

# Mississippi Valley Freight Coalition Authorization

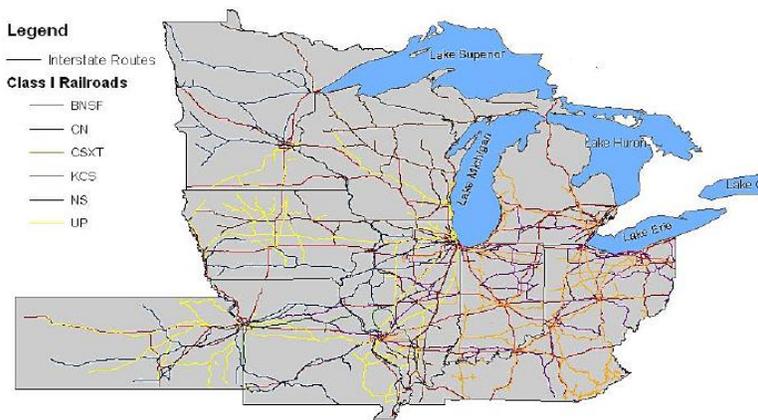
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## Introduction



The ten states of the Mississippi Valley Conference are blessed with an extensive and diverse transportation system. The following map shows the interstate highway routes, class I railroads, Great Lakes and rivers of the region. This system has served the region’s economy well for many years, but it is now challenged. Locks and dams on the Mississippi River System are antiquated; highways are aging, in need of repair, and operating at near capacity; railroads are operating on aging railbeds and also largely operating near capacity; and the

Great Lakes require investment in dredging and lock expansion.

