Connected Vehicle Pooled Fund Study Overview

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VDOT’s Vision for Connected and Automated Vehicles

VDOT envisions a future environment where Connected and Automated Vehicle applications provide connectivity between vehicles, roadside infrastructure and wireless devices. This interconnected environment is expected to meet the following objectives:

- Increased Safety
- Improved Mobility
- Reduced Infrastructure Investments
- Enhanced Traveler Information
Connected and Automated Vehicle Program Development

• Full-Time Program Manage since Fall 2016

• Connected and Automated Vehicle Executive Steering Committee Established
  Sets strategic direction and priorities for VDOT’s CAV Program, including outreach & advocacy, implementation and more

• Connected and Automated Program Plan - Available Now at http://virginiadot.org/automated
VDOT’s CAV Program Plan and More is Online

Please visit http://virginiadot.org/automated
The Connected Vehicle Pooled Fund Study (CV 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, local, and international transportation agencies for the deployment of Connected Vehicle technologies.
Objectives

The program will result in the following outcomes:

• Development and demonstration of connected vehicle technology, algorithms, tools and applications
• Preparation for field deployments
• Development and deployment documentation
• Lessons learned and identification of challenges from field deployments
Current Membership
Phased Program History

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<tr>
<th>Year</th>
<th>PFS Phase I</th>
<th>PFS Phase II</th>
<th>PFS Phase III</th>
<th>PFS Phase IV</th>
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<tbody>
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<td></td>
<td>Research to educate connected vehicle technologies</td>
<td>Develop and field testing connected vehicle applications</td>
<td>Continue developing and field testing CV applications</td>
<td>Continue developing and field testing CV applications</td>
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<th>MMITSS I</th>
<th>MMITSS II</th>
<th>MMITSS III</th>
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<td>2011/10-2013/7 $625K FHWA $500K / PFS $125K ConOps, Sys Req, Sys Design</td>
<td>2013/8-2016/6 $1,875K FHWA $1,500K / PFS $375K Sys Development and Field Testing</td>
<td>2017/4-2019/9 $762.5K FHWA $450K / PFS $312.5K Deployment Readiness Enhancement</td>
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Total: $8,385,000
PFS: $5,535,000
FHWA: $2,850,000 (MMITSS, CTCS)
Current Projects

• Connected Traffic Control System (CTCS): Research Planning and Concept Development
  ➢ Conducted by WSP USA (PI: Tom Timcho)

• Multi-Modal Intelligent Traffic Signal System – Phase III: Deployment Readiness Enhancements
  ➢ Conducted by University of Arizona (PI: Larry Head) and California PATH (PI: Kun Zhou)

• Basic Infrastructure Message Development and Standards Support
  ➢ Conducted by Southwest Research Institute (PI: Michael Brown)
Visit the CV PFS Website for Ongoing and Completed Research Projects

All the reports can be found on the research page of the CV PFS Website

http://www.cts.virginia.edu/cvpfs_research

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Thank you!

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