



## INSIDE HIGHLIGHTS

Page 2-3

- STAR projects selected

Page 4

- Containerization Study
- The NEW Sustainability

Page 5

- Wittwer Named MVFC Facilitator

Page 6

- CFIRE, MVFC Truck Parking Survey Results
- Wisconsin TDA Forum

Page 7

- GLMRI Real-Time Data Project Moving Ahead
- Transportation Infrastructure Bottlenecks Delay U.S. Grain Shipments

Page 8

- Bruce Wang Joins Aggies

Page 10

- New RMRC Course Goes Online

Page 11

- Engineering Professional Development Courses

Page 12

- Upcoming Events

## From the Director



Teresa M. Adams, Director

This year's presidential campaigns have appropriately focused on serious economic crises: losses on Wall Street, wartime expenditures, failing investment and mortgage lending firms, and fluctuating energy-related prices. The new president and Congress will be expected to take careful but effective

action in response to unprecedented happenings that affect the U.S. and world economy.

One of the most basic elements for economic prosperity and recovery, however, is maintaining our preeminent transportation infrastructure. In February, Democratic presidential candidate U.S. Sen. Barack Obama proposed a National Infrastructure Investment Bank to fund projects that would create jobs and stimulate the economy. Republican presidential candidate U.S. Sen. John McCain has not made any specific proposals but frequently mentions "pork-barrel" spending and raising fuel taxes.

In today's environment, many essential transportation projects important to the nation are earmarked for completion and are not "pork-barrel" additions to the budget. If spending is a concern, let's compare the recent \$700 billion rescue plan of investment firms and mortgage lenders to the \$8 billion highway trust fund fix approved a short time earlier. Large firms with poor track records get urgent mega-help while a proven transportation infrastructure system that can't keep up with demand gets a Band-Aid when a major wellness program is required. Even maintaining

See Adams on Forum, page 2

### SAVE THE DATE!

The 2009 Mid-Continent Transportation Research Symposium is scheduled for August 20-21 at Iowa State University in Ames, Iowa.

Thanks to all who attended the CFIRE-sponsored Forum in 2008!

## 2008 Transportation Workforce Summit December 8-9, Madison, Wisconsin



Sponsored by the Wisconsin Transportation Center, CFIRE, Federal Highway Administration and the Wisconsin Department of Transportation. Topics include transportation professional needs by 2030, impact of future advancements, skills for the future workforce, and learning needs of the future. For more information, visit <http://wistrans.org/cfire/21stCenturyWorkforceSummit/>

**Adams** from page 1

infrastructure at current levels carries a tremendous price tag. Many in the industry are willing to pay higher motor fuel taxes or freight user fees to keep their businesses moving, provided that the federal government increases its financial commitment to the transportation network.

Interestingly, these issues are not new. We all know the outcome of President Eisenhower's leadership in establishing the Interstate Highway System in 1958, a national endeavor that was risky, unprecedented and visionary.

Some may not know that our 6th president, John Quincy Adams, took an unpopular stance in the 1824 election campaign, supporting new roads, bridges, canals and docks to move goods for the benefit of the American economy. With no national trade policy and a primitive inland freight system, opponents argued that the federal government would have too much power to make decisions better left to the states. The advent of railroads and the telegraph in the 1840s made for a faster, more efficient inland freight system, making internal improvements viable. In the end, Adams won a controversial election and America initiated a transportation system that has become international in scope.

Now, we seem to have once again come full circle. The National Freight Policy espoused by the National Surface Transportation Policy and Revenue Commission calls for a strong federal commitment to rebuilding an intermodal infrastructure that will keep America globally competitive for many years to come.

Making bold moves is part of politics. We need a strong federal role in infrastructure to complement the willingness of states to collaborate on interstate or regional projects. With Election Day around the corner, candidates must emphasize transportation infrastructure because of its importance to the economy and the environment. Let's keep discourse on course and exercise our right to vote so that our leaders will take us where we need to go.

EVERYONE BE SURE TO . . .

