



2008 Workshop on Responding to National Transportation Initiatives

MAFC 07
December 2008

National Center for Freight & Infrastructure Research & Education
Department of Civil and Environmental Engineering
College of Engineering
University of Wisconsin–Madison



Authors:

Ernest Wittwer, Teresa Adams, and Jason Bittner
University of Wisconsin–Madison

Principal Investigator:

Teresa Adams, Ph.D.
National Center for Freight & Infrastructure Research & Education
University of Wisconsin–Madison

DISCLAIMER

This research was funded by the 10 states of the Mississippi Valley Freight Coalition and the National Center for Freight and Infrastructure Research and Education at the University of Wisconsin-Madison. The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the information presented herein. This document is disseminated under the sponsorship of the Department of Transportation, University Transportation Centers Program, in the interest of information exchange. The U.S. Government assumes no liability for the contents or use thereof. The contents do not necessarily reflect the official views of the National Center for Freight and Infrastructure Research and Education, the University of Wisconsin, the Wisconsin Department of Transportation, or the USDOT's RITA at the time of publication.

The United States Government assumes no liability for its contents or use thereof. This report does not constitute a standard, specification, or regulation.

The United States Government does not endorse products or manufacturers. Trade and manufacturers names appear in this report only because they are considered essential to the object of the document.



Mississippi Valley Freight Coalition Workshop
March 31 – April 2, 2008
Courtyard by Marriott Downtown Indianapolis
Indianapolis, Indiana
Hosted by the Indiana Department of Transportation

GOAL

The Mississippi Valley Freight Coalition was created to protect and support the economic wellbeing of the industries, farms and people of the region by keeping the products of those industries, farms and people flowing to markets reliably, safely, and efficiently.

WORKSHOP OBJECTIVES

- Facilitate opportunities for cooperation among Coalition members
- Updates Coalition members on sponsored activities
- Facilitate dialogue in the context of related national efforts
- Facilitate discussion and response to National Initiatives in Transportation Funding & Policy
- Conduct MVFC Technical Committee meeting and develop the 2009-2010 Workplan for the Coalition.

DAY ONE - MARCH 31 2008

Start	Stop	Activity (location)	Speaker/Facilitator
12:00	noon	Registration <i>Outside Ballroom</i>	
1:00	1:15	Welcome: Purpose and Process <i>Market & Keystone</i>	Teresa Adams, CFIRE Jason Bittner, CFIRE
1:15	1:45	Introductions: Name, role, organization, location, hope for the outcome of MVFC	
1:45	2:45	Host State Presentation Indiana Department of Transportation	Indiana DOT, Keith Bucklew
2:45	3:00	Break <i>Outside Ballroom</i>	
3:00	4:15	Coalition Updates <ul style="list-style-type: none"> • MVFC Activities • Logistics Short Course • Freight Planning for Small and Local MPOs • Expanded Truck Parking Facilities • Bottlenecks and Alleviation Strategies • Freight Traveler Information Clearinghouse 	<ul style="list-style-type: none"> • Teresa Adams, CFIRE • Bruce Wang, CFIRE • Jessica Guo, UW-Madison • Bruce Wang, CFIRE • Jessica Guo, UW-Madison • Todd Szymkowski, UW-Madison
4:15	4:45	FHWA Updates	Robert Tally, FHWA
5:00	7:00	Reception & Cash Bar <i>Meridian</i>	Frank Busalacchi, Secretary, Wisconsin DOT (Member, National Surface Transportation Policy and Revenue Study Commission)
5:45		Keynote Remarks National Surface Transportation Policy and Revenue Study Commission	



Mississippi Valley Freight Coalition Workshop

March 31 – April 2, 2008

Courtyard by Marriott Downtown Indianapolis
Indianapolis, Indiana

Hosted by the Indiana Department of Transportation

DAY TWO - APRIL 1, 2008

Start	Stop	Activity	Leader
7:30	8:00	Full Breakfast and Conversation <i>TGI Fridays Dining Area</i>	
8:00	8:15	Review Agenda <i>Ballroom</i>	Teresa Adams, CFIRE
8:15	9:30	Update on Related Regional Activities <ul style="list-style-type: none"> • Lake Michigan Interstate Gateway Alliance • North America's Super Corridor Coalition (NASCO) • Intermodal Institute, Univ. of Toledo • CREATE Program 	<ul style="list-style-type: none"> • Bob Frey, HNTB • Frank Conde, NASCO • Richard Martinko, UT • Audrey Wennink, Cambridge Systematics, Inc
9:30	10:45	Reauthorization Initiatives & National Efforts <ul style="list-style-type: none"> • Critical Commerce Corridors • AASHTO Vision • National Surface Transportation Infrastructure Financing Commission 	<ul style="list-style-type: none"> • David Bauer, ARTBA • Leo Penne, AASHTO • Rep. Michael Krusee, Texas Legislature, Commissioner
10:45	11:00	Break	
11:00	12:30	State Round Robin (10 minutes each)	State Representatives
12:30	1:30	Lunch & Keynote Coalition for America's Gateways and Trade Corridors <i>Ballroom</i>	Leslie Blakey, Coalition for America's Gateways and Trade Corridors
1:45	3:30	What the Commission Findings Mean for the Mississippi Valley <i>Ballroom</i> <ul style="list-style-type: none"> • Presentation • Facilitated discussion 	Ernie Wittwer, Wittwer Consulting
3:30	4:00	Next Steps and Summary of the Workshop and Meeting	Teresa Adams, CFIRE
MISSISSIPPI VALLEY FREIGHT COALITION BUSINESS MEETING Technical Committee members are expected to attend; all others are welcome			
4:15	5:30	Mississippi Valley Freight Coalition Business Meeting: <i>Fort Wayne</i> Detailed Agenda Available on Site	



Mississippi Valley Freight Coalition Workshop
March 31 – April 2, 2008
Courtyard by Marriott Downtown Indianapolis
Indianapolis, Indiana
Hosted by the Indiana Department of Transportation

DAY THREE—APRIL 2, 2008

Participants are invited to attend either of the breakout sessions.

Start	Stop	Activity
7:30	8:30	Full Breakfast and Conversation <i>TGI Fridays Dining Area</i>
8:30	11:30	Logistics for the Public Sector Mini-Course The primary purpose of this mini-course is to acquaint the public sector with contemporary logistics practice and theory. This course intends to help the public sector better understand the needs of the freight community, and the driving forces behind the ebb and flow of freight on the roads. In 2007, the MVFC approved development of a two day course for public sector managers. This will be a condensed pilot version of the course. <i>Keystone</i>
9:00	4:30	Traveler Information Data Sharing Summit A summit of adjacent state 511 or traveler information representatives is being held to discuss policy and technical issues related to sharing data across borders. The objectives of this summit include learning about other states' practices, formulating strategies for additional data sharing across borders, and establishment of a regional traveler information working group. <i>Fort Wayne Room</i>
1:00	4:00	Weigh in Motion (WIM) Data Sharing An informal group has been arranged by Cecil Selness (MNDOT) to discuss regional efforts for sharing Weigh in Motion data. All attendees are welcome to participate. <i>Keystone</i>

TRAVEL SAFELY

Upcoming Meetings of Interest for 2008:

- Intermodal Freight Technology Working Group *Oak Brook, Illinois* (April 30-May 1)
- FHWA Smart Roadsides Workshop *Jacksonville, Florida* (April 29-May 1)
- Inland Ports Summit *Chicago, Illinois* (May 5-7)
- TRB Summer Meetings *Baltimore, Maryland* (June 18-20)
- Mississippi Valley Conference *Kansas City, Missouri* (July 7-10)
- Mid-Continent Transportation Research Forum *Madison, Wisconsin* (August 13-15)

[HTTP:// WWW.MISSISSIPPIVALLEYFREIGHT.ORG](http://www.mississippivalleyfreight.org)



MVFC Proposed 2008-2009 Initiatives

To assist in reviewing the potential initiatives list, the following categories have been identified:

- **Supporting the Coalition, Education and Outreach (pages 2-6)**
 - Prepare Outreach Materials on Freight
 - Regional Freight Partners Workshop
 - Webpage Publication of Local Regulations
 - Support Great Lakes Manufacturing
- **Facilitating Freight Planning (pages 7-10)**
 - Performance measures for evaluating multistate projects
 - Freight Data Sharing
 - Private-Public Partnerships for Improved Multimodal Freight Planning and Implementation
 - Best Practices of Freight Villages within MVFC
- **Developing the Multi State Freight Network (pages 11-13)**
 - Critical Sections and Resiliency of Freight Corridors in the MVFC
 - Define a Strategic Regional Freight System
 - Transportation-Related Air Quality Issues
- **Freight Operations on Highways (pages 14-17)**
 - Understanding Commercial Fleet Operations within the MVFC Region
 - Develop and Operate Parking Facilities
 - Evaluate Traffic Regulations from a Trucker's Perspective
 - Regional Corridor Action Team
- **Facilitating Multi-Modal and Intermodal Operations (pages 18-21)**
 - Identifying Rail-Highway Crossing Best Practices
 - Airport Congestion and Interconnections
 - Models for Public Investment in Railroad Infrastructure
 - Evaluate the Level Playing Field Between Modes

Each category has multiple projects identified. Dependent on available funding, some, all, or none will be undertaken in each category.

Using the 2006-2007 time period as an example, the expected 2 year budget for coalition activities would be \$750,000.



National Center for Freight and Infrastructure
Research and Education

Teresa M. Adams, Ph.D., Director
University of Wisconsin-Madison
1415 Engineering Drive, Rm 2205
Madison, WI 53706

(608) 263-2655 TEL (608) 263-2512 FAX
<http://www.mississippivalleyfreight.org>

Supporting the Coalition

Project : Prepare Outreach Materials on Freight	
Goal	Develop and disseminate materials for the public and elected officials dealing with the importance and critical state of freight transportation
Scope	The general public across the region and the policy makers of the region are generally less than well informed on subjects related to freight, its importance to our economy, and the fragility of our freight transportation system. This project would develop creditable, understandable materials that would assist those people in better understanding the topic. It will include written materials of various kinds (short papers, pamphlets and brochures), presentations appropriate for transportation officials to use at speaking opportunities, and fact-sheets for transportation officials to use in responding to questions.
Action Items	<ul style="list-style-type: none"> • Conduct research with the states and freight industries to better define the message(s) • Test message(s) with technical committees and agency communications staff • Develop written and presentation materials • Make materials available to agencies • Conduct electronic workshop(s) with agency staff to help them to understand the materials
Deliverables	<ol style="list-style-type: none"> 1) Written and presentation materials 2) An electronic workshop for agency staff
Performance Measures	<ul style="list-style-type: none"> • Impact of materials on targeted audiences • Understanding and use of materials by agency staffs
Schedule	<p>6 months total</p> <ul style="list-style-type: none"> • 2 months to develop message • 1 month to test message • 2 months to prepare materials • 1 month to prepare and conduct workshop
Budget	<p>\$50,000 staff services</p> <p>\$10,000 travel and materials</p>

Project: Regional Freight Partners Workshop

Goal	To improve awareness of activities, develop relationships and share knowledge between State and Metropolitan Planning Organization (MPO) freight coordinators in the Mississippi Valley region.
Scope	In the original version of the SAFETEA-LU legislation, states would be required to assign a person to the position of freight coordinator – many states have already assigned persons to this position. MPOs are tasked with the consideration of and planning for the movement of people and goods (freight) as a part of their planning activities and Transportation Management Areas (TMAs), which are MPOs larger with populations greater than 200,000, are questioned about freight planning activities as a part of their required triennial certification review by FHWA and FTA. Therefore, it would make sense, especially given the regional and even national nature of freight transportation planning, to bring these people together to discuss the pertinent issues in freight.
Action Items	<ul style="list-style-type: none"> • Identify the freight coordinators in each state and MPO in the region • Coordinate a workshop date and location • Develop and agenda • Hold the conference • Report out on findings
Deliverables	Conference report
Performance Measures	<ul style="list-style-type: none"> • Number of attendees • Conference evaluations
Schedule	<p>6 months total</p> <ul style="list-style-type: none"> • Two months to identify and contact freight coordinators • Three months to plan conference and hold conference • One month to report on findings
Budget	\$50,000 including staff time and costs associated with planning and holding conference.

