

## From the Director

By any measure (tonnage, value, volume) and in all modes (trucking, rail, air, water) freight transportation experienced tremendous growth and radical change over the past two decades. Conservative projections demonstrate that freight will grow by 50-75% over the next 20 years. Our infrastructure and systems are not currently able to absorb that growth. The future beyond 20 years promises more of the same. As a consequence, state DOTs singly and in regional and corridor combinations are devoting increasing effort to understanding and dealing with freight transportation issues.



Teresa M. Adams, Director

Among the many research areas outlined in our theme description, CFIRE will never lose sight of the fundamental policy, economic, and social setting within which its research will be applied. CFIRE will explore the nexus of improvements in infrastructure efficiency and the supply chain. Despite previous research and the wealth of information on the importance of transportation investments to our economic health and well-being, significant debate

continues on the link between specific infrastructure improvements or rehabilitation and economic performance. Furthermore, it is essential to understand the relative strength of these links to better influence decision making at all levels.

Throughout and at the end of the federal grant, CFIRE will be an essential resource for the freight community. It will be an information clearinghouse and resource for the community

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Full report from the Mississippi Valley Freight Coalition February Workshop begins on page 3.

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The National Center for Freight and Infrastructure Research and Education (CFIRE) at the University of Wisconsin will be a nationally recognized provider of freight-focused research, training, and educational programs through a collaborative effort of academia, departments of transportation, and private sector interests in the freight community. In this collaborative environment, CFIRE will pursue transformational research opportunities to make significant impacts in the freight community. CFIRE will train a new group of freight managers, understanding both the public sector capacities and private industry demands on our system.

At its core, a university transportation center is responsible for providing the training and continuing education for the next generation of transportation professionals. Through our research and service activities at CFIRE, this next generation of professionals will be well-versed and well-acclimated to the profound impact of freight movements on our nation's continued economic performance, and well trained to address the challenges that our transportation network faces. CFIRE will facilitate partnerships with industry and government to accomplish the tasks necessary to keep America strong.

## What is CFIRE?

In August 2005, the SAFETEA-LU\* authorization designated UW-Madison as a National University Transportation Center. The faculty and staff of the Wisconsin Transportation Center adopted the moniker of the National Center for Freight and Infrastructure Research and Education (CFIRE). Since that time, many have asked, "What is CFIRE?"

To begin, CFIRE is a National University Transportation Center, led by the University of Wisconsin-Madison through a five-year, \$16 million U.S. Department of Transportation grant. It is one of ten National UTCs identified in SAFETEA-LU. The consortium includes the University of

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of transportation professionals from across several states, regions, and at the national level. CFIRE researchers and faculty will develop key leaders in the transportation community who understand the connection and economic importance of our freight network. CFIRE will provide forums for key multi-state partnerships and advanced research.

CFIRE will identify and seed opportunities that explore and develop innovative materials, processes, and strategies needed to enhance and develop our national transportation infrastructure network. To do so, the faculty and staff associated with this program will participate in national-level activities designed to incorporate the vast array of freight interests. Since transportation research has failed to keep pace with the changing character and significance of the freight transportation industry in all modes, activities in the area of freight transportation must span the gap between public and private sector interests and perspectives and be relevant to both. The Center will target multidisciplinary research, educational, and technology transfer opportunities to prepare leaders for current and emerging transportation challenges.

CFIRE will provide assistance based upon key partnerships. Primary among these is the development of the Mississippi Valley Freight Consortium (MVFC), a ten-state partnership of the Mississippi Valley Conference of the Association of American State Highway and Transportation Organizations (AASHTO). CFIRE will provide management services and overall administration of the MVFC. In this partnership, CFIRE can assist in the evaluation and implementation of freight provisions provided in the SAFETEA-LU authorization and in engaging effectively with the private sector.

**CFIRE**



CFIRE will also partner closely with the Federal Highway Administration

(What is CFIRE, continued from page 1)

Wisconsin-Milwaukee, University of Illinois at Chicago, The University of Toledo, and the University of Wisconsin-Superior. These institutions have specific freight expertise that compliments the researchers at UW-Madison.

With a theme of "Sustainable Freight Transportation Infrastructure and Systems," these member universities will primarily provide education, research, outreach and training in freight studies. Consumers of this information will include state de-

Office of Freight Management and Operations. This partnership will provide a direct opportunity for CFIRE research to follow FHWA needs. This partnership will also allow improved support for building human and intellectual capital in the industry. CFIRE faculty and staff hold appointments on key freight-focused TRB committees and will be able to make lasting national contributions. These partnerships are critical to the success of the UTC program and enable the center to conduct timely, effective research. The partnerships also allow this national center to impact national interests.

CFIRE will cooperate with other research centers to eliminate duplicative and repetitive research, training, and education efforts and create synergistic opportunities across the region to better leverage limited federal, state, and industry research investments.

The National University Transportation Center at the University of Wisconsin is pleased to support and advance the national research, development, and technology priorities of the USDOT, as identified by the Department of Transportation Strategic Plan and the U.S. Department of Transportation Research, Development, and Technology Plan. It is a critical juncture for our transportation community and CFIRE is ready to fill this important national need.

partments of transportation, other universities and researchers, and private firms interested in the cutting edge research that CFIRE will provide.

