

**TRANSPORTATION POOLED FUND PROGRAM  
QUARTERLY PROGRESS REPORT**

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

**INSTRUCTIONS:**

Lead Agency contacts 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(441)	<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 type="checkbox"/> Quarter 3 (July 1 – September 30) <input checked="" type="checkbox"/> Quarter 4 (October 1 – December 31)	
<b>TPF Study Number and Title:</b> TPF-5(441) No Boundaries Maintenance Innovations		
<b>Lead Agency Contact:</b> James Fox	<b>Lead Agency Phone Number:</b> 720-241-6309	<b>Lead Agency E-Mail</b> james.fox@state.co.us
<b>Lead Agency Project ID:</b> R6.3 - TPF-5(441)	<b>Other Project ID (i.e., contract #):</b> PO 431008414 (expires 9/1/23)	<b>Project Start Date:</b> 9/30/2020
<b>Original Project Start Date:</b> 9/30/2020	<b>Original Project End Date:</b> 12/30/2025	<b>If Extension has been requested, updated project End Date:</b> Click or tap to enter a date.

**Project schedule status:**

<input checked="" type="checkbox"/> On schedule	<input type="checkbox"/> On revised schedule	<input type="checkbox"/> Ahead of schedule	<input type="checkbox"/> Behind schedule
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**Overall Project Statistics:**

Total Project Budget	Total Funds Expended This Quarter	Percentage of Work Completed to Date
\$715,703.27	\$63,358.26	81%

## Project Description:

No Boundaries Roadway Maintenance Practices transportation pooled fund program is sponsored by the Federal Highway Administration and is led by Colorado Department of Transportation (CDOT). Increasingly, state departments of transportation (DOTs) are challenged to maintain highway facilities to fluctuating budgets, policies and unknown future issues. Maintenance is a long-term activity to extend the life of highways. One of the strategies for achieving longer life facilities is to use innovative maintenance technologies and practices.

No Boundaries is a vital partner in connecting DOT maintenance professionals. By bringing together peers from transportation agencies across the nation and allowing sharing through a variety of channels—face-to-face peer exchanges, technical tours, online clearinghouse database, news distributions, and national partnerships—No Boundaries provides a network that accelerates the transfer of good ideas. This reduces duplication of effort, supports collaboration, and hastens the implementation of maintenance best practices. No Boundaries further fosters collaboration within the transportation community, academia and industry to implement innovative transportation maintenance technologies.

The scope of work is divided into five Task Areas, A through E.

A. General: staffing and management, updating the operations and procedures manual, and required record keeping.

B. Administration: creation of quarterly reports, budget and invoicing, monitoring and coordination of funding transfer among member states, and technical advisory committee meeting (TAC) meetings and peer exchanges.

C. Communication: correspondence with TAC members and regular meetings, and creation and delivery of maintenance news items.

D. Research and innovation: quick-turnaround synthesis research, innovation database development and launch, and innovation database support.

E. Marketing and recruitment: solicitation of new members, marketing (website updates and upkeep, program brochures, innovation one-sheets, and a marketing pan), and partnership and liaison opportunities.

## Progress this Quarter

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

### A. General

- Conducted work in categories A-E below identified on Task Order 4.
- Conducted ongoing management and record keeping.
- Updated membership roster, including updated technical and research staff from member states.

### B. Administration

- Completed the planning for and held a hybrid in-person/virtual TAC Peer Exchange in Suffolk, VA from October 17-19, 2023.
  - Planning included finalizing the meeting agenda, guest presentations, hotel accommodations and meeting logistics, as well as booking remaining member flights.
  - Onsite activities included facilitating and documenting the meeting.
  - Follow-up activities included posting meeting materials, creating a meeting summary presentation for members to use with their agencies and assisting with member reimbursements.
- Continued to reach out to TAC members and funding contacts regarding transfers and payments for FFY23 and commitments for FFY24; kept budget and tracking spreadsheets up to date.
- Created a timeline of activities to lead up to Phase IV of the pooled fund. Developed Phase IV draft solicitation language and sent to CDOT for review and approval.

