

TITLE PAGE

Upper Midwest Freight Corridor Study

Executive Summary

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Performing Organization:

Midwest Regional University Transportation Center
University of Wisconsin-Madison
1415 Engineering Drive, Rm 2205
Madison, Wisconsin 53706
USDOT Region 5

Principal Investigator:

Teresa M. Adams, University of Wisconsin-Madison

Report Authors:

Teresa M. Adams, University of Wisconsin-Madison
Travis J. Gordon, University of Wisconsin-Madison
Ernie F. Wittwer, University of Wisconsin-Madison
Jiwan Gupta, University of Toledo
Peter Lindquist, University of Toledo
Mark Vonderembse, University of Toledo
Kazuya Kawamura, University of Illinois-Chicago
Sue McNeil, University of Illinois-Chicago

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Department of Transportation, Federal Highway Administration

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Upper Midwest Freight Corridor Study

Summary and Recommendations

Introduction

The Upper Midwest states are the economic and geographic cross roads of the nation. All major U.S. and Canadian railroads converge in Chicago. Major East-West (I-80, I-90, and I-94) and North-South (such as I-35, I-69, I-71, and I-75) roadways link the states to each other and to the nation. Ports on the Great Lakes and the Illinois, Ohio, Mississippi, and Missouri Rivers carry goods around the nation and to the world. Substantial freight moves through the region's busy airports. In addition, the Upper Midwest is influenced by a strong and growing economy in Ontario. Demand on the region's transportation system is stretching infrastructure to, and in many cases beyond, capacity. While estimates vary, by 2020 the freight moving across this network is expected to increase by about 50 percent. To improve regional, national, and global competitiveness, it is essential that system-wide efficiency and intermodal connectivity are developed to help suppliers, manufacturers, distributors, and retailers. Because the transportation system does not stop at state or provincial boundaries, improvements must be sought at a regional level.

Phase One of the study was largely concerned with the collection of data and a description of the scope of freight issues across the region. Analysis was expressly given a secondary role. Despite this focus, the data makes some findings inescapable:

- The free and efficient movement of freight is critical to the economy of the region. Gross Domestic Product and Employment track the movement of freight closely. This link is even tighter for the region because it is more dependent on manufacturing than the rest of the nation.
- While the numbers vary depending upon the measures used, something in the range of one-third of the freight movements in the country have an origin or a destination within the region, illustrating the importance of freight and the region to the nation's economy.
- The states of the region are very important in their mutual economies. Trade flows within the region far outweigh trade with other states of the nation or with foreign partners.

- While overhead, that is freight moving through the region that has neither an origin nor a destination in the region, is significant, it is typically less than thirty percent, depending upon the location and the measure used.
- Congestion in all modes is significant. Particularly in urban areas, the infrastructure is operating at or beyond design capacity. In rural areas, both highway and rail links are operating in a state of marginal capacity at many locations. As growth continues, the degree of operating congestion can be expected to grow to intolerable levels.
- Regulatory issues are generally not a major concern for freight movements within or through the region. US federal standards preempt state regulation and thus provide uniformity.
- The region could benefit from greater cooperation in implementing performance measures, traffic management, and information and regulatory systems related to commercial vehicles.
- The region could also benefit from greater efforts to collect freight related data and greater efforts at communication among public agencies and between public agencies and the private sector.
- The region could benefit from a cooperative approach to addressing the challenges of freight. The interdependence of the states in economic activity and trade make such actions critical.

These findings lead to a dire outlook for a no-action scenario. While projections of future travel demand are not part of this study, some simple and conservative assumptions give us a perspective on what happens if nothing is done. Waits at waterway locks will grow longer, congestion at major airports will increase substantially, and rail lines, which offer opportunities for intermodal links from truck to rail, will have more congestion at terminals and transfer points as well as at key main line routes. If by 2020, highway freight grows by 50 percent, which is less than previously projected, and if passenger travel increases by about 25 percent, which is slower than the past twenty years, highways that are already congested will become less safe and less efficient. As congestion increases, the region will become less attractive to businesses because they will be further away from both markets and suppliers in terms of time and because the costs of doing of business will increase.

Background

Several regions in the U.S. began to examine freight movements in the 1990s with studies like the Latin American Trade and Transportation Study and the I-35 Trade Corridor Study. In April of 2002, the Midwest Regional University Transportation Center (MRUTC) convened a statewide meeting that focused on freight and the need for a regional approach for the Upper Midwest states. In July 2002 at the American Association of State Highway and Transportation Officials (AASHTO) Mississippi Valley meeting, the research team (MRUTC, University of Wisconsin at Madison, University of Illinois at Chicago, and University of Toledo) was assembled and initial discussions began with the state Departments of Transportation (DOT). Working in cooperation with the DOTs, the research team developed a study proposal that defined four phases.

- Phase 1: Inventory/Data Collection – Assess the corridor and proposed study area for freight flows, physical infrastructure, and administrative issues.
- Phase 2: Needs Analysis – Identify infrastructure and administrative needs.
- Phase 3: Action Plans – Develop and recommend action items to address needs.
- Phase 4: Implementation and Ongoing Efforts – Develop strategies for implementing these action plans and for continuing regional cooperation.