Project : Webpage Publication of Local Regulations	
Category	Productivity

Goal	To improve availability of information about truck regulations
Scope	<p>Truck drivers are not always aware of size and weight restrictions on highways or arterials. This project would provide them with a resource to determine what regulations apply. The Federal Highway Administration already maintains a website listing restrictions on state routes. This project would use that site as a model and provide additional links to county and municipal commercial vehicle regulations as a webpage added to a central website. The GCM Corridor would partner with the trucking associations to inform their membership about this information.</p> <p>Different states and agencies are have different levels of information available on-line. The webpage created under this project would be a regional resource to direct users to state, county, and eventually municipal resources. This would serve as a central resource for truck drivers moving between states in the region.</p> <p>In the first phase of this project, the Coalition will work with state and county transportation agency contacts to identify existing on-line sources for all regional trucking regulations. This information will then be made available on a new webpage in the form of links to websites or listings of local agency contacts (if an agency does not have it posted on a website). This new webpage will also contain links to the FHWA webpage listing state regulations along with links to existing websites administered by the appropriate permitting agencies in each of the states. An overview of the different approaches states take to size and weight regulations will provide a framework for how users use the information from the different states. This first phase would concentrate on state and county information and resources. Once the new webpage has been developed, the Coalition will work with freight associations to inform their members of the webpage and how to use it.</p> <p>In the second phase of this project, the Coalition will concentrate on incorporating municipal resources in the region. This phase will last longer because hundreds of municipalities will need to be contacted and there is more variations in the type and format of data available. Information on existing resources or municipal contact will be updated on the new webpage as research and interviews are completed.</p>
Action Items	<ul style="list-style-type: none"> • Determine sources for county and local regulations • Develop webpage on with links to existing local regulation sources and existing websites • Develop promotional materials for associations to distribute to their members • Determine regulations that are not already available • Post new regulatory information on webpage
Deliverables	<ol style="list-style-type: none"> 1) Summary report on available information at the state, county, and municipal level in the corridor 2) Draft and final matrices or maps of regulation sources

	<ul style="list-style-type: none"> 3) Interviews with county and municipal contacts 4) Webpage listing links to local regulatory information 5) Promotional material about new webpage
Performance Measures	<ul style="list-style-type: none"> • Number of sources referenced • Number of regulations made available • Number of hits received
Schedule	<p>36 months</p> <ul style="list-style-type: none"> • Phase One: 12 months • Phase Two: 24 months
Budget	<p>\$155,000 development cost, \$7,000/year for operations and enhancements</p> <ul style="list-style-type: none"> • Phase One: \$50,000 • Phase Two: \$105,000
Projected Operational Savings	<p>This project will benefit commercial carriers by reducing the level of difficulty required to achieve compliance. This will result in improved overall compliance with truck regulations, and will translate into reduced damage to roadways from overweight vehicles, less noise in quiet neighborhoods, and fewer trucks getting trapped at roadway locations with tight geometry.</p>

Project : Support for Great Lakes Area Manufacturing

Goal	Identification of steps that that the public agencies of the region should take to support the manufacturing industries with transportation
-------------	---

	services throughout the Great Lakes area in both the US and Ontario.
Scope	Manufacturing is a major component of the economies of the states surrounding the Great Lakes. It is also a major part of the economy of Ontario. In fact, a synergy exists between those states and Ontario that is important to the success of all. In recent years, the adequacy of the transportation infrastructure that serves the manufacturing industries of the region has been questioned; its condition may not be ideal; its regulation inhibiting and its capacity may be constrained. What are the key national and international issues that face the region and how might they be addressed?
Action Items	<ul style="list-style-type: none"> • Conduct research with the agencies, associations, manufacturers and carriers throughout the region. • Document current challenges and opportunities available in the region. • Suggest actions that should be taken to seize those opportunities and meet those challenges
Deliverables	<ol style="list-style-type: none"> 1) Analysis of the transportation needs, opportunities and challenges of the manufacturing sector in the Great Lakes area. 2) Suggested actions that could be taken to address the needs of that sector.
Performance Measures	
Schedule	<p>9 months total</p> <ul style="list-style-type: none"> • 3 months to conduct research with the manufacturing community in the Great Lakes area. • 3 months to draw conclusions on the state of the transportation network that services the sector • 3 months to develop recommendations for actions that might be taken.
Budget	<p>\$80,000 staff services \$10,000 travel, document preparation, and materials</p>

Facilitating Freight Planning

Project:	Performance measures for evaluating multistate projects
Goal	Develop freight focused performance measures for multistate corridor based projects
Scope	It has long been said that freight doesn't respect political jurisdictions. With increased development of megaregions, we know that there is a need to accurately evaluate multi-state corridor projects.

	We are increasingly seeing large scale projects being considered –t through the Corridors of the Future Program or otherwise. This project will develop performance measures that can assist jurisdictions in identifying the economic benefits of multistate projects and evaluating potential investments in these multistate projects.
Action Items	<ol style="list-style-type: none"> 1. Study of literature, existing data sources, and existing work on transportation megaprojects and corridor-focused activities 2. Propose performance measures for these types of large freight infrastructure systems 3. Develop mechanisms for evaluating the projects 4. Test the evaluation tool with data from three states, including the potential I-70 truck lane corridor project.
Deliverables	<ul style="list-style-type: none"> • Ranked list of evaluation tools and performance measures • Literature review results and recommendations for communicating this information to the decision makers
Schedule	<p>12 months total</p> <ul style="list-style-type: none"> • Three months for Literature review and analysis of multistate corridor projects • Three months for data analysis and development of performance indicators for evaluating investments • Three months for testing the those indicators • Three months to revise and test the indicators and develop the work reports
Budget	<p>\$75,000 including staff time and student support \$10,000 for travel and associated expenses</p>

Project : Freight Data Sharing	
Category	Congestion
Goal	Identify freight data needs, sources to meet those needs and mechanisms to store and share data.

Scope	Freight is different from tradition transportation planning because key data elements are held in the private sector and often not shared or shared very reluctantly. This project will build on past work in the region and nationally to define true freight data needs; identify sources for that data; negotiate with the holders of needed data to obtain it; and develop methods of storing and sharing data.
Action Items	<ul style="list-style-type: none"> • Review the national and international research literature on freight data. • Prepare a report of the literature for a committee of data managers and users from the state and MPO agencies of the region. • Based on the literature and the knowledge of regional experts, define data needs, uses and probable sources of data. • Work with and negotiate with private entities that hold needed data to find an agreeable method of obtaining it. • Develop data storage and sharing facilities and protocols.
Deliverables	<ol style="list-style-type: none"> 1) A report of the literature review 2) Documentation of data needs, uses and sources 3) Agreements from private entities outlining the basis and conditions for data sharing 4) A data storage and sharing facility and protocol.
Performance Measures	<ul style="list-style-type: none"> • Availability of improved data • Application of data to freight planning processes • Improved freight planning in the region
Schedule	<p>12 months total</p> <ul style="list-style-type: none"> • 2 months to complete literature review • 1 month to convene committee and develop needs, uses and sources • 4 months to discuss data issues with private entities and gain agreement • 5 months to develop storage facility and sharing protocol
Budget	<p>\$50,000 staff services</p> <p>\$10,000 travel and materials</p> <p>Plus costs of the data</p>

Project: Private-Public Partnerships for Improved Multimodal Freight Planning and Implementation

Goal	To identify successful and promising PPP models for improving freight planning and project implementation in the US over the next 5 to 10 year horizon
Scope	The PPP approach refers to contractual agreements formed between public agencies and private sector entities that aim to maximize utilization of the available knowledge, creativity, and efficiency of the market parties involved. PPP have been applied for decades in Europe, and more recently in Australia and Latin America to improve the planning and implementation of transportation systems. In the United States, the most common type of PPP is long-term leases of existing tolled assets, which the government views as solutions to funding deficits. PPP also take many other forms such as mixed concessions, which entails reconstruction or expansion of existing facilities and long-term operations.
Action Items	<p>Potential tasks include:</p> <ul style="list-style-type: none"> • Review successful PPP models (to include the various contractual agreements) - and their political, financial, operational, cultural, and historical application contexts – in various sectors (including and beyond freight and even transportation) in which PPP principles are being applied. Identify any complementarities between country experience and sector expertise to help diffuse PPP knowledge and experience. • Identify the public and private entities with ownership/jurisdiction over our freight transportation infrastructure. Identify also the opportunities for and barriers to collaboration among these entities. • Define the specific roles of PPP in the context of freight planning and project implementation in the US, particularly in light of SAFETEA-LU. This could range from PPP for financing of freight infrastructure to data collection effort for more informed decision-making. • Develop or mold innovative models of PPP from other industries for selected aspects of the freight planning and project implementation (construction and operation) process.
Deliverables	Guidance for establishing PPPs with respect to roles Models from other industries
Schedule	<p>12 months total</p> <ul style="list-style-type: none"> • 1 month to review successful PPP models • 2 months to identify the public and private entities with ownership/jurisdiction over our freight transportation infrastructure and barriers • 5 months to define roles and establish performance measures • 2 months to develop models • 2 months to report and review

Project: Best Practices of Freight Villages within MVFC

Goal	By comparing the practices in developing freight villages in the MVFC region, state members will have an opportunity to look into this promising practice in order to address the increasing delays and congestions in the urban areas in their own state.
Scope	Freight villages provide comprehensive services to shippers such as packaging, shipments consolidation, warehousing and transportation within a limited area to improve efficiency and reduce redundant highway travels within a dense urban area. How freight villages affect the freight efficiency within an urban area, and how freight villages are planned and operated within different areas within the MVFC region remains largely unknown.
Action Items	<ul style="list-style-type: none"> • Classify the freight villages into categories that fit different urban areas. • Identify issues with their operations. • Compile a list of best practices in developing freight villages within the MVFC region.
Deliverables	<ul style="list-style-type: none"> • An inventory of freight villages in the region. • An inventory of practices/regulations/policies for developing and managing the freight villages • Best practices for developing freight villages
Schedule	<p>12 months total</p> <ul style="list-style-type: none"> • Two months to document the concept of freight villages • Three months to inventory of freight villages in the region • Two months to inventory related issues, and regulations/policies regarding planning and operations of freight villages • Four months to develop a metric to measure efficiency of freight villages and collect data where needed • One month to rank order the best practices and prepare final report
Budget	<p>\$60,000 including staff time and student support \$10,000 for travel and miscellaneous expenses</p>