Four research areas have been identified:

- Design, materials, construction processes for highway, harbor and rail infrastructure
- Multimodal systems planning and optimization
- Traffic operations and safety
- Energy and the environment

Recent activities include a collaboration of the 10 states of the Mississippi Valley Region to create a regional freight pooled fund, the Mississippi Valley Freight Coalition. They held their first conference in Dearborn, Michigan, in February 2007.

CFIRE will lead innovation and research in freight transportation infrastructure in the coming years. For more information on CFIRE, contact Teresa Adams at [adams@engr.wisc.edu](mailto:adams@engr.wisc.edu).

\*Safe, Accountable, Flexible, Efficient  
Transportation Equity Act.

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## Mississippi Valley Freight Coalition February Workshop

On February 26, forty-six people braved the end of a Midwestern winter storm to attend the Mississippi Valley Freight Coalition (MVFC) workshop in Dearborn, Michigan. For many the trip was challenged by closed airports and delayed flights. Despite those

barriers, twenty-six state department of transportation representatives from nine states, eight private sector representatives, three local government officials and nine university members were present.

While the primary focus of the meeting was to develop testimony for the National Surface Transportation Policy and Revenue Study Commission, the first order of business was hearing from the host state.

### Report from the Host State

John Friend, Program Delivery Director for the Michigan Department of Transportation (MDOT), gave an overview of the issues. He began with an overview of the department's five-year highway plan, which will generate \$6.5 billion in gross state product and \$4.4 billion in personal income over its life. This generated a discussion of similar studies done in other states. Generally, those economic studies estimate an economic return in the range of three to four dollars for each dollar invested in transportation.

Next John gave a brief overview of the state's 2030 transportation plan, which has included significant public involvement. Based on that involvement, the public wants a future transportation system that is innovative, holistic, sustainable, environmentally sound, and energy efficient. One element of the plan is the Corridors of Significance. This element identifies corridors of such importance to Michigan that they will be managed and operated at a high level to ensure the economic success of the state.

Economic importance influences talk about Michigan's international border crossings. About 25% of the state's employment is directly or indirectly dependent on trade with Canada. Some 174,000 jobs are directly tied to the trade.

Approximately \$200 billion in trade moved through Michigan border crossings in 2005. The great bulk of that was carried by truck. Because of its importance, MDOT is working hard to keep the flow of freight moving across

its borders with Canada. The most immediate challenge on capacity is Detroit-Windsor international crossing. The Ambassador Bridge is privately owned and has sufficient capacity, but that is not expected to suffice much longer. Physical capacity is also made worse by the problems in maintaining border security. The two countries, the state and the province have made progress in streamlining border clearances, but challenges remain. To ensure that capacity is available when it is needed, both countries and the state and the province are working on locating, designing and building a new bridge. Given the number of players involved, that is a challenge. Community concerns on both sides of the border, environmental concerns related to the river, and the need to connect to the network in both countries combine to make the choice difficult.

Another unique project underway in Michigan is the Detroit Intermodal Freight Terminal (DITF). This partnership of Class I railroads, automakers and the state will provide a new intermodal facility in Detroit that will be shared by all Class Is. Current schedules could allow construction to begin as early as 2008.

Finally, John spoke about the state's partnership with private industry known as Michigan VII. This project is testing smart auto and smart roadway technologies. Basically, this technology uses the highway to transmit information to the automobile to either be displayed inside the auto for the driver's actions or to directly inform the vehicle itself. One of the test projects is a smart work zone.

Corridor of the Future

### Corridor of the Future

Steve Smith, Planning Director of the Indiana DOT, next gave an overview of the I-70 Corridors of the Future proposal. The corridor runs across Ohio, Indiana, Illinois and Missouri. The concept under study for the entire corridor is adding truck lanes. Intended for the long-haul trucker, the lanes will probably provide access at only one interchange per county over their length. To be feasible, they would probably allow some version of long combination vehicles.



I-70 Dedicated Truck Lane Corridor

### Mississippi Valley View

Teresa Adams, of the National Center for Freight and Infrastructure Research and Education (CFIRE) at the University of Wisconsin, spoke next, and talked about the conditions facing the region in the movement of freight and the expected regional growth in freight tonnage.

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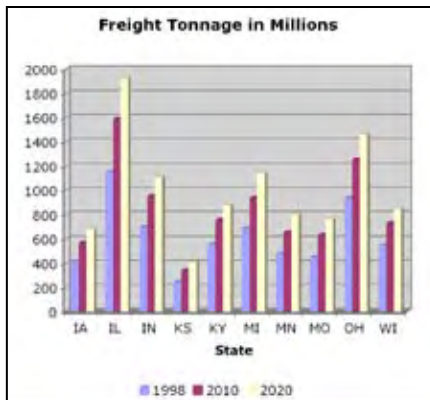
Corridors of Significance

(MVFC Conference, cont. from page 3)

This growth in freight, when combined with continued growth in passenger miles, will cause severe congestion on the highway and rail systems. That congestion could impair the economy of the region, since transportation ties directly to productivity and economic competitiveness.

Teresa also pointed out that our international competitors are making investments in transportation, in many cases closing the gap that has traditionally existed between America's transportation systems and those of other countries. The major economic powers of South America have made major investments, as have China, India and the European Union.