In January 2003, six states agreed to complete Phase 1. Phases 2 through 4 were put on hold pending the outcome of the first phase. A meeting to kickoff Phase 1 was held the following June, and the pooled fund study began in August 2003. The objective of Phase 1 was to establish a regional approach for freight transportation in the Upper Midwest states based on a multi-state, multi-jurisdictional partnership of public and private sector stakeholders. This partnership considers and addresses short- and long-term issues surrounding anticipated increases in freight movement that use the transportation assets in the region and the likely impacts on the region's infrastructure, economic health, and quality of life.

Funding for the study was provided by the state DOTs in Illinois, Indiana, Iowa, Ohio, Minnesota, and Wisconsin (total \$360,000) using State Planning and Research (SPR) funds obtained from Federal Highway Association (FHWA). The study region, which is shown in Figure ES.1, includes these states plus Michigan and the adjoining Canadian provinces. The MRUTC and the participating universities provided a cost share in excess of \$200,000.

The study area is defined by I-80, 90, and 94, major North-South connecting routes, and important parallel routes. The study considers highway, rail, air, and water shipments, and recognizes that freight transportation should be mode agnostic. The administrative structure includes a steering committee and an advisory committee in addition to the research team. The steering committee has one representative from each state DOT in the region, plus the provinces of Manitoba and Ontario. Federal officials from both the U.S. and Canada have also been regular participants in the steering committee. The steering committee's role is to provide direction and oversight for Phase 1. The advisory committee includes all members of the steering committee plus representatives from metropolitan planning organizations, port authorities, private sector firms and associations, and other interested groups. The advisory committee provides perspective, expertise, and ideas on the direction and outcome of the study.

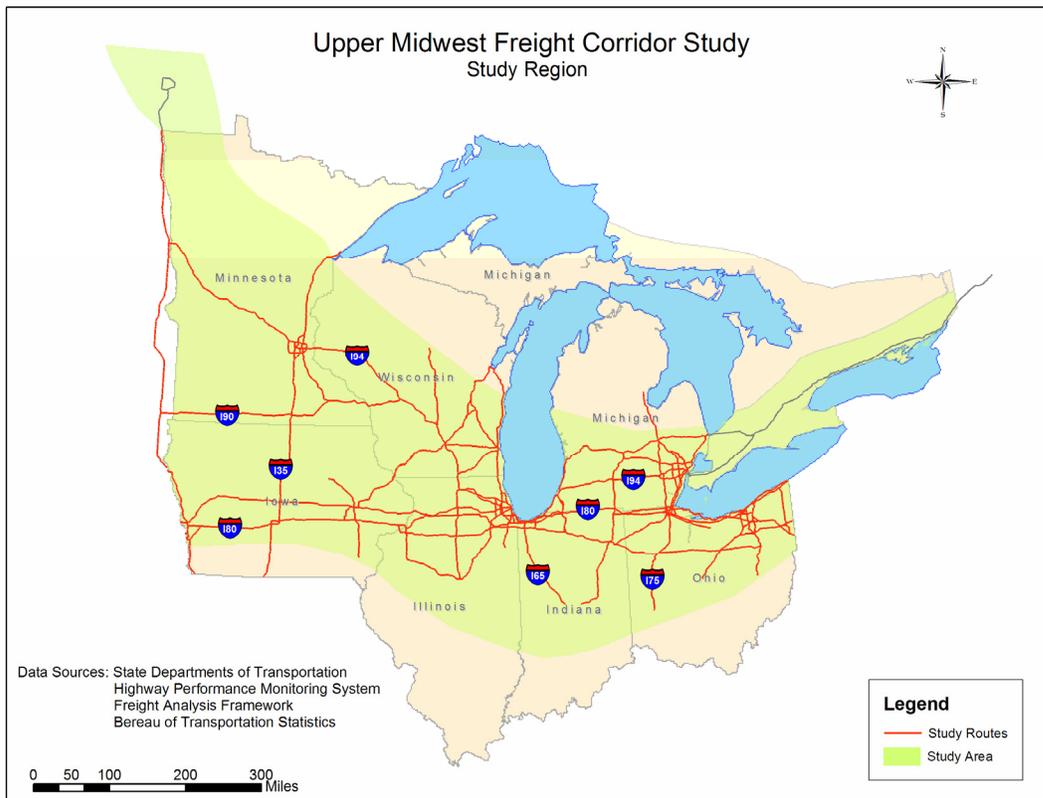


Figure ES.1 Upper Midwest Freight Corridor Study Area

Results

This report focuses on Phase 1, Data Collection, for the comprehensive effort to understand and improve freight flows in the Upper Midwest. The following sub-sections document the tasks as defined by the Phase I pooled-fund study:

- Examine *performance metrics* that may help assess the effectiveness of the transportation system
- Discuss and synthesize the components of *best practices* used by other regions to examine freight movement and to access federal support for projects
- Measure *usage and capacities* across the various modes to identify system level bottlenecks
- Understand *administrative issues* that may act as impediments to effective freight movement
- Create a *data reporting site* that provides access to study data and results
- Determine next steps to create a successful coalition of private and public sector partners to address transportation as a tool to increase economic development and improve quality of life.

At the end of each sub-section, specific recommendations are provided. In addition, overall recommendations are given at the end of the report.

Performance Metrics

Communication, understanding, and an ability to focus regional efforts are essential for improving the flows of freight in the Upper Midwest. Agreeing on and reporting a common set of metrics can play a significant role in unifying regional efforts by helping to guide action and direct resources. Because metrics influence the direction of the region on freight-related issues, they must be carefully selected to reflect accurately the items (e.g., speed, efficiency, and safety) that are important to the region.