Developing the Multi State Freight Network

Project: Critical Sections and Resiliency of Freight Corridors in the MVFC	
Goal	Identification of key nodes and sections on the freight network within the MVFC region with the greatest system impact if they partially or completely lose their capacities.
Scope	<p>The National Infrastructure Protection Plan (NIPP) defines resilience as “the capability of an asset, system, or network to maintain its function during or to recover from a terrorist attack or other incident.” Different components of the freight system within the MVFC region have different significance to the overall freight system efficiency. While transportation corridors can be viewed as highly resilient due to the fact the numerous alternative routes exist, these alternative routes are not always available to commercial trucks. Reduction or complete loss of capacity due to disruptions from bad weather, traffic accidents, and maintenance on these sections, however, has different implications to the freight system’s operational costs in terms of additional delay, safety, and environmental impact. Recognition of their importance on the network and their regional implications would be meaningful to MVFC in order for better cooperative planning.</p> <p>A current related project on regional freight bottlenecks will provide a starting point in terms of regional freight network information, a decision support decision system in managing the bottlenecks.</p>
Action Items	<ul style="list-style-type: none"> • Develop a representation of a regional freight network • Map FAF data onto this network • Identify critical nodes (terminals) and sections through survey where alternative routes is lacking • Develop an analytical framework to verify the survey results • Rank those critical components in term of their potential cost to the region for loss of partial or all capacity. • Make recommendations regarding the most critical nodes and sections of highways in the region for enhancement.
Deliverables	<ul style="list-style-type: none"> • Rank list of critical components in the regional freight network • Recommendation for enhancement to those components by developing/identifying alternative routes going through those nodes/links.
Schedule	<p>12 months total</p> <ul style="list-style-type: none"> • Three months for Literature review and develop the regional network representation • One month for survey for critical components • Two months for analysis using FAF data • Three months for ranking those critical components • Two months for making recommendations to enhance critical points • One month for work report
Budget	<p>\$70,000 including staff time and student support \$10,000 for travel and miscellaneous expenses</p>

Project: Define a Strategic Regional Freight System	
Category	Developing the Multi State Freight Network
Goal	Define highway, rail and maritime facilities that are regionally significant
Scope	Define a strategic freight system for the region. The whole notion of making strategic investments suggests that some hierarchy of systems has been agreed upon. This idea also was raised in the earlier work. The project would develop criteria for selecting highway, rail and maritime facilities to be included in a regional network. It would apply these criteria to define such a system. Finally, it would define performance standards that could be used to establish planning and design criteria for each of these facilities.
Action Items	<ul style="list-style-type: none"> • Establish criteria for each of the modes as to what constitutes regionally significant facilities. • Apply criteria to the network. • Test the draft system with the states and MPOs. • Define the regional freight network. • Define performance standards to be applied to the network to determine facilities and/or services that would be desirable.
Deliverables	<ol style="list-style-type: none"> 1) A regional freight network. 2) Performance standards to guide future actions in each corridor or facility.
Performance Measures	<ul style="list-style-type: none"> • Acceptance of the plan. • Acceptance and application of performance standards.
Schedule	<p>12 months total</p> <ul style="list-style-type: none"> • 3 months to develop criteria • 3 months to apply criteria • 3 months to test system with states • 3 months to develop and test performance standards
Budget	\$50,000 for technical services

Project : Transportation-Related Air Quality Issues	
Goal	Analysis of the relative contributions of freight modes to the precursors of ozone, particulates and green house gases by each surface mode in normal operating conditions.
Scope	Transportation is a major contributor to air pollution in the US. Freight transportation, with its reliance on diesel engines, is a unique subset of the problem. Much has been assumed and written about the contribution that each of the surface modes (rail, truck and water) make to the problem. This effort will attempt to look at the relative contribution related to the volume of freight moved, the nature of the technology used in each mode and the interactions between the modes. Moreover, it will take a more holistic approach, looking at each element of the air quality problem: ozone, particulates and green house gases.
Action Items	<ul style="list-style-type: none"> • Review the literature and relevant models on mobile source emissions. • Review data available from the natural resource agencies in each of the states that might be relevant to the question. • Analyze the state of the technology used in each of the modes. • Analyze the operational characteristics of each mode and of the interaction of the modes as it relates to idling, stopping in traffic, etc. • Develop a method for estimating the impact of significant changes in the allocation of freight between the modes on the output of emissions. • Analyze the relative contribution of the modes to each of the elements of air emissions.
Deliverables	<ol style="list-style-type: none"> 1) Literature review 2) Review of resource agency data 3) Analysis of the technology used by each of the modes 4) Analysis of the operational characteristics of each mode 5) A methodology for estimating the impact of changed freight allocations on the emissions of each mode 6) An analysis of the contributions of each mode to the problem of air quality.
Schedule	<p>12 months total</p> <ul style="list-style-type: none"> • 2 months to conduct review of literature and relevant models • 2 months to analyze the state of technology used in each mode • 2 months to analyze the operational issues and interactions of the modes • 2 months to develop a methodology for evaluating the impact of significantly altered allocations of freight to the modes on emissions • 2 months to analyze the relative emissions of each mode in each type of pollutant. • 2 months to document all of the above.
Budget	<p>\$100,000 staff services \$10,000 travel, document preparation, and materials</p>

Freight Operations on Highways

Project: Understanding Commercial Fleet Operations within the MVFC Region	
Goal	Understand the carrier fleet operational and planning characteristics in order for better planning of public freight system.
Scope	Carrier fleet operations have to do with many freight policies and freight system planning. For example, drivers' preference to certain number of straight driving hours may well determine the need for truck parking spaces at various different locations. In addition, different operational characteristics of fleet operations in different regions may be good indicators of efficient freight system planning between regions. Therefore, understanding the commercial fleet operations is meaningful to public freight planning.
Action Items	<ul style="list-style-type: none"> • Define characteristics of fleet operations meaningful to public sector planning. • Collect according data from multiple fleets within the MVFC region, preferably from multiple metropolitan areas such as Chicago, Detroit, the Twin Cities, and Indianapolis. • Compare the data collected in order to see how operational characteristics are related to the regulations/policies in local and regional areas. • Identify best practices through the use of carrier operational efficiency data.
Deliverables	<ul style="list-style-type: none"> • A metric of operational efficiency for carrier operations relevant to public sector freight planning and operations • Best practices through the use of carriers operational data
Schedule	<p>18 months total</p> <ul style="list-style-type: none"> • Three months for Literature review and develop the metric of carrier operational efficiency relevant to freight planning • Five months to obtain carriers data and regional network characteristics data. • Three months to develop a frame to scientifically compare the carriers operational efficiency data to identify the regions with the best carriers operational efficiency • Two months for analysis through analytical framework using FAF data • Two months to analyze for reasons of good carriers operational efficiency • Three months to make recommendations as to best practices and prepare final report
Budget	\$50,000

Project: Develop and Operate Parking Facilities	
Goal	To increase short term parking availability for trucks
Scope	<p>This project will engage the private sector in finding solutions to the problem of limited truck parking availability. The problem stems from the fact that trips over 10 hours require a driver to take a rest period. Drivers also have to time their deliveries and would often like to time their entry into major urban areas. Add to that the fact that truck volumes are increasing at about 4% per year, this translates into an increasingly serious truck parking problem at rest areas. An earlier project, Expanded Parking Facilities, will determine potential locations for new parking areas. This project would then develop facilities at those locations. It is anticipated that the additional truck parking sites could include expansion of existing rest areas, new rest areas at key locations, and new truck-only facilities through leases or franchises to the private sector.</p> <p>The scope of this project begins with a brief search for best practices and examples of successful business models relating to truck parking facilities. This investigation is then followed by a solicitation for proposals (Public/Private Partnership Proposals, or PPPPs). These solicitations may be conducted by ITS Midwest and/or SmartWays Wisconsin. University researchers will also be used to conduct the solicitations. These organizations can solicit and assess the feasibility of proposals in a confidential process. Attractive strategies would then be submitted to the DOT agencies in the form of generic recommendations without violating the confidentiality of proprietary information. The DOTs can then publish requests for proposals in a formal bidding process.</p>
Action Items	<ul style="list-style-type: none"> • Literature search of the best public/private partnerships • Literature search for truck parking business models • PPPP solicitation process • Formal contract bidding and negotiation process
Deliverables	<ol style="list-style-type: none"> 1) Best practices report 2) Successful business model report 3) RFP for PPPP 4) Solicitation, review and selection of proposals 5) Negotiated contracts with state agencies
Performance Measures	<ul style="list-style-type: none"> • Number of proposals submitted • Number of additional parking stalls created
Schedule	<p>15 months total</p> <ul style="list-style-type: none"> • 3 months to conduct searches • 6 months to conduct PPPP solicitation process • 6 months to negotiate contracts
Budget	\$25,000 for technical services

Project : Evaluate Traffic Regulations from a Trucker's Perspective	
Goal	Evaluate traffic regulations, primarily those that require truck to stay to the right in urban areas, from the perspective of truckers to determine if alternative rules might reduce truck/auto conflicts improving traffic flow and safety.
Scope	Evaluate the operational impacts of stay-right rules in urban areas. Do they force more lane changes and increase the conflicts with autos as those autos merge at interchanges? What would be the impact of alternative rules that would encourage truckers to stay left unless they are entering or leaving the freeway? How would such rules impact the flow of traffic and the safety of both autos and trucks?
Action Items	<ul style="list-style-type: none"> • Review the literature on regulations that require truckers to stay right in urban areas. • Review the number and nature of crashes involving trucks in urban areas. • Identify urban areas without such rules and evaluate their safety and operational experience versus those with keep-right regulations • Develop a simulation model that will allow the evaluation of alternative rules on the safety and flow of both trucks and autos.
Deliverables	1) Report of findings
Performance Measures	<ul style="list-style-type: none"> • Acceptance of findings • Implementation of findings
Schedule	<p>12 months total</p> <ul style="list-style-type: none"> • 2 months for literature review • 3 months to evaluate crash experience • 3 months to identify and analyze comparable urban areas • 3 months to develop and use a simulation model • 1 month to prepare findings and recommendations
Budget	<p>\$90,000 staff services</p> <p>\$15,000 travel and materials</p>

Project: Regional Corridor Action Team	
Goal	To minimize impact of construction on freight traffic
Scope	This project will develop a regional action team to identify ITS applications that can be used to reduce congestion in construction projects. This project would build off and enhance the freight oriented content and activities of the Corridor Action Team that is currently focusing on construction near the Illinois/Indiana border. Available ITS and operations strategies will be examined to determine what improvements can be made to minimize the impact of construction on traffic and ways to ensure the timely movement of freight through the construction zone. A work plan will be developed to lay out what enhancements will be made. Possible enhancements include publication of regional construction schedules, incident management coordination, and reviews and audits of agencies' communication flows. Monthly meetings will be held so that traffic managers, operations staff, and trucking associations are aware of current conditions and upcoming schedule changes and needs. After these relationships are established, trucking association members will also be included in the existing team focusing on the Illinois/Indiana border.
Action Items	<ul style="list-style-type: none"> • Identify participating agencies and representatives • Identify upcoming construction projects • Create consolidated construction schedule table • Identify available ITS resources and operations practices in the area to reduce congestion and improve freight traffic • Publicize planned construction with a regional impact • Develop work plan • Implement work plan • Hold monthly team meetings
Deliverables	<p>Work plan and associated deliverables produced by team will be determined by action team. This could include:</p> <ul style="list-style-type: none"> • Concept of operations for interagency communications • Regional construction schedule handout • Construction information cards • Construction updates for trucking associations • Agency communication flow diagrams • Coordinated incident management operations
Performance Measures	Progress on implemented work plan activities
Schedule	<ul style="list-style-type: none"> • Work plan developed – 2 months • Action Team meetings (monthly) – 3 years duration
Budget	\$30,000 per year

Facilitating Multi-Modal and Intermodal Operations

Project: Identifying Rail-Highway Crossing Best Practices	
Goal	To identify rail-highway crossing best practices in administration, regulation, and design to determine strategies to optimize safety and the efficiency of railroad networks
Scope	Rail-highway crossings are a significant source of dispute, particularly in the outskirts of growing urban areas. Crossings are generally handled through local governments, leading to a variety of administrative, regulatory, and design strategies.
Action Items	<ul style="list-style-type: none"> • Communicate with rail-highway crossing public administrators to identify priorities and practices. • Communicate with railroad administrators to identify priorities and practices. • Establish performance measures for rail-highways crossings in safety and delays for both modes. • Measure the performance of a significant sample of rail-highway crossings under a variety of administrative, regulatory, and design strategies. • Form conclusions on best practices.
Deliverables	1) Report on best practices for rail-highway crossings.
Performance Measures	<ul style="list-style-type: none"> • Acceptance and application of best standards.
Schedule	6 months total <ul style="list-style-type: none"> • 1 month to communicate with local governments • 1 month to communicate with railroad administrators • 1 month to research and establish performance measures • 2 months to measure performance measures • 1 month to report
Budget	\$50,000

