Northern Virginia Transportation Authority
The Authority for Transportation in Northern Virginia

TRANSPORTATION TECHNOLOGY COMMITTEE
Wednesday, October 23, 2019, 8:30 am
Northern Virginia Transportation Authority
3040 Williams Drive, Suite 200
Fairfax, Virginia 22031.

SUMMARY NOTES

I.   **Call to Order/Welcome**   Vice Chairman Rishell

- Vice Chair Rishell called the meeting to order at 8:41 am.
- Attendees:
  - **TTC Members:** Mayor Jeanette Rishell (City of Manassas Park and Authority Member); Jim Kolb (Summit Strategies and Authority Member); Tim Melrose (Ernst & Young); Joe McAndrew (Greater Washington Partnership); Hari Sripathi (VDOT); Mike Garcia (Fairfax County DOT - FCDOT); Robert Schneider (PRTC/OmniRide) Patricia Happ (NVTC).
  - **NVTA Staff:** Monica Backmon (Executive Director); Keith Jasper (Principal, Transportation Planning and Programming); Mackenzie Jarvis (Transportation Planner); Harun Rashid (Transportation Planner); Erica Hawksworth (Communications Manager); Ria Kulkarni (Transportation Planner).
  - **Other:** Sean Schweitzer (FCDOT).

Action

II.   **Approval of September 11, 2019 meeting**
The meeting summary was approved unanimously, with abstention from members not present.

Discussion/Information

III.   **Introductions and Member Updates**

- Vice Chairman Rishell welcomed and invited members present to introduce and brief the group on recent activities/updates.
- Mr. Sripathi (VDOT) provided an update on the Regional Multimodal Mobility Program (RM3P); the first kick-off meeting was recently held and a consultant has successfully been brought on board to begin shaping the deliverables of the effort. He also informed the group that VDOT has posted a Request for Proposal (RFP) for data analytics regarding high-level machine learning and Artificial Intelligence (AI).

- Mr. Schweitzer (FCDOT) introduced Mr. Garcia, the new head of long-range planning for FCDOT.
- Ms. Backmon (NVTA) informed the Committee that she is serving on a Fund Sustainability Committee created by the Virginia Secretary of Transportation, Shannon Valentine. The Fund Sustainability Committee is exploring methods to create a sustainable system of transportation funding in the context of changes to existing revenue streams that present challenges to continued maintenance of infrastructure in the Commonwealth. Specifically, Ms. Backmon mentioned that the Commonwealth is experiencing its first steep decline in gas tax revenues, despite an increase in Vehicle Miles Traveled (VMT), in part due to cleaner and electric personal vehicles. The Fund Sustainability Committee will meet again in December, and soon after, provide a recommendation to the General Assembly. Ms. Backmon then provided a brief overview of NVTA's funding sources, in response to a question from Mr. McAndrew.

IV.   Regional Multimodal Mobility Program (RM3P) Update

- Mr. Jasper updated the committee members on current activities of this Commonwealth-funded initiative, expanding on Mr. Sripathi's updates on the project. Mr. Jasper said RM3P stakeholders were being introduced to their responsibilities around five main task areas, via the recent kick-off meeting, and the next update to the TTC will likely be robust.

V.   TTC Workplan

- Mr. Jasper then presented the proposed work plan deliverables with a series of PowerPoint slides.
- Mr. Jasper provided a brief recap of the discussion about the first deliverable of the TTC Work Plan (discussing and defining possible roles for NVTA with respect to the appropriate use of transportation technology) , which took place during the September 2019 Committee meeting.
- Previous Committee discussions led to the identification of ten policy areas that are included in the Work Plan.
- During this presentation, TTC members were presented with explanations and examples for each of the ten policy areas and asked to contemplate the urgency and impact of addressing each. After all policy areas were discussed, members were asked to rate each by holding up one of a set of cards, labeled 1-6. The numbers on the cards corresponded to a graph (displayed in the presentation) which plots "impact" on the X axis, and "urgency" on the Y axis. Mr. Jasper informed the group that NVTA staff would endeavor to collect similar feedback from all absent members before finalizing the analysis of this activity. (Staff worked with two members, including Chair Snyder, in advance of the meeting, to get their input.)
  - Policy Area #1: Incentivizing right-sizing modes
    - Mr. Jasper acknowledged that Chair Snyder thought that this policy area needed more wordsmithing (in particular, the use of "space" as a primary consideration was a concern.)
    - Staff will be focusing on all travel trips, as commutes comprise only 25% in this region.

