2011 Transportation Hazards and Security Summit

Looking Beyond the 10th Anniversary of 9/11

August 22-24, 2011
Arnold and Mabel Beckman Center of
The National Academies of Science and Engineering
Irvine, California

Jointly Sponsored by
Transportation Research Board
Federal Highway Administration
Transportation Security Administration, Department of Homeland Security
American Association of State Highway and Transportation Officials
Arnold and Mabel Beckman Conference Center
Floorplan

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All Plenary Sessions are located in the Auditorium
Registration, Breaks and Exhibits are located in the Atrium
2011 Transportation Hazards and Security Summit:
Looking Beyond the 10th Anniversary of 9/11

MONDAY, August 22, 2011

11:00 a.m.-5:00 p.m.  Registration  Atrium

Plenary Session 1: Welcome and Keynote Address
1:00 p.m.-2:00 p.m., Auditorium
Looking Beyond the 10th Anniversary of 9/11: Manmade and Technological Emergencies
Stephan A. Parker, Transportation Research Board
Keynote Address: Emergency Management Planning in the Greater New Jersey Region
Henry P. Cortacans, New Jersey Emergency Medical Services Task Force

2:00 p.m. – 2:15 p.m.   Break and Exhibits   Atrium

Breakout Session 2A: Aviation Security - The Evolution of Best Practices
2:15 p.m.-3:45 p.m.   Boardroom
Richard W. Bloom, Embry-Riddle Aeronautical University, presiding
In an ever-changing world, how does one keep pace with optimal security policies, plans, and programs? Salient issues include the collection, analysis, production, transmission, and protection of intelligence; matching technologies to threats, vulnerabilities, and risks; the validity of profiling and behavior detection systems; assessing security programs and the incremental effectiveness of layers of security; comparative economics of aviation operations and security programs; the impact of domestic, regional, and global politics; and the mass communication of aviation security issues and events.
Panelists:
Arnold Barnett, Massachusetts Institute of Technology
Sheldon Jacobson, University of Illinois at Urbana-Champaign
Vahid Motevalli, Purdue University

Breakout Session 2B: Ports and Waterways
2:15 p.m.-3:45 p.m.   Balboa Room
Norman Fassler-Katz, Select Committee on California Ports and Goods Movement, presiding
The nation’s ports and waterways have made significant strides in improving security, both on shore and in the water, but challenges and vulnerabilities remain. The U.S. water transportation network consists of hundreds of coastal, river, and Great Lakes ports with both cargo and passenger terminals. The domestic and global economy depend on commercial shipping as a reliable, cost efficient method of transporting goods and the sheer volume of trade through the ports and on the waterways makes them a target. An attack, natural disaster, or major infrastructure failure on any aspect of the water transportation network could hamper trade and have a significant impact on both the national and global economy.
Panelists:
Security at the U.S. Coastal Seaports
Cosmo Perrone, Cosmo Perrone and Associates, LLC
The Role of Inland Waterways in Response and Resiliency
Heather Nachtmann, University of Arkansas, Fayetteville
Cascading Impacts on Inland Waterways
Jeffrey L. Western, Western Management and Consulting, LLC
Breakout Session 2C: Mass Transit and Passenger Rail Security - Post 9/11, Post Bin Laden
2:15 p.m.-3:45 p.m.  Newport Room
Yuko J. Nakanishi, Nakanishi Research & Consulting, LLC, presiding
Millions of Americans rely on mass transit and passenger rail to get to work and other destinations each day. The consequences of an attack directed against mass transit and passenger rail would be devastating. An attack would likely mean numerous deaths and injuries, significant infrastructure damage, and a major hit to the economy. Speakers will describe evolving threats to U.S. transit systems – passenger rail, subway, and bus -- post 9/11 and post Bin Laden.
Panelists:
Terrorist Threats to Passenger Rail and Rail Infrastructure
Brian M. Jenkins, National Transportation Security Center of Excellence
Keeping Americans Secure: Mass Transit and Passenger Rail Security - Ten Years after 9/11
Christopher McKay, DHS/TSA

