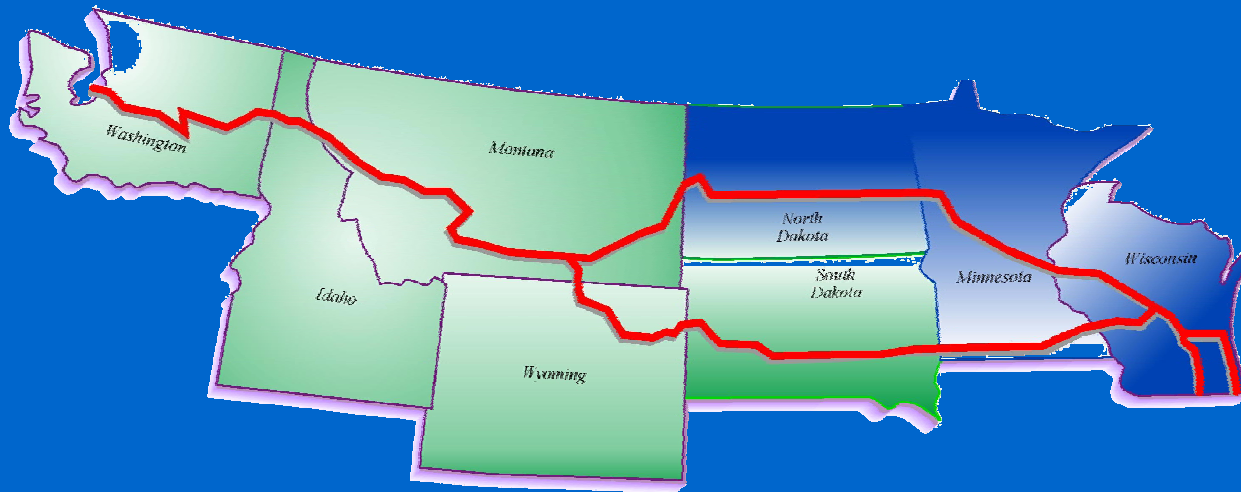


North/West Passage Transportation Pooled Fund Study



Mn/DOT Research Coordinators' Meeting

May 19, 2005

Mark Nelson, Minnesota DOT

Background

- December 7, 2001 – Minnesota Guidestar approved the development of a multi-state project to coordinate ITS deployments along I-90 and I-94
- February 25, 2002 – Representatives from Washington, Idaho, Montana, North Dakota, South Dakota, Wyoming, Minnesota, and Wisconsin held a workshop to discuss the development of a coalition along I-90 and I-94
- June 2002 – Pooled Fund Study Solicitation
- January 2003 – Pooled Fund Study Re-Solicitation
- North Dakota, Minnesota, and Wisconsin secured approval and funding to initiate the development of a North/West Passage Transportation Pooled Fund (TPF) study
- Other I-90 and I-94 states have continued to express interest in the project and are researching funding opportunities

Corridor Map



Goal and Vision of TPF Study



Goal of North/West Passage TPF Study

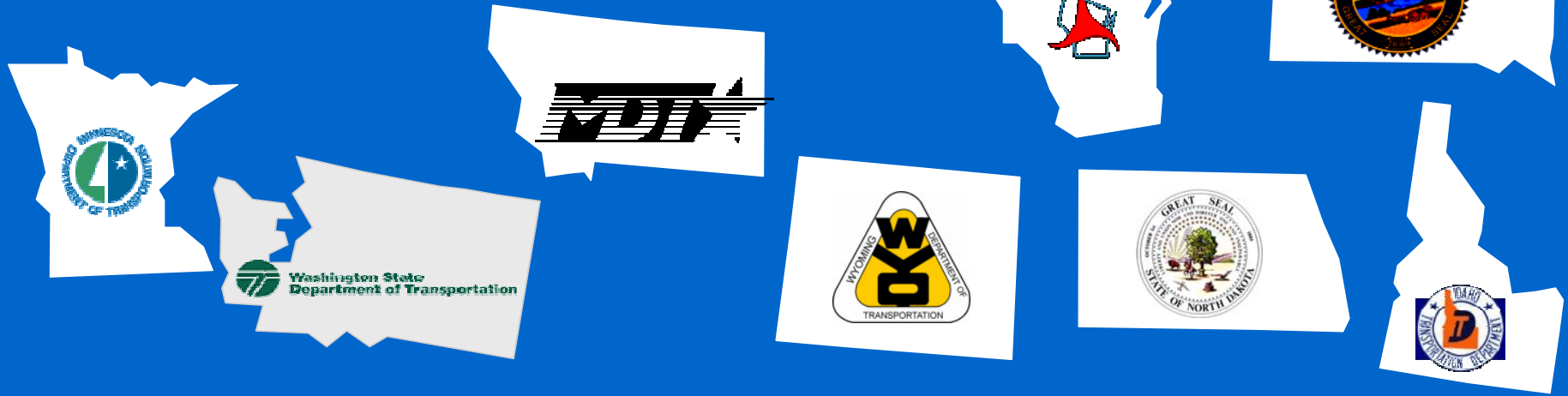
Implement and evaluate integrated traveler information systems and coordinate maintenance operations across state borders.

