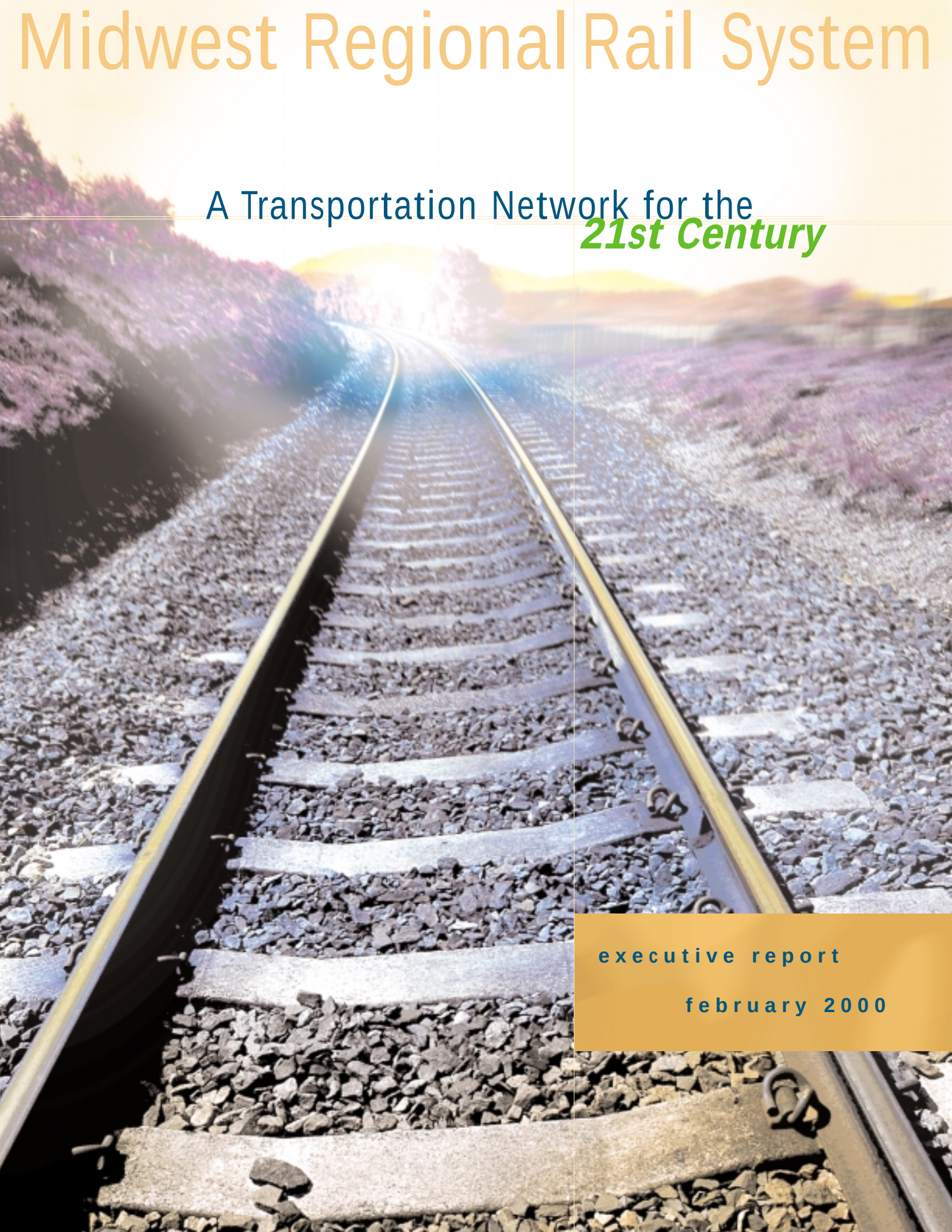
Midwest Regional Rail System

A Transportation Network for the *21st Century*



executive report

february 2000

Midwest Regional Rail Initiative
Executive Report

PREPARED FOR

Illinois Department of Transportation

Indiana Department of Transportation

Iowa Department of Transportation

Michigan Department of Transportation

Minnesota Department of Transportation

Missouri Department of Transportation

Nebraska Department of Roads

Ohio Rail Development Commission

Wisconsin Department of Transportation

Amtrak

PREPARED BY

Transportation Economics & Management Systems, Inc.

IN ASSOCIATION WITH

PaineWebber Incorporated

Quandel & Associates

FEBRUARY 2000

The Midwest Regional Rail Initiative is an ongoing effort to develop an improved and expanded passenger rail system in the Midwest. The sponsors of the Midwest Regional Rail Initiative are Amtrak, the Federal Railroad Administration and the transportation agencies of nine Midwest states—Illinois Department of Transportation, Indiana Department of Transportation, Iowa Department of Transportation, Michigan Department of Transportation, Minnesota Department of Transportation, Missouri Department of Transportation, Nebraska Department of Roads, Ohio Rail Development Commission and Wisconsin Department of Transportation.

This Executive Report includes an assessment of and refinements to the Midwest Regional Rail System Plan published in August 1998. An extensive range of issues has been addressed including infrastructure and operational requirements, level of travel market demand, financing alternatives, institutional arrangements and system-wide costs and benefits.

A Steering Committee, composed of key staff from each state agency and Amtrak, provided oversight and direction to the consultant team retained to conduct the study. The Wisconsin Department of Transportation served as Secretariat for the Steering Committee.

