

NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

MEMORANDUM

FOR: Chair Phyllis J. Randall and Members
Northern Virginia Transportation Authority

FROM: Monica Backmon, CEO

DATE: November 10, 2021

SUBJECT: Report on Implementation of the Transportation Technology Strategic Plan

1. **Purpose:** To inform the Northern Virginia Transportation Authority (NVTA) on recent efforts to implement the inaugural Transportation Technology Strategic Plan (TTSP).
2. **Background:** On May 13, 2021, the Authority adopted the inaugural NVTA Transportation Technology Strategic Plan's Action Plan and Eight Strategies. The Transportation Technology Committee met on October 27, 2021, to discuss the first six months of its implementation.
3. **Summary of Implementation Efforts:** In the first six months since TTSP adoption, NVTA staff initiated multiple activities:
 - a. Completed deliverables
 - i. Introduction of a technology-related section to NVTA's annual Legislative Program (pending Authority action)
 - ii. Creation of a home for TTSP content on the NVTA website
 - iii. Outreach activities, including via TransAction public engagement activities
 - iv. Minor updates to the TTSP, including the addition of a technology timeline
 - b. Ongoing activities:
 - i. Initial draft of an Emissions White Paper on Emissions, which will be subject to a forthcoming Committee review process
 - ii. Initial drafts of Technical Memoranda evaluating two emerging technologies, which will be subject to a forthcoming Committee review process
 1. Autonomous and Electric Shuttles
 2. Personal Autonomous Vehicles
 - iii. Initial draft of a Transportation Policy Template
4. **Upcoming Implementation Efforts:** Over the next six months, through May 2022, NVTA staff will continue to work on the items listed under 3b above, together with other activities related to the TTSP:

- a. New activities:
 - i. Additional transportation technology evaluations, as appropriate
- b. Integration with TransAction
 - i. Integration of technology-related strategies into the TransAction scenario analysis work
 - ii. Public engagement under the TransAction umbrella
 - iii. Incorporation of 'top-down' regional transportation projects that are consistent with the TTSP
- c. Technology-related Outreach
 - i. Development of a more comprehensive approach to technology-related outreach and education that builds upon the "Driven by Innovation" eBlast
 - ii. Ongoing monitoring of market trends and trigger points
 - iii. White Paper development
 - 1. Collaborate on a process for development of future regional transportation policies, utilizing the template developed in the first six months of implementation
 - 2. Identify and prioritize topics for potential future regional transportation policies. (*Detailed regional transportation policy development will not commence prior to agreement on both a process and a list of prioritized topics.*)
 - iv. Consider if any additional strategies should be added to the TTSP and its Action Plan. The Committee discussed the following potential topics:
 - 1. Autonomous Vehicles (in a manner that is synergistic with the existing strategy to "Minimize the potential for Zero Occupancy passenger Vehicles" but more broad in scope.)
 - 2. Freight
 - 3. Personal Delivery Devices (Sidewalk robots)
 - 4. Microtransit

5. Next Steps: NVTA Staff will continue to provide regular updates on progress towards the above actions, through the NVTA Chief Executive Officer's monthly report to the Authority. The TTSP will be maintained as a living document, to reflect the continued evolution of transportation technologies, and to allow NVTA staff the flexibility to update and refine it as necessary. That said, no significant changes or additions to the TTSP, as determined by the NVTA Chief Executive Officer, will occur without prior Authority Approval.