Long-Term Vision of North/West Passage TPF Study

Influence ongoing standards development; operate database systems that can transmit and receive multiple data streams; and, utilize effective methods for sharing, coordinating, and integrating traveler information across state borders.

Phase I Status

- Minnesota DOT is the lead organization for the TPF Study
- Minnesota, North Dakota, and Wisconsin pooled \$100,000 for Phase I projects
- Minnesota DOT hired URS to provide project management support
- Minnesota, North Dakota, and Wisconsin approved a Work Plan in December 2003 that identified projects to pursue as Phase I of the TPF Study
- Phase I projects started in March 2004



Phase I Projects Summary

	Project Name	Project Champion(s)	Project Cost
1.1	Integrate ND, WI, and MN Reporting Systems	Mark Nelson, Mn/DOT	\$29,500
1.2	Deploy Limited CARS Application for WI	Phil DeCabooter, WisDOT	\$7,500
1.3	Develop Automated Road Condition Reporting System (Possible Future Project)	Mark Nelson, Mn/DOT	\$00
1.4	Provide Integrated Communications Capabilities for ND DMS (Possible Future Project)	Ed Ryen, NDDOT	\$00
1.5	Preliminary Design for DMS Deployment on I-94 Eastbound in ND	Ed Ryen, NDDOT Dennis Redig, Mn/DOT	\$12,000
1.6	Preliminary Design for DMS Deployment at the I-94 and I-90 split in Tomah, WI	Phil DeCabooter, WisDOT	\$12,000
1.7	Develop a North/West Passage Web Site	Ayman Smadi, NDSU	\$4,000
1.8	Develop a Communications Plan for the De-Icing System to be installed on the I-94 Bridges at Red River	Dennis Redig, Mn/DOT	\$20,000
1.9	Develop a Lessons Learned Document Comparing Requirements for CARS Deployment in WI to Meridian's Planned Reporting System in ND	Ayman Smadi, NDSU	\$15,000
Total Cost of Phase I Projects			\$100,000*

**Total does not include costs for admin, travel, meeting or consultant support services.*

Phase I Projects



Project 1.1 - **Completed**

Integrate North Dakota, Wisconsin, and Minnesota Reporting Systems

Project Results

Travelers in ND can now receive MN's 511 Traveler Information

- At no additional cost SD can also receive MN's 511 Traveler Information
- Development of an Interface Control Document

Project Champion

Mark Nelson, Mn/DOT

NWP Cost

\$29,500

Phase I Projects

Project 1.2 - **Completed**

Deploy Limited CARS Study Application for Wisconsin



Project Results

- Test deployment of CARS along I-94 in WI - District 6 for staff to become familiar with manual input
- Alleviated fears of system time demands
- Demonstrated the value that will be achieved when a statewide reporting system is implemented
- Wisconsin DOT staff have continued to meet internally to discuss statewide deployment

Project Champion

Phil DeCabooter, WisDOT

NWP Cost

\$7,500

Phase I Projects

Project 1.3 - **Project Tabled**

Develop Automated Road Condition Reporting System

Project Results

- This project has been successfully developed in a separate Maintenance Decision Support System (MDSS) study, TPF-5(054)
- Therefore, planning for this project was set aside in Phase I and will be further reviewed and addressed as a Corridor Strategic Plan is developed during Phase II

Project Champion

Mark Nelson, Mn/DOT

NWP Cost





\$0

Phase I Projects

Project 1.4 - **Completed**

Provide Integrated Communications Capabilities for North Dakota DMS

Project Results

-  NDDOT used a new software to upgrade all 19 of their DMS to NTCIP compliance
-  Utilized a single communication interface to communicate to all DMS
-  Project was funded through an Amber Alert Grant
-  The project was a success – North/West Passage stimulated the project

Project Champion

Ed Ryen, NDDOT

NWP Cost

\$0

Phase I Projects

Project 1.5

Preliminary Design for DMS Deployment
on I-94 Eastbound in North Dakota



-  Install DMS on I-94 in ND for travelers approaching the MN border
-  Complement MN DMS for westbound travelers
-  Receive coordinated traveler information at state boundary
-  Next step: Develop a DMS RFP

