

## TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Virginia DOT (VDOT)

**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>  <b>TPF-5(385) Pavement Structural Evaluation with Traffic Deflection Devices (TSDDs)</b>		<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:</b>  <b>Pavement Structural Evaluation with Traffic Speed Deflection Devices (TSDDs)</b>			
<b>Name of Project Manager(s):</b> Brian Diefenderfer	<b>Phone Number:</b> (434) 293-1944	<b>E-Mail</b> <a href="mailto:brian.diefenderfer@vdot.virginia.gov">brian.diefenderfer@vdot.virginia.gov</a>	
<b>Lead Agency Project ID:</b>	<b>Other Project ID (i.e., contract #):</b> 449904 (VT)	<b>Project Start Date:</b> 10/15/2018	
<b>Original Project End Date:</b> 9/30/2021	<b>Current Project End Date:</b> 10/31/2023	<b>Number of Extensions:</b> --	

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
\$6,040,000*	\$ 4,600,064	70%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$418,639 (6%)	\$418,639	70%

\* Committed (including 2 transfers from FHWA EFL); the actual contracted budget is \$5,201,677 (VTTI)

**Project Description:**

The objective of the pooled-fund is to establish a research consortium focused on providing participating agencies the opportunity to test available TSDDs as part of a demonstration project and providing guidelines on how to specify collection and use data collected with TSDDs. Specific tasks within this multi-year program will be developed in cooperation with the consortium participants.

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

- Organized Workshop meeting on September 27<sup>th</sup>, 2022.
- Finalized and submitted report for Eastern Federal Lands TSD data analysis.
- Continued work Guidelines and Specifications for TSDD Data Collection.
- Submitted proposal to develop appropriate indices to derive from TSD measurement to be used for network-level and project-level applications. Proposal was discussed during TAC meeting on September 27<sup>th</sup>, 2022 and project was approved.

**Anticipated work next quarter:**

- Organize 8<sup>th</sup> Webinar: look for volunteer from participating agencies to present their agency efforts.
- Finalize *Guidelines and Specifications for TSDD Data Collection*.
- Finalize Webinars 1-6 report.
- Continue support of Wisconsin TSD analysis efforts.
- Develop Circular summarizing workshop circular.
- Restart regional pooled fund meetings.
- Organize a TAC meeting during TRB.

**Significant Results:**

- Scavone, M. Katicha, S., Flintsch, G., and Amarth E. "Estimating Load Transfer Load Transfer Efficiency for Jointed Pavements from TSD Deflection Velocity Measurements." Accepted for presentation at the 2023 Transportation Research Board Meeting and Publication in the TRR.

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

**Potential Implementation:**