The first part of a process to select a common set of metrics should be a structured planning session that would bring the stakeholders together to agree on the key regional performance parameters for freight. Measures should flow directly from those parameters. Implementation of metrics requires an organizational entity that spans the states. Several possibilities for this role exist, including the MRUTC and its partners in this study. Because much of the information currently available through transportation agencies does not deal with the topic of freight or the details needed for measurement, additional work will be required to develop dependable data sources.

Previous efforts at defining freight-related performance measures and the results of surveys generally point to the following broad areas for measurement:

- Safety of both employees of the transportation firms and of the general traveling public.
- Economic development that might be fostered by freight movement.
- Economic efficiency, as measured by larger economic trends.
- Economic efficiency, as measured by the costs of moving freight.
- Environmental quality.
- Congestion, reliability and time.

Recommendation for additional work in the area of performance metrics include:

- Facilitate a planning process that leads to the development of regional measures.
- Find or create data to support these measures.
- Define an administrative structure to collect and report the measures.

Synthesis of Practices

Many other regions of the country, such as the I-35 and I-95 corridors, have worked together on transportation planning and enhancements. Much can be learned from their efforts at regional cooperation. Areas for consideration include funding, organizational structure, decision-making processes, identification of catalysts and private sector involvement.

Different objectives bring states, local agencies and private firms together for various reasons. In some regions, organizations sought to better utilize their limited resources to efficiently address issues that crossed jurisdictional boundaries. The states along I-35 and I-29 coordinated deployment of intelligent transportation systems (ITS) for commercial vehicle operations. Other regions emphasized the need for regional thinking and freight planning to increase economic vitality. The southeastern portion of the U.S. realized the importance of Latin American markets to its economy.

The I-95 Corridor Coalition, encompassing the entire east coast of the U.S., set high standards for cooperation across boundaries and modes. This coalition has successfully attracted federal dollars to support regional transportation projects. With a small staff and a relatively small budget, the I-95 group has attempted to coordinate electronic toll payments, develop traveler information systems, and involve

private freight carriers in their efforts. Concepts and programs developed by this coalition are transferable to the Upper Midwest region such as ideas for funding, organizing, and decision-making.

Recommendation for additional work in the area of synthesis include:

- Create an administrative structure for an ongoing effort. A policy-making committee should lead the coalition, with action plans developed by a steering committee. Specific projects would be administered through subcommittees formed as needed around specific issues.
- Share resources to improve efficiency. Agencies should jointly define problems, pool resources to solve them and share the results of these efforts. This could be applied to training, data collection, and working with the federal government.
- Increase communication among the personnel who work with freight issues. The freight industry is complex, changes rapidly and could benefit from advances in technology. The states will benefit from sharing ideas and by learning about different perspectives in freight.
- Improve coordination with other freight related groups in the corridor to take advantage of the work already done by groups such as the Gary-Chicago-Milwaukee ITS Priority Corridor and not duplicate these efforts.

Usage and Capacity

The study area accounts for roughly one-third of the total freight activities that occur in the U.S., and roughly 19% of the U.S. employment, so it is fair to claim that regional economic activities are "freight intensive." In fact, the study area has about 27% of the manufacturing jobs in the U.S. Furthermore, the region is at the heart of the transportation network that connects the economic engines on the East, West, and Gulf coasts of the U.S. as well as the adjoining Canadian provinces. Figure ES.2, which depicts the tons of freight transported by water, highway, and rail, clearly illustrates the critical significance of the Upper Midwest region to the nation's freight transportation network.

