

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.

Transportation Pooled Fund Program Project # <i>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i> TPF-5(385)		Transportation Pooled Fund Program - Report Period: <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)	
Project Title: Pavement Structural Evaluation with Traffic Speed Deflection Devices (TSDDs)			
Name of Project Manager(s): Brian Diefenderfer	Phone Number: (434) 293-1944	E-Mail brian.diefenderfer@vdot.virginia.gov	
Lead Agency Project ID:	Other Project ID (i.e., contract #): 449904 (VT)	Project Start Date: 10/15/2018	
Original Project End Date: 9/30/2021	Current Project End Date: 10/31/2023	Number of Extensions: --	

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
\$5,268,000*	\$ 3,043,389	58%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$238,859 (5%)	\$238,859	58%

* Committed (including transfer from FHWA EFL); the actual contracted budget is \$4,445,996 (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.):

- Finalized Idaho implementation project
- Conducted 3 of the 4 initial subgroup meetings
- Conducted the planned webinar in May
- Selected one case study using data from Idaho and Virginia and finalized the analysis including:
 - Calculation of S_{Neff} using AASHO method and Rohde method
 - Calculation of overlay thickness
- Submitted literature review report: “*Overview of TSDD Technologies and their Network and Project Level Applications*” to pooled fund members
- Started developing Matlab application to calculate S_{Neff} and determine required overlay thickness from TSD and GPR data.
- Finalized proposal for collecting GPR data and analyzing TSD and GPR data for Eastern Federal Lands

Anticipated work next quarter:

- Conduct fifth webinar in August
- Continue to work on the document *Guideline for Pavement Management Implementation of TSD*
- Continue to work on the document *Guidelines and Specifications for TSDD Data Collection*.
- Continue work on case studies
- Continue work on Matlab application

Significant Results:

- Draft report from Infrasense on the Idaho implementation project (submitted to the Idaho DOT for review)
- Report: “*Overview of TSDD Technologies and their Network and Project Level Applications*”

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: