Building a National Freight Policy

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ABSTRACT

Freight is a growing issue in transportation. Freight tonnage and ton miles are growing more quickly than passenger mileage in many highway corridors. Many freeways are operating under increasingly congested conditions. Railroads are also often operating at or beyond theoretical track capacity. Congestion threatens to harm economic health, particularly in the Midwest, with its heavy reliance on manufacturing and agriculture. But the United States has been slow to respond to this growing challenge. In part the slowness is a factor of the traditional roles of the federal government, the states, and private companies in freight. In part, it may also be related to the fact that little real agreement exists on what a policy should contain. In January of 2007, a survey was sent to 250 observers or participants of an organization made up of the ten states of the American Association of State Highway and Transportation Officials’ Mississippi Valley Conference, the Mississippi Valley Freight Coalition. This survey asked for reactions to a number of statements dealing with alternative federal freight transportation policy. The survey results were then used in a workshop made up of state, local, and private sector participants in the freight industry. This paper reviews the results of the survey and of the workshop. It outlines areas of apparent agreement and concerns and suggests future work.

Keywords: finance—freight—planning
INTRODUCTION

Growing demands from both freight and personal travelers has in many corridors of the nation slowed the movement of people and goods. This has caused many people to ask how the demands for transportation can be met in the future. Many of those have asked where the national transportation policy stands. Many have also concluded that no national transportation policy exists. This paper reports on the efforts of a group, the Mississippi Valley Freight Coalition (MVFC), in the Midwest to develop a common perspective on future national transportation policy.

The coalition is made up of the ten states of the Mississippi Valley Conference of the American Association of State Highway and Transportation Officials: Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. The National Center of Freight and Infrastructure Research and Education at the University of Wisconsin and its partners at the University of Illinois, Chicago, and the University of Toledo provide staff support. The coalition was formed in 2006. One of its first efforts was to prepare regional testimony for the National Surface Transportation Commission, which held public hearings in the first half of 2007.

To gain agreement from the member states in the coalition, three steps were taken. A survey was administered; a workshop was held; and commission testimony was drafted, reviewed and revised. The entire process took more than four months.

SURVEY RESULTS

January of 2007, an electronic survey was distributed to about 250 observers or participants of the coalition. The survey asked for responses to a number of statements related to the role of the federal government in freight transportation. Eighty-one, or 34%, responded. Thirty-nine respondents identified themselves as government employees; forty-two as non-governmental representatives. The survey was intended to provide input for the workshop dealing primarily with that issue. Overwhelmingly, respondents favor a stronger federal role in freight transportation. They also favored a maximum degree of flexibility for the states, a federal focus (such as might be found through the designation of a federal freight system), a multimodal approach, and regional cooperation. These conclusions are summarized in Figure 1.

Conclusions

We want:
- A stronger Federal role
- State flexibility
- Focus, as in a designated system
- A multi-modal approach
- Regional cooperation

Figure 1. Survey conclusions
Somewhat less unanimity was found in dealing with defining performance objectives in return for financial assistance to rail and water modes, the use of regulation to ensure that needed services are provided by each mode, and the imposition of new taxes. The majority of respondents supported each of these propositions, but a large minority rejected them (see Figure 2).

Survey responses illustrate some of the key issues in arriving at a national policy. The first major issue is the conflicting roles of state and federal governments. The participants overwhelmingly said the federal role should be strengthened (see Figure 3), but they also said funding should be available to the states in a flexible form (see Figure 4). This response of stronger federal direction with sustained or enhanced state flexibility is a difficult combination to produce.

We might consider:
- Performance objectives for rail and water assistance
- A regulatory system
- New taxes

Figure 2. Tentative survey conclusions

Increased federal funding for freight-related infrastructure should be focused on specific corridors, such as might be designated as a part of a national freight transportation system.

Figure 3. The federal role
The second major issue deals with the government’s role in the rail and maritime modes. Seventy percent of the respondents agreed or strongly agreed that federal transportation policy should encourage the use of nonhighway modes. Sixty-eight percent said that critical rail and water services should receive federal assistance. Sixty-two percent said critical water and rail services should be aided if the aid came from nonhighway sources. But only 46% said that a freight-related tax should be created to assist all modes. While the spread on this issue is not as great as the spread on state and federal roles, it does illustrate the fact that government participation in rail and maritime remains a difficult issue.

**WORKSHOP**

On February 26, 2007, 46 people braved the end of a Midwestern winter storm to attend a workshop on freight in Dearborn, Michigan. For many the trip was challenging. Closed airports and delayed flights proved to be a barrier for many who had planned to attend. Twenty-six state department of transportation representatives from nine states, eight private sector representatives, three local government officials, and nine university people were present.