Breakout Session 2D: Highway Infrastructure Security - Where Are We Going?
2:15 p.m.-3:45 p.m.  Huntington Room
Daniel M. Ferezan and Steven L. Ernst, Federal Highway Administration, presiding
The purpose of this interactive workshop is to seek answers to the following questions, with a focus on the security and protection of highway infrastructure in the face of terrorist act/criminal threat:
• Where are the current and future vulnerabilities?
• What actions are needed to eliminate them or mitigate the consequences?
The discussions will consider current highway infrastructure vulnerabilities and what can and should be done about them beyond the 10-year mark.

3:45 p.m. – 4:15 p.m.  Break and Exhibits  Atrium

Plenary Session 3: Report Out from Transportation Security Breakout Sessions 2A through 2D and FEMA Grant Program Update
4:15 p.m.-5:00 p.m., Auditorium
Update on FEMA Transportation Grant Programs (Transit and Ports)
Alexander Mrazik, Jr., U.S. Department of Homeland Security

Presentations

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TUESDAY, August 23, 2011

7:00 a.m. – 8:00 a.m.  Breakfast

7:00 a.m. – 5:00 p.m.  Registration  Atrium

Plenary Session 4: Keynote Address and Update
8:00 a.m.-9:30 a.m., Auditorium
Looking Beyond the 10th Anniversary of 9/11: Emergencies from "Natural" Disasters
Stephan A. Parker, Transportation Research Board
Keynote Address: Nature’s Timetable--If Not Now, When?
Kathleen Jane Tierney, Natural Hazards Center
Haiti Engineering: Action Update on the Haiti Earthquake
Herby Lissade, California Department of Transportation

9:30 a.m. – 10:00 a.m.  Break and Exhibits  Atrium

Breakout Session 5A: Assessment of Threat, Vulnerability, and Risk - The Knowns and Unknowns
10:00 a.m.-11:45 a.m.  Boardroom
Richard W. Bloom, Embry-Riddle Aeronautical University, presiding
Transportation security and hazards policies, plans, and programs are contingent on accurate assessment of threat, vulnerability, and risk. But what are the most reliable and valid approaches to such assessments? What are the strengths and weaknesses of various qualitative and quantitative assessment approaches? Of special note will be opportunity cost—i.e., what answers to assessment questions are precluded by an approach’s constraints and explicit and implicit assumptions.
Panellists:
Ernesto Acosta, Transportation Security Administration
Ernest Ronald Frazier, Countermeasures Assessment and Security Experts, LLC
Robert G. Ross, Department of Homeland Security; Michael Claude Smith, University of Virginia

Breakout Session 5B: Disaster Response and Recovery – Shelter-in-Place or Evacuate? Assessing Damage and Implementing Repairs
10:00 a.m.-11:45 a.m.  Balboa Room
Brian Wolshon, Louisiana State University, presiding
Among the topics discussed in this session are the results of a recent project funded by the United States Department of Health and Human Services to evaluate nursing homes in Louisiana in the wake of Hurricane Katrina to assist officials from these facilities to understand hurricane risks and support decision of whether to shelter-in-place evacuate. The discussion will also include the development of a methodology to quantitatively evaluate risks to life safety for sheltering in place versus evacuating.
Panellist:
Marc Levitan, National Institute of Standards and Technology
Breakout Session 5C: Resilience Measures and Implementation: State of Art and State of Practice  
10:00 a.m.-11:45 a.m.  Newport Room  
Vinayak V. Dixit, Louisiana State University, presiding  
This session will focus on the state-of-art and state-of-practice in studying and planning for resilient transportation systems. The following questions will be presented and discussed: - How is a transportation systems resiliency measured? - What are the methods used to measure resiliency? - How to plan for resiliency? - What were the experiences associated with implementation of a transportation system resiliency plan?  
Panelists:  
Statewide Planning for Freight System Resilience  
Barbara A. Ivanov, Washington State Department of Transportation  
Integrating Network Modeling with Economic Impact Studies and Resilience Measurement  
Li Zhang, Mississippi State University