Transportation Economics & Management Systems, Inc. of Frederick, Maryland, led the consultant team and was responsible for ridership and revenue forecasts, operations planning, financial and economic analysis, institutional arrangements, implementation and business planning, and directing the work of the other members of the consultant team. The other consultant team members and their responsibilities were: PaineWebber Incorporated, review of the financial analysis; and Quandel & Associates, assessment of infrastructure requirements.

This report was financed, in part, by Amtrak, Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio and Wisconsin. Additionally, this study was also funded by the Federal Railroad Administration (FRA). This report's contents do not necessarily reflect the official views of the FRA or the U.S. Department of Transportation.

...MWRRS planning activities confirm that it is feasible to implement and operate this 21st century regional passenger rail system...

...The primary purpose of the MWRRS is to meet future regional travel needs through significant improvements to the level and quality of regional passenger rail service...

...System synergies and economies of scale, including higher equipment utilization, more effective crew and employee utilization and a multi-state rolling stock procurement can be realized through this regional rail system...

Vision: Midwest Regional Rail System

Since 1996, the Midwest Regional Rail Initiative (MWRRI) advanced from a series of service concepts, including increased operating speeds, train frequencies, system connectivity, and high service reliability, into a well-defined vision to create a 21st century regional passenger rail system. This vision reflects a fundamental change in the manner in which passenger rail service is provided throughout the Midwest, and it forges an enhanced partnership between the states and Amtrak in planning and providing Midwest passenger rail service. This system would use existing rail rights-of-way shared with freight and commuter rail connecting nine Midwest states to serve their growing population. System synergies and economies of scale, including higher equipment utilization, more efficient crew and employee utilization, and a multi-state rolling stock procurement can be realized through this regional rail system.

This vision has been transformed into a transportation plan-known as the Midwest Regional Rail System (MWRRS). The primary purpose of the MWRRS is to meet future regional travel needs through significant improvements to the level and quality of regional passenger rail service. The rail service and its stations will also provide a stimulus for joint development. Senior officials from the nine Midwest states and Amtrak have tested, refined, and confirmed that it is indeed feasible to implement and operate this 21st century regional passenger rail system.

MWRRS Elements

Planned MWRRS elements will improve Midwest travel. The major plan elements include:

- **Use of 3,000 miles of existing rail rights-of-way to connect rural, small urban, and major metropolitan areas**
- **Operation of a "hub-and-spoke" passenger rail system providing through-service in Chicago to locations throughout the Midwest**
- **Introduction of modern train equipment operating at speeds up to 110 mph**
- **Provision of multi-modal connections to improve system access**
- **Improvement in reliability and on-time performance**

Proposed Midwest Regional Rail System

Legend

- Speeds up to 110 mph
- Speeds below 110 mph*
- Feeder Bus Service

* *In Missouri, current restrictions limit train speed to 79 mph*

Opportunity and the MWRRS

As planned, the MWRRS will improve mobility and stimulate economic development. It affords the opportunity to:

- **Greatly enhance passenger rail service throughout the Midwest**
- **Achieve significant reductions in travel times and improve service reliability to Midwest areas currently served by passenger rail**
- **Introduce passenger rail service to Midwest areas currently not served by passenger rail**
- **Introduce a regional passenger rail system designed to generate revenues in excess of its operating costs when it is fully implemented**
- **Provide major capital investments in rail infrastructure to improve passenger and freight train safety and reliability on shared rights-of-way**
- **Provide impetus to station area development**

...The MWRRS:

- Reduces travel time
- Improves service reliability
- Expands regional travel services
- Improves passenger and freight train safety
- Creates development opportunities...

Focus of the Executive Report

Planning for the MWRRS has progressed from the concept stage to the feasibility stage. This Executive Report highlights the findings resulting from a technical review and refinement of major plan elements. These include:

- **Refinements to capital and operating costs**
- **Refinements to ridership and revenue estimates**
- **Comparative analysis of advanced train technologies**
- **Update of the operating plan**
- **Modifications to implementation plan phasing**
- **Update of the financial plan**
- **Discussion of project coordination**

MWRRS Key Assumptions

Successful implementation and operation of the MWRRS require ongoing dialogue and coordination involving the Midwest State Departments of Transportation, freight and commuter railroads, railroad labor, funding entities, and the public. The findings and recommendations included in this report are based on several key assumptions. Major changes in these assumptions could alter the projections and economics associated with the MWRRS. These assumptions are:

> **Ridership and revenue projections assume the construction of the system and introduction of new service and trip times according to the proposed project phasing schedule, and the predicted response from travelers to a fully integrated Midwest regional rail system**

> **Operating plans for passenger train frequencies, schedules, and speeds are achievable through cooperative agreement with the freight and commuter railroad owners**

> **Infrastructure improvements are dependent upon the freight and commuter railroad owners' commitment to the construction schedule**

> **Funding for planning, construction, and equipment procurement is available to support the implementation schedule**

...Successful implementation and operation of the MWRRS require ongoing dialogue and coordination involving the Midwest State Departments of Transportation, freight and commuter railroads, railroad labor, funding entities, and the public...

...The MWRRS plan is based on several key assumptions involving:

> Ridership & revenue estimates

> Rail operations

> Infrastructure improvements

> Project funding...

Capital Costs

Rolling Stock

MWRRS capital costs include two major components-rolling stock and infrastructure. The total capital investment is estimated to be $4.1 billion (in 1998 dollars). Advanced passenger train technology enhances the utility and attractiveness of the proposed MWRRS. Travel time reductions, increases in train frequency, improved service and reliability and modern equipment attract the attention of travelers, increase the competitiveness of rail travel with other means of transportation, and establish the MWRRS as a new mode choice for business and non-business travelers.

