



Northern Virginia Transportation Authority
The Authority for Transportation in Northern Virginia

TRANSPORTATION TECHNOLOGY COMMITTEE

Wednesday, April 13, 2022

8:30 AM

(In-person meeting and livestreamed via [YouTube](#))

AGENDA

I. Call to Order/Welcome Chairman Snyder

Action

II. Summary Notes of October 10th, 2021 Meeting Chairman Snyder
Recommended action: Approve meeting notes

Discussion/Information

III. Transportation Technology Strategic Plan (TTSP) Update Mackenzie Love, Regional Transportation Planner

IV. Presentation: VDOT's Connected and Automated Vehicle Program Amanda Hamm, Connected and Automated Vehicle Program Manager, VDOT

V. TTSP candidate topic overview and discussion Mackenzie Love, Regional Transportation Planner

VI. 7th Annual Northern Virginia Transportation Roundtable Recap Mackenzie Love, Regional Transportation Planner

VII. NVTA Updates Ms. Monica Backmon, CEO

VIII. Member Updates

Adjournment

IX. Adjourn

Next Meeting

8:30am on Wednesday, July 6th, 2022 at the NVTA Office.



TRANSPORTATION TECHNOLOGY COMMITTEE
Wednesday, October 27, 2021, 8:30 am
Electronic meeting and livestreamed on [YouTube](#)

MEETING SUMMARY

I. Call to Order/Welcome

- Chairman Snyder called the meeting to order at 8:32 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); Hari Sripathi (VDOT); Dr. Richard Mudge (Compass); Mike Garcia (FCDOT); Sean Schweitzer (FCDOT); and Jana Lynott (AARP)
 - **NVTA Staff:** Monica Backmon (Chief Executive Officer); Keith Jasper (Principal, Transportation Planning and Programming); Mackenzie Love (Regional Transportation Planner).
 - **Others:** Cindy Mester (City of Falls Church) and Mike Mollenhauer (Virginia Tech Transportation Institute).

Action

II. Summary Notes of April 21st, 2021 Meeting

The meeting summary was approved unanimously, with abstention from members not present.

Discussion/Information

III. Presentation of the Connected Infrastructure Demonstration Project

- Ms. Mester introduced the Falls Church Smart Communities project, which involves implementation of connected infrastructure as part of the West Falls Church revitalization project to establish a “living lab” environment.
 - She indicated that the COVID pandemic had created some difficulties in scoping the project, but that with management by the Virginia Tech Transportation Institute (VTTI) and partnership with Virginia Department of Transportation (VDOT) the project was progressing.
 - The project will involve a blend of city and VDOT roads near a Metro Station and include innovative technology aimed at mitigating impacts on the environment and air quality.
- Mr. Mollenhauer provided background on the genesis of the Falls Church Smart Communities project. He also explained how VTTI’s experience with other projects could translate to this context. Relevant initiatives include: The Virginia

Connected Corridor Living Lab and Northern Virginia Testbed; smart intersection evaluations; smart adaptive lighting deployments; low-speed Automated Vehicle (AV) deployment like the Relay Shuttle in Fairfax County; e-scooter research and more.

- The project will be part of a Transit Oriented Development (TOD) envisioned for a parcel of land situated between I-66 and its trail, Route 7, and Haycock Road.
- Major components of the project include: A Smart Cities Data Exchange Management System; adaptive lighting; smart parking and payment; smart intersections; data access and evaluation tools; and roadway and infrastructure development to include incorporation of sensors. Other Smart Cities applications will also be explored.
- Phase 1 of the project was expected to begin in the second quarter of 2022.
- The Committee then discussed the content of the presentation and asked questions of Ms. Mester and Mr. Mollenhauer.
 - Dr. Mudge offered to share best practices and research he and his client have done on autonomous buses, including things that can be accomplished with automation, before full autonomy is achieved.
 - Chairman Snyder indicated that he hoped this project would be a testbed for microtransit as well.
 - Mayor Rishell asked if low-speed AV circulators are crash tested. Mr. Mollenhauer responded that they are not and instead they operate under an exception granted by National Highway Traffic Safety Administration (NHTSA) after a review of risk mitigation plans.
 - Mayor Rishell asked if there would be sensors in recycling receptacles, and if so, if the sensors could also help improve sorting. Mr. Mollenhauer indicated that some providers offer this, but use in this project is to be determined. Additionally, separation technologies may still need to be proven.
 - Ms. Lynott asked when VTTI expected to release their study and recommendations on scooter safety. Mr. Mollenhauer indicated that the study would conclude in May of 2022, but results from other initiatives may be released in advance. VTTI intends to publish three technical papers in the coming spring, with final reports expected in mid-summer.

IV. **Transportation Technology Strategic Plan (TTSP) Update**

- Ms. Love provided a recap of the history of the development of the Transportation Technology Strategic Plan (TTSP). She also shared an overview of deliverables that were completed in the first six months of implementation. These include: introduction of a technology-related section to NVTA's annual Legislative Program (pending Authority action); outreach activities via TransAction; a whitepaper on emissions; evaluations of two emerging technologies; creation of a template for developing transportation policies; and minor updates to the TTSP itself.
 - The current draft of NVTA's 2022 Legislative Program included a new TTSP-related section that would be updated each year. For 2022, the proposed focuses were electric vehicles and support for continued funding of pilot programs and research initiatives throughout the Commonwealth.

- Ms. Love then shared the next steps proposed for implementation of the TTSP including: evaluating additional transportation technologies as appropriate; further integration of the TTSP into TransAction; conducting additional technology-related outreach; development of additional whitepapers as appropriate; identification of technology-related refinements to future NVTA Six Year Program (SYP) selection process after the TransAction update is completed; and considering if additional topics should be added to the TTSP and its Action Plan.
- The Committee then discussed the TTSP and relevant future actions.
 - Mr. Sripathi indicated that it is possible to address/mitigate equity concerns around electric and autonomous vehicles (EV AVs).
 - Dr. Mudge indicated that shared mobility may be a focus for automated vehicle manufacturers, as opposed to private ownership.
 - Chairman Snyder highlighted the potential benefits of microtransit, particularly in regards to providing an attractive alternative to private vehicle use.
 - Mayor Rishell highlighted the topic of platooning (driving more closely together than is possible with human operators) for both public and private vehicles.

V. **TransAction Survey Results**

- Mr. Jasper shared results of the TransAction survey. He noted that it was important to disaggregate these results to see sub-regional variations in certain preferences. For example, in outer jurisdictions the survey showed an emphasis on roadway projects but also a desire for more travel options. Key technology-related takeaways include:
 - Respondents indicated they would be more likely to consider using an EV once there is more readily available infrastructure (64%) and once the price is similar or lower than the price of a gasoline-powered car (58%)
 - Respondents indicated they would be more likely to use an AV once they had confidence that AVs were safe (61%).
- Chairman Snyder recommended that NVTA look beyond preferences and perceptions to determine what fact-based treatments would best to address needs in terms of NVTA's Core Values. For example, he noted that respondents in inner jurisdictions indicated a preference for more bike lanes, but perhaps providing options like microtransit would be a more effective option for motivating or enabling drives to leave their personal vehicles.

VI. **Member Updates**

- Ms. Backmon informed the Committee that NVTA received 27 applications for its FY 2022-2027 Six Year Program (SYP) totaling \$1.3 billion in requests, which was more than the amount of funding available. She committed to keeping the Committee apprised of developments.

Adjournment

- The meeting adjourned at approximately 10:10 am.