



Commonwealth Transportation Board Environmental Subcommittee

March 15, 2022

Draft Minutes

The meeting was called to order at 10:07 a.m.

Members of the Subcommittee in attendance: Angel Deem (Chair), Mary Hynes, Stephen Johnsen, Scott Kasprowicz, Mark Merrill, Cedric Rucker

Welcome

Angel Deem, Chief of Policy, VDOT

Approval of February 2022 minutes

Sustainability Office

Staffing Update – VDOT is active recruitment for two positions within the Sustainability Office, which falls under the Environmental Division: the lead or Assistant Division Administrator and the Decarbonization Lead. Two other support positions were identified but positions are not currently available.

Agenda Planning – Ms. Deem reviewed agenda projections out for the next four months as requested at the last meeting.

- Mr. Kasprowicz requested identification on the monthly agenda as to the purpose of each presentation suggesting this would be informational or educational versus when a presentation was intended to have potential policy considerations. He suggested this will enable Subcommittee members to identify which items tie into Board authority to make decisions and take action.
- Ms. Hynes requested identification of existing CTB policies which intersect with the Subcommittee's work.
- Ms. Hynes requested a new logo for the Sustainability office or initiatives that communicated integration. Ms. Deem shared that VDOT's Communications team will be working on branding.
- Mr. Merrill asked when the group will discuss outcome metrics and what material impact the Subcommittee – and the Transportation sector – can or is having. Ms. Deem noted that following baselining in a given area, the next step will be goal and/or target setting. This is the point at which metrics can be considered.

- While discussing the upcoming resiliency focused topics Ms. Hynes requested an advanced copy of any draft resolution that may accompany the planned presentation to the board in May 2022.
- While discussing future topics related to greenhouse gas (GHG) emissions and decarbonization Ms. Hynes asserted that VDOT should establish expectations in cases where the agency does not have a funding or oversight role in a project reasoning that the project will become accepted into the Commonwealth's transportation network.
 - Ms. Hynes suggested the group consider whether there should be a "trigger" (e.g., so much disturbance of land, so much expansion of capacity) for a requirement to review environmental impacts (not limited to GHG emissions).
- Ms. Hynes requested that the Subcommittee's official Purpose Statement be added to the planning updates for a while to keep the group focused.

The May planning update will include a return to the GHG baseline discussion. Last year, DEQ presented to the Subcommittee on a GHG inventory and baseline setting. VDOT has been working with DEQ over the past year to ensure that we are all in agreement on the baseline.

Greenhouse Gas Analysis – Update on GHG analysis for NEPA studies

Mr. Jim Ponticello, Environmental Division, provided the group with an update on recent studies aimed at assessing how best to address GHG emissions during NEPA to meet federal requirements.

- VDOT and DRPT worked closely with DEQ, FHWA, and a nationally-recognized consultant on these efforts.
- A Statewide Planning-Level Analysis was completed that developed GHG emission estimates for the entire transportation network, including highway, rail, and transit. It evaluated tailpipe, construction/maintenance, and fuel-cycle emissions for a 2015 base year and a 2040 build and no-build scenario.
- Key findings noted that for both 2040 scenarios, a majority of emissions (just over 75%) come from on-road mobile sources, with about 2% from transit and rail, just under 5% from construction/maintenance, and about 17% from fuel-cycle emissions. Also, compared to 2015, both 2040 scenarios showed a decrease in GHG emissions of just under 50%, which occurs despite a projected 20% increase in vehicle miles traveled (VMT). This is largely due to improved fuel efficiency standards and a cleaner electric grid.
- Ms. Hynes inquired whether semi-truck emissions were broken out in the report. Mr. Ponticello said that he didn't think the report broke out emissions by vehicle type, but those numbers can be produced for the Subcommittee. Mr. Kasprovicz requested that the report also be distributed to the Subcommittee.
- A project-specific GHG pilot analysis was also conducted for I-95 corridor from the Springfield Interchange to Route 17 that included a 5-mile buffer to incorporate the impact to surrounding roads. It evaluated tailpipe, construction/maintenance, and fuel-cycle emissions for a 2019 base and 2045 design year, and also evaluated scenarios including a major highway widening and enhanced VRE rail service.
- Key findings noted the study corridor contributed just under 10% of total statewide tailpipe GHG emissions in 2019. From 2019 to the 2045 base case, VMT was forecast to increase just over 25% while direct GHG emissions were projected to decrease just over 50%.

