



Chapter 6: Intercity Passenger Rail

Table of Contents

Introduction	3
Overview of Existing Intercity Passenger Rail in Wisconsin.....	4
History of intercity passenger rail in Wisconsin.....	4
Amtrak Hiawatha Service: Chicago-Milwaukee	6
Amtrak Thruway bus routes.....	9
Wisconsin passenger rail stations	10
Roles in Planning and Implementation of Intercity Passenger Rail Service.....	12
Federal role	12
Regional role	15
Wisconsin’s role in planning and implementing intercity passenger rail	17
Issues Impacting Intercity Passenger Rail	21
Increasing public demand for additional intercity passenger rail service	22
Limitations of existing intercity passenger rail service in meeting transportation needs.....	23
Safety on shared-use corridors	24
Multi-state coordination in planning and implementing new intercity passenger rail services	25
Intercity passenger rail and commuter rail integration and coordination	26
Freight rail accommodations and coordination.....	27
Intercity passenger rail equipment needs	27
Existing intercity passenger rail stations needs	28
Intermodal connectivity.....	29
Operational speed of new intercity passenger rail services	31
Governance of a regional intercity passenger rail system.....	32
Preservation of rail lines for potential future rail use.....	33
Intercity Passenger Rail Recommendations	33
Continue to support and enhance existing passenger rail service	35

Continue planning work and coordination with member states of the Midwest Regional Rail Initiative 35

Implement the Wisconsin component of the Midwest Regional Rail System..... 36

Facilitate intermodal connections and promote livable communities 41

Fund the Rail Station Capital Assistance Program 42

Continue to assist with neighboring states’ intercity passenger rail studies and projects that impact Wisconsin 43

Consider opportunities to expand intercity passenger rail service to other regions of Wisconsin.... 43

Chapter 6: Intercity Passenger Rail

Introduction

Intercity passenger rail service carries riders on trips that are typically 100 miles or longer; has stations (stops) spaced every 20 miles or more; and commonly operates at top speeds of 79 to 90 miles per hour (speeds of 110 miles per hour and above are generally referred to as high-speed rail). The National Railroad Passenger Corporation, known as Amtrak, is the primary operator of intercity passenger rail services in the United States. Intercity passenger rail typically shares track with freight rail operators and operates on track owned by freight or commuter railroads, which are referred to as “host railroads.” There are some exceptions on the East Coast and in Michigan where Amtrak owns the tracks.

The Wisconsin Department of Transportation (WisDOT) envisions an intercity passenger rail system that links the Midwest region’s major economic centers. The system would provide connections within Wisconsin, and to cities throughout the Midwest; integrate with other modes; and provide a sustainable transportation alternative to enhance mobility and help grow the state’s economy. The Wisconsin Rail Plan 2030 builds off of the vision defined in Connections 2030 and provides additional background information and analysis, along with actions to achieve the vision.

To date, Wisconsin has made multiple investments in intercity passenger rail. These rail investments can yield public benefits, which are summarized in Appendix 6-A.

This chapter includes:

- An overview of existing intercity passenger rail in Wisconsin
- Federal, regional and state roles in planning and implementing intercity passenger rail service
- Wisconsin’s role in planning and implementing intercity passenger rail service
- Issues impacting intercity passenger rail
- Intercity passenger rail recommendations

Intercity Passenger Rail, Commuter Rail and Light Rail

Intercity train routes are generally longer in distance than commuter train routes, which focus on travel between suburban areas and downtown urban work centers at peak commute times. Intercity station stops may be located 20 miles or more apart, while commuter rail stops are located on average every five to seven miles. The majority of riders on commuter train routes are typically commuting to and from work. Commuter rail is a type of fixed-guideway transit and is considered regional transit.

Light rail is a type of fixed-guideway transit and is not intercity passenger rail. Light rail operates within metropolitan areas, stops frequently and is part of local or regional transit systems.

The **Amtrak** system is a network of long distance and corridor trains. Nationally, these trains serve 504 stations in 46 states on more than 21,000 route miles. During the last decade, Amtrak experienced substantial ridership growth due, in part, to improved reliability, increased service frequencies, state support, highway and aviation congestion and higher vehicle fuel costs.

Overview of Existing Intercity Passenger Rail in Wisconsin

History of intercity passenger rail in Wisconsin

Wisconsin has a long history of involvement in and support for passenger rail service. Before the creation of Amtrak in 1970, private railroads provided an extensive network of passenger rail service across the state, including express service and branch lines.

As automobile use increased, fewer people traveled by train. Through the 1950s and 1960s the amount and quality of passenger rail service declined dramatically in Wisconsin and nationwide. In response to these declines, in 1970 Congress created the National Railroad Passenger Corporation (Amtrak) to operate the nation's intercity passenger rail services. Its purpose was to relieve the freight railroads of the financial losses they incurred from fulfilling the federal requirement to provide passenger rail service. Amtrak was set up as a quasi-private corporation that receives assistance from the federal government. While Amtrak stabilized the passenger rail system, the creation of a national system also resulted in the discontinuance of passenger rail service on many routes, including several in Wisconsin. A detailed chronology of Amtrak service in Wisconsin can be seen in Appendix 6-B.

Throughout the 1970s, Amtrak service in Wisconsin was generally stable. Amtrak provided three to five daily round trips between Chicago and Milwaukee, and one to two daily round trips between Chicago, Milwaukee, Minneapolis/St. Paul and the Pacific Northwest. Starting in 1975, Amtrak also provided service between Minneapolis, Superior and Duluth.

In the early 1980s, federal budget cuts decreased Amtrak service in Wisconsin. By 1985, Wisconsin's Amtrak service was reduced to three daily round trips between Chicago and Milwaukee, and one daily round trip between Chicago, Minneapolis/St. Paul and the Pacific Northwest.

In 1989, Wisconsin and Illinois jointly funded a two-year demonstration project that added two daily round trips to Amtrak's Chicago-Milwaukee service, to evaluate the potential of state-supported intercity passenger rail service. The demonstration proved successful. The two states have jointly funded Amtrak's *Hiawatha Service* ever since. Over the years, Wisconsin and Illinois have made incremental improvements to the service, such as adding frequencies, building new stations and improving track infrastructure. These improvements have resulted in substantial growth in ridership. Over the ten-year period of 2000-2010, Amtrak *Hiawatha Service* ridership has increased by 85.8% percent; an increase from 426,652 riders in 2000 to 792,848 riders in 2010.

Amtrak currently operates two routes in Wisconsin; the *Hiawatha Service*, a corridor service, and the *Empire Builder*, a long-distance train between Chicago and Seattle (Map 6-1). These routes are integrated with Amtrak's nationwide system at Chicago's Union Station. Chicago serves as the hub of Amtrak's nationwide long-distance network and the hub of its Midwest corridor services (short distance and generally higher frequencies).

In addition to intercity passenger rail service, Amtrak also provides connecting intercity bus service, known as Amtrak Thruway (Map 6-1). This bus service extends Amtrak service to parts of the state not served by Amtrak trains. These intercity bus routes serve Amtrak stations where seamless connections can be made to train services. Interlining agreements between private bus companies and Amtrak allow passengers to purchase a single ticket through Amtrak for both the train and bus portions of their trip.

Existing passenger rail service performance

WisDOT continually monitors the performance of Amtrak’s *Hiawatha Service* and *Empire Builder*. This provides the department with data for evaluating and improving the existing service. Common performance indicators include ridership, on-time performance and financial performance.

On-time performance is the percentage of trains that arrive at their final destination at the scheduled arrival time. Trains are considered on-time if they arrive within an allowed tolerance, which is 15 minutes for corridor trains such as the Amtrak *Hiawatha Service*, and 30 minutes for long-distance trains such as the *Empire Builder*.

Amtrak continuously tracks causes of delay for its routes. A 2008 United States Department of Transportation (USDOT) Office of the Inspector General report identifies causes of delay consistent to those identified by Amtrak. One category identified by Amtrak for causes of delay is delays caused by host railroads. This includes problems with the dispatching of trains by the host railroad; speed restrictions and slow orders, which can occur if there is track maintenance going on; train interference (delays caused by freight or commuter train movements); problems with track and signals; etc. Another delay category is Amtrak-caused delays, which can include “passenger-related delays” (delays related to assisting passengers such as holding a connecting train for passengers arriving on a late train), equipment breakdowns, etc. In addition to delay causes in these categories, insufficient track capacity

Map 6-1: Wisconsin Amtrak intercity passenger rail and Thruway bus service.



- Amtrak Hiawatha Service facts**
- Service frequency: Seven daily round-trips (six on Sundays)
 - Travel time: 1 hour, 29 minutes
 - Ticket cost: \$24 one-way (base fare)
 - Stops/stations: Chicago Union Station; Glenview, IL; Sturtevant, WI; Milwaukee Airport Rail Station; Milwaukee Intermodal Station

and external factors beyond the host railroads' control are identified by the 2008 U.S. DOT report as causes of delay.

Delays can increase the operating costs of passenger rail (labor and fuel costs) and negatively impact ticket revenues. The Amtrak *Hiawatha Service* enjoys relatively good on-time performance in large part due to the sound dispatching and maintenance practices of the host railroads: Canadian Pacific Railway, Metra and Amtrak.

One measure of financial performance is the cost recovery ratio, commonly referred to as farebox recovery ratio in the context of public transit. The cost recovery ratio is the percentage of operating costs covered by revenues such as ticket and food service revenues.

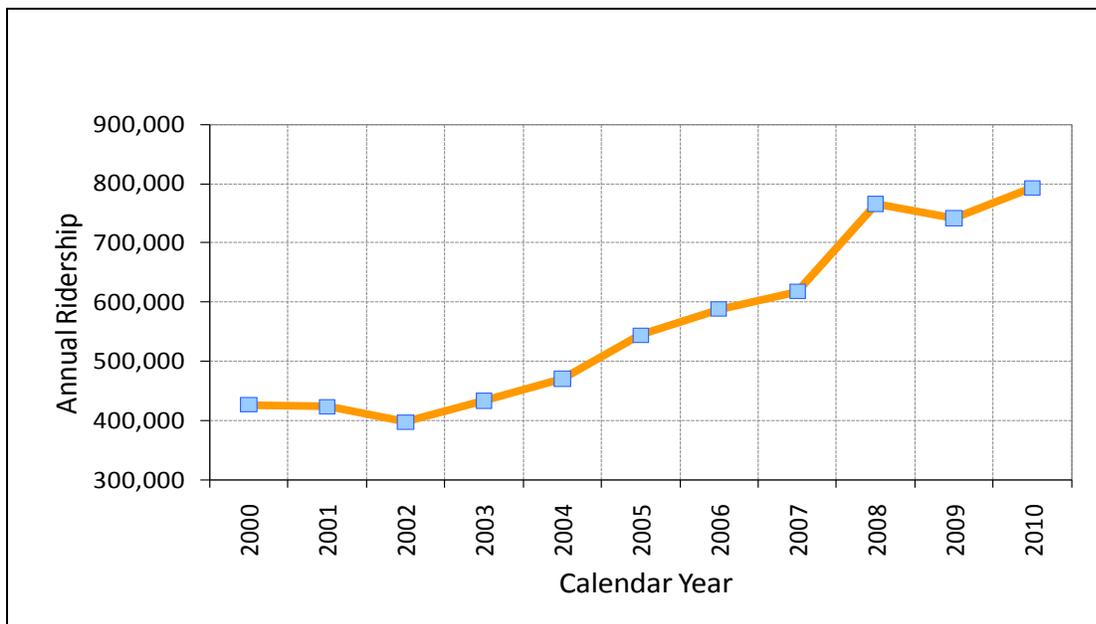
Amtrak Hiawatha Service: Chicago-Milwaukee

WisDOT and the Illinois Department of Transportation provide funding assistance for the *Hiawatha Service* operations. The following sections detail the *Hiawatha Service* ridership, on-time performance and farebox recovery.

