

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Washington State Department of Transportation

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.

Transportation Pooled Fund Program Project # <i>(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i> <p style="text-align: center;">TPF-5(494)</p>	Transportation Pooled Fund Program - Report Period: <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)	
Project Title: <p style="text-align: center;">Western States Rural Transportation Consortium (WSRTC) (Phase 2)</p>		
Name of Project Manager(s): <p style="text-align: center;">Tony Leingang</p>	Phone Number: <p style="text-align: center;">360-709-8002</p>	E-Mail <p style="text-align: center;">Tony.Leingang@wsdot.wa.gov</p>
Lead Agency Project ID: <p style="text-align: center;">TPF5494</p>	Other Project ID (i.e., contract #): <p style="text-align: center;">N/A</p>	Project Start Date: <p style="text-align: center;">January 31, 2022</p>
Original Project End Date: <p style="text-align: center;">March 31, 2027</p>	Current Project End Date: <p style="text-align: center;">March 31, 2027</p>	Number of Extensions: <p style="text-align: center;">0</p>

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
\$856,971.00	\$608,289.92	70.98%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
	\$59,282.68	70.98%

Project Description:

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The Western States Rural Transportation Consortium (WSRTC) was established with the following mission, vision and goals:

Mission

The WSRTC shall provide a collaborative mechanism to leverage research activities in a coordinated manner to respond to rural transportation issues among western states related to Technology, Operations and Safety.

Vision

The WSRTC shall promote innovative partnerships, technologies and educational opportunities to facilitate and enhance safe, seamless rural travel throughout the western United States.

Goals

- Provide a framework to leverage research and promote collaboration in solving rural transportation issues.
- To leverage research resources related to rural issues concerning technology, operations and safety.
- Provide technology solutions in the form of technology transfer to rural areas and training on a regular basis.
- Recycle and reuse existing research, applying its results to rural issues.
- Development of a rural western states integrated corridor management system to improve seamless, coordinated and safe transportation to the public.

Project work is assigned via task order, and 5 task orders have been executed in Phase 2 of the pooled fund through the end of this quarter:

- WTI Task Order #2 - WSRTC Meeting Coordination, Western States Forum Travel Support and Website Maintenance (\$110,000). This task order concluded 6/30/2024.
- WTI Task Order #6 - WSRTC Meeting Coordination, Western States Forum Travel Support and Website Maintenance (\$121,977).
- Montana Tech Task Order #2 - Chain-Up Delay Tracking and Estimation (\$125,000).

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

WTI Phase 2, Task Order #6 - WSRTC Meeting Coordination, Western States Forum Travel Support and Website Maintenance

Task 1: Project Management

The project team compiled the minutes and meeting documents from the Annual Meeting. The agenda, meeting presentation, and meeting minutes were made accessible and posted to the website along with a report on the meeting. A balance spreadsheet of project expenditures was updated.

Commitments and obligations to the Pooled Fund were discussed. The WSRTC Charter document was edited and reviewed.

Travel support was coordinated and reimbursement requests received, processed, and disbursed for the Western States Forum and WSRTC annual meeting, and for NRITS / ITE.

Task 2: Western States Forum Support

The 19th Annual Forum was held near the end of the last quarter. This quarter the project team completed all remaining travel reimbursement requests and fulfilled all financial obligations. The evaluations were compiled, and a review meeting was held with the Steering Committee. An article about the Forum for the WTI newsletter was drafted and published: Cutting-Edge Technology and Practical Solutions for Rural ITS Challenges: Highlights from the 19th Annual Western States Forum – The Western Transportation Institute. The 2024 Past Forum page was posted on the Forum website

Anticipated work next quarter:

WTI Phase 2 Task Order 6: WSRTC Meeting Coordination, Western States Forum, Website Maintenance

Task 1: Project Management

Project management discussions will be held including budgeting and executing future task orders within the Pooled Fund. The WSRTC and Forum fact sheets will be updated. A balance spreadsheet of expenditures will also be updated.

The WSRTC Charter document will be edited, reviewed, finalized, and sent for signatures.

Task 2: Western States Forum Support

The final report for the 2024 Western States Forum will be completed, sent for review, and finalized. The Forum and WSRTC websites will be further updated with a report on the 2024 Forum and images from the event. The impact page will also be updated as needed.

The venue for the 2025 Forum will be secured along with any lodging blocks as needed. A Save the Date postcard for the 20th Forum will be finished and distributed by mail and electronically. The Call for Abstracts will also be released mid-quarter. Both will be posted on the websites. The invitation and contact list will be updated. Catering plans will be reviewed.

Task 3: Meeting Planning and Coordination**Significant Results:****MSU:**

Project updates will be completed including a report on the 2024 Western States Forum. Contact information will be updated. The Forum website will be updated with images from the last Forum along with any current information for the 2025 event. New pages for the Chain-Up Delay and Fotokite projects will be posted. Impact pages will be updated.

Montana Tech:

Work continued on the Chain-Up Delay Tracking and Estimation project, and data collection continued overlapping with some bad weather and several chain-up events at Fawndale. Additional sites were brought online by Caltrans. Access was tested and data was downloaded for subsequent analysis. Travel time estimation was tested and associated delay was observed in conjunction with known chain-up events. Timestamp issues were discovered and rectified.

UC Davis:

The key achievement for Q1-25 was investigating the root causes of Fotokite's shortcomings. First, concerning the premature landings caused by ground base overheating, Fotokite determined the cause was due to a malfunctioning backup battery (specific to unit E376K). Three out of five (3 out of 5) units in the fleet experienced premature landings at least once, and the remaining two units require further examination for additional conclusions if any. Second, regarding Fotokite's incompatibility with new trucks, which resulted in short flight times of 30 to 45 minutes, both Fotokite and the AHMCT team suspect that this issue occurred due to limitations in the OEM ports, which might not consistently supply the necessary 85 amps of current. This issue is still under investigation. In the meantime, the AHMCT team suggested that WSDOT monitor the current draw at the inverter input and output to ensure consistent power supply.

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).

Winter was mild this year in Northern California. As a result, there have been relatively few chain-up events at Fawndale. The situation will be monitored in conjunction with the Chain-Up Delay Estimation project. Data quality issues were discovered and will be investigated further in the subsequent quarter.

Potential Implementation:

Tech Transfer and prospective implementation is anticipated from round-table discussions and affiliation with the Western States Forum.

Chain-Up Delay Tracking and Estimation is planned for ongoing research and development and subsequent implementation.