- Mr. Sripathi questioned if the objective of this policy would be to optimize the system of modes or to maximize use of a select mode or mode(s). He then opined that the policy area should be renamed to include "optimization."
- Mr. McAndrew asked about NVTA's role in this policy area, advocating for this to include "programming" or "support." NVTA will inform and advocate. NVTA has a long-range, regional planning role but cannot fund operations.
- Mr. Melrose said he would like to know what levers NVTA has to effectuate each of the examples provided for each policy area.
  - Mr. Jasper advised that identifying such levers would be the next step for NVTA staff, once policy areas have been prioritized.

o Policy Area #2: Encouraging equity in access to transportation technologies
- Mr. Jasper reminded the group that equity was a recurring theme in the Committee's discussion and that questions about equity arise often, as new technologies are developed.
- Vice Chair Rishell asked for clarification for one portion of the explanation of this policy area – "perceptions of exposure to threats associated with use"
  - Ms. Jarvis explained that transportation technologies have the potential to create different risks (real and/or perceived) for different groups, depending on the context and/or the method of interaction between the individual and a device. For instance, in the past, some shared scooters were equipped with a theft/vandalism deterrent, giving audible warnings when touched. Although these devices do not have the capability to place a call to report theft or vandalism, the warning mentioned calling the police, which may be perceived differently based on lived experience.
- Mr. Sripathi advised that "vulnerable populations" (specially the elderly) should be considered in these policies.

o Policy Area #3: Establishing guidelines for deployment of future transportation technologies
- Mr. Jasper described this policy area as an attempt to avoid fragmentation and move towards regional consistency. He also advised that a unified approach would afford the region more leverage in negotiations with external entities.
- Ms. Backmon added that the RM3P project, in which NVTA is partnering with the Commonwealth, will also address this, and serve as a "clearinghouse" for the region.
- Mr. McAndrew and Mr. Jasper discussed the importance of working with partners in Maryland and the greater region.
  - Mr. Jasper hoped that moving forward, the only differences in policy development across the greater region would be the rate of progress, rather than the direction that different parts of the region take. NVTA is always willing to coordinate with its neighbors.

- o Policy Area #4: Fostering development of standardized or complementary Shared Mobility Devices (SMD) policies, region-wide
  - Mr. Jasper said this policy area addresses, in part, obtaining data from SMD systems, as well as includes regulatory aspects like device speed limits and equity requirements.
- o Policy Area #5: Creation (and standardization) of curbside management and parking policies
  - Mr. Jasper described curbside management as the use of emerging technologies to address the multiple demands for curb space that vary throughout the day. NVTA has seen some activity/efforts in Northern Virginia in regards to curbside management, but the most concentrated work is taking place in Washington D.C. That being said, Mr. Jasper anticipates that there will eventually be more need for curbside management in the region.
  - Ms. Backmon added that Arlington, VA is attempting to instate a utilization fee for Transportation Network Companies (TNCs) but that the Virginia General Assembly may need to sign off on the program before it can be implemented. She also mentioned that Dulles Airport (IAD) began using curbside management strategies after the arrival of TNCs and seeing utilization of their parking lots plummet, and congestion at drop off zones increase. (IAD's program is not subject to approval of the General Assembly.)
- o Policy Area #6: Regional standardization of data collection and sharing
  - Mr. Jasper highlighted the need for consistency in collecting and sharing data, noting that this was important for all modes. He also pointed out that the RM3P will work towards this same end.
  - Mr. Jasper acknowledged the issue of cybersecurity, cautioning that NVTA could serve as a conduit of information around cybersecurity but can't implement. Rather, it would likely be VDOT that could address the issue more directly, and that it is important to set the boundaries of NVTA's role here.
  - Vice Chair Rishell asked if it would be possible to provide assurances about cybersecurity to the public.
    - Ms. Backmon advised that NVTA would not want to provide any assurances before the Federal Government completes their current work on the issue.
    - Mr. Sripathi added that the National Highway Traffic Safety Administration (NHTSA) and the U.S. Congress are working on policies to address cybersecurity. He went on to say that it is the responsibility of local and state governments to stay on top of these constantly evolving threats and that NVTA's complementary role may involve facilitation/aggregation of funds for security measures and to lead a regional conversation.
  - Vice Chair Rishell asked if NHTSA's ability to enforce policies was robust and if the entity was more proactive or reactive.
    - Mr. Sripathi advised that NHTSA tests technologies in advance of deployment but that things can still go wrong. He then referenced NHTSA's recalls of some technologies like Takata air bags, as an example of robust reaction.