Ridership

During the ten-year period from 2000 to 2010, *Hiawatha Service* ridership increased 86 percent (Figure 6-1). A slight decrease in ridership from 2008 to 2009 coincides with the economic recession and a decline in ridership across the Amtrak system nationwide. Ridership in 2010 was 792,848, the highest calendar year ridership on record. In recent years, many trains have been filled to capacity, a situation that required the addition of extra cars. Despite the increase in capacity, some trains continue to be standing room only as of 2010.

Figure 6-1 Amtrak *Hiawatha Service* annual ridership to and from Wisconsin stations, 2000 – 2010



Additional detail regarding ridership and factors such as increased train frequencies and gas prices can be found in Appendix 6-C.

On-time performance

The *Hiawatha Service* has one of the best on-time performance rates of any Amtrak service. However, WisDOT continually seeks to improve the on-time performance of the Amtrak *Hiawatha Service*, with a goal of 95 percent on-time. Between 2001 and 2010, on-time performance ranged from 87 percent to 95 percent. Amtrak defines on-time as arriving within 15 minutes of the scheduled arrival time for corridor services.

In June of 2010, Amtrak identified the primary causes of delay for the *Hiawatha Service* as:

- Train interference: 43.2 percent
 - 66.1 percent occurred on Metra
 - 29.2 percent occurred on CP Rail
 - 4.7 percent occurred on Amtrak-owned property
- Track and signals: 25 percent
 - 84.8 percent occurred on Metra
 - 14.7 percent occurred on CP Rail
 - less than half a percent occurred on Amtrak
- Operational: 9 percent
 - 53.7 percent occurred on Amtrak
 - 38.5 percent occurred on CP Rail
 - 7.8 percent occurred on Metra

***Hiawatha Service* on-board survey results**

In 2011, WisDOT and the Illinois Department of Transportation conducted on-board surveys to collect data that could be used to provide more information when planning service improvements, improve marketing, and support general WisDOT and Illinois planning activities. Over 2,000 surveys were collected. Some of the key findings were:

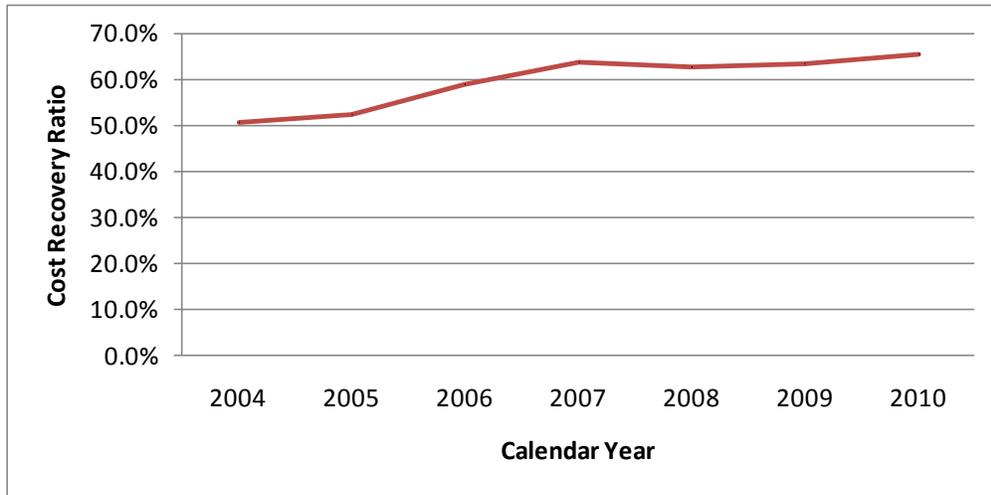
- 81 percent of respondents indicated that avoiding traffic was an important factor in deciding to use the *Hiawatha Service*
- 20 percent of weekday trips were for daily commuting
- 46 percent of weekend trips were for visiting family and friends
- 91 percent of riders had one or more vehicles at home (average vehicles/household = 1.9)
- Nearly 70 percent of respondents indicated they would drive if *Hiawatha Service* were not available
- Most weekday and weekend riders made less than one trip a month

Operational delays included delays related to late arrival of departing train, movement of train for servicing and crew-related delays.

Cost recovery ratio

The cost recovery ratio is the percent of operating costs covered by revenues. Increased ridership has resulted in a greater percentage of operating costs being covered by ticket revenues (Figure 6-2). WisDOT and Amtrak continue to work to improve the cost recovery ratio.

Figure 6-2: Amtrak *Hiawatha Service* cost recovery ratio 2004 - 2010



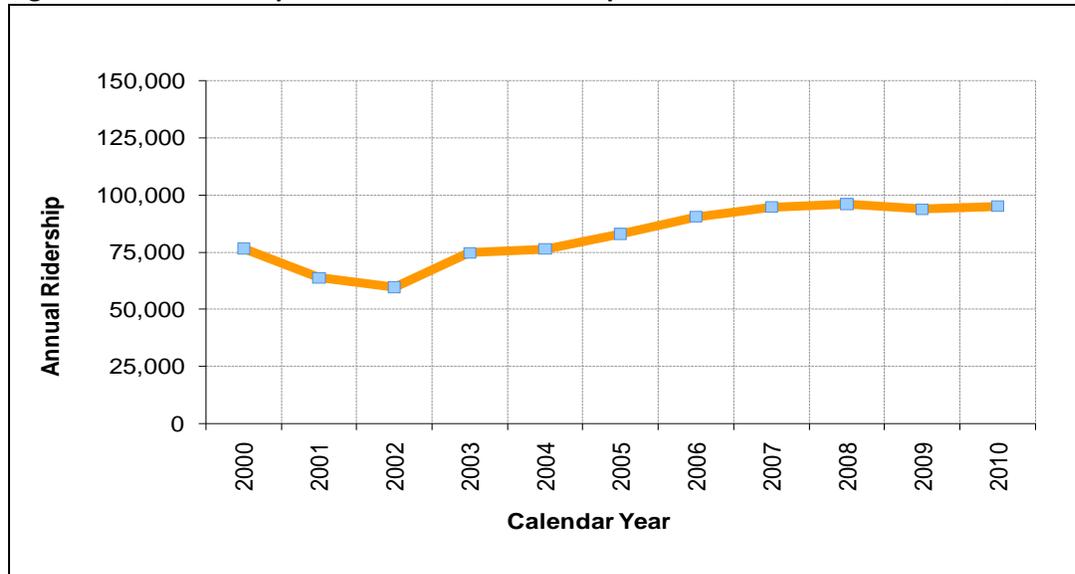
Empire Builder: Chicago-Seattle/Portland

The *Empire Builder* is Amtrak’s most popular long-distance train. It provides one daily round-trip between Chicago, Milwaukee, Minneapolis/St. Paul and Seattle/Portland. Amtrak provides the *Empire Builder* service as part of its national network, without any financial support from any state.

Ridership

Since 2002, the *Empire Builder* has experienced growing ridership (Figure 6-3). In 2010, *Empire Builder* ridership to and from Wisconsin stations was more than 95,000. This represents a 16 percent increase during the five-year period from 2005 to 2010. In 2010, *Empire Builder* ridership was 1.3 percent above 2009.

Figure 6-3: Amtrak *Empire Builder* annual ridership to and from Wisconsin stations, 2000 to 2010



Over 70% of *Empire Builder* passengers boarding or alighting at Wisconsin stations in 2010 had an origin or destination within the Chicago to Minneapolis/St. Paul segment of the *Empire Builder* route. This indicates that even with the train's low frequency (single round-trip per day) and longer travel time (compared to flying or driving in good weather and traffic conditions); Wisconsin travelers are using the *Empire Builder* more for regional transportation needs than long-distance travel needs.

The *Empire Builder* is a valued component of Wisconsin's transportation system, providing regional transportation in the Chicago-Minneapolis/St. Paul corridor. The train faces challenges with on-time performance on its eastbound runs due to the distance and number of host railroads each train must traverse between Seattle/Portland and Minneapolis/St. Paul. The *Empire Builder* is somewhat limited in its ability to meet the demand for convenient regional corridor service between Chicago, Milwaukee and Minneapolis/St. Paul due to its limited schedule and longer travel times.

On-time performance

For long-distance trains such as the *Empire Builder*, on-time is defined as arriving within 30 minutes of scheduled arrival time. The *Empire Builder* has one of the better on-time performance rates (percent of trains arriving on-time) of Amtrak's long-distance trains. Between May 2009 and May 2010, its on-time performance was 81.3 percent, higher than the 2009 average Amtrak long-distance train on-time performance of 75.5 percent.¹ Generally, long-distance trains have lower on-time performance rates than most short-distance corridor routes such as the *Hiawatha Service*. The distance and multiple host railroads that the long-distance trains must traverse create more potential for delays.

Amtrak Thruway bus routes

Amtrak Thruway bus services are scheduled intercity bus services that connect Amtrak stations with other communities across the state that are not directly served by passenger trains. Amtrak designates these routes as Thruway routes once interlining agreements are established. Interlining agreements:

- Allow riders to connect from bus to rail or vice versa to complete a trip
- Provide through-ticketing (one ticket for an entire trip that involves both the rail and the bus connection to the final destination) when purchased through Amtrak
- Allow coordinated scheduling between bus and train arrivals and departures
- Ensure that the bus schedule is included on Amtrak's system schedules
- Provide on-line ticketing and trip planners

¹ Amtrak.com. Routes - Historical On-time Performance.

In 2010, Amtrak had four Thruway bus routes in Wisconsin (Map 6-1). These routes provide connections with the *Hiawatha Service* and the *Empire Builder* as well as all Amtrak trains serving Chicago. Residents in northwestern Wisconsin have access to an Amtrak Thruway service between Duluth and Minneapolis/St. Paul. While no portion of the route is operated in Wisconsin, the state's residents can access the service in Duluth.

Amtrak's Thruway service represents an intermodal connection that supports the success of both the bus route and the rail service. These intermodal connections are critical in extending the mobility benefits of intercity passenger rail to Wisconsin residents who do not live near Amtrak stations.

Wisconsin passenger rail stations

Eight passenger rail stations are located in Wisconsin (Map 6-1). These stations vary in the type of facilities and services provided, and in their physical condition. Three of these are new station facilities: Milwaukee Intermodal Station, Milwaukee Airport Rail Station and the Sturtevant station. The Milwaukee Airport Rail Station is one of only four rail stations at airports in the nation.

As part of the development of the *Wisconsin Rail Plan 2030*, WisDOT completed a station inventory that documents station ridership, available intermodal connections, parking and physical condition of the station, and accessibility (Appendix 6-D). The station inventory highlights needs and challenges at the current passenger rail stations, and will help guide station improvements and investment in the future. Table 6-1 presents a summary of the findings of the inventory.