**CFIRE STAR Projects Named**

of Research (STAR) projects for 2008-2009. The projects were selected from proposals that were subject to peer review in June. The projects are consistent with the CFIRE mission to advance knowledge, expertise, technology and innovation in freight transportation and infrastructure research that sets CFIRE apart from other university transportation centers:

**Design, Materials, & Construction Processes for Highway, Rail and Harbor Infrastructure**

Dr. Michael Oliva's STAR group will oversee projects related to improved bridge infrastructure:

- Rapid Replacement/Construction of Bridges
- Bridge Analysis and Evaluation of Effects under Overload Vehicles
- Reconstruction of Railroads and Highways with In-Situ Reclamation Materials
- 3D Design Models for Construction Plans and GPS Control of Highway Construction Equipment



Associate Director Michael Oliva

**Multimodal Systems Planning and Optimization**

Prof. Jessica Guo's STAR group will survey freight operations in two key studies:

- Understanding and Modeling Freight Stakeholder Behavior
- Understanding the Land Use – Freight Transportation Connection

The first project will focus on how shippers, carriers, and receivers make decisions that affect freight transportation

activities. The second will probe the relationship between economic development and infrastructure performance and the effect of land use on the environment.



Associate Director Jessica Guo



# N E W S L E T T E R

## Traffic Operations and Safety

Dr. David Noyce's STAR group will focus on the following project:

- Traffic Management of Heavy Vehicles in Work Zones

In rural areas across the U. S., highway work zones cause up to 90% of traffic delays. With freight traffic expected to double by 2035, traffic management in work zones is a priority. The STAR project deals with freight demand management & traffic operation. An adaptive work zone management system using advanced traveler information system (ATIS) technology, for example, would forewarn travelers of road closures and incidents on highways but requires in-depth study of route choice behavior to affect freight management.



Associate Director David Noyce

**Energy and Environment.** Dr. Tracey Holloway's STAR will investigate two projects related to the issues of freight, air quality, and public health:

- Sustainable Freight Infrastructure to Meet Climate & Air Quality Goals
- Assessment of Near-term Strategies for Freight Transport Emissions Reduction over 10 Years



Associate Director Tracey Holloway

Carbon dioxide, fine particulate matter, nitrogen oxides, sulfur dioxide and hydrocarbons when released into the atmosphere affect climate change and pose public health risks. Researchers propose using intermodal freight approaches to reduce freight emissions that will require cost-benefit analyses and changes in industry operations and public policies while maintaining mobility standards and economic productivity. The project will develop models and measurement methods to determine the impact of freight on air quality and develop mitigation strategies for local communities with high exposure levels.

## Containerization: Weighing Shipping versus Safety

For the remainder of the year, CFIRE is collaborating with Wisconsin DOT's bureau of planning and economic development staff to collect data and analyze shipping activities and regulations to determine the cost-benefit effect of raising vehicle load limits on Wisconsin's international containerized imports and exports.

CFIRE researchers will examine current international container shipments of top commodities, and others that could be shipped in and out of Wisconsin if vehicle load limits were increased. Researchers will identify select commodities, shippers, and highway routes to accurately assess the effect of vehicle load limits on the supply chain, cost-efficient freight movement, and highway infrastructure and safety. Shippers could benefit, for example, from better on-site packing that could eliminate the current practice of container breakdowns at shipping hubs that affect the supply chain but are required so shippers meet Wisconsin's size and weight regulations. As part of this project, CFIRE researchers will tour a Chicago freight yard to directly observe the containerization process and the breakdowns of international containers headed to Wisconsin.

WISDOT survey data meanwhile will assist CFIRE researchers in developing a containerization route map that will show the volumes and travel distances of top commodity shipments along various state highways.



## A New Look at . . .

# Sustainability

In a Mid-Continent keynote speech, a UW-Madison engineering professor said facts must replace myths in infrastructure planning

Sustainable development would reach mutually beneficial goals if researchers take a fresh look at the freight and infrastructure picture as they move ahead and apply new ways of thinking to their planning efforts.

That from John S. Nelson, adjunct professor in the department of Civil and Environmental Engineering at the University of Wisconsin-Madison, delivered a keynote address, “Sustainable Development – A Different Definition of Progress” at the Mid-Continent Transportation Research Forum August 14.



