CFIRE
NATIONAL CENTER FOR FREIGHT & INFRASTRUCTURE RESEARCH & EDUCATION

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From the Director


Dr. Teresa M. Adams, Director

It is an exciting time in Madison. March brings with it the state basketball championships, spring break, hopes for a snow melt, and anticipation of spring flowers. This year Madison set a new all-time record for snowfall. At over 100 inches, we smashed the previous record of 76 inches. People in Wisconsin are winter hearty but we are all growing tired of shoveling our sidewalks, driveways, and roofs. The trick is finding a new place to put the snow.

This winter is challenging our county maintenance crews too. A blizzard in February caused a major back up and stranded thousands of motorists and carriers on Interstate 90 in Wisconsin. Fortunately, no one was injured. Air travel has become an uncertain event. The airlines have canceled thousands of flights. The weather is affecting freight too. Carriers have battled significant delays in shipments and in repositioning vehicles for return trips. Freight movements on rail have also been impacted – drayage times and typically well coordinated movements have kept third party logistics providers and freight brokers scrambling. The system has enough resiliencies to provide some back up options, but these hiccups have been enough to exacerbate economic slowdowns. The transportation services index dropped during the quarter -- as has the rest of the economy.

March also brings with it some exciting developments for the National Center for Freight and Infrastructure Research and Education. We are about to release our first Request for Proposals for research in Sustainable Freight Transportation Infrastructure and Systems. My faculty colleagues, Jessica Guo, Tracy Holloway, David Noyce, and Mike Oliva led the development of the RFPs to reflect the input from our stakeholders at our November workshop and our best collective thinking within and across the Signature Technical Areas of Research. We've done our homework and we have an excellent set of project topics for meaningful and advanced research. Following our advisory committee meeting, in early April, we will post the

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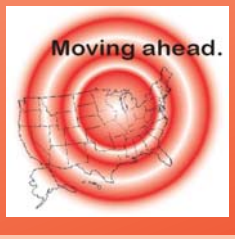


Call for Abstracts now available at mrutc.org/midcon. See page 9 for details.

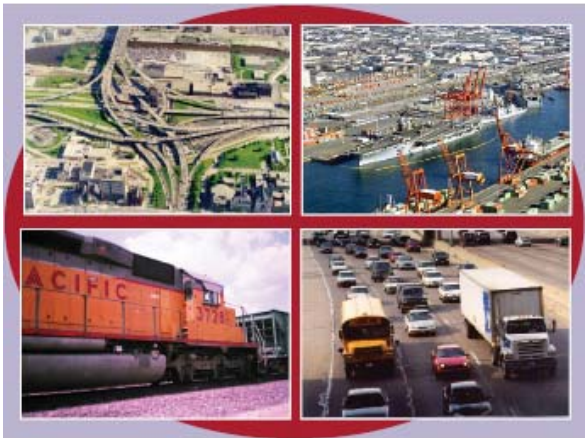
Mississippi Valley Freight Coalition Spring Meeting and Workshop

March 31-April 2, 2008
Indianapolis, Indiana

MISSISSIPPI VALLEY FREIGHT COALITION

The Mississippi Valley Freight Coalition 2008 meeting and conference will help develop the region's response to several key initiatives for transportation reauthorization, and chart the course for the Coalition's operations over the next two years. *See page 2 for details.*

Mississippi Valley Freight Coalition Spring Meeting and Workshop



March 31 - April 2, 2008

Indianapolis, Indiana

The Mississippi Valley Freight Coalition (MVFC) will hold its 2008 meeting March 31-April 2nd in Indianapolis. The Mississippi Valley region includes ten states (Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Ohio, and Wisconsin) that share key interstate corridors, rail infrastructure, and inland and Great Lakes waterways. This meeting and 1.5 day conference will help develop the region's response to several key initiatives for transportation re-authorization, and chart the course for the Coalition's operations over the next two years. The meeting is hosted by the Indiana Department of Transportation.

Featured speakers include:

- Secretary Frank Busalacchi, Wisconsin DOT
- Keith Bucklew, Freight Mobility Director, Indiana DOT
- Adrienne Gregory and Leslie Blakey, Coalition for America's Gateways and Trade Corridors
- Leo Penne, American Association of State Highway and Transportation Officials
- Frank Conde, North American SuperCorridor Coalition
- Dr. Teresa Adams, National Center for Freight and Infrastructure Research and Education
- As a special offering, the short course "Freight Logistics for Public Sector Managers" will be held the morning of April 2.

For more information, visit mississippivalleyfreight.org/2008Meeting.htm.

MVFC Meeting to Focus on Response to *Transportation For Tomorrow* Report

When the Mississippi Valley Freight Coalition (MVFC) holds its spring meeting in Indianapolis, March 31-April 2, committee members will be formulating a response to the "Transportation for Tomorrow" report released in January that calls for a major federal effort to revamp the national transportation infrastructure system to address needs for the next 50 years.