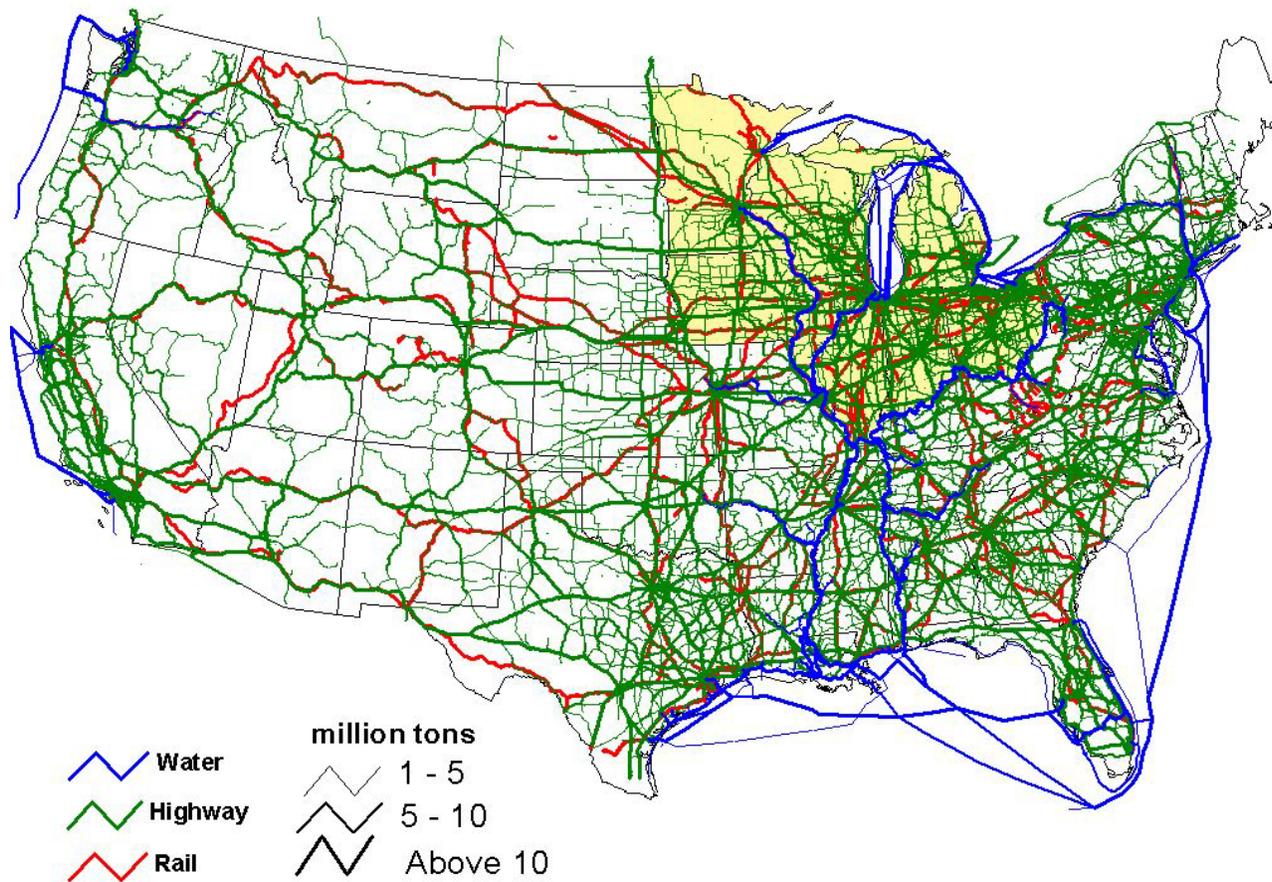


Figure ES.2 Link Tonnages, 1998

Source: FHWA, GeoFreight

Key Usage characteristics: Chart ES.1 looks at freight shipments that have at least one trip-end within the study area. It shows the region's share of the total U.S. freight shipments by ton, value, and ton-mile for the different modes. These data show the importance of the region to the country across all modes of transportation. Water plays a significant role when the parameter, ton-miles, is considered.

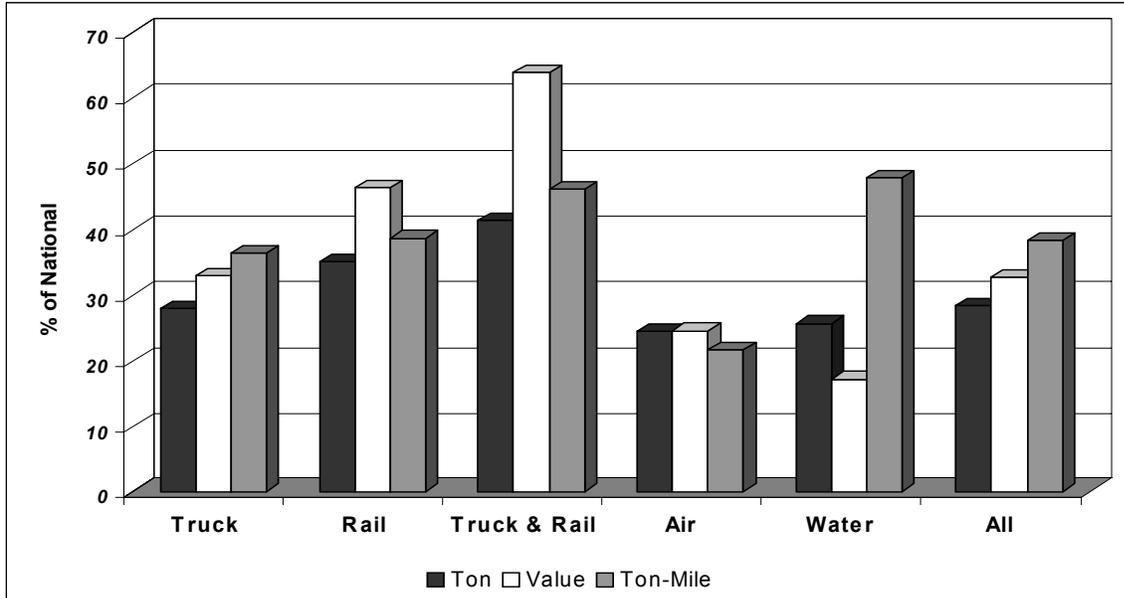


Chart ES.1 Share of the U.S. freight shipments - shipments with at least one trip end within the study area.

Source: Woods & Poole, 2003

Table ES.1 shows shipment by ton, value, and ton-mile that are intrastate (S-S), interstate within the region (S-R), and interstate outside the region (S-E). By tonnage, the freight activity in the Upper Midwest is dominated by the intrastate truck shipments (64%). However, low-value shipments such as gravel and non-metallic minerals account for about 30% of all the intrastate truck freight movements. Also, the trip lengths for those commodities tend to be very short. Consequently, the analyses of other indicators of freight activity, such as value of shipments and ton-miles, are more useful. When value is considered, intrastate shipments by truck are still substantial (38%), but regional moves (S-R) and external moves (S-E) are also substantial. This supports the claim that the states in the region are their own best trading partners. When ton-miles are considered, as expected, rail and water shipments carry a larger portion of the total shipments.