L

Project : Airport Congestion and Interconnections	
Goal	Identification of priority issues to improve air freight; identification of potential alternative freight airports; consideration of access improvements to existing air freight facilities
Scope	Air freight is a small, but valuable and growing component of the region's freight movements. Seven of the nation's top 20 freight airports are located in this region, including 2 of the top 5. USPS, PAX, UPS and DHL operate major air freight hubs in the region. There is a concern that growing congestion at major airports and access to them will impact these operations. Alternative freight airports (such as Wilmington) may need to be identified to improve these operations. At the same time, the continued success of these hubs is reliant on efficient connections between the rail, highway, and airport.
Action Items	<ul style="list-style-type: none"> • Conduct research with the airports and air freight industry to better understand the capacity concerns • Identify potential restrictions and access concerns • Identify community regulations, security and policy issues that affect air freight movements at the region's airports
Deliverables	<ol style="list-style-type: none"> 1) Analysis and list of alternative freight airport locations 2) Identification of locations where freight access is creating congestion/capacity concerns and opportunities for improvements 3) Opportunities for improved Intermodal connections
Schedule	<p>9 months total</p> <ul style="list-style-type: none"> • 3 months to develop contacts, conduct interviews, and identify regulatory concerns • 4 months to analyze connections and alternatives • 2 months to develop priorities and outline Intermodal improvements
Budget	<p>\$30,000 staff services \$10,000 travel, document preparation, and materials</p>

Project : Models for Public Investment in Railroad Infrastructure	
Goal	Conduct analysis of alternative rationales and methods for public investment in railroad infrastructure.
Scope	<p>Freight rail infrastructure is, in many cases, operating at capacity; in many other cases, it is in a condition that prohibits it from carrying industry standard loads or from operating at reasonable speeds. Historically, rail infrastructure has been owned and maintained by private companies. In recent decades, some public involvement has been seen in many states in the upgrading of class II & III rail infrastructure in an effort to maintain rail service to threatened areas. Involvement with class I rail infrastructure has been limited to cases where a clear public interest can be demonstrated: rail/highway crossings, the Alameda Corridor, CREATE and similar projects.</p> <p>As we look to the future with major increases in the volumes of freight and changing service patterns by both rail and truck, does this traditional view of investment in rail infrastructure continue to make sense from a public policy perspective? What alternative approaches might be followed and under what policy rationale?</p>
Action Items	<ul style="list-style-type: none"> • Review literature in the US and in other countries. • Document the practices and other countries and document the parallels that might exist or the differences that would dictate that alternative approaches are more appropriate in the US. • Examine the history of public involvement in rail and similar modes in the US and identify 21st Century issues that might argue for retaining or revising those historic policies. • Examine alternative methods that might be used to invest public capital in rail infrastructure, if it was determined to be a desirable policy.
Deliverables	<ol style="list-style-type: none"> 1) Review of US and international literature. 2) Documentation of practices in other countries and comparison to US situation. 3) Documentation of historic approaches to funding rail infrastructure and analysis of the relevance of that experience to the 21st Century. 4) Documentation of methods that could be considered to apply public capital to rail infrastructure, if it is deemed to be in the public interest to do so.
Performance Measures	<ul style="list-style-type: none"> • Utility of the reports presented.
Schedule	<p>10 months total</p> <ul style="list-style-type: none"> • 3 months to conduct literature reviews and document international practices • 2 months to analyze the applicability of those international practices to the US conditions • 2 months to document historic approaches and evaluate their applicability to the 21st Century. • 3 months to develop alternative methods that could be used to apply public capital to rail infrastructure
Budget	\$60,000 staff services; \$1,000 materials

Project : Evaluate the Level Playing Field Between Modes	
Category	Finance
Goal	Evaluation of the tax burdens or subsidies available to each of the surface freight modes (freeway, rail, water) to determine if any are unduly penalize or subsidized by federal tax or investment policies.
Scope	The various surface freight modes have long argued over whether they operate in a truly level competitive economic field. Railroad spokesman have argued that truckers and water carriers have significant advantages because they operate on facilities largely provided by the public sector. It has also been argued that specific programs and policies, such as the railroad retirement program, place a disproportionate burden on the railroads. In contrast, truckers argue that they pay high user fees and are burdened by environmental and other regulations. What are the relative burdens or benefits of the modes? Is the playing field level? If not how is it skewed?
Action Items	<ul style="list-style-type: none"> • Review the programs and tax policies of the federal government that impact railroads, trucker and maritime interests. • Document the impact that each of those programs or policies has on each mode. • Develop a methodology for comparing the impacts on the modes. • Apply that methodology to draw conclusions on the level or un-level playing field.
Deliverables	<ol style="list-style-type: none"> 1) Analysis of federal programs and tax policies that impact the modes. 2) Documentation of the impacts of those policies on the modes. 3) A methodology for analyzing the relative impact on the modes. 4) Conclusions on the extent to which the field is level.
Performance Measures	
Schedule	<p>9 months total</p> <ul style="list-style-type: none"> • 2 months to identify federal programs and tax policies relevant to the topic. • 2 months to analyze the impact of those policies on the modes • 2 months to develop a method of analyzing the relative impacts on the modes • 1 month to draw conclusions
Budget	<p>\$80,000 staff services \$1,000 travel, document preparation, and materials</p>



Analysis of the National Surface Transportation Policy and Revenue Study Recommendations

Prepared for the Mississippi Valley Freight Coalition
2008 Annual Workshop
Indianapolis, Indiana

By

Ernie Wittwer, Wittwer Consulting, Inc.

Teresa M. Adams, Ph.D., Director, National Center for Freight and Infrastructure
Research and Education, University of Wisconsin-Madison

The National Surface Transportation Policy and Revenue Study Commission was mandated by the Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users of 2005. It was charged with conducting a comprehensive study of: 1) the current condition and future needs of the surface transportation system; 2) short-term sources of Highway Trust Fund revenues; 3) long-term alternatives to replace or supplement the fuel tax; 4) revenue sources to fund the needs of the surface transportation system over at least the 30 year period following enactment; 5) revenues flowing into the Highway Trust Fund under laws in existence on the date of enactment of this Act; and 6) whether the amount of revenue described is likely to increase, decrease or remain constant absent any changes in the law. Based on this study, they were to develop a conceptual plan to ensure that the surface transportation system will continue to serve the needs of the United States.

USDOT Secretary Mary Peters chaired the Commission. Its members included many leaders in the business community, state and local government and academia. Wisconsin Transportation Secretary Frank Busalacchi was among the members. Over nearly two years of work, the Commission held numerous field hearings across the nation and commissioned many studies of specific issues.

At two of the Commission's hearings, the views of the Mississippi Valley Freight Coalition (MVFC) were presented. Michigan Transportation Director Kirk Steudle spoke in Chicago; and Teresa Adams, Director of the National Center for Freight and Infrastructure Research and Education, spoke in Minneapolis. Professor Adams was quoted in the final report:

"The actions of individual States and regional coalitions are not enough to solve the nation's freight problems. We need strong leadership from the federal government in the form of strategies, tools, and revenue, and we must make changes to our institutional arrangements."

This paper presents a review of the Commission's study report relative to the views of the MVFC and summarizes various outcomes for the MVC if the Commission recommendations are implemented. The recommendations of the MVFC were developed February 2007 at a meeting of the technical, advisory and customer committees in Dearborn, Michigan.

The recommendations of the MVFC are summarized as follows:

- The USDOT should communicate regularly with policy makers and the general public to help them better understand the importance of transportation and freight movement.
- The federal government must define strategies and standards for implementing advanced traveler information and other appropriate technologies, including development of broadband WI-FI standards. Such strategies should include standards for interoperability, so that hardware and software used by different jurisdictions can interact effectively.
- A federal initiative, including funding and incentives for action, is needed to address these bottlenecks such as Detroit border crossing or CREATE.
- To remove bottlenecks, the federal initiative should define criteria for identifying nationally significant areas and provide higher federal participation rates for projects that address them.
- The federal government might also consider steps and incentives to encourage states to pool resources to address regional bottlenecks.
- The federal government should take a leadership role in engaging the states and industry to develop a national system and a national strategy for increasing highway capacity. The products of that engagement should be the definition of a national freight system, that includes the current Interstate system, and a portion of the National Highway System; agreement on a national strategy (or strategies) for adding needed capacity, general lanes, truck lanes or some other configuration; and appropriate incentives to the states for implementing the national strategy. Increased federal participation rates seem most reasonable.
- The Commission should urge Congress to provide tax credits as incentives for railroads to add capacity.
- The federal government may need to take a larger role in addressing railroad capacity.
- Public policies should be enacted that encourage the efficient use of all modes. Some of the measures that could be considered include:
 - Expanding use of pre-clearance techniques to streamline the paperwork involved in intermodal transactions.
 - Investing in research to improve the technologies of intermodal transfer with the goal of making such transfers more economically and temporarily competitive.
 - Increasing the payload weight limits for truck drayage shipped largely by rail or water.
 - Revising tax policies, such as the Harbor Maintenance Tax, which now make the use of our abundant waterways less competitive.
 - Defining special corridors as trade zones to increase the traffic density, making rail movements more competitive. This includes the support for initiatives like SMARTPORT in Kansas City and other inland port development.
 - Encouraging and providing incentives for private sector investment in intermodal terminals and connections to make intermodal operations more efficient and competitive.
 - Encouraging and providing incentives for private sector investments together

- with public funding to remove intermodal and intramodal bottlenecks, such as the CREATE project in Chicago.
- Fully utilizing available trust fund monies to improve our inland waterways to increase their use.
 - Building relationships with private sector partners that can invest in intermodal facilities as well as locks and harbors and earn an appropriate return through tolls and other fees.
 - The federal government should make a concerted effort to engage shippers and carriers to identify impediments to efficient freight movements and then strategies to reduce those impediments.
 - The federal government should assign a very high priority to leading the effort to find, refine and make available alternative energy sources for transportation to reduce our dependence of fossil fuels.
 - The federal government must commit itself to maintaining and improving sources of information relative to the movement of freight.
 - The federal government should provide leadership for the states and the industry to establish a sheltered new truck driver intern program.
 - There must be predictable and sustained federal investment programs. Those programs must be expanded in size and cover all the modes. More revenues -- collected from all modes-- are needed to fund needed transportation improvements.
 - The federal government should take a leadership role in facilitating public partnerships to finance and implement transportation efforts.

In January 2008, the Commission released its recommendations. In many ways they reflected the views of the MVFC. To quote KDOT Secretary Deb Miller, as she testified before Congress:

“Clearly, they got the big ideas right.”

In her testimony, Secretary Miller referred to the following:

- The need for “fundamental reform of the Federal Transportation Program,”
- Significant additional investment,
- A strong federal role, and a shared funding responsibility by federal, state and local governments;
- The need for a multi-modal approach;
- An increase in federal revenues, be it through fuel taxes or other means;
- The need to transition to alternative revenue sources twenty years from now;
- Greater use of tolls and public private ventures to supplement revenues at the state and local levels;
- Systematic planning to guide investment to where it is most needed;
- Performance-based programming of funding;
- Accountability for achieving results; and
- Investment focused on objectives of genuine national interest including: preservation, freight, metropolitan congestion, safety, connecting with rural America, intercity passenger rail, environment, energy, federal lands, and research....”