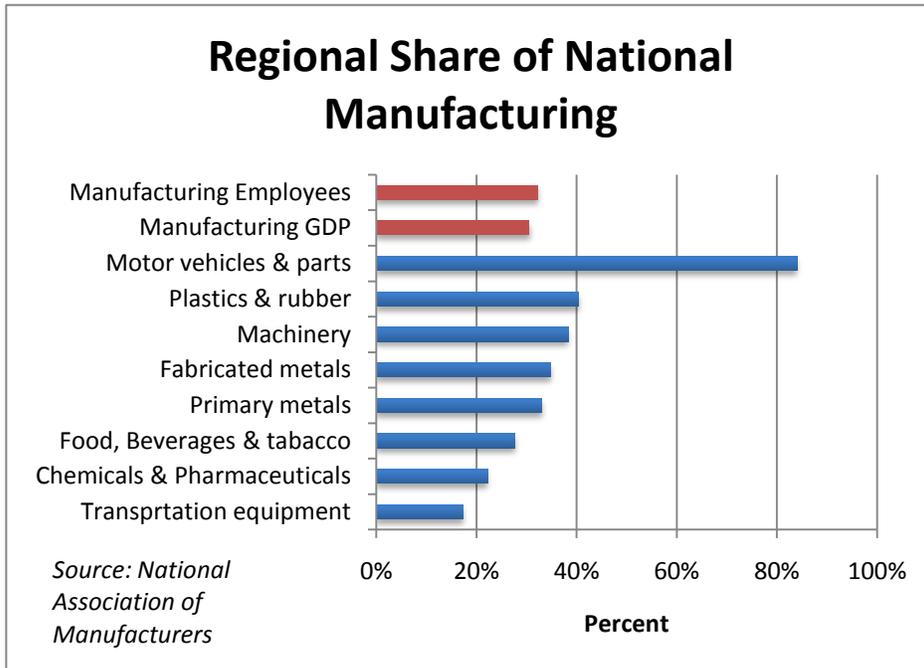


**The Interstate and Class I rail networks of the Mississippi Valley Region Freight Transportation System.**

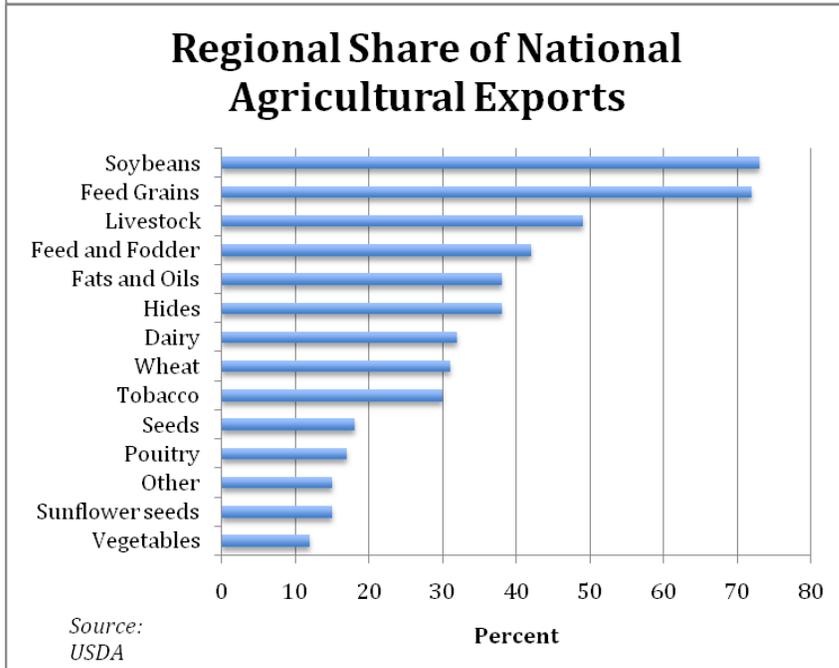
As we move to the world economy of the 21<sup>st</sup> Century, we must also be concerned with using the parts of our transportation system in ways that complement one another, via efficient intermodal connectivity. Policies, intermodal facilities, communications, transparent funding, and collaborative planning are all needed. The 2009 Transportation Authorization must support these goals with increased, modally flexible funding and

national policies that promote the development of all modes.

The states within the region share similar economic bases: heavy manufacturing and agriculture. These economic elements are both very dependent on robust transportation systems to move the large and heavy products they produce. The region generates much freight; and, because of its location, it supports significant overhead traffic that neither starts nor ends within the region.



Despite losses in industrial employment in recent years, the region remains the nation's workshop. While it accounts for a little more than 22% of the nation's population, it holds 32% of the manufacturing jobs and



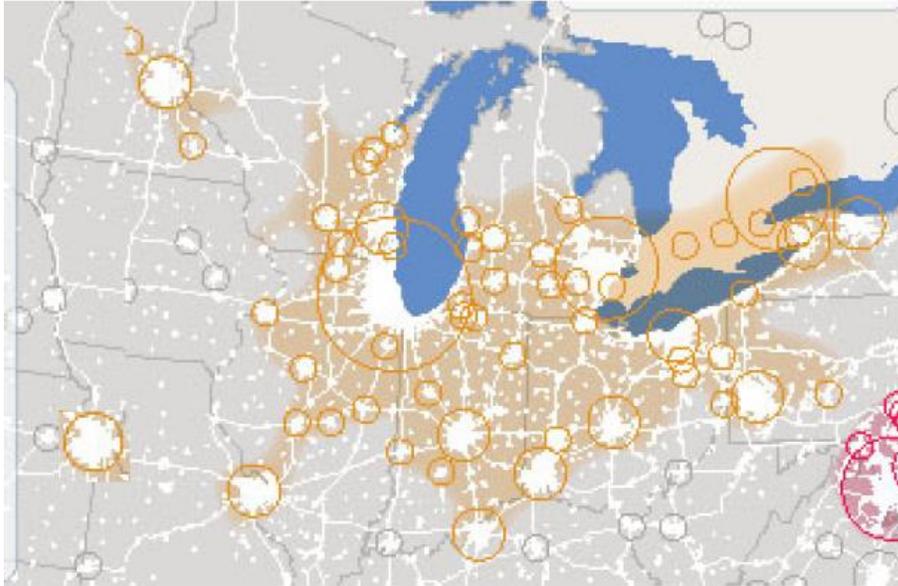
produces 31% of the manufacturing GDP.

Agriculture, the other major component of the region's economy, tends to be focused on the production of grains and livestock. The states in the region lead in 18 of the USDA's 21 categories of top agricultural exports.

A fully connected multi-modal transportation system is essential to

support the continued growth of what is being called the Great Lakes Mega-Region, a collection of economic activity centers that run from the Twin Cities to Louisville and from

Pittsburgh to Kansas City. Keeping the transportation systems functioning to meet the needs of this diverse set of economic activities will be a challenge to all of the states.



*Image: Courtesy of America 2050 Prospectus*

All of these things point to the need for transportation policies crafted to meet the unique needs of the central portion of the country, policies that support true intermodal freight transportation with adequate capacity to meet the needs of the regions industries and farms.

# Programs

## Summary

The MVFC should support the American Association of State Highway and Transportation Officials (AASHTO) recommendations to:

- Authorize \$18 Billion over six years to be apportioned to the states for freight projects on the NHS. Funding will be from the highway account.
- Authorize \$42 Billion over six years. Half to be apportioned to the states and half allocated to projects of national significance. Revenues will be from new sources. A range of projects would be eligible.

Recognizing that the benefit derived from such programs will depend on how funds are allocated and projects are selected, the states of the MVFC should condition their support upon finding equitable factors for the apportionment of the \$39 billion in new program funding and reasonable criteria for the selection of projects for the \$21 billion to be allocated to projects of national significance.

