



# Freight Notes

The Newsletter of the Mississippi Valley Freight Coalition



## MVFC Annual Meeting

The third annual meeting of the Mississippi Valley Freight Coalition was held on April 14, 15 and 16 in Kansas City. State agency representatives, metropolitan planning organization personnel, federal employees and private sector freight experts met to hear speakers and exchanged ideas and experiences. The following is a short summary of the comments made by those speakers.

### From the Editor:

This issue of the Freight Notes contains a summary of the annual meeting of the Mississippi Valley Freight Coalition, held in April in Kansas City. Despite travel issues in several departments, the meeting was well attended and an overall success. These notes are intended to be of help to those who could not make the meeting. All the presentations and podcasts can be found on our website: [mississippivalleyfreight.org](http://mississippivalleyfreight.org).

Ernie Wittwer

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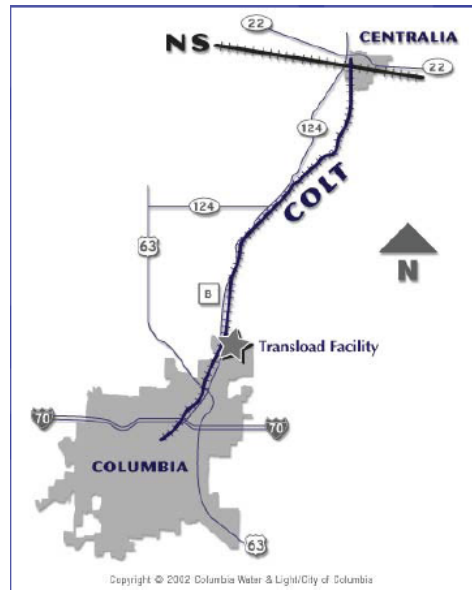
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### Host State Comments

The two host states, Missouri and Kansas, shared information on freight related activities in each of their states. Both departments have recently added staff and emphasis to freight issues.

### Missouri

Ernie Perry, MoDOT, told of the importance of freight to his state. The state's central location makes it ideal for warehousing and distribution. Forty-three percent of the nation's population and 44% of the nation's manufacturing plants are located within 500 miles of the state. Four point five percent of state jobs are in the transportation and logistics sector, the largest employment cluster in the state. Eighteen of the states 50 top employers are freight dependent.



Because of the importance of freight to the economy, MoDOT has placed greater emphasis on it. Ernie pointed to four focus areas for freight in MoDOT: 1) creating an environment for success; 2) engaging with freight partners; 3) expanding system capacity; and 4) evaluating performance.

To illustrate their efforts, two projects were discussed. The

first is a feasibility study for creating a shortline rail service between Columbia and Centralia, see the map above. The project is evaluating whether an existing transloading facility could be expanded to generate more traffic, making the shortline connection to the Norfolk-Southern mainline in Centralia an attractive service both for shippers and for the mainline rail. If the project is successful, it will have elements of a public-private partnership.



The second effort discussed deals with reestablishing freight traffic on the Missouri River. In recent years, concerns over environmental issues, particularly the fish shown in the picture to the left, have caused federal agencies to effectively lower the water level in the Missouri, making it difficult for standard tugs and barges to operate. The state is evaluating whether low-draft craft might be used on the river and if they were, if sufficient traffic would be generated to make the service viable. They are considering the potential for various public-private arrangements that might make the craft available.

## Kansas

John Maddox, KDOT, gave an overview of freight activities in Kansas. KDOT is in the process of doing a number of freight related studies:

- The Kansas Statewide Freight Study and Commodity Flow Analysis is scheduled to be complete in April 2009.
- The Kansas Statewide Rail Plan Update, a 12 month study, is scheduled to begin in July 2009.
- The Statewide Weigh and Inspection Station Analysis is underway.
- A multimodal study with a major freight component is being done for the five counties of Wyandotte, Leavenworth, Johnson, Miami, and Douglas.
- KDOT is assisting MPOs in Kansas City and Wichita on freight studies.

KDOT is using over \$2.1 million of Stimulus funding for shortline rail projects. In a statewide open call for projects, 17 applications were received which would have required about \$18 million.

Finally KDOT recently received legislative approval to raise over size/over weight truck permit fees, for the first time in 50 years. The increased revenues will be used to modernize the state's permit processing system.

### Keynote Address

Secretary Deb Miller, of the Kansas DOT, shared thoughts and insights from the senior agency management perspective. Recalling part of the discussion that followed John Maddox's presentation, she urged the Coalition to address regional permitting in some manner, perhaps through a peer review process.

Secretary Miller shared her opinions on the upcoming authorization discussions, and noted that the financial obstacles nationally will be the major stumbling block to making major progress. The insolvency of the trust fund, which will have to be addressed again in 2010, will make reauthorization difficult. Moreover, it could make the transition between bills even harder, since continuing resolutions will not work, if the fund is insolvent.

Added to these problems is the perception of some that the stimulus package has addressed transportation. Some still have this view despite the work of two national commissions that have met, gathered information and come to essentially the same conclusions: we need to invest significantly more in transportation.

