**CTB Innovation and Technology Subcommittee Meeting**

Agenda
April 20, 2016 at 8:00 a.m.
Craddock Terry Hotel and Event Center
Granite Hall
1312 Commerce Street
Lynchburg, Virginia 24504

**CTB Members present:**

Hap Connors, Jr.
Scott Kasprowicz
Alison DeTuncq
Court Rosen
Shannon Valentine

Mr. Connors called the meeting to order at 8:00 am.

Mr. Connors identified the following VDOT staff presenting to the Subcommittee:

- Mr. Quintin Elliott, Chief Deputy Commissioner
- Mr. Garrett Moore, Chief Engineer
- Mr. Dean Gustafson, State Operations Engineer
- Mr. Jose Gomez, Director, Virginia Transportation Research Council

## 1. Presentation of Innovation and Technology Transportation Fund Projects

Mr. Connors asked Mr. Gustafson to continue his presentation from the previous meeting on proposed Innovation and Technology Transportation Fund (ITTF) projects.

Mr. Gustafson reminded the Subcommittee of what was presented at the March meeting and continued his presentation with the proposed statewide and pilot initiatives.

### Statewide Project 1: Advanced Towing and Recovery (Emergency Relocation) Pilot Program

- Implementation of a pilot program to partner with towing and recovery operators to stage and deploy assets quicker during peak period travel times.
- Mr. Elliott commented that there were numerous legal issues associated with quick incident clearance processes and that the Department was actively working through those issues.

- Ms. Valentine noted that potential positive impacts that automated vehicles may have on reducing the number of traffic incidents in the future.

**Statewide Project 2: Transit Efficiency-Enabling Technologies**

- Deployment of technologies to support transit system reliability and improve travel times. VDOT to partner with DRPT and localities to identify most promising corridors and/or transit systems.
- No comments on this item.

**Statewide Project 3: Implement Emerging Technology Research**

- Conduct and implement innovative research on advanced transportation technologies. Research partners include Virginia Transportation Research Council, University of Virginia, Virginia Tech, George Mason University, and Old Dominion University.
- Mr. Gomez informed the subcommittee of the proposed effort to create an "automated park" at the Virginia Tech Transportation Institute to test and evaluate new transportation automation technologies.
- Mr. Moore identified the discrepancies between the testing of new technologies and actual real-world experience.

**Statewide Project 4: VDOT 511 System Enhancements**

- Deployment of new system features to promote multimodal options and advanced travel time estimation features. Promotes traffic demand management capabilities to control traffic volume.
- Mr. Gustafson clarified that VDOT's role in the provision of traveler information was changing over time with the advent of new services by the private sector.
- Mr. Rosen sought clarification on the Department's program of deploying dynamic message signs, particularly those posting destination travel times.
- Mr. Gustafson stated that the destination travel time signs were focused on specific traveler destinations and were significantly less expensive to deploy that traditional over-the-road dynamic message signs.

**Statewide Project 5: Community-Wide Adaptive Signal System**

- Deployment of adaptive traffic signal and centralized signal control technology on key arterial corridors to demonstrate / maximize the benefits of such technology. This is a pilot program to partner with localities to improve urban traffic flow.
- Mr. Elliott clarified that this effort would be focused on the integration of locality and VDOT signal systems to improve throughput.

- Mr. Connors questioned whether the barriers to success were institutional or technological. Mr. Gustafson clarified a little of both, but mostly institutional.

**Statewide Project 6: Advanced Traffic Signal Controllers**

- Deployment of new traffic signal controller technology to improve arterial throughput and reliability. The Advance Transportation Controller (ATC) allows application developers to create computer programs that work with the signal controller. This will be a critical component of all traffic signals as connected vehicle and autonomous vehicle technology begins to be deployed by the auto industry.
- Mr. Kasprowicz asked whether these systems were interoperable. Mr. Gustafson assured him they were based on national industry standards and not tied to a specific vendor.
- Ms. DeTuncq asked whether these systems needed to be deployed first to enable adaptive traffic signal technology. Mr. Gustafson assured her they did not.

In summary, Mr. Connors suggested that VDOT should consider coordination with federal research labs in the development and commercialization of advanced transportation technologies.

**2. Discussion of Innovation**

Mr. Connors opened the discussion by asking who in the Department (VDOT) was taking the long view (20-25 years) of the future of transportation in Virginia.

Mr. Moore commented that VDOT was developing a Request for Information (RFI) to seek input from private industry on how Virginia could accelerate the deployment and adoption of connected and automated vehicle technologies.

Mr. Kasprowicz asked whether VDOT could take a national leadership role on connected and automated vehicles. Mr. Moore assured him that we could.

Mr. Elliott commented that VDOT was experienced in leading national innovation efforts and bringing the private sector to the table.

Mr. Connors asked several questions addressing a number of potential areas for innovation:

- Who owned the innovation pipeline for transportation in Virginia?
- How do we reduce the cost of construction?
- Do we need a Chief Innovation Officer?
- Are we as tapped into the research and development community as we could be?

Ms. Ronique Day, from the Office of the Secretary of Transportation, was in attendance and informed the Subcommittee that she was initiating a working group to discuss how Virginia could accelerate the deployment of connected and automated vehicles in Virginia.

In summary, the Subcommittee and VDOT representatives agreed on a need for a visioning process for the future of transportation in Virginia. VDOT agreed to develop such a vision and present it to the Subcommittee at its next meeting.

Mr. Connors concluded the meeting at 9:00 am.