## Background

Seven of the ten states in this region are donor states, meaning that they pay more into the federal highway trust fund than they receive in normal apportionments. Minimum return provisions of transportation authorizations have mitigated the impact of the donor issue for the past two decades. Care must be taken as new programs are established to not reintroduce the tension of donor/donee issues into the transportation bill. One approach to mitigating this historic controversy is to recognize regional differences and capture the significance of those differences in apportionment and project selection decisions.

The MVFC region is unique in a number of ways:

- Because of its central location, it hosts a significant amount of flow-through traffic. On the key East-West routes in Indiana, Illinois, and Iowa more than 25% of the truck tonnage passes completely through the region.
- The region generates much freight because of the nature of its economy, which is based on heavy manufacturing, agriculture and mining.
- The region is host to the country's largest rail hub at Chicago, the only place on the continent where all class I railroads meet, as well as several secondary hubs.
- Finally, in the Mississippi River System, which includes the Mississippi, Ohio, Illinois and Missouri Rivers, and the Great Lakes, the region has incredible maritime resources.

The freight transportation requirements of these unique features must be recognized in any criteria devised to allocate funds or to select projects for discretionary funding.

## Potential Apportionment Factors

The goals of any scheme for apportioning funding related to freight should be the preservation of the entire transportation infrastructure, support for the economy and promoting the most efficient movement of freight. With these goals in mind, a number of factors might be considered for the distribution of apportioned funds to the states:

1. **Taxed diesel fuel:** Taxed diesel fuel is a very good proxy for truck miles of travel. It would tend to reflect the region's significant pass-through traffic. It would also tend to reflect the huge amounts of freight generated by the region's manufacturing and agricultural economies.
2. **Share of National Highway System mileage:** The national highway system contains the major truck routes of the country and, therefore, represents the circulatory system upon which freight moves to support our economy. It is an indication of the extent of the highway-related responsibilities of the states. Apportionments based on share of NHS should be preferred to the share of interstate mileage because it is a more complete and accurate reflection of transportation's contribution to economic productivity than the designation of the interstate system being used now.
3. **Share of class I rail mileage:** Like the share of NHS mileage, share of class I track mileage provides an indication of the size of the freight transportation responsibility within a state or region. As the home for the nation's major rail hubs, the responsibility for rail in this region is huge, as are the rail-related needs.
4. **Share of manufacturing GDP:** A major goal of an expanded freight transportation program should be to foster the growth of American manufacturing. Sharing federal transportation funding based on a state's contribution to manufacturing would demonstrate the importance of this key economic sector and enhance the competitiveness of that sector.
5. **Share of navigable waterways:** Historically, the nation's waterways have not been included in the federal surface transportation system and authorization. Yet those waterways carry a significant volume of freight and must be considered as a part of the intermodal freight transportation system. This is especially true for the Mississippi Valley region.
6. **Share of rail activity:** A number of measures of rail activity could be used as a part of the allocation process—Carloads originated, carloads terminated, carloads carried, tons originated, tons terminated, and tons carried. All would be good approximations of the responsibility and the impact of rail freight activities.

### **Potential Project Selection Criteria**

Under AASHTO's recommendations, \$21 billion would be allocated to freight projects of national significance. These projects would be selected for funding based on some determination of national need or benefit. The region should be very concerned about the basis upon which those selection decisions will be made. A defined, structured approach should be developed to help remove some of the arbitrary nature of discretionary funding, to reduce the probability that the program would become the subject of earmarking, and to

ensure that the projects selected are truly the most meritorious. A formal benefit/cost method would seem to be most appropriate.

If such an approach is used, the analysis should rely heavily on the economic importance—as measured by annual dollar value, percent of GDP or total employment—of the industries being supported by the proposed project. This can be contrasted with a benefit/cost computation that relies on direct project impacts—time saved, crashes reduced, etc. This contrast is important because the purpose of the freight program is fundamentally different from traditional transportation programs and projects. A freight program is intended to support economic activity. Its purpose is to support the economic production of the nation. For example, using the traditional benefit/cost, one might find huge benefits in a rail grade separation project in a large urban area that saves a few minutes of motorist time for thousands of motorists each day, but the project might have minimal impact on the overall efficiency of the industries that use either the highway or the rail corridor to ship their product. On the other hand, improvements to a trans-shipment facility might have very small benefits to the direct transportation users; but, because of enhanced reliability or speed, it might have a large impact on the competitive position of the industries that are served by the facility.

From the region's perspective, added weight should also be given to industries that produce products reliant on the freight system. This, again, relates to the nature of a freight program. It should support the economic growth of the nation. In the final analysis, the economic wellbeing of the nation is dependent upon the materials produced within the country—not on the materials consumed within the nation.