Aside from its inherent marketing value, the MWRRS-selected train technology will:

- **Permit travel at speeds up to 110 mph throughout most of the system**
- **Significantly reduce train travel time**
- **Provide safe, reliable, comfortable, and convenient service**
- **Offer on-board amenities for business and leisure travelers**
- **Offer operations and maintenance cost savings**

Fleet Composition

The proposed operating plan requires 66 trainsets, including spares. The rolling stock for the entire system will cost approximately $652 million. This cost may vary depending on the selected manufacturer. Also, this cost reflects a volume discount achieved by procuring the rolling stock on a system—rather than a corridor—basis and by manufacturing the rolling stock in the Midwest. The train technologies considered represent enhancements to passenger rolling stock in wide use around the world.

Infrastructure Improvements

Track Improvements

Based on a comprehensive engineering review and refinement process, the infrastructure improvements required to implement the MWRRS are estimated to cost $3.4 billion. The infrastructure cost estimate has increased by 10 percent in this refinement phase due largely to changes in routes, increases in operating speeds, and improvements to accommodate freight rail capacity needs. Major capital improvements include right-of-way modifications to track and track alignments to support 110 mph train speeds and accommodate freight and commuter rail activity, plus upgrades to stations, highway/railroad grade crossings, and signaling and communication systems.

MWRRS Capital Investment by Corridor

The 3,000-mile rail network to be used by the MWRRS is largely in good condition. Freight railroads own the majority of the system, and Amtrak, and Chicago's commuter rail operator, Metra, own the remainder. Three of the nine corridors have considerable freight train traffic. Amtrak uses some of the lines for its various passenger services. The rail infrastructure must be improved and enhanced to integrate the proposed MWRRS onto the existing rail network and simultaneously preserve the integrity of current and future freight and commuter operations.

...The MWRRS capital investment:

> Increases operating speeds up to 110 mph

> Improves highway/railroad grade crossing safety

> Enhances operating safety on shared tracks with freight and commuter rail activity...

MWRRS Capital Investment by Corridor

Corridor	Rolling Stock	Infrastructure	Total Costs
Chicago-Detroit/Grand Rapids/Port Huron	$161	$377	$538
Chicago-Toledo-Cleveland	76	648	724
Chicago-Indianapolis-Cincinnati	47	347	394
Chicago-Champaign-Carbondale	28	254	282
Chicago-Springfield-St. Louis	85	200	285
St. Louis-Jefferson City-Kansas City	47	266	313
Chicago-Quincy/Des Moines-Omaha	85	402	487
Chicago-Milwaukee-Minneapolis/Green Bay	123	855	978
Systemwide Planning & Implementation	—	—	51
Total System	$652	$3,349	$4,052

(Millions in 1998 dollars)

...Systemwide infrastructure improvements include:

> State-of-the-art train communication and control systems

> Highway/railroad grade crossing safety enhancements

> Rehabilitation of existing and construction of new track and sidings

> Construction of new and refurbishment of existing passenger rail stations...

...The MWRRS is estimated to generate an additional $2.6 billion in public/private sector investments to improve and increase amenities in stations and nearby areas...

Benefits Associated with Infrastructure Improvements

Numerous benefits will be derived from MWRRS-related infrastructure improvements, including:

- **Operation of passenger trains at speeds up to 110 mph**
- **Reliable, frequent, and convenient passenger train arrivals and departures**
- **System operation consistent with freight railroad policy and FRA safety regulations**
- **Modern and spacious facilities and amenities for passengers**
- **Rehabilitation of existing and construction of new track and sidings to increase passenger and freight train speeds and capacity**
- **Reduction or elimination of highway/railroad grade crossings to improve safety**

Train Communication and Control Systems

A state-of-the-art positive train control signaling system will be implemented for collision avoidance and train traffic management. This system will be designed to improve operating safety, track capacity, and operational coordination with freight and commuter rail activity.

Highway/Railroad Grade Crossings

Improvements to highway/railroad grade crossings, through a combination of technology improvements, visibility improvements, fencing, and some closures are part of the MWRRS infrastructure improvement program. Improvements are designed to enhance train, motor vehicle, and pedestrian safety. The highway/railroad grade crossing improvements included in this plan were developed in accordance with FRA guidelines.

Passenger Stations

Passenger station costs include the construction of new facilities where none now exist as well as the refurbishment of existing stations. Improvements will be made to Chicago's Union Station, the hub station for the system, as well as regional and local stations. Planned improvements are intended to enhance the aesthetics of MWRRS stations, their functionality, and their ability to support potential station-related, income-producing improvements. The $4.1 billion public investment in the MWRRS is estimated to generate an additional $2.6 billion in public/private sector investment to improve and increase amenities in stations and nearby areas.

Travel Market Served

Travel time, quality of service, reliability and intermodal connectivity are key to revitalizing passenger rail service in the Midwest. Attributes inherent to the MWRRS will attract a broad ridership market. In 2010, with full implementation of the system, the MWRRS is forecast to annually attract approximately 9.6 million passengers. This level of ridership is estimated to be four times greater than would occur if the existing passenger train service were to be continued without improvement.

Average MWRRS fares are estimated to be up to 50 percent higher than current Amtrak fares to reflect improved services. The MWRRS fares will be competitive with air travel and will generate revenue levels in excess of operating costs after the system's ramp-up period. For all markets served, the MWRRS will provide a level of service, comfort, convenience, and fares that will attract a wide range of travelers.