Breakout Session 5D: Supply Chain Impacts and Disruptions from Manmade and Natural Disasters  
10:00 a.m.-11:45 a.m.  Crystal Cove Room  
Jeffrey L. Western, Western Management and Consulting, LLC, presiding  
This session will focus on the following topics: - Transportation supply chain impacts resulting from a disaster - Cascading supply chain impacts on other CIKR Sectors - Intermodal freight transport impacts - State transportation agency concerns and considerations - Subsector (aviation, maritime, mass transit, highway infrastructure and motor carrier, freight rail, pipelines) issues and concerns.  
Panelists:  
Michael Penders, Environmental Security International  
Martin Rojas, American Trucking Associations;  
Joshua Jordan, Department of Homeland Security  
David Thomas, Federal Bureau of Investigation

Breakout Session 5E: Responding to Multiple/Simultaneous Disasters – How Nimble and Resilient Are We in Making Multiple Decisions?  
10:00 a.m.-11:45 a.m.  Huntington Room  
Laurel J. Radow, Federal Highway Administration, presiding  
This session will examine what research is needed with regard to multiple events occurring at the same time in or around a single site. Issues for participants to consider include: - Conflicting guidance to the public - Heightened level of stress faced by first responders - Impact of financial constraints on training and equipment - Mix of expertise needed to respond to mix of disasters and how to coordinate response.  
Panelists:  
Solving Multi-Hazard Response Problems with State-Condition-Focused Modeling Frameworks  
Kenneth Gerald Crowther, MITRE Corporation  
What Does This Mean for State DOTs?  
John Contestabile, Johns Hopkins University
Plenary Session 6: Report Out from Transportation Risk and Emergency Management
Breakout Sessions 5A through 5E
1:30 p.m.-2:15 p.m., Auditorium
Stephan A. Parker, Transportation Research Board, presiding

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2:15 p.m. – 2:45 p.m. Break and Exhibits Atrium

Breakout Session 7A: Enhancing Emergency Response through Technology Innovations
2:45 p.m.-4:30 p.m. Boardroom
Yuko J. Nakanishi, Nakanishi Research & Consulting, LLC, presiding
This session will focus on the transportation technologies and related innovations made in recent years that will enhance emergency response. The fast pace of development in transportation and related technologies such as location-based technologies, communications technologies, signal preemption mechanisms, route optimization algorithms, and advent of social media are enhancing or have significant potential to enhance the response effort, saving lives and property. The session will cover existing and emerging transportation technologies and related innovations that will help responders identify all types of emergencies (terrorism, accidents, natural disasters), and identify research gaps that need to be addressed.

Panelists:
The Power of Location-Based Technologies
Diane Davidson, Oak Ridge National Laboratory
DHS Science and Technology Directorate
Mitchell Erickson, Department of Homeland Security
Technology to Enhance Response
John Contestabile, Johns Hopkins University

Breakout Session 7B: Communications
2:45 p.m.-4:30 p.m. Huntington Room
William Brownlow, AASHTO; Herby Lissade, California Department of Transportation, presiding
The session will be a discussion on communications structured within the framework of Plan, Prepare, Respond and Recover, and will cover planning communications protocols for both the responders and public information officers, conducting drills and exercises to prove the plan, analysis of an actual event (California wildfires) and how information flowed from the responders at the scene to the Emergency Operations Center and how the field reports were compiled and released to the public.

Panelists:
Role of the Public Information Officer in Disaster Communications
Terri Kasinga, California Department of Transportation
Fire Team Radio System Usage
Dave Schloss, San Marco Fire Department

Breakout Session 7C: Emergency Transportation Planning for Evacuation - Focus on Dependent and Vulnerable Populations
2:45 p.m.-4:30 p.m. Newport Room
Brian Wolshon, Louisiana State University, presiding
Discussion in this session will include key findings from recent evacuation planning efforts targeting vulnerable and dependent population. The first focuses on a soon-to-be-released Transit Cooperative Research Program (TCRP) study on Communication with Vulnerable Populations: A Transportation and Emergency Toolkit. The second will focus on results from a
recent Federal Transit Administration (FTA) sponsored pilot project to develop a planning framework for the Mid-Ohio Regional Planning Commission (MORPC). The purpose of this project was to develop a coordinated planning framework addressing the evacuation needs of populations who are not able to self-evacuate during a disaster. The presentation will discuss how such planning may be incorporated into local existing emergency management plans of other Emergency Management Agencies (EMA) around the country.