The AASHTO recommendations are significant for an organization that has traditionally supported state agency interests in transportation. She noted the recommendations to create a new freight program, a large portion of which would be targeted to projects of national significance, as a major change for the states. Recommendations for performance measures represent another departure, something that many state CEOs may have concerns about, but that most agree are the correct way to manage a program. Finally, urging a stronger federal role in defining a future transportation vision and direction is also a major change.

During Q&A, it was noted that there seems to be a disconnect between industry and the DOTs on size and weight issues, and that further discussion is required on the use of alternatives to the fuel tax, such as vehicle miles of travel (VMT) taxes.

### Industry Panel

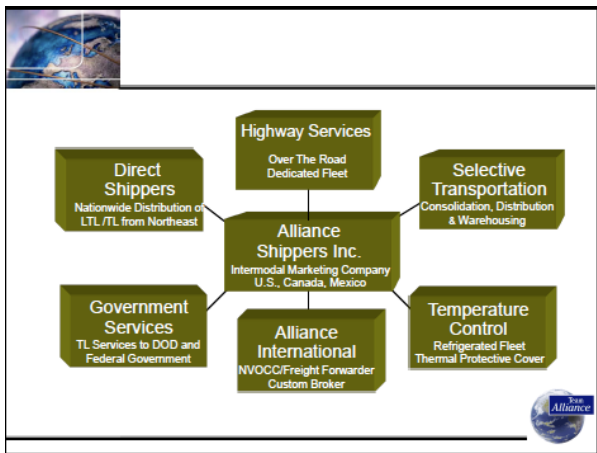
A panel of three representing three very different private companies involved in the freight business shared ideas with the group. Mac McMichael, of Alliance Shippers, Steven Dodd, of BNSF, and Shellee Currier, of WATCO Companies, spoke. Each panelists gave a short overview of their company.

#### Mac McMichael

Alliance is a privately owned company that has been in business since 1977. It is an asset based and a non-asset based provider with global coverage. Mac noted that the key to success was getting the right customers and keeping them. To illustrate this point, he showed the slide to the right.

The company philosophy emphasizes service throughout its range of operations, which are illustrated in the following graphic.

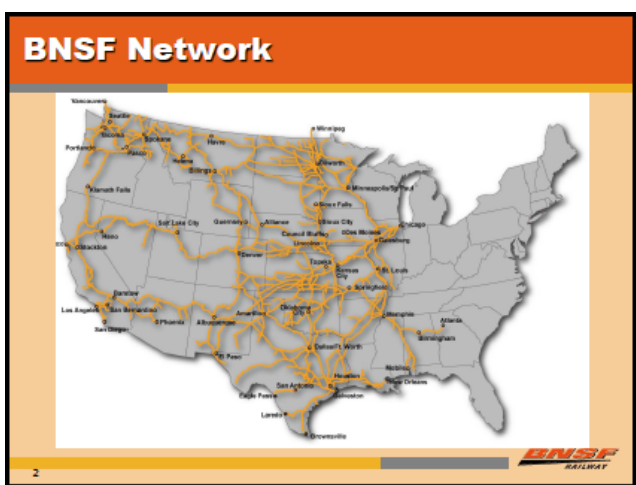




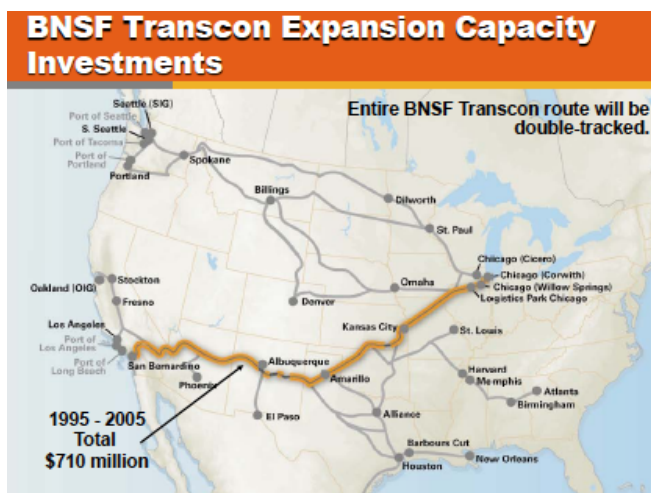
**Steve Dodd**

BNSF is one of the largest railroads in the country. It operates in 28 states and two Canadian provinces on some 32,000 route miles. Each year it hauls enough grain to supply 900 million people with a year’s supply of bread and enough coal to heat one in ten of the nation’s homes. It is the largest intermodal rail carrier, lifting a container or trailer every 7.5 seconds.

The BNSF US network is shown in the map to the left.



Steve noted that one of the major challenges facing railroad companies was maintaining and expanding their infrastructure. Over ten years BNSF has invested over \$700 million in double tracking its entire Transcon route from LA to Chicago, which is illustrated in the graphic below.