Project Champions

NWP Cost

Ed Ryen, NDDOT & Dennis Redig, Mn/DOT

\$12,000

Phase I Projects

Project 1.6 - **Completed**

Preliminary Design for DMS Deployment at the I-94 & I-90 Split at Tomah, Wisconsin

Project Results



Project successfully shifted to better meet the users needs by determining a Concept of Operations should be developed first that fits into the Wisconsin Statewide Transportation Operations Plan, being developed at the same time



Information gathered and documented will assist in moving forward with the statewide plan

Project Champion

Phil DeCabooter, WisDOT

NWP Cost

\$12,000





Phase I Projects

Project 1.7 - **Completed**

Develop a North/West Passage
Program Website



Project Results

-  Provide easy access to North/West Passage information
-  Communicate and educate public about North/West Passage Pooled Fund Study
-  Information available on demand
-  www.nwpassage.info

Project Champion

Ayman Smadi, NDSU

NWP Cost

\$4,000



Phase I Projects

Project 1.8 - Completed

Develop a Communications Plan for the Anti-Icing System to be Installed on the I-94 Bridges at Red River



Project Results

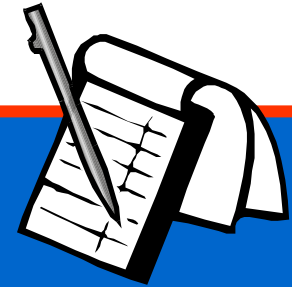
-  Developed the preliminary design and communication design for the Anti-Icing System on the I-94 bridge over the Red River
-  RFP developed - Anti-Icing System to be completed Fall 2005

Project Champion

Ed Ryen, NDDOT & Dennis Redig, Mn/DOT

NWP Cost

\$20,000



Project 1.9

Develop a Lessons Learned Document Comparing Requirements for CARS Deployment in Wisconsin to Meridian's System Deployment in North Dakota



Identify typical requirements for developing a road condition reporting system



Survey available systems, use deployment as case study, identify agency issues/requirements



Guide other states in deploying similar projects

Project Champion

Ayman Smadi, NDSU

NWP Cost

\$15,000

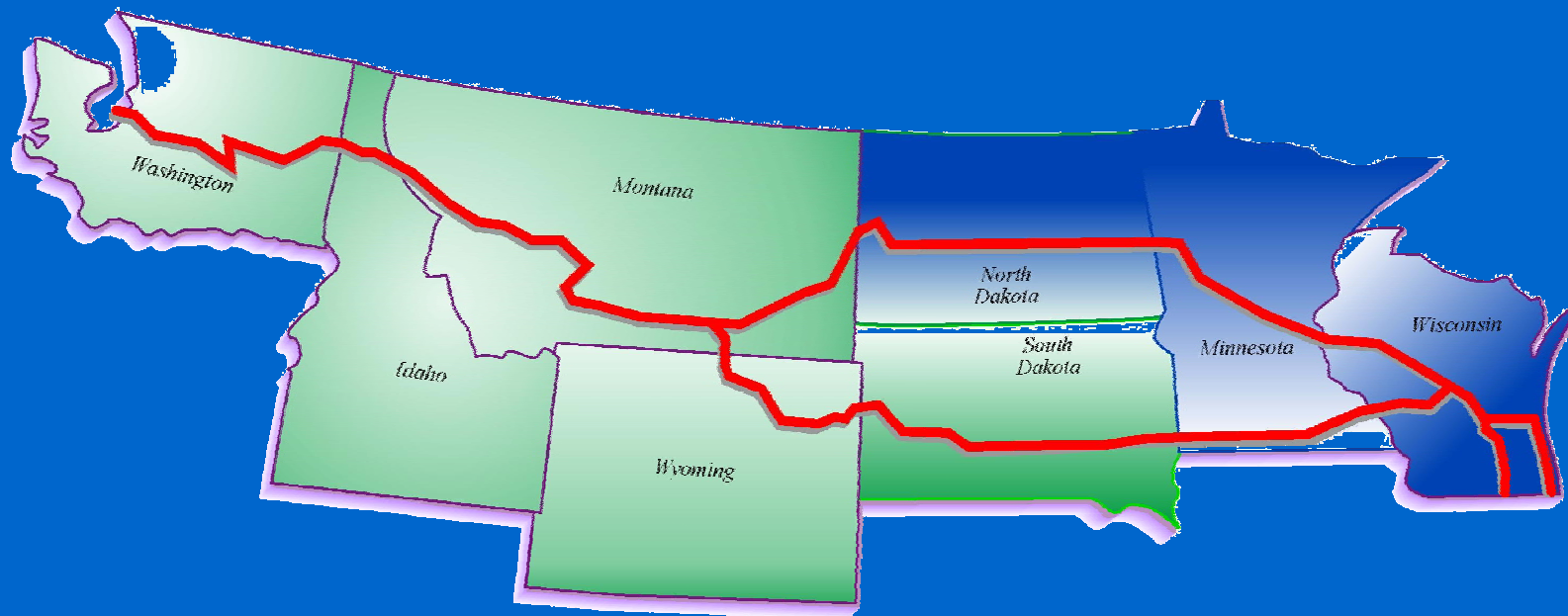
Phase II – North/West Passage ITS Integrated Corridor Strategic Plan