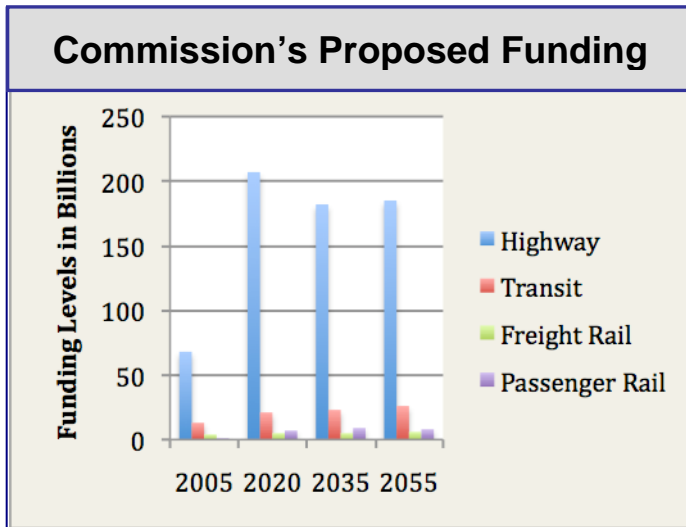


Figure 1 The Commission's Proposed Funding Levels

The Commission recommended significant increases in funding for passenger and freight rail, as outlined in Figure 1. This and the following recommended funding levels use the low end of the high funding range. Like all Commission funding, recommendations combine federal, state and local sources.

A recent Congressional Budget Office report illustrates the importance of increased funding. The report deals with public funding for all

infrastructure, transportation, water, sewer and water resources programs. Three graphics from the report illustrate the problem. Figure 2 tells the story that most transportation agencies will understand. Over the last forty-eight years the funding required for maintenance and operations has gone up dramatically, surpassing the capital spending for all infrastructure categories.

Figure 3, breaks the total spending by federal, state and local sources. Clearly all sources have grown over time, but the non-federal share has grown more significantly than has the federal.

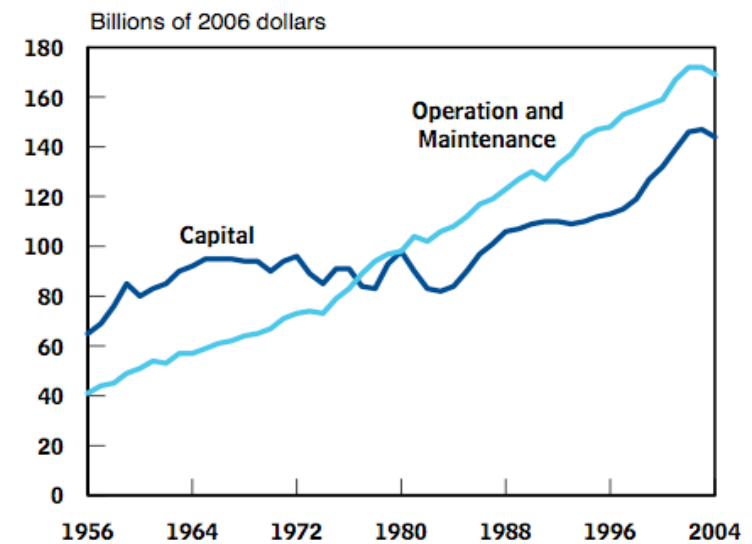


Figure 2 Public spending for infrastructure

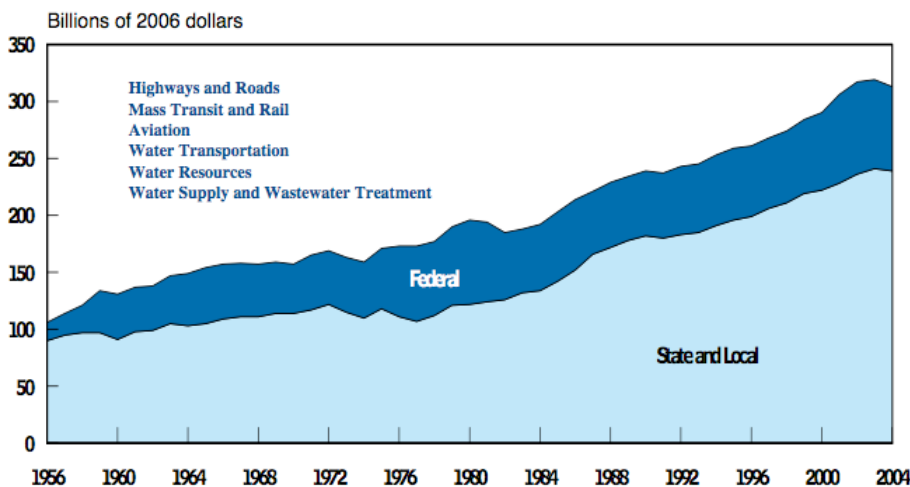


Figure 3 Federal, State, and Local Infrastructure Spending

Finally, Figure 4 illustrates the state and local spending by type of infrastructure. The spending for highways and roads has grown very little in real terms from 1956 through 2004. Over that same period, the state and local requirements for water supply, wastewater treatment and mass transit have grown. The trend portrayed by the CBO report cannot be sustained indefinitely.

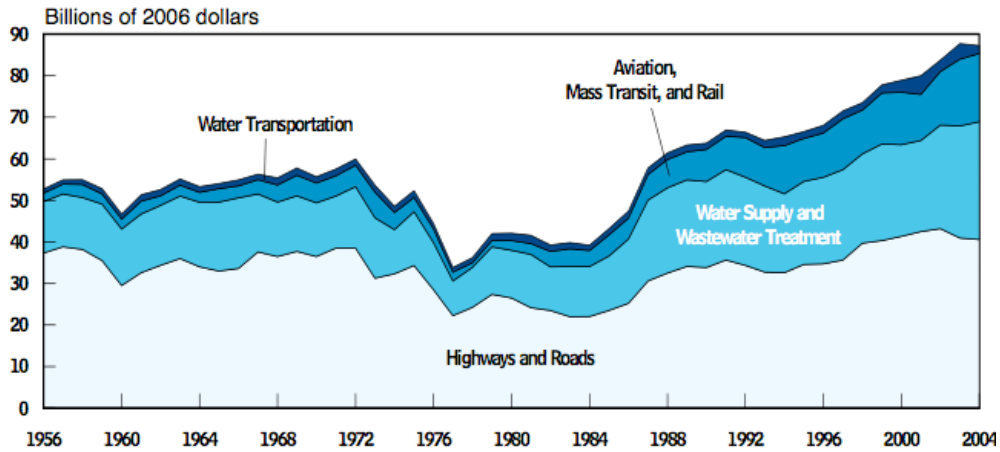


Figure 4 State and Local Spending by Infrastructure Type

MVFC Recommendations and the Commission’s Report

The Commission agreed with many of the points recommended by the MVFC testimonies. Figure 5 lists key recommendations on funding that are compatible with MVFC positions. The MVFC called for a consolidation of programs to allow the states more flexibility. It also suggested a strong federal role. The Commission defined that role as a continuation of about the current and historic share of total funding, 40%. The MVFC pointed to the need for freight-related revenues that could be used for all modes. The Commission suggested a container charge, waybill charge or a share of customs duties. The MVFC comments did not specifically deal with

Commission: Funding
<p>Compatible with MVFC</p> <ul style="list-style-type: none"> • Consolidate 108 programs from five agencies into 10 programs • Federal government should maintain a 40% share of total funding • Use freight fee (container charge, waybill charge, etc.) to fund the removal of freight bottlenecks • Remove barriers to tolls for new capacity and congestion pricing • Uniform toll collection technology

Figure 5 Recommendations on Funding

more tolling, but the discussion seemed to support more freedom to impose tolls. The MVFC also discussed moving to a uniform toll collection technology.

The Commission also made many recommendations for funding beyond the MVFC focus area (Figure 6). Most seem to be in line with the Coalition’s general thoughts. One deserves comment.

The Commission recommends levying a ticket tax on urban

mass transit and passenger rail. Both modes are subsidized to keep prices

competitive and encourage ridership. The Commission’s logic is that some form of user fee should be available to support the mode.

Unfortunately, prices will rise with such a tax and then either ridership could fall and then the subsidy will have to be increased or the subsidy may have to be increased to keep prices competitive.

The Commission made many recommendations on planning (Figure 7). Two are clearly in line with MVFC thoughts: the USDOT should take the lead in developing a

Funding: Beyond MVFC
<ul style="list-style-type: none"> • The federal Motor Fuel Tax (MFT) should be raised from 5 to 8 cents per year over next five years, for a total of 25 to 40 cents • Index federal MFT to inflation • Levy federal ticket tax on transit • Dedicate a portion of customs duties to freight-related improvements • Use federal tax credit for freight facility expansion • Levy ticket tax for passenger rail • Share carbon tax for projects that reduce CO2 emissions • Expand use of congestion pricing • Encourage 3Ps • Require a national study for long term (beyond 2025) revenue solutions • Rename the Highway Trust Fund to Surface Transportation Fund

Figure 6 The Commission’s Funding Recommendations beyond those of the MVFC

Commission Planning
<p>Compatible with MVFC</p> <ul style="list-style-type: none"> • USDOT would take the lead in developing a National Freight Plan • Encourage multi-state freight groups <p>Beyond MVFC</p> <ul style="list-style-type: none"> • Programs would be based on individual state plans • Develop national performance standards for each program • Develop state and local standards within the national framework • Plans would be updated before each reauthorization • Projects would have to be within plans and cost-beneficial • Progress toward meeting performance standards would be measured • A National commission would be established to oversee national policy, advise Congress, consolidate plans and allocate funds to projects • Metropolitan mobility plans required for areas over a million • Current metropolitan planning processes retained for smaller areas

national freight plan and regional cooperation should be encouraged.

The Commission envisions a performance based planning process. National performance standards or objectives would be developed. State and regional objectives would be developed within that national framework. States would also be required to use and asset management system to predict needs and select preservation options under the

Figure 7 Planning Recommendations

preservation program. Metropolitan areas with population greater than one million would also have to develop performance standards and performance based plans. For large urban areas and states, the performance based plans would replace current planning requirements. Smaller urban areas would be required to continue current planning processes. Plans would have to be updated before each reauthorization and would be assembled into a national plan, which would be submitted to a National Surface Transportation Revenue and Policy Commission. All projects would have to be within the plans and would have to be positive from a benefit/cost perspective.

In the abstract, performance based planning is a positive approach, as is the use of benefit cost analysis. Both allow for greater program monitoring and accountability. Both encourage the selection of the most beneficial projects.

Figure 8 is a graphic representation of the method outlined in the Commission report for the creation of national standards. The USDOT would be in the lead and would solicit input from a variety of stakeholders and state and local government. This process would be repeated for the creation of state and local standards, as illustrated in Figure 9. State and MPO plans from around the nation would then be submitted to the USDOT and assembled into a national plan by the USDOT. This is portrayed in Figure 10.