### **Actions Required**

To ensure that the interests of the region are protected, several actions are required:

- The MVFC states should insist upon a public rule-making process to develop apportionment criteria and processes.
- They should also insist on a similar public process for developing a project selection process for any discretionary program.
- Both the apportionment process and the project selection process should consider freight specific factors.
- Both should deal with all of the freight transportation modes.
- The project selection process should contain analytic processes that consider the importance of the industry being supported by the project and the impact of the project on the competitive position of that industry.
- The project selection process should be clearly defined and followed as the program is implemented.
- The project selection process should give greater weight to industries that produce products within the country.

# Rail

## Summary

- Efficient rail freight transport is important for the region. Currently rail capacity is challenged.
- Expanded rail services in the form of expanded intermodal and other shorter-haul services may be in the economic and environmental interest of the region and the country.
- Public incentives should be provided both in terms of direct capital funding and tax credits to bring about expanded capacity and services.
- Projects supported by either direct public funding or tax credit incentives should be included in state rail plans, similar in concept to the highway STIP, to ensure that those projects are in the public interest and to encourage rail companies to take part in transportation planning.
- Funding for rail crossing improvements should be expanded to allow economic efficiency criteria to be included for project selection.

## Background

Historically, public involvement in rail has followed two guiding principles: 1) Funding is proportionate to the benefits received; and 2) Rail company solvency is good for the public. Each of these principles deserves expansion.

The notion of proportional investments and benefits has been followed in countless rail/highway crossing projects. A rail crossing improvement, particularly a separation, provides benefits in terms of operational efficiency, safety improvements and avoided maintenance costs to the highway user and to the rail company. If the benefit is determined to be 30% to the rail company and 70% to the highway user, the cost of the improvement is similarly apportioned. While the presence of federal RR crossing safety funds sometimes skews this allocation in routine projects, the basic approach has been applied to a number of high-profile projects such as Alameda and the Chicago Region Environmental and Transportation Efficiency (CREATE) program.

From the perspective of a total transportation system, this proportional approach can be criticized based on the types of benefits considered. For example, closing rail crossings has the effect of increasing the operating speeds for trains, thereby reducing the cost of transportation and increasing the competitive position of industries, but that broad economic impact is usually not considered. Similarly, freight moved by rail is usually requires less fuel and produces fewer greenhouse gases than freight moved by truck. Therefore, it could be argued moving freight by rail is in the public interest, but the basic approach to allocating investments does not consider this public benefit.

Rail companies have always been private entities. Since deregulation, those private companies have had a fair amount of freedom to pursue policies and markets that support their return on investment (ROI) and profitability. As a result, the rail industry is now more profitable than it has been in nearly a century. But one could ask whether profitability in and of itself is always in the public interest. Might services and actions that do not contribute significantly to the rail industry's bottom line be in the public interest? If that is

the case, what public policies could be used to bring about those services that the market place does not cause to happen? The usual paradigm has two approaches: Free market and regulation. The first may not be producing all of the services that could be in the public interest; the second nearly destroyed the rail industry. Can another approach be found?

One step that can be taken to protect the public interest is to insist that all privately owned capital projects developed with public assistance—either through direct public investment or with the support of tax credits—be included in a state prepared transportation plan. This approach, which is similar in concept to the STIP required of highway projects, would ensure that rail companies take part in state transportation planning efforts. It would also ensure that such projects meet some test of being in the public interest.

A short-term action that could be taken to broaden the definition of public benefit involves expanding the criteria for making project decision on rail/highway crossing projects to include economic efficiency. The current rules focus on safety benefits. Separating or closing crossings also allows trains and trucks to move more efficiently. Capturing these benefits to the public, industry, rail companies and truckers would expand the number of crossings treated. More crossings addressed would have a benefit to rail operations. This action has the added attraction of being an area in which transportation agencies and rail companies have a long history of cooperating—they know how to do it.

### **Actions Required**

To bring about the suggestions outlined above, a number of actions will be required:

- The states of the MVFC should take an active role in articulating a national rail policy that clearly outlines a vision of how rail fits within an overall view of transportation services.
- Expanded freight-related revenue sources should be supported. Some that have been suggested include:
  - Climate change legislation
  - Customs revenues
  - Bill of lading fees
  - Container fees
  - Diesel fuel tax increase
  - Innovative financing
  - Tax credit bond financing
  - Government-business partnerships
  - Removing obstacles to private investment
  - Freight transportation value tax
  - Weight-distance tax
- A program for freight transportation, which would be available to rail, should be supported.
- Support tax credits for rail capital investments, but insist that all such investments be included in state transportation plans.
- Insist that all publicly supported investments in private facilities be included in the state transportation plan.
- Support additional funding and broad project selection criteria for rail/highway crossing projects.