Table ES.1 Breakdown of Freight Shipments with One or both Trip-Ends in the Study Area

	Freight Tons %			Freight Value %			Freight Ton-Mile %		
	IS	Reg	Ext	IS	Reg	Ext	IS	Reg	Ext
Total	70.3	13.5	16.2	39.6	23.4	36.9	15.0	17.0	68.0
Truck	64.3	10.4	9.2	38.4	21.9	30.3	12.2	11.9	29.5
Rail	5.1	2.4	4.4	1.0	1.1	4.0	2.2	3.9	22.1
Truck and Rail	0.0	0.0	0.2	0.0	0.0	1.4	0.0	0.0	2.1
Air	0.0	0.0	0.0	0.1	0.4	0.7	0.0	0.0	0.1
Water	0.9	0.7	2.4	0.1	0.0	0.5	0.6	1.2	14.2

IS=Intrastate; Reg=Regional; Ext=External; Total does not include all modes, only the five major modes specified in the table.

Intrastate shipments typically account for less than 20% of the total truck tonnage transported on any given link. The remainder is attributed to regional, external and pass-through freight traffic. All freight modes cater to fairly specific market niches that are defined by the origin-destination pairs and commodities. For example, a considerable portion of the freight moved by water transportation involves low-value bulk goods such as coal and grain between the Upper Midwest and Louisiana ports. Intermodal competes against truck and air for certain high-value commodities such as automobile parts, electronics and other machinery. California is a major origin and destination location for those modes. Consequently, the flow of freight is driven largely by a limited number of origin-destination and commodity combinations. Typically about one-third of the freight flow can be attributed to the top 15 origin-destination pairs. Truck is by far the most versatile in terms of the types of commodities transported. All other modes are narrowly focused on only a few commodities that typically account for over 80% of total freight transported.

Although gravel and crushed stone accounted for over 23% of truck freight movements in terms of weight, its economic significance is negligible (0.3% of total value). Meanwhile, finished goods and machines account for a significant percentage, approximately 25%, of the total value of the shipments moved by trucks.

Five out of the ten largest traffic generators of rail freight, in the U.S. are either within or in close proximity of the study area, underscoring the importance of the study corridor for the movement of

freight by rail. The Chicago region ranks third and first as origin and destination, respectively. In terms of weight, bulk commodities account for most of the rail shipments. Roughly 70% of the rail shipments that originate or terminate in the study area are coal, metallic ores, or cereal grains.

Intermodal transport (i.e. truck and rail combination) is used mostly for long-distance shipments of high-value commodities. California is by far the most important destination for the intermodal shipments originating from the study area.

The type of commodities and also origin-destination pairs served by air transportation are similar to intermodal movements. California appears to be an important trade partner for airfreight. Approximately 60 to 70 % of the total value of all the shipments can be attributed to precision machinery such as electronic equipment and instruments, suggesting a narrow market niche for the airfreight industry.

The Great Lakes and the inland waterway system provide an extensive network for the movement of freight by water. The movement is predominately north-to-south taking advantage of the Mississippi River system. Freight movement from Illinois to Louisiana account for almost a third of all movements in terms of tonnage and over 50% by value.

Most highway segments in the urban areas are congested and operating at capacity. This congestion is extending into some of the rural parts of the highway system. As other factors such as interchange geometry, toll plazas, and incidents are included, the overall operating capacity deteriorates beyond what is shown in Figure ES.3.

Rail capacity is similar to that of highways. While many railway segments have the ability to handle additional traffic flow, key rail segments are at capacity. Additional constraints on the system are rail yards and terminals. The number of sidings and signals also negatively impact rail segment capacity.

Although excess runway capacity exists at many of the airports in the region, other factors such as air traffic control systems, weather, and landside capacity may constrain airport capacity. A detailed study will expand the analysis of airport capacity.

River locks are bottlenecks in the regional waterways navigational system, causing inefficiency in the movement of barges and bulk goods. If these bottlenecks were addressed, excess line-haul capacity is available in the navigational system.

