

MISSISSIPPI VALLEY



FREIGHT COALITION

# MVFC Conference & Annual Meeting

April 27-29, 2010  
Cincinnati, Ohio

## National Center for Freight and Infrastructure Research & Education (CFIRE)

Jason Bittner & Teresa Adams

April 27, 2010



# CFIRE

- ❖ **VISION:**  
The National University Transportation Center at the University of Wisconsin-Madison will 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.
- ❖ **MISSION:**  
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.
- ❖ **THEME:**  
**Sustainable Freight Transportation Infrastructure and Systems**



# CFIRE STARS

- ❖ **Design, Materials & Construction Processes for Highway, Harbor & Rail Infrastructure – Prof. Mike Oliva**
- ❖ **Multimodal Systems Planning and Optimization – Prof. Jessica Guo**
- ❖ **Traffic Operations and Safety – Prof. David Noyce**
- ❖ **Energy and Environment – Prof. Tracey Holloway**



# National Responsibility



## National Transportation Centers:

*The role of each center shall be to advance significant transportation research on critical national transportation issues and to expand the workforce of transportation professionals (from SAFETEA-LU)*



## Transformational Change:

- Sustainable Freight Transportation Infrastructure and Systems
  - Economic
  - Environmental
  - Social



# CFIRE and the MVFC

- ❖ **Key partners and cross-representation**
- ❖ **UW-Madison's CFIRE provides \$125,000 annually for MVFC efforts**
- ❖ **Project leadership**
- ❖ **Administrative services**



# CFIRE Team

## CFIRE Faculty



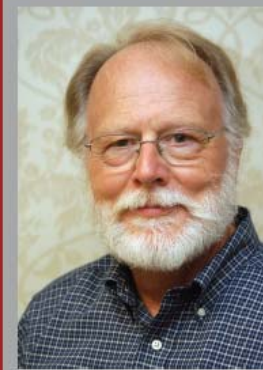
Teresa Adams  
Director &  
Principal Investigator



David Noyce  
Associate Director  
Traffic Operations  
& Safety



Jason Bittner  
Deputy Director

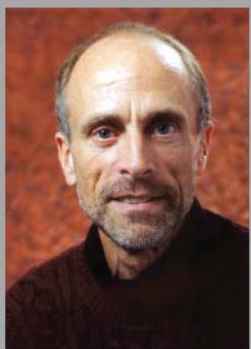


Ernie Wittwer  
Mississippi Valley Freight  
Coalition Facilitator



Greg Waidley  
Research & Education  
Programs Coordinator

## CFIRE Staff



Michael Oliva  
Associate Director  
Design, Materials, &  
Construction Processes



Tracey Holloway  
Associate Director  
Energy & Environment



Jessica Guo  
Associate Director  
Multimodal Systems  
Planning & Optimization



Steve Wagner  
Communications



Bob Gollnik, Jr.  
Researcher



Jessie Hanz  
University Services  
Associate





# Students



Patrick Fuchs  
Project Assistant  
La Follette School of  
Public Affairs



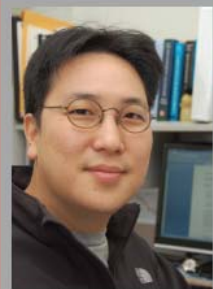
Spencer Gardner  
Project Assistant  
Urban and Regional Planning



Dadit Hidayat  
Project Assistant  
Nelson Institute for  
Environmental Studies



Emil Juni  
Project Assistant  
Civil and Environmental  
Engineering



Myungook (MK) Kang  
Project Assistant  
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Dan Kleinmaier  
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Ravi Pavuluri  
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Kaushik Reddy  
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Bickey Rimal  
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Kanisa Rungjang  
Project Assistant  
Transportation Engineering



Mamata Shrestha  
Project Assistant  
Construction Engineering  
Management



Edwia Toledo-Duran  
Project Assistant  
Civil and Environmental  
Engineering



Erik Viel  
Project Assistant  
La Follette School of  
Public Affairs



# Context for Transportation

- ❖ **Safety**
  - *Improving the safety of U.S. transportation facilities and systems.*
- ❖ **Livability**
  - *Improving the quality of living and working environments.*
- ❖ **Economic Competitiveness**
  - *Contributing to the economic competitiveness of the United States.*
- ❖ **Sustainability**
  - *Improving energy efficiency, reducing dependence on oil, reducing greenhouse gas emissions and benefitting the environment.*
- ❖ **State of Good Repair**
  - *Improving the condition of existing transportation facilities and systems, with particular emphasis on projects that minimize life-cycle costs.*





# CFIRE Research Efforts

## Grant Year 4 Projects Currently Being Reviewed

- Expect to award \$1.8 million in new projects

## Over 75 current projects, most with Midwest and regional focus

- Examples: Air Emissions, Modeling Freight Stakeholder Behavior, Energy Use, Commodity Analysis, Intermodal Competitiveness