The MVFC is a ten-state coalition that coordinates applied research aimed at developing strategies for improving freight transportation in the Mississippi Valley region. Research projects focus on freight operations and management solutions using public-private partnerships, technological applications, and various funding sources, including the Transportation Pooled Fund (TPF) through the Federal Highway Administration (FHWA) and the US-DOT.

The National Commission on Surface Transportation Revenue and Policy report comes after 20 months of study and ten public hearings to determine the future direction of transportation networks that serve freight and passenger movement across the U.S. The report crystallizes the major issues facing the 2009 reauthorization of the federal surface transportation program and is a call to action on the immediate need to address the nation's growing transportation challenges, including estimated unmet annual surface transportation needs ranging from $225 billion to $340 billion. In particular, the Commission recommends a performance-driven, outcome-based and generally mode-neutral federal program that pursues objectives of national interest.

Of the ten functional programs recommended, MVFC, CFIRE, and the Midwest Regional Transportation Center (MRUTC) are especially pleased with those that meet research objectives, such as Rebuilding America (to upgrade existing transportation facilities) and Global Competitiveness (to ensure the efficient movement of freight).

The other recommendations include:

- Metropolitan Mobility – to relieve congestion in urban areas

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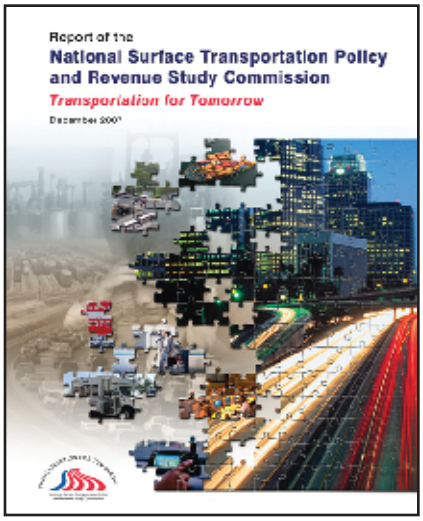
CFIRE Applauds Report, Works on Related Projects

Many of the Commission's recommendations fit the CFIRE strategic plan which received USDOT approval last summer. The strategic plan focuses on sustainability and improvement of freight transportation to meet ever-growing demands on highway, harbor, and rail infrastructure. The goal is to apply technological advances and a wealth of knowledge and expertise to planning, design, and operation of freight transportation and its associated systems for the benefit of the regional economy, environment and users of the transportation network.

CFIRE has worked closely with the MVFC on these issues, while also taking stakeholder recommendations for research proposals at a November 16, 2007, workshop entitled, Setting the Freight Transportation Research Roadmap: Sustainable Freight Transportation Infrastructure and Systems. Based on CFIRE's research advisory committee recommendations made in December, Signature Technical Areas of Research (STAR) chairs have been reviewing proposals for 2008. The four areas are design, materials and construction processes for highway, harbor and rail infrastructure and systems; planning and multimodal system optimization; traffic operations and safety; and energy and environment.

"Our research teams continue to develop proposals for our region to address contemporary freight transportation issues across modes," CFIRE director Dr. Teresa M. Adams said. "The Commission report adds a key national interest emphasis necessary for future enhancement of freight movement and transportation infrastructure. CFIRE will continue to be a major stakeholder in the interests of the Upper Midwest Region."

Adams Quoted in Commission Report



CFIRE Director Dr. Teresa M. Adams was quoted directly in the Report of the National Surface Transportation Policy and Revenue Study Commission. CFIRE helped prepare testimony on behalf of the ten states of the Mississippi Valley Freight Coalition in February and April. Adam's remarks appeared as follows:

"The actions of individual States and regional coalitions are not enough to solve the Nation's freight problems. We need strong leadership from the Federal government in the form of strategies, tools, and revenue, and we must make changes to our institutional arrangements." –Teresa M. Adams, Ph.D., Director of the National Center for Freight and Infrastructure Research and Education at the University of Wisconsin-Madison, at the Commission's Minneapolis field hearing.

This section of the report focused on the development of a National Freight Policy. The full report is available online at transportationfortomorrow.org.

Last November, the American Road & Transportation Builders Association (ARTBA) issued task force recommendations on the future of federal surface transportation that, in many ways, echo the Commission report.

ARTBA has proposed increasing the federal motor fuel tax by at least ten cents a gallon, with indexing for inflation to meet current and future national surface transportation needs. In addition, ARTBA backs a Critical Commerce Corridors initiative to build the necessary system capacity to ensure safe, secure, and efficient movement of freight and to reduce effects of truck traffic on other highway users.

The Commission report calls for a user fee increase that is expected to spark political debate but is proposed to provide the funds to meet federal surface transportation needs over the next 50 years. The 3C initiative follows Commission recommendations to improve infrastructure, reduce traffic congestion, and promote global economic competitiveness through an enhanced national surface transportation network. ARTBA noted in its findings that traffic gridlock is a hidden tax costing $78 billion a year.

The American Trucking Association (ATA) noted that the Commission recognized the dominant role that trucking will continue to play in freight transportation. While ATA is willing to accept a motor fuel tax hike, president Bill Graves says any tax must be coupled with systematic reforms in the surface transportation and infrastructure system.