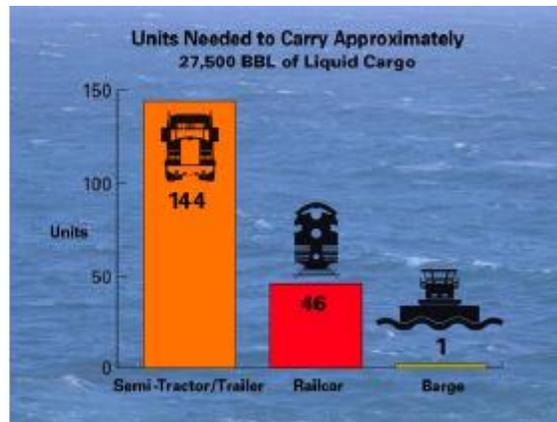
# Maritime

## Summary

- Freight transportation services provided by the Mississippi River system and the Great Lakes are very important to the economy of the region. These maritime resources hold the potential for adding freight transport capacity that is low cost, congestion free and relatively low in its environmental impact.
- Waterborne freight transportation should be included in the surface transportation authorization.
- A greater investment is required in dredging to keep navigation channels near authorized depths and to promote efficient maritime transport.
- Locks and dams on both the rivers and the lakes require additional investment to bring them up to 21<sup>st</sup> century operational standards and to provide the resiliency of additional capacity.
- Existing legislative obstacles to expanded use of the water mode, the harbor maintenance tax and the Jones Act, should be modified to bring them into compliance with current circumstances.
- Additional investment should be made in maritime research to further improve its efficiency and environmental performance.
- Tax provisions should be established to encourage investment in new or expanded maritime resources.
- Consideration should be given to supporting demonstrations of new maritime services such as container on ship or barge, Roll-on/Roll-off operations, or ferry operations.

## Background

Water is the most fuel-efficient and air quality positive mode of freight transportation. The following graphics are from the Texas Transportation Institute study that compared modes of transportation. The first deals with simple capacity.



The next table provides modal comparisons for emissions.

### Summary of Emissions - Grams per Ton-Mile.

Emissions (grams/ton-mile)				
	HC	CO	NO <sub>2</sub>	PM
Inland Towing	0.01737	0.04621	0.46907	0.01164
Eastern Railroad	0.02419	0.06434	0.65312	0.01624
Western Railroad	0.02423	0.06445	0.65423	0.01621
Truck	0.020	0.136	0.732	0.018

The next graphic illustrates fuel efficiency.



Despite the benefits of using maritime freight, a recent report on the Great Lakes St. Lawrence Seaway states that the system is operating at only about half of its potential capacity. This is at a time when highways and railroads in the region struggle to meet demands.

Dredging is a major issue on the Lakes. A recent presentation by the head of the Great Lake Carriers Association highlighted the dimension of this problem. As shown below, many ports have lost depth measured in feet. Dredging is also a problem on the

ivers of the region, where operating depths are also down.



Another major problem of the rivers and lakes are their antiquated locks. On the rivers, they require tows to waste time in breaking into parts to pass through the locks. On the Lakes, they provide no resiliency, with the system shutting down when a lock fails.

### **Actions Required**

The states of the MVFC should insist that:

- The Lakes and inland waterways be included for planning and funding in the next surface transportation authorization.
- Funding be increased for dredging and lock and dam renovations.
- The Jones Act be revised to allow the acquisition of used vessels for use on the lakes, regardless of where they were constructed.
- The harbor maintenance tax be modified so as to not penalize scheduled services such as roll-on/roll-off or ferry operations.
- Tax credits, similar in concept to those being proposed for railroads, be established to promote the investment in capacity and renovation of privately held marine capital assets.
- Funding be provided for research on maritime issues.
- That demonstration projects be supported to encourage the expanded use of waterborne freight.

## Institutional Issues

### Summary

The states of the Mississippi Valley Conference should work with AASHTO, FHWA and Congress to develop institutional arrangements that will allow for the improved planning, construction and maintenance of the freight transportation system. Included in these institutional arrangements should be:

- A redefined role for the USDOT that will allow it to better coordinate the activities of the states and private companies in planning, constructing and operating an intermodal freight transportation system. This redefined role should involve a great deal of interaction with the states and with the highway, rail, air and maritime transportation industries. The goal should be to find solutions to transportation problems that go beyond state boundaries, to facilitate solutions that involve private companies and to develop policies and procedures that will support a national transportation system.
- An expanded understanding and use of regional groupings of states to address issues of concern to those states. The MVFC is an example of such a grouping. Many others also exist. Those now in existence are based on informal and ad hoc agreements and are not recognized within the federal program structures.
- A refined methodology for states to voluntarily join together to cooperate in interstate arrangements.
- Improved legislation and technical standards to enable states to elect tolling as a revenue measure and to support uniform collections technology.
- Guidance at the federal level that will help state agencies protect the public interest in Public/Private Partnerships (P3s).
- Requirements for the U.S. DOT and State DOTs to plan and develop freight transportation projects in a multimodal manner, to include intermodal connectivity, rather than the traditional silo modal approach.

