



## Pathfinder: Implementation Recommendations

The Pathfinder initiative, supported by the Federal Highway Administration (FHWA) and the National Oceanic and Atmospheric Administration's (NOAA's) National Weather Service (NWS), facilitates collaborative partnerships between the NWS, State Departments of Transportation (DOT), and private sector Weather Service Providers (WSP) that support DOTs. The value of this collaboration is an improved assessment of weather impacts on the transportation system, and the ability to develop concise and consistent messages for the traveling public, which results in safer and smoother travel.

State Departments of Transportation (DOT) continue to be engaged and interested in advancing Pathfinder implementation efforts, spurred by their participation in the Every Day Counts (EDC) Weather-Savvy Roads (WSR) initiative. The Federal Highway Administration (FHWA) has published an implementation guide that documents best practices and provides a roadmap for agencies to improve collaboration between State DOTs, the NWS and the WSP (the latter two are often referred to as the weather enterprise). This document is a primary resource for DOTs transitioning from planning for Pathfinder to implementation.

This fact sheet provides a summary of five key recommendations for DOTs based on lessons learned to date. It is intended to help DOTs as they build on the concepts presented in the guide, addressing some common concerns and uncertainties about the Pathfinder Initiative.

- **Develop mutually beneficial partnerships that leverage the existing roles and capabilities that exist with both the public and the private sector.** The Pathfinder initiative works best when the DOTs, NWS and the private sector WSPs each see a role for themselves in supporting a collaborative event response as a three-way partnership.

While the implementation guide identifies many models of partnership, the key recommendation is that the initiative should be seen as a vehicle to bolster the missions of the three critical players.

*For a Quick Reference Guide on Getting Started on Pathfinder, please review the checklist available on Page 28 in the Pathfinder Implementation Guide, <https://ops.fhwa.dot.gov/publications/fhwahop16086/fhwahop16086.pdf>*



Private sector participation, as well as meteorologists employed by the DOT, are important to bringing road weather and segment-specific forecast information to the Pathfinder initiative. Without access to this level of support, the DOT and the NWS are limited in their ability to forecast road weather impacts. Without the DOT maintaining road weather information systems, both the WSPs and NWS have limited situational awareness of road conditions. The breadth of NWS resources enables both the WSP and the DOTs to be better prepared.

As the maturity of Pathfinder implementation grows, the roles of each partner (WSPs, NWS, DOTs) not only become clearer, they become essential. A region with a mature Pathfinder implementation is much more likely to have all three parties involved in day-to-day collaboration, with clearer roles and responsibilities.

- **Keep the primary focus on shared weather impact messaging during events.** The Pathfinder effort should not be seen as adding meteorological support from the NWS to the DOT. The emphasis should be on developing a shared weather impact message that is based on constant communication between the three-way partnership promoted under the initiative. When State DOTs and the weather enterprise collaborate on shared weather impact messages, consistent information may be obtained across the range of sources, which in turn is more likely to enable travelers to make informed decisions regarding their travel in the face of inclement weather.
- **Document procedures, communication protocols and points of contact.** Pathfinder is a process-driven initiative. The goal is not a new technology procurement or a new weather model. Rather, implementing Pathfinder is about improving lines of communication, establishing roles and

responsibilities, and identifying the most effective means and methods of communication (i.e., teleconferences, NWChat, and websites), for any given weather event.

- **Enable effective archiving, after-action reviews and performance measurement.** An important part of the Pathfinder initiative is to effectively archive what happened during an event to support continual improvement. While agencies instinctively focus on the preparations and the event response, it is critical that this part of the initiative not be forgotten. Without effective archiving of event progression, the actual messages conveyed, and the impacts on highway operations, the efficacy of shared messaging cannot be determined.
- **Create new partnerships.** Lastly, as agencies move forward with Pathfinder, it is important to bring other partners to the table. Internally, the role of the public information officers (PIO) cannot be understated. Often times, they are the face of the department and bringing them in early into discussions about shared weather impact messaging can mitigate many of the potential hurdles DOT operations and maintenance staff may face. More importantly, PIOs act as effective liaisons with media and enable wider dissemination of the shared weather impact message.

*For examples of Shared Impact Messages and Archiving Checklists, please refer to Appendix H and C in the guide. <https://ops.fhwa.dot.gov/publications/fhwahop16086/fhwahop16086.pdf>. For more Pathfinder resources, visit <https://go.usa.gov/xnS8m>*

For more information about any of the recommendations and examples presented in the factsheet, please refer to the Pathfinder implementation guide. <https://ops.fhwa.dot.gov/publications/fhwahop16086/index.htm>. For more information about the Weather Savvy Roads efforts, please refer to <https://go.usa.gov/xnSqy>.

[www.fhwa.dot.gov](http://www.fhwa.dot.gov)

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