Teresa concluded by saying that the time had come for the states of the region to work together to begin making improvements in our transportation infrastructure.



### Report on Customer & Coalition Surveys

Ernie Wittwer, Wittwer Consulting, reported on the survey of private sector businesses completed last fall and on the pre-workshop survey related to the role of the federal government that was completed in January 2007.

Truckers, railroaders, port operators, barge operators and shippers from all 10 Coalition states gave their views of what needed to be done to improve the freight transportation systems in the region. A common response was:



Director Adams addresses the crowd

Thanks for asking! The major concerns raised during the interviews dealt with the deteriorating condition of the highway, rail and water infrastructure, growing congestion and resulting safety concerns, workforce, productivity and transportation finance. The full report on the survey can be found at [www.mississippivalleyfreight.org](http://www.mississippivalleyfreight.org).

In January 2007, an electronic survey was distributed to more than 250 members and friends of the Coalition. The survey was intended to provide input for the workshop on the role of the federal government in freight transport. Eighty-one responses were received. Overwhelmingly, respondents favored a stronger federal role in freight transportation and at the same time favored a maximum degree of flexibility for the states. The response indicated that a federal focus (such as might be found through the designation of a federal freight system), a multimodal approach and regional cooperation were also important.

Somewhat less consensus 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.

### What Does the Region Want From the Federal Government

The participants broke into small groups to answer that question and reported their findings. While they had a wide range of views, a great many common elements also existed. Rational, flexible funding, improved data, and better support for research were noted. Improved interoperability for technology made more than one list, as did steps toward intermodalism, or modal connectivity.

These commonalities yielded a collective set of priorities for the federal government in freight policy that included: Defining a sustainable national transportation and freight policy; intermodalism; interoperable technology standards and 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.

### How Should the Federal Government Carry Out its Role?

The participants divided into two groups to take the ideas listed above deeper. A complete list of the items identified is posted at [www.mississippivalleyfreight.org](http://www.mississippivalleyfreight.org). 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 detailing each issue. With respect to funding, the group struggled with issues of state flexibility and strategic federal funding strategies. They resolved this by proposing federal programs providing maximum flexibility, but using increased federal participation rates to encourage state actions promoting strategic directions.

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## Mississippi Valley Freight Coalition and CFIRE Urge Commission To Adopt a National Freight Program

CFIRE Director Teresa Adams presented testimony to the National Surface Transportation Policy and Revenue Study Commission at its Minneapolis field hearing on April 18th. MVFC Executive Committee Member Kirk Steudle, Director of the Michigan DOT, presented at the Chicago field hearings the same day. Their comments echoed those of others about the need to address a national freight perspective.



Kirk Steudle

### ARTBA Proposal

The MVFC recommendations complement the American Road and Transportation Builders Association's (ARTBA) legislative proposal. ARTBA First Vice Chairman Charlie Potts, CEO of Heritage Construction and Materials described the the proposal, which would result in a bifurcated federal-aid highway program structure focusing future investment on two priorities:

- A new "Critical Commerce Corridors" (3C) program, financed with new freight-related, dedicated revenue streams that would provide the highway improvements and capacity enhancements necessary to ensure U.S.competitiveness in the global marketplace; and
- A strengthened "core" highway and transit programs with increased revenues from the existing highway user fees to upgrade the current surface transportation infrastructure network to better address the nation's regional mobility challenges.



Copies of the Adams and Steudle testimony are available on the Commission website at [www.transportationfortomorrow.org/information](http://www.transportationfortomorrow.org/information).

## Bush Administration Requests \$67 Billion for U.S. DOT in 2008

The Bush Administration is requesting \$67 billion for 2008 to finance key transportation construction, congestion relief and safety programs, and to provide the framework for reforming the aviation system, U.S. Secretary of Transportation Mary E. Peters announced in February.

"Our goal is to deliver a transportation system that frees all of us to make daily decisions confident we can reach our destinations safely, without worrying about how we will get there, or if we can make it on time," Secretary Peters said.

The Administration is seeking a record \$42 billion for highway construction and safety programs, the Secretary said. The FY 2008 budget request proposes overall transportation safety funding of \$20.3 billion. This request will fund the aviation and surface transportation safety programs and initiatives. Included in the amount are programs and activities to target areas like motorcycle crashes and drunk driving.

The 2008 budget also requests \$175 million to cut traffic congestion by developing commuter traffic information systems, accelerating construction along trade and travel corridors and helping metropolitan areas test new solutions. The budget request includes \$1.3 billion for commuter rail and transit projects for urban areas and \$100 million for transit projects in smaller towns and rural areas, the Secretary added.

In announcing the budget request, Secretary Peters invited Congress to work with the Department on solutions to financing and managing the nation's transportation network, noting that the government is spending from the Highway Trust Fund at a rate that is faster than the growth in revenue in part because of the explosive growth in earmarks.

"Freedom is at the core of our American values, but we lose a little more freedom each time we venture into traffic," the Secretary said. "This budget proposal takes a big step in helping us get our freedom back."

The Secretary's speech can be found at [www.dot.gov/affairs/peters020507.htm](http://www.dot.gov/affairs/peters020507.htm).