Nelson speaks at Mid-Continent Luncheon August 14, 2008

Nelson said sustainable development approaches to freight transportation infrastructure must be “serious, urgent, and global,” an action-oriented forward movement from the current starting point. Nelson added that progress needed to be defined as finding solutions for all interests based on the triple bottom line theory that discards commonly held myths and confronts brutal facts to solve problems from social, economic and physical/environmental perspectives. Nelson urged researchers to honestly assess limits and consider scalability in evaluating potential strategies, such as the energy return on investment (EROI) that compares energy value to cost of production.

Nelson complimented CFIRE for its rethinking of the concept of mobility, concluding that researchers must confront the brutal facts and be involved in the policymaking process that will map freight’s future.

A copy of Nelson’s presentation is available on the Forum’s website.

## 21st Century Workforce Summit: December 8-9, 2008

Demand isn’t limited to freight logistics issues. The transportation industry needs workers, researchers, and educators now and in future years.

The **2008 21st Century Workforce Summit December 8-9 at Madison, Wisconsin** addresses these concerns. The Wisconsin Transportation Center, CFIRE, the Federal Highway Administration (FHWA), and the Wisconsin Department of Transportation (WISDOT) are cosponsoring the summit to provide a picture of transportation employment needs by 2020, the effect of transportation advancement on the workforce and the skills and learning needs that transportation careers will require.

“Transportation growth and retirements will create many career opportunities,” CFIRE director Teresa Adams said. “CFIRE has worked with industry and educational professionals to encourage entry into the field. The summit is an opportunity to learn more about what the future holds.”

For more information contact the center or visit our website. <http://cfire.wistrans.org> or [www.wistrans.org/cfire/21stCenturyWorkforceSummit](http://www.wistrans.org/cfire/21stCenturyWorkforceSummit).



## Wittwer Named MVFC Facilitator

The Mississippi Valley Freight Coalition (MVFC) has a new facilitator with years of experience in regional freight transportation research. As MVFC completes its third full year serving a 10-state Midwest region, Former MRUTC director Ernie Wittwer believes that members must continue outreach and peer collaboration efforts to meet multimodal regional freight needs in the 21st Century.



Ernie Wittwer

A new plank in the MVFC platform is a strong emphasis on educating and informing policymakers, industry stakeholders and the general public on the basics of freight, its importance to regional economies and the value of public-private partnerships in balancing economic competitiveness and infrastructure investment with environmental protection and efficient uses of traditional and renewable fuel sources.

Wittwer noted that the Midwest region generates a third of the U.S. durable goods gross national product, calling the 10-state Mississippi Valley region the “manufacturing hub of the country.” Nearly 85% of the automotive industry is located in the region, with three-fourths of soybean and feed grain shipments, half of U.S. livestock exports, one-third of dairy and wheat commodities and one-fifth of chemical and pharmaceutical manufacturing business generated from the Midwest.

“One of my goals for next year is to put more energy into private sector participation in our ongoing activities,” Wittwer told the CFIRE Executive Committee at its August 13 meeting. “They have the most to gain from what we’re doing.”

Current MVFC projects are already headed in this direction. A regional truck parking project asked truckers, transportation planners and law enforcement officials to identify truck parking needs. Researchers received nearly 250 responses to a Web-based interactive survey. The MVFC freight bottleneck alleviation project is using a similar approach to determine the most serious freight delay locations and use stakeholder input to develop alleviation strategies.

The ongoing Freight Traveler Information Clearinghouse project is aimed at providing real-time travel information via radio, telephone, and Web sites through an interactive system allowing travelers quick access to information on accidents or upcoming delays, road closures, and weather conditions.

The online Logistics Short Course is designed to educate all interested parties about the importance of freight. MVFC also plans to produce a newsletter and expand its Web site so people are able to learn more about the significance of freight, Wittwer said.

For 2009, Wittwer believes performance measures for freight could provide an impetus for federal funding reauthorization. “With an uncertain supply of federal dollars, it helps to show how transportation research funds have been used to effectively address current and future issues,” he concluded.