**Panelists:**
Communication with Vulnerable Populations: A Transportation and Emergency Toolkit
Deborah Matherly, Louis Berger Group, Inc.
John Porco, M Baker Corp

Breakout Session 7D: Logistics of Disaster Relief Aid
2:45 p.m.-4:30 p.m.  *Balboa Room*
Joedy Cambridge, Transportation Research Board, presiding
Coordinating public and private collaboration and implementing the logistics of getting relief aid to those who need it is a significant challenge in any type of major disaster. Coordinating the many aspects of getting goods and services to where they are most needed in a timely and efficient manner is a major challenge. This session will focus on best practices and new initiatives to improve this process.

**Panelists:**
Ines Pearce, Pearce Global Partners Inc.
Nathalie Butcher, Fritz Institute

Breakout Session 7E: Engaging the Private and Public Sectors for Collaboration
2:45 p.m.-4:30 p.m.  *Crystal Cove Room*
Michael G. Dinning, Volpe National Transportation Systems Center, presiding
While there has been a focus on essential public sector services that require continuity of operations in the event of all-hazards disruptions, there has been less attention given to private sector services. What is the role of public and private sector collaboration in resilience, preparedness, response and recovery? The session will feature two examples of successful regional efforts to engage the private sector to build regional and community resilience including corporate resources.

**Panelists:**
Paula Scalingi, Bay Area Center for Regional Disaster Resilience
Kiersten Todt Coon, Good Harbor Consulting, LLC
Charlotte Franklin, Arlington Office of Emergency Management

4:45 p.m. – 6:00 p.m.  **Reception and Exhibits**  *Atrium*
**WEDNESDAY, August 24, 2011**

7:00 a.m. – 8:00 a.m. **Breakfast**

7:00 a.m. – 10:00 a.m. **Registration**  **Atrium**

**Plenary Session 8: Keynote Speakers and Report Out from Response and Recovery**

**Breakout Sessions 7A through 7E**

8:00 a.m.-9:45 a.m., **Auditorium**

Joedy Cambridge, Transportation Research Board, presiding

**Keynote Address:**

**Resiliency and Port Security**

John Holmes, Port of Los Angeles

**Developments in Transit Security**

Brian Jenkins, Mineta Transportation Institute

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9:45 a.m. – 10:00 a.m. **Break and Exhibits**  **Atrium**

**Breakout Session 9A: Pandemic/Health Impacts – Where Partnerships Are Truly Essential and How Transportation and Health Can Inform Each Other**

10:00 a.m.-11:45 a.m. **Newport Room**

Laurel J. Radow, Federal Highway Administration, presiding

The session will discuss the best ways for the transportation sector to share what it knows with the health community and for the health community to share its expertise with the transportation sector.

**Panelists:**

**Health/CDC Perspective**

Andrew D. Plummer, Centers for Disease Control and Prevention (CDC)

**Transportation Perspective**

Peter LaPorte, Washington Metropolitan Area Transit Authority (WMATA)

**Breakout Session 9B: Cyber Security: What You Can Do To Address This Growing Threat**

10:00 a.m.-11:45 a.m. **Crystal Cove Room**

Michael G. Dinning, Volpe National Transportation Systems Center, presiding

The nation’s transportation systems are becoming increasingly dependent on the digital infrastructure and e-enabled vehicles, and the risks of potential disruption form cyber attacks are growing. This session will begin with a panel discussion highlighting the results of recent research in transportation cyber security, including programs in highways, aviation, ports and transit systems. The panelists will describe strategies to improve employee awareness and other human security challenges common to all transportation organizations. Panelists will describe new partnerships among federal, state and local agencies; industry and academia; and will provide information on a variety of resources available to increase cyber security awareness and to develop effective risk mitigation strategies. The session will conclude with a facilitated discussion to allow participants to share information on their concerns, best practices and research priorities in cyber security.

**Panelists:**

Michael G. Dinning, Volpe National Transportation Systems Center

Kelley Bray, Transportation Security Administration

Michael Murray, MAD Security, LLC
Breakout Session 9C: Environmental Impacts of Natural Hazards: Natech Events and the Transportation System
10:00 a.m.-11:45 a.m.  *Balboa Room*
Brian Wolshon, Louisiana State University, presiding

Natural disasters can trigger simultaneous technological disasters among critical infrastructure in impacted areas. Examples of these joint “Natech” events include hazardous material chemical releases from earthquakes and floods, damage to environmental infrastructure like water treatment plants and the secondary impacts caused by the generation and handling of large amount of debris. This session will use case studies to highlight the environmental impacts of such disasters and the impact on and of transportation resources and processes, including debris removal, separation, disposal, and storage. Participants will discuss the types of Natech events that interact with the transportation sector and identify research gaps that limit effective planning and risk management.

**Panelists:**
John Pardue, Louisiana State University
Laura Steinberg, Syracuse University

Breakout Session 9D: Economic Challenges of Transportation Security and Emergency Management
10:00 a.m.-11:45 a.m.  *Boardroom*
Yuko J. Nakanishi, Nakanishi Research & Consulting, LLC, presiding

Keeping transportation infrastructure in a “state of good repair” is challenging enough. Costs arising from new and expanded post-9/11 security and emergency management initiatives include training, awareness, and education initiatives, implementation and maintenance of technologies, and additional security personnel can strain agency budgets. Topics will include combining and mainstreaming security and emergency management, integrating security with safety programs, combining recovery and mitigation resource, innovative resource management, and best practices.

**Panelists:**
Emergency Management Funding Challenges: the State DOT Perspective
Herby Lissade, California Department of Transportation
Transit Infrastructure Protection: On-Time, Within Budget
Allen C. Smith, Metropolitan Transit Authority of Harris County Texas
Meeting the Economic Challenges of Transportation Security and Disaster Mitigation: A Strategic Approach
Yuko J. Nakanishi, Nakanishi Research & Consulting, LLC

Breakout Session 9E: Preparedness and Training - Public and Private Sector Perspectives
10:00 a.m.-11:45 a.m.  *Huntington Room*
Irvin S. Varkonyi, American Public University System, presiding

The interaction between public and private sectors is most notable in the movement of goods and people. Each must share common values which protects business operations and individual travel while also minimizing risk that flows from such activities. What impact do the NIPP, National Preparedness Guidelines, and PPD have on preparedness and training? TSA must constantly react to changes in transportation technology, business conditions, and a stream of new threats.

**Panelists:**
Interaction in the Movement of Goods and People
Seth Stodder, Palindrome Strategies, LLC
Information sharing to support transportation preparedness (HSIN-CS)
Daniel Schultz, Department of Homeland Security
Updates to the Transportation Systems Sector Specific Plan and Modal Annexes
Irvin S. Varkonyi, American Public University System

11:45 a.m. – 1:15 p.m.  Lunch

Plenary Session 10: Report Out from Breakout Sessions 9A through 9E and Facilitated Discussion on Setting Research Priorities and Next Steps
1:15 p.m.-3:30 p.m., Auditorium
Brian Wolshon, Louisiana State University, presiding

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EXHIBITORS

AASHTO SCOTSEM
Bureau of Transportation Statistics
Federal Highway Administration
First Observer
Haiti Engineering, Inc.
Mineta Transportation Institute
National Transportation Security Center of Excellence
Natural Hazards Center
Rutgers University
The Louis Berger Group, Inc.
TRB Cooperative Research Programs
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