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 Cooperative Transportation Systems 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:** December 2013	**Number of Extensions:** 1

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
$2,015,000	$726,267	36%

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	$114,328	N/A

Project Description:

The pooled fund study entitled "Program to Support the Development and Deployment of Cooperative Transportation Systems 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 Cooperative Transportation Systems.

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 Transportation Systems 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 Connected Transportation Systems. 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 Transportation Systems 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. Year 2 Program
a. CTS Certification project by OmniAir: A final report compiling all tasks was submitted on May 9th and approved by the pooled fund study members and the project was officially complete.
b. Aftermarket OBE project by Visteon: The final Task 4 report was submitted on April 26th. Subsequently, the final report including all tasks was delivered on Monday, May 21st and the project officially ended.

2. PFS Dynamic Mobility Application (DMA) Program
a. Project management plan (PMP): a draft delivered on April 2nd, a revision on April 30th and a final on May 15th.
b. Report on assessment of relevant research: a draft delivered on May 31st and a final on June 29th.
c. On Monday, June 4th, a public webinar was held to gather stakeholder inputs on the ideas/issues related to concept of operations. A draft stakeholder meeting report was delivered on Saturday, June 30th.
d. For project management, several conference calls with the contract were held on May 2nd, May 29th, and June 14th.

3. Selection and Scoping of Projects for Next Year
a. Along with an assessment of six project ideas selected in Irvine in December 2011, two new project ideas were proposed for consideration in Phase 2. The PFS team held a conference call on April 16th for a discussion.
b. A revised list of project ideas and their high-level scopes were prepared. Finally two projects were recommended for further consideration as follows: 1) 5.9 GHz DSRC Vehicle Based Road and Weather Condition Application and 2) Traffic Management Centers in a Connected Vehicle Environment.
c. Draft scopes for these two projects were completed and subsequently discussed at a call on June 29th.

4. Work Plan for Phase 2: A proposal for Phase 2 of the pooled fund study with budget and scope was being prepared.

Anticipated work next quarter:

1. PFS Dynamic Mobility Application (DMA) Program

a. A final report on assessment of relevant research will be delivered in July.
b. A final report on stakeholder input will be submitted in July.
c. A draft and a revised concept of operations will be delivered in July and a final version will be completed in September.
d. A face-to-face meeting will be held on July 18th in Washing D.C. to gather inputs on the concept of operations.

2. Selection and Scoping of Projects for Next Year

a. Draft scopes for the selected projects will be finalized and a procurement process will be initiated. These projects are:
   1) 5.9 GHz DSRC Vehicle Based Road and Weather Condition Application
   2) Traffic Management Centers in a Connected Vehicle Environment.

3. Work Plan for Phase 2

a. A proposal for Phase 2 of the pooled fund study will be finalized and submitted to Virginia Center for Transportation Innovation and Research (VCTIR) to establish a project at UVA CTS.

Significant Results:

1. Two Year 2 Projects (CTS Certification and Aftermarket OBE) were completed.

2. For the PFS Dynamic Mobility Application (DMA) project, a project management plan and an assessment report on relevant research were complete. Also, a stakeholder meeting webinar was held.

3. The projects for Phase 2 were finally selected and the scopes are being finalized.

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 will be deployed in the selected location in the next phase of the PFS DMA program.