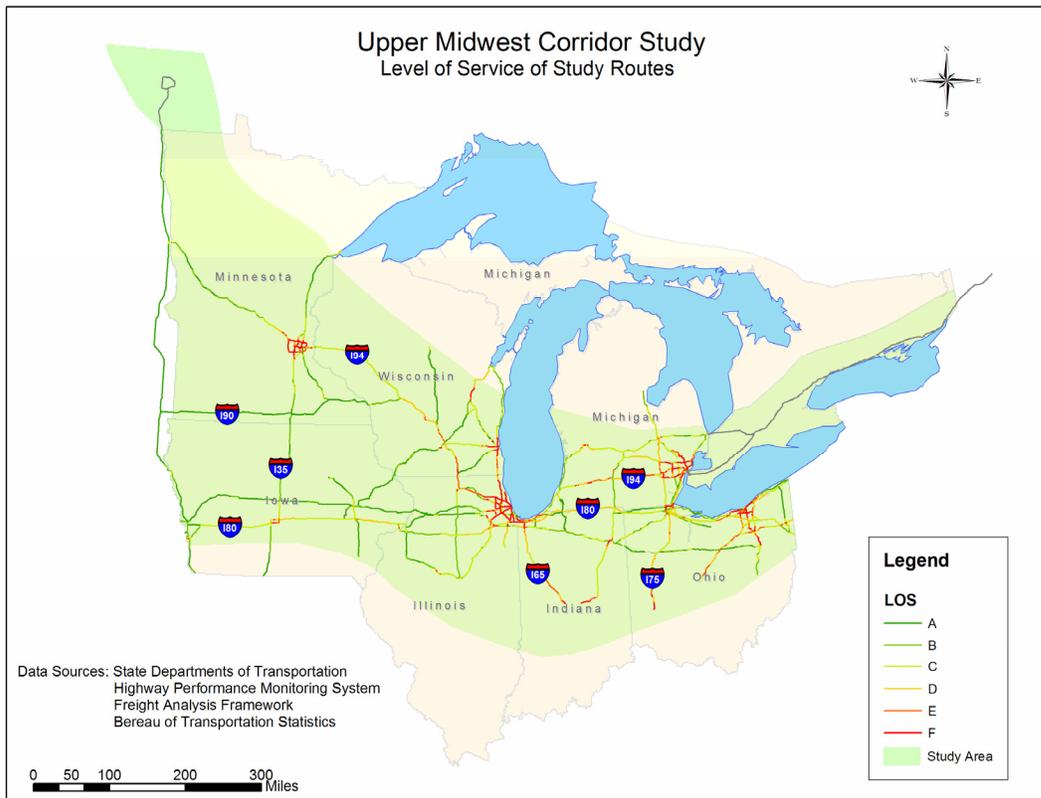


Figure ES.3 Thematic Map showing Level of Service for the Study Region Highway Network

Recommendation for additional work in the area of usage and capacity include:

- Develop a regional approach to transportation planning. The average trip length of all the freight shipments that are destined for the study area is over 250 miles. Although the data are not available, similar figures should apply for the outbound shipments. The overwhelming majority of the freight traffic that originates or terminates in the study region crosses at least one state boundary. Thus, any changes in the flow of freight, favorable or unfavorable, will likely cause impacts that extend beyond state lines.
- Use existing transportation infrastructure in all modes to address the needs to move freight. While more detailed network-level analysis must be conducted to determine the actual impacts on the study corridor, it is unlikely that highway expansion alone can address the current and growing congestion problem.

- Investigate policy and technical options to make intermodal (truck on rail) transportation efficient and reliable enough to compete in the market for medium and short shipments, which account for approximately 70% of the freight tonnage in the study area. Analysis indicates it is unlikely that intermodal alone will make a significant dent on the road congestion at the network level.

Administrative Issues

This area of study focused on the impacts of regulatory inconsistencies for freight transport on highways because freight transported by the other modes is privately controlled (rail), federally regulated (air and water ports), or determined by limitations specific to the locations (water ports). Even on federally funded highways, federal regulations govern freight vehicle equipment, maintenance, and operators. As a result, regulatory inconsistencies impact freight movement when the freight shipment's origin or destination is located within a certain region. The inconsistencies have no effect on freight movement that passes through the region because of the uniformity of federal regulations. U.S. federal regulations are generally more restrictive than Canadian guidelines, thus trucks that meet size and weight rules to travel in the U.S. comply with Canadian regulations. Regulatory inconsistencies in the region include:

- Minnesota and Wisconsin do not allow STAA doubles (twin 28.5 foot trailers with max gross vehicle weight (GVW) of 40 tons) on non-designated state highways as do other jurisdictions.
- The adjoining Indiana East-West Toll Road and Ohio James W. Shocknessey Turnpike accommodate longer combination vehicles (doubles and triples). However, the maximum allowable GVW and cargo size for long combination vehicles are different for Indiana and Ohio.
- A standard five-axle truck and trailer that complies with U.S. Federal weight regulations cannot legally travel on non-designated state routes in Minnesota and on some state roads in Illinois.
- Indiana, Illinois, Ohio, and Michigan enforce a speed differential for trucks that is up to 15 mph lower than for cars.
- The fee structure for commercial driver's licenses and required participation in the International Fuel Tax Agreement and Single State Registration System vary among jurisdictions in the region.

Regulatory inconsistencies may impact the efficiency of freight movement within the region. Trucks that must comply with multiple regulations must comply with the most restrictive, leading to more trucks and higher transport costs. For example, if a fully loaded truck in Wisconsin reaches its weight capacity before its volume capacity is full, it carries the equivalent of 1.09 fully loaded trucks in Minnesota

(operating off of the federally designated system) because the gross vehicle weight limit is higher in Wisconsin.

In another case, some states have differential speed limits (DSL) for trucks. The logic is to improve highway safety. DSL may impact the efficiency of freight transport across the region and impose an added enforcement burden for highway patrol with little impact on highway safety.

Recommendation for additional work in the area of administrative regulation include:

- Collaborate to deploy electronic screening facilities at critical locations. Even with regulatory differences, jurisdictions should collaborate to build a regional network of electronic sites for better enforcement, time saving-benefits to carriers and increased safety and efficiency of commercial vehicle operations.
- Upgrade all weigh stations to handle electronic screening. Ohio and Illinois have employed this technology, but other states have only recently begun deployment. A regional perspective builds on what the states are doing to solve regulatory compliance and safety problems.
- Examine regulatory inconsistency and consider change. For example, allowing STAA doubles, adopting a single regional weight package, or removing speed differentials are likely to increase the efficiency for freight transport and may impact safety.
- Redesign fee structures and administrative procedures to make them uniform.

