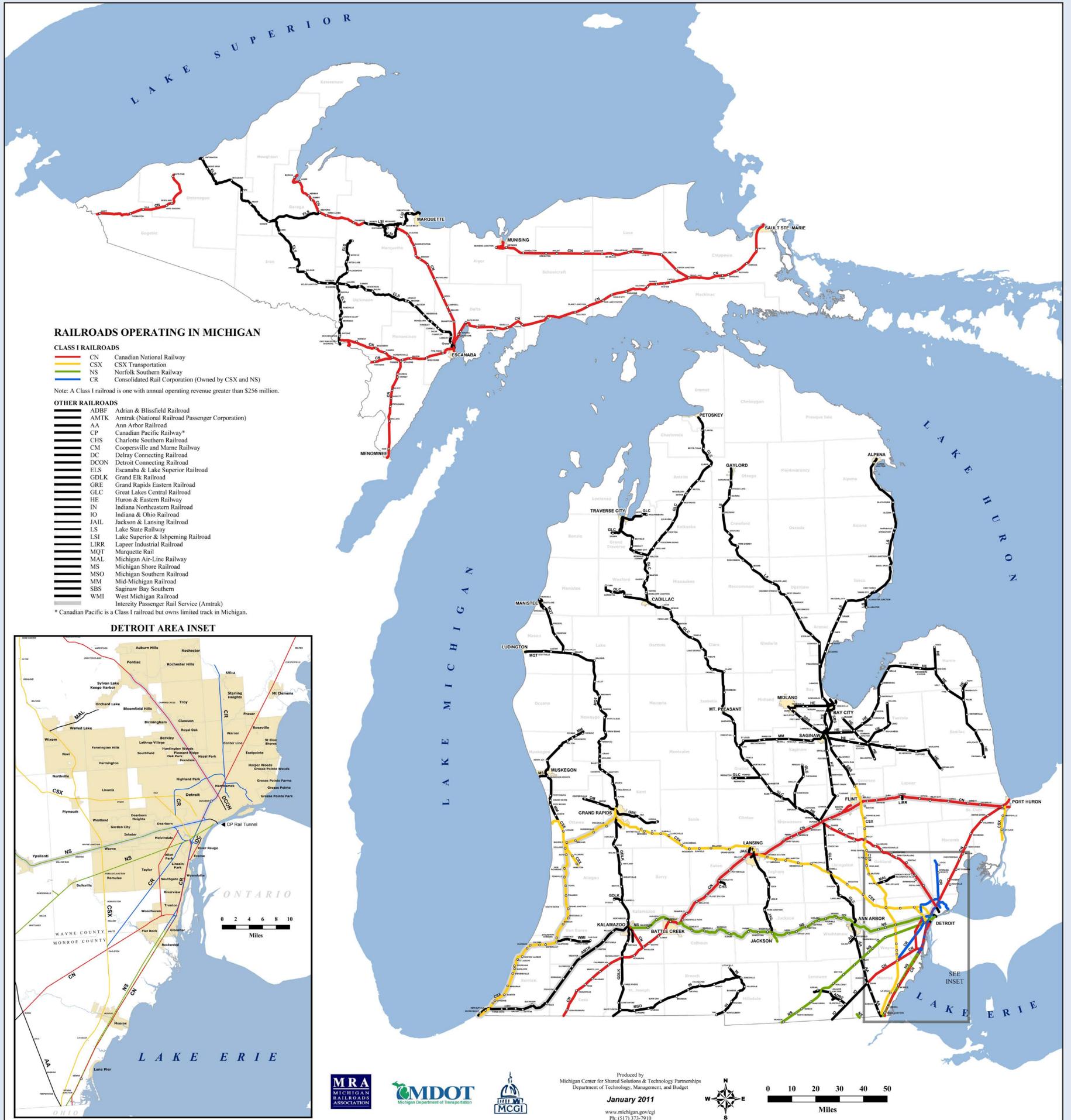


## FREIGHT RAIL SERVICE *in* MICHIGAN

RAILROAD CLASSIFICATION	NUMBER OF RAIL COMPANIES	OPERATED MILES	OWNED MILES	STATE-OWNED MILES
Class I - Freight/Passenger	4	2,137	2,265	0
Class II - Regional	2	444	94	347
Class III - Short Line	15	1,514	907	183
Switching & Terminal	8	222	152	0
Totals	29	4,317	3,418	530