- o Policy Area #7: Creation of usage based pricing schemas for Electric Vehicles/Autonomous Vehicles
  - Mr. Jasper acknowledged that this policy area is slightly more controversial and that it raises potential equity concerns. (That being said, fees of this sort may provide funding to expand capacity in other, equitable ways, using the funds gathered.) However, the Committee indicated that usage based pricing needs should be considered, particularly given the outlook of our own 2040 travel forecasts. Moving forward NVTA needs to consider how to move as many people as possible through corridors and examine the levels of delay that individuals will be willing to accept, or not.
  - Mr. Jasper advised that while these policies may be controversial in the United States, they are accepted in big cities around the world. He also noted that New York City is looking to implement a usage pricing schema in 2021 and that Washington D.C. is kicking off a congestion pricing study now.
  - Ms. Backmon added that the Commonwealth is partnering with Delaware and Maryland, to explore a VMT charge program and that there is an ongoing pilot program. (She noted that equity concerns have been raised about the program being piloted.) Ms. Backmon mentioned the Fund Sustainability Committee chaired by Secretary Valentine, is currently considering all options to address transportation revenue sustainability.
  - Mr. McAndrew asked if any such pricing schema would be subject to the approval of the General Assembly.
    - Ms. Backmon responded that she was not certain but there is a high likelihood that General Assembly approval would be necessary.
  - Mr. McAndrew advised that regional scale is critical in this type of policy. He informed the group that his entity, The Greater Washington Partnership, has been encouraging Washington D.C. to include both Virginia and Maryland jurisdictions in their pricing schema planning efforts, for the same reason.
  - Mr. Sripathi advised that AV technology will most likely be used by TNCs first. He also cautioned against the potential of "islands of autonomy," in which zones are created that cannot be accessed without AV technology and/or only one company is able to service a zone (with AVs). This could result in the loss of a cordon pricing opportunity for the locality.
    - Ms. Backmon asked how this would impact transit.
      - o Mr. Schneider informed the group that in the New York City pricing schema transit is exempted from the fees. He went on to say that this enables individuals to choose the trip that is best for them, and that if a locality prioritizes transit and removes barriers to access, it is not only cheaper but also more effective.
  - Ms. Melrose asked if NVTA might also consider serving a "programming" role in this area.

