



Commonwealth Transportation Board Environmental Subcommittee

VDOT Central Office
1401 East Broad Street
Richmond, Virginia 23219

January 11, 2022

Minutes

The meeting was called to order at 8:30 a.m.

Members of the Subcommittee in Attendance: Angel Deem, Chair; Mary Hynes; Mark Merrill

I. Welcome

Angel Deem, Chief of Policy, VDOT

II. Approval of December 2021 minutes

III. Sustainable Aviation Fuels

Presenters:

James H. Lambert, Director of the Center for Risk Management of Engineering Systems at the University of Virginia

Mark Manasco, President and Executive Director of the Commonwealth Center for Advanced Logistics Systems (CCALS)

Mark Flynn, Director, Virginia Department of Aviation

- Ms. Cathy McGhee, Director of Transportation Research and Innovation introduced this topic sharing that the focus on this initiative is in concert with the reduction of greenhouse gas emissions from the transportation section. While aviation fuels are a relatively small component of transportation emissions, moving to a more sustainable fuel source could have an environmental and economic impact.
- Dr. James Lambert, indicated the major airlines are interested in having access to sustainable aviation fuels and Virginia is positioned to be a leader for integrating the

supply chain having a United Airline hub, an existing fuel pipeline that can leverage the available wood byproducts and feed stock/farm waste residuals.

- Dr. Lambert, to further this point, indicated that across all airlines, there is a nationwide commitment to purchase three billion gallons/year of alternative airline fuels.
- Ms. Mary Hynes inquired as to the applicability of this research for heavy vehicles. Dr. Lambert explained that, for ground vehicles, there are more efficient ways to decarbonize such as use of batteries and hydrogen. Further, aviation fuel is a different formula than diesel used for surface transportation.
- Mr. Mark Merrill requested a graph showing what type of users use what type of fuel.
- Ms. Hynes noted that Tazewell is on I-81, where congestion is already a problem and expressed concern that more trucks would be needed to ship these new fuels, making traffic worse. She asked if some could be moved by rail. Dr. Lambert/Cathy McGhee indicated the SAF itself would be transported via pipeline; however, they made clear that the current research does not examine transportation system stresses that may be needed to transport the byproduct to the refineries. It was noted that should a supply chain be established, there would be a need to look into transportation alternatives for moving byproducts.
- Ms. Hynes asked for confirmation that a new pipeline would be needed in Virginia. Dr. Lambert/Mark Flynn confirmed that one would not, but spurs may be needed. Dulles currently receives fuel by pipeline and this alternative airline fuel can be mixed in with what is in the pipeline.
- Mr. Merrill asked whether the US Department of Defense is considering these fuels, given the magnitude of the military establishments in Virginia. Dr. Lambert confirmed that they are.
- Ms. Hynes summarized stating that Virginia already has a substantial market and a delivery system, but she questioned who would get the manufacturers connected to the market and delivery system. Dr. Lambert added that the Federal government does not plan to step in and that it will be up to Virginia to negotiate with the airlines and make it happen.

IV. Resiliency

Follow up on Definitions

- Angel Deem asked the Committee to recall the definitions provided in the December minutes and added that comments are still welcome.
- Ms. Hynes noted that flooding may be too narrow and the definitions need to capture landslide risks as well. “Other water inundation” was discussed as a means of capturing related issues or concerns.
- Mr. Merrill recommended adding “mitigate” in the resiliency definition.
- VDOT’s resiliency steering committee (a committee of subject matter experts) will provide additional feedback on these definitions at an upcoming workshop.

Needs Statement and Objectives

- Angel Deem and Chris Swanson shared the concept of a Resiliency Program Plan as a vehicle to organize efforts and strategies, identify priorities, and position the Commonwealth for funding opportunities.
- Continued discussion with this subcommittee will identify those program elements that warrant adoption by the CTB.
- An overarching Needs Statement and Objective was shared with the group for general discussion.

Needs Statement (*Working Draft*)

Virginia's transportation network has been subject to changing conditions that threaten its ability to safely and easily move people and goods. To date the most threatening is recurrent flooding and other water inundation related impacts including in its coastal regions and certain inland areas of the state. As part of the Commonwealth's resiliency planning, the transportation sector must develop specific strategies to anticipate and prepare for flooding events that put transportation infrastructure at risk for disruption and deterioration.

Objective (*Working Draft*)

VDOT's resiliency program will inform the determination of where, when and how to invest to achieve a resilient transportation network.

- Ms. Hynes advised that the needs statement should encompass all aspects and should extend to DRPT as well.
- Suggestions from committee members also included using the word “reliably” in the document and to change “inform” to “prioritize” for greater impact.
- Ms. Hynes inquired about a listing or mapping of areas with recurring flooding in VDOT's Northern Virginia District. Localities may have this listing as they are well aware of hot spots. Chris Swanson shared about the recently completed study and report on recurrent flooding in this planning district. This information is being used in collaboration with broader modeling efforts.
- Ms. Hynes suggested sharing this information with area planning entities including NVTVA and NVTC.
- Mr. Merrill asked if there will be a statewide inventory of flood-prone areas, and Ms. Deem confirmed that there will be as the efforts are intended to identify points in the network that are vulnerable. Mr. Swanson added that there are several initiatives underway that can help us get there.
- Ms. Hynes requested a high-level outline of components to be included in initial plan.

Public Comment

None

The meeting was adjourned at 9:27 a.m.