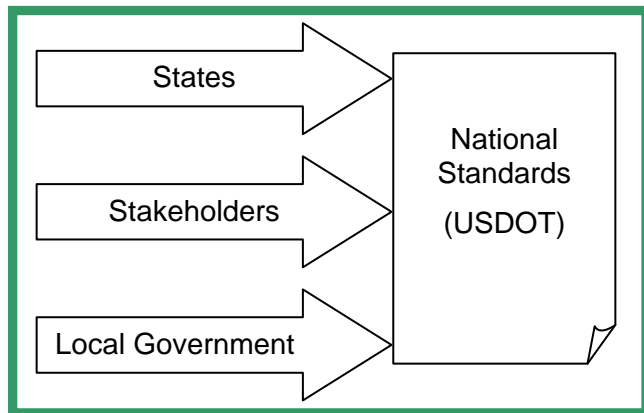


Figure 8 Creating National Performance Standards

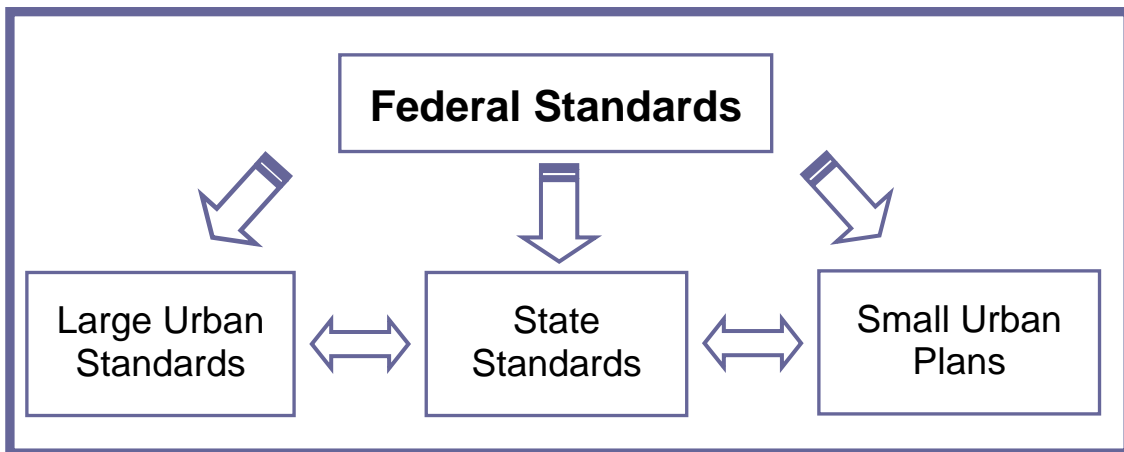


Figure 9 Creating State and Local Standards

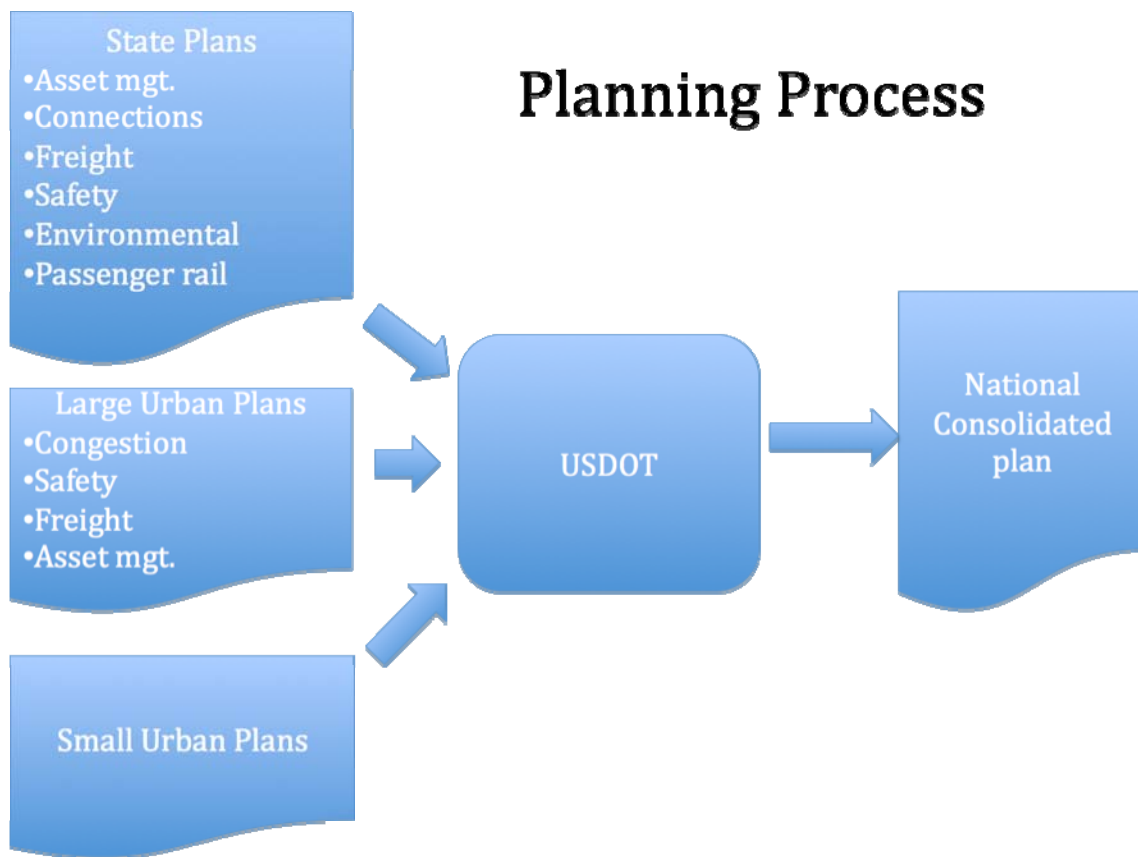


Figure 10 Planning Process

Finally, Figure 11, which is from the Commission report, outlines the process that follows the consolidated plan as it moves to the National commission.

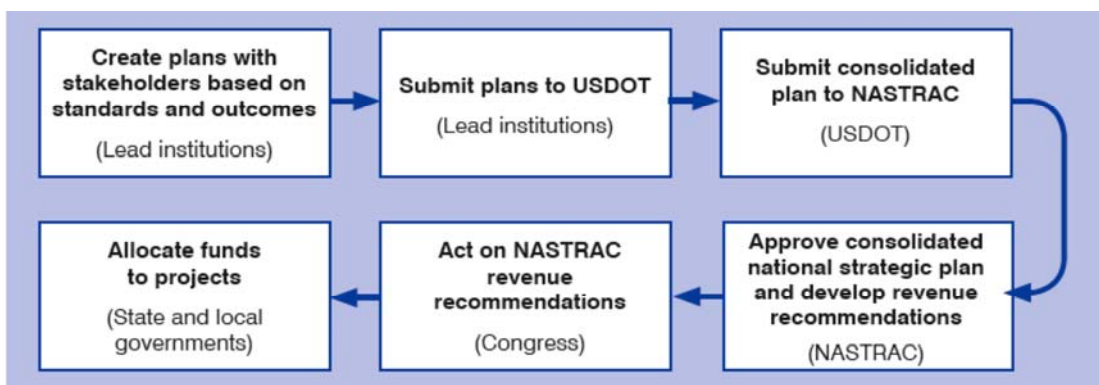


Figure 11 Process Overview: Implementation of a new strategy direction for transportation

This process must be evaluated in light of the state of the art of performance-based planning. NCHRP 446: A Guidebook for Performance-Based Transportation Planning described the state of the art in 1999. Its major conclusions are shown in Figure 12.

Development of a Performance Based Planning Process

- Integration of performance-based methods into the planning process remains a desirable and importance objective.
- States and MPOs are looking for guidance rather than regulation.
- Implementation of performance-based planning methodology in the transportation planning context is an evolutionary process.
- Programs that started out comprehensive in nature have been refined to provide a smaller, more focused method of measuring system condition and performance.
- Performance measures are being applied in a variety of contexts.
- The research findings do not warrant any endorsement for using performance measures as a way of replacing current transportation project prioritization and selection processes with purely analytical, quantitative methods.
- In most transportation agency applications, performance-based approaches have not yet had a significant impact on the ultimate outcome of decisions.

Figure 12 Findings from NCHRP 446: A Guidebook for Performance-Based Transportation

The Commission got it right with research. Their three specific recommendations

Commission Research
<p>Compatible with MVFC</p> <ul style="list-style-type: none"> • Authorize \$200 million annually for energy research to reduce dependence on petroleum • Develop national R&D plan with goals • Invest in data collection

Figure 13 The Commission's Recommendations for Research

are consistent with the MVFC's (Figure 13). They recommend allocating \$200 million annually to the Department of Energy for fuel research, a national R&D plan (which

the MVFC did not specifically address); and a federal commitment to data collection.

Some specific issues that the MVFC felt strongly about are not included in the report, or may be included but to a lesser degree. These are listed in Figure 14.

Inter-modalism is considered in the Commission's recommended allocation of funds. It's also addressed in the text on page 8 of the Commission's report:

Passengers and shippers should have options to travel within and between regions by road, rail, and water, helping to reduce congestion and accommodating future growth on the highways and in the air.

Major Commission Omissions
<ul style="list-style-type: none"> • Inter-modalism • Improved freight productivity <ul style="list-style-type: none"> ○ Less intrusive enforcement ○ Parking information ○ Traveler information ○ Drowsy driver detection systems • Improved awareness of freight by policymakers and the public • A multi-modal national freight network • Encourage use of inland ports

Figure 14 Major Omissions

A major omission is the maritime mode. The report mentions water modes and has an insert that outlines the needs of the seaway, but no funding or policy recommendations are made to improve the quality or competitiveness of the rivers, lakes or coasts.

The distribution of funding can also be seen as fairly uni-modal. Figures 15 and 16 contain a graphic illustration of the change in funding. Figure 15 shows the Commission's recommendations normalized to the 2005 base. Passenger rail, which starts with an annual budget of \$1 billion, grows to seven times its 2005 amount.

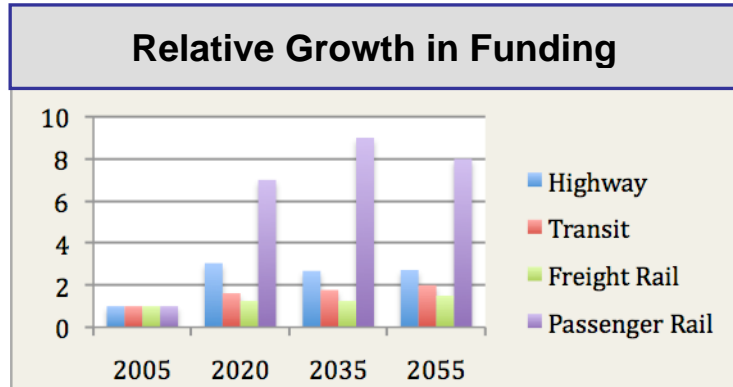


Figure 15 Relative Growth in Recommended Funding

Figure 16 illustrates the absolute change in funding levels recommended by subtracting 2005 levels from the recommended levels.

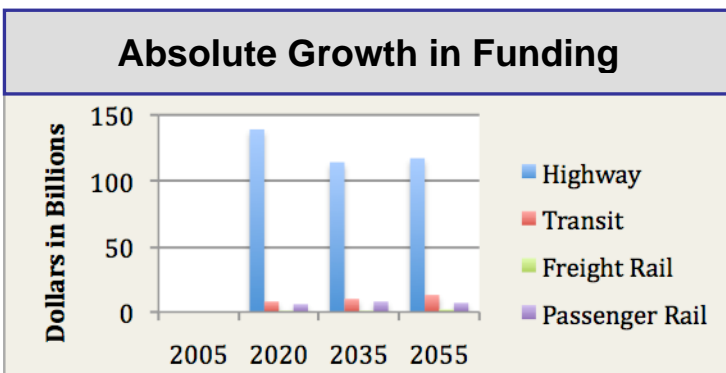


Figure 16 Absolute Growth in Funding

levels recommended by subtracting 2005 levels from the recommended levels.

The Commission's intermodal commitment could be questioned based on the funding levels and speed of completion of the passenger rail system. The investment is spread over more than forty years. By

comparison, most of the interstate highway system was built in a decade.

Other omissions, listed in Figure 14, deal with new technologies: less intrusive enforcement and inland ports. They may be covered in the expanded commitment to research, but they are not addressed in the report.