The American Association of State Highway and Transportation Officials (AASHTO) has also played a lead role in calling for a strong federal role for a national surface transportation system, including significant investment to preserve and modernize the system for the future.

CFIRE Hosts Site Visit From Congressman Petri

CFIRE began an ambitious 2008 project year with a site visit from Wisconsin Congressman Thomas E. Petri (R-WI) who toured the Wisconsin Transportation Center on the UW-Madison campus on January 3.

Petri serves on the House Transportation and Infrastructure and Education and Labor committees and is in his fifteenth term representing the 6th congressional district, which includes parts of eastern, central and southern Wisconsin and extends to the Lake Michigan border.

CFIRE director Dr. Teresa M. Adams led an overview and discussion of the Signature Technical Areas of Research (STARs) that recently received approval from the USDOT. The four areas are:

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

The CFIRE work plan includes requests for proposals (RFPs) that will be considered by the STAR chairs in March. A research advisory committee took requests and budget estimates in December 2007.

Adams emphasized CFIRE's education and outreach mission and its partnerships with a consortium of campuses dedicated to freight transportation research. The Transportation Management and Policy (TMP) program, for example, is an interdisciplinary graduate level certificate program at the University of Wisconsin-Madison that allows students to focus on transportation issues of their choice. Coursework in environmental studies, economics, engineering and policy ensures a diverse student body and

Congressman Thomas E. Petri (R-WI)

varied perspectives on transportation issues. Students work with departments of transportation and professional and nonprofit organizations to gain hands-on experience. In addition, freight short courses and supply chain and logistics courses offer educational and professional development opportunities through universities, colleges, and professional associations throughout the Upper Midwest (see course list on page 11).

UW-Madison also leads a CFIRE consortium of research universities that includes UW-Superior, UW-Milwaukee, University of Toledo, and the University of Illinois-Chicago. These campuses house areas of specialized applied research related to freight transportation and work with other agencies to develop cooperative solutions to current problems.

At the January 3 briefing, Congressman Petri received an update on CFIRE collaborations with other freight transportation organizations, including the Wisconsin-based Recycled Materials Resource Center (RMRC) that conducts research and development of recyclable materials for highway construction and maintenance; the Great Lakes Maritime Research Institute (GLMRI) at UW-Superior that focuses on maritime transportation, commerce and logistics; and the Mississippi Valley Freight Coalition (MVFC), a ten-state consortium that's working on a regional freight transportation clearinghouse, expanding truck parking and developing plans to address freight bottlenecks in the Mississippi Valley region; as well as CFIRE's work with the National Surface Transportation Policy and Revenue Study Commission on improving transportation networks.

The MVFC meets March 31-April 2 in Indianapolis, Indiana, and will provide updates on its ongoing research agenda.

Congressman Petri, CFIRE Faculty and Staff, and COE Dean Paul Peercy and Assistant Dean Deanna Dietrich

The National Center for Freight & Infrastructure Research & Education
NEWSLETTER

Future City Competition

One way to do transportation education and outreach is to reach in—to the classroom.

That's what the National Center for Freight & Infrastructure Research and Education (CFIRE) did through the Future City Competition for seventh and eighth grade students. A CFIRE special award was given during the competition, which uses virtual reality software to plan and build future cities.

The special award, "Best Freight Transportation Network," went to a team from the Stone Bank School in Stone Bank, Wisconsin, that participated in the Milwaukee regional of the 2008 competition, held January 19 during National Engineers Week. The winning team's city was called Diamond Bank.

The Future City Competition, now in its second decade, helps students discover and foster interests in math, science, and engineering. Students use SimCity 3000 software, complete with a handbook of rules, instructions, tips, and techniques for designing and building their city of the future. In addition to an introduction to engineering, students learn writing, public speaking, teamwork, time management, problem solving and new computer skills.

CFIRE's Greg Waidley (L) with the Stone Bank School team.

"This is one of many examples where transportation education and outreach contribute to student learning and may plant the seed for future career choices," said Greg Waidley, research and education coordinator for the Wisconsin Transportation Center in Madison, Wisconsin. "Studies tell us that our field will need more skilled workers in the future. Some of these students may gain inspiration from this type of an event." Waidley is CFIRE's liaison to the Future Cities program. For more information, see the Future City Competition website at futurecity.org.

(From the Director, continued from page 1)

RFPs. Check our website at http://cfire.wistrans.org for the latest details.

Speaking of the weather, this winter is giving us first hand lessons on how much we depend on a reliable transportation system, how much we take it for granted, and the direct relationship between transportation and the economy. It is very clear the time is now to focus developing a national plan for the transportation system of this country. The economic stakes are too great to ignore. We have heard political candidates begin to comment on the challenges facing the transportation system. Most of this is in context of the infrastructure needs of an aging system. But we need to think about environmental sustainability and quality of life too.