## FREIGHT RAIL TRENDS

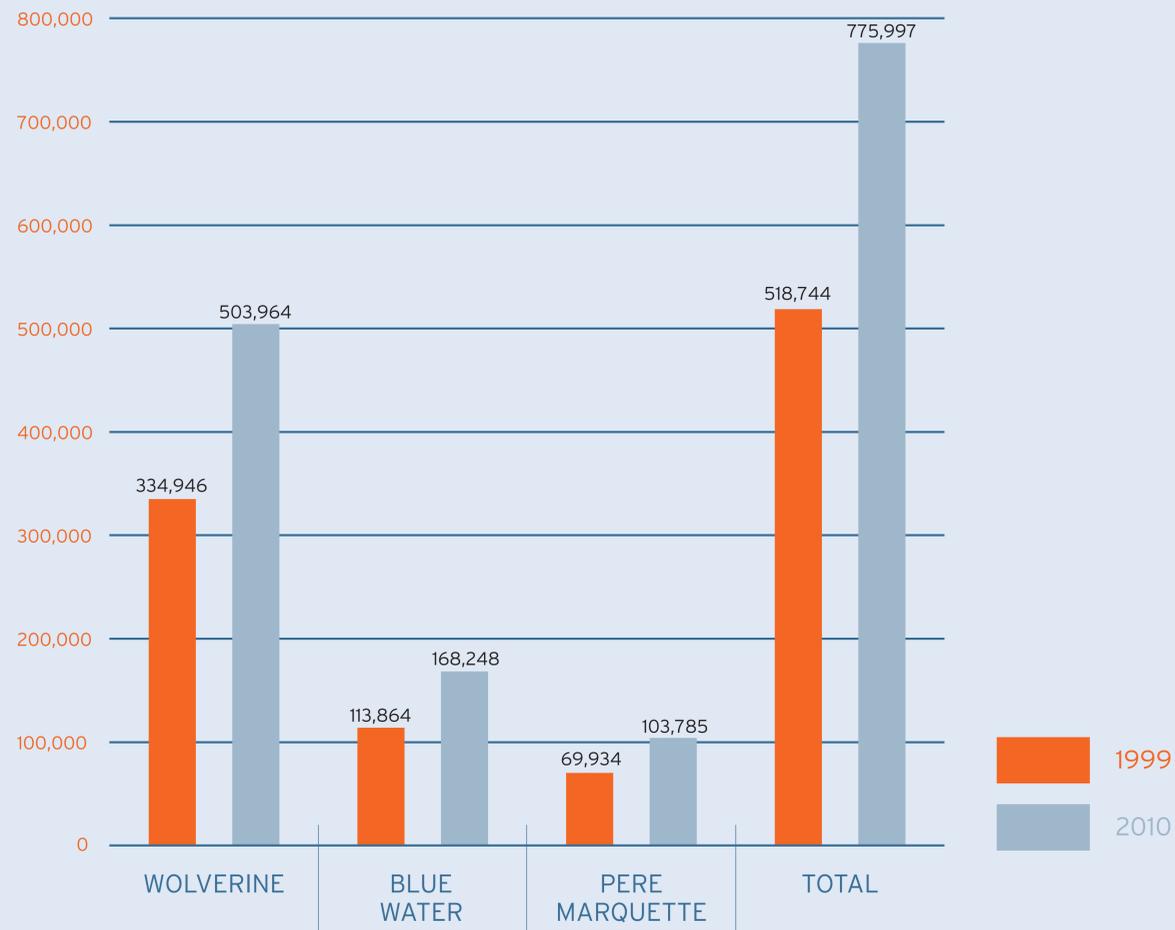
- About 33 percent of Michigan's freight tonnage was moved by rail in 2009, accounting for \$41.4 billion in commodities.
- Major rail shipments include coal, metallic ores, chemical products and transportation equipment.
- Rail imports are expected to increase modestly at 0.13 percent annually.
- Rail exports are expected to increase at a faster pace of 2.51 percent annually.



