



North/West Passage  
Transportation Pooled Fund Study  
TPF-5(190)  
Q4 2010 Status Report  
October 1 – December 31, 2010

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**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](http://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 included enhancing the traveler information website ([www.i90i94travelinfo.com](http://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. All five work plan 4 projects were completed by September 2010.

The Phase 5 work plan was approved in 2010. Six projects were funded from the work plan. The projects include developing a cost/benefit ITS tool, share details of Wyoming's citizen reporting program and identifying enhancements, conducting a workshop to establish a set of consistent phrases to be used on DMS along the North/West Passage Corridor, developing a best practice document summarizing mobile weather and road condition measurement and reporting systems, continuing subcommittee meeting discussions from work plan 4 to explore regional permitting, and educating North/West Passage members on how to acquire, modify, maintain and integrate open source software.

*Status/Progress This Quarter*

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.*
  - During the webinar (held 9/23/10 to learn the details of Wyoming's citizen reporting), participants noted a number of concerns related to staffing, institutional issues and funding a citizen reporting program. A document was developed to summarize these concerns and identify how the Wyoming DOT was able to overcome many of the same concerns. A document was also developed to provide suggested steps for state DOT's to consider as they plan for a citizen road reporting system.
  
- 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 has created an initial spreadsheet to start identifying the parameters and thresholds for the 4 focus areas (DMS, RWIS, Detectors, and CCTV). The spreadsheet will ask a user a series of questions and then based on the response it would generate a financial benefit for the proposed deployment location.
  
- 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*
  - Scope of work and budget approved in December 2010.

- Project 5.6: Facilitating the Use of Open Source Software Throughout the Corridor  
*Educate NWP on how to acquire, modify, maintain and integrate open source software.*
  - Scope or work drafted.

#### Steering Committee

The Steering Committee provides overall program direction. The committee held two teleconference meetings during the 4<sup>th</sup> Quarter. The following bullets summarize the meeting discussions.

- Steering Committee Meeting on October 19, 2010  
The primary focus of this meeting was to approve the revised scope of Project 5.5, approve an operation and maintenance document for consideration on future projects and discuss the status of Work Plan 5 projects.
- Steering Committee Meeting on November 16, 2010  
The primary focus of this meeting was to discuss and address the concerns the North/West Passage members identified with a citizen assisted reporting systems and provide updates on the Work Plan 5 projects.

#### Status/Progress Anticipated Next Quarter

- Steering Committee Meetings in January, February, and March.
- Project 5.1 Citizen Assisted Reporting Feasibility Study  
Finalize projects documents (concerns related to staffing, institutional issues and funding a citizen reporting program and suggested steps for state DOT's to consider as they plan for a citizen reporting system) and investigate if other technologies such as social media, email entries or an internet based entry tool could be used for reporting conditions.
- Project 5.2 Cost/Benefit ITS Tool Evaluation  
Continue to build the spreadsheet and identify 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  
Execute a contract to begin work on the project.
- Project 5.6: Facilitating the Use of Open Source Software Throughout the Corridor  
A webinar or workshop will be conducted in 2011 if Wyoming DOT transitions to deploying IRIS (Minnesota's open source control software). Wyoming DOT would be able share firsthand the benefits and drawbacks of implementing open source software. The webinar will also include the open source software mobile apps for checking traveler information that Washington DOT has developed.

**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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