



Technical Memorandum #1
Vision, Goals and Objectives

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Prepared for:



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The Vision, Goals and Objectives for the Michigan State Rail Plan

Role of Railroads in Michigan

Michigan's freight and passenger rail system is part of a multimodal transportation system with a diverse mix of facilities in both public and private ownership. Michigan has an extensive rail system, ranking 12th nationally in the number of miles of track among the 50 states.¹ Michigan also has a long history of Amtrak and state-supported intercity passenger rail service and is one of 13 states that contract with Amtrak for the operation of trains that supplement frequencies and/or extend service beyond the national system.

There are approximately 3,600 miles of freight railroad track within the state of Michigan operated by 24 freight railroads including 4 class one railroads, 2 regional railroads and 18 shortline railroads.² There are 530 miles³ of track owned by the State of Michigan. In 2003 Michigan's railroads carried nearly 120 million tons of freight accounting for approximately 18 percent of Michigan's total commodity movements. The value of these rail shipments exceeded \$162 billion.⁴

Intercity passenger rail service in Michigan is provided by Amtrak in three major corridors: Chicago-Detroit-Pontiac (Wolverine Service), Chicago-Grand Rapids (Pere Marquette Service) and Chicago-Port Huron (Blue Water Service). These three corridors are served by 22 stations. The Chicago-Detroit-Pontiac Corridor is a federally designated high-speed corridor. This corridor contains the only segment of track outside the Northeast Corridor that is owned by Amtrak and technically able to travel at 110 mph and currently operates at 95 mph. In FY 2009, 756,651 riders used Amtrak service in Michigan.⁵

Efficient freight and passenger rail service provides important economic development benefits to Michigan communities. Industrial development can be thwarted by the lack of freight rail service. Freight rail service is a key location factor for many new companies seeking to locate or expand in Michigan. Enhanced passenger rail service can provide important economic development benefits to Michigan communities by providing improved accessibility, connectivity and travel efficiency. An economic impact analysis has been prepared for the Midwest Regional Rail Initiative Plan which recommends 110 mph high speed rail service in the Chicago-Detroit-Pontiac Corridor and enhanced service in other Michigan corridors. This analysis estimates that improved passenger rail service in Michigan will result in 6,970 new permanent jobs, \$680 million in increased

¹ Association of American Railroads, State Rankings, 2008

² Association of American Railroads, State of Michigan Fact Sheet, 2008

³ Michigan DOT, Bureau of Aeronautics and Freight Services

⁴ Freight Profile Technical Report, Michigan Department of Transportation, State Long-Range Transportation Plan 2005-2030, October 2006, p. 24

⁵ Amtrak Fact Sheet, Fiscal Year 2009, State of Michigan

property values around Michigan stations and a \$138 million increase in annual household income statewide.⁶

Beyond freight movement and passenger mobility, intercity rail service provides important environmental benefits to the citizens of Michigan. Freight rail is three times more fuel efficient than the truck mode on a per ton-mile basis. The U.S Environmental Protection Agency (EPA) estimates that a typical freight train emits only one-third the pollution of a truck on a ton-mile basis. Transportation by rail saves approximately \$266 million annually in pavement damage to Michigan roadways. Rail also reduces truck congestion on Michigan roadways.⁷

Passenger rail travel has similar environmental benefits. Data from the Oak Ridge National Laboratory indicate that intercity passenger rail consumes 17 percent less energy per passenger mile than airlines and 21 percent less energy per passenger mile than autos.⁸ Intercity passenger rail produces 60 percent fewer carbon dioxide (CO₂) greenhouse gas emissions per passenger mile than the average auto and about half the greenhouse gas emissions per passenger mile of an airplane. Intercity passenger rail also generates fewer emissions per passenger mile of other pollutants such as nitrous oxide (N₂O), volatile organic compounds (VOCs) and carbon monoxide (CO).⁹

Intercity passenger rail service provides downtown to downtown connectivity which encourages urban development, infilling and downtown redevelopment. This type of “transit friendly” development can be more energy efficient, result in fewer harmful emissions and more efficiently provide urban services than low density urban sprawl.

