

## 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 checked="" type="checkbox"/> Quarter 2 (April 1 – June 30) <input 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	\$362,625.07	83%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$75,983.68	\$75,983.68	17%

**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 included 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.

The Phase 6 work plan was approved in September 2011. Seven projects were funded. The projects include marketing and outreach efforts to the commercial vehicle operators on the corridor, conducting an operational test of corridor-wide traveler information, investigating options and promoting consistent application of the federal rule regarding the

real-time management information program (23 CFR 511), and adding another phase to continue the efforts of the citizen assisted reporting project, benefit/cost tool evaluation project, and the traveler information website efforts.

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

Phase 5 Work Plan Projects

- 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.*
  - Project complete. Final Report available at: <http://www.nwpassage.info/projects/phase5/?project=5.2>
- 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.*
  - Public agencies were surveyed to document their experience with sensors and MDSS efforts.
  - Vendors and contractors were surveyed to gather information from the private side.
- 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.*
  - A webinar was held on May 9, 2012. The webinar introduced open source software, reviewed barriers and benefits of open source software, Minnesota's IRIS open source software was presented as an example, and potential next steps were discussed. A recording of the webinar is available at: <http://www.nwpassage.info/projects/phase5/?project=5.6>

Phase 6 Work Plan Projects

- Project 6.1: Corridor-wide Traveler Information Coordination – Operational Test  
*Conduct an operational test to coordinate traveler information (communications, acceptance, MOU's etc.) during one or more major events throughout the corridor. The project would leverage existing systems in place (DMS, 511 phone & web, corridor wide ATIS site) and therefore would not need to deploy new equipment or systems.*
  - There have been unplanned events that have been considered for evaluation by this project, but unfortunately due to the clearance time of the events coordination with a bordering state was not needed. It was suggested during the May 2012 Annual Meeting to continue the project through another winter and spring season due to the mild winter that the corridor faced in 2011-2012.
- Project 6.2: 23 CFR 511 Final Rule  
*To investigate options and to promote consistent application of the recently adopted federal rule regarding the real-time system management information program (23 CFR 511).*

- The group reviewed the draft Project 6.2 report in detail during the May 2012 Annual Meeting.
- Project 6.3: Citizen Assisted Reporting – Phase 2  
*To implement selected strategies to expand Wyoming DOT's Enhanced Citizen Assisted Reporting System.*
  - Idaho is continuing to work with their 511 vendor (Castel Rock) to provide the capability for citizen reporting.
  - Wyoming has started developing a web entry tool
- Project 6.4: Benefit/Cost Tool – Phase 2  
*To enhance and improve the North/West Passage Cost/Benefit Tool (Project 5.2) for future coordination with the ENTERPRISE ITS Warrants Project.*
  - Continued to add metadata to the Benefit/Cost Tool
- Project 6.5: NWP Traveler Information Website  
*Enhance www.i90i94travelinfo.com by adding citizen comments on events to the website, or uploading the ECAR entries from Wyoming and Idaho (Project 6.3).*
  - Project has not started. The scope of the project will be based on the MCOM application submitted in December 2011.
- Project 6.5: NWP Traveler Information Website  
*Enhance www.i90i94travelinfo.com by adding citizen comments on events to the website, or uploading the ECAR entries from Wyoming and Idaho (Project 6.3).*
  - Project has not started. The scope of the project will be based on the MCOM application submitted in December 2011.
- Project 6.6: CVO-Regional Permitting Phase 3  
*The vision of this project is to continue the coordination of the eight states working toward permitting consistencies between states building off the recommendations from the earlier phases.*
  - Project Kickoff Meeting held June 25, 2012. The purpose of the meeting was to agree on the approach to Phase 3
- Project 6.7: Corridor-Wide Marketing and Outreach to CVOs  
*The focus of Project 6.7 is to gather feedback from the trucking industry and DOT staff on website enhancements to the i90i94travelinfo.com website. In addition to enhancing the website, the project is also focused on identifying current communication channels that exist with commercial vehicle carriers and identifying what gaps exist.*
  - Two surveys were developed and distributed on February 6, 2012 one survey to DOT staff and one to the trucking association/companies along the I-90 and I-94. Survey results were presented at the May Annual Meeting

#### Steering Committee

The Steering Committee provides overall program direction. The committee held two teleconference meetings during

the 1<sup>st</sup> Quarter and one in person meeting. The following bullets summarize the meeting discussions.

- Steering Committee Meeting on April 10, 2012  
The primary focus of this meeting was to review project ideas for Work Plan 7 and review the draft webinar agenda for Project 5.6.
- Steering Committee Annual Meeting on May 16 and 17, 2012 in Custer, South Dakota  
The primary focus of this meeting was to review North/West Passage accomplishments and provide detailed discussions on Work Plan 5 and Work Plan 6 projects as well as vote on and determine projects for Work Plan 7.
- Steering Committee Meeting on June 12, 2012  
The primary focus of this meeting was to review draft Work Plan 7 priority projects and provide project updates.

**Anticipated work next quarter:**

**Status/Progress Anticipated Next Quarter**

- Steering Committee Meetings in July, August and September.
- Project 5.1 Citizen Assisted Reporting Feasibility Study  
Project complete. Final report available at: <http://www.nwpassage.info/projects/phase5/?project=5.1>
- Project 5.2 Cost/Benefit ITS Tool Evaluation  
Project complete. Final report available at: <http://www.nwpassage.info/projects/phase5/?project=5.2>
- Project 5.3 Consistent and Coordinated Dynamic Message Sign (DMS) Use Workshop  
Project complete. The final project deliverables are available at:  
<http://www.nwpassage.info/projects/phase5/?project=5.3>
- Project 5.4: Use of Mobile Sensors & Maintenance Decision Support for Automated Road Condition Reporting  
Finalize project report.
- Project 5.5: NWP Regional Permitting – Phase 2  
Project complete. Final report available at: <http://www.nwpassage.info/projects/phase5/?project=5.5>
- Project 5.6: Facilitating the Use of Open Source Software Throughout the Corridor  
Finalize project summary.
- Project 6.1: Corridor-wide Traveler Information Coordination – Operational Test  
Evaluate the Sturgis event.
- Project 6.2: 23 CFR 511 Final Rule  
Finalize project report.
- Project 6.3: Citizen Assisted Reporting – Phase 2  
Idaho to continue to work with their 511 vendor to provide the capability for citizen reporting and Wyoming continue to develop web entry tool. Also, review the citizen phrases used by Wyoming and identify consistent phrases to use with both the Wyoming and Idaho entry tools.

- Project 6.4: Benefit/Cost Tool – Phase 2  
Continue to add metadata to the tool and finalize metadata tables.
- Project 6.5: NWP Traveler Information Website  
Update project scope based on MCOM proposal.
- Project 6.6: CVO-Regional Permitting Phase 3  
Conference calls scheduled for July, August and September.
- Project 6.7: Corridor-Wide Marketing and Outreach to CVOs  
Finalize project summary.

**Significant Results:**

Project 5.2 NWP Benefit/Cost Tool Evaluation complete. The final report is available at:  
<http://www.nwpassage.info/projects/phase5/?project=5.2>

**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).**

N/A

**Potential Implementation:**

N/A