*Michigan has three Amtrak passenger rail lines – Wolverine, Blue Water and Pere Marquette – that provide efficient connections between the state’s largest urban areas and Chicago.*

## SYSTEM FACTS

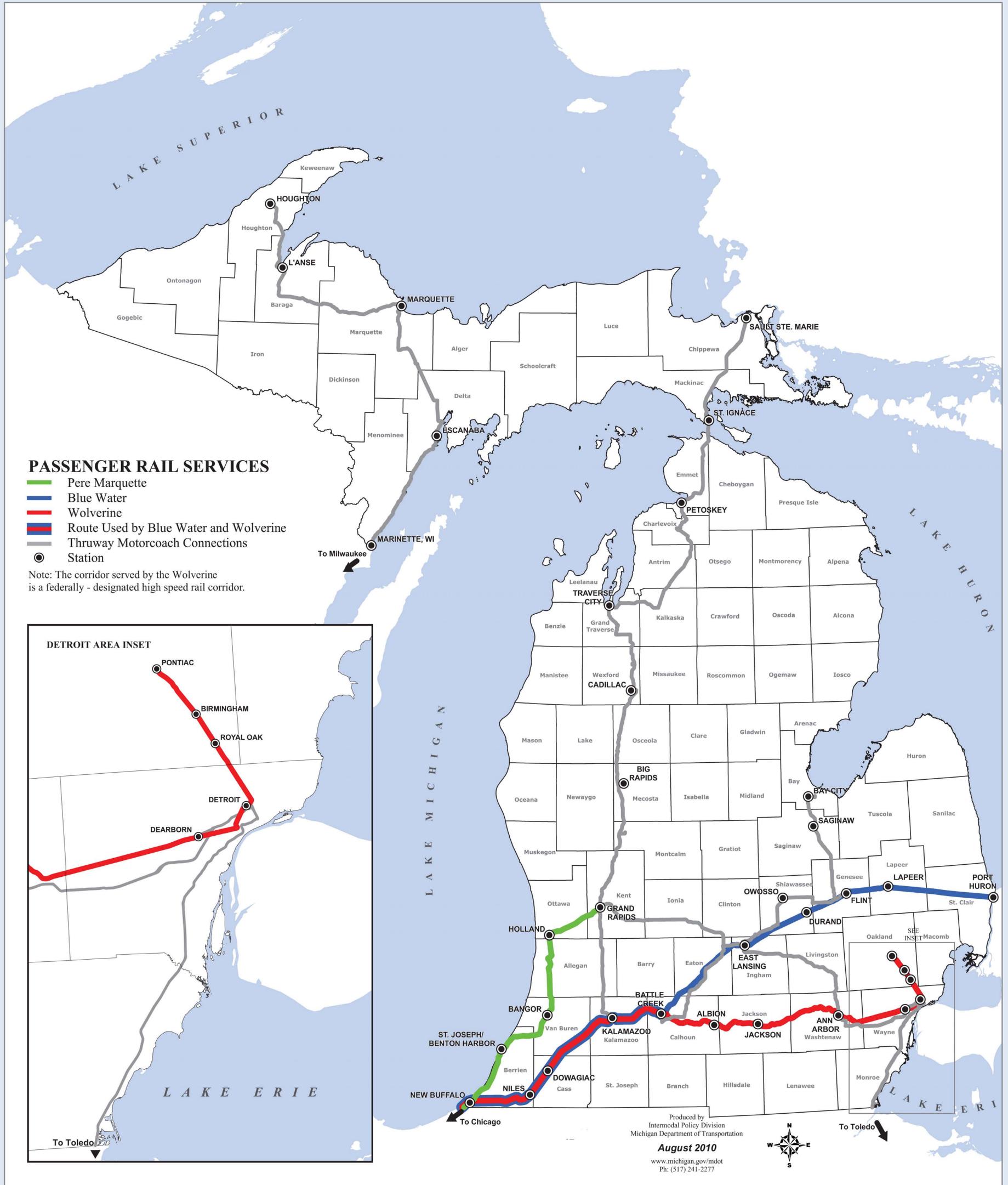
- Passenger rail serves 22 stations along 521 miles of track in Michigan.
- Thruway bus connections are provided by Amtrak in East Lansing, Ann Arbor, Dearborn, and Detroit.
- The state provides about \$8 million per year in operating support for Amtrak’s Pere Marquette and Blue Water routes.
- The Wolverine is part of Amtrak’s national system and is currently provided at no cost to the state.
- Ridership has increased by 50 percent over the past decade.