Table 6-1: Passenger rail station summary profile

Station	2010 station on/off*	Ticketing: Agent and/or Quik-Trak machine	Parking (number of spaces)	Intercity Bus in community**	Public Transit in Community**	Accessible (ADA compliance)***	Owner
Chicago, IL	803,512*	Agent and Quik-Trak	1,000	Yes	Bus/ rail	Yes	Amtrak
Glenview, IL	66,700*	Agent and Quik-Trak	Shared parking with Metra	No	Bus/ rail	Yes	Metra
Sturtevant, WI	70,601	Quik-Trak	169	No	Bus	Yes	Village of Sturtevant
Milwaukee, WI – Airport	157,152	Quik-Trak	278	Yes	Bus	Yes	Wisconsin/ CP Rail / Milwaukee County
Milwaukee, WI	596,906*	Agent and Quik-Trak	281	Yes	Bus	No	Wisconsin/ CP Rail
Columbus, WI	17,659	Agent	30	Yes	No	No	CP Rail
Portage, WI	7,322	None	Shared parking with CP	Yes	Shared-Ride Taxi	No	CP Rail
Wisconsin Dells, WI	13,981	None	25	Yes	No. Private taxi available	No	Wisconsin Dells / CP Rail
Tomah, WI	11,035	None	15	Yes	Shared-Ride Taxi	No	CP Rail
La Crosse, WI	30,395	Agent	100	Yes	Bus	No	La Crosse Depot LLC / CP Rail
Winona, MN	24,159	Agent	20	Yes	Bus	No	CP Rail
Red Wing, MN	10,813	None	25	Yes	Bus	No	Red Wing Property Conservation Fund / CP Rail
Minneapolis / St. Paul, MN (Midway Station)	123,371	Agent and Quik-Trak	200	Yes	Bus/ rail	No	Amtrak

* Total *Hiawatha Service* and *Empire Builder* ridership

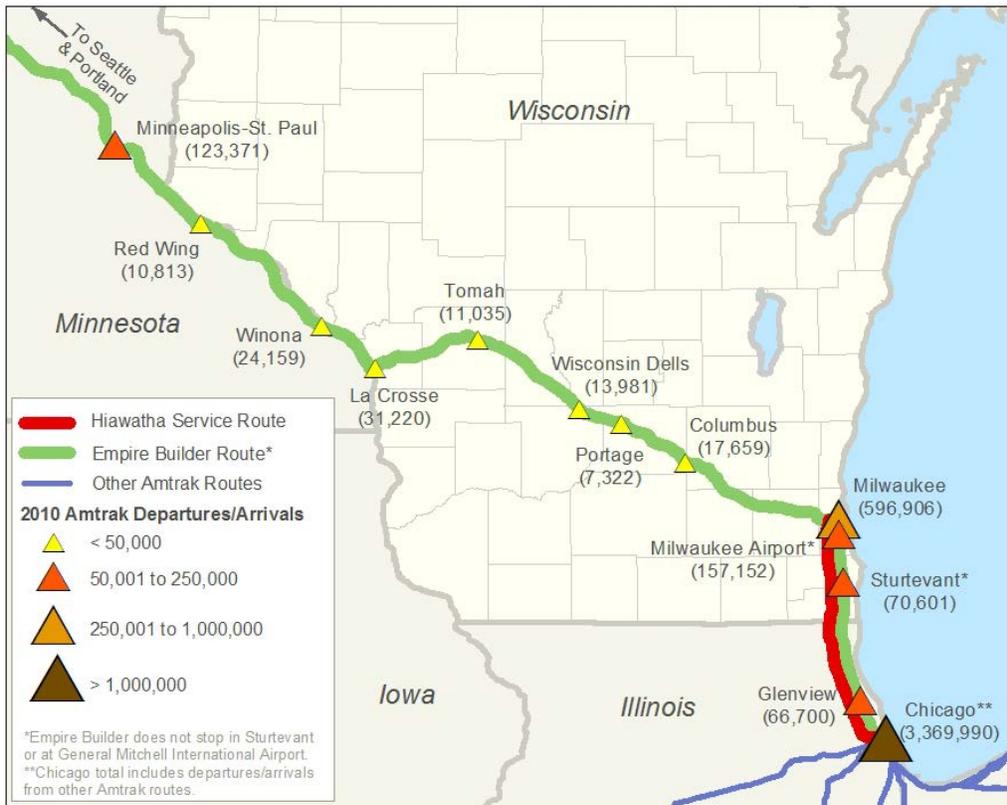
**Mode exists in the community, but does not necessarily serve the station directly (see Appendix 6-D for more detail)

*** ADA-compliant platforms (meets standards for construction of new platforms) and building as of 2010

Station ridership can also be seen in Map 6-2. The Milwaukee Intermodal Station has high ridership relative to other stations in the Amtrak system. After Chicago, Milwaukee is the second-busiest station in the Midwest, and the nineteenth-busiest station nationwide.²

² www.Amtrak.com. Inside Amtrak. Amtrak Information and Facts. National Fact Sheet.

Map 6-2: Wisconsin passenger rail station ridership and passenger rail



Roles in Planning and Implementation of Intercity Passenger Rail Service

Federal role

For many years, the federal government’s role related to intercity passenger rail was primarily safety and oversight, and funding of Amtrak. In its safety and oversight role, the Federal Railroad Administration (FRA) issues and enforces regulations regarding infrastructure and equipment, and oversees compliance and conducts inspections. This includes setting passenger rail equipment safety standards. The FRA implements U.S. DOT environmental policies and enforces environmental laws and regulations related to railroads. The FRA also enforces civil rights and accessibility regulations, including ADA compliance (coach cars and stations). This work also includes oversight of implementation of federal regulation and policy by intercity passenger rail funding grantees.

Beginning in 2008 and carrying forward to 2010, the federal government placed a high priority on the improvement of the country’s intercity rail passenger service network as an important future mode of passenger transportation and a source of economic stimulus. This high priority has resulted in several actions:

- Increased funding for states through the passage of the Passenger Rail Investment and Improvement Act and the American Recovery and Reinvestment Act
- Development of a vision for passenger rail and creation of a national rail plan
- Development of a process for implementing intercity passenger rail corridors with federal funds

Increased funding for states

Since the creation of Amtrak in 1970, the federal government has provided funding to support Amtrak’s passenger rail service. The FRA administers grants to Amtrak for both operations and capital improvements.

Two pieces of legislation – the Passenger Rail Investment and Improvement Act of 2008 (PRIIA) and the American Recovery and Reinvestment Act of 2009 (ARRA) – demonstrated the federal government’s support of intercity passenger rail. PRIIA authorized three new federal intercity passenger rail capital programs: Intercity Passenger Rail Service Corridor Capital Assistance, High Speed Rail Corridor Development, and Congestion Relief. ARRA provided \$8 billion for intercity passenger rail funding through the PRIIA-authorized programs. For more information on federal funding sources for intercity passenger rail, refer to Chapter 10: Funding Wisconsin’s Rail System Investments.

Developing a vision for passenger rail and creating a national rail plan

As part of implementing the Passenger Rail Investment and Improvement Act and the American Recovery and Reinvestment Act, the FRA developed the *Vision for High-Speed Rail in America: High-Speed Rail Strategic Plan*. The plan proposed “an efficient, high-speed passenger rail network of 100- to 600-mile intercity corridors that connect communities across America” (Map 6-3).

To help achieve the vision, the FRA is conducting national rail planning activities. This includes:

- Addressing freight, passenger and commuter rail issues
- Incorporating all state rail plans
- Guiding intercity passenger rail investment decisions

Map 6-3: Federal Railroad Administration’s vision for high-speed rail in America

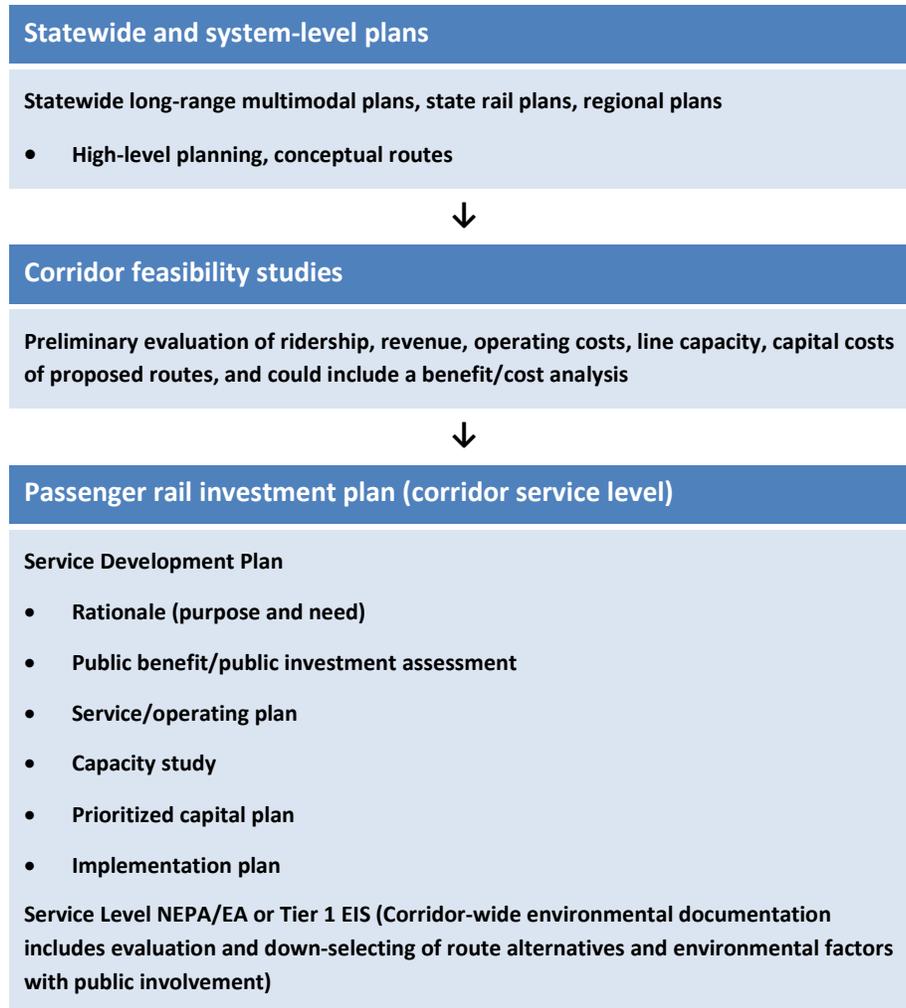


Developing a process for implementing intercity passenger rail corridors with federal funding

Implementing new passenger rail corridors involves a detailed multi-step process. The federal government is developing and refining this process for states for the implementation of intercity passenger rail service using PRIIA-authorized federal funding. Figure 6-4 outlines a typical planning process for new passenger rail service, from conceptualization to implementation. As the process is still

evolving and being further defined by the FRA, Figure 6-4 is intended to illustrate what the process is anticipated to include as of this writing. Some of the steps may be combined.

Figure 6-4: Anticipated planning and implementation process for intercity passenger rail projects receiving federal funds³



³ As of this writing, the planning process is still evolving and being further refined by FRA. The process illustrated is based on the latest FRA guidance and WisDOT experience in intercity passenger rail planning and implementation.



Project-level NEPA study and preliminary engineering

Project-level environmental documentation (categorical exclusion, environmental assessment, or environmental impact statement) resulting in a finding from the FRA

Preliminary Engineering

Stakeholder Agreements



Implementation

Final Design

Stakeholder Agreements

Construction

The implementation process is influenced by the fact that many of the proposed new intercity passenger rail routes nationwide will operate on freight corridors. Implementing new routes on freight corridors requires negotiation with Amtrak and the host freight railroads throughout the process. In addition, adding passenger trains to a freight corridor, even if the track is in excellent condition, could require capital investment to increase track capacity. A capacity analysis and negotiations with the host railroad determines what infrastructure improvements are needed.

Regional role

Wisconsin has participated in three regional groups that facilitate and plan for improved intercity passenger rail service:

- Midwest Regional Rail Initiative
- Midwest High Speed Rail Steering Group
- Midwest Interstate Passenger Rail Coalition

The Midwest Regional Rail Initiative

Established in 1996, the Midwest Regional Rail Initiative (MWRRI) is a cooperative, multi-agency, multi-state effort. The states of Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio and Wisconsin, in partnership with the Federal Railroad Administration and Amtrak, evaluated the potential for improved intercity passenger rail in the Midwest. To date, the effort has resulted in a business plan that defines the way the Midwest passenger rail system should be implemented. Working together, the states proposed a regional intercity passenger rail system – the Midwest Regional Rail System (MWRRS) (Map 6-4). The phased implementation of the Wisconsin routes on this system can be seen in “Intercity Passenger Rail Recommendations” on page 6-34.

Map 6-4: Proposed Midwest Regional Rail System (from 2004 Midwest Regional Rail Initiative Business Plan Executive Report). Note: Actual route alignments and stations will be determined during environmental and engineering studies which will include coordination with local units of government and public involvement opportunities.