—USDOT Office of Public Affairs

**CFIRE**



SPRING 2007

## U.S. DOT ITS for Traveler Information Leaflet Available

Congestion is bad and getting worse, but we don't have to put up with it. That's the message of the National Strategy to Reduce Congestion on America's Transportation Network, released in May 2006 by the U.S. Department of Transportation (U.S. DOT). One element of the U.S. DOT's Congestion Initiative is to promote the use of new technologies, such as Intelligent Transportation Systems (ITS).

An estimated 55% of all highway congestion is "non-recurring," i.e., it's caused by specific events such as incidents, work zones and severe weather. When travelers receive up-to-the-minute information about these events, they are empowered to avoid the traffic hot spots and congestion is reduced. So timely, accurate traveler information is particularly important in the effort to curb congestion and smooth traffic flow.

A leaflet published online in January 2007 discusses how ITS technologies can be used as part of a comprehensive real-time traveler information program. Developed jointly by the Federal Highway Administration (FHWA) and the ITS Joint Program Office, the leaflet summarizes the benefits, costs, extent of deployment, and lessons learned about all aspects of real-time traveler information, including the national traveler information telephone number 511. View the leaflet online or download the PDF version at [www.its.dot.gov/jpodocs/repts\\_te/14319.htm](http://www.its.dot.gov/jpodocs/repts_te/14319.htm).

Information in the leaflet is taken from the ITS Decisionmakers' Resources: the ITS Benefits Database ([www.itsbenefits.its.dot.gov](http://www.itsbenefits.its.dot.gov)), the ITS Costs Database ([www.itscosts.its.dot.gov](http://www.itscosts.its.dot.gov)), the ITS Deployment Statistics Database ([www.itsdeployment.its.dot.gov](http://www.itsdeployment.its.dot.gov)), and the ITS Lessons Learned Knowledge Resource ([www.itsslessons.its.dot.gov](http://www.itsslessons.its.dot.gov)), as well as other sources. The online version contains a full list of supporting documentation.

### Resource Leaflets and Information for ITS

#### *ITS for Traveler Information*

[www.its.dot.gov/jpodocs/repts\\_te/14319.htm](http://www.its.dot.gov/jpodocs/repts_te/14319.htm)

#### *ITS for Traffic Incident Management*

[www.its.dot.gov/jpodocs/repts\\_te/14288.htm](http://www.its.dot.gov/jpodocs/repts_te/14288.htm)

#### *ITS for Work Zones*

[www.its.dot.gov/jpodocs/repts\\_te/14320.htm](http://www.its.dot.gov/jpodocs/repts_te/14320.htm)

#### *ITS for Traffic Signal Control*

[www.its.dot.gov/jpodocs/repts\\_te/14321.htm](http://www.its.dot.gov/jpodocs/repts_te/14321.htm)

For more information about FHWA's Real-Time Traveler Information Program, contact Robert Rupert of the FHWA Office of Transportation Management, (202) 366-2194, [robert.rupert@dot.gov](mailto:robert.rupert@dot.gov).

For more information about the ITS Decisionmakers' Resources, contact Joe Peters of the ITS Joint Program Office, (202) 366-2202, [joe.peters@dot.gov](mailto:joe.peters@dot.gov).



## CFIRE to Co-Sponsor UTC Freight Research Conference

CFIRE is proud to announce that it is co-sponsoring the 2nd University Transportation Center focused conference organized by TRB and sponsored by the Research and Innovative Technologies Administration.

The conference will focus on Research Issues in Freight Transportation: Congestion and System Performance, and will be held in Washington, D.C., October 22-23, 2007. See [trb.org/conferences/FreightResearch](http://trb.org/conferences/FreightResearch) for more information.

CFIRE Director Dr. Teresa Adams is on the planning committee. A preliminary call for papers will be released in the coming weeks. Other committee members are: Michael D. Meyer, Georgia Institute of Technology, Chair; Christina Casgar, U.S. Department of Transportation; Harold Cervany, The Tioga Group; Genevieve Giuliano, University of Southern California; Kathleen Hancock, Virginia Polytechnic Institute and State University; Susie Lahsene, Port of Portland; Heather Nachtmann, University of Arkansas; Cecil Selness, Minnesota Department of Transportation; Ronald Duych, Thomas Marchessault, Robin Kline, Thomas Bolle, Research and Innovative Technology Administration; Elaine King, Thomas Palmerlee, and David Floyd, TRB.

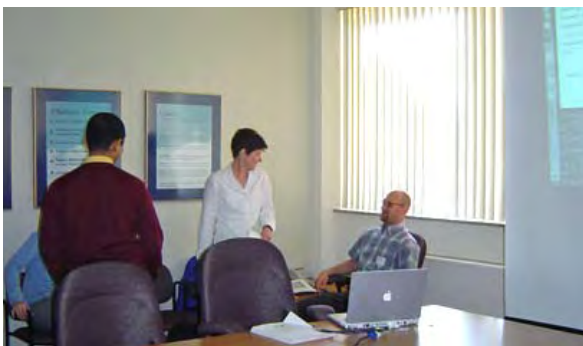


## UW-Madison Students Applying Freight Research

This spring semester, graduate students from the University of Wisconsin-Madison's Transportation Management and Policy (TMP) Program will be creating a freight planning guide for metropolitan planning organizations (MPOs) in the Midwest region. This project is the core of this spring's TMP Colloquium, which takes graduate students interested in transportation studies and immerses them in a real-world transportation problem. This team of students will provide important information to MPOs on the best practices of freight planning as part of a guide to the freight planning process.