### MVFC Projects 2008-2010

1. **Develop and Disseminate Outreach Materials and Media Kits on Freight**
2. **Develop Regional Recommendations for Federal Reauthorization**
3. **Transportation Profiles for MVFC Commodities and Industries**
4. **Performance measures for evaluating multi-state freight projects**
5. **Critical Sections and Resiliency of Freight Corridors in the MVFC freight network**
6. **Member Communication Services for the MVFC Pooled Fund Activities**





## Wisconsin Truck Parking Study

Truck parking has become a nationwide freight transportation problem. There's more freight movement by truck and a shortage of truck parking spaces that would reduce congestion and improve road safety by providing rest stops for truckers required to follow hours of service rules designed to reduce fatigue-related accidents.

In their quest to develop low-cost strategies to expand truck parking in Wisconsin, CFIRE researchers found that truck stops, weigh stations, and rest areas could provide more spaces. Some potential sites, however, would require costly land purchases or larger footprints at truck stops. Large sites tend to fill up at peak times, forcing truckers to park overnight on highway ramps or in customer



CFIRE researchers visited the World's Largest Truck Stop on Interstate 80 in central Iowa parking lots, sometimes being forced to move midway through their required rest periods. Some truckers end up circling around, looking for spaces and miss deadlines, resulting in lost pay, disciplinary action, or both.

### What are some possible solutions?

The research team has begun to evaluate a host of possible underutilized parking areas. County fairgrounds, parks, or malls and sports arenas could be used for truck parking during nonuse periods. Local ordinances could require industrial or business parks to include truck parking facilities in their site plans. Municipalities could also allow deliveries between 8 p.m. and 6 a.m. to reduce the demand for overnight truck parking.

## MVFC Truck Parking Survey

From nearly 250 surveys, researchers found that truckers ranked available fuel, restroom facilities and food as the most important needs at a truck parking location, followed by level spaces with ample lighting and minimal noise; security; and proximity to their destination. Researchers conducted the survey at an Iowa Truckers Jamboree along Interstate 80 in July and at various truck stops around the region. Special mention should be given to Binnema Planeview Travel Plaza at Highways 26 and 41 in Oshkosh, Wisconsin for providing booth space and other services to researchers.



CFIRE's Bruce Wang with student researcher Preston Judkins at Iowa Truck Jamboree

More survey results are available at <http://www.mvfcpraveen@cae.wisc.edu/visualizer>

## TDA Forum: "Our Future is Riding on It"

On November 12th and 13th, 2008, the Transportation Development Association of Wisconsin has organized a critical forum on transportation funding priorities for the next Wisconsin biennial budget cycle 2009-2011.

TDA has recruited national and local transportation leaders to present the transportation dollar dilemma and the challenges facing Wisconsin and the nation.

For updates on the TDA forum, go to <http://www.ourfutureisridingonit.com>.



FALL 2008



# N E W S L E T T E R

## GLMRI Maritime Network

CFIRE research partners envision a seamless, sustainable information delivery system to serve the Great Lakes and St. Lawrence Seaway commercial shipping interests.

CFIRE research partners from the Great Lakes Maritime Research Institute (GLMRI) at the and the University of Toledo Intermodal Transportation Institute (ITI) envision an accessible data bank of all freight movements

with a delivery site for maps, tables, graphics and text to provide information on demand and a data exchange – basically an electronic library of maritime data and research. Users could follow vessel movements, commodity flows, and economic activity for Great Lakes ports, once enough data is plugged into the system. A value-added feature would link data bases and provide port and dock locations - - with aerial photos and



The Great The The Great Lakes Marine Transportation System (GLMTS) serves 50 regional and 15 international ports

and transactions. Users would learn the effects of maritime freight movements on the economy, the effects of various freight modes on congestion, and the potential impacts of shifting freight or maritime shipments to other transportation modes.

The system would have an Internet-based GIS viewer

satellite images -- in an integrated network.

CFIRE partner University of Toledo Prof. Peter Lindquist expects data collection to be an ongoing activity before the system is operational. To learn more, visit <http://www.utoledo.edu/research/ITI>

## Against the Grain

Freight bottlenecks caused costly delays in U.S. grain shipments this year, once again showing the need for an improved intermodal freight infrastructure system in the Midwest region.

In August, the Associated Press reported that transportation infrastructure delays were costing millions of dollars and threatening U.S. position in the world grain market. An Aberdeen Group study found that 58% of businesses had financial losses in the past year from supply chain disruptions, a majority (56%) from supplier capacity not meeting demand.