### C. Communication

- Continued writing and sending weekly emails, featuring individual news items on research, webinars, events, and program announcements, to the No Boundaries email distribution list.
- Coordinated quick-turnaround surveys and forwarded formal surveys at individual members' and outside researchers' request.
  - Litter Pickup on State Highways and Medians (MIT)
  - CDL Contracts for Staff (CA)
  - Maintenance Training (CT)
  - Fog or Low Visibility Detection/Warning System (IL)
  - Interest in a pooled fund on AVL (MO)
- Communicated with individual members to fulfill information requests.

### D. Research and Innovation

- Finalized the Equipment Acquisition and Management Challenges and Solutions synthesis, which included a literatures search and survey.
- Began work on several syntheses efforts that resulted from the Virginia Peer Exchange.
  - Innovation Showcases – Developed a table with the initial research results into every DOT innovation program
  - Using Virtual Reality for Maintenance Training – Completed the scope and preliminary literature search.
  - Maintenance Staff Engagement with Agency Tools and Technologies in the Field – Drafted the scope and preliminary literature search.
  - Reducing Backing Accidents in State Transportation Agency Workplaces and Work Zones – Drafted the scope and preliminary literature search.
- Continued collecting/creating innovations for the innovations database.

### E. Marketing and Recruitment

- Updated website with new program information.
- Sent final postcard and trading card size marketing pieces to TAC members to use at meetings and conferences to promote No Boundaries innovations.

## Anticipated work next quarter:

### A. General

- Conduct ongoing management and record keeping.
- Develop, draft and finalize a second amendment to Task Order 4.

### B. Administration

- Plan and hold a TAC call on January 31, 2024.
- Complete the planning for and hold a hybrid in-person/virtual TAC Peer Exchange the week of May 6, 2024 in Louisiana.
  - Planning will include finalizing the meeting agenda, technical site visit details, guest presentations, hotel accommodations and meeting logistics, as well as booking remaining member flights.
  - Onsite activities included facilitating and documenting the meeting.
  - Follow-up activities included posting meeting materials, creating a meeting summary presentation for members to use withing their agencies and assisting with member reimbursements.
- Finalize the solicitation language for Phase IV of the pooled fund study, anticipated to begin in FFY25. CDOT will start the pooled fund solicitation process. This will include securing Steering Committee and full TAC approval.

C. Communication

- Continue writing and sending weekly news emails to the No Boundaries email distribution list.
- Onboard new TAC members and new No Boundaries Member agencies as needed.

D. Research

- Continue coordinating quick-turnaround surveys at individual member's request.
- Continue work on new syntheses to be identified at the October 2023 peer exchange.
  - Innovation Showcases – Survey states for additional information on innovation programs, finalize the table and post on No Boundaries website.
  - Using Virtual Reality for Maintenance Training – Develop and send national survey, complete literature search and draft the synthesis.
  - Maintenance Staff Engagement with Agency Tools and Technologies in the Field – Develop and send national survey, complete literature search and draft the synthesis.
  - Reducing Backing Accidents in State Transportation Agency Workplaces and Work Zones – Develop and send national survey, complete literature search and draft the synthesis.
- Continue collecting/creating innovations to add to the innovations database, including items in partnership with FHWA and the Build a Better Mousetrap program

E. Marketing and Recruitment

- Update No Boundaries website with latest program information.
- Support national presentations.
- Continue discussion with national partners and identify formal liaison opportunities.
- Identify opportunities for presenting on No Boundaries at other national meetings.

**Significant Results:**

See Progress This Quarter section.

**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).**

None.

**Potential Implementation:**

This project provides a forum for State DOTs to share their maintenance innovations with each other, support technology transfer activities and develop marketing and deployment plans for the implementation of selected innovations. Innovative products, practices and policies that CDOT and other member DOTs learn about can be readily tried in the field, piloted and implemented. Members can call upon one another for further information, support and guidance. Such implementation among member states has been documented since No Boundaries' inception, and it is expected to continue.

Moreover, the project's next-generation database and associated innovation communication tools, now in development, is expected to serve as a hub where innovations and research related to highway maintenance can be found and showcased.

FHWA, industry and others (domestic and international) will be invited to participate in the project discussions and activities by presenting or demonstrating innovations. No Boundaries members also attend regional state and national meetings and serve as liaisons with national committees (notably AASHTO and TRB). Further implementation of maintenance innovations among such partners beyond state DOTs is fostered through these relationships.