### Background

The flow of people and goods do not stop at state lines. Most long distance travelers and shippers do not know or care if they are in Indiana or Kansas. Facilities, regulations and practices that change at state lines are often seen as an impediment to travel and the movement of freight. Similarly, national and international transportation companies—package carriers, trucking companies, railroads, airlines, barge operators and steam ship lines—often find it difficult to deal with differing state regulations; and state agencies often find it difficult to deal with those companies on issues of service and policy. Yet, most of our nation's transportation policy and management approach is based on the primacy of state governments or, particularly in the case of rail, of private companies.

At the same time, both state and federal agencies have promoted the use of alternative financing mechanisms. Yet the most obvious of these mechanisms is often hindered by federal rules that make it difficult to impose tolls on existing facilities and by the lack of technical standards for toll collection devices.

Other alternative financing arrangements that involve P3s are often done in a very ad hoc manner. Such ad hoc arrangements have left some in the industry and the public questioning whether the public interest may have been sacrificed for short-term financial expediency. Some standards, templates and analytic tools should be provided by the federal government to ensure that the public interest is protected in these alternative financing arrangements.

### **Role of the Federal Government**

The current role of the federal government varies by mode. In the case of highways, they serve as a major provider of funding. They also play a major role in engineering standards, planning and environmental processes and research. They do not develop national plans or even development policies. With few exceptions, the question of the nature of the highway facilities to be developed and how they are maintained and operated fall to state and local governments.

In rail, the federal role is primarily concerned with issues of safety. As with highway, the federal government has a very limited role in decisions related to the extent or nature of service.

In maritime, the federal role deals with safety and with maintaining navigation channels, locks and dams, and navigation systems.

In air, safety and security are the primary roles, focusing on traffic control systems and the security of the traveler.

In part because of the role played by the federal government, the US has no national transportation plan. It has no national transportation goals that are tied to meaningful strategies or implementation actions. This can be contrasted with most of the rest of the developed and developing world. The European Union, for example, has plans that involve the construction of highways, railroads and waterways as well as information and navigational systems. All of these efforts in the EU are aimed at drawing the region closer together and reducing the cost of transport.

### **Regional Groupings**

Over the past decade a large number of regional groups have developed to deal with transportation issues larger than individual states. The MVFC is one such group. The I-95, I-5, and I-10 Coalitions are others. In every case the states have recognized the need to develop strategies and plans to meet transportation needs from a regional perspective. In every case the coalitions are organized in informal or semiformal ways through letter agreements or charters. In no case does any arrangements exist that bind a state to action beyond the current administration or legislature. Federal funding programs do not specifically recognize these regional entities. All federal funding for these coalitions is funneled through one of the member states.

For the purposes of planning, strategizing and cooperating, these informal arrangements work well enough. For developing capital projects or for owning regional facilities, these informal arrangements are not sufficient. For example, several states in this region are involved in developing a plan for truck lanes on I-70. When the planning is complete, these states will be faced with a choice of proceeding as individual states within their own boundaries, in much the way that the Interstate system was built, or of entering into a formal interstate compact arrangement, which would bind the states to joint actions.

The interstate compact is the only device now available that binds states to joint actions. It requires approval by each state legislature and approval by Congress. Once approved by Congress, the compact has the force of federal law. This formal process is very cumbersome and can be controversial. It can take many months or years to be completed. Yet it may be preferable to the informal process when capital expenditures of any significance are undertaken. That informal process may leave a facility incomplete as the priorities within a state shift over time. It may also result in a patchwork of franchise and administrative arrangements as each state pursues facility operators independently.

### **Actions Required**

A number of actions should be considered to improve our institutional arrangements:

1. AASHTO should initiate a national dialog on the role of the USDOT and on the need for a more active agency, an agency that would develop national plans and strategies in cooperation with state and local agencies and private interests.
2. The states of the MVFC should join with AASHTO and the FHWA to work with the states involved in the I-70 project to use it as a case study in how to develop regional arrangements that are sufficiently robust to support capital project development and operations.
3. The MVFC should urge that the next federal authorization specifically recognize and encourage regional organizations through funding programs directed at such organizations.
4. The states of the MVFC should urge that the next transportation authorization bill create a mechanism that will enable states to use tolling when it is appropriate. It should also urge that the federal government create technological standards for toll collection to minimize the public opposition to tolls.
5. AASHTO should begin the process of developing analytic tools, templates and standards to assist states and local governments in the application of P3 arrangements, so that the public interest is protected.