...Two years after full implementation, the MWRRS is forecast to annually attract approximately 9.6 million passengers...

...For all markets served, the MWRRS will provide a level of service, comfort, convenience, and fares that will attract a wide range of travelers...

Examples of One-Way MWRRS Fares

City Pairs	Estimated Fares Non-Business*	Estimated Fares Business
Milwaukee-Chicago	$22.30	$35.00
Chicago-Detroit	$47.20	$74.00
Detroit-Kalamazoo	$23.50	$36.90
Toledo-Cleveland	$23.45	$36.75
Cincinnati-Indianapolis	$21.95	$34.50
St. Louis-Springfield	$18.40	$28.85
Jefferson City-Kansas City	$32.45	$50.90
Des Moines-Omaha	$28.00	$42.60
St. Paul-Madison	$53.20	$83.35

* NOTE: Non-Business fares reflect a 15 percent discount off estimated standard fare.

Feeder Bus System

Accessibility to the Midwest rail system will be enhanced by the operation of a feeder bus system. The feeder bus network extends the reach of the system to outlying areas. With full implementation of the MWRRS, including the feeder bus system, approximately 80 percent of the Midwest region's population will be within a one-hour ride of a MWRRS station or feeder bus connection. Feeder bus lines will be privately owned and operated. Operating hours and schedules will be coordinated with train schedules to optimize the bus system's utility and minimize transfer time to MWRRS trains.

...Approximately 80 percent of the Midwest population will be within a one–hour ride of a MWRRS station or feeder bus connection...

Service Attributes and Travel Market

...Numerous benefits will be derived from the MWRRS train and feeder bus services, including:

> Availability of a new transportation travel option for short to medium-distance trips

> Downtown-to-downtown connectivity between urban centers

> Means to expand workforce recruitment...

Collectively, MWRRS train and feeder bus services will provide numerous attributes and benefits:

- **A new transportation option in major travel corridors that are experiencing significant levels of congestion**
- **A time competitive service for short to medium-distance trips**
- **A transportation choice for smaller communities which do not have or are under-served by commercial air service**
- **A travel environment conducive to both business and leisure travel**
- **A means to expand workforce recruitment by employers located in communities served by the MWRRS**
- **A transportation choice that affords travelers downtown-to-downtown connectivity between major urban centers**
- **A transportation system for individuals who do not or cannot drive a motor vehicle (e.g. elderly and/or disabled individuals)**

At right is a comparison of current Amtrak service and the number of roundtrips planned for the fully implemented MWRRS.

Passenger Rail Service Comparison (Roundtrips)

City Pair	Current Amtrak Service	Fully Implemented MWRRS
Chicago-Detroit	3	9
Chicago-Kalamazoo/Niles	4*	10*
Kalamazoo/Niles-Ann Arbor	3	9
Ann Arbor-Detroit	3	9
Kalamazoo-Port Huron	1*	4*
Kalamazoo-Holland	0	4
Detroit-Pontiac	3	4
Chicago-Cleveland	3*	8*
Chicago-Toledo	3*	8*
Toledo-Cleveland	3*	9*
Chicago-Cincinnati	1*	5*
Chicago-Indianapolis	2*	6*
Indianapolis-Cincinnati	1	6**
Chicago-Carbondale	2*	2*
Chicago-Champaign	2*	5*
Chicago-Carbondale	2*	2*
Chicago-St. Louis	3*	9*
Chicago-Joliet	3*	9*
Joliet-Springfield	3*	9*
Springfield-St. Louis	3*	9*
St. Louis-Kansas City	2	6
St. Louis-Kansas City	2	6
Chicago-Quincy	1	4
Chicago-Omaha	1	4**
Chicago-Princeton	3*	9*
Chicago-Rock Island	0	5
Rock Island-Iowa City	0	5
Iowa City-Des Moines	0	5
Des Moines-Omaha	0	4
Chicago-Minneapolis-St. Paul	1*	7*
Chicago-Milwaukee	7*	17*
Milwaukee-Madison	0	10**
Madison-St. Paul	0	6
Milwaukee-Green Bay	0	5

* Includes Amtrak long-distance trains
** MWRRS route differs from current Amtrak service

