



North/West Passage
Transportation Pooled Fund Study
TPF-5(190)
Q3 2010 Status Report
July 1 – September 30, 2010

Project Description

The North/West Passage Transportation Pooled Fund (TPF) Study is a multi-state cooperative program for the coordination, development, and deployment of Intelligent Transportation Systems (ITS) along the I-90 and I-94 corridor. The states of Washington, Idaho, Wyoming, Montana, North Dakota, South Dakota, Minnesota, and Wisconsin began meeting in February 2002 to discuss the development of a North/West Passage multi-state transportation program. The states formally established as a TPF Study through the Federal Highway Administration (FHWA) in 2003. FHWA serves as a monitoring body, providing strategic and technical input. Minnesota serves as the Program Administrator and a Steering Committee consists of one representative from each of the states that have financially contributed to the effort. The Steering Committee meets monthly or as necessary to provide overall program direction.

North Dakota, Minnesota, and Wisconsin contributed funding for the execution of a Phase 1 work plan. The Phase 1 work plan included eight projects, the purpose of which was to implement and evaluate integrated traveler information systems and coordinate maintenance operations across state borders. Individual reports for the projects completed under the Phase 1 work plan are available online at www.nwpassage.info. A full Phase 1 summary report is also available online.

Additional contributions were made by all of the states for the execution of a Phase 2 work plan, which focused on developing a strategic plan for the corridor. Focusing on traveler information and maintenance operations, the plan presents an inventory of ITS deployments in the corridor; provides a high-level architecture; analyzes targeted concepts/solutions; and, proposes a coordinated deployment and operational concept for traveler information systems and maintenance operations across state borders. The Steering Committee elected to wait until the strategic plan is further developed before identifying a more complete list of projects for further implementation in the corridor.

The balance of funds contributed during the Phase 2 solicitation were applied to a Phase 3 work plan. The Phase 3 work plan included five projects that focused on continuing to develop, expand implementation, and evaluate integrated traveler information systems. The projects also continued the understanding and development of coordinated maintenance operations across state borders.

A Phase 4 work plan was approved and five projects moved forward. Projects include enhancing the traveler information website (www.i90i94travelinfo.com), researching call forwarding between states, and exploring regional permitting for the corridor as well as detailing center to center communications between states.

Status/Progress This Quarter

Phase 4 Work Plan Projects

- **Project 4.1: North/West Passage Travel Information Website – Phase 2 and Project 4.3 Center to Center Communications Concept of Operations**

The intent of Project 4.1 is to:

- *Develop a ConOps for a second generation corridor-wide traveler information website that builds upon the currently operational website (i90i94travelinfo.com); adding the*

ability to acquire active event reports posted by member agencies and display active corridor events.

- *Design and implement the second generation website based on the ConOps.*
- *Develop a Concept of Operations for event report sharing between states to guide future data exchanges among member agencies. For example, some member states may wish to exchange event reports between states in order to populate their condition reporting system with events from neighboring states.*

The Phase 2 website was launched as a beta website at the end of September 2010. The website is available at: <http://184.106.214.13/>.

A next generation design document was completed to provide the North/West Passage states with recommendations for a next phase of the website.

Project 4.1/4.2 was completed on September 30, 2010. Final project deliverables can be found at: <http://www.nwpassage.info/projects/phase4/project1>

Phase 5 Work Plan Projects

- Project 5.1 Citizen Assisted Reporting Feasibility Study
Share details of Wyoming's citizen reporting program, research citizen reporting expansion to other North/West Passage (NWP) states, and investigate social media options for reporting conditions to improve Wyoming's citizen reporting system.
 - 8/26/10 Kick-off conference call held to finalize scope of work
 - Webinar held 9/23/10. Attendees learned the details of Wyoming's citizen reporting (how training is conducted, process for consistent reporting, etc.).
- Project 5.2 Cost/Benefit ITS Tool Evaluation
Evaluate New York State DOT's Evaluation Model for Freeway ITS Scoping (EMFITS) and determine if it provides a valid and acceptable approach to ITS project cost/benefit determination. In addition the project will look at how the tool can be expanded to typical rural North/West Passage applications.
 - Athey Creek developed a matrix to identify where EMFITS might work for NWP and where EMFITS may need to be modified for the rural nature of the NWP states. The following focus areas for Project 5.2 were approved at the September 2010 Steering Committee meeting: DMS, RWIS, CCTV, and Traffic Detectors.
- Project 5.3 Consistent and Coordinated Dynamic Message Sign (DMS) Use Workshop
Conduct a workshop to establish a set of consistent phrases to be used on DMS along the NWP as well as develop a plan for coordinated DMS.
 - Draft scope of work developed.
- Project 5.4: Use of Mobile Sensors & Maintenance Decision Support for Automated Road Condition Reporting
Develop a best practice document summarizing mobile weather and road condition measurement and reporting systems, and research approaches toward automating road

condition reporting using Maintenance Decision Support Systems (MDSS) and mobile monitoring devices.