The National Surface Transportation Policy and Revenue Study Commission released its report on the future direction of the transportation program. The ten programs outlined in the report all will help move us towards a multimodal system that can enhance our economic prosperity. Many organizations, including ARTBA, AGC, ACEC, NARC, AASHTO, TRB, and others have released their own observations on the Commission's findings. While most attention in the press has focused on the recommended 25- to 40-cent-per-gallon increase in the federal motor fuels tax, there is little debate about the findings of the study. We need to think broadly about transportation challenges - constrained budgets, increasing demands, congestion, resiliency, aging systems, and rising fuel costs. The global trends affecting the movement of goods demand a new way of looking at the systems in place and the need for a national freight policy in the context of economic competitiveness. Growth and development of mega regions and regional economies, continued population growth, and the need to address environmental concerns are at the forefront of discussions on the impact of transportation on quality of life.

We have an opportunity to begin to take action locally – the ten state Mississippi Valley Freight Coalition holds its annual workshop meeting in Indianapolis in late March. Last year we developed a consensus position and prepared testimony for the Commission. This year we'll hear from several speakers, including National Commissioner and Wisconsin DOT Secretary Frank Busalacchi. At the workshop this year, we will review the recommendations from Commission's study and what they may hold for the region. The focus will be on developing a regional perspective and addressing freight challenges specific to the Midwest. The draft agenda is available at http://www.mississippivalley-freight.org and we hope that you might join us.

CFIRE Researcher Wins Awards for Simulation Project

Prof. Jessica Guo, a CFIRE researcher on intermodal transportation and assistant professor of Civil and Environmental Engineering at UW-Madison, has won two awards for her planning/experimentation and design/implementation research on applying Engage, a computer simulation game model, to academic research and education.

Prof. Guo's current project involves design and implementation of a prototype computer simulator tool using the Madison, Wisconsin, transportation system as a model.

"In theory, our design would allow us to simulate several types of transportation system problems and projects," Prof. Guo said. "Right now, I am focusing on passenger travel, with particular focus on public transportation."

Computer simulations such as Engage might be compared to SecondLife and other virtual reality interactive online games that allow users to create simulated people, communities, and situations.

If the simulator is implemented, Prof. Guo said, it could be modified and expanded to include freight transportation.

In addition to finalizing the project, Prof. Guo said a budget estimate is in process. Completion of this phase of the Engage project has a May 2008 deadline.

The three-phase project on began in January of 2006. The first phase included discussions of community needs for building, adapting and utilizing games and simulations in higher education. In November of that year, researchers hosted Play@Pyle where faculty and staff saw examples of how computer simulation technology was being applied at UW-Madison. The planning and experimentation phase (Phase II) began with the Play@Pyle demonstrations and concluded in April 2007.

Prof. Guo, also director of the Transportation and Urban Systems Analysis Lab (TUSAL) at UW-Madison, is featured with other faculty in a new video on creative application of technology to teaching and learning.

MVFC addresses report, continued from page 2

- Connecting America – to promote rural connectivity
- Intercity Passenger Rail – to develop regional passenger rail networks
- Highway Safety – to reduce traffic fatalities
- Environmental Stewardship – to mitigate transportation's impact on the natural environment
- Energy Security – to promote alternative fuel development
- Federal Lands – to provide public access on federal property
- Research & Development – to provide a national research program

The Commission wants stakeholders in each of these areas to develop plans to meet performance objectives.

The MVFC has an extensive multimodal agenda and has already embarked on projects to address regional freight bottlenecks, expand truck parking facilities, and develop a traveler information clearinghouse that would notify commercial freight movers in advance of delays or bottlenecks that may require changing routes.

The FHWA has also approved a proposal for an Interstate 70 Corridor of the Future that provides for truck-only lanes and traffic relocations to reduce freight and passenger congestion. Sufficient funding is also critical, considering the projected 75 percent increase in freight tonnage in the Mississippi Valley region by 2035. An American Association of Railroads (AAR) study says $148 billion will be needed for rail infrastructure, also by 2035, including $13 billion for short line and regional freight railroads.

"The MVFC recognizes the need for a long-term strategic national plan for the safe and efficient movement of freight and to reduce the effect of truck traffic on other highway users," MVFC director Greg Waidley said. "We're pleased that the Commission report is on track with many current and future objectives for accomplishing these goals."

The National Center for Freight & Infrastructure Research & Education
NEWSLETTER

CFIRE, MVFC to Participate in Regional Workforce Summit

CFIRE and the Mississippi Valley Freight Coalition (MVFC) will be among the leaders from transportation agencies participating in a Regional Workforce Summit to be held in September at Madison, Wisconsin.

The summit will involve soliciting information on recruiting and retaining employees to meet future transportation industry needs and providing ongoing professional development. CFIRE research partners, transportation department executives and staff from MVFC's ten states, and researchers from Northwestern, Purdue, Minnesota, and Iowa State universities will be among the participants in pre-workshop surveys on current recruitment efforts and new ways to bring qualified people into the transportation field. A main theme of the regional summit is to create skill-based educational programs and promote transportation careers to fill vacancies as veteran transportation professionals retire and demands for transportation continue to grow.