The system will:

- Improve existing rail corridors to accommodate both expanded passenger rail service and freight trains
- Use Chicago as the network hub
- Use modern train equipment to provide improved reliability, speed and passenger comfort
- Provide frequent and reliable intercity passenger rail service
- Operate at speeds of up to 110 miles per hour
- Include new or remodeled stations
- Use a coordinated intercity/feeder bus service to connect to additional communities
- Link, wherever possible, with air, transit, taxi service, bicycle and pedestrian, and private auto modes

Assuming federal and state funding is secured, the proposed 3,000-mile system is planned to be implemented in phases.

The Midwest Regional Rail Initiative activities include coordinated planning and technical work to advance the Midwest Regional Rail System to implementation. Numerous studies related to the proposed passenger rail system have been completed. Some of these include ridership estimates, capital cost estimates, an economic impact study and benefit-cost analysis, study of equipment issues including interoperable train types that can operate on all corridors, development of preliminary environmental scopes and purpose and need a service development plan. The Midwest Regional Rail Initiative states continue to work together to develop capital and operating cost-sharing strategies.

Midwest High-Speed Rail Steering Group

The states of Wisconsin, Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri and Ohio, and the mayor of Chicago formed the Midwest High-Speed Rail Steering Group in 2009 to coordinate the region's intercity passenger rail interests. The group's priorities were to:

- Promote regional coordination in individual applications for federal funding opportunities
- Communicate the Midwest strategy to the federal government
- Support economic development within the region

The Midwest Regional Rail Initiative provided technical support to the Midwest High-Speed Rail Steering Group and had a representative on this group.

Midwest Interstate Passenger Rail Commission

Established in 2000 by state leaders to advocate for improvements to intercity rail service, the key goals of the Midwest Interstate Passenger Rail Commission are to promote, coordinate and support improvements to Midwest regional passenger rail service. The commission:

- Promotes improvements and long-range planning
- Coordinates interaction between state officials, other local and federal public officials, and the private sector
- Supports current service implementation and planning efforts being conducted through Midwest state departments of transportation

Current commission members include Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio and Wisconsin. Membership requires enactment of the compact language into law by each state.

Wisconsin's role in planning and implementing intercity passenger rail

Since 1989, Wisconsin has played an active role in supporting improvements to intercity passenger rail service. The following sections describe WisDOT's role in planning, coordination, operating assistance, infrastructure improvements, and implementation.

Planning

WisDOT plays a key role in planning intercity passenger rail service in the state. WisDOT began studying intercity passenger rail service in the 1970s, and has undertaken a number of related studies and

planning efforts since 1990. Previous studies and reports for intercity passenger rail over the past 20 years have led to the current planned routes and services. Table 6-2 documents the more recent studies.

Table 6-2: Listing of Wisconsin-related passenger rail studies

Year	Studies
1991	<ul style="list-style-type: none"> • Tri-State High Speed Rail Study
1992	<ul style="list-style-type: none"> • The Amtrak Service Demonstration Project Year Two Report
1993	<ul style="list-style-type: none"> • Report to the Governor Concerning Restoration of Rail Passenger Service to Green Bay and Madison
1994	<ul style="list-style-type: none"> • Translinks 21 (Wisconsin’s first statewide 20-year multimodal plan)
1997	<ul style="list-style-type: none"> • Chicago-Milwaukee Rail Corridor Study
1998	<ul style="list-style-type: none"> • Midwest Regional Rail Initiative Phase 1 and 2 Studies
2000	<ul style="list-style-type: none"> • Tri-State II Study
2001	<ul style="list-style-type: none"> • The Governor’s Blue Ribbon Task Force on Passenger Rail Service • Chicago-Milwaukee-Green Bay Corridor study and Milwaukee-Green Bay Passenger Rail Alternatives Analysis • Midwest Regional Rail Initiative Phase 3 Study
2002	<ul style="list-style-type: none"> • Eau Claire & Janesville Corridors Feasibility Study and Intercity Rail Modal Diversion Study • Madison-Milwaukee Passenger Rail Corridor Study: Environmental Assessment/Preliminary Engineering Study
2004	<ul style="list-style-type: none"> • Midwest Regional Rail Initiative Phases 4 and 5 Study (updated Midwest Regional Rail Initiative Business Plan) • Wisconsin Rail Issues and Opportunities Report
2008	<ul style="list-style-type: none"> • Midwest Regional Rail Initiative Phase 6 Study (Economic Impact Analysis, Preliminary Environmental Impact Statement Scope of Work and Cost Estimate)
2009	<ul style="list-style-type: none"> • <i>Connections 2030</i> (Wisconsin’s current statewide 20-year multimodal plan)
2010	<ul style="list-style-type: none"> • <i>Minnesota Comprehensive Statewide Freight and Passenger Rail Plan</i> (recommends several passenger rail corridors that include Wisconsin (Milwaukee-Minneapolis/St. Paul, Duluth/Superior-Minneapolis/St. Paul, and Eau Claire-Minneapolis/St. Paul)
2010	<ul style="list-style-type: none"> • Midwest Regional Rail Initiative Phase 7 Study (Updated Capital Costs, data gathering for future route alternatives analysis as part of a Passenger Rail Investment Plan, website development, analysis of equipment options, PTC issues, etc.) • Madison-Milwaukee Environmental Assessment Re-evaluation and Final Engineering Studies

These studies included the following analyses:

- Performance assessments of existing Amtrak service
- Travel market and feasibility studies (including ridership and revenue forecasts, operating cost estimates and capital cost estimates)
- Route alternative studies
- Examination of technology options and speeds

- Analysis of economic benefits
- Development of detailed business plans (including detailed analysis of proposed operations, ridership forecasts, revenue forecasts, operating costs, capital costs, equipment, implementation plans, financing and governance)
- Environmental studies
- Preliminary engineering studies

Connections 2030, Wisconsin’s statewide long-range multi-modal plan adopted in 2009, built off many of the studies listed above and developed policy recommendations for intercity passenger rail as part of a multi-modal transportation system for the state.

Table 6-3 identifies the passenger rail projects or studies in progress in Wisconsin and in neighboring states where the corridor passes through Wisconsin.

Table 6-3: Projects/studies ongoing

Project or Study	Lead agency	Estimated completion
Chicago-Milwaukee improvements - final design and construction of crossovers and a platform extension at Milwaukee Airport Rail Station	Wisconsin DOT	2013
Chicago-Milwaukee Service Level NEPA study – environmental study to increase train frequencies between Milwaukee and Chicago	Wisconsin DOT	2014
Chicago-Minneapolis/St. Paul Second Empire Builder Frequency Feasibility Study and Capacity Simulation	Minnesota DOT	2013
Milwaukee-Twin Cities Service Level NEPA/ Tier 1 environmental study	Minnesota DOT	2014
Northern Lights Express Preliminary Engineering/NEPA study – study to advance high-speed rail service between Minneapolis/St. Paul and Duluth	Minnesota DOT / Northern Lights Express Alliance	2014

Coordination

WisDOT’s intercity passenger rail planning activities require the department to coordinate with many different stakeholders. Examples include working with:

- Communities regarding environmental analyses, design and station issues
- Host freight railroads regarding existing passenger service issues, potential improvements and other activities
- Amtrak regarding existing service issues, planning future service improvements and other issues
- Metra regarding track-sharing issues for the *Hiawatha Service*
- Neighboring states for consistent and connected passenger rail service

In addition Wisconsin undertakes joint planning activities with seven other Midwest states and Amtrak as part of the Midwest Regional Rail Initiative, described in the previous section.

Operating assistance

Since 1989, WisDOT and the Illinois Department of Transportation have provided funding assistance to cover operating costs of the *Hiawatha Service*. WisDOT also funds a program to market the *Hiawatha Service* in addition to the marketing provided by Amtrak. Neither WisDOT nor the Illinois Department of Transportation operates the service. Instead, the departments contract with Amtrak.

Station improvements

Wisconsin played an important role in developing and funding the recently-remodeled Milwaukee Intermodal Station and the Milwaukee Airport Rail Station.

Wisconsin owns the Milwaukee Intermodal Station and has implemented plans to create an improved multimodal facility. The Milwaukee Intermodal Station was built using a public-private partnership with the state of Wisconsin, the city of Milwaukee and a private developer. In 2010, WisDOT began final design of a new train shed and platforms.

The Milwaukee Airport Rail Station was developed by the state in partnership with Milwaukee County. The project took advantage of an opportunity to create an intermodal connection between air and rail on an existing rail service. The Milwaukee Airport Rail Station is one of only four airport rail stations in the nation. While the station building is owned by the state, the platform and track are located on land owned by Canadian Pacific Railway, with the parking lot on land owned by Milwaukee County.

The Milwaukee Intermodal Station and the Milwaukee Airport Rail Station buildings are the only stations owned by the State of Wisconsin.

WisDOT also provided funding assistance for a new station in Sturtevant. Developed by the village of Sturtevant, the station opened in 2006.

Corridor improvements

In recent years, WisDOT worked with many stakeholders to make numerous infrastructure improvements to Wisconsin's intercity passenger rail service. These improvements helped improve travel time and reliability of existing service, and allowed for increased frequencies. Wisconsin has also taken actions along future intercity passenger rail corridors to advance new service projects toward implementation. These activities include:

- Adding one daily round-trip on the *Hiawatha Service*, resulting in a total of seven daily round-trips (2003)
- Constructing a new station at Milwaukee's General Mitchell International Airport (2005)
- Providing assistance to allow the village of Sturtevant to construct a new station to replace the community's previous facility (2006)
- Renovating the downtown Milwaukee station (2007)
- Making grade crossing improvements (ongoing)

- Implementing track improvements between Chicago and Milwaukee, including the installation by Canadian Pacific Railway of 17 miles of welded rail between Milwaukee and Kenosha to improve reliability and speed for the *Hiawatha Service* (2009)
- Adding cars to increase capacity of the Chicago-Milwaukee *Hiawatha Service* (2007 and 2009)

Implementing new passenger rail service

Wisconsin's role in implementing new passenger rail service includes planning, environmental work, applying for federal capital and planning grants, operating and capital funding and construction of state-owned infrastructure, as well as the purchase of passenger rail equipment. Examples of activities to specifically advance implementation of new service include:

- Purchasing the Watertown-Madison line (2003)
- Completing an Environmental Assessment and receiving Federal Railroad Administration approval for the Milwaukee-Madison intercity passenger rail segment of the Chicago-Milwaukee-Madison rail corridor (2004)
- Making grade crossing improvements (ongoing)
- Studying the capacity of the Chicago-Milwaukee-Madison route (2008-2010)
- Environmental study for the Chicago-Milwaukee corridor (ongoing)
- Improving the Milwaukee Intermodal Station train shed and platforms (ongoing)

Wisconsin successfully applied for several American Recovery and Reinvestment Act grants for intercity passenger rail projects. The grants include \$14 million for infrastructure improvements within the Chicago-Milwaukee corridor to improve reliability of existing and future services. The projects include new crossovers on the CP Rail C&M Subdivision at Truesdell and an extension of the platform at the Milwaukee Airport Rail Station. Minnesota was awarded a grant for the Milwaukee-Minneapolis/St. Paul environmental study (Service Level NEPA) to extend service from Milwaukee to Minneapolis/St. Paul.

Issues Impacting Intercity Passenger Rail

Pressures on Wisconsin's transportation system are expected to intensify over the next 20 years as the state faces growing highway and air traffic congestion, an aging population, rising fuel prices, and an increasing policy focus on climate change as it relates to transportation. This section identifies a series of issues related to intercity passenger rail:

- Increasing public demand for additional intercity passenger rail service
- Limitations of existing intercity passenger rail service in meeting transportation needs
- Safety on shared-use corridors
- Multi-state coordination in planning and implementing intercity passenger rail services
- Intercity passenger rail and commuter rail integration and coordination
- Freight rail accommodations and coordination
- Intercity passenger rail equipment needs
- Concerns regarding intercity passenger rail stations

- Intermodal connectivity
- Operational speed of new intercity passenger rail services
- Governance of regional intercity passenger rail systems
- Preservation of rail lines for potential future rail use

Increasing public demand for additional intercity passenger rail service

Like many states, Wisconsin would benefit from having additional intercity travel options for the travelling public; an issue that has come to the forefront in recent years with a growing elderly population, increasing gas prices, and increasing road and air congestion. During the *Connections 2030* process, WisDOT received many comments from the public and stakeholders, most in support of additional passenger rail service. Of the approximately 1,200 comments received for *Connections 2030*, roughly 800 were passenger rail-related, the majority of which were in support of additional intercity passenger rail service.

