Northern Virginia Transportation Authority
The Authority for Transportation in Northern Virginia

TRANSPORTATION TECHNOLOGY COMMITTEE
Wednesday, April 24, 2019, 8:30 am
Northern Virginia Transportation Authority
3040 Williams Drive, Suite 200
Fairfax, Virginia 22031

SUMMARY NOTES

I.	**Call to Order/Welcome**	Chairman Snyder

- Chair Snyder called the meeting to order at 8:37 am.
- Attendees:
  - **TTC Members:** Chair David Snyder (City of Falls Church and Authority Member); Mayor Jeanette Rishell (City of Manassas Park and Authority Member); Jim Kolb (Summit Strategies and Authority Member); Nicholas Zabriskie (Uber); Greg Rogers (SAFE); Hari Sripathi (VDOT); Cathy McGhee (VDOT); Martin Walker (VTTI); Andrew Meese (TPB/COG); Leonard Wolfenstein (Fairfax County DOT); Jana Lynott (AARP); Richard Mudge (COMPASS); Tim Melrose (EY); Bee Buergler (Arlington County DOT); Robert Schneider (PRTC/OmniRide).
  - **NVTA Staff:** Monica Backmon (Executive Director); Keith Jasper (Principal, Transportation Planning and Programming); Harun Rashid (Transportation Planner); Sree Nampoothiri (Transportation Planner); Erica Hawksworth (Communications Manager).
  - **Other:** Sean Schweitzer (Fairfax County DOT); Todd Horsley (DRPT); Peggy Tadej (NVRC).

Action

II. **Approval of January 30, 2019 meeting.**
The meeting summary was approved unanimously, with abstention from members not present.

III. **Introductions**

- Ms. Backmon expressed her gratitude for each member's participation and reiterated the overarching goal of the Transportation Technology Committee (TTC) – to guide the long-range planning process at NVTA so that it is in sync with recent developments in transportation technology, and so that NVTA's transportation

investments do not become obsolete. Each member then briefly described recent developments in their professional realm.

- o Mr. Schneider (PRTC/OmniRide) announced the short-term trial deployment of a double-decker commuter bus at OmniRide and spoke about new engine technology.
- o Ms. Buergler (Arlington County) highlighted recent technology deployments within Arlington County transit buses (all buses have on-vehicle video) and supporting infrastructure. Transit Signal Priority technologies in Arlington corridors are being tested and studied – always looking to upgrade, improve and coordinate with other jurisdictions. ART is currently exploring conversion of buses from compressed natural gas propulsion to electric.
- o Mr. Melrose (EY) mentioned his organization's role in formulating public-private partnerships for business trips management and the partnership with Greater Washington Partnership.
- o Mr. Mudge (COMPASS) described the low-speed automated shuttle pilot project in Fort Myer. In response to committee members' queries, he described some operational features of this pilot automated shuttle service. The members discussed scope and potential of such service and agreed that such automations can improve the last-mile/first-mile connections.
- o Ms. Lynott (AARP) emphasized the importance of public policy on mobility management to connect vulnerable populations. AARP is working with the Transportation Research Board on data standards for human services transportation. AARP will release a case study on mobility management for non-drivers and on-demand micro transit.
- o Mr. Wolfenstein (Fairfax County) announced recent county technology initiatives to enhance bus services such as the utilization of a centralized tracking center/GPS technologies, and mentioned a partnership with Virginia Transportation Research Council (VTRC) and Dominion Energy to implement a pilot automated shuttle service in the Mosaic District.
- o Mr. Meese (MWCOG/TPB) drew attention to three recent MWCOG initiatives on transportation technology – 1) TPB to host regional forum on CASE vehicles in FY2020; 2) MWCOG's partnership with Greater Washington Board of Trade to initiate a program called Smart Regions Movement and looking at IT in life beyond just transportation; 3) Series of workshops to discuss challenges/opportunities in recent micro-mobility projects/ May 30 workshop on dockless vehicles and electric scooters.
- o Mr. Walker (VTTI) highlighted recent initiatives at Virginia Tech (VTTI) to formulate operational strategies for CASE vehicles in freight sector. Testing roadway readiness, maintenance, insurance, and safety.
- o Ms. McGhee (VDOT) explained VTRC's mission and objective, and its role to support technological innovation in transportation across the Commonwealth. Looking at pedestrian/collision avoidance and evaluating how it works. Also working on a commuter incentive program to have people change the mode of transportation they may typically use and try different routes, all in real-time. She mentioned VDOT's partnership with NVTA for the RM3P project using the Innovation and Technology Transportation Fund.
- o Mr. Sripathi (VDOT) described current initiatives in VDOT's Office of Strategic Innovation. He highlighted several projects/programs – to spread RM3P concepts across the Commonwealth, intelligent signal systems to

support CASE vehicles, and artificial intelligence/machine learning to identify and predict crash patterns and intervention, using data from transit providers, weather service, census, etc. VDOT is also looking at cybersecurity, evaluating virtual public engagement, and exploring crowdsourcing to enhance parking management.