In addition to the major omissions, there are a number of possible omissions relative to the MVFC's position. Figure 17 lists these potential omissions. We list these as possible omissions because in some

- ### Potential Commission Omissions
- Technology: Research on innovation and standards for interoperability for transportation technology
 - Encourage use of technology
 - Information
 - Interoperability standards
 - WIM and other truck technology
 - Inter-jurisdiction coordination
 - Provide states more flexibility in funding programs
 - Align funding to national strategies
 - Reexamine the revenue collection methods
 - Incremental actions on energy policy

Figure 17 Potential Omissions from the Commission's Report

cases, the information provided in the report is simply insufficient to understand whether the item is really recommended. An example of this is related to state flexibility. The Commission recommends that programs be consolidated, which should provide flexibility; but the lack of clearer descriptions of how funds will be allocated coupled with the expanded planning requirements, make it unclear.

The revenue collection issue simply reflects the fact that the Commission recommends no immediate change and another study of long term needs.

What Might the Commission’s Recommendations Mean For the Mississippi Valley Conference?

It is difficult to answer this question with any precision because the report does not deal with how funding will be allocated. We can only make inferences and look at the national information that is provided. As Figure 18 illustrates the MVC region accounts for approximately 20 to 30 percent of the nation for each measures except apportionments.

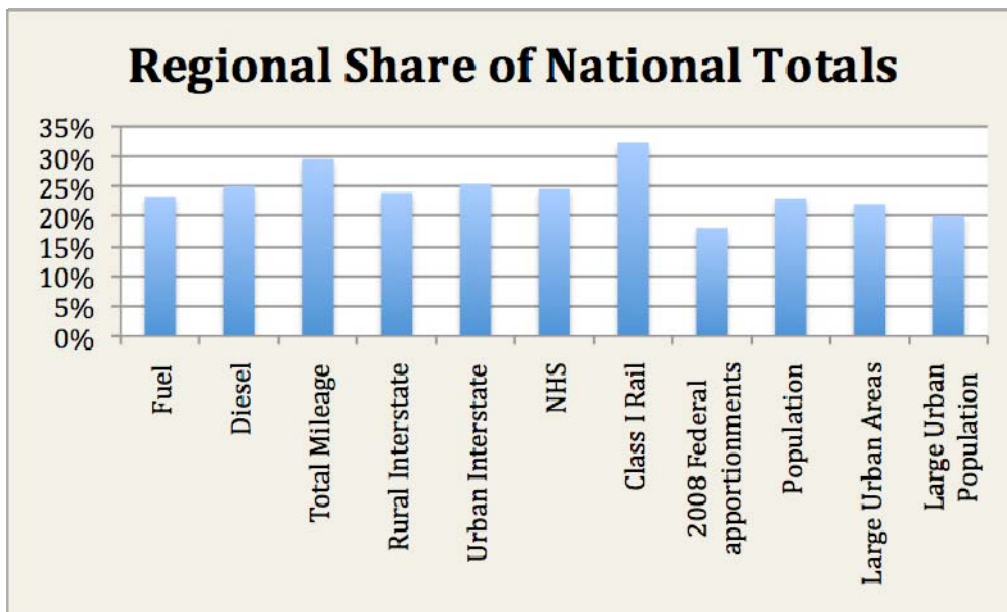


Figure 18 MVC as a Percent of the Nation

A look at some of the specific programs recommended by the Commission may help to illuminate the potential impacts.

Rebuilding America is a rehabilitation and reconstruction program, one of the ten consolidated programs recommended by the commission. It will use an asset management approach. Most of the

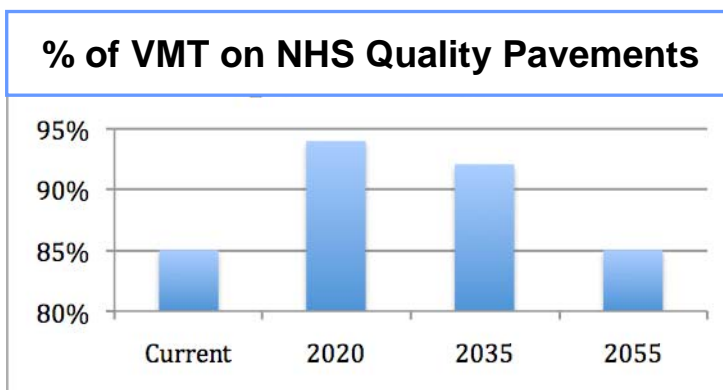


Figure 19 Pavement Quality

states in the region will have little problem in meeting the requirement; but it is unclear whether the asset management systems will have input into how funds are allocated, or if funds might be allocated on a needs basis or on an accomplishment basis. Depending upon the route chosen for allocating funds, the result could be very different. Figure 19 illustrates what the Commission report holds out as the national outcome of the recommended funding levels: A greater percent of the national VMT will take place on quality pavements.

The Commission’s summary of the freight program talks about removing bottlenecks and illustrates its recommendations with two projects, CREATE and the Alameda Corridor. They also speak of bottlenecks to international trade. Figure 20, which is from the Commission report,

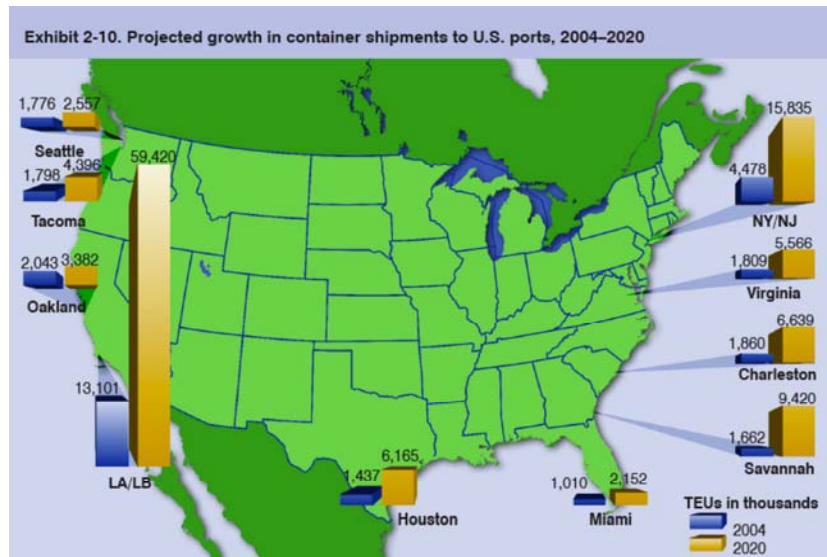


Figure 20 Growth In Container Traffic

may be cause for some concern as to whether much of this funding category will be available to the MVC. It points out the huge growth that is expected in container traffic at nearly all the major seaports. All will require additional highway and rail capacity. Addressing congestion at the ports will only push the problem to the interior. Given trends in fuels costs and competing global economies, we need to also facilitate exports. The MVC region contributes heavily to the US export account.

The Commission’s recommended congestion relief program focuses on metropolitan areas of more than one million population. The report specifically recommends using the broader metropolitan measure rather than urban area. This makes a number of smaller areas eligible for the program. Figure 21 shows the Commission report’s analysis of what the recommended funding would do for delay: VMT would grow more quickly than delay.

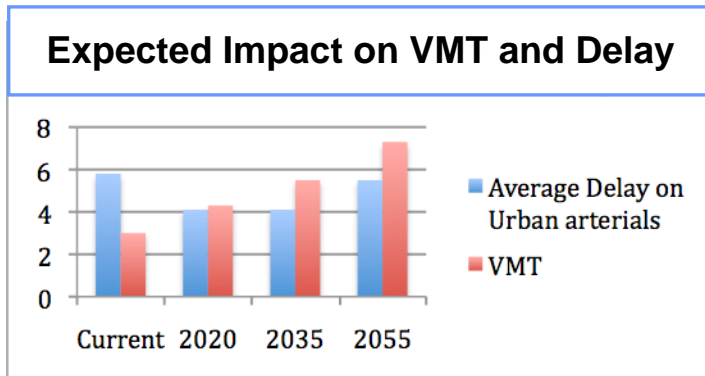


Figure 21 Predicted Delay and VMT under Recommended Funding

The MVC region has about 20 percent of the nation’s metro regions and metro population (see Figure 18). But the metro areas in the MVC region tend to be smaller than others in the nation. Figure 22 illustrates this point. Of the eleven metro areas over one million in our region, only Chicago and Detroit are larger than the average.

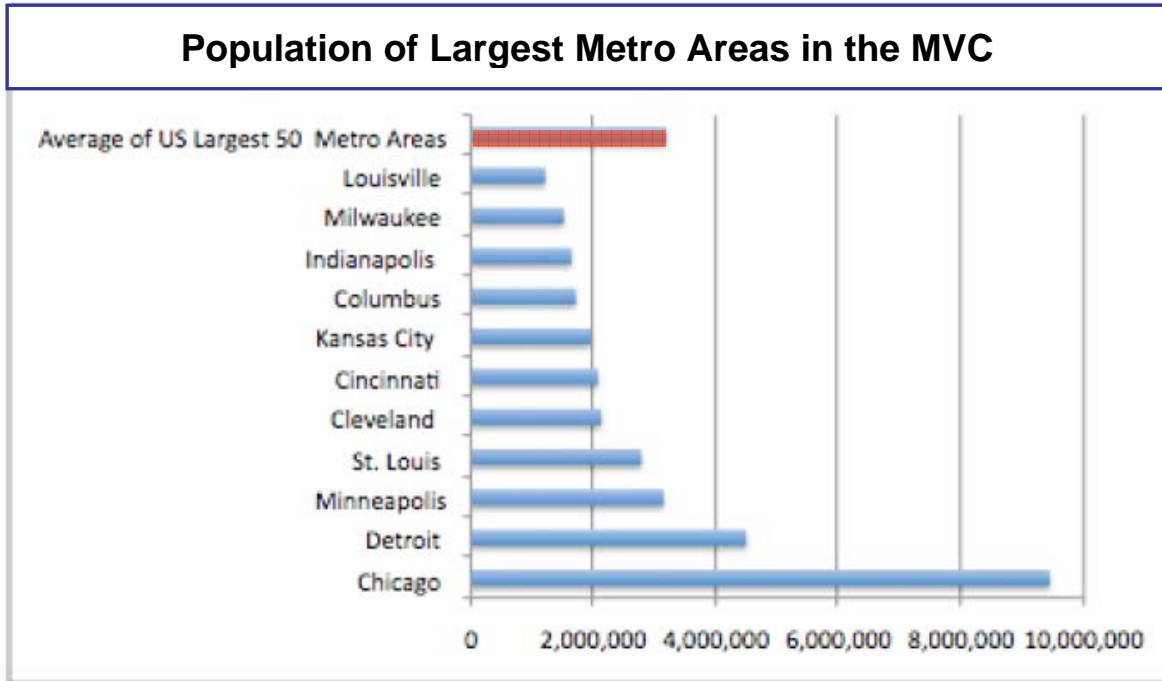


Figure 22 Population of Largest Metro Areas in the MVC

Since smaller, they also tend to have less traffic congestion. Figure 23 uses the national mobility study to illustrate the point. This data is somewhat different from that shown in Figure 23. The mobility study uses the urban area definition, which is more restrictive than the metro area definition used by the Census Bureau.