## PASSENGER RAIL SERVICE *in* MICHIGAN

SERVICE	RAIL CORRIDOR	STATIONS	DISTANCE (miles)	TRAVEL TIME (hours)
Wolverine	Chicago-Detroit-Pontiac	Chicago, Hammond-Whiting, Michigan City, New Buffalo, Niles, Dowagiac, Battle Creek, Kalamazoo, Albion, Jackson, Ann Arbor, Dearborn, Detroit, Royal Oak, Birmingham, Pontiac	304	6.5
Pere Marquette	Chicago-Holland-Grand Rapids	Chicago, St. Joseph-Benton Harbor, Bangor, Holland, Grand Rapids	176	4
Blue Water	Chicago-Battle Creek-Port Huron	Chicago, New Buffalo, Niles, Dowagiac, Kalamazoo, Battle Creek, East Lansing, Durand, Flint, Lapeer, Port Huron	319	7

# MICHIGAN'S INTERCITY PASSENGER RAIL SYSTEM



*Michigan's high-speed rail plans are focused on the Chicago-Detroit-Pontiac corridor along with two feeder routes to Grand Rapids, Mich. and Port Huron, Mich.*



## HIGH-SPEED RAIL FACTS

- Michigan's high-speed routes will be integrated with the Midwest Regional Rail Initiative, which envisions a high-quality passenger rail network radiating from a hub in Chicago.
- The Chicago-Detroit-Pontiac corridor is a federally designated high-speed rail corridor.
- The 97-mile segment between Kalamazoo, Mich., and Porter, Ind., is the only area outside the Northeast Corridor that is owned by Amtrak and is designed for train speeds up to 110 mph.
- Passenger trains currently operate at speeds up to 95 mph between Kalamazoo, Mich. and Porter, Ind., and are expected to increase up to 110 mph in August 2011.
- MDOT has been successful in obtaining approximately \$350 million in federal funds to purchase and upgrade the railroad between Dearborn, Mich. and Kalamazoo, Mich.

Since 1974, Michigan has invested more than \$100 million in state, federal and local funds on passenger rail projects. Michigan has also invested more than \$100 million for grade crossing safety projects and \$115 million for state-owned rail lines and rail-related economic development projects since 1995.

## FUNDING CHALLENGES

- State budget shortfalls have led to the retraction of many transportation programs.
- State freight rail funds are limited and there are no dedicated federal freight funds.
- The state must consider purchasing the track between Kalamazoo and Dearborn valued at \$200 million to avoid it being downgraded to 25 mph.
- State matching funds are needed to take advantage of new federal passenger rail grant awards.
- The federal Passenger Rail Investment and Improvement Act of 2008 will require Michigan to provide the operating subsidy for the Wolverine starting in fiscal year 2014 at an estimated cost of \$25 million per year.
- Federal funding for passenger rail is uncertain because it requires ongoing congressional appropriations.

## FUNDING OPPORTUNITIES

New federal legislation for passenger rail has changed the funding outlook by creating competitive grant programs that have made billions of dollars available for projects throughout the country.

Michigan has successfully obtained the following major awards:

- January 2010: \$40 million for station improvements.
- August 2010: \$150 million for upgrades to Dearborn and Kalamazoo corridor.
- **Recently awarded!** May 2011: \$199 million to improve the Dearborn to Kalamazoo corridor.



In May 2011, Michigan received nearly \$200 million in federal rail grants for projects to improve the rail corridor between Dearborn and Kalamazoo. Image source: MDOT Photography Unit.