- Mr. Jasper agreed and suggested that NVTA could also serve a "planning" role here.
    - Mr. Jasper opined that these policies would likely be the result of Public Private Partnerships (P3s), in which the private entity pays for infrastructure, in return for some share of the resulting profits.
  - Policy Area #8: Guidelines for funding future technologies
    - Mr. Jasper said the role NVTA can play in establishing such guidelines is dependent on the approach taken. One approach may be unifying the region as a "block" for purchasing and/or applying for funding. Purchasing AV shuttles was suggested as a logical place to start, as NVTA has funded the purchase of other transit vehicles in the past.
  - Policy Area #9: Facilitation of development of infrastructure, for EVs and AVs
    - Mr. Jasper noted that AVs are also likely to be electric, meaning that both technologies would benefit from electric charging infrastructure.
    - Vice Chair Rishell asked if this policy could be supported in a future update to TransAction.
      - Mr. Jasper said that the planning components of TransAction would be the place for NVTA to start and that the topic of EV/AV infrastructure would need to be included in TransAction to be eligible to receive any NVTA funding.
    - Vice Chair Rishell asked for clarification on the concept of "high performance wireless communications" (as mentioned in the explanation of the policy area).
      - Mr. Jasper said that 5G technology would most likely be critical for the implementation of AVs but that he would defer to VDOT for further insight on the topic.
      - Mr. Sripathi added that there are several additional communications technologies available at this time, which would be useful to AVs, particularly during a transition period. These include "Broad-Fi", the Internet of Things (IoT) and fiber-connected traffic lights. He also reminded the group of the existing and robust power of the 4G network.
      - Vice Chair Rishell cautioned that it may not be appropriate to spend NVTA funds on components of such a system that may become private.
  - Policy Area #10: Development of stimulation strategies for Connected/Autonomous/Shared/Electric (CASE) vehicle deployment
    - Mr. Jasper indicated that NVTA is still working to understand the implications of market penetration rates of these technologies, and how that impacts our planning and programmatic efforts. He noted that the period of transition to full adoption will itself be a challenge for which we must plan.
- Mr. Jasper asked the Committee if there are any other topics that should be considered as potential policy areas to be addresses by the Strategic Plan.
  - Vice Chair Rishell suggested considering safety as a policy area. There was discussion among the group about the kind(s) of safety that could be addressed and what NVTA's role could be in influencing these. The group

came to the consensus that safety should be understood as an objective in transportation planning and that the Strategic Plan could best address it as a "core value" (per the suggestion of Mr. Schneider).
- o Mr. Sripathi suggested a goal of watching/staying on top of "emerging modes that impact transportation." He referenced the sudden and unforeseen entrance of e-scooters and the potential for electric flying helicopters and other drone technologies in support of his suggestion.
- Members of the Committee were then asked to score each of the policy areas, with a number between 1 and 6, with 6 being the most pressing. All scores were recorded individually and preliminary tallies were taken and discussed briefly. (NVTA staff had requested and received similar scores from Chair Snyder and TPB in advance of the meeting and these were included in the tallies.)
  - o NVTA staff committed to seeking similar feedback from all TTC members who were absent during this meeting and will share the final tallies and analysis after all scores have been synthesized.
- After the polling concluded, Mr. Sripathi emphasized the importance of identifying NVTA's role vs. the Commonwealth vs. Localities.
  - o Ms. Backmon said language could be added to NVTA's legislative program.
  - o Mr. Sripathi suggested the development of a guide outlining roles that could be shared.

VI.   New business
- The next meeting of the TTC is scheduled for December 4th. During this meeting, NVTA staff will recap the outcomes of this meeting and review the discussion of the first two deliverables from the TTC Work Plan. The final two deliverables of the Work Plan will also be discussed.
- Mr. McAndrew announced that the Greater Washington Partnership will be hosting an event on November 12th to discuss important regional projects, such as Long Bridge, and the potential impact of congestion pricing schemas. The Commonwealth's Secretary of Transportation, Shannon Valentine, and Maryland's Secretary of Transportation, Pete Rahn, will be in attendance, as well as well as a senior staff person from Los Angeles Metro.
- Mr. Sripathi announced that VDOT is developing an autonomous vehicle plan for the Commonwealth. He informed the group that the Department of Motor Vehicles (DMV) and Police Departments were involved in the effort as well. He also mentioned VDOT held a workshop to provide feedback on the draft of a high-level strategic plan for the Commonwealth which will be ready within a few months. He can share with the TTC a draft of the 10 strategies within the plan.

Adjournment

- **Adjourn**
  - o The meeting adjourned at 10:21 am.