



## Cooperative Transportation Systems (CTS) Pooled Fund Study (PFS)

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## Cooperative Transportation Systems Pooled Fund Study

- **The Pooled Fund Study (PFS) is a partnership of transportation agencies who have established a program to facilitate the development and evaluation of Connected Vehicle applications**
- **The program will prepare state and local transportation agencies for the deployment of Connected Vehicle technologies**
- **The program will result in the following outcomes:**
  - **Development and demonstration of Connected Vehicle-enabled system operations algorithms, tools and applications**
  - **Preparation for field demonstration tests**

# Current PFS Membership

## Paying/Voting Members

- VDOT is lead agency with administrative support from UVA
- Ten Core Members:  
*Virginia, California, Florida, Michigan, Minnesota, New York, Texas, Washington, Maricopa County and FHWA*
- *Wisconsin DOT is joining for Phase 2*

## Non-paying/Non-voting Members

- Associate Members:  
*Palm Beach Co, FL; Oakland Co, MI; MTC (Bay Area), Montgomery Co, MD; Transport Canada*
- Liaisons:  
*NCHRP/SHRP 2; AASHTO (strategic and deployment plans)*



## CTS PFS Program Phases

### Phase I (FFY 10-11)

- **Focused on researching topics needed for transportation agencies to plan for connected vehicle deployments**

### Phase II (FFY 12-13)

- **Focused on preparing agencies to deploy connected vehicle environments, potential tasks may include**
  - **Framework for state and local agencies to evaluate different approaches to Connected Vehicle infrastructure deployment**
  - **Follow on tasks from Year 1 projects that enable transportation agencies to deploy connected vehicle technologies**
  - **Deployment of DMA Signal Application**
  - **Phase now open for new member commitments**

## PFS Program Goals and Objectives

- **Develop and evaluate Connected Vehicle system-level applications**
  - **Signal system algorithms**
  - **Pavement Maintenance Support Applications**
- **Independently research and address issues that will affect the deployment of Connected Vehicle systems by state and local transportation agencies**
  - **Certification of RSEs**
  - **Deployment of OBE/Aftermarket devices**
  - **Evaluation of Signal Phase and Timing data**
- **Support AASHTO's Strategic and Deployment Plans**
- **Support USDOT's Connected Vehicles Programs and initiatives**
  - **Dynamic Mobility Applications**

## Support and Align with Key Recommendations from AASHTO's Deployment Analysis\*

- **Support applications on aftermarket & consumer devices**
- **Deploy RSEs for selected applications and users, based on corridor approach**
  - **Mobility & agency operations**
  - **Commercial vehicle transactions**
  - **Emergency Vehicle pre-emption**
  - **Safety applications at isolated intersections**
- **Support and provide input to the USDOT's Connected Vehicle Program**
- **Address CV governance, liability, security and privacy issues**
- **Develop plan for CV education and outreach**
- **Develop a national footprint plan for DSRC RSE infrastructure**
- **Provide recommendations into the development of formal CV Infrastructure Design Guidelines**
- **Develop a national funding strategy, collaborating with other parties as appropriate**

## PFS Phase II of Study

- **Study has been extended for another two year phase that allows:**
  - Additional funds and contract vehicle to continue independent Connected Vehicle research and development activities
  - PFS to develop projects that align with the DMA program timeline
  - Projects to evolve to the deployment/testing of Connected Vehicle applications and research
- **Phase II Next Steps**
  - **PFS Website is open for Commitments**
    - \$50k per year per agency
    - SPR Funds can be used
    - Localities are welcome to join as a paying member, commitments can be negotiated based on agency size and research/operations budgets
    - Begin Phase II in January 2012
  - **Projects still to be defined for Phase II of the Study, however, will focus on the deployment of CV technology**



## Additional Information

### Cooperative Transportation Systems Pooled Fund Study Website

[http://cts.virginia.edu/CTSPFS\\_1.html](http://cts.virginia.edu/CTSPFS_1.html)

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