Northern Virginia Transportation Authority
The Authority for Transportation in Northern Virginia

TRANSPORTATION TECHNOLOGY COMMITTEE
Wednesday, July 6, 2022, 8:30 am
Electronic meeting and livestreamed on YouTube

MEETING SUMMARY

I. **Call to Order/Welcome**
   - Chairman Snyder called the meeting to order at 8:30 am.
   - Attendees:
     - **TTC Members:** Councilmember/Chairman David Snyder (City of Falls Church and Authority Member); Mayor Jeanette Rishell (City of Manassas Park and Authority Member); Mike Garcia (FCDOT); Andrew Meese (Transportation Planning Board); Dr. Robert Schneider (Potomac and Rappahannock Transportation Commission) Hari Sripathi (VDOT) and Reginald Viray (Virginia Tech Transportation Institute).
     - **NVTA Staff:** Monica Backmon (Chief Executive Officer); Keith Jasper (Transportation Planning and Programming Lead); Dr. Sree Nampoothiri (Senior Transportation Planner) and Mackenzie Love (Regional Transportation Planner).

Action

II. **Summary Notes of April 13th, 2022, Meeting**
   The meeting summary was approved unanimously, with abstention from members not present.

Discussion/Information

III. **Transportation Technology Strategic Plan Content and Progress Update**
   This was the first meeting of the TTC since the first anniversary of the adoption of the TTSP. For that reason, the Committee received updates on both major developments in the field, as well as an update on the implementation of the TTSP itself.

   In the April 2022 TTC meeting, the Committee requested that NVTA staff make recommendations for integrating three topics into the TTSP going forward:

   - Topic: Connected and Automated Vehicles (CAVs) and related infrastructure
     - Staff recommended incorporating this topic into the existing TTSP strategy #4 - Minimize Potential for Zero Occupancy passenger Vehicles. They also recommended changing its title to reflect this change.
     - The committee and staff discussed that the nature of the recommended change would expand the strategy from focusing on minimizing

potential negatives, to also maximizing potential benefits, taking a more comprehensive approach to CAVs.

- o The committee voted unanimously to adopt the expansion of the scope of TTSP strategy #4 and to update its title to "Enhance operations of the multimodal transportation system through connectivity and automation."
- Topic: hydrogen propulsion systems
  - o Staff recommended incorporating this topic, along with content on other synergistic technologies that could improve overall resiliency, like Vehicle to Grid (V2G), into the existing TTSP strategy #8 - Advance Decarbonization of the Transportation System.
  - o The committee noted that this approach increases the flexibility of strategy #8 to incorporate other technologies, as appropriate, in the future.
  - o The committee voted unanimously to adopt the expansion of this strategy.
- Topic: Transit innovations, such as microtransit
  - o Staff recommended creating an entirely new strategy to focus on transit, due to the number of technologies currently available to enhance this impactful mode. Additionally, this approach would allow flexibility to address any new technologies that may emerge in the future. Topics that could be covered immediately include microtransit and Bus Rapid Transit (BRT), which would synergize with the work of NVTA's BRT Working Group.
  - o The committee discussed how to best scope a new strategy of this type, with twin objectives of being well-aligned with the current structure and intention of the TTSP, and effectively complementing the ongoing update to TransAction, without duplication.
  - o The committee voted unanimously to adopt this new strategy, under the title "Enhanced mobility in the region through innovation and emerging technologies in transit."

Based on this discussion of the TTSP, its implementation thus far and the collaborative decision to expand the content it covers, the committee determined there would be value in NVTA staff exploring ways to facilitate the advancement of transportation technology projects. This could include convening a meeting with local and regional staff involved in transportation planning, funding, and operations.

IV. **TransAction Update**

Mr. Jasper provided the committee with an overview of the draft Project List developed through the ongoing process to update TransAction which includes 429 projects, 17 of which are technology focused. He said that in past funding programs not many technology projects have been submitted. He noted that in the current funding cycle NVTA received its first application for a technology project outside of the City of Alexandria and Arlington County for an ITS project on Rte. 7 submitted by Loudoun County. He went on to explain that technology projects have historically performed very well, particularly in terms of Congestion Reduction Relative to Cost

(CRRC.) This was followed by a discussion of potential action the committee and NVTA could take to convey this history of success for technology projects to funding applicants going forward, and staff were requested to make recommendations for this during the next TTC meeting.

Next, Mr. Jasper explained the use of scenario analysis in the update of TransAction, including one scenario that focuses on transportation technologies. Three key takeaways include that if these technologies were adopted in accordance with assumptions made they could generate a 25% fall in Person-Hours of Delay, a 37% reduction in duration of severe congestion, and 28% less emissions. Separately he noted that only the scenario that addressed pricing and incentives showed a potential to increase transit trips, which would require multi-layer government policies to realize.

V.   **NVTA Update**

Ms. Backmon informed the committee that NVTA received 26 applications for funding in the FY2022 – 2027 Six Year Program (SYP), with a total ask of $1.2 billion. She indicated that staff have made recommendations to NVTA's committees to fund 20 of these projects, for a total of $626 million. Each of the committees unanimously approved recommending Authority approval of the staff recommendations. She anticipates that the Authority will take action on these recommendations during their July 14th meeting. She added that the Authority would also be asked to approve the public comment period and public hearing date for the TransAction update at that same meeting.

VI.   **Member Updates**

Three TTC members also provided updates:
- Andrew Meese of the Metropolitan Washington Council of Governments' Transportation Planning Board (TPB) announced that Visualize 2045, the long-range transportation plan for the National Capital Region, was recently passed. This plan incorporates the TPB's CAV principles.
- Hari Sripathi of VDOT shared progress on CAV related initiatives including initiation of a data mapping project, concerted efforts to maximize the potential of CAVs to address the needs of people who may have limited mobility, and updating roadway design standards. He also informed the committee that VDOT was working with Virginia Tech Transportation Institute and a maintenance contractor to develop an automated crash attenuation vehicle.
- Dr. Schneider indicated that OmniRide is continuing with its ongoing Zero Emission Bus Study. The agency is also seeking approval to provide Sunday service in the Eastern side of Prince William County for the first time.

Adjournment

- The meeting adjourned at approximately 9:54 am.