The demand for intercity passenger rail is high along the planned Midwest Regional Rail System corridors, but also in other parts of the state. During the public outreach process for *Connections 2030*, interest was expressed for passenger rail service in the following areas or corridors:

- West Central Wisconsin (Eau Claire, Menomonie, Hudson)
- La Crosse area
- Green Bay/Appleton to Twin Cities via Stevens Point, Marshfield and Eau Claire
- Rhinelander and Wausau
- Rock County (Janesville, Beloit)
- Conventional service between Milwaukee and Green Bay
- Additional frequency between Chicago and Minneapolis/St. Paul via La Crosse (*Empire Builder* route)

During the outreach efforts for the *Wisconsin Rail Plan 2030*, the majority of comments continue to support the state's plans for intercity passenger rail and the identification of additional routes statewide, including those listed above. The *Wisconsin Rail Plan 2030* online questionnaire found that 66 percent of the survey respondents supported the current level or higher level of investment in intercity passenger rail.⁴ For additional detail on survey results and public input, refer to Chapter 2.

As mentioned previously, implementing new intercity passenger rail service is a multi-step and detailed process. Figure 6-4 on pages 6-14 and 6-15 illustrates a typical planning process for implementing new intercity passenger rail service. Adding intercity passenger rail service on shared-use corridors requires negotiations and agreements with the host freight railroads and Amtrak. Even in situations where the track is in excellent condition, infrastructure investment may be needed to increase track capacity to accommodate the passenger service.

⁴ *Wisconsin Rail Plan 2030* Online Questionnaire Summary

In determining whether to pursue future routes, some general high-level criteria may include:

- Population served and ridership potential
- Connections to major cities/destinations
- Connectivity to other existing rail routes
- Intermodal connections facilitated
- Economic impact
- Infrastructure needs to implement corridor
- Considering whether route would use shared-use (freight and passenger) on existing freight tracks
- New greenfield development
- Abandoned rights-of-way, or rails-to-trails conversion
- Track condition and capacity for shared-use corridors on existing freight lines

Additional corridor-specific factors would be considered in a corridor feasibility analysis and the route alternatives analysis.

Finally, there may be some instances where it is more cost effective to serve a community by implementing dedicated feeder bus service to connect to a nearby rail station rather than providing direct intercity passenger rail service. Feeder bus service offers an effective way of expanding passenger rail service to other parts of the state. It has been used successfully in other states such as California.

Limitations of existing intercity passenger rail service in meeting transportation needs

Amtrak ridership in Wisconsin has grown over the last decade. Even with the recent addition of two cars, the *Hiawatha Service* still experiences overcrowding on some trains. Likewise, the *Empire Builder* faces several limitations:

- Does not provide enough frequencies for a robust and viable transportation alternative for a wide range of travelers
- Experiences delays due to the length of the route
- Is not time-competitive with auto travel
- Limits the opportunity for advance reservations between Wisconsin destinations in order to retain space for longer distance travel

Other populous regions of the state such as Green Bay, the Fox Cities, Eau Claire, Madison and West Central Wisconsin do not have direct access to intercity passenger rail service. However, these areas are served by Amtrak Thruway bus service and other intercity bus services.

The Minnesota Department of Transportation is studying a potential route from Milwaukee to Minneapolis/St. Paul. The Green Bay/Fox Cities area is identified for intercity passenger rail service under the Midwest Regional Rail System.

By implementing components of the Midwest Regional Rail System as recommended in *Connections 2030* and *Wisconsin Rail Plan 2030*, WisDOT can address this issue. Access to improved intercity passenger rail services will be expanded further with implementation of new and improved intercity bus service and routes that connect to rail stations, as outlined in *Connections 2030*. In addition to these recommendations, WisDOT will increase public awareness of the benefits of using intercity passenger rail service, including opportunities to connect to rail service using intercity bus.

Safety on shared-use corridors

Safety is a key concern and is a priority in all federal and state initiatives. Implementation of new intercity passenger rail services will need to be integrated with existing freight and commuter rail services. To ensure that safety standards are met, three key elements must be addressed:

- Positive Train Control (PTC)
- Rail-highway crossings
- Equipment standards

Positive Train Control (PTC)

The Rail Safety Improvement Act of 2008 requires the implementation of Positive Train Control (PTC) systems on every main line carrying intercity or commuter rail in regular service. PTC is a system designed to prevent collisions between trains, over-speed derailments, incursions into track work zones, and movements through misaligned switches. These systems must be installed by December 31, 2015. While the installation of PTC will increase passenger, commuter and freight rail safety, it presents a financial challenge. Some freight railroads and commuter rail agencies have expressed concern about this financial challenge in light of the short implementation timeline.

Rail-highway crossings

Rail-highway crossings are another important safety consideration. Emerging intercity passenger rail, with speeds up to 110 miles per hour, will require additional crossing safety treatments, such as median barriers or quad gates, to minimize the possibility of motorists driving around gates. Crossings on federally designated “high-speed rail” corridors will be evaluated for additional warning device needs to increase safety.

Equipment standards

Another rail safety consideration is equipment standards. To date, U.S. rail passenger equipment safety standards have been designed to keep passengers and crew safe in a mixed operating environment with conventional freight equipment, which is very heavy. Future high-speed rail systems may use lighter-weight equipment to achieve performance efficiencies through reduced fuel use and faster train speeds. Current standards result in equipment design that is solely tasked with protecting passengers and crew from death or injury. These heavy car designs, while protecting passengers and crew, create additional operating costs through increased fuel use and can reduce acceleration and deceleration speeds, increasing schedule time. Changes in the standards are being considered that will utilize crash energy management techniques to provide the needed safety while allowing lighter-weight equipment. The

safety improvements from the implementation of PTC may provide an opportunity to revise the safety approach for high-speed and conventional commuter and intercity passenger rail operating in shared corridors.

WisDOT will continue to monitor these issues and will work with the federal government, other states and freight and passenger rail operators to implement guidance or regulations as needed.

Multi-state coordination in planning and implementing new intercity passenger rail services

As discussed throughout this chapter, Wisconsin is part of the Midwest Regional Rail Initiative, which is moving forward in implementing improved service on the Midwest Regional Rail System corridors. In addition, some states are moving forward with projects in other corridors not originally identified on the Midwest Regional Rail System. For example, Illinois and Iowa are exploring a new service between Chicago, Rockford and Dubuque (see Figure 6-5). Minnesota is exploring the resumption of service between Duluth and Minneapolis.

Figure 6-5: Additional passenger rail corridors being studied by neighboring states

Minneapolis/St. Paul – Eau Claire - Minnesota Department of Transportation

The Minnesota *State Rail Plan* identifies this route as conventional intercity passenger rail with speeds up to 79 miles per hour, and anticipates four daily round-trips. Further ridership studies will determine whether the route is considered intercity passenger rail or commuter rail.

Minneapolis – Duluth (via Superior, WI) – Minnesota Department of Transportation

Known as the *Northern Lights Express*, this planned route is identified in *Connections 2030* and the Minnesota *State Rail Plan*. The project will result in an intercity passenger rail service with speeds up to 110 miles per hour and four daily round-trips. Proposed stops are Minneapolis, Cambridge and Hinkley, Minnesota, Superior, Wisconsin and Duluth, Minnesota. The project has received federal and Minnesota state funding. An environmental assessment and preliminary engineering study began in 2010. WisDOT is currently a cooperating agency, providing technical assistance.

Chicago-Rockford-Dubuque – Illinois Department of Transportation

Illinois is studying and advancing to implementation a route between Chicago and Dubuque that offers one daily round-trip and stops in Chicago, Rockford, Freeport and Galena, Illinois and Dubuque, Iowa. Since the route does not have a stop or use any tracks in Wisconsin, WisDOT will not have direct involvement. However, the proposed stops are in close proximity to Wisconsin communities. For example, Beloit is approximately 19 miles from Rockford, Illinois; Platteville is approximately 22 miles from Dubuque, Iowa and 25 miles from Galena, Illinois; and Monroe is approximately 23 miles from Freeport, Illinois. In 2010, Illinois allocated state funding for construction and equipment. Illinois DOT expects new service to begin in 2015.

Intercity passenger rail corridors in the Midwest use Chicago as the system hub. The additional corridors proposed by the region's states build off this design. Successful implementation on other Midwest corridors and the introduction of new corridors will positively impact ridership of Wisconsin services

given the network efficiencies realized through the Chicago hub and the resulting connections available. This “hub effect” increases access to more destinations in the Midwest for Wisconsin passengers.

As planning and project implementation move forward, continued multi-state planning and coordination is needed to realize the full benefits of the Midwest Regional Rail System. In addition to the *Connections 2030* recommendations for implementing the Wisconsin component of the Midwest Regional Rail System, WisDOT will also:

- Continue planning work with the Midwest Regional Rail Initiative to advance a coordinated Midwest Regional Rail System
- Continue and enhance coordination with Midwest Regional Rail Initiative states
- Continue to assist neighboring states’ intercity passenger rail studies and projects

Intercity passenger rail and commuter rail integration and coordination

As new passenger rail service is implemented, it will need to be integrated with existing Amtrak operations, as well as existing and planned commuter rail services. For example, the proposed Chicago-Milwaukee-Minneapolis/St. Paul service will require integration with existing Amtrak *Empire Builder* service and Metra commuter rail service. It may also require integration with new commuter rail services such as those proposed in Madison Area Transportation Planning Board plans and Southeastern Wisconsin Regional Planning Commission plans, and proposed intercity passenger rail and/or commuter services in the Minneapolis/St. Paul region. Coordination with *the Northern Lights Express* (Minneapolis-Duluth) and the existing *Northstar* commuter rail service (Minneapolis-Big Lake) will also be required.

The current *Hiawatha Service* route shares track between Rondout and Union Station in Chicago with Metra’s Milwaukee District North line. Expansion of *Hiawatha Service* levels between Milwaukee and Chicago will need to be integrated with Metra’s Milwaukee District North line commuter service.

The term “integration” includes working with other operators to address track sharing and schedule issues, as well as ensuring coordinated schedules and common ticketing procedures. One aspect of integration is the provision of sufficient capacity on shared lines. A line capacity assessment will require an operations simulation involving all future traffic, including freight and passenger, to determine whether capacity exists or if additional infrastructure is needed to accommodate the traffic. A simulation could also help resolve capacity issues at terminals (the ability to accommodate the additional trains at the stations). Another aspect of integration is coordinating schedules among the various intercity passenger rail services and commuter rail services (with potentially different operators). This will be important to facilitate easy connections. A coordinated ticketing system between different operators and/or types of services is another component of convenient intermodal connections. This includes ticketing system and schedule coordination with intercity bus and other public transit modes.

Freight rail accommodations and coordination

As with commuter rail, intercity passenger rail systems must be coordinated with freight rail operations. The majority of track on which Wisconsin's proposed intercity passenger rail routes will operate is owned or operated by freight railroads. These include Canadian Pacific Railway, Union Pacific Railroad, Canadian National Railway and Wisconsin and Southern Railroad.

Future freight and passenger growth must be accommodated with minimal delays through appropriate track capacity improvements. Both the state and freight railroads work together to complete capacity analyses and ensure that freight railroad service is not negatively impacted by the expansion of passenger rail service. The state, or other sponsoring agency of the new passenger service, pays a share of the capacity improvements related to increased passenger service. This could include items such as sections of double track, new passenger sidings, and signal system improvements. A freight railroad may be willing to contribute for capacity improvements to the extent that the improvements provide opportunities for increased revenues, or reduced operating costs, or both. In most cases, the necessary improvements to accommodate passenger rail are expected to enhance freight service.