BNSF has also made significant investments in intermodal facilities, which combine facilities to accommodate unit trains, container and trailer lifts and warehousing. One such facility is now



under construction just outside of Kansas City. All BNSF intermodal facilities are shown on the map below.

**Shellee Currier**

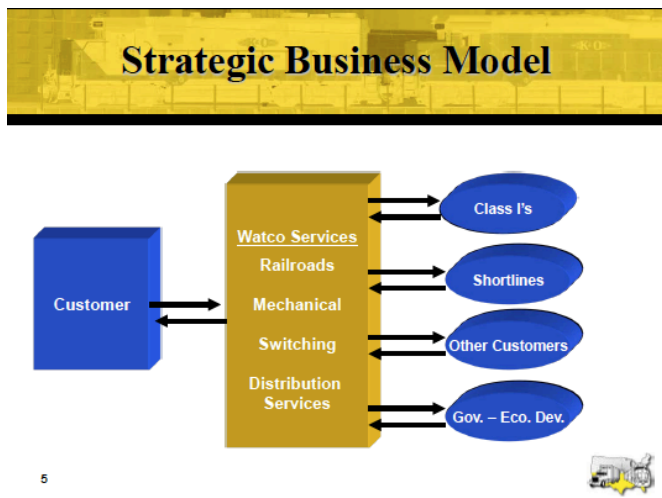
WATCO is an all encompassing industry serving rail, mechanical, switching, storage, trucking, warehousing and intermodal needs of customers in 24 states. It began as a switching operation in



1983. It is the third largest shortline rail operator in the US with 20 shortline railroads, operating on 3,500 miles of track. It also has 20 switching operations, 14 mechanical shops, 12 transloading location, and two intermodal locations. Some 2,200 employees work for WATCO. A graphical illustration of these facilities is a the right.

WATCO operates with the philosophy that you cannot improve what you cannot measure, so they track the trends of their services and of their services' affect on their customers. These tracking reports are provided regularly to all of their customers and partners.

Its strategic business model, which highlights the importance of both customers and partners, is illustrated in the following.



**Discussion**

During the discussions, several issues arose concerning the continued interaction between the private sector and the public agencies. The panelists noted that the public sector can help with infrastructure and responsiveness. The MVFC was recognized as an example of how the two can work efficiently to better relationships. The panelists also noted that the public sector can improve driver training so that truck \passenger vehicle conflicts are reduced.

Public support for appropriate intermodal facilities was also raised as a key area that can assist the private companies make the necessary

investments to keep their operations efficient and competitive.

BNSF noted that the public understanding of the business models for rail still is lacking.

The panel emphasized the importance of using organizations like the Council of Supply Chain Management Professionals to interface with the private sector. One of the carriers noted however that the lower their company can keep their profile the better.

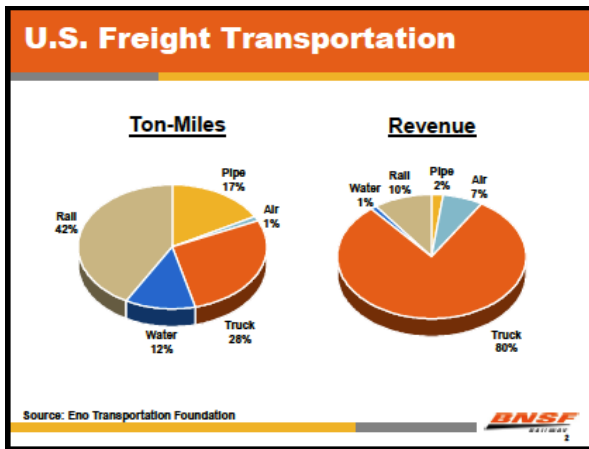
**Luncheon Speaker**

Paul Nowicki, Assistant Vice President of BNSF, spoke at lunch. His presentation covered a wide range of topics and observations, including the opinion that the climate has been improved between his company and national transportation leaders after the release of the report of the National Policy and Revenue Commission’s findings.

He used the CREATE project, which is a partnership of private companies and public agencies dedicated to improving rail transportation in Chicago, to discuss the need for cooperation between the public and private sectors. Chicago is the nation’s rail hub. It has more than 1,200 trains per day.

CREATE will construct 78 projects, including 25 grade separation, six flyovers and 47 railroad projects, to improve the movement of rail and highway traffic in the city. Delays in public funding and increases in project costs have demonstrated the need for trust, patience, persistence and perseverance.