- Draft scope of work developed.
- Project 5.5: NWP Regional Permitting – Phase 2
Continue subcommittee meeting discussions from Phase 1, identify opportunities to reduce confusion of regulations/requirements between jurisdictions, conduct a basic permit requirements inventory, research XML permit concepts, and work with the 5 NWP states that are not part of WASHTO to join, not join, or expand WASHTO
- Draft scope of work developed.

Steering Committee

The Steering Committee provides overall program direction. The committee held two teleconference meetings during the 3rd Quarter. The following bullets summarize the meeting discussions.

- Steering Committee Meeting on August 17, 2010
A Steering Committee Meeting was held on August 17, 2010. The primary focus of this meeting was to provide an update on Project 4.1/4.3 and discuss the next steps to move Work Plan 5 forward.
- Steering Committee Meeting on September 21, 2010
A Steering Committee Meeting was held on September 21, 2010. The primary focus of this meeting was to review the next generation design document for Project 4.1/4.3 and provide updates on the Work Plan 5 projects.

Best of Rural ITS Award

At the Opening Session of the August 2010 National Rural ITS Conference, the North/West Passage Transportation Pooled Fund Study was recognized as the winner of the 2010 Best of ITS Rural Award under the category Best New Practice. The Best of ITS Rural Awards is the only program in the world that recognizes the best and brightest of the rural ITS community. Bill Legg, North/West Passage Chair, accepted the award on behalf of the North/West Passage Program.

Status/Progress Anticipated Next Quarter

- Steering Committee Meetings in October, November, and December.
- Project 5.1 Citizen Assisted Reporting Feasibility Study
Distribute webinar summary and summarize concerns identified by webinar participants and indicate how the Wyoming DOT was able to overcome any issues as they developed their citizen reporting program.
- Project 5.2 Cost/Benefit ITS Tool Evaluation
Created an initial spreadsheet to start identifying the parameters and thresholds for the 4 focus areas (DMS, CCTV, Traffic Detectors, and RWIS).
- Project 5.3 Consistent and Coordinated Dynamic Message Sign (DMS) Use Workshop
Finalize scope of work.

- Project 5.4: Use of Mobile Sensors & Maintenance Decision Support for Automated Road Condition Reporting
Finalize scope of work.
- Project 5.5: NWP Regional Permitting – Phase 2
Finalize scope of work.

Work Plan 1 Financial Summary

The following commitments were made during the Phase 1 solicitation.

- North Dakota \$25,000 (SP&R Dollars)
- Minnesota \$50,000 (SP&R Dollars), plus \$102,576 (State funds)
- Wisconsin \$25,000 (80/20 I-90/94 Earmark Dollars)

Work Plan 2 and 3 Financial Summary

The eight states in the corridor committed \$450,000 through a solicitation. Following is a summary of the financial contributions by individual members. Because funding is comprised of various state and federal sources, FMIS will track SP&R dollars and Mn/DOT administered and tracked other state and federal dollars through partnership agreements with the corresponding states.

- Idaho \$50,000 (Federal and State Dollars)
- Minnesota \$150,000 (SP&R Dollars)
- Montana \$25,000 (Source Unknown)
- North Dakota \$25,000 (SP&R Dollars)
- South Dakota \$50,000 (SP&R Dollars)
- Washington \$50,000 (State Dollars)
- Wisconsin \$50,000 (Federal and State Dollars)
- Wyoming \$50,000 (Federal and State Dollars)

Work Plan 4 Financial Summary

The eight states in the corridor committed \$200,000 through a solicitation. Following is a summary of the financial contributions by individual members. Because funding is comprised of various state and federal sources, FMIS will track SP&R dollars and Mn/DOT administered and tracked other state and federal dollars through partnership agreements with the corresponding states.

- Idaho \$25,000 (SP&R Dollars)
- Minnesota \$25,000 (SP&R Dollars)
- Montana \$25,000 (SP&R Dollars)
- North Dakota \$25,000 (SP&R Dollars)
- South Dakota \$25,000 (SP&R Dollars)
- Washington \$25,000 (SP&R Dollars)
- Wisconsin \$25,000 (SP&R Dollars)
- Wyoming \$25,000 (Federal and State Dollars)

Project Manager (Program Administrator)

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