The bulk of the effort within the workshop was devoted to finding points of agreement for testimony to the commission. The results of the survey were presented and discussed, as was an overview of information previously developed on freight in the region. The participants seemed to find few, if any, surprises in the survey results.

Armed with the survey and background information, participants broke into small groups to ponder the question: What do we want from the federal government?
What We Want From the Federal Government

The groups reported their findings. While they had a wide range of views, a great many common elements also existed, such as rational, flexible funding, improved data, better support for research, improved interoperability for technology, steps toward intermodalism, and modal connectivity.

These commonalities yielded a collective set of priorities for the federal government in freight policy that included the following: defining a sustainable national transportation and freight policy, intermodalism, interoperable technology standards and a support for technological innovation, leadership in developing and making available alternative and sustainable energy sources, a national effort to reduce bottlenecks, national support for improved freight information, measures to improve freight productivity, improved funding, better information to policymakers on freight, and a defined national multimodal freight system (see Figure 5).

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<tr>
<th>Collective Priorities</th>
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<tr>
<td>National transportation/freight policy that is sustainable</td>
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<td>Intermodalism</td>
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<tr>
<td>Technology: innovation, standards for interoperability, and increase reliability</td>
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<td>National energy policy for alternative and sustainable fuels</td>
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<td>Freight data for modelers and decision-makers</td>
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<td>Improve awareness of freight by policymakers</td>
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<td>Establishing a multimodal national freight network</td>
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Figure 5. Workshop priorities

How Should the Federal Government Carry Out Its Role?

Next, the participants divided into two groups to delve deeper into the ideas listed above. The basic question they addressed was: How do we want the federal government to carry out its role?

The first group dealt with funding, a sustainable transportation policy, and education and awareness. The second group dealt with data, technology, energy and emissions, and productivity.

Their reports succeeded in going deeper into each issue. With the funding issue, the group struggled with flexibility for the states and aligning federal funding to national strategies. They resolved this by arguing that federal programs should provide maximum flexibility to the states but use increased federal participation rates to encourage state actions that promote national strategies (see Figure 6).
A national transportation policy should incorporate a number of factors in the decision making process: the economy, environmental concerns, safety, and equity. It should encourage the use of technology to maximize the benefit of the existing infrastructure. It should use the best information available to support rational decisions and management. It should create more choices for energy sources, aligning a transportation policy to an energy policy. Finally, it should be intermodal in its view and application (see Figure 7).

Education and awareness was a difficult issue. The group noted that we have modal awareness, largely because of the efforts of modal advocates, but we have no champion for freight. It suggested that the United States Department of Transportation (USDOT) should assume that role, working with the states and the various national associations. The message would be focused on the social and economic importance and impact of freight movements. The group sees that next federal bill as FREIGHT-LU, signaling the importance that freight will likely have in it. Now is, therefore, the time to begin spreading the message of the importance of freight (see Figure 8).
Technology is moving to help solve the data issues, if we can solve the institutional questions associated with technology. Cell phones, in-truck communications, package and load tracking systems, roadway management systems, and others have the potential for providing much useful and needed information. But we must have a national approach, including funding and standards if this potential is to be realized. This will require partnerships between the federal government and the states and between the public and private sectors. Efforts must be made to meet the needs of each of these partners (see Figure 9).

**Figure 8. Education recommendations**

The discussion of technology focused largely on two issues: making greater use of inland ports and information technology systems (ITS), as shown in Figure 10. Inland ports have the potential for using a wider range of the available infrastructure, thus reducing the growth in congestion at some points and making the total transportation system operate more efficiently. To operate effectively, inland ports, such as the proposed Kansas City Smart Port, must have improved institutional arrangements. Essentially, many government agencies have to coordinate their activities. In the case of Kansas City, the major players are the customs agencies for Mexico and the United States. Inland ports also must have improved interoperability of information systems to improve the flow of data between agencies and transportation providers. And it must have improved cargo tracking capabilities, both for customs purposes and to facilitate intermodal transfers.

**Figure 9. Data recommendations**
ITS has the capability of making real-time information available to both travelers and to the agencies that manage facilities, but to realize its potential, technologies must be operated across jurisdictional boundaries, which requires standards of interoperability and coordination.

### Figure 10. Technology recommendations

- Encourage the use of inland ports
- Improved institutions
- Improved data and modal interoperability
- ITS
  - Real time information
  - Interoperable standards
  - Better use of WIM and other truck technology
  - Inter-jurisdictional coordination

### Energy and Emissions

- Funding for research
- Incremental actions
- Improved flows

### Figure 11. Energy recommendations

The group suggested three basics approaches to the concerns of energy and emissions (see Figure 11). First of all, the federal government should lead the effort in research to refine and make available alternative energy sources.