CFIRE director Dr. Teresa M. Adams is scheduled to speak on factors that will influence the transportation future: regional economic centers, freight, greenhouse gas impacts, and technology. Currently, CFIRE and Midwest Regional University Transportation Center (MRUTC) researchers have solid partnerships established with transportation, engineering, and urban and regional planning schools throughout the Upper Midwest. Ongoing transportation research projects feature collaboration between students and faculty in exploring solutions to freight transportation problems and issues.

"Our idea is to focus on characterizing the future role of the transportation agency and then identify the workforce needed to fulfill the role," Adams said. "This differs from other workforce initiatives that focus on increasing the pipeline for qualified workers. We are starting with the premise that the agency's role will change for a number of reasons including the need for new sources of revenue for transportation financing, emerging mega-region transportation networks, the role of transportation in global competitiveness, and sustainability and security of transportation issues."

The summit will include a panel discussion on what educational institutions are doing to meet the challenges. The University of Wisconsin-Madison, the University of Massachusetts, the University of California-Berkeley, and Georgia Tech University will be represented on the panel.

What's the current state of affairs? The Federal Highway Administration (FHWA) estimates that half of the state transportation workforce will be eligible to retire in the next ten years. In response, FHWA's National Workforce Development Initiative has outlined six strategies:

- A broad-based Transportation Internship Program (TIP)
- Retraining programs for downsized industries
- Connecting community colleges into transportation career pathways
- Increasing transportation's participation in promoting STEM
- Making the transportation workplace a top workplace environment
- Marketing efforts to promote the value of transportation careers

In addition, workforce provisions in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) increased annual funding for university transportation centers—such as CFIRE and MRUTC—from $32.5 million to $76 million, expanding the number of universities from 33 to 60. Centers use the money for research, education and technology transfer in addressing solutions to transportation issues and problems. SAFETEA-LU has also earmarked $1.875 million for transportation-related curriculum development that's more closely aligned with industry skill-set needs.

For more information on the Regional Workforce Summit, go to the CFIRE website at wistrans.org/cfire, or visit the MVFC website at mississippivalleyfreight.org.

NCFRP Projects Approved

Seven freight transportation research project concepts approved by the National Cooperative Freight Research Program (NCFRP) governing board last December will be outlined in detailed project statements that were expected to be released in April 2008.

CFIRE research places a high priority on improving freight movement through cooperative research efforts. The Mississippi Valley Freight Coalition (MVFC) is an Upper Midwest research leader in freight movement as well, with several works in progress related to trucking and other areas. The seven NCFRP projects, totaling $2.3 million in funding, are consistent with CFIRE and MVFC objectives. Projects and funding amounts include:

- Current and Future Contributions to Freight Demand in North America ($400,000)
- Understanding Urban Goods Movements ($500,000)
- Specifications for Freight Transportation Data Architecture ($300,000)
- Developing High Productivity Truck Corridors ($400,000)
- Truck Drayage Practices ($400,000)
- Representing Freight in Air Quality and Greenhouse Gas Models ($200,000)
- Synthesis of Short Sea Shipping in North America ($100,000)

The NCFRP is sponsored by the Research and Innovation Technology Administration (RITA) and managed by the National Academies, acting through the Transportation Research Board (TRB).

ARTBA "It's Our Future Campaign" Has Ambitious Agenda

Make no mistake about it – the call for a national surface transportation system for the future is about more than money and mortar.

The American Road & Transportation Builders Association (ARTBA) has begun charting a new mission and direction for the U.S. surface transportation network that calls for a "can do" attitude involving political leadership, public-private partnerships, and capital investment to achieve current and long-range goals in transportation and its effects on related areas such as economic growth, the environment, and public safety and security.

"The safe and efficient movement of goods and people is a fundamental necessity for a thriving society," say the authors of ARTBA's "A New Vision & Mission for America's Federal Surface Transportation Program," released in November 2007. "Yet each year, America's aging highway, road, bridge and rail transit infrastructure network falls further behind in meeting the demands being placed on it by a dynamic economy and growing population."

As Congress prepares for reauthorization of the federal highway/transit investment law, ARTBA cites six major challenges ahead:

1. Traffic Congestion – Traffic gridlock is a $78 billion annual hidden tax that also causes 4.2 billion hours of travel delay and 2.9 billion gallons of wasted fuel.
2. Global Competition – China has a plan to build 42,000 miles of interstate in 20 years. India is building 25,000 miles of expressways. Where is the U.S. plan for the future of its transportation network?
3. Tsunami of Freight – Like CFIRE and the Mississippi Valley Freight Coalition, ARTBA recognizes the freight bottleneck crisis that costs the trucking industry $8 billion annually. Freight tonnage shipped on roadways by truck is expected to double by 2035.
4. Crumbling Roads and Bridges – USDOT reports almost 162,000 federal-aid highways have unacceptable pavement and nearly 154,000 bridges nationwide are structurally deficient or functionally obsolete.
5. Transportation Financing Solvency – Without reauthorization of the federal highway/transit investment law, state DOTs will receive 40 percent less in federal aid for improvements.
6. Public Health & Safety – Highway crashes have an estimated economic and social cost of $230 billion annually. According to the National Highway Traffic Safety Administration (NHSTA), poor road conditions

Continued on page 11

WisDOT Truck Study Underway

To provide a balance between safe, efficient freight movement on Wisconsin's highways and bridges and state economic growth, the Wisconsin Department of Transportation (WisDOT) has begun to interview candidates to conduct a comprehensive cost-benefit study on truck size and weight limits that's to be completed by January 1, 2009.

