TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Virginia DOT

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.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)* TPF-5(206)	**Transportation Pooled Fund Program - Report Period:** ☑ Quarter 1 (January 1 – March 31) ☐ Quarter 2 (April 1 – June 30) ☐ Quarter 3 (July 1 – September 30) ☐ Quarter 4 (October 1 – December 31)	
Project Title: Program to Support the Development and Deployment of Connected Vehicle Applications		
Name of Project Manager(s): Michael Fontaine	**Phone Number:** 434-293-1980	**E-Mail** Michael.Fontaine@vdot.virginia.gov
Lead Agency Project ID: 97199/90712	**Other Project ID (i.e., contract #):** 133471-GS10961	**Project Start Date:** July 2009
Original Project End Date: June 2011	**Current Project End Date:** December 2021	**Number of Extensions:** 4

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
$8,760,890.33	$7,944,904	91%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
N/A	$469,152	N/A

Project Description:

The pooled fund study entitled "Program to Support the Development and Deployment of Connected Vehicle Applications" was created by a group of state and local transportation agencies and FHWA in order to provide a means to conduct the work necessary for infrastructure providers to play a leading role in advancing the connected vehicle environment.

Objective:

Through a set of pooled fund studies, the Virginia Department of Transportation (VDOT) is working with federal, state and local departments of transportation, to establish a multi-phase program to facilitate the field demonstration, and deployment of connected vehicle infrastructure applications. In Phase I, the participants are focused on modeling, development, engineering and planning activities that will aid transportation agencies in justifying and promoting the large scale deployment of a connected vehicle environment. Phases 2 through 4 of the program will continue research and development to prepare agencies to deploy connected vehicle environments.

Scope of Work:

The pooled fund study will focus on the following:

• Development and evaluation of connected vehicle large-scale system level operations applications
• Independently research and address issues that will affect the deployment of connected vehicle systems by state and local transportation agencies
• Support AASHTO's Strategic and Deployment Plans
• Support USDOT's Connected Vehicles Programs and initiatives

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

1. Pooled Fund Study Overall
   a. Monthly calls were held on January 29, February 26, and March 26, 2021.
   b. The Pooled Fund Study Members approved new projects.
   c. Commitments are being received for the current/new PFS (TPF-5(389)) for FY2021 and beyond.
2. Multi-Modal Intelligent Traffic Signal System (MMITSS) Phase 3 - Deployment Readiness Enhancements
   a. A close out meeting was held on February 18, 2021.
3. V2I Queue Advisory/Warning
   a. A close out meeting was held on January 21, 2021.
4. Connected Intersections Program
   a. Monthly calls were held January 19, February 16, and March 16, 2021.
   b. WSP created a work plan to streamline the effort being done across several agencies.
5. Creation of MAP Guidance Document
   a. Task 5: Prototype Use & Pilot Testing of Draft Guidance - Volunteers completed testing
   b. Task 6: Final Guidance Document draft revisions were completed.

Anticipated work next quarter:

1. Pooled Fund Study Overall
   a. Monthly calls will be held in each month.
   b. Future project topics will be discussed, approved and initiated by the members.
   c. A new phase of the PFS will be initiated (Phase 5).

2. Multi-Modal Intelligent Traffic Signal System (MMITSS) Phase 3 - Deployment Readiness Enhancements
   a. A project closeout presentation was held on February 18, 2021. Final deliverables were sent to members.

3. V2I Queue Advisory/Warning
   a. A project closeout presentation was held on January 21, 2021. Final deliverables were sent to members.

4. Creation of MAP Guidance Document
   a. Monthly project calls will be held in each month.
   b. A final draft Guidance document will be complete.
   c. CV PFS members approved an extension of this project with an expanded scope to continue work on this project.

5. Connected Intersections Program
   a. Monthly project calls will be held in each month.
   b. Testing at the selected sites will begin.
   c. A plan for SCMS Engagement and coordination with ITE will begin.

Significant Results:

None in this quarter.

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 this quarter.

Potential Implementation:

None in this quarter.