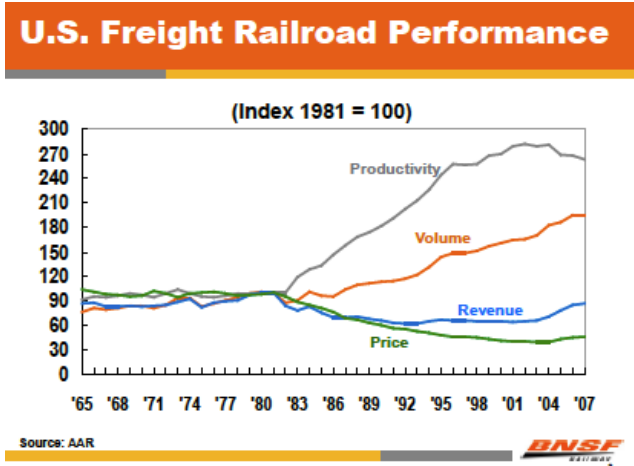
One of the basic issues facing the rail industry is profitability. He used the graphic to the left to make the point that rails carry 42% of the freight ton-miles, but



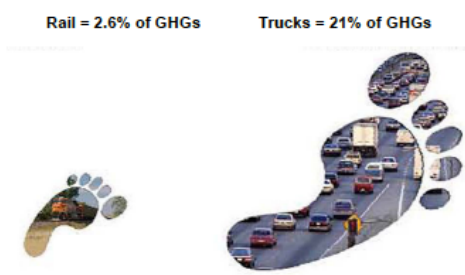
generate only 10% of the freight revenues.

Since deregulation rail productivity and volumes have increased, while prices and revenue have fallen. The graphic to the right uses an index to illustrate these points.

This challenge is made greater by the huge capital investments required in the industry. Other major industries in the US invest between three and six



**Rail Emits a Fraction of Total U.S. Greenhouse Gas Emissions**



percent of their revenues in capital. The rail industry invests about 10% of its revenues in capital, much of that related to right of way.

He argued that environmental and economic concerns should make public policy supportive of a greater use of rail for freight. The carbon footprints of rail and truck, at left, were used to illustrate his point. He also noted the much greater fuel efficiency of rail over truck.

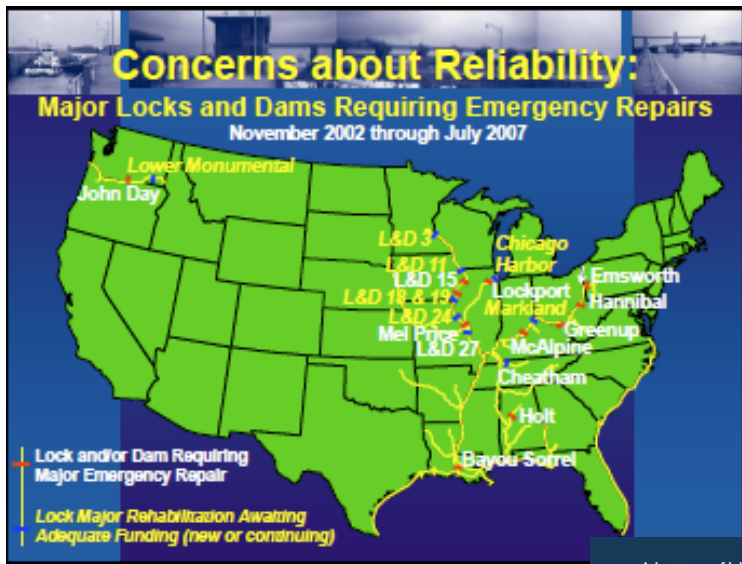
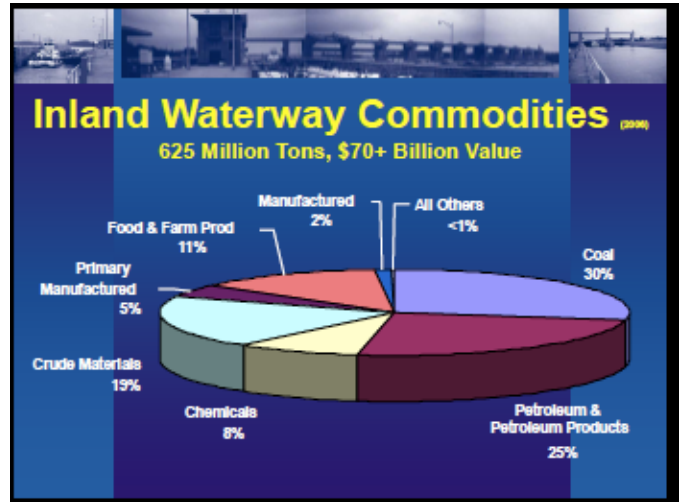
### Maritime Panel

Paul Rohde, of the Waterways Council, and Bob Goodwin, of MARAD (Maritime Administration of the USDOT), formed a panel to discuss maritime issues.

#### Paul Rohde

The Waterways Council is a public policy organization that advocates for world-class system of ports and inland waterways. Paul noted the range of products carried by the nation’s waterways, as illustrated in the graph to the right. He noted that the demand for transport on the inland waterways remains high, but that the economic turmoil has taken its toll on the industry.

The inland waterways are also faced with serious deterioration, illustrated by the map



below showing the many locations on the waterways that have reliability concerns. Efforts to repair and expand the system are hampered by an unsustainable trust fund and a disconnect between annual appropriations for the Corps of Engineers, the agency responsible for carrying out such projects, and the multi-year planning and construction process. The result is an unreliable planning process and projects that take many years to complete.

