TTC Work Plan Deliverable #2

First Thoughts – Regional Transportation Technology Policy Development Needs

October 23, 2019
Keith Jasper, Principal, Transportation Planning and Programming
Northern Virginia Transportation Authority

Policy Development Needs

The second deliverable of the Transportation Technology Committee (TTC) Work Plan will identify and prioritize potential policy development needs related to the deployment of transportation technologies in Northern Virginia.

Please review the following ten policy areas, and consider the following questions in the context of Northern Virginia:

- For each policy area, how <u>urgently needed</u> is a policy? (Low, medium, high)

- For each policy area, what is the potential <u>impact</u> of a policy? (Low, medium, high)

Additionally, please consider whether there are any additional policy areas that should be considered?

Overarching Policy Needs

Policy Area #1: Incentivizing right-sizing modes

- Transportation resources (including funding and space to build infrastructure, its capacity, the time of those who use it and the environment's capacity to withstand such use) are finite. Efficient use of physical space helps to maximize all of these resources. Policies that harmonize context, mode availability and occupancy rate, encourage efficiency.
- **Example(s):**
    - Vanpools encouraged in the outer ring
    - Mass transit encouraged in the inner ring
    - Micro mobility encouraged in core areas
    - SOVs/ZOVs discouraged everywhere

Possible NVTA role(s):

Policy	Programming	Planning	Advocacy	Facilitation
X			X	

Policy Area #2: Encouraging equity in access to transportation technologies

- Access to and usability of some modes of transportation and technologies may be limited, or precluded by: income, technical literacy, perceptions of exposure to threats associated with use (this may or may not pertain to race, gender and/or identity), lingual barriers or access to personal technologies (smart phones) and banks. Ensuring equitable access to all persons is not only the right thing to do, but also increases the possibility of achieving region-wide goals.
- **Example(s):**
  - Cash-based access to Shared Mobility Devices (SMDs) and Transportation Network Companies (TNCs)
  - Adaptive technologies

Possible NVTA role(s):

Policy	Programming	Planning	Advocacy	Facilitation
X		X	X	

Policy Area #3: Establishing guidelines for deployment of future transportation technologies

- Transportation technologies are evolving at an unprecedented pace. The pace and scale of change creates the possibility of piecemeal and inconsistent approaches across the region. Guidelines for local policy creation, as well as establishment of regional direction for technology implementation, would facilitate responsive and cohesive policy development.
- **Example(s):**
  - Creation of a toolkit for policy development
  - Regional goals for integration of CASE systems

Possible NVTA role(s):

Policy	Programming	Planning	Advocacy	Facilitation
X		X	X	X

Standardization Policy Needs

Policy Area #4: Fostering development of standardized or complementary SMD policies, region-wide

- Standardized policies for SMDs would provide consistency for both citizens and companies operating in the region and ensure that the valuable data generated by these systems is gathered and stored in ways that facilitate analysis. Regional cohesion also lends strength to jurisdictional negotiation positions.
- **Example(s):**
  - Standard data collection protocols
  - Standard requirements for equity
  - Standard speed limits and sidewalk policies

Possible NVTA role(s):

Policy	Programming	Planning	Advocacy	Facilitation
X		X	X	

Policy Area #5: Creation (and standardization) of curbside management and parking policies

- Standardized policies for curbside management would provide consistency for both citizens and companies operating in the region and ensure that the valuable data generated by these systems is gathered and stored in ways that facilitate analysis. Regional cohesion also lends strength to jurisdictional negotiation positions.
- **Example(s):**
  - Standard (or complementary) usage rates
  - Standardized approach to ADA accessibility
  - Standardized approach to emergency vehicles

Possible NVTA role(s):

Policy	Programming	Planning	Advocacy	Facilitation
X		X	X	

Policy Area #6: Regional standardization of data collection and sharing

- Standardized data collection policies (across all modes and technologies, when applicable) ensure that data is gathered and stored in ways that facilitate analysis. Regional cohesion also lends strength to jurisdictional negotiation positions.
- **Example(s):**
  - General Bikeshare Feed Specification (GBFS) for bikeshare and eScooters
  - Open Application Programming Interface (API) requirements to allow for potential Mobility as a Service (MaaS) projects
  - General Transit Feed Specification (GTFS) for Transit

Possible NVTA role(s):

Policy	Programming	Planning	Advocacy	Facilitation
X		X	X	

Financial Policy Needs

Policy Area #7: Creation of usage based pricing schemas for EVs/AVs

- Establishing policy regarding usage based pricing schemas for EVs/AVs could create opportunities to encourage more efficient use of the transportation system, minimize SOV/ZOV vehicles miles travelled (VMT), and address the long term sustainability of transportation revenue funding streams that are tied to personal vehicle ownership and the gas tax.
- **Example(s):**
  - Cordon, trip and/or curb pricing
  - Pricing per vehicle or passenger mile traveled
  - Dedicating funds from usage fees to equity efforts and mass and micro transport

Possible NVTA role(s):

Policy	Programming	Planning	Advocacy	Facilitation
X	X		X	X

Policy Area #8: Guidelines for funding future technologies

- Providing guidelines for funding future technologies would facilitate the entrance of technologies into the region, especially those which align with NVTA's vision and goals.
- **Example(s):**
    - Create an evergreen calendar of funding opportunities that can be used for innovation and share with jurisdictions
    - Provide support (and potentially, assistance) to funding applications
    - Suggest opportunities to jurisdictions

Possible NVTA role(s):

Policy	Programming	Planning	Advocacy	Facilitation
X	X		X	X

Infrastructure Policy Needs

Policy Area #9: Facilitation of development of infrastructure, for EVs and AVs

- EV and AV technologies will be dependent on specific infrastructure for any substantial level of adoption. EVs will require a network of charging facilities and AVs (which will likely be electrically powered) will require high performance communication systems, a network of sensors and devices, as well as consistent paving markings and signage etc.
- **Example(s):**
  - TransAction goals for inclusion of EV and AV supportive infrastructure (and/or provision of weighted performance measures for inclusion of such efforts)
  - Supporting jurisdictions in applying for funding

Possible NVTA role(s):

Policy	Programming	Planning	Advocacy	Facilitation
X	X	X	X	

Policy Area #10: Development of stimulation strategies for CASE vehicle deployment

- Exploration of scenarios for CASE technology adoption and market penetration can inform goal setting for NVTA's planning and programmatic efforts, particularly TransAction updates. It could also contribute to jurisdictional planning efforts and bolster funding applications and/or discussions with technology providers.
- **Example(s):**
  - Full transition of private vehicle fleet to CASE
    - Private ownership vs subscription model
  - All TNCs using CASE vehicles only
  - Mixed adoption of CASE across private and TNCs
  - Autonomous shuttles and full-size transit vehicles

Possible NVTA role(s):

Policy	Programming	Planning	Advocacy	Facilitation
X		X		X