This has enormous implications for the Midwest region. According to the National Corn Growers Association (NCGA), all 10 states in the Mississippi Valley Freight Coalition (MVFC) produced their highest - ever corn yields, highest price per bushel, and highest production value in 2007. (See table next page). The MVFC region produces roughly 70 percent of the U.S. corn crop at an average price of four dollars a bushel. Twenty percent of the U.S. corn crop is exported and and 2/3 of Mississippi River shipping volume is grain.

Bob Oleson of the Wisconsin Corn Growers Association says shipping delays occur in part because of a lock and dam system built in the 1930s for half the capacity of today's grain barges. The 600-foot locks force operators to reconnect towboats on the other side to push cargo through. Product losses result from grain loads piling up waiting for space on barges or railroad cars. Oleson says new locks will help but the \$2.5 billion for lock and dam improvements in the 2007 Water Resources Development Act has not been released.

### Intermodal efficiency

Barges and rail are efficient intermodal carriers but economics affects both. NCGA found that barges travel farther on a gallon of fuel than trains or trucks while reducing highway congestion and rail crossing delays. The Association of American Railroads (AAR) reports that railroads account for 41 percent of freight ton-miles. *Continued next page*



# NEWSLETTER

## Grain Movements & Mississippi Valley Freight continued from page 7

MVFC State	Yield (bushels)	Price / bushel	Prod. value
Iowa	2.37 billion	\$4.00	\$9.5 billion
Illinois	2.3 billion	\$4.05	\$9.25 billion
Minnesota	1.13 billion	\$3.85	\$4.4 billion
Indiana	987 million	\$4.05	\$4 billion
Kansas	518 million	\$4.10	\$2.07 billion
Missouri	461 million	\$3.95	\$1.8 billion
Wisconsin	443 million	\$3.90	\$1.725 billion
Ohio	470 million	\$3.30	\$1.55 billion
Michigan	291 million	\$3.95	\$1.15 billion
Kentucky	175 million	\$4.10	\$719 million

**Nine of 10 MVFC states exceeded \$1 billion corn production value in 2007**

Intermodal traffic has quadrupled over the last 25 years. In 2007, railroads hauled 12 million containers and trailers of raw materials, farm products, and consumer goods. Food and farm produce, however, brings in only 15 percent of gross freight revenue. Revenue per car has declined in recent years.

Freight railroads, however, need revenue to improve capacity. Though

safe and efficient, freight rail itself faces global competitive challenges that have a multi-billion dollar price tag if the industry is to stay on track. At the same time, small town agricultural shippers say they can't afford current rail rates but have few options, according to the National Association of Wheat Growers and the Agricultural Retailers Association.

**CFIRE, MVFC role**  
The projection for 2020 is a 44 percent increase in rail freight and a 62 percent increase in truck freight, producing a 57 percent increase in freight tonnage. If rail capacity stays the same, highway congestion will likely slow freight to a crawl.

Research continues on developing freight commerce corridors, short-sea shipping and other intermodal intermodal options. The Upper Midwest Freight Corridor Study (conducted by the MRUTC) recommends that shippers share information to improve efficiency and security and that railroads receive more public money for infrastructure.

CFIRE and MVFC have involved freight stakeholders in freight planning, demand forecasting, and multi-state collaboration to build a freight roadmap that needs infrastructure capacity and efficiency to meet increasing demand.

“Shifting freight loads from highways to other transportation modes is a critical technical research area,” CFIRE director Teresa Adams said. “Commodity shipments are booming, freight modes are thriving, but infrastructure can't keep up. We must continue to seek innovative ways to improve intermodal regional freight systems.”

### Wang Joins Texas A & M CE Faculty

CFIRE researcher Dr. Bruce X. Wang is now an assistant professor of civil engineering at Texas A&M University.



Dr. Wang takes the next career road

At CFIRE, Wang's primary responsibility was multi-state corridor research and proposal development. Recent projects dealt with logistics education and trucking regulations, including size and weight limits and truck parking.

Dr. Wang has published papers on transportation logistics, traffic control, and intelligent transportation systems.