The motivation for this assignment is the recognition that freight, while vital to the economy and access to goods, can have an adverse effect on the natural and built environments, the social community, and movement of people. Consequently, effective freight planning is key to ensuring that the adverse effects are minimized and needs are met.

The multidisciplinary team of students, under the guidance of Professor Jessica Guo and FHWA-Wisconsin Transportation Planner Stephanie Hickman, aims to clarify the role of freight in transportation planning processes. Their manual will ensure that MPOs have a valuable resource to better understand their role in freight planning. The document will also provide MPOs with the knowledge of how their practices compare to other MPOs, which practices are the most common, and which practices are most effective.



Examples of work by students in previous years include an analysis of Wisconsin's ferry system under direction of Dr. Teresa Adams and a study on the effects of senior drivers on Wisconsin's transportation system under former Adjunct Faculty Member Ernie Wittwer.

As part of CFIRE's core mission of research and education, this course at UW-Madison is an example of researchers and students producing knowledge for the benefit of the greater transportation community.

## Maritime Research Proposals Due June 4

The Great Lakes Maritime Research Institute (GLMRI) has funding available for another year of research project awards. Proposals are due June 4, 2007.

Below is a partial list of suggested research focus areas. View the full list, plus the complete RFP and submission instructions at [www.glmri.org](http://www.glmri.org). GLMRI is also open to other topical subjects that would impact Great Lakes shipping and commerce. The RFP includes a list of currently funded projects supported by GLMRI.

- Evaluate short sea shipping market opportunities on the Great Lakes
- Evaluate export and import markets for foreign trade between ports on the Great Lakes and foreign ports such as those located in Europe and Africa
- Analyze the methods and effects of taxes and fees imposed on Great Lakes shipping
- Analyze the origin-to-destination flow of freight in the Great Lakes
- Analyze the economic viability of establishing transshipment facilities and intermodal for ocean-going and intra-lake cargoes on the Great Lakes, which may include the evaluation of 12-month operations of the locks and shipping lanes
- Develop new products and technologies to enhance port security and port operations
- Identify ways to improve the integration of the Great Lakes Marine Transportation System (MTS) into the national transportation system
- Examine the potential of expanded seasonal operations on the Great Lakes MTS
- Identify ways to include intelligent transportation applications into the Great Lakes MTS
- Analyze the effects and impacts of aging infrastructure and port corrosion on the Great Lakes MTS
- Establish and maintain a model Great Lakes MTS database
- Identify market opportunities for, and impediments to, the use of United States-flag vessels in trade with Canada on the Great Lakes

A consortium of the University of Wisconsin-Superior and the University of Minnesota Duluth, the institute is dedicated to developing and improving economically and environmentally sustainable maritime commerce on the Great Lakes through applied research. For more information contact GLMRI Assistant Director Carol Wolosz, [info@glmri.org](mailto:info@glmri.org), (218) 726-7446.

(MVFC Conference, cont. from page 4)

The group agreed that a national transportation policy should incorporate a number of factors in the decision making process: the economy, environmental concerns, safety and equity. It will encourage the use of technology to maximize the efficiency of the existing infrastructure. It should also use the best information available to support rational decisions and management and should create more choices for energy sources, aligning a transportation policy to energy policy. Finally, it should be intermodal in its view and application.



Small groups determined priority items

In terms of promoting education and awareness, the group noted that we have modal awareness, largely because of the efforts of modal advocates, but we have no champion for freight. It was suggested that the U.S. DOT 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-TEA, 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.

Technology is improving to help data issues, if institutional questions associated with technology are addressed. Cellular technology, in truck communications, package and load tracking systems, roadway management systems and others has the potential for providing useful and needed information, but a national approach, funding and common standards are essential. A policy promoting partnerships between the federal government and the states and between the public and private sectors is in order.

The discussion of technology focused largely on two issues: making greater use of inland ports and intelligent transportation systems (ITS). 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. Inland ports also must have improved information interoperability to improve the flow of data between agencies and transportation providers. Finally, these ports must have improved cargo-tracking capabilities, both for customs purposes and to facilitate intermodal transfers.

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

The group suggested three basic approaches to the concerns of energy and emissions: federal leadership in research to refine and make available alternative energy sources, an incremental approach recognizing that smaller steps can have immediate impacts, and 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. The first deals with a range of technologies, such as next-generation commercial vehicle information systems and networks (CVISN), virtual weight stations and similar technologies to make truck enforcement more efficient and less intrusive.

Related technologies are parking information systems and traveler information systems that provide drivers better information on available truck parking 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.

With these points as a group consensus, CFIRE staff will draft testimony for the National Surface Transportation Policy and Funding Committee. That testimony will be



Attendees of the February 2007 workshop hear from Consultant Wittwer





(MVFC Conference, cont. from page 8)

delivered at the committee's April hearings by Teresa Adams, Director of the National Center for Freight and Infrastructure Research and Education; Kirk Steudle, Director of MDOT; and a representative from Daimler Chrysler, MVFC Customer Committee Member Jon Schwarz.