- Mr. Merrill asked what percentage of the total statewide VMT is attributable to the I-95 study corridor, and Mr. Ponticello said he can provide that number.
- In further discussion of the study outcomes telework assumptions were questioned. Mr. Ponticello noted that enhanced telework options were included with the results included in the report. He commented that it did not lead to as big a GHG emissions reduction as he originally thought, due largely to the projected high level of vehicle electrification and cleanliness of the electrical grid.
- The next steps for this work will be development of recommendations on GHG emissions analysis in NEPA project-level reviews.

Resiliency

Ms. Deem briefly reviewed the status of 2022 General Assembly resiliency bills with some relationship to VDOT's efforts.

- [HB 516/SB 551](#) – Requires development of a Flood Protection Master Plan, establishes a Virginia Coastal Resilience Technical Advisory Committee, and moves forward the engagement aspect of that work.
- [HB 517](#) Clarifies the designation and role of the Chief Resilience Officer from under the responsibility of the Secretary of Public Safety and Homeland Security to the Secretary of Natural and Historic Resources and adds provisions related to the role of the Chief Resilience Officer in creating and overseeing the implementation of a Virginia Flood Protection Master Plan and a Virginia Coastal Resilience Master Plan.

Resiliency - Program Plan Strategies

Mr. Chris Swanson, Assistant State Location & Design Engineer, VDOT provided an update on the VDOT Resiliency Program Plan noting it will be data-driven and integrated into existing Department processes and workflows, wherever possible. The Program Plan currently has six objectives with one or more strategy tied to each objective. For each strategy, steps are identified to ensure they can be accomplished (including timelines) and evaluative criteria are laid out.

- As a follow-up to an inquiry from Mr. Kasprovicz, Mr. Swanson confirmed that VDOT is building tools for individual departments and decision makers to use.
- Mr. Merrill and Mr. Kasprovicz asked about the specifics of the evaluative criteria. Mr. Swanson clarified that the criteria will help determine which measure(s) to use, but the criteria have yet to be developed. Ms. Deem added that, as we complete our network analysis, this can help inform the criteria to be used.
- Ms. Hynes appreciated the added value these criteria could bring to the prioritization process as it would highlight both cautions and opportunities that otherwise might not be visible. Ms. Deem noted that it also adds a broader context for a project under evaluation.
- Mr. Kasprovicz predicted these criteria will help us identify how we make our decisions.
- Ms. Hynes and Mr. Rucker requested that the various factors of the multi-criteria analysis (MCA) be explained in the Program Plan for the reader's understanding. For example, there was discussion about what "public acceptance" meant in the context of the MCA.

Resiliency - DRPT Engagement

Ms. Jen DeBruhl, Acting Director, DRPT briefly discussed their agencies' intent to leverage the work done through the VIMS modeling as well as VDOT's program plan to inform their upcoming Rail Plan update. She further noted that the information under development will be paired with transit route data to identify potential impacts to transit facilities and to aid transit operators in their decision making about projects.

Public comment

Chris Stone, a member of the Joint Subcommittee on Coastal Flooding shared that the House & Senate have passed resolutions renaming the subcommittee the Joint Subcommittee on Recurrent Flooding to focus on flooding across Virginia (including riverine flooding). Mr. Stone also shared work with the [ASCE Committee on Adaptation to a Changing Climate](#) that looks at climate change and weather extremes and is examining how to incorporate resiliency into codes and standards. Last year, he worked with two PhD candidates from William & Mary on a study looking at over a dozen states and how they incorporate resiliency into transportation planning.

The meeting was adjourned at 11:03 a.m.