# Performance Measures

## Summary

The MVFC states should:

- Embrace performance measurement and the use of measures for effective management as a necessary and reasonable step toward improving the effectiveness of transportation programs and the accountability of transportation agencies.
- Work toward appropriate use of measures as tools for understanding, managing and improving performance.
- Insist that measures be developed that reasonably reflect the needs and situations of specific states and regions as well as the nation.
- Commit to the effort required to define, refine, and report meaningful measures.

## Background

NCHRP 311 offers a simple definition of performance measures: *“Performance measurement is a process of assessing progress toward achieving predetermined goals...”*. This definition was developed from the perspective of a single agency. Viewing performance measurement from a regional or national view introduces additional complexity in how measures are defined and used. A major complexity deals with the data systems, definitions and collection methods of each state. Even in those cases where definitions seem comparable collection methods and processing differences can make cross-state comparisons problematic. For example, even basic data elements such as pavement ride can vary markedly across state lines because of the tools used to collect the information, the attention given to calibration or the timing of the collection. A second area of complexity deals with the objectives being pursued by each state as they develop measures. Again, measures that seem comparable may be quite different when viewed in the light of the objectives for which they have been developed and are being used. Finally, state and regional differences in environment and context can markedly change perceptions and standards. For example, a definition of “bad” congestion in the Northeast will be very different than in most parts of the Midwest. Similarly, the standards of an acceptable response to a two-inch snowfall in Minnesota will be very different than in Georgia. All of these differences between states and regions have to be considered and understood as measures are developed and used.

## Uses for Measures

Measures can be used for a number of purposes:

1. **Process Improvement:** Measures allow agencies to better understand how their services and facilities are performing.
2. **Monitoring progress:** The trend line of performance measures over time allows an agency to monitor its progress toward attaining defined goals.

3. **Accountability and transparency:** Well-structured measurement systems allow agencies to better communicate with their publics—legislators, stakeholders, customers and the general public.
4. **Benchmarking:** Benchmarking is the process of selecting comparable organizations against which programs, services and facilities can be measured, so that improvements can be made.
5. **Allocating Funds:** The Surface Transportation Policy and Revenue Commission seemed to assume that allocating funds was an appropriate use of measures in its report.
6. **Finding fault:** Perhaps the worst use of measures is to simply find fault.

### Types of Measures

A number of different types of things can be measured, as shown in the following graphic.



Inputs are the ingredients that go into doing transportation—contract dollars, hours of labor, tons of asphalt; outputs are the immediate results of the inputs—miles of renewed pavements; outcomes are the immediate objectives of the effort—smooth pavements; and results are the larger objectives—an enhanced traveling experience, reduced fuel consumption, improved safety.

### Numbers and Levels of Measurement

A common point of discussion in measurement is: How many measures are appropriate? The simple answer is: you need as many as you need for a given purpose. Too many may confuse the issues; too few may miss key aspects of the program or process, skewing management actions. The following is an attempt to illustrate this point.

#### Numbers and Levels of Measurement

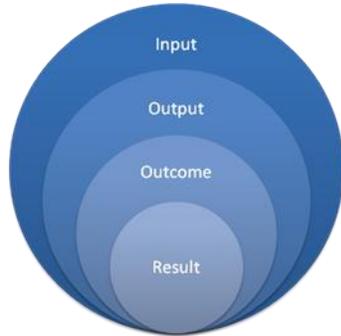


Relatively few measures should meet the needs of national monitoring and accountability. More will be required for senior state managers to carry out their responsibilities. More still will be needed for mid-level state managers who are concerned with improving processes. Still more will be required for lower level

managers, who supervise the daily operations of a state agency.

The key to making this approach workable is that the measures at the lower levels have a logical relationship to those fewer measures at higher levels. The following graphic attempts to illustrate this nesting.

### Nesting of Measures



The graphic uses the types of measures to make the point. A relatively few measures of results should be supported by a greater number of outcome measures. More output measures are needed to support the outcome measures. More input measures may be needed to support the output measures. The

graphic could also have used levels of government and management: Few measures at the national level; more for senior state managements; more still for mid-level state managements; and many more for lower level managers.

### Potential Freight Measures

The following outlines some potential measures for freight. The table illustrates outcome and result measures that might be appropriate for the state, regional and federal levels.