### Committee Meetings

The workshop ended with meetings of the Technical Committee. The policy group worked on how it would prioritize future actions, while the operations group prioritized potential operations projects.

The policy group, meeting on the morning of February 28, then agreed on a future agenda for the Coalition. After much discussion, it was agreed that the staff would reframe the following projects for consideration by the committee:

#### 1. *Workshop to Endorse/Respond to/Consider Funding Commission and Other Activities*

This project can be considered phase two of this workshop. The intention is to review the findings of the funding commission "when released" and similar efforts of the National Academy of Public Administration and others from the perspective of our region. It will help the MVFC consider positions leading into the next authorization. This effort will likely not be undertaken until at least the spring of 2008.

#### 2. *Mississippi Valley Traveler Information Clearinghouse*

This is a combination of four projects identified through conference calls of the MV Traffic Operations Coalition. Those four projects include: Identification of Advanced Traveler Information Decision Points, Combine State Static Closure Information, Real Time Traveler Information Needs of the Trucking Industry, and Identification of Alternative Routes. This project will need to be re-scoped to determine how these projects will best fit together and be implemented within the region.

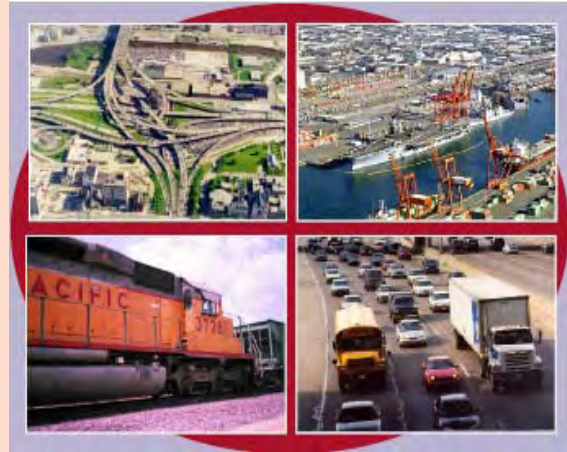
#### 3. *Define Regional Freight Bottlenecks*

The project as originally scoped was to include only truck bottlenecks. However, considering the multi-modal nature of our Coalition and the discussion at the workshop, it seemed appropriate to replace the word "truck" with "freight." This project will need to be re-scoped.

#### 4. *Expanded Truck Parking Facilities*

This project will engage the freight industry in an effort to identify potential areas for truck parking that supplement the limited capacity of the existing rest areas.

See accompanying sidebar for reports from individual states.



## MVFC Workshop: Report From the States

Each of the states at February's Mississippi Valley Freight Coalition (MVFC) workshop in Michigan reported on current issues facing them that might be of interest to the group.

Keith Bucklew of **Indiana** spoke first, giving an overview of major happenings in that state:

- Major Moves, INDOT's fully funded ten-year construction program, will create over 200 new improvement projects.
- I-69, from Evansville to Indianapolis, a project that has been under study for decades, will be moving to construction.
- The Illiana, a 65-mile potential new route that could connect I-94 to I-57, is under study by Indiana and Illinois. It is another finalist candidate for the Corridors of the Future.
- The Indiana Commerce Corridor, essentially a partial Indianapolis outer loop, is moving ahead.
- The Central Indiana Corporate Partners is a group of businesses that have organized to promote logistics as a discipline.
- The state is also just underway with a multi-modal freight plan. Cambridge Systematics is the consultant contracted to do the work.

Dennis Slimmer then spoke for **Kansas** DOT:

- Their current 10-year Comprehensive Transportation Program expires in 2009, so they are updating it. Funding constraints will force a heavy emphasis on preservation projects.
- Unprogrammed projects, like roadway work associated with the planned BNSF intermodal transfer center in Kansas City,

Continued on page 10



(MVFC State reports, continued from page 9)

force the state to reevaluate its program often. They like the project, but it does cause some havoc with an orderly program.

- Longer Combination Vehicles (LCVs) are already allowed on the Kansas Turnpike, a section of interstate that was built before the interstate and was grandfathered, from Kansas City to Wichita.
- Ethanol plants in southwest Kansas are changing grain usage and distribution patterns.

Kent Van Landuyt outlined issues from **Missouri:**

- They are currently working on a bond program that will upgrade about 2,000 miles of pavement on Interstate and arterial routes, make numerous safety improvements, upgrade 800 bridges, and improve 3,000 miles of roads.
- They are looking at a public/private partnership (3P) to replace a major bridge in downtown Kansas City.
- Performance measures have been institutionalized in the Tracker report, which measures all aspects of the agency's performance and is available online.
- Missouri has used what it calls "practical" design to keep the cost of its highway projects down.
- Missouri and Illinois are discussing a new crossing of the Mississippi River at St. Louis. They are in disagreement as to whether the bridge should be funded with traditional state bonding or with a 3P arrangement.

Tim Milam spoke for **Illinois:**

- The state is involved in major corridor or project studies and initiatives in CREATE, to solve some of the rail issues in Chicago; I-55; I-90; and the Illiana, a proposed new route south of Chicago.
- The proposed South Suburban Airport continues to take much attention.
- They are pursuing ISO certification, as an organizational improvement effort.
- Ethanol plants in the state are having a major impact on the transportation system.
- They are seeking to engage their metropolitan planning organizations in an effort to improve freight planning.