## 2010 STATE RAIL FUNDING PROGRAMS

PASSENGER RAIL PROGRAM - OPERATIONAL SUPPORT	 \$7.6 million
LOCAL GRADE CROSSING PROGRAM	 \$7.0 million
TRUNKLINE RAILROAD CROSSING PROGRAM	 \$1.4 million
FREIGHT ECONOMIC DEVELOPMENT PROGRAM	 \$1.3 million
STATE-OWNED RAIL PROPERTY CAPITAL DEVELOPMENT	 \$1.0 million
MICHIGAN RAIL LOAN ASSISTANCE PROGRAM	 Program suspended in 2010



## BASELINE PACKAGE

Cost: \$3.6 billion  
 Funded: \$3.6 billion  
 Unfunded: \$0

This package would maintain funding at current levels, allowing for some public and private investment. Funding would not be sufficient to maintain the aging freight rail infrastructure and the Wolverine would be eliminated.

Projects include:

- State operating support for Blue Water and Pere Marquette passenger rail services
- Amtrak funded corridor improvements including Incremental Train Control System
- Cab car coach refurbishment and leasing for Ann Arbor-Detroit Regional Rail and WALLY
- Tier I EIS for Chicago-Grand Rapids and Battle Creek-Port Huron corridors
- Jackson and Durand station improvements
- MDOT freight rail improvement programs continued
- Several privately financed track, structure and equipment replacement projects



**RECOMMENDED PACKAGE** ✓

## GOOD PACKAGE

Cost: \$7.2 billion  
 Funded: \$4.2 billion  
 Unfunded: \$3.1 billion

This package includes everything in the Baseline plus over 90 projects that would expand the passenger and freight rail systems.

Projects include:

- Baseline projects
- Chicago-Detroit-Pontiac corridor improvements: Dearborn-Kalamazoo corridor acquisition; Grand Crossing in Chicago; Battle Creek West Track; Detroit-Pontiac segment
- State operating support for Wolverine passenger rail service
- New stations in Detroit and Ann Arbor
- Improvements and operations for Ann Arbor-Detroit Regional Rail and WALLY
- Positive Train Control installation on all passenger lines and hazardous material freight lines
- Traverse City/Petoskey and Detroit-Toledo service feasibility studies
- Several Detroit Intermodal Freight Terminal projects
- New freight rail tunnel between Detroit and Windsor, Ontario
- Increased funding for state-funded freight programs
- Substantial short-line rail infrastructure investments



## BETTER PACKAGE

Cost: \$7.9 billion  
 Funded: \$4.2 billion  
 Unfunded: \$3.7 billion

This package would implement several projects that will make significant improvements to the rail system.

Projects include:

- Baseline and Good projects
- Completion of high-speed rail projects for Chicago-Detroit-Pontiac corridor and feeder services to Grand Rapids and Port Huron
- Completion of all Detroit Intermodal Freight Terminal projects
- Feasibility studies for 220 mph passenger rail service between Chicago and Detroit, and continuing to Toronto



## BEST PACKAGE

Cost: \$9.2 billion  
 Funded: \$4.2 billion  
 Unfunded: \$5 billion

This package includes all projects under the Baseline, Good and Better scenarios and the remainder of projects that have been identified as investment needs.

Projects include:

- Baseline, Good and Better projects
- Completion of all Midwest Regional Rail Initiative projects in Michigan
- Purchase of new passenger rail equipment
- New passenger rail service to Traverse City

*A list of more than 140 projects with a cost of over \$9 billion has been developed to identify and prioritize Michigan's rail investment needs. Projects from the list were prioritized into Baseline, Good, Better and Best investment packages.*



## ECONOMIC BENEFITS

- An economic analysis for each rail investment package was completed to show the importance of rail to Michigan's economy.
- The Baseline contributes a substantial amount of economic activity, but is less than existing conditions because the Wolverine would be discontinued.
- Economic benefits increase incrementally for the Good, Better and Best investment packages.