Before joining CFIRE, Dr. Wang taught transportation and logistics management as an assistant professor at UW-Superior for 4 1/2 years. Dr. Wang holds a Ph.D. from the University of California-Irvine and worked in railway operations in China for five years.



**THANKS, BRUCE, & GOOD LUCK**



# N E W S L E T T E R

## Container Regulations

### by State

From CONTAINERIZATION p. 3

Generally, states follow federal regulations for truck size and weight limits and container sizes and weights to promote safe travel and preserve investment in infrastructure. Maximum width and height for trucks tends to follow federal regulations but states in the Midwest Region have different maximum lengths for trucks depending on commodity and number of axles.

The maximum gross weight limits for each state in the 10-state Mississippi Valley Region are as follows:

**Illinois** -- 80,000 pounds for truck tractor with 2 or 3 trailing units or other configurations;

**Indiana** -- 127,400 pounds for 2 or 3 trailing units, 80,000 for others;

**Iowa** -- 129,000 pounds for 2 or 3 trailing units; 80,000 pounds maximum gross weight with 96,000 maximum allowed for livestock and construction vehicles.

**Kansas** -- 80,000 pounds maximum gross weight limit; 120,000 pounds for units with two or three trailers;

**Kentucky** -- 80,000 pounds for all configurations.

**Michigan** -- 164,000 pounds for units with a truck tractor and two trailing units; 80,000 pounds for all other configurations, with weight and length increases allowed for logs, pulpwood, farm products, concrete pipe and for certain types of auto allowed for livestock and construction vehicles.

**Minnesota** -- 80,000 pounds for all configurations, with slightly higher exceptions for livestock and farm produce.

**Missouri** -- 120,000 pounds for trailers, 80,000 for other configurations

**Ohio** -- 127,400 pounds for vehicles with two trailers and 115,000 pounds for three trailers; 80,000 pounds for other configurations

**Wisconsin** -- 80,000 pounds maximum gross weight for all configurations, with increases allowed for milk hauling and transport of hay, vegetables, potatoes, and cranberries.



Some Midwestern states have separate truck size and weight limits for transporting milk and farm produce.

## CFIRE Helps with Onboard Survey

CFIRE, MRUTC, and the Traffic Operations and Safety (TOPS) Laboratory conducted an onboard ridership survey of Madison Metro riders for the region's Transport 2020 Initiative this spring.

Teams of surveyors from UW-Madison conducted on-board surveys three days a week from February through early May. All Madison Metro routes were surveyed from 6:00 a.m. until 2:00 p.m. Civil and Environmental Engineer Professor David Noyce led the effort and CFIRE deputy director Jason Bittner was co-principal investigator.

Approximately 45 grad and undergrad students from across campus were involved. Surveyors interacted with passengers on board and provided a 3-5 minute questionnaire. Questionnaire topics included personal travel times, frequency of travel, boarding areas, intended destinations, and overall rider satisfaction.

Responses will be used as

part of the FTA new start application by the City of Madison, Dane County, and the Wisconsin Department of Transportation. In addition, Metro and UW staff will use the data to plan future routes schedules.

## Wisconsin Transportation Reception

The 88th annual Transportation Research Board (TRB) annual meeting will include the 2009 Wisconsin Transportation Reception hosted by the Wisconsin Transportation Center and Transportation Development Association of Wisconsin (TDA). The reception will be held on Tuesday, January 15, 2009 from 6:00 p.m. to 7:30 p.m. at the Marriot Wardman Park Hotel, 2600 Woodley Road, NW, Washington, D.C. Room TBD.

Sponsors include private industry and several CFIRE partners: UW-Milwaukee, UW-Superior, RMRC and Construction & Materials Support Center, and the Great Lakes Maritime Research Institute (GLMRI) among others.



FALL 2008

# N E W S L E T T E R

## RMRC, FHWA offer Webinar

A Web-delivered course on foundry sand recycling for highway projects is available through the UW-Madison-based CFIRE affiliated Recycled Materials Resource Center (RMRC), and the Federal Highway Administration (FHWA). The online course, *Using Foundry Sand in Transportation and Civil Infrastructure Applications*, will focus on the engineering properties of foundry sands and using the

interactive Web sessions every Thursday from Oct. 16 through November 20, 2008, beginning at noon Eastern Time, 11 a.m. Central.