Paul also emphasized the efficiency of the waterway system and the impact that it has on the highway and rail network. The graphic at right illustrates that number of trucks or rail cars that would be needed to carry the liquid cargo of one barge. He also noted that freight moved on waterways is done with fewer spills and with greater safety.

Advantages of Inland Waterways Transport:

**Easing Rail and Highway Congestion in Our Communities: Liquid Cargo**



A loaded tank barge carries **27,500 barrels** of gasoline, enough to keep about 2,500 automobiles running for an entire year.

**Units to Carry 27,500 Barrels of Liquid Cargo**

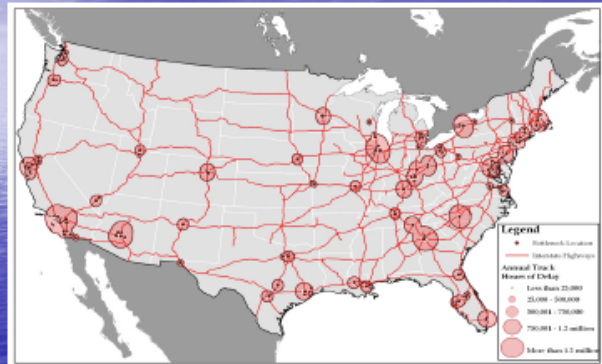
- 1 barge 
- 46 rail cars 
- 144 trucks 



**Bob Goodwin**

Bob talked about the greater safety and efficiency of maritime freight transportation, as well as the lesser environmental impacts of maritime freight movement. He noted the major freight bottlenecks in the nation, illustrated by the map at the right, and the increasing congestion of the highway and rail system in the country. A solution that the Maritime Administration is pursuing is the designation of marine highways. The map,

**Major Freight Truck Bottlenecks**



**America's Marine Highways:  
A Solution**



at left, is a conceptual view of the marine highway system. Between the nations rivers, the Great Lakes ,and the coasts, many of the freight bottlenecks could be alleviated by the expanded use of maritime transport.

MARAD is now seeking recommendations for marine highway designations. While no funding is presently available, there is hope that it may become available in the future. States in the MVFC have interests in portions of the Mississippi, the Ohio and the Great Lakes becoming marine highways.

**Discussion**

During the discussion, Bob clarified that MARAD is interested in the inland waterways, the Great Lakes and the Coastal waterways as potential marine highways. He noted that the I-95 corridor along the East Coast was a likely candidate for a demonstration effort.

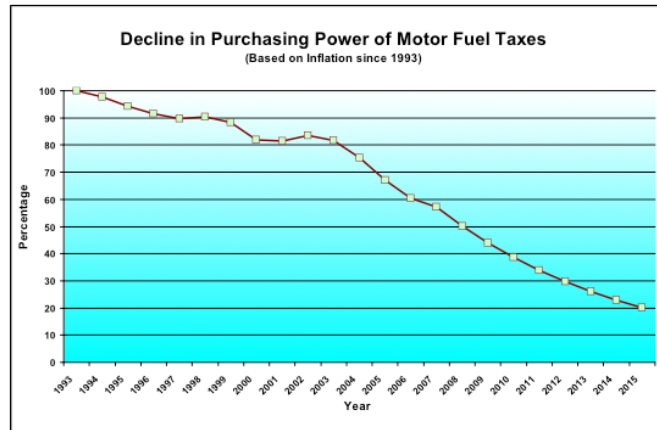
Paul responded to questions about environmental concerns over the greater use of the river system, by noting that we cannot just be river environmentalists. We have to look at all tradeoffs in transportation. When we do, the use of the inland waterways becomes much more attractive.

**Federal Authorization Update**

Leo Penne, AASHTO Program, provided comments on the federal authorization update. Congress should fund a \$545 billion dollar surface transportation program across all major modes, including: highway, transit, freight, and intercity passenger rail programs between 2010 and 2015.



The purchasing power of the motor fuel tax, the primary revenue source for transportation, has declined markedly in recent years ( see graphic at right).



**AASHTO Authorization Recommendations:**

- National Freight Transportation System. Establish a framework for freight policy, planning, operations, and investment by better defining the nation’s freight transportation system, the demand for freight transportation, and the associated infrastructure requirements.
- Freight Corridor Organizations. Authorize funding to support state-driven multistate, multimodal corridor planning and investment organizations.
- State Freight Transportation Program. Authorize a state-administered freight transportation program within the Highway Trust Fund funded at \$18 billion for six years, apportioned annually to states.
- National Freight Corridors Investment Fund. Authorize an investment fund for freight related projects on national freight corridors to total \$42 billion over six years (revenues from new sources—half apportioned to states, half allocated to fund national projects from a fund administered by US DOT).
- Existing Programs. Reauthorize freight transportation programs authorized in SAFETEA-LU.
- Other AASHTO Recommendations. Support positions on freight transportation taken by other policy teams, standing committees, and the AASHTO Board of Directors.