- o Mr. Rogers (SAFE) mentioned state coalitions to develop comprehensive infrastructure for electric vehicle charging stations. Working with oil companies to try switching to electric vehicles and ensuring AVs are distributed safely and quickly. They'd like more utilization of AVs in the workforce and to work with companies like Uber to reduce congestion.
- o Mr. Zabriskie (Uber) discussed several recent Uber initiatives to – create a digital platform integrating Transportation Network Company (TNC) services with public transportation, introduce micro-mobility modes into the mix, explore CASE vehicles in TNC services and in the freight delivery market, and a two-day summit from June 11 - 12 in Washington D.C. (UBER-Elevate) to introduce EVTOL (electric vertical take-off and landing) modes for personal mobility. He also spoke about the development of Uber Freight for better efficiency and routes.
- o Mr. Kolb (Summit Strategies/Authority Member) described his firm's role in technology integration to connect private interests with government funding initiatives. Represents transportation agencies on a local level and has seen rapid growth on the local levels since working on Capitol Hill.
- o Mayor Rishell (City of Manassas/Authority Member) stated her primary concern is safety and putting people first/profits second. She emphasized the importance of cyber security and avoidance of technology failures in upcoming innovations in the transportation sector, and stated that the public is looking for assurances regarding technology.

IV.   Review TTC Workplan development methodology   Mr. Jasper

- Mr. Jasper laid out the workplan framework of the TTC in the context of NVTA's transportation planning and programming functions. He re-stated that this committee advises the NVTA Executive Director, and an important objective is to inform the long-range planning process (TransAction Plan), which in turn influences NVTA's project selection process. Everything discussed/recommended needs to be based on facts, not on myth or hope. Mr. Jasper presented a summary of the inaugural meeting's discussion in January 2019 with topics in 3 categories – Proactive, Reactive, and Other. The items in the Proactive category will be addressed first in terms of deliverables, Reactive items are to be observed, and other items are to be monitored. The process of creating deliverables is to be framed around the following outlines: 1) Appropriate role of technology; 2) Regional technology policy development needs; 3) Outreach/education; 4) Behavioral trends; and 5) Relation to NVTA funding plans.
- Ms. Backmon asked everyone to think about what can actually be achieved and what's the reality.

- Committee members discussed to clarify the outline. Mr. Meese asked if the committee's approach would be strategic or tactical - to which Chair Snyder opined that this committee should address both because of the unique nature of both planning and funding responsibilities of the Authority. Responding to another question, Mr. Jasper explained that the realm of uncertainties will be addressed, maybe by enhancing the sensitivity analyses conducted in the previous iteration of TransAction. Ms. Backmon referred to these sensitivity analyses as a 'book-end' approach, in which scenarios were defined in order to evaluate the impact of the TransAction plan for a range of possible 'alternate futures'. The TTC now has an opportunity to help define the future technology scenarios that should be considered for sensitivity analysis in the next TransAction update.
- Ms. Lynott stated that transportation mobility and accessibility of vulnerable populations is a moral/ethical issue and should be addressed in the Proactive category. Ms. Lynott also urged everyone to look beyond AVs, as there are more easily accessible tech options available right now. Several members identified that there is a lack of Federal guidance on the regulation of CASE vehicles, which may pose challenges to this committee's effort to draft a strategic plan. According to Mr. Zabriskie, the challenge is even greater for NVTA, which does not get involved in land use decision making – a key factor in impacting travel demands. Ms. Backmon emphasized to not just look at the technology, but also consider the infrastructure planning process. She warned that nothing should be funded that could be a technology fail and emphasized NVTA cannot do any tech testing, although other entities can. Mr. Sripathi recommended to not just limit to what NVTA can fund, but rather, look at what the localities can do as well. Otherwise, bigger opportunities will be missed. NVTA can guide localities on what to submit via other funding programs. It is also important to consider how maintenance fits into the conversation, especially since roadways are still in play with new technologies. Mr. Snyder suggested focusing on sorting through technologies and hurdles, with a focus on infrastructure. Ms. Rishell emphasized not to fund anything that cannot be explained to the taxpayers.

V.   Proposed TTC Workplan, and associated deliverables/schedule

- In summary, Chair Snyder identified three themes for the TTC to progress: 1) Create a forum fostering public-private partnership; 2) Identify an actionable set of technology tools to implement among all choices; and 3) Guide public infrastructure funding policies based on the findings. The focus should be on efficiency, equity, sustainability, accessibility and safety. He then asked the group if there should be an immediate working focus (e.g. focus on CASE vehicles only). Two members opined that with new technologies, maintenance should be a focus (Mr. Zabriskie and Mr. Sripathi). Ms. McGhee stressed that the focus should be on identifying real solutions of real-world challenges on ground, as there is a real risk in investing public funds for innovations only. Mr. Melrose stated that partnering with business community can be another goal, to which Ms. Backmon agreed. Mr. Meese then asked what the format of deliverables should be. Mr. Jasper told the group that this can be included in the committee members' suggestions.

- Mr. Jasper highlighted several questions to develop technology policies, e.g. how to mitigate potential negative impacts of CASE vehicle travels, how to address road pricing models in the new technology era, what is the right balance of public/private partnerships. To this, Mr. Zabriskie opined that the fundamental thinking around roadway congestions and trip-making need to be addressed, e.g. more trips may not be negative for the system if an ideal shared-mobility can be implemented. Mr. Sripathi and Ms. Lynott also identified the equitable distribution of technology benefits as a major focus in developing policies.
- Chair Snyder urged the committee members to summarize all their thoughts and send email comments to Mr. Jasper. He also floated the idea for future TTC meetings to consider presentations from relevant entities, as well as from Committee members.
- Once everyone's feedback is compiled, a revised Work Plan will be developed by NVTA staff based on the meeting's discussions. Ms. Backmon suggested bucketing what NVTA can undertake and also the broader/bigger picture.

Adjournment

VI.   **Adjourn**

The meeting adjourned at 10:31 am.