Secondly, they suggested an incremental approach that recognizes that smaller steps can have a more immediate and greater impact. This follows the example of California that has mandated or encouraged greater fuel efficiency, alternative fuels and cleaner fuels from technology that is already available. Finally, recognizing that poor traffic flows waste energy and increase emissions, the group suggested a concerted national effort to identify and remove bottlenecks, thus improving traffic flow.

Productivity is often a euphemism for bigger loads and longer vehicles, but the group identified some steps that can improve productivity without venturing into those areas of controversy (see Figure 12). The first deals with a range of technologies, such as next generation CVISN, virtual weight stations, and similar technologies that could combine to make truck enforcement much more efficient and less intrusive.

Related technologies are parking information systems and traveler information systems that would provide drivers better information on where truck parking was available and on the reliability of the highway system, thus allowing trips to be better planned.
Other emerging technologies, such as drowsy driver detection, could improve productivity by allowing drivers to respond more quickly to their need for rest. It would also, of course, improve safety.

The issues reported by the groups and supported by most workshop participants became the substance of the testimony for the national commission. Once again, the pull between federal and state roles was not resolved: Flexible federal funding that was aligned to federal priorities was recommended. Again, the role of nonhighway modes was somewhat ambiguous, appearing only as “encourage intermodalism.” Responses to this question also pointed to another issue in defining a national transportation, or freight transportation, policy, which is the role of the USDOT. A much stronger advocacy is suggested for the USDOT to make the decision makers aware of the challenges we face.

DRAFTING TESTIMONY

A draft of testimony for the national commission was prepared that included most of the points made at the workshop. It was sent to all participants in the workshop for their review and comment. Only state department of transportation and university people responded.

Most comments dealt with editorial issues. A few went to more substantive things. Those substantive comments usually had the result of weakening the message. A couple of states were not fully comfortable with flatly advocating new or higher federal taxes to deal with transportation. Some were not sure that they should or could advocate federal assistance to nonhighway modes. Some argued that the testimony should be more pointed, that is, fewer issues should be raised.

Comments generally indicated a reticence on the part of the states to embrace strong, clear positions. It still raised a number of issues, but the edge was somewhat blunted on several of the more key and controversial of those issues.

ANALYSIS

The survey, workshop, and drafting of the testimony pointed out several issues that will have to be raised, discussed, and resolved if we are to have a national freight transportation policy or any national transportation policy:

- The role of the states vs. that of the federal government
- The role of the public sector in rail
- The role of the USDOT
- The role of the private sector in making government policy
• The role of government as a financier of public works projects

Each of these points deserves explanation and elaboration.

The Role of the States

The states were reluctant to embrace strong national leadership in highways. Given our history, this is not surprising. The United States has never had a tradition of strong national direction in highway transportation. It has historically operated with what has been described as a system of federally aided, state-administered highway construction programs.

The 1956 Interstate Highway Act has often been cited as the last, some might argue the only, instance of articulated and implemented national highway policy. But even it fit well within the previous framework of federally-aided, state-administered. The Congress and the Eisenhower administration agreed that a national interstate system should be built. With the selling point of national defense, they imposed a tax and offered states 90 cents of every dollar spent to build the system. The system itself was defined by the states subject to very broad parameters outlined by the Federal Highway Administration: national connectivity, mileage guides, and design standards. Some states sought approval for every route that might qualify; others laid out more modest systems. Each state built at its own pace, within the allocated federal funding levels. Ultimately, many states withdrew approved interstate projects and used the funding for other purposes. At best the interstate was a federal vision interpreted and constructed through the eyes of 50 states. It achieved the desired outcome of a national freeway system, but the system was molded to fit the needs and desires of the states.

This molding has continued and grown over the years. Starting in 1982, a number of states noted that they were sending much more money to Washington than they were getting back in federal highway aides. These donor states asked for and got minimum guarantees of return on their contributions to the federal highway trust fund. Eighty cents of each dollar was the original guarantee. It is now 95 cents, and some argue it should be one dollar out for one dollar in. This donor argument has dominated national highway politics for the past 25 years. It is not likely to go away anytime soon. The question remains: How can you have a national transportation policy if the role of the federal government is to collect and return taxes to the states?

The donor arguments also raised a number of issues relative to state flexibility. The federal government provides money for specific programs—bridge replacement, interstate highway maintenance, the national highway system, safety, etc. This distribution of money may not fit the states’ priorities. When this is the case, can the dollars be used in the programs that reflect the state priorities? Historically, the answer was rarely, but starting with the 1991 Surface Transportation Act, flexibility has been steadily increased. Transfers between federal categories are routine to the point of making those categories fairly meaningless.

