Overview and Problem

Safe, reliable, and efficient transportation systems are essential to the economic vitality and strength of our nation. If the U.S. economy is to reach new heights, the transportation system must be capable of moving people and goods safely, quickly, and efficiently. Federal transportation activities increasingly consider freight movements as key elements of planning and development as there are strong correlations between freight volume and both general employment and manufacturing employment. In addition, the quality of life including work-related, leisure, and recreational travel depend upon safe and reliable transportation.

The States of the Upper Midwest (Minnesota, Michigan, Wisconsin, Indiana, Iowa, Illinois, and Ohio) created a pooled fund [TPF-5(0118)] to address freight issues from a regional perspective. The graphic below illustrates the study region.

Demand on our transportation system is stretching infrastructure to, and in many cases beyond, capacity. While estimates vary, the freight moving across this network is expected to increase by at least 50 percent by 2020. Ideas and methods are needed that increase the utilization of existing assets through the application of technology and innovative
management practices that identify and solve bottlenecks in the transportation network.

The Upper Midwest is also uniquely situated at the economic and geographic cross roads of the nation. All major U.S. and Canadian railroads converge in Chicago. Major East-West and North-South 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 the world. Substantial freight moves through our busy airports. To improve regional competitiveness, it is essential that we seek system-wide efficiency and inter-modal connectivity.

A multi-state, multi-jurisdictional partnership of public and private sector stakeholders is needed to transform a regional vision into specific goals, action plans, and projects. To address regional issues, sustained efforts across a variety of stakeholders is essential. The Upper Midwest Corridor Study-Phase II continued to develop this vision.

**Project Objectives**
This study builds upon work completed in Phase I (SJN 134138) and continues regional efforts targeting planning and cooperation. Phase II added the State of Michigan and considered short- and long-term issues surrounding anticipated increases in freight movement within the region and the likely impacts on the region’s infrastructure and economic health.

The specific objectives of Phase II included:
- Development of a Regional Freight Agenda
- Facilitating discussions of a regional approach to deploying commercial vehicle-related intelligent transportation systems
- Maintenance and improvement of the regional information system on freight.

The research team was also tasked with preparation of a whitepaper series on various policy options that the region could consider for specific and emerging freight challenges. These whitepapers reflect conversations with state freight planning and federal relations staff, and other efforts at the national level.

**Task Descriptions**
To develop the regional freight agenda, several teleconferences and two face to face conferences were held. Key elements for inclusion in the stakeholder meetings were developed by the state-established technical committee.

The first of these stakeholder meetings was held in November 2005 in Milwaukee, Wisconsin. Over 70 participants attended the workshop. They developed a list of potential action items and requested that the research team begin drafting a series of actions to comprise a regional freight agenda. The second stakeholder meeting was held in Columbus Ohio in April 2006 to develop the formal recommendations and items for inclusion in the Regional Agenda. At the conclusion of these meetings, participants decided to continue efforts, ultimately yielding the Mississippi Valley Freight Coalition, the 10-state, Mississippi Valley Conference of AASHTO, regional cooperative effort on freight issues.

The Midwest Traffic Operations Coalition was formed to address regional traffic and ITS issues. In
the first quarter of 2006, a series of exploratory meetings were held with a collection of Midwest-based organizations with an interest in enhancing interstate traffic and commercial vehicle operations and sharing of traveler information. The Midwest Regional University Transportation Center (MRUTC) and the Traffic Operations and Safety Laboratory (TOPS) at the University of Wisconsin-Madison worked together to explore the establishment of a Midwest Traffic Operations Coalition. Using the participant framework and existing funding of the Upper Midwest Freight Corridor Coalition was the launching platform. The formation of this coalition resulted in a Conceptual Regional Technology Plan, the second key objective of Phase II.

Data services were also expanded and continued through the Midwest FreightView database.

**Conclusions & Recommendations**

The principal product of this study is a Regional Freight Agenda. The agenda is a compilation of the information obtained through the regional dialog and research. The document includes prioritized statements of potential initiatives that reflect the region’s collective interests.

Three priority initiatives were identified, these include:

1. Public & Political Understanding; this initiative improves public and political understanding and better document funding needs. Elements include recommendations to:
   - Establish a cross-state task group to develop marketing plans, detail necessary audiences, and define messages and actions.
   - Continue work with public officials to clearly document infrastructure funding needs to improve freight movements.
2. Public Sector’s Ability to Plan for and Deal with Freight; this initiative outlines plans to create an ongoing regional effort. Steps:
   - Develop an information resource to identify opportunities for freight transportation improvements
   - Define a regional multimodal freight network, identifying agency points of contact, developing model planning approaches, and
   - Develop the role and structure for public/private partnerships.
3. Intermodal Regulations and Capacity; this initiative is focused on the removal or mitigation of regulatory and capacity limits on freight mobility in the Upper Midwest. The team identified several specific barriers to enhanced competition in the freight industry and outlined support for alleviating bottlenecks.

Another product of the Phase II study is a Conceptual Regional Technology Plan. The plan outlines six objectives:

- Organizational and technical support to foster learning and information sharing
- A source of long-distance travel information to shippers and the traveling public
- Development of a mobility-oriented Regional Concept of Transportation Operations
- Development and maintenance of strategic, performance-oriented business plans
- Creation of frameworks and guidelines that will:
• Assist members with system management and operations
• Support investment decisions
• Select and define standards for information sharing
• Accelerate coordinated system management and operations by facilitating deployments of cross-jurisdictional services.

A third objective was the continued development of the regional information system. Included in the Phase II report is the necessary Information Resources for Supporting the Regional Freight Agenda in the Upper Midwest. This data plan highlights the key information necessary to implement the regional agenda. The information system provides a single repository for regional data and provides convenient access to public sector officials to obtain information on freight.

Implementation Potential
At a minimum, the dissemination of the white papers, briefing documents, and regional freight agenda will benefit transportation decision makers. Audiences for these materials include the general public, transportation analysts, agency decision makers and legislators and their staffs. The materials prepared in Phases I and II formed the basis for a “Corridor of the Future” proposal and for a formal Memorandum of Understanding among the states in the region to cooperate in the planning, operation, preservation, and improvement of transportation system infrastructure.

Impediments to implementation will be funding required for suggested technology deployment and administrative inconsistencies as also documented in Phase I. Implementation relies upon continuing cooperation and discourse between the states, the freight industry, and the local governments. The continued dialogue and the development of an emerging Mississippi Valley Freight Coalition will serve as tools for overcoming these challenges.

For additional information on the efforts, visit http://www.mississippivalleyfreight.org.

White Papers
The research team prepared detailed whitepapers as part of this study. Each is provided in the final report document:
• The Challenge Ahead
• Trade between China and the Upper Midwest States
• Null Alternative in Highway Capacity & Management
• Applying Regular Federal Aids to Highway Freight Capacity Issues
• Creating Highway Capacity
• The Role of Tolls in Moving Freight
• Using Highway Technology
• Railroads and Freight in the Future
• Great Lakes Maritime Transportation System
• Encouraging Development of Intermodal Freight Facilities
• Investing in Non-Revenue Modes
• Transportation and the Economy