2007 Assembly Bill 238 requires the DOT to conduct the consultant study to identify possible law changes that would consider the net benefits of protecting highway infrastructure and ensuring public safety and reducing the costs of truck transportation by allowing some exceptions for heavier loads.

The selected consultant will work with an advisory committee including members from business, local government, the trucking industry, trucking-related small businesses, and enforcement agencies to review the following:

- Existing truck size and weight laws including limits, exceptions, spring load restrictions, permits and enforcement
- Laws in bordering states and provinces, innovative practices, and advances in equipment safety
- Freight industry needs, logistics patterns and trends, and the impact of current laws

WisDOT will likely hold meetings around the state with public and private stakeholders to discuss existing laws regarding allowable commercial truck weight limits, lengths and widths. The results of the study may be used to recommend future legislation on truck size and weight restrictions and conditions.

Mid-Continent Transportation Symposium 2008

CFIRE Research Forum Seeks Research Abstracts

The 8th annual MidContinent Transportation Research Forum is being held August 14-15 in Madison, Wisconsin.

CFIRE is sponsoring the event, along with the Midwest Regional University Transportation Center (MRUTC), the Wisconsin DOT, the Wisconsin Traffic Operations & Safety Laboratory, the Wisconsin Highway Research Program, the Iowa DOT, and the Center for Transportation Research and Education at Iowa State University.

Participating researchers will develop abstracts for transportation projects that demonstrate a significant return on the investment of the sponsoring agencies, specifically state DOTs. Submitters of abstracts are encouraged to partner and jointly present their material with practitioners. The one-page abstracts should include the authors' names and affiliations, mailing addresses, and email addresses.

Authors of accepted abstracts will not be expected to prepare a complete paper for inclusion in the conference proceedings. If authors wish to submit papers, full papers will be due June 16, 2008.

The deadline to submit abstracts is May 1, 2008. They should be submitted to CFIRE deputy director Jason Bittner. Questions about submittals or conference information can be directed to Jason Bittner at bittner@engr.wisc.edu or 608-262-7246. Please refer to mrutc.org/midcon for periodic updates.

UW-M Studying Permit Vehicle Loads in Wisconsin

A University of Wisconsin-Milwaukee research project will take a closer look at permit vehicle loads in Wisconsin, specifically oversize and overweight vehicles that carry commercial freight across the Midwest region's highways.

UW-Milwaukee is a consortium partner of the National Center for Freight and Infrastructure Research and Education (CFIRE) and the Midwest Regional University Transportation Center (MRUTC) that does transportation research, education and outreach projects on issues and problems affecting the Upper Midwest transportation system.

UW-M researcher Jian Zhoa's project will create a database for overweight vehicles with detailed configuration information. The project will also identify vehicle configurations that best apply to permit vehicles in Wisconsin, update the Wisconsin Bridge Manual related to bridge rating and permit vehicle checks, and establish guidelines for future evaluation and adaptation of increased permit vehicle weights and oversize vehicle configurations for issuing state DOT permits.

The project started last October and is expected to be completed in the fall of 2008. It is CFIRE project number: 01-02 and is in cooperation with the Wisconsin Highway Research Program, Structure Technical Oversight Committee. More information is available at the wistrans.org/cfire website.

The National Center for Freight & Infrastructure Research & Education
NEWSLETTER

Winter Driving Regulations Help Truckers in Snowstorms

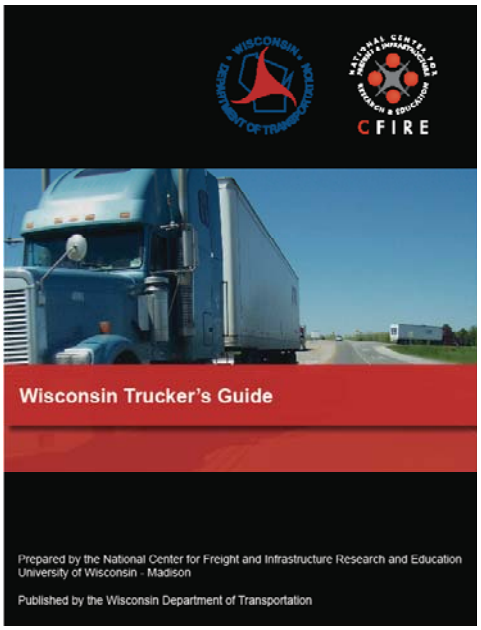
You don't have to tell commercial freight movers that this has been one of the worst winters on record. And federal regulations give drivers some leeway for dealing with snowstorms and other unexpected bad weather while making cargo runs across the country so that they can meet deadlines or find safe parking. Regulations define "adverse driving conditions" as snow, sleet, fog, snow-covered or ice-covered highways, or other unusual road or traffic conditions that were not apparent at the start of a run.