Operating Plan

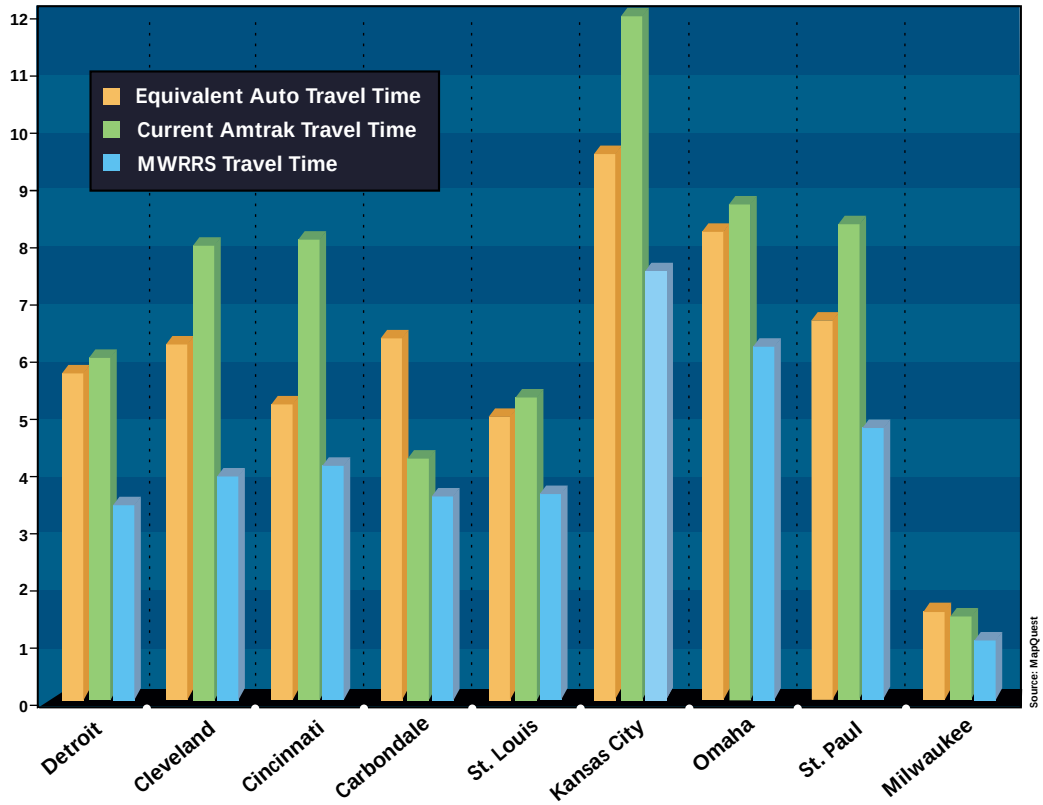
The proposed MWRRS operating plan optimizes the relationship among service levels, estimated ridership, and revenue generated. It consists of a hub-and-spoke operation with Chicago's Union Station serving as the system hub. The operating plan dramatically improves service reliability, increases service frequency, and reduces travel times compared to Amtrak's current regional passenger rail services. Depending upon the corridor, roundtrip frequencies increase between two and five times those offered by existing services. Reductions in travel times range from 30 percent between Chicago and Milwaukee to 50 percent between Chicago and Cincinnati. Additionally, the MWRRS service will increase through and connecting trips at Chicago Union Station.

The operating plan results in higher operating efficiencies compared with existing Midwest service by using trains capable of quick turnaround at service endpoints and run-through service in Chicago. Maintenance and service facilities will be strategically located to optimize operating schedules, eliminate maintenance-related service interruptions, and achieve cost efficiencies.

...The operating plan dramatically improves:

- **Service reliability within the region**
- **Frequency of train service**
- **Train travel times compared to existing passenger rail service in the Midwest...**

Estimated Travel Times to Chicago by Corridor



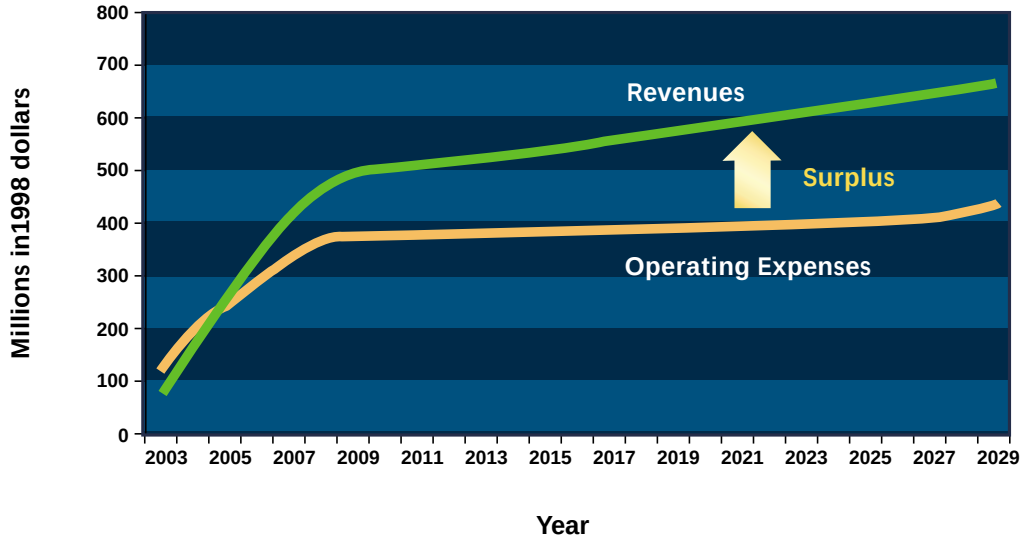
Financial Performance

All MWRRS corridors are projected to generate operating revenues greater than operating costs by the year 2010, assuming that the entire system is fully operational and that the MWRRS operating and financial forecasts are essentially achieved. During the construction and start-up phases, system revenues will not be sufficient to cover all system operating costs. As a result, operating subsidies will be required to support the proposed level of service. A Transportation Infrastructure Finance and Innovation Act (TIFIA) loan—a newly established USDOT federal credit program that provides credit assistance for surface transportation projects of national and regional significance—is the suggested mechanism that should be used to cover operating losses during the initial start-up years. The 35-year payback permitted by this federal program enables the loan to be retired using future system revenues. As additional portions of the MWRRS system become operational, its financial performance will improve. Revenues in excess of operating costs are projected within three years of full program completion.

...All MWRRS corridors are projected to generate operating revenues greater than operating costs by the year 2010, assuming that the entire system is fully operational....

Rental of retail space within passenger stations and display of commercial advertising within passenger stations will generate additional revenue not included in the MWRRS financial forecast. These revenue-producing sources will further strengthen the MWRRS' financial viability.

