



National Symposium: Impacts of Extreme Weather Events on Transportation



MEETING AGENDA



May 21–22, 2013
L'Enfant Plaza Hotel
Washington, DC

Photos courtesy of Alaska DOT (top left) and CalTrans (bottom left).





May 20, 2013

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| 3:00 p.m.–6:00 p.m. | Registration | Outside Quorum Room |
| 5:30 p.m.–7:00 p.m. | Reception | Solarium |

May 21, 2013

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| 8:00 a.m.–5:00 p.m. | Registration | Outside Quorum Room |
| 8:00 a.m.–9:00 a.m. | Breakfast | Solarium |
| 9:00 a.m.–9:30 a.m. | Welcome | Ballroom C/D |
| | Joan McDonald , Commissioner, New York State Department of Transportation; Chair, Sustainable Transportation: Energy, Infrastructure and Climate Solutions Steering Committee | |
| | Bud Wright , Executive Director, AASHTO | |
| | Gloria Shepherd , Associate Administrator, FHWA Office of Planning, Environment & Realty | |

Session I: State DOT Experiences with Recent Extreme Weather Events

Ballroom C/D
This session will feature case studies highlighting the extreme weather experiences of state DOTs. Case studies will describe impacts to transportation, share lessons learned on system performance, and contribute best practices.

Facilitator: **Karuna Pujara**, Maryland DOT

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| 9:30 a.m.–10:30 a.m. | Case Studies on Storms and Flooding | |
| | New Jersey DOT: Our Bout with Superstorm Sandy ; Richard Shaw, New Jersey DOT | |
| | Flooding in the Midwest: A Minnesota Case Study ; Andrea Hendrickson, Minnesota DOT | |
| | Impacts of “Snowmageddon” on Transportation ; Terry Bellamy, District of Columbia DOT | |
| 10:30 a.m.–10:45 a.m. | Break | |
| 10:45 a.m.–11:30 a.m. | Case Studies on Wildfires and Dust Storms | |
| | 2012 Waldo Canyon Fire ; David Watt, Colorado DOT | |
| | Dust Storms in Arizona: The Challenge to Ensure Motorist Safety ; Jennifer Toth, Arizona DOT | |
| 11:30 a.m.–Noon | Synthesis and Discussion of Recent State DOT Experiences with Extreme Weather | |
| | Karuna Pujara, Maryland DOT | |
| Noon–1:00 p.m. | Lunch and Presentation | Solarium |
| | Inland Waterway Navigation: Effects of Disruptions and Lessons Learned ; | |
| | Alan Meyers, Parsons Brinckerhoff | |

Session II: Extreme Weather Events—Trends, Projections, and Integrating Information into Decisions

This session will cover trends and projections for extreme weather events across the United States. It will also provide examples of how state DOTs have partnered with agencies such as NOAA in order to access needed information on extreme weather events. During discussions, participants will exchange ideas for integrating available information into transportation decision making.

Facilitator: **Elisabeth Kolb**, New York State DOT

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| 1:15 p.m.–2:30 p.m. | Extreme Weather Events in the United States: Trends and Projections | Ballroom C/D |
| | Joe Casola , Center for Climate and Energy Solutions (C2ES) | |
| | Integrating Weather Forecasts into Transportation Decision Making | Ballroom C/D |
| | David Green , National Weather Service | |
| | Useful Weather and Climate Resources for State DOTs | Ballroom C/D |
| | Ellen Mecray , NOAA | |
| 2:30 p.m.–3:15 p.m. | Breakout Groups by Extreme Weather Event | |
| | Coastal storms ; Facilitator: Kevin Walsh, Massachusetts DOT | |
| | Ballroom C/D | |
| | Inland floods ; Facilitator: Michael Kennerly, Iowa DOT | |
| | Monet 1 | |

Winter storms; Facilitator: Randy Van Portfliet, Michigan DOT Monet 2
Heat waves, wildfires, and droughts; Facilitator: Kristen Keener Busby, Arizona DOT Monet 3

Assignment: Each group should prepare a “needs statement” stating (in 2 min or less) what data/information/assistance state DOTs need in order to better prepare for and recover from each type of extreme weather.

3:15 p.m.–3:30 p.m. **Break**
 3:30 p.m.–3:45 p.m. **Presentation of Needs Statements** Ballroom C/D

Session III: Costs of Extreme Weather Ballroom C/D

This session will provide participants with examples of how state DOTs and other agencies have evaluated the costs of extreme weather and benefits of adaptation.

Facilitator: **Elisabeth Kolb**, New York State DOT

3:45 p.m.–4:10 p.m. **Analyzing Extreme Weather Costs for Roadway Investment Decisions**
Nathaniel Coley, U.S. DOT

4:10 p.m.–4:30 p.m. **Evaluating the Cost of Replacing Bonner Bridge**
Joe Turner, North Carolina DOT

4:30 p.m.–5:00 p.m. **Discussion: Costs of Extreme Weather**
 • What kinds of cost information do state DOTs need? How do state DOTs envision using these cost data?
 • What are the barriers to collecting this information? What could be done to help DOTs overcome these barriers?