The regulations cover two types of drivers: property-carrying vehicles and passenger-carrying vehicles. The driver of a property-carrying vehicle may drive up to 13 hours continuously—two hours more than the 11-hour standard—after ten hours off duty and within a 14-consecutive hour maximum. For passenger-carrying vehicles, drivers may be on the road for 12 hours continuously—two hours above the ten-hour standard—after eight hours off duty, with a 15-consecutive hour maximum. In either case, the driving hours cannot be combined with the normal 16-hour exception for continuous duty.

Of course, bad weather or poor driving conditions have to be unforeseen, arising only after the driver is dispatched. Exceptions cannot be made if a dispatcher knows prior to the run that the driver, for example, will be heading into a major snowstorm. Encountering heavy traffic delays near urban centers, or because of loading and unloading, are also not considered exceptions.

CFIRE Prepares Truckers Guide to Help Improve Safety & Compliance

CFIRE researchers and educators recognize the connection between traffic safety and commercial movement, further noting that large truck safety directly affects freight logistics as well. To assist the trucking community, CFIRE Researcher Bruce Wang recently led an effort to develop the Wisconsin Truckers Guide. The guide is a reference of commonly requested information for dispatch operators and owner operators. The online version is available at wistrans.org/cfire/Research/CFIRE/CFIRE01-01/TruckersGuideFinal.pdf.



Large Trucks Pass Ten-Year Road Test

In a published report now available through the Federal Motor Carrier Safety Administration (FMCSA) website, the trucking industry has produced a solid safety record related to large truck crashes that caused death, injury, or property damage.

From data collected for the period 1996-2006, FMCSA found that large truck crashes resulting in fatalities declined 0.5 percent nationwide, with an 18 percent decline in fatal crashes per 100 million miles traveled. For the same ten-year period, FMCSA research shows that the injury rate for large truck crashes dropped 30 percent.

According to FMCSA, large trucks are involved in only eight percent of all U.S. motor vehicle fatalities, three percent of motor vehicle injury accidents, and four percent of accidents causing property damage.

Large trucks account for seven percent of all vehicle miles traveled and three percent of the registered vehicles, the report said.

Despite the positive news, however, FMCSA chief John Hill said the agency is working to craft more precise data on truck-related fatalities that could pinpoint the number of deaths actually attributable to truck drivers.

"I'm trying to refine the data that we presently use," he said, "because I think it's inappropriate to judge our safety efforts on causes of crashes that are not the fault of a commercial driver."

Hill noted that measuring the effectiveness of truck safety programs is important because commercial vehicle regulations don't apply in the same way to accidents involving passenger vehicles.

FMCSA data currently can't assign fault to crashes, but Hill says that will be built into the formula for next year.

For more information, go to the FMCSA website at fmcsa.org.

Transportation Program Course Offerings

DEPARTMENT OF
Engineering Professional Development

Course Title	#	Date(s)	Location
Calculating Water Surface Profiles	J985	April 10-11	Madison, Wisconsin
Docks and Marinas 2008	J908	October 15-17	Madison, Wisconsin
Drainage Engineering Fundamentals for Non-Engineers	J762	April 17-18	Madison, Wisconsin
Effective Roadway Lighting	J140	April 28-30	Madison, Wisconsin
Engineering Fundamentals of Rail Freight Terminals, Yards, and Intermodal Facilities: Current Practices in Design and Construction	J942	September 15-16	Philadelphia, Pennsylvania
Freight Railroads: Best Operating Practices	K111	October 21-22	Madison, Wisconsin
Fundamentals of Railway Train Control and Signaling Systems	J943	September 17-18	Philadelphia, Pennsylvania
Highway Bridge Design, Including Seismic	J921	April 28-30	Sunnyvale, California
Implementing a Sidewalk Management System	J757*	January 28-29	Madison, Wisconsin
Implementing Effective Culvert Maintenance	J765*	April 16-17	Madison, Wisconsin
Improving Public Works Construction Inspection Skills	K118*	December 8-9	Las Vegas, Nevada
Maintaining Asphalt Pavements	K117	January 22-23, 2009	Madison, Wisconsin
Managing Snow and Ice Control Operations	K119	October 6-7	Madison, Wisconsin
Mastering the Fundamentals of Culvert Hydraulic Design	J759*	April 14-15	Madison, Wisconsin
Municipal Engineering Fundamentals for Non-Engineers	J491*	April 7-8	Madison, Wisconsin
Preparing an Effective Municipal Capital Improvements Plan	J488	May 8-9	Madison, Wisconsin
Railway Bridge Engineering	J933*	June 18-19	Philadelphia, Pennsylvania
Railway Track Systems: Engineering and Design	J778	May 5-6	Elk Grove Vil., Illinois
Soil Engineering for Roads and Pavements	J928*	May 12-13	Madison, Wisconsin
Using HEC-RAS to Compute Water Surface Profiles for Floodplains, Bridge and Culvert Hydraulics	J489*	May 5-7	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. Click on Courses then Civil and Environmental Engineering Courses. ***Indicates additional scheduled dates and locations for this course.** See the EPD Website for details.