Goal

Develop a high-level architecture, coordinated traveler information system, and an inventory of communication issues for I-90 and I-94 to produce a solid, corridor-wide strategy for planning, programming and development of future integrated corridor projects

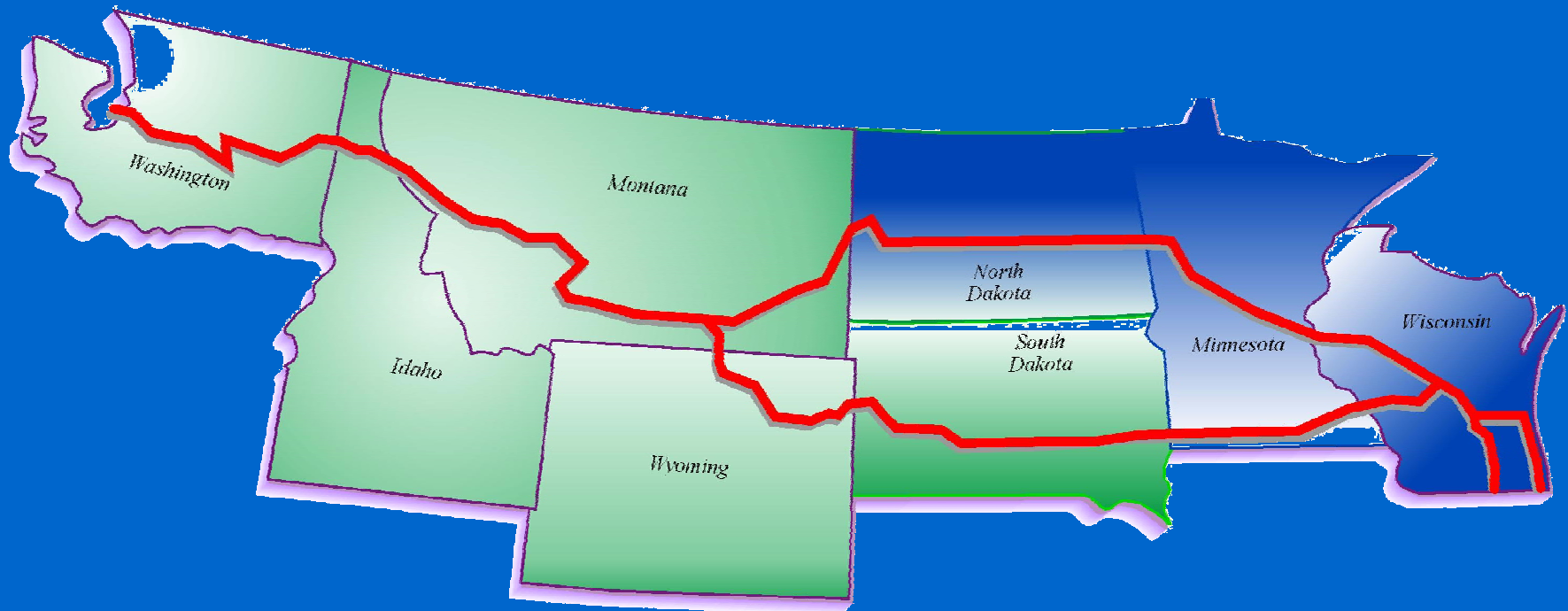
Next Steps

- Continue and Complete Phase I Projects
- Review/Approve Draft Phase I Report
- Phase II Proposals Due May 23, 2005



Next Steps

- Washington - Committed
- Idaho - Committed
- Wyoming - Likely
- Montana - Very Likely
- North Dakota - Committed
- South Dakota - Unknown
- Minnesota - Committed
- Wisconsin - Likely



Questions



Contact Information

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