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-(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): Catherine McGhee	**Phone Number:** 434-293-1973	**E-Mail** Cathy.McGhee@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:** August 2017	**Number of Extensions:** 2

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
$4,989,854	$4,248,128	85%

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	$88,504	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 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. PFS monthly calls were held on August 26 and September 30.
   b. The next face-to-face meeting will be held on December 7-8 in San Antonio, TX.
      i. December 7 – Texas demo and project updates
      ii. December 8 – CV PFS business
      iii. Logistics for the meeting is being prepared.
      iv. A draft agenda was prepared and being revised.
   c. Collaboration opportunity with USDOT
      i. Multi-Modal Intelligent Traffic Signal System (MMITSS) Phase 3 discussion in progress
2. Multi-Modal Intelligent Traffic Signal System (MMITSS) Phase II
   a. The final report was received and approved and the project is now completed.
3. Phase II (Round 4) Project
   a. Surveying/Mapping for CV Applications
      i. A final presentation webinar was held on August 18.
      ii. The final report was received and approved and the project is now completed.
4. Phase III Projects
   a. DSRC Rd/Wx Phase 2
      i. A kickoff call was held on August 26.
      ii. Work being conducted as planned.
   b. Basic Infrastructure Message
      i. A final revised proposal was received and approved.
      ii. A subcontract is being established.

Anticipated work next quarter:

1. Pooled Fund Study Overall
   a. A PFS monthly call will be held in each month.
   b. The next face-to-face meeting will be held on December 7-8 in San Antonio, TX.
   c. MMITSS Phase 3 collaboration discussion with USDOT will continue.

2. Phase III Projects
   a. DSRC Rd/Wx Phase 2
      i. Work will be conducted as planned.
   b. Basic Infrastructure Message
      i. A kickoff call will be held on October 14.
      ii. An official subcontract will be established.

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:

The Multi-Modal Intelligent Traffic Signal System was deployed in the testbeds in Arizona and California and demonstration was completed.