Suzanne Benton and Jason Latham spoke for **Michigan:**

- Suzanne reemphasized the importance of the international crossings and the Detroit intermodal facility for the state.

- They have several rail shortline initiatives underway.
- Jason spoke to issues in the southwest region of the state. They are making greater use of context sensitive design. Through their Commerce and Trade Partnership, they are improving overall enforcement and truck weight enforcement. They also have a concept underway known as RCTO, which is a regional approach to traffic operations.

John Tompkins spoke for **Minnesota:**

- The state adopted a statewide freight plan in 2005. They are now involved in regional studies concerned with ethanol plants and ports.
- A statewide truck parking study is underway attempting to inventory available truck parking, estimate demand for parking and outlining several "what-if" scenarios.
- They are working with North Dakota on a Twin Hub Study, which is an effort to keep rail service viable in the western part of Minnesota and North Dakota.
- John also plugged the summer Mississippi Valley Conference, which will be held next July in Minneapolis. A conference theme will be Public Policy and Freight.

Don Fisher spoke for **Ohio:**

- They have a new governor and a new director.
- Their major construction program, which resulted from a revenue enhancement approved several years ago, continues.
- They are exploring a "Port-to-Port" route, which would link Toledo to Fort Wayne.
- The I-70/71 split in Columbus is being reconstructed at a cost of between \$500 million and \$1 billion.
- They are working with the CSX on a potential south rail bypass of Columbus.

Maria Hart spoke for **Wisconsin:**

- They hope to complete a long-range plan by mid-summer.
- Corridor management plans are being developed for 37 different highway corridors.
- The state is working with ten cities on emergency evacuation plans.
- In the world of operations, they are involved in the Gary-Chicago-Milwaukee Corridor, which now has a heavy freight emphasis; and the Northwest Passage, which runs from Wisconsin to Seattle and focuses on weather information and a corridor-wide plan.

## Intermodal Freight Technology Work Group Update

### About IFTWG

The Intermodal Freight Technology Work Group is a public-private partnership focused on the identification and evaluation of technology-based options for improving the efficiency, safety, and security of intermodal freight movement. Working from this common goal, the IFTWG engages in efforts to marry industry and government priorities in a way that leverages collective experience and shared investment.

### Oakbrook Meeting

Center Director Dr. Teresa Adams and Researcher Bruce Xiubin Wang participated in the meeting on May 2-3, 2007, in Oakbrook, Illinois, and helped identify future IFTWG projects. The meeting's theme was "Industry and Government Partnering to Promote Freight Efficiency through Technology."

First, the group heard two panel presentations on freight technologies and their applications to the intermodal industry. These sessions were followed by a case study on: "The Challenges of Adopting New Technologies," and a forum to discuss emerging issues and future group projects. Activities on the second day of the meeting included updates on the current IFTWG projects including Electronic Freight Management (EFM), the Freight Information Highway (FIH), and the Cross-Town Improvement Project (C-TIP). There were also a variety of networking opportunities with colleagues during a lunch on May 2 and with IANA Seminar attendees at an evening reception.

Meeting information, minutes and presentations are available at [www.intermodal.org/iftwg\\_files/index.shtml](http://www.intermodal.org/iftwg_files/index.shtml).



## TRANSPORTATION PROGRAM COURSE OFFERINGS

### DEPARTMENT OF *Engineering Professional Development*

Course Title	#	Date(s)	Location
Access and Site Design of Parking Lots	J020	September 13-14, 2007	Madison, Wisconsin
Effective Roadway Lighting	J140 AYS*	April 28-30, 2008	Madison, Wisconsin
Evaluation and Rehabilitation of Pavements	J377	November 7-8, 2007	Madison, Wisconsin
<b>Fundamentals of Railway Train Control and Signaling Systems</b>	J159	September 19-20, 2007	Philadelphia, Pennsylvania
Highway Bridge Design	J133	May 22-25, 2007	Madison, Wisconsin
Improving Intersection Safety and Efficiency	H842	June 25-26, 2007	Madison, Wisconsin
Managing Snow and Ice Control Operations	J375	September 13-14, 2007	Madison, Wisconsin
Preparing an Effective Municipal Capital Improvements Plan	J277	May 30-31, 2007	Madison, Wisconsin
<b>Railroad Engineering</b>	J160	October 8-10, 2007	Madison, Wisconsin
<b>Railway Bridge Engineering</b>	J157	June 26-27, 2007	Philadelphia, Pennsylvania
<b>Railway Track Systems: Engineering and Design</b>	H782	May 3-4, 2007	Rolling Meadows, Illinois
Railway Track Systems: Engineering and Design	J205	May 7-8, 2007	Las Vegas, Nevada
Railway Track Systems: Engineering and Design	J158	September 17-18, 2007	Philadelphia, Pennsylvania
Soil Engineering for Roads and Pavements	J156	May 8-9, 2007	Las Vegas, Nevada
<b>Traffic Impacts of Land Development</b>	J019	September 11-12, 2007	Madison, Wisconsin
Traffic Signal Design and Operation	H844	June 27-29, 2007	Madison, Wisconsin

These transportation short-courses are being offered by the University of Wisconsin-Madison. Please refer to the EPD course web pages for more information: [epdweb.engr.wisc.edu](http://epdweb.engr.wisc.edu). Click on Courses then Civil and Environmental Engineering Courses.

\*AYS – At Your Site. This course is available to be delivered at your organization, with the same faculty, course materials and content. Many regular scheduled or past courses may also be conducted onsite if minimum requirements are met. See [epdweb.engr.wisc.edu/onsite\\_courses.lasso](http://epdweb.engr.wisc.edu/onsite_courses.lasso) for more information.



# The National Center for Freight & Infrastructure Research & Education

## U P C O M I N G E V E N T S

### May

- **Intermodal Freight Technology Working Group**  
May 2-3 Oak Brook, Illinois  
[www.intermodal.org/iftwg\\_files/IFTWG-Spring07.shtml](http://www.intermodal.org/iftwg_files/IFTWG-Spring07.shtml)
- **Intermodal Operations & Maintenance Seminar**  
May 3-4 Oak Brook, Illinois  
[www.intermodal.org/events\\_files/seminar\\_files/index.shtml](http://www.intermodal.org/events_files/seminar_files/index.shtml)
- **9th Annual Harbor Safety Committee Conference**  
May 9-11 Chicago, Illinois  
[www.trb.org/Conferences/2007/HSCC/](http://www.trb.org/Conferences/2007/HSCC/)
- **North American Freight Transportation Data Workshop**  
May 15 Washington, D.C.  
[guest.cvent.com/i.aspx?5S,M3,85eeaf5e-47e4-498c-beba-ed602176bde8](http://guest.cvent.com/i.aspx?5S,M3,85eeaf5e-47e4-498c-beba-ed602176bde8)

### June

- **Council of University Transportation Centers Meeting**  
June 13-15 Madison, Wisconsin  
[www.mrutc.org/cutc2007](http://www.mrutc.org/cutc2007)

### July

- **32nd Annual Summer Ports, Waterways, Freight and International Trade Conference**  
July 7-9 Chicago, Illinois  
[guest.cvent.com/i.aspx?5S,M3,29226138-4c4a-4f33-a810-922c317f39b7](http://guest.cvent.com/i.aspx?5S,M3,29226138-4c4a-4f33-a810-922c317f39b7)
- **Meeting Freight Data Challenges Workshop**  
July 9-10 Chicago, Illinois  
[trb.org/conferences/2007/FreightData/FreightData.pdf](http://trb.org/conferences/2007/FreightData/FreightData.pdf)

- **AASHTO Subcommittee on Maintenance**  
July 15-19 Madison, Wisconsin  
[www.dot.wisconsin.gov/news/events/scom.htm](http://www.dot.wisconsin.gov/news/events/scom.htm)

### August

- **2007 National Truck Driving Championships**  
August 21-25 Minneapolis, Minnesota  
[www.truckline.com/2k7ntdc](http://www.truckline.com/2k7ntdc)

### October

- **Financing Capacity and Growth in the Railway Industry**  
October 2-3 New York, New York  
[www.railtrends.com](http://www.railtrends.com)
- **2007 ATA Management Conference & Exhibition**  
October 20-23 Orlando, Florida  
[truckline.com/upcomingevents/mce2006](http://truckline.com/upcomingevents/mce2006)
- **Research Issues in Freight Transportation—Congestion and System Performance**  
October 22-23 Washington, D.C.  
[trb.org/conferences/FreightResearch](http://trb.org/conferences/FreightResearch)

### November

- **IANA's Intermodal Expo & Annual Membership Meeting**  
November 10-13 Atlanta, Georgia  
[www.intermodal.org/events\\_files/expo\\_files/index.html](http://www.intermodal.org/events_files/expo_files/index.html)

### December

- **2nd National Urban Freight Conference**  
December 5-7 Long Beach, California  
[www.metrans.org/nuf/2007](http://www.metrans.org/nuf/2007)

CFIRE's mission is to advance technology, knowledge, and expertise in the planning, design, construction and operation of sustainable freight transportation infrastructure through education, research, outreach, training and technology transfer at the University of Wisconsin-Madison and its partner institutions. Our vision is to be an internationally recognized authority and resource that creates knowledge, advances understanding, develops technologies, and prepares leaders to meet the nation's need for safe, efficient and sustainable infrastructure for the movement of goods.

Dr. Teresa M. Adams **DIRECTOR**  
adams@engr.wisc.edu

Jason Bittner **DEPUTY DIRECTOR**  
bittner@engr.wisc.edu

Dr. Bruce Xiubin Wang **RESEARCHER**  
wangx@engr.wisc.edu

Gregory Waidley Jr. **RESEARCH & EDUCATION PROGRAMS COORDINATOR**  
gwaidley@engr.wisc.edu

Susan Karcher **UNIVERSITY SERVICES ASSOCIATE**  
skarcher@wisc.edu

**PHONE** 608.263.2655

**FAX** 608.263.2512

**WEBSITE** [cfire.wistrans.org](http://cfire.wistrans.org)

**EMAIL** [cfire@engr.wisc.edu](mailto:cfire@engr.wisc.edu)

**MAIL** National Center for Freight & Infrastructure  
Research & Education  
2205 Engineering Hall  
1415 Engineering Drive  
Madison, WI 53706-1691



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of  
**WISCONSIN**  
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