Figure 23 illustrates the cost of congestion as calculated by the Mobility Study. Again, only Chicago and Detroit surpass the national average of 39 of the nation’s largest urban areas. Our analysis provides

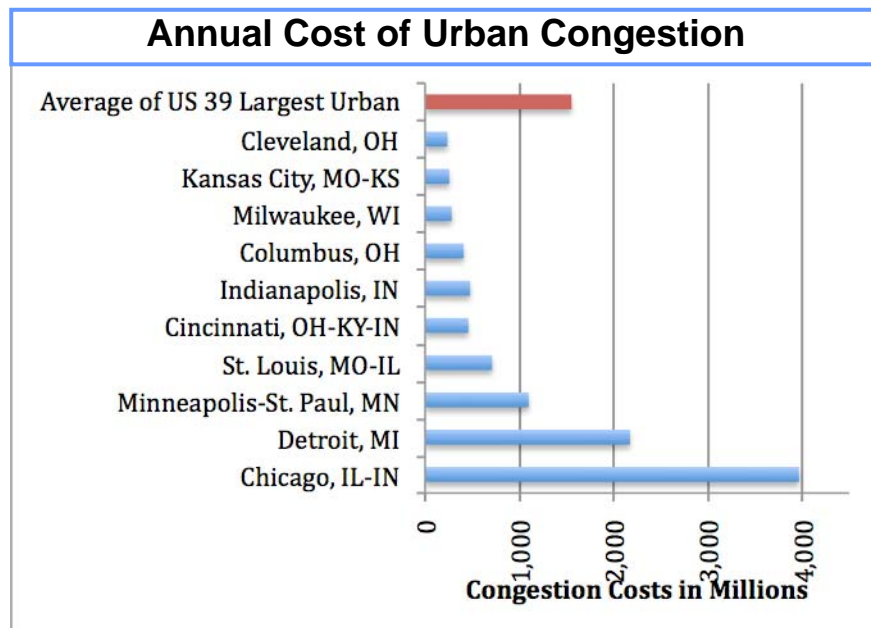


Figure 23 Annual Cost of Urban Congestion

some insight of the MVC's collective standing among the nation's metro and urban areas, but without specific information on how funds would be allocated, it is impossible to determine the impact for the region.

The Commission's recommended Connecting America program, which is intended to provide funding for connections to smaller cities and rural areas, should treat the region well. As Figure 18 points out, the region has 30 percent of the total road mileage in the country. Moreover, the Commission uses the mega-economic region concept (Figure 24). The Midwest is geographically the largest of these regions, with many smaller cities contained within it and long distances to connect the larger cities.

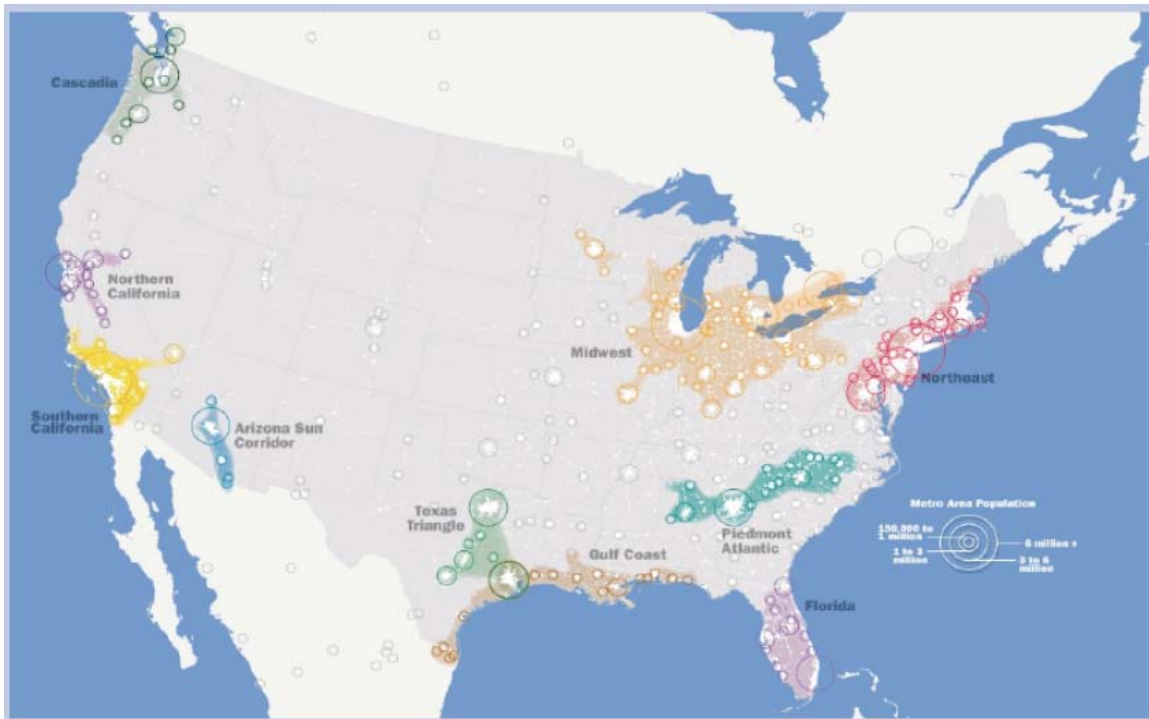
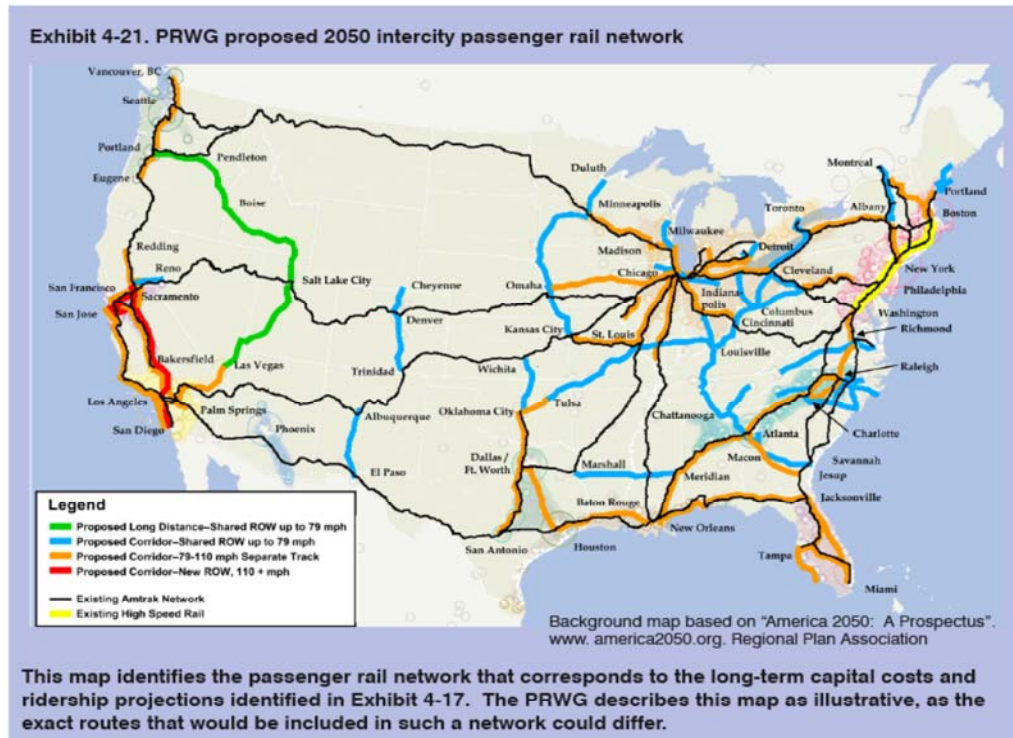


Figure 24 MegaRegions

The planned accomplishments of the passenger rail program are illustrated in the report. By 2050 all of the routes shown in Figure 25 would be in place. This includes all of the inks of the Midwest Rail Plan.

Some other issues might be considered as regional impacts. The numbers quoted above for funding levels are from all funding sources. The Commission recommends that the funding level for the federal government stay at 40 percent for highways. Therefore, 60 percent of the new highway funding shown in the Commission report will have to be raised at the state and local levels, or through private (3P) arrangements.

This may be somewhat mitigated by the tolling recommendations, which will make it easier for states that choose to use that source to do so. In particular, those states in the region now studying regional truck facilities on I-70 would be able to finance some of the effort with tolls, without any additional federal approvals.



Source: *Vision for the future: U.S. intercity passenger rail network through 2050*, prepared for the Commission by the Passenger Rail Working Group.

Figure 25 Passenger Rail Implementation

Similarly, congestion pricing measures would allow some cities and states to make use of this as both a traffic management and a revenue strategy.

Finally, the recommended Environmental Stewardship fund would allocate 7 percent of total federal surface transportation dollars to environmental purposes. This, according to the report, is an increase of about two points over the current levels. This funding might make it easier to do some of the environmental enhancement and mitigations activities that have become more common but controversial.

Conclusions

The commission report reflects many of the recommendations made by the MVFC. A few recommendations and, perhaps, some omissions may be of concern to the region. This summary was intended to help the agencies of this region consider the Commission report in light of future federal transportation legislation. The next federal reauthorization will almost certainly deal with freight in some detail. Since the report will be a significant input into that legislative process, the region may do well to find areas of agreement and concern.

Specifically, some areas that may be of particular importance to the region include:

- The Commission recommends a significant increase in transportation funding, particularly for highways. If implemented at the federal, state and local level, this

would facilitate progress in meeting the growing needs related to congestion and deterioration of the regional highway network.

- Expanded planning requirements hold the promise of greater accountability on the part of the states and greater understanding on the part of policymakers. This should provide an improved basis for policy discussion as lawmakers deal with transportation policy and funding.
- Funding for rail capacity, in the form of recommended tax credits and new revenues, may allow progress to be made on existing rail bottlenecks such as those that would be addressed by CREATE.
- The lack of a recommended policy framework within which to deal with rail as an integral element of the freight network may be cause for concern.
- The lack of attention to the water mode may also be of concern to the MVC region, which has rich water transportation resources.
- The emphasis on large metropolitan areas for congestion relief may also be costly to the MVC region, since metropolitan areas in the region, with two exceptions, tend to be near the smaller end of the national average and experience less daily congestion costs.
- The apparent focus of the Commission's recommendations on freight as an element of international trade, may also be of concern to the MVC region, since the region has no seaports, such as LA or NY/NJ, for which highway and rail capacity expansion will be needed.
- The Commission's recommended Connecting America program should provide needed resources to the region, since the MVC is geographically large, with many cities for which improved connections are needed.
- Similarly, the Rebuild America program should provide needed resources to states that are already relatively advanced in implementing transportation asset management techniques.

Ultimately, the impact on the MVC region will depend upon many details of how the Commission recommendations are implemented. Perhaps the most significant of these details involve final decisions on how funding will be allocated to the states and regions. Similarly, the specific policy focus of the final implementation of many of the programs could help or harm the interests of the MVC. The above listing should provide a useful starting point for the states to monitor the next federal reauthorization.

References

- Adams, Teresa. "Commission Testimony." Minneapolis, MN. April 2007.
- Congressional Budget Office. Trends in Public Spending on Transportation and Water Infrastructure, 1956 to 2004. Washington, D.C. August 2007.
- Federal Highway Administration. 2006 Highway Statistics. Washington, D.C. 2006.
- Miller, Deb. "Testimony before the United States Senate Committee on the Environment and Public Works." Washington, D.C. February 2008.
- MVFC. Testimony for the National Surface Transportation Policy and Revenue Study Commission. Chicago, IL. April 2007.
- National Surface Transportation Policy and Revenue Study Commission. Transportation for Tomorrow. Washington, D.C. December 2007.
- NCHRP 446. Development of a Performance-Based Planning Process. Transportation Research Board. Washington, D.C. December 1999.
- Passenger Rail Working Group. Vision for the Future: U.S. intercity passenger rail network through 2050. Madison, WI. December 2007.
- Regional Plan Association. Emerging Megaregions in the United States. Copyright 2006.
- Steudle, Kirk. "Commission Testimony." Chicago, IL. April 2007.
- Texas Transportation Institute, *2007 Urban Mobility Study*
- US Census Bureau. Table E-13 at www.census.gov/compendia/smadb/TableE-13.xls
- Wittwer, Ernest. "MVFC Workshop Proceedings." Madison, WI. March 2007.



CFIRE

University of Wisconsin-Madison
Department of Civil and Environmental Engineering
1410 Engineering Drive, Room 270
Madison, WI 53706
Phone: 608-263-3175
Fax: 608-263-2512
cfire.wistrans.org