Amtrak mostly operates over freight railroads using its own equipment. The Rail Passenger Service Act of 1970 gives Amtrak statutory authority to operate intercity passenger service on privately-owned railroad lines in the United States, subject to negotiation for required capacity improvements with line owners. The act states that Amtrak trains should be given priority over freight trains.

Ultimately, implementing new passenger rail services will require agreements between service sponsors, the hosting freight railroads and the passenger rail operator. The provision for new capacity enhancements will be part of the agreements.

The *Wisconsin Rail Plan 2030* identifies several actions WisDOT will take:

- Continue to partner with freight railroads when planning and implementing intercity passenger rail service
- Continue to work with freight railroads on capacity analyses and cost sharing
- Ensure agreements are established between the sponsoring agency for any new passenger service and freight railroads

Intercity passenger rail equipment needs

Amtrak faces an equipment shortage nationwide. As more states add passenger rail service, Amtrak does not have enough functional equipment to accommodate the service growth. In addition, some of Amtrak's fleet is aging, deteriorating and outdated, which decreases the quality of service, causes delays, and increases operating and maintenance costs. To respond to these issues, Amtrak developed a new fleet plan in 2009, and created the Next Generation Equipment Committee to develop

specifications for new equipment. Equipment needs for improved state-supported corridor services are being addressed by the Next Generation Equipment Committee.

Amtrak released the *Amtrak Fleet Plan*, which describes the agency's plan to replace its current fleet over the next 14 years. The plan aims to increase the availability of railcars for existing services, reduce the age of the fleet, and increase capacity on equipment for existing services. To date, funding has not been secured to implement the entire plan. However, Amtrak signed a contract in 2010 to purchase replacement equipment for its long-distance trains (which was one recommendation of the plan) with its own funds.

Section 305 of the Passenger Rail Investment and Improvement Act required Amtrak to create the Next Generation Equipment Committee composed of representatives of Amtrak, FRA, freight railroads, states, equipment manufacturers and other passenger operators to design and develop specifications for a standardized interoperable pool of next generation passenger cars and locomotives for state/regional corridors. The specifications will be used by Amtrak and the states implementing new service. The standardized corridor equipment would share design elements to lower design, acquisition and maintenance costs. A standardized equipment design would also facilitate larger orders with lower unit costs, benefiting both the states and Amtrak.

Wisconsin participates on the Section 305 committee described above and is working with the Midwest Regional Rail Initiative states on equipment recommendations.

New equipment, whether purchased by Amtrak or Wisconsin, provides several benefits, including:

- Reduced maintenance costs through more reliable and easier-to-maintain systems
- Reduced fuel consumption and better performance due to lighter-weight equipment
- Improved reliability from fewer breakdowns
- Increased passenger amenities such as wireless Internet access and improved comfort

As part of the rail plan, WisDOT will continue to work with Amtrak and the Midwest Regional Rail Initiative states to identify equipment needs.

Existing intercity passenger rail stations needs

Train stations are critical components of Wisconsin's intercity passenger rail system. Stations should:

- Act as gateways to both communities and the intercity passenger rail system
- Bring multiple modes of transportation together, allowing passengers to make seamless connections between trains, planes, intercity buses, local transit, bicycle and pedestrian facilities, and taxi service
- Act as a catalyst for community economic development

While the Chicago-Milwaukee corridor served by the *Hiawatha Service* has a number of new, modern stations that meet American with Disabilities Act standards, stations elsewhere in Wisconsin do not provide the same level of facilities. The existing station inventory (Appendix 6-D) revealed that some

stations lack amenities, while others do not meet some American with Disabilities Act standards, and still others may present safety and security concerns. Specifically, many stations were lacking one or more of the following:

- Platforms meeting Americans with Disabilities Act standards (including platform height and width)
- Sufficient platform length to accommodate the length of existing trains⁵
- Public address systems
- Passenger information systems (including electronic information screens with real-time information)
- Comfortable, heated and air-conditioned waiting rooms and modern restrooms
- Up-to-date signage
- Ticketing facilities
- Connections and/or coordination with existing intercity bus service
- Adequate parking facilities, including bicycle parking
- Lighting
- Fencing
- Overhead or underground access to platforms

The station inventory also revealed that for some stations, ownership and management can be complex, with the tracks, platforms, station building and/or parking lot all owned by different entities. In addition, the station may be operated and maintained by yet another entity.

Addressing these station shortcomings is critical to ensuring all potential users can access stations safely, comfortably and conveniently, making passenger rail travel attractive to more individuals and positively impacting the travel experience of current riders. As stated under the *Intercity Passenger Rail Recommendations* section, WisDOT will propose ongoing funding for the state's Rail Station Capital Assistance Program. The program will be used to:

- Upgrade existing stations
- Build new stations
- Ensure that all stations are accessible to people with disabilities
- Encourage connections with other transportation modes such as airplanes, intercity bus, and local transit and taxi service

Intermodal connectivity

Existing Wisconsin stations vary in the amount and coordination of connections with other modes of transportation at the station. New or expanded passenger rail service and new stations, along with planned improvements in other modes such as intercity bus and transit, provide the opportunity to increase and improve intermodal connections.

⁵ At some stations, the train is required to make two or more stops to load and unload passengers because platforms are too short. In some cases, crossing gates are down during the duration of these multiple stops causing increased wait times for vehicles.

Most of Wisconsin's existing Amtrak stations generally have excellent road access. Some stations lack sufficient parking spaces to meet growing demand. In addition, some stations would benefit from improved pedestrian access and bicycle access, including bicycle parking facilities.

Connectivity to local transit varies by station. While the majority of station communities have some form of public transit, Wisconsin Dells and Columbus stations are not served by local public transit (although Wisconsin Dells has private taxi service available). In some cases, intermodal connections could be improved if more transit served a station. For example, as of 2010, one Milwaukee County Transit System bus route directly serves the Milwaukee Intermodal Station. Planning efforts are underway for a streetcar and new bus routes to serve the station, which will improve the local transit connection.

Intercity bus connections also vary across the state. Columbus and Portage have intercity bus service at their Amtrak stations. The Milwaukee Intermodal Station is served by Amtrak and is a hub for intercity bus services. In some cases, intercity bus service may serve the community but not have stops at the rail station. For instance, while La Crosse, Tomah and Wisconsin Dells have intercity bus service, the buses do not stop near the Amtrak station. With Wisconsin's new intercity bus program and implementation of recommended *Connections 2030* bus routes, there is potential for new intercity bus services to serve stations, and to improve coordination between existing routes and Amtrak services.

Connections to the region's major international and hub airports (Chicago O'Hare International Airport, Milwaukee General Mitchell International Airport and Minneapolis-St. Paul International Airport) are also important to improving intermodal connections, maximizing passenger rail ridership, reducing air congestion, and mitigating highway congestion. The Milwaukee airport already enjoys a strong intermodal connection with Amtrak *Hiawatha Service* at the Milwaukee Airport Rail Station. A shuttle bus meets every train and takes passengers to/from the airport terminal.

Consistent with the policy set forth in *Connections 2030*, WisDOT can encourage and facilitate improved connections among various private and public entities through existing initiatives, the intercity passenger rail program, and the new state intercity bus program. New intercity passenger rail stations should be located and designed to accommodate public transit, bicycle, pedestrian, intercity bus, taxi, and the private auto. Implementing and planning connections at stations also requires leadership and action at the local level, and cooperation with private transportation companies. WisDOT will work with communities to facilitate connections to other modes at stations, and provide access and links between the community and surrounding area and the stations.

To achieve WisDOT's vision of an "integrated multimodal transportation system," as well as encourage more individuals to use alternate forms of transportation, the transportation system needs to provide convenient and seamless connections. Ensuring these intermodal connections is critical to the success of intercity passenger rail service, the efficiency of Wisconsin's multimodal transportation system, and the support of livable communities. For more information on this issue and how WisDOT will address it, see Chapter 8: Livable and Sustainable Communities.

Operational speed of new intercity passenger rail services

The proposed Midwest Regional Rail System includes operating speeds of up to 110 miles per hour. Comments received during the *Connections 2030* public review periods, as well as during the initial drafting of *Wisconsin Rail Plan 2030*, indicated that individuals had differing opinions regarding the speed at which service should be provided. To expedite the implementation of new intercity passenger rail service, some felt speeds of 110 miles per hour were not necessary, at least not initially. Others felt speeds should be at least 150 miles per hour.

Existing intercity passenger rail service in Wisconsin operates at speeds of up to 79 miles per hour. The Federal Railroad Administration defines the three categories of high-speed rail as follows:

- **High-speed rail – express:** Frequent, express service between major population centers 200 to 600 miles apart, with few intermediate stops. Top speeds of at least 150 miles per hour on completely grade-separated, dedicated rights of way (with the possible exception of some shared track in terminal areas). Intended to expand transportation capacity otherwise constrained by air and highway capacity issues.
- **High-speed rail – regional:** Relatively frequent service between major and moderate population centers 100 to 500 miles apart, with some intermediate stops. Top speeds of 110 to 150 miles per hour, grade-separated, with some dedicated and some shared track (using positive train control technology). Intended to expand a transportation system’s capacity by shifting some of the traffic off of the congested highways and, to some extent, aiding with air capacity constraints by offering a cost-effective and time-effective alternative.
- **Emerging high-speed rail:** Developing corridors of 100 to 500 miles, with strong potential for future high-speed rail regional and/or express service. Top speeds of 90 to 110 miles per hour on primarily shared track (eventually using positive train control technology), with advanced grade crossing protection or separation. Intended to develop the passenger rail market, and provide some relief to other modes.

Expressions of Interest for express high-speed rail

Section 502 of the Passenger Rail Investment and Improvement Act of 2008 directed the Federal Railroad Administration to solicit Expressions of Interest for public-private projects to finance, design, construct, operate and maintain an improved high-speed rail system in one of 11 federally-designated corridors.

Several proposals were submitted, including a proposal for the Midwest that calls for passenger trains operating at speeds up to 220 mph to connect Chicago with Minneapolis/St. Paul, St. Louis, Cincinnati, Cleveland and Detroit. These trains would integrate with the Midwest Regional Rail System, which would act as a “feeder system” into the proposed network.

As of this date, the FRA has not advanced any proposals. Congress may or may not take actions to advance any of the proposals.

The proposed 110-miles-per-hour high-speed rail service for the Midwest Regional Rail System represents an “incremental approach” to high-speed rail in the Midwest. As a first step, speeds of up to

110 miles per hour will be implemented on existing freight corridors. Higher speed service could be implemented on some corridors in the future, with the initial 110-miles-per-hour service acting as a feeder service.

Studies conducted by Wisconsin and the Midwest Regional Rail Initiative have led to the determination that the 110-miles-per-hour maximum speed provides the desired balance between the public investment, ridership and revenue potential, as well as public benefits for intercity passenger rail in the proposed corridor. In addition, average speed has a greater impact on travel times than maximum speeds. The average speed is the distance divided by the travel time and is a function of station stops, areas where slower speeds are required, etc. For example, while the Amtrak *Acela* service on the East Coast has a high maximum speed of 150 miles per hour, the average speed is 70 miles per hour. The proposed Midwest Regional Rail System express trains have a maximum speed of 110 miles per hour and an estimated average speed of 78 miles per hour.

The amount of public investment varies greatly between speed categories. For example, European high-speed rail with speeds of 180 miles per hour and above can cost between \$30 million and \$50 million per mile. The Midwest Regional Rail Initiative's 110-miles-per-hour service is estimated to cost between \$4 million and \$6 million per mile.

Recently, there has been some renewed interest in developing Express High-Speed Rail (with top speeds of at least 150 miles per hour) in the Midwest. This interest has focused on a recent federal request for Expressions of Interest in the public-private development of Express High-Speed Rail service (see text box), as well as a recent action by Illinois creating the Illinois and Midwest High-Speed Rail Commission. The commission is charged with developing strategies to design, build and maintain Express High-Speed Rail service, with top speeds of 220 miles per hour, between Chicago and St. Louis and between Chicago and neighboring states.