Area	State	Regional	Federal
<b>Economic Efficiency</b>	Percent of state product required for transportation and warehousing.	Percent of regional product required for transportation and warehousing.	Percent of Gross Domestic Product required for transportation and warehousing.
	Travel time on major corridors across the state or between major origins and destinations within the state.	Travel time between major regional origins and destinations.	Travel time between major national origins and destinations.
	Variation in travel time on major corridors across the state or between major origins and destinations within the state.	Variation in travel time between major regional origins and destinations.	Variation in travel time between major national origins and destinations.
	Average time required for weight and safety	Number of weight stations with full	Number of weight stations with full CVISN

	enforcement	CVISN capability.	capability.
	Cross-border variations in freight regulation—size/weight, permitting, enforcement, etc.	Intra-regional variations in freight regulation—size/weight, permitting, enforcement, etc.	
	Average time lost at major trans-shipment, both intra-modal and intermodal, terminals within the state.		Average time lost at major national freight transportation hubs.
	Average time lost at river and lake locks.		Average time lost at river and lake locks.
	Average time lost at border crossings.		Average time lost at border crossings.
<b>Safety</b>	Truck-involved fatalities.	Truck-involved fatalities.	Truck-involved fatalities nationally.
	Truck-involved crashes.	Truck-involved crashes.	Truck-involved crashes nationally.
	Truck-involved crash rates.	Truck-involved crash rates.	
	Rail crossing fatalities.	Rail crossing fatalities.	Rail crossing fatalities nationally.
	Rail crashes/derailments.	Rail crashes/derailments.	Rail crashes/derailments nationally.
	Rail crash/derailment rates.	Rail crash/derailment rates.	
	Rail crossing crash rates.	Rail crossing crash rates.	
			Maritime crashes nationally.
<b>Environmental</b>	Carbon emissions per ton-mile of freight.	Carbon emissions per ton-mile of freight.	Carbon emissions per ton-mile of freight.
			Frequency of Hazmat spills.
	Freight mode share.	Freight mode share.	Freight mode share.
<b>Resiliency</b>	Length of detour around key facilities.		
	Emergency response plans in place and current.	Emergency response plans in place and current.	Emergency response plans in place and current.
	Emergency response time in the case of a major incident.	Emergency response time in the case of a major incident requiring regional	Emergency response time in the case of a major incidents requiring federal

	support.	response.
Availability of alternative modes.	Availability of alternative modes.	Availability of alternative modes.

This suggested list of measures and the split between state, regional and federal is intended to provide each with the information needed to communicate with stakeholders and to improve the activities assigned to them. This arrangement solves only a small amount of the complexity involved in developing and using national measures. Within this framework of use and responsibility, much effort will still be required to develop specific measures, the data sources and processes to support them, and the manner in which they will be published and used.

### **Actions Required**

If the above view of freight performance measurement is to become a reality, a number of actions will be required:

1. Convene a working group of interested state and federal transportation officials with representatives of the transportation industry to define specific measures, definitions and standards.
2. Establish a freight mobility plan charged to updating and reporting measures regularly.
3. Help the state departments of transportation to understand the measures being developed at a national level and state measures needed in direct support of those national measures.
4. Work with the researchers from the American Trucking Research Institute to refine the efforts now underway to generate information from truck-based communications systems on travel times and reliability.

# Truck Size and Weight

## Summary

The MVFC should support the 97,000-pound, six-axle truck configuration recommended by the American Trucking Association, if:

- The units are powered sufficiently so that they can accelerate safely in traffic;
- The units have sufficient braking capability to stop safely in emergency situations; and
- The industry is willing to pay additional fees to compensate for the costs incurred by the public sector.

## Background

The efficient movement of freight is critical to the economy of the region. Recent studies in Minnesota and Wisconsin have shown that significant benefits can be found if the larger vehicles are allowed. For example, Wisconsin's study predicted an annual net benefit of nearly \$95 million if this configuration was allowed on both state highways and Interstate routes within the state (note that this analysis assumed that surrounding states stayed with current weight rules). The bulk of the annual benefits were to the private sector, while all of the increased costs would accrue to the public sector.

According to the 2000 Addendum to the 1997 FHWA Highway Cost Allocation Study, trucks in the 75,000 to 80,000 pound category paid about 80% of the costs that they caused to the highway system (<http://www.fhwa.dot.gov/policy/hcas/addendum.htm>). Correcting for this historic imbalance and compensating for the added costs of larger vehicles would require a significant increase in large truck fees.

Safety remains a major concern with larger vehicles, but current technology can provide assurance that even 97,000-pound trucks can have both the power and the braking ability to perform safely. To ensure that the proper equipment is used, any vehicle operating at this new weight must meet all of the requirements of the Federal Motor Carrier Administration related to power, braking and other safety features.

## Actions Required

The following actions are required:

- Follow the size and weight debate.
- Insist that any increase in weight be accompanied by insurance that adequate power, braking and other safety equipment is required.
- Insist that the operators of large vehicles pay the full cost caused by those vehicles on the public highway systems.