

## TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Minnesota DOT \_\_\_\_\_

**INSTRUCTIONS:**

*Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.*

<b>Transportation Pooled Fund Program Project #</b> <i>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i>  TPF-5(190)		<b>Transportation Pooled Fund Program - Report Period:</b> <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input checked="" type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)	
<b>Project Title: North/West Passage Transportation Pooled Fund Study – Phase 3</b>			
<b>Name of Project Manager(s):</b> Cory Johnson	<b>Phone Number:</b> 651.234.7062	<b>E-Mail</b> cory.johnson@state.mn.us	
<b>Lead Agency Project ID:</b>	<b>Other Project ID (i.e., contract #):</b> MnDOT Contract No. 91150 CFMS Contract No. B06319	<b>Project Start Date:</b> December 2008	
<b>Original Project End Date:</b> September 2012	<b>Current Project End Date:</b> September 2012	<b>Number of Extensions:</b> None	

Project schedule status:

- On schedule     
  On revised schedule     
  Ahead of schedule     
  Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date
\$435,750.36	\$200,175.68	47%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$9,975.10	\$9,975.10	2%

**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.

**Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):**

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.*
    - The project was presented at the 2011 National Rural ITS Conference in Coeur d' Alene, Idaho.
    - Comments received by the Steering Committee at the Annual Meeting in May were incorporated and a final document for the project was posted to the North/West Passage website in September 2011.
    - Project completed September 12, 2011. Final report available at:  
<http://www.nwpassage.info/projects/phase5/?project=5.1>
  
  - 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.*
    - The project was presented at the 2011 National Rural ITS Conference in Coeur d' Alene, Idaho.
    - A webinar was held on September 27, 2011 to provide an opportunity for additional input from the states to the logic in the benefit/cost tool.
  
  - 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.*
    - Project deliverables were finalized in September and posted to the program website.
      - Summary of DMS Locations, Messages and Procedures
      - Workshop Summary
      - Operations Guideline: Coordinating Traveler Information
      - Changeable Message Sign Operation and Messaging Handbook, FHWA-OP-03-070, August 2004
- There is also a login portion of the website that includes:
- State DMS Operational Guidelines
  - Map of Traveler Information tools with TMC/TOC contact information
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- 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.*
  - The Minnesota DOT (Pooled Fund Administering state) posted the RFP for the project on May 17, 2011 and a contractor was selected in August 2011.

- 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*

*Three conference call were held with the project team.*

- July 25, 2011 Meeting – The purpose of the meeting was to review several requirements related to the movement of oversize/overweight loads to determine if any of the differences could be reconciled into a single set of standards.
- August 29, 2011 Meeting – The discussion focused on reviewing the hours of travel and holidays for each North/West Passage states, identifying when an additional steering axle is required, information requirements and requirements for a virtual or xml system.
- September 12, 2011 Meeting – The group reviewed hours of operation, data requirements, and discussed virtual or XML requirements.

- 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 of work drafted.

#### 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 9, 2011  
The primary focus of this meeting was to review discuss Project 5.3 in detail, review modifications to Work Plan 6, confirm the meeting location for the 2012 Annual Meeting and discuss the status of Work Plan 5 projects.
- Steering Committee Meeting on September 13, 2011  
The primary focus of this meeting was to continue to review the project deliverables for Project 5.3, review Work Plan 6 and discuss the status of Work Plan 5 projects.

#### **Anticipated work next quarter:**

##### **Status/Progress Anticipated Next Quarter**

- Steering Committee Meetings in October, November and December.
- Project 5.1 Citizen Assisted Reporting Feasibility Study  
Project complete.
- Project 5.2 Cost/Benefit ITS Tool Evaluation  
The next step is to incorporate the comments received from project webinars and distribute the spreadsheet for final review by the project team.
- Project 5.3 Consistent and Coordinated Dynamic Message Sign (DMS) Use Workshop

A webinar is scheduled for October 26, 2011 to discuss the operational guidelines prior to the winter season and to provide a tutorial of the information available on the project website.

- Project 5.4: Use of Mobile Sensors & Maintenance Decision Support for Automated Road Condition Reporting  
Execute a contract with the selected contractor.
- Project 5.5: NWP Regional Permitting – Phase 2  
Continue monthly conference calls.
- 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.

**Significant Results:**

Project 5.1 Citizen Assisted Reporting Feasibility Study complete. The final report is available at:  
<http://www.nwpassage.info/projects/phase5/?project=5.1>

**Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).**

The Minnesota DOT was shutdown in July 2011 for a few weeks until a state budget resolution was reached. All project work related to the North/West Passage Pooled Fund was stopped during the shutdown, but there was no delay in meeting project deadlines once the Minnesota DOT resumed normal business.

**Potential Implementation:**

N/A