**Coalition for Transportation Productivity**

John Runyan, of International Paper and co-chair of the Coalition for Transportation Productivity, spoke to the issue of increased truck weight limits on Interstate highways. The Coalition is comprised of more than 100 member agencies and companies who are engaged in shipping a range of commodities, including timber, agricultural, and consumer food goods. In particular, the coalition is interested in increasing the weight limit from 80k pounds for a 5-axle tractor-trailer to 97k pounds for a properly equipped 6-axle combination vehicles. Runyan cited the potential for productivity gains and numerous additional benefits to increased weight limits, many of which are shown in the table below.

“Now is the time: international competitiveness, fuel efficiency, environmental performance and infrastructure constraints can be addressed, at least in part, by taking a step already proven to be successful in most of the developed world – increasing the federal weight limit for properly equipped trucks,” Runyan stated.

<u>Concern</u>	<u>Potential Solution</u>
Safety	Additional axle equalizes braking power
Road wear	Additional axle reduces pounds per tire
Funding	Registration fees to offset bridge impact
Reduced Rail Utilization	WI study found increased weight limit would not transfer cargo from rail to roads.
Unions / Job Security	Driver shortage ensures there will be work
Carrier Investment	Rate structures to provide ROI

## State Freight Planning Initiatives

A panel made up of freight managers from Indiana, Minnesota and Kansas shared the actions that their states are taking in freight planning

### Indiana

Keith Bucklew, INDOT, provided a project update on their statewide freight and mobility plan. Keith discussed the initial scope of work, existing and future conditions, current and projected freight flows, policy recommendations, and initial findings. Initial findings are shown in the figure below and highlight both freight-positive and freight-negative implications.

The implications of these preliminary findings are:

- Trucks are competing with passenger vehicles for capacity on Indiana's major highways, particularly in urban areas.
- Future congestion on Interstate routes could lead to increased truck volumes on arterials.
- Railroads are operating near capacity, with significant investment needed to maintain market share in the future.
- The result will be increased congestion and delay which affect both passenger transportation and regional commerce.
- Due to limited rail service between IN and the western US, a significant portion of both inbound and outbound rail commodity tonnages are transferred between carriers and modes in Chicago.
- Indiana is well positioned for growth in the sectors that are dependent on freight goods movement. In order for this growth to occur, Indiana's infrastructure must be able to keep pace.

Initial Findings	
+	Indiana's Freight dependent industries are healthy and growing (representing a larger % of GSP than the national average)
+	Due to its strategic location, proximity to large consumer markets, and excellent transportation network, Indiana is well poised for economic growth
+	Indiana's air and marine freight industries are vibrant with capacity to expand
-	Indiana lacks efficient rail service to/from the West, as well as north-south linkages for bulk commodities
-	Indiana's distribution potential is limited due to rail service limitations
-	Indiana's lack of intermodal facilities limits its ability to benefit from commodities moving "through" the state
-	Lack of east-west roadways in the northern portion of the state results in delays in the movement of freight around the Chicago metropolitan area
-	Indiana's urban areas are beginning to experience congestion, which can be expected to worsen in the future without infrastructure improvements
-	Lack of Ohio River crossings limits access to Southern Indiana, hindering industry/port development



### Minnesota

Dave Christianson, MNDOT, described Minnesota's approach to profiling and forecasting freight flows at the regional level. Minnesota's most recent statewide freight plan was completed in 2005, and a series of regional freight plans is intended to build upon previous planning efforts by providing an in-depth characterization of freight trends and commodities flows. To date, a regional freight study for District 7 in the southwestern area of the state has been completed. Studies for North Minnesota & Wisconsin (District 1, 2, and Northwest Wisconsin), Western

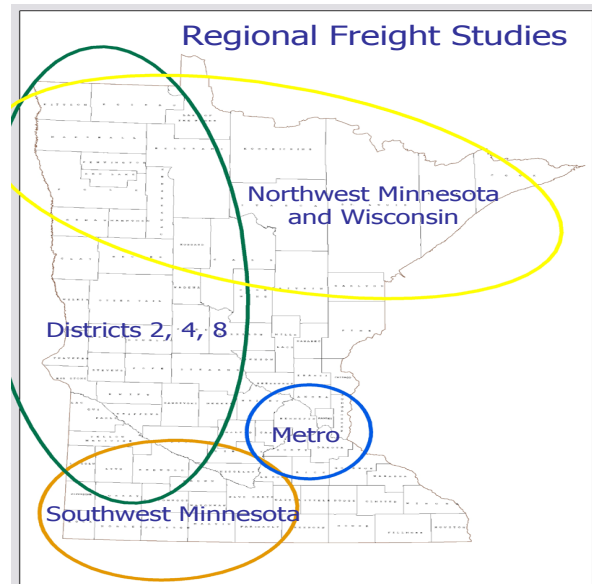
Minnesota (District 2, 4, and 8), and the Twin Cities Metro area are proposed for 2008/9 (illustrated in the following graphic).

There are a number of deliverables expected from the regional planning efforts, among them:

- System inventory & mapping
- Commodity/industry sector profiles
- Industry interviews and research
- Governmental program analyses, and improvements
- Implementation strategies.


Mr. Christianson noted that the necessary output from the studies (to improve regional freight transport) is:

1. To highlight area characteristics & needs.
2. Identify policies on rail support, facilities investment, truck permits and weights.
3. Provide freight guidance for highway planning.
4. Identify project list & investment needs.
5. Provide Integration with local, District, & State planning efforts.



**Kansas**

John Maddox, KDOT, described current statewide freight planning efforts in Kansas that aim to develop a systems-level overview of the extent and performance of the state’s freight transportation system. This will be the first comprehensive freight plan for the state and will result in a set of strategic, infrastructure, institutional, and policy recommendations which can be integrated with the KDOT long-range planning process.



**Key Issues and Challenges**

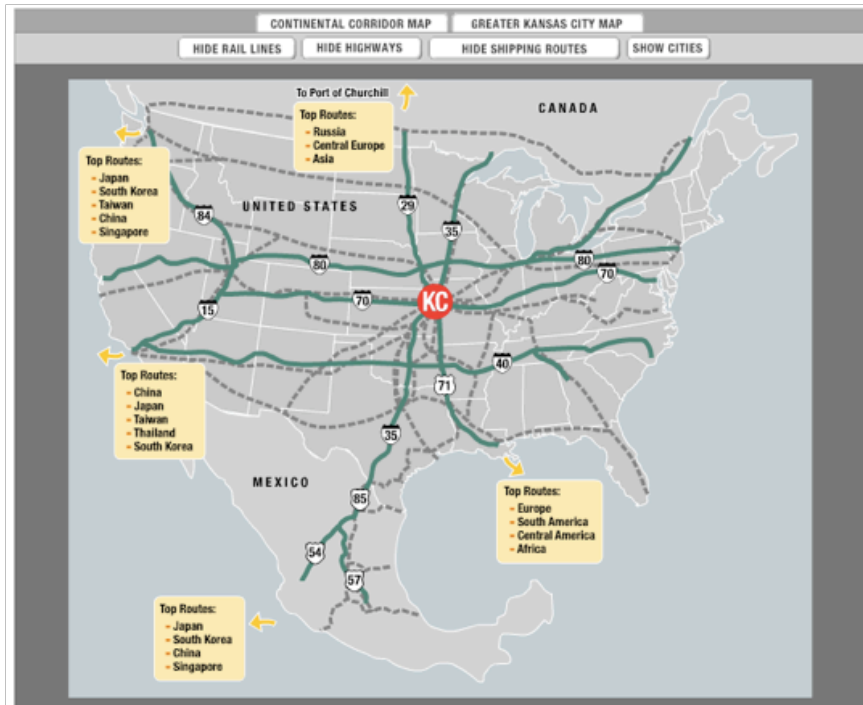
- Class I rail system capacity constraints and choke points
- Short line railroad system switch yard choke points
- Ability of short line railroads to safely and efficiently transport 286,000 pound rail cars
- Continued growth in truck traffic in both urban areas and rural corridors
- Urban highway interchange bottlenecks
- Key highway corridor congestion issues – both urban and rural
- Continued growth in oversize/overweight movements
- Upgrading of oversize/overweight permitting and routing systems

Key freight issues and challenges facing Kansas are shown in the figure at left.

The study has been a precursor to several key trends: increased freight planning and incorporation of freight needs in agency decision-making, the formation of a Railroad Advisory Committee, the formation of a Freight Advisory Committee, and increased attention to oversize-overweight permitting and routing practices.

## Closing Keynote Address

Chris Gutierrez, President of KC Smartport, provided an overview of KC Smartport operations and freight activities. Gutierrez spoke to Smartport's unique approach to providing transportation services in the Kansas City area, which combines inland port services and facilities with economic development activities.



Key freight and logistics components boasted by KC Smartport include:

- The largest rail center in the United States by tonnage; and situated on a rail corridor spanning coast to coast across the U.S. and extending from Canada to Mexico
- 10,000+ acres of Foreign Trade Zone space
- Access to three major interstate highways: (I-35, I-70, I-29)
- Air cargo facilities at the Kansas City International Airport
- Access to the largest navigable inland waterway (MO/MS River system)

Gutierrez noted that despite challenges facing the economy, Smartport and the Kansas City region have continued to field inquiries from businesses interested in expanding or relocating freight capacity. KC Smartport's Transportation Outlook 2009 states, "...2009 will likely be a challenging year for both the national economy and the transportation industry, but it will be a booming year of international business in 2009. All segments of the transportation industry will be affected by fuel prices and as a result there will be a continued shift in transportation mode from truck to rail. The transportation industry will see the international intermodal container shipments among the fastest-growing freight categories, boosting both railroad and trucking volumes." This bodes well for Kansas City and the rest of the MVFC region, much of which is geographically situated at key locations for truck and rail corridors.

## Workshops

The half day before the start of the meeting was dedicated to workshops, designed to highlight specific projects or initiatives. Participants moved between the sessions, focusing on issues of particular importance to them.



