

CTB Innovation and Technology Subcommittee Meeting

Agenda

March 16, 2016 at 8:00 a.m.
VDOT Central Auditorium
VDOT Training Room
1221 East Broad Street
Richmond, Virginia 23219

CTB Members present:

Charles Kilpatrick, VDOT Commissioner, CTB Deputy Chair
Hap Connors, Jr.
Scott Kasprowicz
Alison DeTuncq
Court Rosen
Shannon Valentine
John Matney

The meeting was called to order at 9:00 am.

1. Discussion of Subcommittee Goals

Mr. Connors convened the meeting with a brief overview of the proposed goals of the Subcommittee and asked VDOT to present on the proposed projects to be funded by the CTB using Innovation and Technology Transportation funds.

Mr. Kilpatrick provided a brief introduction the roles of the Operations Division, Virginia Transportation Research Council and the Virginia Tech Transportation Institute in the Department's transportation technology program.

Mr. Garrett Moore, VDOT Chief Engineer, said that he wanted Virginia to drive innovation by other states and private industry on the issues of connected and automated vehicles.

Mr. Connors would like an established contact within the Department to be in charge of innovation and attract industry to support this effort. Mr. Moore discussed that VDOT needs to lead early deployment of new technologies in Virginia.

Mr. Kasprowicz asked whether there were national standards in place for connected and automated vehicles.

Mr. Moore commented that he believed new technology should be focused on reducing infrastructure and maintenance costs.

Deputy Commissioner Quinton Elliott suggested that Virginia may want to consider a pilot program to encourage the development or testing of new technologies in the Commonwealth.

Ms. DeTuncq suggested that VDOT should consider utilizing construction techniques that will support the deployment/adoption of connected and automated vehicles.

Mr. Connors suggested that VDOT conduct a formal analysis on innovative technologies and how best to coordinate these activities in the Department. He suggested that the ITTF funds could be used as an accelerator for transportation technology businesses in Virginia. Ms. Valentine agreed that such an approach would be good for economic development in Virginia.

Mr. Moore summarized that Virginia should:

1. Develop an Office of Innovation within the Department to attract new transportation technologies to Virginia and coordinate technology research and development.
2. Promote pilot sites to test and evaluate new technologies
3. Lead the development of standards that encourage the development of innovative technologies
4. Coordinate activities its activities with the Federal Highway Administration and the American Association of State Highway Transportation Officials (AASHTO).

Mr. Kilpatrick stated that there are numerous innovative transportation research facilities in Virginia.

Mr. Gustafson stated that VDOT was already in leader among state departments of transportation in the area of connected and automated vehicles, including standards development.

2. Presentation of Innovation and Technology Transportation Fund Projects

Mr. Dean Gustafson, State Operations Engineer, presented the following projects:

Project 1: I-95/I-395 Integrated Corridor Management Program: Multimodal Traveler Information

- Broad-based program to support multi-modal travel options in Northern Virginia. Project will include field equipment such as electronic signage comparing highway, alternate route and alternate mode travel time; parking management systems at VDOT Park and Ride lots; and dynamic destination travel time signs.
- Mr. Kilpatrick stated that the goal of this program was to modify driver behavior by providing better information to travelers about alternate routes and modes
- Mr. Connors asked about integration of this information into the VA 511 system.
- Mr. Kilpatrick stated that this information would be integrated in the VA 511 system but that the system needed to evolve to “push” the data to users.
- Mr. Gustafson discussed the Department’s efforts to work with crowd-sourced data providers such as Waze and Google.

Project 2: I-64 Westbound Over-height Vehicle Detection System

- Deployment of technology to detect and divert over-height vehicles in advance of HRBT tunnel; which will reduce the number of vehicles needing to turnaround requiring traffic stoppages. The project includes detectors, electronic signage and CCTV to monitor system performance.
- Mr. Kilpatrick stated that the westbound tunnel tube was approximately one foot lower than the eastbound tube; and this was the reason for the significant number of over-height vehicles attempting to use the tunnel.
- Mr. Kilpatrick described the project and its goal of identifying, stopping and re-routing over-height vehicles well in advance of the tunnel facility.

Project 3: Arterial Operations Improvements: US60, US17, Rt. 143 and Rt. 199

- Deployment of advanced signal communications, monitoring and control technologies to improve travel on the parallel routes to I-64 around the Williamsburg area.
- Mr. Gustafson explained that this project would be a partnership between VDOT and several localities.
- Mr. Kilpatrick stated that the project would help to rationalize signal technology among the parties.

Project 4: I-95 Southbound Hard/Dynamic Shoulder Running

- Implementation of hard/dynamic shoulder running on I-95 south from Rt. 630 to US17, a distance of approximately 5.4 miles.
- Mr. Gustafson identified this project as part of an Active Traffic Management (ATM) initiative for the area.
- Mr. Kilpatrick stated that this system was unlike the I-66 ATM project; this project would be less infrastructure-intensive.
- Ms. DeTuncq identified the need for operational improvements to improve operation of the I-95 HOT lanes.

Due to time constraints, the remainder of the projects was unable to be presented by Mr. Gustafson. Instead, he provided a brief overview of the structure of the presentation, highlighting the additional corridor-specific projects, statewide programs and pilots, and case studies of previous technology implementations. In addition, an offer was made to take the Subcommittee members to visit specific technology deployments in the field.

Mr. Connors thanked the Department of their efforts and said he would consider a continuation of the discussion at the April meeting in Lynchburg. Mr. Connors concluded the meeting at 8:55 am.