# 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><br>( <i>i.e.</i> , SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX) | Transportation Pooled Fund Program - Report Period: |  |
|---|---|--|
|   | ☑Quarter 1 (January 1 – March 31)                   |  |
| TPF-5(385)  | □ Quarter 2 (April 1 – June 30)                     |  |
|   | □ Quarter 3 (July 1 – September 30)                 |  |
|   | □ Quarter 4 (October 1 – December 31)               |  |
|   |   |  |

## Project Title:

Pavement Structural Evaluation with Traffic Speed Deflection Devices (TSDDs)

| Name of Project Manager(s): | Phone Number:                        | E-Mail                               |
|-----------------------------|--------------------------------------|--------------------------------------|
| Brian Diefenderfer          | (434) 293-1944                       | brian.diefenderfer@vdot.virginia.gov |
| Lead Agency Project ID:     | Other Project ID (i.e., contract #): | Project Start Date:                  |
|                             | 449904 (VT)                          | 10/15/2018                           |
| Original Project End Date:  | Current Project End Date:            | Number of Extensions:                |
| 9/30/2021                   | 9/30/2021                            |                                      |

Project schedule status:

| $\checkmark$ | 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<br>Completed to Date |
|----------------------|--------------------------------|---|
| \$3,694,000*         | \$ 1,308,351                   | 35%                                     |

#### Quarterly Project Statistics:

| Total Project Expenses      | Total Amount of Funds | Total Percentage of |
|-----------------------------|-----------------------|---------------------|
| and Percentage This Quarter | Expended This Quarter | Time Used to Date   |
| \$397,498 (11%)             | \$397,498             | 11%                 |

\*Committed; the actual contracted budget is up to \$2,265,000 (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 a TAC meeting on January 14, 2020 in conjunction with 99<sup>th</sup> Annual Meeting of the Transportation Research Board in Washington D.C.
- Analyzed FHWA data for the detection of weak spots and weak joints in jointed concrete.
- Developed a first research statement for developing *Guidelines and procedures to implement TSDD measurements into pavement management,* based on feedback from January TAC meeting.
- Conducted TSD measurements in Georgia and Texas (partial).
- Processed and delivered the data collected in Arkansas, Mississippi, New Mexico (partial), North Carolina, Georgia, Tennessee, and Texas (partial).

## Anticipated work next quarter:

- Start work on research need statement (literature review on TSDD practices and implementation into PMS)
- Plan and conduct additional testing as needed.
- Continue data processing and delivery.

## Significant Results:

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).

• The Raptor is currently not available to be able to perform comparison with TSD.

#### **Potential Implementation:**