May 22, 2013

7:30 a.m.–8:30 a.m. **Breakfast and Presentation** Solarium
Welcome and Day 1 Recap; Jennifer Brickett, AASHTO

Session IV: Managing Extreme Weather Events (Design, Operations and Maintenance) Monet 1 and 2

This session contains two breakout sessions that will highlight the potential design and O&M strategies that state DOTs are pursuing in order to increase resilience to extreme weather.

Facilitators: **Rick Land**, Caltrans (Design) and **Jennifer Brandenburg**, NCDOT (Operations and Maintenance)

| | Design Breakout Monet 1 | Operations and Maintenance Breakout Monet 2 |
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| 8:45 a.m.–9:05 a.m. | Designing for Extreme Weather Events: Survey Results from the AASHTO Highway Design Subcommittee; Rick Land, Caltrans Changes to Extreme Precipitation Events: What the Historical Record Shows and What It Means for Engineers; Geoffrey Bonnin, National Weather Service | ALDOT Operations and Extreme Weather Events; George Conner, Alabama DOT |
| 9:05 a.m.–9:25 a.m. | Generating Extreme Weather Projections and Using Them to Assess Vulnerability: Gulf Coast Phase 2; Rob Kafalenos, FHWA | Impacts of Extreme Weather on Operations and Maintenance with a Focus on Lake Effect Snow; Greg Johnson, Michigan DOT |
| 9:25 a.m.–9:45 a.m. | Vermont’s Rivers and Roads: Managing for the Future; Rich Tetreault, VTrans | Extreme Weather Events and Commercial Motor Vehicles in Missouri; Jan Skouby, Missouri DOT |
| 9:45 a.m.–10:15 a.m. | Discussion: Design Approaches | Discussion: O&M Approaches |

10:15 a.m.–10:30 a.m. **Break**



Session V: Managing Extreme Weather (Emergency Management)..... Ballroom C/D

This session will cover emergency management of extreme weather events. Case studies will focus on communication strategies, special considerations for extended extreme weather events, and rebuilding to increase resilience.

Facilitator: **John Himmel**, Washington State DOT

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| 10:30 a.m.–10:50 a.m. | Managing Vermont's Emergency Response to Irene Rich Tetreault, VTrans | |
| 10:50 a.m.–11:10 a.m. | Managing an Extreme Weather Event of Prolonged Duration Michael Kennerly, Iowa DOT | |
| 11:10 a.m.–11:30 a.m. | Innovative Communication Strategies During Extreme Weather Events Lloyd Brown, AASHTO | |
| 11:30 a.m.–Noon | Discussion: Managing Extreme Weather Best Practices <ul style="list-style-type: none">• Best practices by time-frame (before event, during event, after event)• How can we re-build to increase resilience?• What are effective communication strategies? How can we best leverage social media during extreme weather events? | |
| Noon–1:00 p.m. | Lunch and Presentation Solarium Resiliency ; Roderic Sechrist, New York State DOT | |

Session VI: Risk Assessment and Asset Management..... Ballroom C/D

This session will focus on vulnerability and risk assessments, with an emphasis on how asset management systems can support those assessments.

Facilitator: **Alan Jones**, Tennessee DOT

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| 1:00 p.m.–1:40 p.m. | Introduction to Risk Assessment and Asset Management Overview of FHWA Vulnerability Assessment Framework and Pilot Program ; Becky Lupes, FHWA Transportation Asset Management: A Risk-Based Approach ; Butch Wlaschin, FHWA | |
| 1:40 p.m.–2:00 p.m. | WSDOT's Risk Assessment Casey Kramer, Washington State DOT | |
| 2:00 p.m.–2:20 p.m. | Evaluating Flood Risk in Massachusetts Kevin Walsh, Massachusetts DOT | |
| 2:20 p.m.–2:40 p.m. | Break | |
| 2:40 p.m.–3:00 p.m. | Coordinating Minnesota's Transportation Assets and Extreme Weather Vulnerability Duane Hill, Minnesota DOT | |
| 3:00 p.m.–3:30 p.m. | Discussion: Risk Assessment and Asset Management <ul style="list-style-type: none">• What are best practices for assessing vulnerability and risk due to extreme weather events?• What kinds of data and processes are required for a successful vulnerability assessment?• How can asset management systems be used to support risk assessment? | |

Closing Keynote Address

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| 3:30 p.m.–4:00 p.m. | Symposium Synthesis & Moving Forward Ballroom C/D Michael Lewis, AASHTO President and Director of Rhode Island DOT | |
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