Data Reporting Site

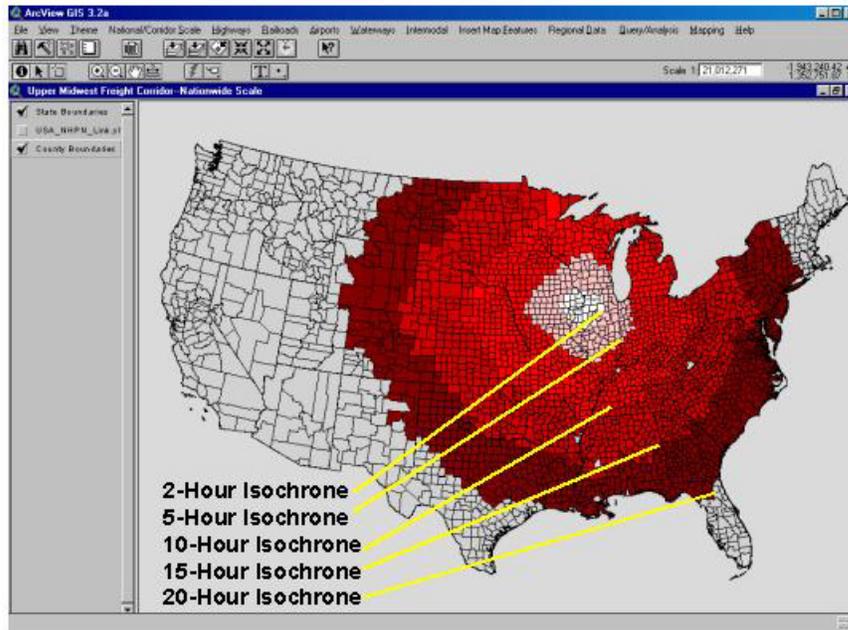
Early in the study a decision was made to create a database structured within an internet-based GIS delivery system to provide continuous, seamless coverage of the regional transportation system. The system serves as a mechanism for reporting on the condition of regional infrastructure and for the on-going study of freight movements. This approach was intentionally adopted to underscore the importance of the study's regional perspective and to enable stakeholders and public officials to gain a view of freight movements that extends beyond their counties, states, or provinces. The database and the delivery system were designed to bring together transportation professionals from a variety of organizations including State/Provincial Departments of Transportation, Metropolitan Planning Organizations, Economic Development Organizations, Private Sector Participants and Research Organizations.

A second major element in the development of the regional freight database deals with the internet-based data delivery system. This system, dubbed *Midwest FreightView*, enables users from these organizations to access the database through a specialized *Citrix* Metaframe server located at the University of Toledo (UT). Users are given a set of permissions and can access data using a standard web browser with no additional software needed. Users operate the delivery system entirely on the UT server and screen images, not data, are transferred to users. All data are stored at the Toledo site to maintain data quality and security. A full range of mapping and query functions are available on the site.

Considerable effort has been expended to gather and manage data from a wide range of sources including highways, rail lines, waterways, airports, ports and intermodal terminals. Additional data dealing with usage, capacity and administrative policies have been tied to these components of the network. The network contains data sets from the Bureau of Transportation Statistics (BTS), the Federal Railroad Administration (FRA), FHWA and state DOT databases as a way to provide as detailed a description of the network as possible. In addition, the database contains comprehensive regional economic data including employment figures, number and locations of establishments, and the types of commodities produced within each portion of the region. As a result, the database serves as a resource for the research team, transportation professionals, and economic development authorities to draw the essential link between economic activity and the capacity of the freight infrastructure.

Recommendation for additional work in the area of the data reporting site include:

- Extend the *Midwest FreightView* to simulate travel time on the highway network. Detailed data pertaining to the interplay between travel time, traffic volume and capacity, and travel at specific times of day can be developed to simulate truck movements over the highway network. Figure ES.4 illustrates the travel time from Moline, Illinois to the rest of the lower 48 states. This simulation is based on assumed congested conditions over the network on truck trips.
- Add social and economic data to *Midwest FreightView*. This would allow the study team and others to examine the relationship between these data and freight movement.



**Isochrone Map:
Hours from
Moline, Illinois**

**“Congestion”
Scenario
Over
Identified Links**

**40% of US Farms
Within 10 Hours**

**83% of US Farms
Within 20 Hours**

Figure ES.4 Sample isochrone map showing travel times from Moline, Illinois to the national market

Overall Recommendations

If the transportation network in the Upper Midwest is to keep pace with the demands of businesses that move freight to meet consumer demand, achieve economic growth and development that lead to jobs, and meet the leisure and recreational needs that enhance quality of life, it must be developed and managed as a regional asset. The process for implementing these efforts requires the development of mechanisms for interstate cooperation at the policy, planning, implementation, and operating levels. It is a process that requires the commitment, support, and involvement of the CAO/Director in the state DOTs. Commitment implies authority to move ahead; support implies resources to do the work; and involvement implies an active role in driving the concept throughout the DOT and participation in regional policy making.

Important outcomes should be:

- Continued communication among freight transportation stakeholders in the region

- Processes for reviewing and investing in promising ideas and technologies that boost the safety, reliability and efficiency of the transportation network
- Efforts to seek federal support for projects that are important to the region and the nation
- Resource sharing in design, planning and implementation expertise as well as the planning and execution of transportation research
- Establish regional cooperation. Before these innovations can be implemented challenges must be overcome to assure efficient, timely and accurate information exchange within the region. The first of these issues deals with regional interest, dialog and participation among the players.