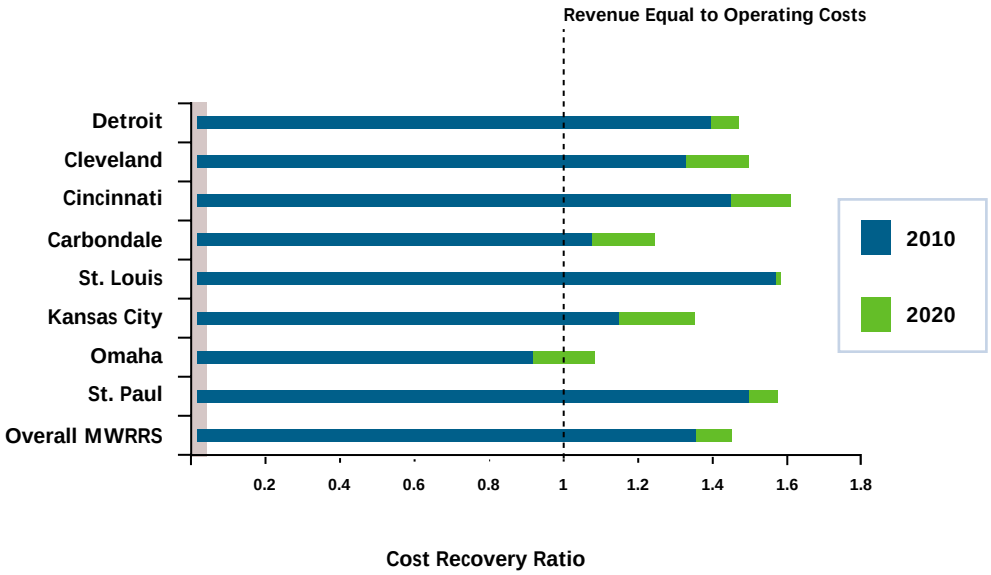
Total Revenues and Operating Expenses



Forecast Operating Ratios

As planned, the MWRRS will be a very cost-effective system to operate and its financial performance is expected to improve as the system matures. The regional connectivity of the MWRRS in general, and the efficiencies of its operating plan in particular, are the foremost reasons why the system is expected to be cost-effective. Reduced travel times result in operating more train miles per hour of service. Since the largest component of annual operating costs is attributable to labor, when labor is used more productively, operating costs decline on a train-mile basis.

Revenue to Operating Cost Ratios



...The MWRRS operating plan and train speeds are integral to the system's overall cost effectiveness, as well as the system's reliability and regional connectivity...

The use of advanced train technology reduces per mile operating costs and maintenance costs. Although system operating costs incorporate current Amtrak labor work rules and labor rates, service-related productivity improvements, such as lower equipment maintenance costs, faster equipment turnarounds, and better crew utilization serve to contain operating costs.

Financing the Required Capital Investment

The MWRRS capital improvement program is estimated to cost $4.1 billion (in 1998 dollars) and is spread over 10 years. The funding plan consists of a mix of funding sources including federal loans and grants, state funding, general funds, and capital and revenue generated from system-related activities, such as joint development proceeds.

While the capital investment required is substantial, the goal of obtaining sufficient capital funding is achievable. A coordinated and active effort involving each state, private sector representatives, and local elected officials will be required to ensure the system's implementation.

Federal funding will be the primary source of capital funds. A major, multi-year funding program will be necessary to guarantee that federal funds are available to the project consistent with the implementation schedule. Some of the Midwest states are currently using federal funds to implement MWRRS components such as highway/railroad grade crossing safety improvements. The strategic financial plan also assumes that Federal Full Funding Agreements, Grant Anticipation Notes and Transportation Infrastructure Finance and Innovation Act (TIFIA) loans will be used to ensure a steady flow of federal funds in order to maintain the implementation schedule.

...A $4.1 billion capital investment is required to implement the MWRRS. Funding this level of investment requires:

> Federal funds

> State funds

> Private sector funds...

Key Assumptions Underlying the Strategic Financial Plan

A significant level of federal participation in the financing of capital costs will be obtained.

State funding to purchase trainsets and to match federal funding for infrastructure improvements will be obtained.

Where feasible, private–sector financing to augment public-sector investments will be obtained.

Federal funds from both transportation and non-transportation programs will cover 80 percent of infrastructure costs.

Proposed Implementation Schedule

The proposed implementation schedule reflects a 10-year phasing of MWRRS corridor segments. This 10-year phasing program is based on a detailed understanding of the system's operations, engineering, and environmental requirements and issues.

The following principles were used to assemble the proposed implementation plan:

- **Service is to be implemented consistent with market demand and each state's financial capacity to implement the phase**
- **Corridor segments with the highest potential ridership per dollar invested are to be implemented first**
- **Broad geographic coverage is to be achieved as early as possible**
- **Branch lines, which are expected to generate less revenue, are to be introduced in the later implementation phases when most of the corridors generate revenues in excess of operating costs**

...The MWRRS implementation plan reflects an incremental approach to capital improvements and service introductions. The proposed phasing ensures:

- Strong system start-up in terms of ridership and revenue
- Increasing ridership and revenue as the system becomes operational...

Additionally, ridership and revenue forecasts generated for the MWRRS were analyzed to identify the strongest performing corridors and to identify synergies between corridors in terms of rider travel patterns, level of ridership, operations, and network connectivity. The implementation and capital upgrade program was based on detailed input from freight and commuter rail operators. The implementation of the MWRRS will continue to require long-term, joint planning and coordination with the freight and commuter railroads.