Vision Statement

In light of these benefits, Michigan’s “Vision” for passenger and freight rail service focuses on providing mobility, economic development opportunities and environmental sustainability including energy conservation. The Vision Statement is:

Michigan Rail Vision Statement

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

⁶ Economic Impacts of the Midwest Regional Rail System, Transportation Economics and Management Systems, Inc. and HNTB, November 2006

⁷ American Association of Short-Line Railroads, utilizing a Texas Transportation Institute formula, 2005

⁸ Oak Ridge National Laboratory, Transportation Energy Data Book, Edition 26, 2007

⁹ “Vision for the Future – U.S. Intercity Passenger Rail Network Through 2050”, prepared for the National Surface Transportation Policy and Revenue Study Commission, December 2007

Goals and Objectives: Michigan State Rail Plan

Based upon this Vision, the findings and recommendations of the Michigan State Rail Plan are driven by six major goals:

1) Goal: Promote the Efficient Movement of Passengers

Objectives:

- a) Provide new and enhanced passenger rail service to Michigan communities and travelers as an efficient and cost-effective mobility alternative.
- b) Reduce travel times through increased speeds and reduced delay.
- c) Increase frequencies.
- d) Improve reliability and performance.
- e) Improve the traveler efficiency and comfort by providing amenities such as food service, internet connectivity, 110-volt power for electronic devices, and video information displays onboard and at stations.
- f) Increase passenger rail accessibility to low income, elderly and special needs groups that have limited access to auto and other modes.

2) Goal: Promote the Efficient Movement of Freight

Objectives:

- a) Encourage frequent, reliable and efficient freight rail service to un-served or under-served communities, businesses and shippers.
- b) Provide public investments for railroad projects where public benefits exceed public costs.
- c) Pursue public-private partnerships to improve service and reduce freight rail congestion.
- d) Identify corridors where 286,000-pound rail car load capacity is needed based on market demand.
- e) Identify corridors where 315,000-pound rail car load capacity is needed based on market demand.

3) Goal: Encourage Intermodal Connectivity

Objectives:

- a) Support the development of intermodal freight facilities which will provide seamless connectivity between rail and truck and water modes. Focus on facilities which have the greatest potential to increase the efficiency and accessibility of the rail mode and provide lower transportation costs for shippers.

- b) Support the connectivity of Michigan passenger rail service to other corridors regionally, nationally, and internationally to maximize network benefits in terms of increased ridership, revenues and passenger mobility.
- c) Support intermodal connectivity between intercity passenger rail and other passenger modes including air, local transit, auto, intercity bus, and non-motorized transportation. Focus on intermodal investments which have the most potential to increase the efficiency of the rail mode and provide greater accessibility to travelers including those with special needs and limited access to automobile transportation.

4) Goal: Enhance State and Local Economic Development

Objectives:

- a) Provide enhanced passenger rail service to Michigan communities as a part of an overall economic development strategy to increase employment, household incomes and property values based on the increased accessibility and mobility provided by the rail mode.
- b) Promote state policies and programs to provide increased freight rail service to Michigan communities and businesses as a means of increasing their attractiveness for the expansion of existing businesses and the recruitment of new businesses.
- c) Promote freight rail service, infrastructure improvements, and intermodal connectivity to increase the efficiency of freight rail service and to lower transportation costs for Michigan businesses.
- d) Encourage the preservation of critical rail transportation corridors that are in danger of abandonment to ensure their continued availability for future ground transportation uses.

5) Goal: Promote Environmental Sustainability

Objectives:

- a) Support enhanced freight and passenger rail service as a part of an overall state energy conservation policy and to protect Michigan travelers and shippers from the adverse mobility and economic impacts of expected increases in future transportation energy costs.
- b) Support enhanced freight and passenger rail service as a means of enhancing environmental sustainability through reduced emissions per ton and passenger-mile.
- c) Develop multimodal-transportation plans which recognize the role intercity passenger rail service can play in supporting local land use plans which encourage downtown development, re-development and in-filling. Plan for passenger rail service in a manner which encourages the benefits that these and other forms of “transit-friendly” development offer in terms of lower

emissions, less energy consumption, and the efficient provision of public services.

6) Goal: Promote Safe and Secure Railroad Operations

Objectives:

- a) Promote rail and highway safety by improving grade crossing surfaces and warning devices and pursuing road closures and grade separations where appropriate.
- b) Promote the safe transportation of hazardous materials via railroads.
- c) Promote efforts to provide security of passenger and freight railroad operations, particularly for freight trains crossing the border between Canada and Michigan.

