



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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February 27, 2018

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



Source: Georgia DOT



Source: Georgia DOT

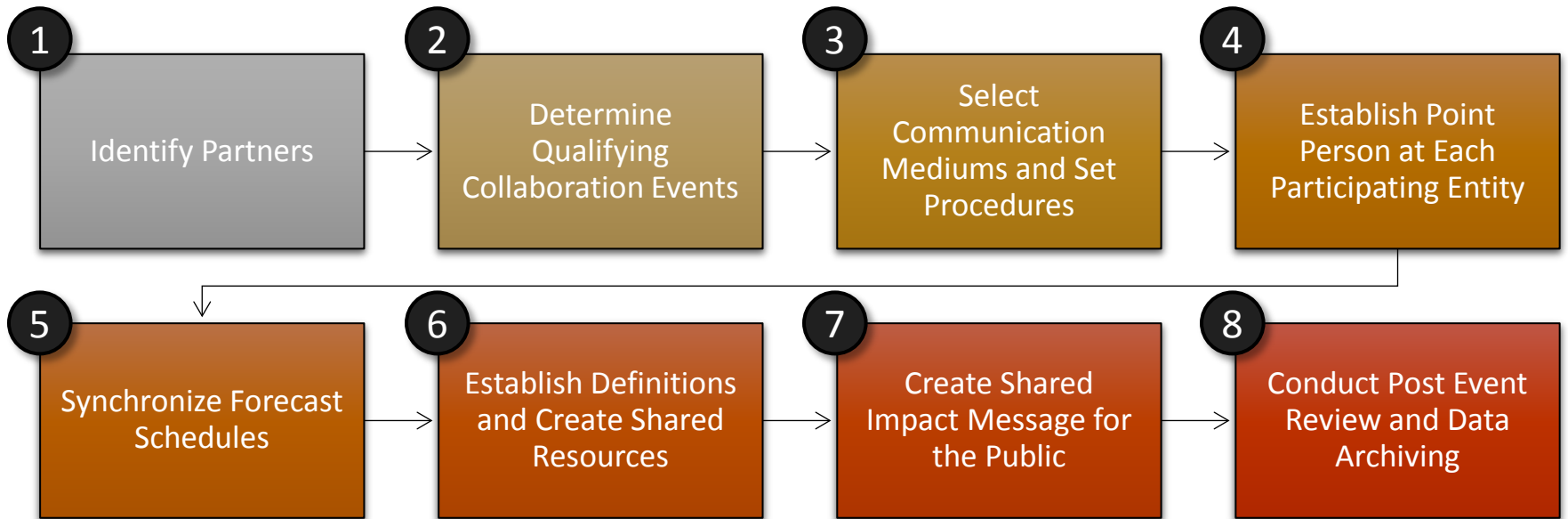
Mitigating Impacts through Pathfinder

- 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



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



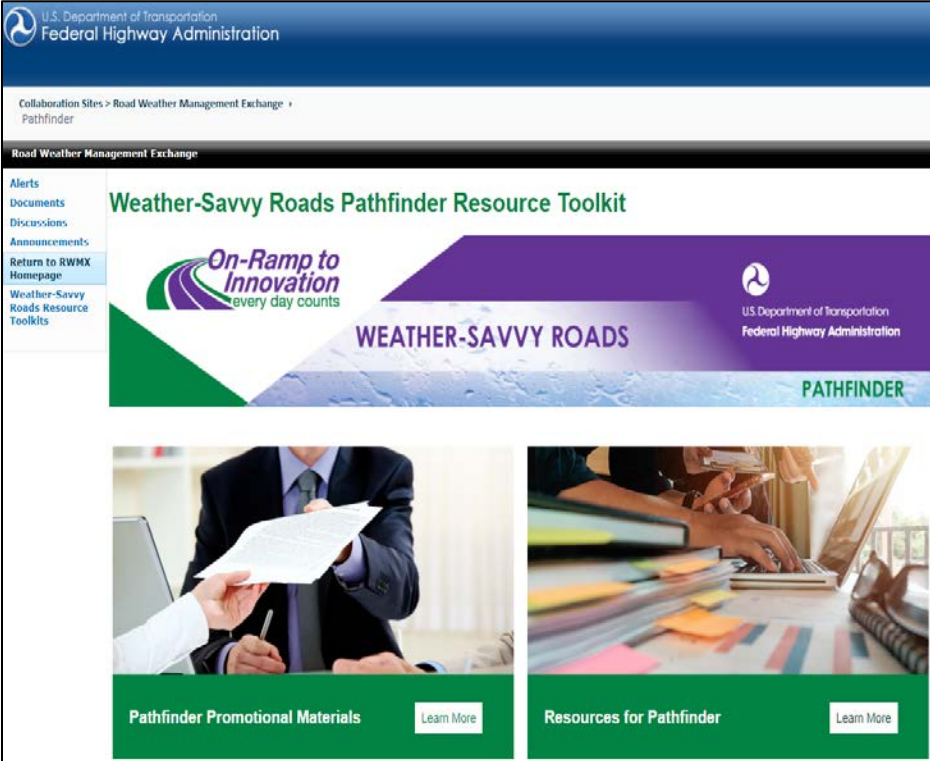
Source: Arizona DOT

Partnerships result in better management of events

- ASU meteorologists, AZDOT, and NWS help forecast weather and roadway conditions
- NWSChat helps facilitate these discussions

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**



U.S. Department of Transportation
Federal Highway Administration

Collaboration Sites > Road Weather Management Exchange > Pathfinder

Road Weather Management Exchange

Alerts
Documents
Discussions
Announcements
Return to RWMX Homepage
Weather-Savvy Roads Resource Toolkits

Weather-Savvy Roads Pathfinder Resource Toolkit

On-Ramp to Innovation
every day counts

WEATHER-SAVVY ROADS

PATHFINDER

U.S. Department of Transportation
Federal Highway Administration

Pathfinder Promotional Materials [Learn More](#)

Resources for Pathfinder [Learn More](#)

Access all resources at:

<https://collaboration.fhwa.dot.gov/dot/fhwa/RWMX/SiteAssets/path.aspx>



Discussion