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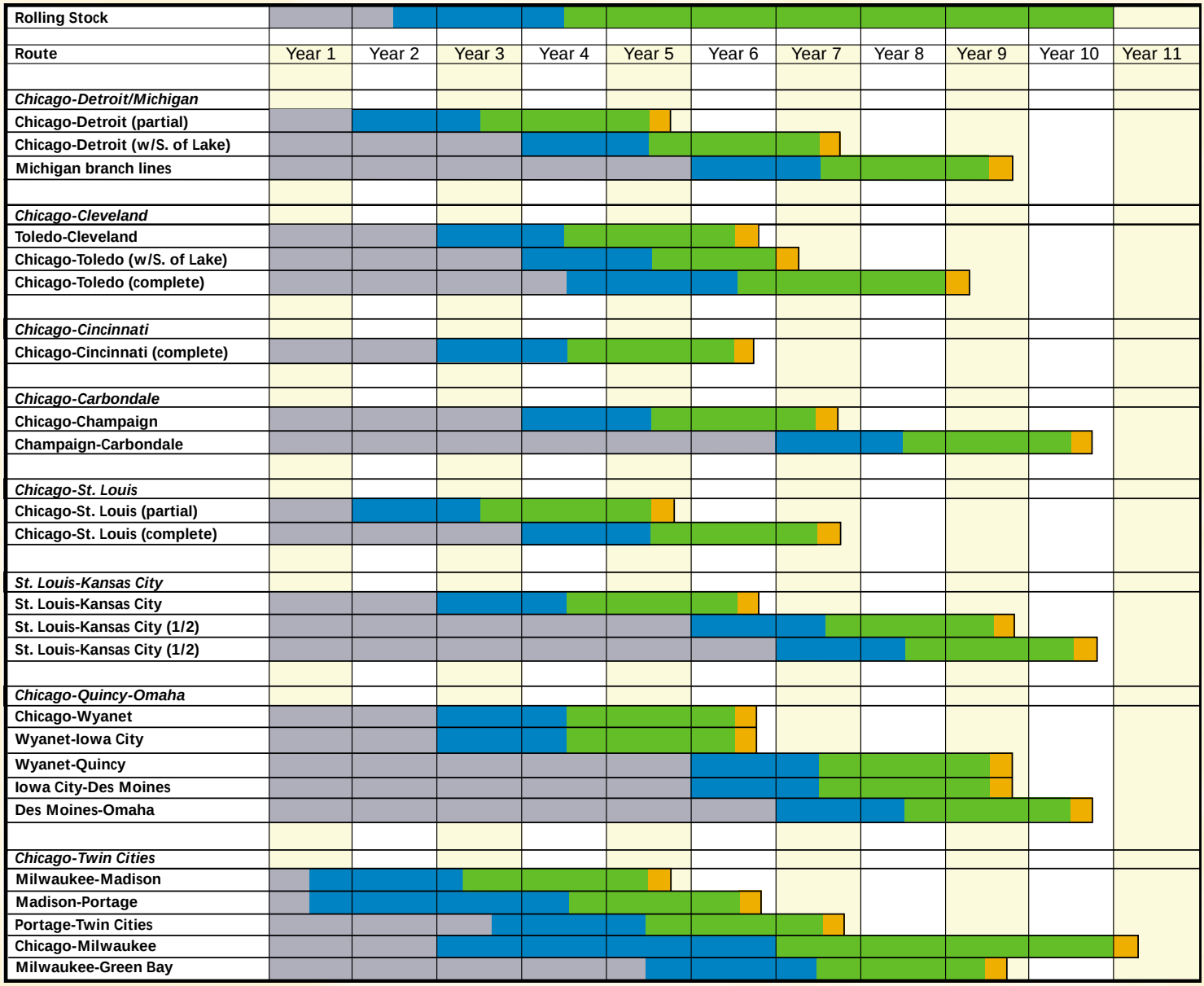
MWRRS Implementation Schedule



Key to Implementation Stages:

- Project Development
- Preliminary Eng. & Design
- Construction
- Revenue Service

Project Coordination

The phased implementation of the MWRRS will result in various states performing different activities during the same year. For example, during the initial phases of the MWRRS implementation, Illinois, Michigan, Minnesota, Missouri, and Wisconsin will be performing construction-related activities while Indiana, Iowa, Nebraska, and Ohio will be involved in design, environmental studies, and pre-construction activities. To properly support these activities, the management and institutional structures required for the MWRRS must be flexible and evolve over time to respond to the changing needs of the states as their corridor(s) progress from planning to revenue service.

The actual pace of this phasing hinges upon the capability of each state to proceed with project implementation activities. Since federal funding is the predominant funding source for infrastructure improvement costs, the MWRRS management structure will evolve over time in response to the level of funding and the complexity of the system being managed.

...MWRRS management requirements will evolve at a pace consistent with system implementation. Ultimately, a joint agreement addressing state responsibilities will be required...

MWRRS State Coordination

The MWRRI Steering Committee, comprised of state and Amtrak representatives, has managed the concept and feasibility planning activities over the past several years. This steering committee should continue through the initial years of project implementation. Its role, however, will evolve from planning, coordination and review to one that is more involved in project funding, satisfying grant requirements, and addressing implementation issues. At this juncture in the MWRRI, it is essential that a strong working relationship be forged between the states, Amtrak, freight and commuter railroads, and railroad labor to ensure that system needs are identified and that the underlying principles of the MWRRS vision are incorporated into the actual service provided.