The course is useful for design engineers, regulatory review professionals, contracting service personnel, contractors, public professionals, dam owners, biologists, and planners.

“Our WisLine Web



Recycled materials are increasingly used in base foundations for new or resurfaced roads

recycled material in designing hot mix asphalt, controlled low strength material, pavements in base and subbase, for embankments, retaining structures, and structural fill. Students will evaluate the environmental suitability of foundry sands for infrastructure construction.

EPD course K479 will consist of six one-hour

conferencing system combines an audio teleconference with visually interactive Web-based materials,” program director Philip R. O’Leary said. “You can participate in this course from anywhere you have access to the Internet and a telephone.”

To enroll, go to <http://epdweb.engr.wisc.edu/>.

*In P. J. Russell’s 1971 trucking history, **The Motor Wagons**, the author predicted that someday “fantastic memory computers will be able to keep track of every bit of freight shipped in the country -- when it left, when it will arrive, where it is now, and the possibility of losing a load of freight, even for a few hours, will be lessened.” Russell also forecasted gas turbine, electric or fuel cell-powered trucks.*

One out of four isn’t bad.

*(The Motor Wagons, p. 33)*

## Minnesota Freight Symposium Scheduled

Skyrocketing energy costs are squeezing every sector of the economy like never before, triggering a chain reaction of price increases and a rethinking of total-cost concepts for freight and goods distribution. The 12th annual CTS Freight and Logistics Symposium, titled “Energy Uncertainties: Supply Chain Impacts in the Upper Midwest,” will explore these issues on December 5, 2008, at the Four Points Sheraton in Minneapolis.

Energy uncertainties affect location decisions, inventory carrying and turning, and delivery mode choice. Representatives from the business community, academia, and the public sector will discuss the impact of energy issues on the supply chain as well as options for meeting energy needs and possible public policy alternatives. Craig Simon, president of supply chain services with FedEx, will make the keynote presentation about companies adapting to the next generation of global trade and generating new efficiencies along the way.

For registration, visit [www.cts.umn.edu/events/FLOGSymposium](http://www.cts.umn.edu/events/FLOGSymposium). You may also contact Sara Van Essendelft, 612-624-3708, [cceconf5@umn.edu](mailto:cceconf5@umn.edu).



# N E W S L E T T E R

## TMP Study Backs

### Clean Cabs

Transportation Management and Policy (TMP) students at the UW-Madison have recommended a trial program during which Madison-based Union Cab Cooperative will experiment with more fuel-efficient fleet cars known to produce lower CO2 emissions and collect evaluation data from actual cab rides. TMP students surveyed UW students, faculty and staff as well as members of Union Cab Cooperative. Generally, respondents supported the idea of a cleaner, fuel efficient fleet. A one-cent per mile surcharge could help pay for carbon credits that reward businesses for initiatives that reduce CO2 emissions or remove CO2 from the atmosphere. Students advised continued evaluation of vehicle and fuel types and capital costs of fleet conversion or replacement. The TMP graduate engineering students to pursue topics of choice and make presentations for credit as part of their professional training.

## CFIRE WIRE . . .

**The U.S. Environmental Protection Agency (EPA)** has awarded \$3.4 million for clean diesel projects under its diesel emissions reduction program. Three organizations -- Community Development Transportation Lending Services, Cascade Sierra Solutions, and the Owner-Operator Independent Drivers Association -- will share the grant to help small trucking companies lower fuel costs and emissions through loans and rebates for projects that save fuel and lower greenhouse gas and exhaust emissions from diesel engines. The grants are expected to save trucking \$72 million in fuel costs per year, according to an EPA spokesperson.

**A new railroad safety reform bill** would require new technology to prevent crashes and limit hours engineers can work. The proposal includes installation by 2015 of technology that would engage brakes if a train misses a signal or gets off track. The requirement would cover all passenger rail lines and freight lines carrying hazardous materials. The legislation is in response to a collision between a commuter train and a freight train Sept. 12 that killed 25 people in Los Angeles.

