Transportation Technology Committee

September 11, 2019

Role of TTC members

- Review draft deliverables and provide feedback;
- Where appropriate, suggest additional work plan deliverables; and
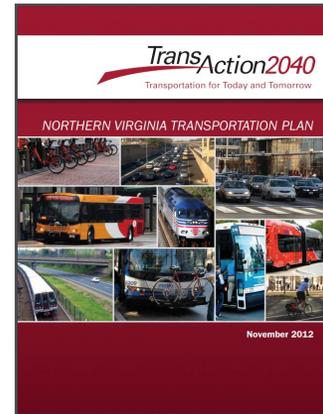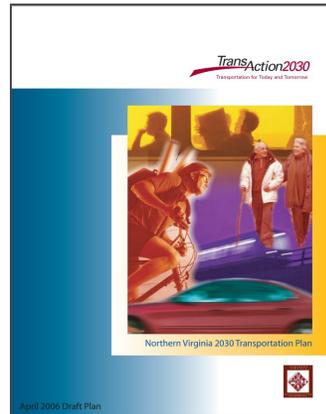- Inform the TTC on matters relevant to the TTC Work Plan.

TTC Work Plan has four deliverables

- Action-oriented deliverables
  - **Appropriate Role of Technology, Challenges/Opportunities**
  - Regional Technology Policy Development Needs
- Supporting deliverables
  - NVTA/NoVA Transportation Primer
  - Research/Outreach/Education

- Ultimately this effort will lead to NVTA's Transportation Technology Strategic Plan.

Two Primary Responsibilities

1. Develop and update the long range, multi-modal Transportation Plan for Northern Virginia → TransAction (adopted October 2017)

TransAction Vision and Goals

Vision

In the 21st century, Northern Virginia will develop and sustain a multimodal transportation system that enhances quality of life and supports economic growth. Investments in the system will provide effective transportation benefits, promote areas of concentrated growth, manage both demand and capacity, and employ the best technology, joining rail, roadway, bus, air, water, pedestrian, and bicycle facilities into an interconnected network that is fiscally sustainable.

Goals

1. Enhance quality of life and economic strength of Northern Virginia through transportation

2. Enable optimal use of the transportation network and leverage the existing network

3. Reduce negative impacts of transportation on communities and the environment

Goal	Objective	Performance Measure	Weight
Goal 1: Enhance quality of life and economic strength of Northern Virginia through transportation	Reduce congestion and crowding experienced by travelers in the region	Total person hours of delay*	10%
		Transit crowding*	5%
		Person hours of congested travel in automobiles*	5%
		Person hours of congested travel in transit vehicles*	5%
	Improve travel time reliability	Congestion severity: maximum travel time ratio	5%
		Congestion duration*	10%
	Increase access to jobs, employees, markets, and destinations	Percent of jobs/population within 1/2 mile of high frequency and/or high performance transit	5%
		Access to jobs within 45 minutes by auto or within 60 minutes by transit*	5%
	Improve connections among and within areas of concentrated growth	Average travel time per motorized trip between Regional Activity Centers	5%
		Walkable/bikeable environment within a Regional Activity Center	5%
Goal 2: Enable optimal use of the transportation network and leverage the existing network	Improve the safety of transportation network	Safety of the transportation system	5%
	Increase integration between modes and systems	First and last mile connections	10%
	Provide more route and mode options to expand travel choices and improve resiliency of the system	Share of travel by non-SOV modes	10%
	Sustain and improve operation of the regional system	Person hours of travel caused by 10% increase in PM peak hour demand*	5%
Goal 3: Reduce negative impacts of transportation on communities and the environment	Reduce transportation related emissions	Vehicle miles traveled (VMT) by speed	10%

First Thoughts: Possible NVTA Roles

Need	TransAction Goal/Objective	Technology Opportunities	Technology Challenges	Possible NVTA Roles (All = Inform)
Safety	2/1	AVs reduce human error	Near perfection required	Input to regional/state policies?
Emergency Management	2/4	Data/AI mitigate incident impacts	False positives, data protection issues	Funding opportunities, possibly subject to new approaches to procurement?
Congestion	1/1 1/2	CAVs increase highway efficiency, freight, env.	Uncertainty, Curb Mgt., ZOVs, increased VMT	New approaches to what we fund? Pricing/ incentives policy?
First/Last Mile	1/4 2/2 2/3	Reduce SOV VMT, active transportation	Transit impact	Funding for AV shuttles and facilities? New healthcare partnerships
Accessibility to Labor, Jobs, etc.	1/3	Strengthen regional economy, quality of life	See 'Safety' and 'Congestion'	New biz community partnerships. NVTA role in transp./land use discussion?
Accessibility for Mobility Impaired	Multiple/ non-specific	Improve quality of life, opportunities	See 'Safety' and 'Congestion'	New community partnerships, e.g. AARP
Emissions	3/1	AVs=EVs	Revenue Streams	EV infrastructure policy
Resilience	2/3	Better data=better info	Complexity of 'threats' (type/location/scale/ timing/duration)	Consider investment obsolescence and need for infrastructure redundancy options
Other?				