To accomplish these outcomes, it is necessary that regional transportation leaders create a vision for the future of transportation in the Upper Midwest and define a structure and process that leads us to that vision through broad-based participation and intense interaction, free and open idea exchange, and frank evaluation and feedback. The study implies that the vision should involve transportation as the means to the ends of better economic development and enhanced quality of life. Key factors include the development, application and use of technology both transportation and information systems related. Creating a vision involves cooperative efforts in planning, implementation and operations, supported by sharing resources, information and ideas. A process for turning this vision into reality requires a multi-state, multi-jurisdictional partnership of public and private sector stakeholders that can transform the vision to specific goals, action plans, and projects.

The study team, with the support of the steering committee and the advisory committee, is making the following recommendations.

1. Continue efforts to build a regional coalition to improve freight transportation. This should become an ongoing activity that is supported by the seven states and the Canadian provinces, private sector and public sector stakeholders, the Midwest Regional University Transportation Center and the University of Wisconsin at Madison, University of Illinois at Chicago, and University of Toledo. The essence of this partnership is to:
 - Define regional goals, objectives, and metrics
 - Examine commodity flows into and out of the region
 - Discuss and resolve public policy issues
 - a. National and regional freight policy
 - b. Level of cooperation among the states

- c. Role of the public sector in freight
 - d. Level of investment in research and new technology
 - e. Appropriate strategies to influence behavior
 - f. Value of public and private sector partnerships
- Develop and execute transportation plans
 - a. Compatible approaches to design and planning
 - b. Develop a regional planning process
 - c. Jointly plan and fund research
 - d. Share information/data dissemination
 - Identify issues on the ground
 - a. Bottlenecks of regional importance
 - b. Identify intermodal opportunities
 - c. Enhance infrastructure utilization
 - d. Examine administrative fees and procedures
 - e. Cooperative management efforts—ITS
2. Form a policy committee for the Upper Midwest states that would include the CAO or their designated representative from all the seven state DOTs. This group should quickly determine the role and level of participation of the adjoining Canadian provinces. The purpose of this group would be to provide direction and oversight for building a regional coalition. The initial tasks for this group are to:
- Develop a vision statement for the region that considers economic development, the quality of life, the role of technology, regional planning and cooperation.
 - Create a process that can transform the vision into specific goals, action plans and projects. A starting point for the process is shown in Figure ES.5.
3. Provide short-term funding support for the Upper Midwest Freight Corridor Study until July 2005. This funding would support the following efforts
- Define a regional agenda for freight
 - Investigate opportunities to secure federal dollars to continue funding future study phases
 - Investigate funding sources for the corridor and the impact of participation on ongoing federal aids received in the region. During this process the research team would review the reauthorization bill, identify the provisions that would benefit the corridor, and provide a “white

paper” with advice and reasoning that the state DOTs can pass on to their AASTHO representatives.

- Develop applications for participation as deemed appropriate by the states.

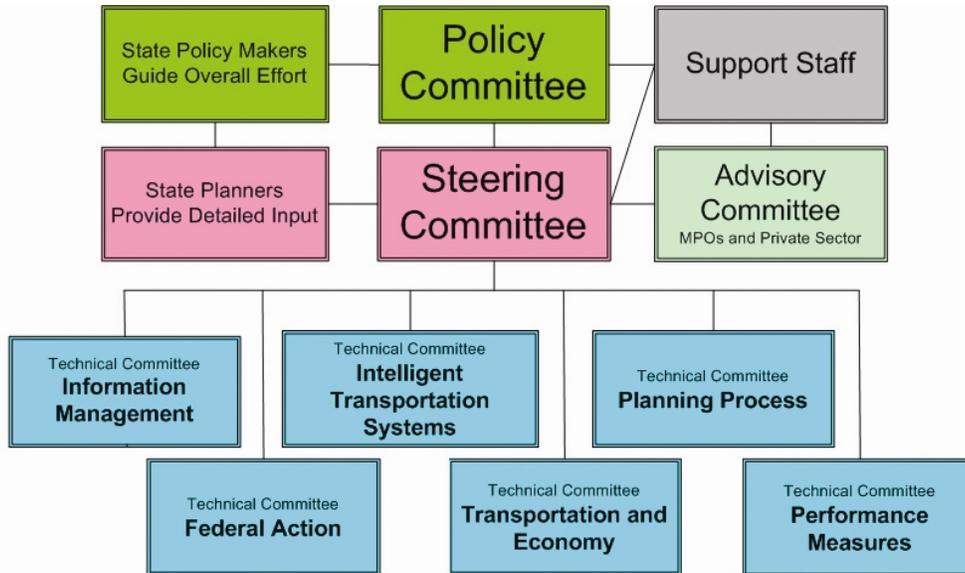


Figure ES.5 Proposed structure of regional freight coalition

- Coordinate a regional dialog to reach agreement on a regional position on freight issues for the federal arena.
- Seek AASHTO and FHWA – Freight Office endorsement and co-sponsorship of the corridor study, the study’s recommendations, and future efforts. Seek their advice and direction for next steps.
- Offer to use the corridor as a new initiative or test case study corridor. For example, the region would welcome the development and testing of new technologies that could reduce congestion and increase system capacity.
- Continue outreach and education work in support of the regional agenda.
- Continuing information management and enhancement efforts
- Facilitate an initial effort in Commercial Vehicle Operation – Intelligent Transportation Systems (ITS)

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