**The Center for Excellence in Rural Safety** reports that the traffic fatality rate on rural roadways remains more than twice that in urban areas. Factors in fatal crashes include alcohol impairment, driver inexperience, driver behaviors, and frequency of seat belt use.

## TRANSPORTATION PROGRAM COURSE OFFERINGS THROUGH: D E P A R T M E N T O F *Engineering Professional Development*

The following transportation short-courses are being offered by the University of Wisconsin-Madison. Please refer to the EPD course web pages for more information: <http://epdweb.engr.wisc.edu/> Click on "Courses" then "Civil and Environmental Engineering Courses".

Title	Course Number	Date(s)	Location
Freight Railroads: Best Operating Practices <i>CFIRE Scholarships Available</i>	K111	October 21-22, 2008	Madison, Wisconsin
RMRC Webinar Course: Using Foundry Sand in Transportation and Civil Infrastructure Applications.	K479	Oct. 16-Nov. 20, 2008	Online through RMRC
Railway Track Systems: University Education and Training for the Rail Industry	K202	Nov. 17-18, 2008	Sunnyvale, California
Improving Public Works Construction Inspection Skills		January 20-21, 2009	Madison, Wisconsin
Engineer in Transition to Management	K310	January 26-28, 2009	Las Vegas, Nevada
Structural Design of Masonry Systems	K016	January 26-27, 2009	Madison, Wisconsin
Introductory Principles of Engineering Project Management	K188	Feb. 9-10, 2009	Las Vegas, Nevada
Management Skills for Engineering Capital Projects	K189	Feb. 11-12, 2009	Las Vegas, Nevada
Watershed Modeling Using the New HEC-HMS	J973	March 31-April 2	Las Vegas, Nevada





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

## October

- **American Association of State Highway and Transportation Officials (AASHTO) Annual Meeting October 16-20, 2008 Hartford , Connecticut** <http://www.transportation.org/meetings/93.aspx>
- **National Motor Freight Traffic Association (NMFTA) Annual Meeting October 20-21, 2008 Alexandria , Virginia** <http://www.nmfta.org>
- **America Road and Transportation Builders Association (ARTBA) National Convention October 21-24, 2008 Chicago , IL** [http://www.artba.org/meetings\\_events/meetings\\_index.htm](http://www.artba.org/meetings_events/meetings_index.htm)
- **Transportation Research Board (TRB) Rethinking Transportation for a Sustainable Future, October 28-29, 2008 Louisville , KY** <http://www.rethinkingtransportation.com/location.htm>
- **Intermodal Association of North America (IANA) Intermodal Expo & Annual Membership Meeting November 15-18, 2008 Fort Lauderdale , FL** [http://www.intermodal.org/events\\_files/expo\\_files/index.html](http://www.intermodal.org/events_files/expo_files/index.html)
- **National Industrial Transportation League (NITLeague) 101st Annual Meeting and TransComp, November 15-19, 2008 Fort Lauderdale , FL**
- **15th World Congress on Intelligent Transport Systems & ITS America's 2008 Annual Meeting & Exposition November 16-20, 2008 New York , NY** <http://www.itsa.org/worldcongress.html>
- **Small Business Administration (SBA) Labor Safety (OSHA/MSHA) Roundtable, November 21, 2008 Washington, D.C.**

## November

- **2008 Railroad Environmental Conference, November 4-6, 2008, University of Illinois at Urbana-Champaign,** [hagemann@uiuc.edu](mailto:hagemann@uiuc.edu)
- **Council of Supply Chain Management Professionals (CSCMP) Fundamentals of Supply Chain Management Workshop, November 13-14, 2008 Lombard, IL,** <http://cscmp.org/events/fundamentals/Chicago08.asp>
- **Summit on Agricultural and Food Transportation, December 1-3, 2008 Washington , DC** <http://www.agandfoodtrucking.org/>
- **2008 Transportation Workforce Summit, December 8-9, Madison, Wisconsin. Sponsored by CFIRE, FHWA, and the Wisconsin DOT.** [adams@engr.wisc.edu](mailto:adams@engr.wisc.edu) or <http://wistrans.org/cfire/workforce>

For other events, go to <http://www.wistrans.org/CFIRE>

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.

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