Under *Wisconsin Rail Plan 2030*, WisDOT recognizes that in the future, higher speeds may be initiated in the Midwest on new grade-separated rights-of-way, and that the Midwest Regional Rail System could serve as a regional feeder service to these higher-speed services. However, WisDOT will continue with the implementation of 79 mile-per-hour to 110-mile-per hour regional intercity passenger rail service in Wisconsin.

Governance of a regional intercity passenger rail system

To fully realize the vision of the Midwest Regional Rail System, local, county, state and federal agencies must work together. Likewise, states will need to work with several public entities and freight railroads that own the tracks and rights-of-way. Taken together, this creates a potentially complex governance structure for implementing and operating new service.

The Midwest Regional Rail Initiative is developing a governance plan to address these issues. The Midwest states are committed to continuing and expanding upon the current relationship and joint

work that have allowed planning and federal funding to flow to the network. They are also committed to seeking the best structure under which to operate a unified system.

WisDOT will continue to work with the Midwest Regional Rail Initiative states on future governance of the Midwest Regional Rail System.

Preservation of rail lines for potential future rail use

Corridors 2030 recognized that because of their contiguous nature and the difficulty in replacing them, transportation corridors are some of the most valuable assets in the state. Rail lines or rail rights-of-way at risk for abandonment should be identified and preserved so that future rail transportation options are maintained. The growing economy, increasing highway congestion and potentially increasing fuel prices could shift traffic – both passenger and freight – from highways to rail.

Preserved rail lines are available for potential implementation of commuter and intercity passenger rail. They are also available to increase the capacity of the rail freight network. In some cases, re-opening a preserved rail line as a through freight route could be more efficient than adding tracks to an existing through route as a way to increase capacity. This may be especially true if the current through route is also used by intercity passenger service planning an expansion in the number of trip frequencies.

Recent efforts at the local or regional level in Wisconsin have identified freight rail lines that should be preserved for future use. For example, the South Central Wisconsin Commuter Transportation Study identified various rail lines in and around Rock County for preservation for future passenger or freight use to meet potential future needs in that area.

Wisconsin has preserved rail lines for the future by applying the methods outlined in the federal rails-to-trails program, state purchase of rail lines for continued use, or rail banks when continued use is not feasible. For more information on rail line preservation and how WisDOT addresses this issue, refer to Chapter 5, *Freight Rail*.

Intercity Passenger Rail Recommendations

The recommendations discussed in *Wisconsin Rail Plan 2030* incorporate recommendations from *Connections 2030* and further enhance and refine relevant actions specific to rail. Map 6-5 shows *Wisconsin Rail Plan 2030* planned intercity passenger rail system for 2030. While the endpoints of the corridors shown in the map have been established, specific route alignments and intermediate station stops will be determined through route alternatives analyses as part of environmental and preliminary engineering studies. Route alignments shown are base routes identified in previous planning efforts.

Map 6-5: Wisconsin 2030 Potential Intercity Passenger Rail System



*The selected route alternative in the Minnesota DOT Milwaukee-Twin Cities Tier 1 Environmental Impact Statement does not preclude Madison or Eau Claire route alignments in the future.

This section documents the specific passenger rail recommendations of *Wisconsin Rail Plan 2030* and actions to achieve the recommendations. The recommendations, subject to legislative direction, are:

- Continue to support and enhance existing passenger rail service
- Continue planning work and coordination with member states of the Midwest Regional Rail Initiative
- Implement the Wisconsin component of the Midwest Regional Rail System
- Facilitate intermodal connections and promote livable communities

- Fund a State Rail Station Capital Assistance Program
- Continue to assist and/or coordinate with neighboring states on intercity passenger rail studies and projects that impact Wisconsin
- Consider opportunities to expand intercity passenger rail service to other regions of Wisconsin

Continue to support and enhance existing passenger rail service

Wisconsin’s existing Amtrak service will act as the foundation upon which future Midwest Regional Rail System service will be built in the state. Many infrastructure improvements to Wisconsin’s intercity passenger rail service being made today, such as grade crossing improvements and station renovations, will also serve MWRRS service in the future. Moreover, current efforts to increase Amtrak service, such as increasing *Hiawatha Service* train frequencies, will help build a ridership base and provide additional insight into how the MWRRS ultimately should be designed and operated. WisDOT will continue to support and enhance existing intercity passenger rail service by:

- Providing continued financial support for Amtrak’s Chicago-Milwaukee *Hiawatha Service*
- Continuing to fund a marketing program using print, radio and other media to promote the *Hiawatha Service*
- Upgrading rail stations, purchasing and upgrading track, and improving roadway-railway grade crossings
- Completing required environmental work and service planning to increase *Hiawatha Service* train frequencies (Chicago-Milwaukee)
- Continuing to facilitate improvement of train equipment, service reliability, efficiency and intermodal connectivity
- Supporting intercity feeder bus service linking with Amtrak at the rail stations
- Continuing to monitor performance of the *Hiawatha Service*, including conducting passenger surveys

Continue planning work and coordination with member states of the Midwest Regional Rail Initiative

Wisconsin will continue to work with the eight Midwest Regional Rail Initiative states and Amtrak to advance implementation of the Midwest Regional Rail System through cooperative planning work. Wisconsin has been conducting planning work with the Midwest Regional Rail Initiative for 14 years and has completed seven study phases. This work was instrumental to MWRRRI states in receiving federal funding for intercity passenger rail corridors in 2010.

Future phases of work may include, but are not limited to:

- Updates to the economic analysis, environmental studies and route alternatives analysis
- An engineering, operations, and safety assessment for shared corridors
- Updates to operating cost estimates and the financial plan

- New ridership estimates (with the potential addition of other planned passenger rail corridors in the Midwest)
- A Chicago Union Station needs assessment (train operations requirements and passenger facilities)
- Updates to the implementation plan
- Identification of equipment needs and support for equipment procurement
- A governance plan for the new service

Completing this work as part of the Midwest Regional Rail Initiative will help advance plans to implement and improve Midwest applications for federal funding for intercity passenger rail projects through continued strong regional cooperation and joint efforts. This regional cooperation is critical to the successful implementation of all Midwest Regional Rail System passenger services.

Implement the Wisconsin component of the Midwest Regional Rail System

Building on incremental improvements to Wisconsin’s existing Amtrak *Hiawatha Service* and rail infrastructure, WisDOT will improve the state’s intercity passenger rail service by working to implement the Midwest Regional Rail System. As part of this long-term implementation, WisDOT will evaluate options to serve Eau Claire and West Central Wisconsin, connecting the region with the Midwest Regional Rail System. Wisconsin’s future intercity passenger rail system will require a strong partnership of federal, state and local governments, as well as Amtrak, freight railroads and other private sector interests. To implement Wisconsin’s vision of improved intercity passenger rail service, WisDOT will:

- Work with the Office of the Commissioner of Railroads to discourage new at-grade crossings on rail corridors
- Work toward implementation of the Midwest Regional Rail System through roadway-railway crossing improvements, track upgrades, and other infrastructure projects and engineering work
- Support dedicated federal funding to cover 80 to 100 percent of the total capital costs needed to implement Wisconsin’s portion of the MWRRS, including infrastructure upgrades and new trains
- Implement improved intercity passenger rail service identified in the Midwest Regional Rail Initiative plan in Wisconsin, shown in Maps 6-6 and 6-7 and described below

The following routes and projects identified in the short-term plan and the long-range plan require NEPA environmental studies, preliminary engineering studies, and service development plans before they are finalized and can advance to final design and construction. Actual route alignments and service details will not be determined until completion of the required environmental studies and service development plans.

Short-term plan (2010-2015)

Map 6-6 shows the short-term implementation plan of the *Wisconsin Rail Plan 2030*. In the short-term plan, existing Chicago-Milwaukee intercity passenger rail service is planned to be expanded from seven daily round-trips to 10 daily round-trips between Chicago and Milwaukee, and have travel time reduced

potentially through an increase in maximum speed from 79 miles per hour to 90 miles per hour. Estimated travel time (based on preliminary estimates) between Chicago and Milwaukee ranges from one hour and 18 minutes to one hour and 29 minutes (the current travel time), depending on whether the maximum speed is 79 miles per hour or 90 miles per hour, and whether the train is express or makes all stops. Final travel times will vary as final design and engineering of necessary infrastructure improvements is completed.

Map 6-6: Short-term plan



An additional daily round-trip frequency on the existing Amtrak *Empire Builder* route between Chicago and Minneapolis/St. Paul is planned for implementation in the short-term. This train would serve existing Wisconsin Amtrak stations and travel at conventional speeds of up to 79 miles per hour. Combined with the existing Amtrak *Empire Builder*, this additional frequency would result in two daily round-trips connecting Wisconsin communities with Minneapolis/St. Paul to the west, and Milwaukee and Chicago to the east. Estimated travel time of the additional frequency based on preliminary estimates is seven hours and 30 minutes between Chicago and Minneapolis/St. Paul. Minnesota DOT is also studying an extension of the additional frequency to St. Cloud, Minnesota.

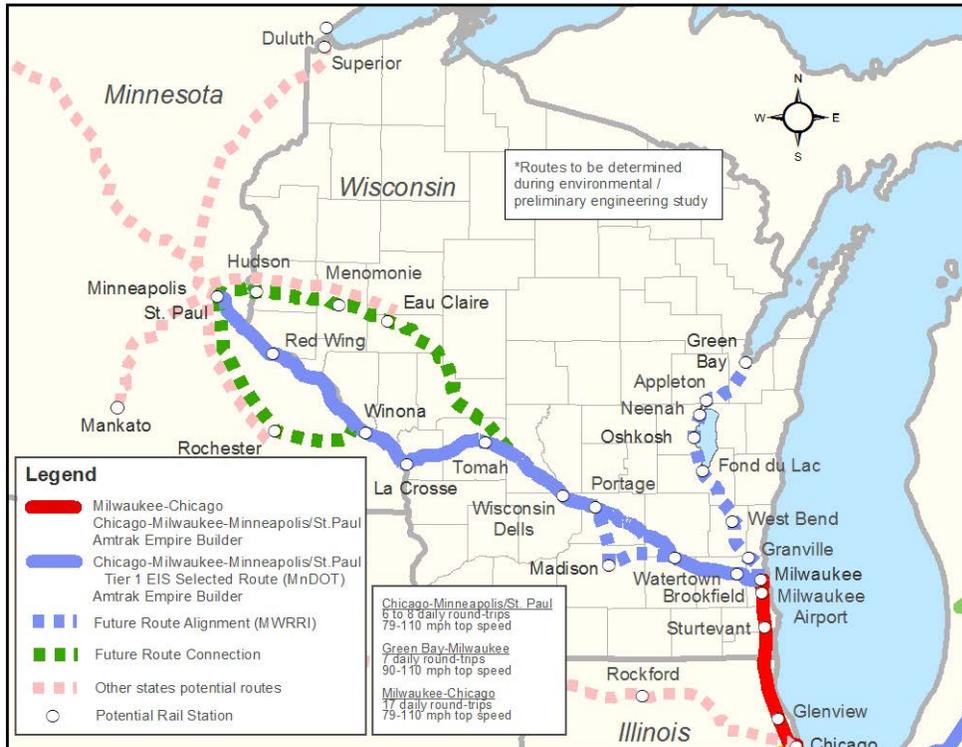
Long-range plan (2030 Plan Horizon)

Chicago-Milwaukee-Minneapolis/St. Paul Intercity Passenger Rail Corridor

In the long-range plan, enhanced intercity passenger rail service is planned to be extended west to Minneapolis/St. Paul, resulting in a Chicago-Milwaukee-Minneapolis/St. Paul service. The long-range plan calls for 10 round-trips between Chicago, Milwaukee and Madison with six extending to

Minneapolis/St. Paul. Estimated travel time (based on preliminary 2004 MWRRRI estimates) between Milwaukee and Minneapolis/St. Paul is approximately four hours and 40 minutes. The long-range plan is shown in Map 6-7.