On the whole, states’ rights, return on contribution, and flexibility have defined national transportation policy debates for decades. The responses of the MVFC states generally reflected that history. When you have spent a career arguing for more authority, more return, and greater flexibility, it is hard to embrace the notion of a strong, federally directed effort.
The Role of the Public Sector in Rail

Few people disagree with the notion that more freight carried on rail is an objective that is in the public interest, but how to achieve that goal is not clear. It is not clear because of the history and traditions of the nation relative to public involvement in rail.

Most railroads in the United States were built by private companies, some with federal assistance in the form of land grants. Private companies operate most rail services. Since government deregulation in the 1980s, railroads have had a fairly free hand to define service areas and types and the rates for that service. They have aggressively tried to become more efficient. Generally, efficiency has meant bigger cars and locomotives, smaller train crews, longer trains, and fewer miles of track. It has also meant less service to smaller places, and often less frequent service. Less service to many locations has also tended to increase the length of truck hauls to the railhead, increasing highway congestion.

For the railroads, all of this means that they are profitable, which is important to a private company. It also means that rails are carrying record amounts of cargo, while their market share is falling.

As we look to a future with more freight tonnage than can be accommodated on many roadways, some have asked how to expand the role of rail. The status quo promises a continuation of the trends of the past 20 years. In fact, longer term projections of freight generally show growing absolute numbers for rail but a smaller market share. Few would argue for a return to the regulation that ensured service but drove most rail companies to the verge of bankruptcy. Short of that, what government policies are available to encourage the use of freight rail? The participants in the process of developing a position on freight policy were reluctant to embrace any solution. Direct public aid to private companies seems to hold a number of problems. Public ownership of rail facilities has even more problems. Aid with performance standards seems more logical, but it is not clear that it is workable.

Clearly much more public discussion is needed to come to grips with this issue.

The Role of the USDOT

Participants in this process suggested a stronger role for the USDOT in two areas. The first, defining standards for interoperability for technical applications, should not be controversial in most quarters. The second, becoming an advocate for freight transportation needs, might come into conflict with the realities of national politics. An advocacy role will almost certainly put the USDOT into a political discussion of the direction of national policy. While many current and former USDOT officials would argue that they have always played such a role, history does not support that view.

The USDOT is a cabinet agency. It tends to focus its activities on those issues, policies, and budget allocations that are supported by the sitting administration. For example, in the most recent reauthorization discussions, the Federal Highway Administration’s own analysis clearly demonstrated the need of a much larger federal investment in both highway and transit transportation. Larger investments would have required some additional revenues, which the administration would not support. Not surprisingly, the spokesmen for the agency tried agilely to reconcile the need for more investment with a recommendation for less by noting the need for greater state and local support and the huge possibilities for innovative financing. As a result, members of Congress became the largest advocates for transportation inside the government.
The Role of the Private Sector in Making Government Policy

Those who depend on the transportation system for their livelihood, shippers and carriers, should be the most vocal and effective advocates for that system. Generally, they have not taken an active role in the process. Only eight private sector people took part in the workshop, and most of these were not directly shippers or carriers. None took the time to comment on the draft testimony. The private sector representative who was supposed to have taken part in the delivery of the testimony cancelled at the last minute.

Again this should not be surprising. Shippers tend to treat logistics as a cost to be managed. It is not a key business area. Presidents and CEOs do not come from logistics; they come from finance, engineering, or sales. Carriers, even the very largest, tend to see the world in terms of dealing with their competition and providing service to their customers. As long as everyone is dealing with the same congested transportation system, the field is level.

Competition also reinforces the need to maintain proprietary interests. Shippers and carriers are usually reluctant to take part in group discussions with their peers for fear of losing some competitive advantage. For the same reason, they are often reluctant to share company information with public agencies.

Finally, the slow, deliberative process of the public sector, with its 20-year planning horizons, tends to be nearly fathomless to most private sector people.

This reluctance to participate in public policy issues is beginning to change as our transportation system becomes more congested, but it remains the exception rather than the rule.

The Role of Government as a Financier of Public Works Projects

Historically, public agencies at the local, state, and federal level have been the primary financiers of highway and other public works projects. However, since the 1980s, public policy makers have grown more and more reluctant to impose the taxes that are needed to support public works. Instead, they have advocated greater efficiencies, the use of tolls, or privatization. As a result professional public transportation employees are usually reluctant to take any position on revenue issues before their elected leaders have taken a stand.

Unfortunately, this nation still operates within the framework of publicly financed public works. We do not have the traditions or the institutions to deal with widespread use of tolls or private investment. Without those alternative institutions, we tend to have rhetoric and occasional experimentation, a toll road leased or a concession given here or there. The result is a gradual increase in the fragmentation of the transportation system. Now we have many public agencies, most notably 50 state departments of transportation, controlling transportation system decisions, and a small number of private companies controlling relatively short but key segments of the highway network.

Public discussion and debate is needed to either reinforce the historic, publicly financed system, or to develop new institutions that will allow an alternative system to work.
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