



North/West Passage

Transportation Pooled Fund TPF-5(190)

5.3 Consistent and Coordinating DMS Use: Workshop Summary

May 19 and 20, 2011

Reference Material

The following materials were prepared for and referenced during the workshop.

- Summary of DMS locations, message and procedures
- Googlemap of DMS locations
- Draft operational guidelines for coordinating DMS

Workshop Purpose

This workshop began with the intent to establish operating guidelines that would support the coordinated use of dynamic message signs (DMS) throughout the North/West Passage corridor states during major events. The workshop was organized around the following discussion topics:

- The need for coordinated DMS messages
- Summary of DMS research and information gathered
- Candidate messages and operational guidelines

During the workshop the participants determined that coordination during major events should also include other traveler information tools such as highway advisory radio (HAR), 511 telephone and web sites. The operational guidelines and reference map resulting from this discussion encompass all traveler information tools in the states. It is expected that each state will incorporate the high-level, operational guidelines developed through this workshop into their individual state guidelines or standard operating procedures. The guidelines and map will be available through the North/West Passage web site at www.nwpassage.info.

The remainder of this summary highlights key issues discussed around each of the workshop topics. A list of workshop participants is also included at the end of the summary.

The Need for Coordinated DMS Messages

The vision of the North/West Passage states is to focus on developing effective methods for sharing, coordinating and integrating traveler information and operational activities across state and provincial borders. Some earlier North/West Passage projects – developing consistent messages for major events, for example – contributed to the momentum for this project. The national trend to have states display public service messages on DMS during major holidays provided further impetus for this discussion.

Although the North/West Passage has traditionally focused on I-90/I-94, the results of this workshop will have benefit beyond the corridor. States may use these guidelines to coordinate information sharing along other routes and among other nearby states.

The states discussed the type of events (i.e., weather, crashes, etc.) that may require coordination, existing relationships with adjacent states, routes that would benefit from coordination and whether or not portable DMS would be used for major events. It was agreed that the remainder of the workshop discussion would focus on:

- Major incidents with significant impacts
- Fixed and seasonal (or semi-fixed) signs
- Interstate routes

DMS Research and Information Gathered

Information on DMS locations, messages and procedures was gathered from each of the states prior to the workshop. A summary of that information was reviewed with the states and discussed during the workshop. Similarities among the states' operating procedures were noted as points that could be leveraged for coordination during major events. For example, all of the states have staff available 24/7 to post messages on DMS and all have some level of coordination with the states immediately adjacent to them. The most common events that drive coordination among the states are weather related. Mountains in the western states often have snow and ice related closures and this spring flooding has generated a significant number of closures. Some of the states do not yet have written procedures for DMS operation, but nearly all of the states use sign control software that allow for both pre-defined message sets and free text. A complete summary of the information on messages and procedures, along with copies of several states' individual procedures, are available on the North/West Passage web site at www.nwpassage.info.

A Googlemap of the DMS locations along I-90/I-94 in the North/West Passage states was also prepared for and referenced during the workshop. It is anticipated that the map could be used by TMC/TOC operations staff to identify where DMS are located and who to contact to coordinate their use. It was also noted that there are very few DMS available at two significant locations on the corridor – where I-90/I-94 split in Montana and in Wisconsin. These are the points at which cross-country travelers might choose to take the alternate route if there was a major event on their intended route. Portable DMS or other traveler information tools would need to be considered if a major event created the need for information related to these points.

Discussion of these two decision points in the corridor raised a broader question about the isolated use of DMS. All of the states agreed that their action to share information about a major event would not be limited to posting DMS messages. Every state said they would also post information to their HAR (if available), 511 telephone, web sites and other traveler information services. As a result of this observation, the states agreed that the remainder of the workshop should encompass the coordination of all traveler information tools.

Candidate Messages and Operational Guidelines

Using the operational guidelines prepared for Minnesota and North Dakota DMS coordination during an earlier North/West Passage project, draft guidelines were prepared for coordination among the states. The guidelines provided a brief introduction to the rationale behind the coordination of traveler information in the states and presented a series of high-level operational guidelines to support coordination among the states. The states reviewed and provided the following comments.

- Expand guidelines and map information beyond DMS to include all relevant traveler information tools available such as HAR, 511 telephone, web sites and other services.
- The introduction should include more about the philosophy driving this need to coordinate traveler information among the states.
- Note that each state receiving a request from another state will determine if and how it is appropriate to further disseminate the information within their state.
- The guideline should indicate that each state will strive to adhere to the guidelines developed North/West Passage. In addition, each state should review current standard operating procedures and incorporate the guidelines as appropriate.
- Guidelines and title should be written to apply statewide not just only to the North/West Passage corridor of I-90/I-94.
- Add guideline to encourage participation in after action reviews following a major event.
- It was agreed to avoid time, distance or event type parameters in place of each states using their own judgment to determine when coordination is necessary. The states' perspectives vary on what constitutes a major event. For example, 90-minute closures through the mountain passes are common.
- Because major events vary in many ways, these guidelines should prompt states to consider coordination and discussion with nearby states, not necessarily prescribe what that coordination will involve.
- Remove list of phrases to post on message signs. Each state will determine phrases appropriate to the traveler information tools being used.
- Initial contact among the states should occur by phone and then be followed up with an email to verify the information provided (i.e., route or city spellings, distances, etc.).
- These guidelines should be reviewed annually among the states' TMC/TOC operations staff to maintain awareness, understanding and accuracy of the content. This will be facilitated by the North/West Passage steering committee.

Next Steps

Revisions will be made to the operational guidelines and map, and then reviewed by the states 2-3 weeks following the workshop. These and other resources to support coordination among the states will be made available through a limited access web page. The states also agreed to identify additional steps they could take to make TMC/TOC operations staff aware of these resources and incorporate the guidelines into their own operating procedures. It is also anticipated that North/West Passage Work Plan 6 will fund a project to conduct an operational test or exercise to coordinate traveler information during a major event. This would At the completion of the test, it is important that these guidelines be reviewed and further modified as appropriate.

Workshop Participants

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Name	Representing	Phone	E-Mail
Bill Legg	Washington State DOT	360.705.7994	leggb@wsdot.wa.gov
Monica Harwood	Washington State DOT	509.343.6383	harwoom@wsdot.wa.gov
Bob Koeberlein	Idaho Transportation Dept	208.334.8487	robert.koeberlein@itd.idaho.gov
Kathy Bessey	Idaho Transportation Dept	208.846.7626	kathy.bessey@itd.idaho.gov
Vince Garcia	Wyoming DOT	307.777.4231	vince.garcia@wyo.gov
Brad Darr	North Dakota DOT	701.328.4443	bdarr@nd.gov
Dave Huft	South Dakota DOT	605.773.3358	dave.huft@state.sd.us
Jason Humphrey	South Dakota DOT	605.773.3571	jason.humphrey@state.sd.us
Jesse Larson	Minnesota DOT	651.234.7040	jesse.larson@state.mn.us
Tina Roelofs	Athey Creek Consultants	651.207.5638	roelofs@acconsultants.org
Ginny Crowson	Athey Creek Consultants	651.600.3338	crowson@acconsultants.org

** Montana (Brandi Hamilton) and Wisconsin (Peter Rafferty) were unable to participate in the workshop discussion but will be included in follow up discussions and the finalization of resources developed through this project.*