Session 2: New Accomplishments, Updates, and Points of Interest

Informing Travelers Before and During Dust Storms Through Pathfinder

2018 Arizona Dust Storm Workshop

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What is Pathfinder?

- **Collaboration** between the National Weather Service (NWS), State DOTs, and support contractors to share and translate forecasts into consistent public transportation impact statements

- Disseminates road weather information that is:
  - clear,
  - concise,
  - impact-based, and
  - consistent

**Intended Outcome** - Drivers are well informed and able to make safe and efficient travel decisions
Mitigating Impacts through Pathfinder

- Pathfinder helps agencies manage road systems and inform travelers ahead of and during adverse road weather conditions.

- Travelers need to know:
  - Timing, location and duration of dust storm.
  - Impact of storm on road conditions.
  - Impact of agency maintenance and traffic management actions.
  - And they need to hear a consistent message from multiple sources.

Source: Arizona DOT
8-Step Pathfinder Process

1. Identify Partners
2. Determine Qualifying Collaboration Events
3. Select Communication Mediums and Set Procedures
4. Establish Point Person at Each Participating Entity
5. Synchronize Forecast Schedules
6. Establish Definitions and Create Shared Resources
7. Create Shared Impact Message for the Public
8. Conduct Post Event Review and Data Archiving

Source: FHWA
Pathfinder in Arizona

- Winter 2017 Flagstaff Area Pathfinder Pilot
  - Focused on winter weather conditions
  - Collaboration between stakeholders
  - Shift from reactive to proactive messaging
  - After action reviews and reports

- Applying Pathfinder in Southern AZ during Monsoon Season
  - Taking lessons learned from Flagstaff
  - Focus on dust storms and torrential rains

Source: Arizona DOT
Why Pathfinder is Needed for Dust Storms

- **Higher degree of uncertainty** for dust storms vs. other weather events
  - Dust storms are sudden and difficult to forecast
  - Immediate lack of visibility creates dangerous conditions

- **Less procedures** in place for dust storms vs. other weather events
  - Informal processes in place
  - No alert/warning technologies currently in operation

**Partnerships result in better management of events**
- ASU meteorologists, AZDOT, and NWS help forecast weather and roadway conditions
- NWSChat helps facilitate these discussions

Source: Arizona DOT
Pathfinder Resources

• **Pathfinder Implementation Guide**
• **Peer Exchanges**
  • Virtual: Winter Messaging and Dynamic Message Sign Terminology
  • In-Person: Pathfinder PX Summit
• **Fact Sheets**
  • Pathfinder Overview
  • Benefits and Costs
• **Case Studies**
  • Colorado’s Pathfinder Process
  • Wyoming DOT’s Total Solar Eclipse
• **Demonstration Site Visits**
• **Workshops**
  • (customized for your region)
• **Webinars**
• **Videos**

Access all resources at: https://collaboration.fhwa.dot.gov/dot/fhwa/RWX/SiteAssets/path.aspx
Discussion