Map 6-7: Long-range plan



*The selected route alternative in the Minnesota DOT Milwaukee-Twin Cities Tier 1 Environmental Impact Statement does not preclude Madison or Eau Claire route alignments in the future.

Minnesota is completing a Tier 1 Environmental Impact Statement (EIS) for the Milwaukee to Minneapolis/St. Paul corridor segment. Map 6-7 shows the selected route alternative in the EIS, which is the current Amtrak *Empire Builder* alignment.

The MWRRRI plan and *Connections 2030* have a similar alignment to the Minnesota Tier 1 EIS, but that passes through Madison. This alignment through Madison is identified as a future route alignment for the Chicago-Minneapolis/St. Paul corridor. The Milwaukee-to-Madison segment of the Chicago-Minneapolis-St. Paul corridor has an independent Environmental Assessment with a Finding of No Significant Impact from the FRA, enabling service on the Madison-Milwaukee-Chicago segment to potentially occur prior to or separately from the overall corridor. The 2004 *Wisconsin Rail Issues and Opportunities Report* identified a potential alignment through Eau Claire as a future connection to the corridor. The report used information from an MWRRRI analysis. Based on this report and stakeholder and public input during the *Connections 2030* and *Wisconsin Rail Plan 2030* planning processes, the route is in both plans. Figure 6-5 discusses ways in which intercity passenger rail could serve Eau Claire.

Figure 6-5: Potential rail service to Eau Claire

Eau Claire and West Central Wisconsin could be served in multiple ways. One possibility is that the region could be connected to the selected route of the Minnesota-lead Milwaukee-Minneapolis/St. Paul Tier 1 EIS, with through service between Chicago, Milwaukee and Minneapolis-St. Paul. Alternatively, or in addition, it could be served with trains exclusively between Eau Claire and the Twin Cities. As part of the long range plan, studies will be undertaken to explore these options in the long-term plan timeframe.

Chicago-Milwaukee-Green Bay Intercity Passenger Rail Corridor

Also in the long-range time horizon, improved intercity passenger rail service is planned to be extended from Chicago to Milwaukee to Green Bay. The cities served and route alignment will be determined pending the results of the environmental study. Consistent with the third phase of MWRRI plan implementation, train speeds between Chicago and Milwaukee are planned to be increased to up to 110 miles per hour and train frequencies increased to 17 round-trips, as shown in Map 6-7. Seven of these trains will be extended from Milwaukee to Green Bay. Estimated travel time (based on preliminary 2004 MWRRI estimates) between Chicago and Milwaukee is approximately one hour, and between Milwaukee and Green Bay is approximately two hours.

Figure 6-6: Forecast ridership for short-term and long-term intercity passenger rail routes¹

Short-term plan

Chicago-Milwaukee *Hiawatha Service* Improvements (10 daily round-trips, shorter travel time) – Operational Alternatives

- Chicago-Milwaukee maximum speed 79 mph: 1,021,300* (for 2017, assumed first year of service)
- Chicago-Milwaukee maximum speed 90 mph: 1,084,500* (for 2017, assumed first year of service)

Chicago-Milwaukee-La Crosse-Minneapolis/St. Paul Second *Empire Builder* Frequency (one additional daily round-trip) – Route Alternatives²

- Chicago-St. Paul: 155,000 riders during the first year of service
- Chicago-Minneapolis (with stop at St. Paul) 177,000 riders during the first year of service
- Chicago-St. Cloud (stops at St. Paul and Fridley): 180,000 riders during the first year of service
- Chicago-St. Cloud (stops at St. Paul and Minneapolis): 185,000 riders during the first year of service

Long-range plan³

Extend service to Minneapolis/St. Paul

- Approximately 1,860,000 annual riders in the first year of service (ten daily round-trips between Chicago, Milwaukee and Madison with six of those extending to Minneapolis/St. Paul)

Chicago-Milwaukee-Green Bay

- Approximately 3,357,000 annual riders in first year of service (17 daily round-trips between Chicago and Milwaukee, with 10 of those trips continuing to Minneapolis/St. Paul and seven continuing to Green Bay)

NOTE:

- 1) Annual rider numbers are for the entire corridor and include riders to/from all stations.
- 2) Second *Empire Builder* frequency ridership numbers are preliminary estimates and do not include ridership that is forecasted to be on the Amtrak *Empire Builder* long-distance trains. Estimates will be refined as the study progresses.
- 3) Estimates for the Long-term Plan were undertaken as part of the *Midwest Regional Rail System Study* (2004 MWRRI Project Notebook Update) and are from a different source and use different methodology than the Chicago-Milwaukee-Madison ridership estimates developed in 2009, which estimated the Chicago-Milwaukee-Madison segment ridership (10 round-trips between Chicago and Milwaukee with 6 extending to Madison) at 1,401,600 in the first year of service). New ridership estimates for the Chicago-Minneapolis/St. Paul corridor are being developed as part of the MnDOT Tier 1 EIS study.

Table 6-4: Implementation activities underway for Midwest Regional Rail System corridors through Wisconsin

Action	Status	Notes
Chicago-Milwaukee increased frequencies	<ul style="list-style-type: none"> • Increase Amtrak <i>Hiawatha Service</i> from seven daily round-trips to ten daily round-trips between Chicago and Milwaukee and a reduction in travel times. • Maximum speeds being studied are 79 miles per hour and 90 miles per hour. • Environmental Assessment, Service Development Plan, and a Finding of No Significant Impact are expected in 2013. 	Wisconsin DOT, Illinois DOT, and the Federal Railroad Administration, in partnership with Amtrak, are conducting the NEPA study and Service Development Plan to be eligible for federal funds for infrastructure and train equipment when federal funds become available.
Extension of service to Minneapolis / St. Paul	<ul style="list-style-type: none"> • Minnesota received funding in 2010 to complete a Tier 1/Service Level NEPA study. Next step: Complete the NEPA and Preliminary Engineering study, expected in 2014. 	The Minnesota Department of Transportation is developing the Environmental Impact Statement.

As WisDOT implements the Midwest Regional Rail System, WisDOT will:

- Continue to partner with freight railroads when planning and implementing passenger rail service
- Continue to work with freight railroads on capacity analyses and cost sharing
- Ensure agreements are established between the sponsoring agency for any new passenger service and freight railroads
- Continue to work with Midwest states and Amtrak to identify equipment needs, and continue to purchase equipment as needed

Facilitate intermodal connections and promote livable communities

Existing and planned intercity passenger rail in Wisconsin is part of an integrated multimodal network, as outlined in *Connections 2030*; it is not being implemented as a single line or route. To encourage a well-connected multimodal transportation system in Wisconsin and promote livable communities, the intercity passenger rail system will link with intercity/feeder bus service, air service at General Mitchell International Airport, local and regional transit and taxi services, and bicycle connectivity points.

The State Intercity Bus Program (state statute 85.26) provides an opportunity and potential funding source to implement some of the intercity/feeder bus routes in Wisconsin identified in both *Connections 2030* and MWRRI plans. The program provides state funding to match federal funding to implement new intercity bus routes in Wisconsin and maintain and enhance the existing network of intercity bus routes.

One of the stated purposes of the program is to facilitate meaningful intermodal connections including intercity bus and intercity passenger rail. In implementing the program, connections to intercity passenger rail stations will be a factor in selecting which routes to fund. In addition, WisDOT will encourage the operators of state-supported intercity passenger rail services and intercity bus services that use the same station to enter into interlining agreements with each other (i.e., Amtrak Thruway services as described earlier in the chapter). This will allow one ticket for a trip that includes a connection between bus and rail and coordinated scheduling.

WisDOT will work with communities to facilitate connections and coordination between modes. This includes designing and locating stations to accommodate transit and intercity buses, facilitation of interlining agreements between the rail operator and intercity bus operators, coordinating with communities and transit agencies to increase service to stations, providing adequate bike facilities at all stations, and providing bike accommodations on trains.

In conjunction with planning coordination and strong local comprehensive plans, intercity passenger rail and improved intermodal connections can help to create livable communities. WisDOT will provide technical assistance to and coordinate with counties, municipalities, and Metropolitan Planning Organizations (MPOs) on local plans. More information on livable communities can be found in Chapter 8, Livable and Sustainable Communities.

Fund the Rail Station Capital Assistance Program

Train stations are critical components of Wisconsin's intercity passenger rail system. The stations:

- Act as gateways to both communities and the intercity passenger rail system
- Bring multiple modes of transportation together, allowing passengers to make seamless travel connections between trains, airplanes, intercity buses, local transit, bicycle and pedestrian facilities, and taxi service
- Act as catalysts for community economic development

The station inventory completed for this plan highlights the needs that many Wisconsin stations have, including inadequate parking, ADA non-compliant platforms, poor signage or lighting, limited services, limited waiting facilities, etc. To maximize the benefits that train stations provide to Wisconsin communities and to address current station needs, WisDOT will evaluate funding alternatives for the Rail Station Capital Assistance Program. Working with local governments and the private sector, the program may be used to:

- Upgrade existing stations
- Build new stations
- Ensure that all stations are accessible to people with disabilities
- Encourage connections with other transportation modes such as airplanes, intercity bus, and local transit and taxi service

Continue to assist with neighboring states' intercity passenger rail studies and projects that impact Wisconsin

Wisconsin's neighboring states and partners are also moving forward with studies and implementation of intercity passenger rail corridors. WisDOT will assist with future studies as requested from other states, as needed. For example, WisDOT is currently involved in supporting an effort by the State of Minnesota and local governments pursuing intercity passenger rail service between Duluth/Superior and Minneapolis/St. Paul. There are other projects in neighboring states that do not enter Wisconsin and will not have Wisconsin involvement, but are close to the border and could provide a transportation alternative to some Wisconsin residents. A listing of current studies by other states potentially offering intercity passenger rail travel opportunities for Wisconsin residents appears in Figure 6-5.

Consider opportunities to expand intercity passenger rail service to other regions of Wisconsin

Wisconsin's priority in passenger rail implementation is to implement the Wisconsin component of the Midwest Regional Rail System as described previously.

In addition to the Midwest Regional Rail System planned routes, Wisconsin has studied additional routes in the recent past. In 2002, WisDOT studied route options serving Eau Claire (Chicago-Twin Cities via Eau Claire, and an Eau Claire-Minneapolis service) and Janesville (Chicago-Madison via Janesville) that would be in addition to the MWRRS routes. The preliminary study found that these routes would be viable in terms of ridership potential. As noted earlier, the Minnesota Department of Transportation identified rail service between Eau Claire and Minneapolis/St. Paul in the *Minnesota Comprehensive Statewide Freight and Passenger Rail Plan*.

WisDOT will study the potential for expanding the state's intercity passenger rail system as part of future updates to *Wisconsin Rail Plan 2030*. WisDOT will apply knowledge and experience gained from earlier implementation phases of the Midwest Regional Rail System in assessing future expansion of the state's intercity passenger rail system. Once some of the planned MWRRS routes are implemented and can be assessed, WisDOT can better assess the feasibility of adding service to other parts of the state. These studies could examine expanded service to regions such as North Central Wisconsin, Central Wisconsin and South Central Wisconsin.

When planned service to the Twin Cities and Green Bay is in operation, there will be a new "base case." Having those services in place and performing successfully could make other routes more feasible due to connectivity to the system.

In determining conceptual routes to study further in the future, the following broad criteria will be considered:

- Population served and ridership potential
- Connections to major cities/destinations

- Connectivity to other existing passenger rail routes
- Intermodal connections facilitated
- Economic impact
- Environmental factors
- Whether a route would be a greenfield development versus on a shared freight corridor vs. on abandoned right-of-way vs. a rails-to-trails conversion

Additional corridor-specific factors would be considered in a corridor feasibility analysis and the route alternatives analysis.