### **I-95 Freight Academy**

Marygrace Parker, of the I-95 Corridor Coalition described program development for the Coalition's Freight Academy. The foundation for the program was to provide transportation planners with a solid basis in freight-specific planning knowledge. The academy was attended 30 state DOT, MPO, and Port Authority representatives; with guest instructors that were comprised of executive-level public and private sector representatives. The course was structured as an intense 5-day academy atmosphere; with pre-course assignments, classroom activities, and field visits. The program was well received by participants as well as guest lecturers and provided a valuable conduit between public sector planners and private freight activities and shipping operations.

MVFC representatives attending the workshop expressed significant interest in exploring options for a similar program for planners in the MVFC region who are engaged in freight activities.

### **MVFC Freight Clearinghouse**

Ravi Pavuluri presented a data analysis framework for the MVFC Clearinghouse project to elicit feedback and/or suggestions for moving forward. The project emerged as a result of the combination of proposals centered around the following four concepts: identification of advanced traveler decision points, combining state static closure information, real time traveler information needs of the trucking industry, and identification of alternative routes. The tool was well received by workshop attendees. Key questions raised were in regard to who the end user would be (commercial motor vehicle operators) and the cost and/or availability of the tool, and how the tool could be marketed (truck stops, trucking organizations, and events).

### **Multistate Performance Management**

Ernie Wittwer, of MVFC, facilitated a performance management workshop, which aimed to gather information on the feelings and practices of the states in evaluating the impact of major transportation projects and business expansion projects on the movement of freight across the region. Key findings included:

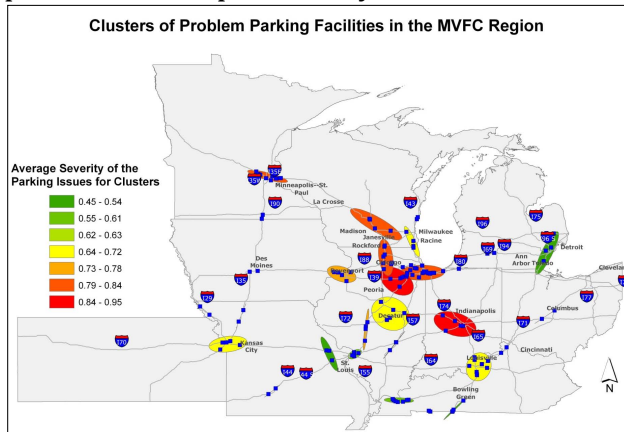
- Most states have some method of evaluating the traffic impacts of major new generators.
- Most do not specifically estimate freight impacts.
- Few make much effort in evaluating the impact of transportation projects on the movement of freight, beyond the normal project planning efforts.
- The group tended to agree that a first step in the process might be defining a regional freight system, so that the need for evaluations could be more focused.
- Several noted the use they were trying to make of nationally collected data on truck movements as a source of performance measurement.
- All agreed that an effort to develop processes for estimating the impact of major changes to the transportation or business infrastructures on freight movement would be useful.

### **MVFC Truck Parking**

Praveen Srivastava, of CFIRE, presented an update on the MVFC Truck Parking Study. The problem statement guiding the research has been focused around the fact that while the major metro areas serving the MVFC region serve as freight hubs connecting the region to the rest of the country via East-West and North-South corridors, there is a mismatch between availability of

truck parking facilities and amenities and services available at existing facilities.

Web-based technologies enabled results of surveys and interviews to be spatially analyzed and documented on an open-source platform. The spatial analysis has resulted in several conclusions:



1) Web-based technologies and open source GIS make it possible to enhance the stakeholders participation in transportation research; 2) Web-based GIS developed in this research offers a platform to

collect freight related geo-spatial data, visualize the problem truck parking locations, enhance public and private stakeholders communication; 3) The most common parking problem is related to capacity; 4) Major causes for truck parking are for staging purposes and breaks to conform to the hours of service regulation; and 5) Solutions should be considered in the context of freight logistics and operations

### MVFC Freight Bottlenecks

Andrew Obernesser, CFIRE, provided a project update for the ongoing Freight Bottlenecks study. Goals of the study are to identify freight bottlenecks on regionally significant routes along highway, rail, and port networks; develop inventory of planned alleviation projects, and recommendations for additional solutions for the 10-state MVFC region.

The project included a literature review of relevant studies, stakeholder input from public and private agencies, and an online surveying tool. The objective of the project is to integrate analyzed locations, alleviation projects, and create a user-generated input-based freight bottleneck mapping tool. Work of the MVFC Freight Clearinghouse project has been incorporated where possible. A prototype of the tool can be found at: <http://freight.engr.wisc.edu/travel5.html>

### Next Year

In 2010 the Coalition will have its annual meeting in Cincinnati, hosted by the states of Ohio, Kentucky and Indiana. It will be in April. Read future Freight Notes for exact dates and locations.

The Mississippi Valley Freight Coalition and the Center for Freight and Infrastructure Research and Education

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