### ECONOMIC BENEFITS OF RAIL INVESTMENT PACKAGES

ECONOMIC INDICATOR	Existing Conditions	Rail Investment Packages			
		Baseline	Good	Better	Best
Personal income earnings	\$7.4 billion	\$7.2 billion	\$8.7 billion	\$9.0 billion	\$9.3 billion
Sale of commodities	\$26.8 billion	\$26.0 billion	\$31.1 billion	\$32.0 billion	\$33.6 billion
Employment (annual average)	7,500	7,400	8,800	9,100	9,400



## COMMUNITY BENEFITS

- Enhanced freight rail services encourage local business investment.
- Passenger services result in increased development potential around stations.
- Improvements to warning devices at crossings increases safety and may qualify a community for a quiet zone which reduces train horn noise.

## TRANSPORTATION BENEFITS

- Rail increases efficiency and choice for passengers and freight.
- Intercity passenger rail connects major urban centers, allows a passenger to be productive while traveling and is less prone to highway and airline delays.
- High-speed passenger rail is time-competitive with air and auto trips between 100 and 500 miles.
- Freight rail makes moving goods quicker, cheaper and more reliable, directly benefiting businesses and jobs.

## ENVIRONMENTAL BENEFITS

- Rail travel is the most energy efficient transportation mode in the country reducing fuel consumption and air pollution.
- One gallon of fuel will carry one ton of freight 413 miles via rail, as compared to 155 miles by truck, reducing greenhouse gas emissions by 53 percent.
- Intercity passenger rail uses 21 percent less energy per passenger mile than autos and 17 percent less than airlines.

*The State Rail Plan recommends Michigan actively pursue the Good investment package, which will require creative funding strategies to leverage federal funds and encourage funding from railroad companies and other private sources. A summary of the plan's policy recommendations are below.*

### To further develop **PASSENGER RAIL** Michigan should:

- ✓ Continue improving Michigan's high-speed rail network.
- ✓ Expand the feeder bus system to connect more communities to the passenger rail system.
- ✓ Conduct feasibility studies to expand rail service to Traverse City, Grand Rapids and Toledo.
- ✓ Study 220 mph service for the Chicago-Detroit-Toronto corridor.
- ✓ Establish a bonding program to provide state matching funds for federal grants.
- ✓ Investigate the use of a state ticket fee/tax to offset state matching funds.
- ✓ Encourage local communities to participate in capital funding for station improvements.
- ✓ Seek Congestion Mitigation and Air Quality funding for short-term passenger rail operations.
- ✓ Conduct market studies to maximize ticket revenue and initiate a media campaign to encourage ridership.
- ✓ Investigate outsourcing for equipment maintenance, reservation services and food services.

### To address **STATE-OWNED LINES** Michigan should:

- ✓ Continue to sell state-owned rail lines and seek legislative permission to expedite selling the larger rail systems.
- ✓ Look for opportunities to sell short segments of track that are not critical to overall system.
- ✓ Encourage new industry to locate along state-owned lines to make them more attractive to buyers.
- ✓ Continue to make improvements that increase the track's ability to carry heavier loads.
- ✓ Preserve and make provisions for segments that are critical to future passenger rail service.

### To enhance **STATE RAIL FUNDING PROGRAMS** Michigan should:

- ✓ Continue to fund the Freight Economic Development Program to encourage businesses development.
- ✓ Consider changing the Michigan Rail Loan Infrastructure Program from a revolving loan to a grant.
- ✓ Expand funding for the Local Grade Crossing Program to address crossing surface conditions.

### To enhance **FREIGHT RAIL** services Michigan should:

- ✓ Work with local, regional and state agencies to identify regional economic development strategies.
- ✓ Prioritize freight projects that will have the most economic development impact.
- ✓ Develop promotional materials for funding programs.
- ✓ Develop regional economic distress indicators and focus resources in those areas.
- ✓ Study rail freight movements in underserved areas.
- ✓ Study short-haul intermodal facility needs.

### To leverage **FEDERAL FUNDING SOURCES** Michigan should:

- ✓ Continue to pursue federal passenger rail funding opportunities focusing on the Chicago-Detroit-Pontiac corridor.
- ✓ Create Service Development Plans, Alternative Analyses and NEPA documentation to make sure projects are ready to proceed when additional funding becomes available.
- ✓ Pursue federal funding opportunities that will also benefit freight rail.