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:** June 2020	**Number of Extensions:** 3

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
$7,382,354	$5,353,456	73%

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	$218,435	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. Phase 2 and 3 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 July 27, August 24, and September 28.
   b. PFS transition planning was completed.
      i. The current PFS will cover up to FY2018.
      ii. A new PFS number was established for FY2019-2020.
   c. A face-to-face meeting is being planned for Atlanta, GA on December 4-5.
   d. A slightly revised charter was prepared and posted on the CV PFS website.
2. PFS Phase 3 Projects
   a. Basic Infrastructure Message
      i. Monthly calls were held on July 19 and August 16.
      ii. Draft final reports for Tasks 2-4 and two white papers are being prepared and will be submitted in November.
3. Multi-Modal Intelligent Traffic Signal System (MMITSS) Phase 3 - Deployment Readiness Enhancements
   a. Monthly calls were held on July 19 and August 16.
   b. A project management plan was submitted and a revision is being prepared.
   c. A MMITSS development plan is being prepared.
4. Connected Traffic Control Systems (CTCS)
   a. A monthly call was held on September 18.
   b. A draft project management plan was submitted and a revision is being prepared.
   c. A draft stakeholder engagement plan is being prepared.
5. PFS Phase 4 - two new projects are being pursued.
   a. V2I Queue Advisory/Warning: A request for letters of intent is being prepared which will be released in November.
   b. Using Third Parties to Deliver I2V: A request for letters of intent was released on September 4.

Anticipated work next quarter:

1. Pooled Fund Study Overall
   a. Monthly calls will be held in each month.
   b. A face-to-face meeting will be held in Atlanta, GA on December 4-5.

2. PFS Phase 3 Projects
   a. Basic Infrastructure Message
      i. Monthly project calls will be held in each month.
      ii. All the draft final reports will be submitted in November for final approval.
      iii. This project will be completed by the end of December.

3. Multi-Modal Intelligent Traffic Signal System (MMITSS) Phase 3 - Deployment Readiness Enhancements
   a. Monthly project calls will be held in each month.
   b. A project management plan will be finalized.
   c. A MMITSS development plan will be finalized.

4. Connected Traffic Control Systems (CTCS)
   a. Monthly project calls will be held in each month.
   b. A project management plan will be finalized.
   c. A stakeholder engagement plan will be finalized.

5. PFS Phase 4 - two new projects are being pursued.
   a. V2I Queue Advisory/Warning: RFLI will be issued and a subcontractor will be selected.
   b. Using Third Parties to Deliver I2V: A subcontractor will be selected.

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).

No problems have been encountered to date.

Potential Implementation:

None in this quarter.