(ARTBA campaign, continued from page 8)

or outdated alignments contribute to about one-third of 43,000 highway traffic deaths annually.

What does ARTBA recommend? The key areas include:

1. Meeting Highway & Transit Investment Needs – Increase the federal motor fuel tax by at least ten cents a gallon, with indexing for inflation.
2. Utilizing All Revenue Options – Provide states with toll financing options, including congestion pricing, high occupancy toll lanes, and truck-only lanes. Congestion pricing and truck-only lanes are two vital research areas for CFIRE and MVFC.
3. Preparing for the Future – Start the transition to new financing mechanisms and the use of alternative fuels and fuel efficiency technology (a key area of CFIRE's energy and environment strategic plan component).
4. Improving Project Delivery & Protecting the Natural Environment – Increase USDOT authority in the planning process, allow qualifying states to have control over environmental reviews, and make transportation enhancement funds available for environmental stewardship measures.
5. Defending Public Safety – Boost infrastructure investment to improve motorist and highway worker safety, in pursuit of a zero traffic fatality goal.
6. Critical Commerce Corridors – Provide new surface transportation system capacity and operational improvements exclusively focused on securing the safe and efficient movement of freight. The network would include the Interstate highway system and some of the non-Interstate national highway system and new multi-modal trade corridors. Truck-only lanes and bottleneck relief would be two key objectives. The 3C program would get financial support from freight user fees, public-private partnership and debt financing.

To view a more comprehensive report about ARTBA's SAFETEALU reauthorization and "Critical Commerce Corridors" proposals, visit the government affairs section of artba.org.

The National Center for Freight & Infrastructure Research & Education

UPCOMING EVENTS

March

- **Ohio Transportation Leadership Forum**
  March 19, Columbus, Ohio
  morpc.org/forum/Forum2008.htm
- **Short Sea Shipping Symposium**
  March 26-27, Dartmouth, Massachusetts
  umassd.edu/sustainability/shortsea.cfm
- **Mississippi Valley Freight Coalition Spring Meeting and Workshop**
  March 31-April 2, Indianapolis, Indiana
  mississippivalleyfreight.org
  (See page 2 for details)

April

- **USDOT Integrated Vehicle-Based Safety Systems (IVBSS) Program Public Meeting**
  April 10-11, Ypsilanti, Michigan
  itsa.org/ivbss.html
- **2008 Freight Claims & Loss Prevention Annual Conference**
  April 29-May 1, Long Beach, California
  truckline.com/upcomingevents
- **Intermodal Freight Technology Working Group (IFTWG) Spring Meeting**
  April 30-May 1, Oak Brook, Illinois
  intermodal.org/iftwg_files
- **Intermodal Operations and Maintenance Seminar**
  April 30 -May 2, Oak Brook, Illinois
  intermodal.org

May

- **95th Annual American Short Line & Regional Railroad Association Convention**
  May 4-6 San Antonio, Texas
  aslrra.org
- **2008 Warehousing Education and Research Council (WERC) Annual Conference**
  May 4-7 at Chicago, Illinois
  werc.org

June

- **TRB Summer Conference**
  June 15 - 18 Baltimore, Maryland
  trb.org/calendar
- **33rd Annual TRB Summer Ports, Waterways, Freight and International Trade Conference**
  June 18-20 Baltimore, Maryland
  trb.org/calendar

August

- **Mid-Continent Transportation Symposium 2008**
  August 14-15, Madison, Wisconsin
  mrutc.org/midcon
- **FTR Associate's 2008 Freight Transportation Conference**
  August 26-28 Indianapolis, Indiana
  ftrassociates.net

The National Center for Freight and Infrastructure Research and Education (CFIRE) at the University of Wisconsin-Madison is one of ten National University Transportation Centers. The CFIRE consortium includes the University of Wisconsin-Milwaukee, University of Illinois at Chicago, University of Toledo, and University of Wisconsin-Superior. 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. 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. CFIRE has four signature technical areas of research as noted below.

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

Signature Technical Areas of Research (STAR) Chairs:

Dr. Jessica Guo, **PLANNING AND MULTIMODAL SYSTEMS**
jyguo@wisc.edu

Dr. Tracey Holloway, **ENERGY AND ENVIRONMENT**
taholloway@wisc.edu

Dr. David Noyce, **TRAFFIC OPERATIONS AND SAFETY**
noyce@engr.wisc.edu

Dr. Michael Oliva, **DESIGN AND MATERIALS**
oliva@engr.wisc.edu

THE UNIVERSITY of WISCONSIN MADISON

PHONE 608.263.2655
FAX 608.263.2512
WEBSITE cfire.wistrans.org
EMAIL cfire@engr.wisc.edu
MAIL National Center for Freight & Infrastructure Research & Education
2205 Engineering Hall
1415 Engineering Drive, Madison, WI 53706-1691