Implementation of the MWRRS will remain the responsibility of the states. Once operational, states might find it advantageous to either broaden the roles and responsibilities of the MWRRI Steering Committee or take action to establish a formal organization charged with operations and system oversight. There are various institutional structures in the Midwest and in other parts of the U.S. that can serve as models for multi-state coordination. These models range from ad hoc multi-state committees, to committees established by multi-state agreement, to a Joint Powers Authority established through legislative authority.

Financial & Economic Benefits

An economic analysis was completed for the MWRRS using the same criteria and structure used by the Federal Railroad Administration (FRA) in its 1997 study, High-Speed Ground Transportation for America. This analysis, summarized below, generates a benefit to cost ratio of 1.7. The FRA, in its independent study, confirmed that a Midwest rail passenger system offers the highest level of economic benefit associated with rail investment anywhere in the U.S. except for Amtrak's Northeast Corridor.

...The MWRRS generates a benefit to cost ratio of 1.7...

MWRRS Economic Benefits to 2030

Benefits	Billions in 1998 dollars
MWRRS User Benefits	
Consumer Surplus	$6.4
(e.g., time savings expressed as dollars)	
System Revenues	$6.8
Other Mode User Benefits	
Airport Congestion Relief	0.7
Highway Congestion Relief	1.3
Resource Benefits	
Air Carrier Operating Cost Reductions	0.4
Emission Reductions	0.3
Total Benefits	**$15.9**
Costs	
Capital	$4.1
Financing	0.2
Operating and Maintenance	5.0
Total Costs	**$9.3**
Ratio of Benefits to Costs	**1.7**

...The FRA analysis supports the conclusions of the MWRRS plan, recognizing the system's:

> Potential financial return

> Economic benefits that could be derived...

The system will also generate resource savings in automobile operating costs, airport and highway congestion relief, and reduced energy usage and exhaust emissions. The extensive regional passenger rail network and the connectivity that it provides will afford an attractive travel choice that could result in reduced automobile trips for commuting, business, and leisure purposes.

...The MWRRS is an attractive regional travel option...

Other Benefits

MWRRS enhances the Midwest region's existing transportation system

...The MWRRS is a reasonable public and private investment...

- Provides an attractive passenger rail system with vastly reduced travel times, and enhanced service frequencies and regional connectivity
- Provides a transportation choice that affords travelers downtown-to-downtown connectivity between major urban centers
- Provides an alternative to highway travel and reduces congestion, energy use and emissions

MWRRS is a reasonable public and private investment

...The MWRRS investments lead to spin-off financial and economic benefits relating to:

> Freight and commuter rail improvements

> Community development

> Job creation...

- Total capital cost of $4.1 billion over a 10-year phasing plan

  Recommended 80 percent federal share; 20 percent state share

- Financially self-supporting operation upon completion of system ramp-up period

  Estimated 9.6 million passengers annually with operating revenues in excess of operating costs

MWRRS investments lead to spin-off benefits

- Freight and Commuter Rail Improvements

  Increased train speeds and improved highway/railroad grade crossing safety resulting from track capacity and signalization improvements

- Community Development

  Impetus for new station and station-area development opportunities and retail opportunities

  Improved transportation choices for regional travelers

- Job Creation

  2,000 permanent jobs

  4,000 construction jobs

...The MWRRS will generate over 2,000 new permanent rail operating, equipment maintenance, and track maintenance jobs and, approximately 4,000 construction jobs...

The Path Forward

The Midwest economy, like many other regions in the U.S., is experiencing significant growth. Midwest commercial and economic growth, to a large degree, is dependent upon travel within the region. Economic and population growth trends are expected to continue and the region's transportation network must keep pace with demand to sustain this growth pattern. Mobility—for both passengers and freight—is key to sustaining the Midwest's economic vitality, economic growth, and quality of life into the 21st century. The MWRRS will serve as a key component in order to achieve a 21st century transportation system. The planned, 3,000-mile MWRRS is designed to provide a coordinated passenger rail network, attractive travel times, service reliability, and systemwide connectivity necessary to offer an attractive mobility option and foster economic growth in the Midwest.

A series of short and long-term actions are necessary to advance the MWRRS plan towards implementation. Key actions are summarized below:

...The MWRRS is a key component in order to achieve a 21st century transportation system...

...Short-term and long-term actions required to advance the MWRRS towards implementation include:

> A coordinated project advocacy program

> An action plan to obtain funding commitments from federal and state governments

> A cooperative partnership with the freight and commuter railroads...

Project Advocacy

A regional stakeholder coalition is required to solicit active support for the MWRRS and secure the required levels of state and federal funding. This regional stakeholder coalition will consist of elected officials - mayors, legislators, governors, and members of Congress - as well as private sector advocates and the general public. Their foremost responsibilities include soliciting active support for the MWRRS and assuming an active role in securing federal and state funding.

Project Funding and Funding-Related Activities

An action plan to obtain funding commitments for MWRRS implementation is also required. Efforts are required to secure a dedicated MWRRS capital funding source. Actions should commence to gain federal agency approval to conduct a programmatic environmental review of the MWRRS in order to satisfy National Environmental Policy Act (NEPA) requirements and to position the MWRRS project for receipt of federal grant funds and TIFIA loans.

Shared Rail Rights-of-Way

Continuing dialogue with the freight and commuter railroads is also needed to finalize agreement on planned right-of-way improvements, the use of shared rights-of-way, and potential adjustments/refinements required to accommodate freight, commuter rail, and proposed MWRRS operating schedules.

For more information or additional copies contact:

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