



**Northern Virginia Transportation Authority**  
*The Authority for Transportation in Northern Virginia*

**TECHNICAL ADVISORY COMMITTEE**

**Wednesday, July 21, 2021, 7:00pm**

**NVTA Office**

(Meeting to be livestreamed on [NVTA's YouTube Channel](#))

**AGENDA**

- I. Call to Order/Welcome** Chairman Boice

**Action**

- II. Summary Notes of April 27, 2021 Meeting** Chairman Boice  
*Recommended action: Approval of meeting notes [with abstentions from those who were not present]*

**Discussion/Information**

- III. TransAction: Goals & Objectives** Mr. Jasper, Principal,  
Transportation Planning and Programming
- IV. NVTA Update** Ms. Backmon, Executive Director

**Adjournment**

- V. Adjourn**

**Next Meeting**

Wednesday, September 15, 2021

7:00 pm



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**TECHNICAL ADVISORY COMMITTEE**  
**Wednesday, April 27, 2021, 7:00 pm**  
Virtual meeting and live-streamed on [YouTube](#)

**MEETING SUMMARY**

**I. Call to Order/Welcome**

- Chairman Boice called the meeting to order at 7:00 pm.
- Attendees:
  - **Members:** Randy Boice, Armand Ciccarelli, Amy Morris, Frank Spielberg, Pat Turner, Dr. Shanjiang Zhu
  - **NVTA Staff:** Monica Backmon (Executive Director), Keith Jasper (Principal), Mackenzie Love (Regional Transportation Planner), Sree Nampoothiri (Senior Transportation Planner), Ria Kulkarni (Regional Transportation Planner)
  - **Others: On YouTube live stream.**

**II. Resolution finding the need to conduct meetings electronically**

- Chairman Boice noted that as a result of the COVID-19 and Governor Northam's declaration of a State of Emergency, the Authority's Technical Advisory Committee Meeting was being held electronically. He noted that the passage of the amendments to HB 29 (the FOIA Bill) allowed regional bodies such as the Authority and their committees to conduct business meetings electronically. He added that the meeting by electronic means is authorized because the Committee Meeting Agenda items are statutorily required or necessary to continue operations of the Authority. The motion to accept was moved by Ms. Turner and seconded by Ms. Morris and the resolution was passed unanimously.

**III. Summary of March 17, 2021 Meeting**

The motion to accept the meeting summary was moved by Ms. Turner and seconded by Ms. Morris and was approved unanimously.

**IV. Transportation Technology Action Plan (TTSP)**

- Mr. Jasper revisited the TTSP's timeline to an anticipated adoption in 2021 compared to the timeline of development of the iPhone, a household name in technology since 2005. He gave an overview of what the TTSP is, its basis of establishment and its usefulness and benefits in long-range planning activities.
- He further emphasized on the recommended eight strategies and nine roles of NVRTA for long-term intent in planning. He added that the TTSP comprises of eight strategies that align with core values of TransAction Vision, namely safety, equity and sustainability.



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- Ms. Love provided examples of transportation technologies implemented in the region such as the transit EV shuttle and how such technologies relate to the strategies in the TTSP and in-turn TransAction Vision statement.
  - Dr. Zhu wanted to seek updates on the transit shuttles to which Ms. Love responded that NVTA’s “Driven- by- Innovation” newsletter covers regional, state and national updates about various such developments. Dr. Zhu noted that the examples cited were a great way to approach the TTSP strategies and efforts.
  - Ms. Turner asked about a jargon used in the TTSP - “sandbox” to which Ms. Love responded that the Glossary has been updated with its contextual meaning.
- Mr. Jasper noted planned action through October 2021, that includes public engagement, monitoring of trends, outreach and education and collaborating on process and white papers for development of regional transportation policies. He also added that the Executive Director’s Report would summarize the above mentioned TTSP topics as they are updated.
- Mr. Spielberg appreciated the breadth and depth of the TTSP document. He however, noted that some of his comments were not addressed. Mr. Jasper thanked him for his feedback and apologized, adding that the comments have been addressed diligently in no specific sequence and a full final report will be provided to the Committees before presenting to the Authority.
- The motion to recommend the eight strategies of the TTSP & Action Plan to the Authority, moved by Ms. Morris and seconded by Mr. Spielberg, passed unanimously.

**V. NVTA Update**

- Ms. Backmon thanked the Committee for feedback on the TTSP. She noted that the TTSP strategies and Action Plan will be presented to the Authority for approval at the Authority meeting in May.

**VI. Adjournment**

- The meeting adjourned at 8:02 pm. The next meeting date is to be determined.

# TransAction

## *Goals, Objectives & Measures*

July 21, 2021

*presented to*

*Technical Advisory Committee*



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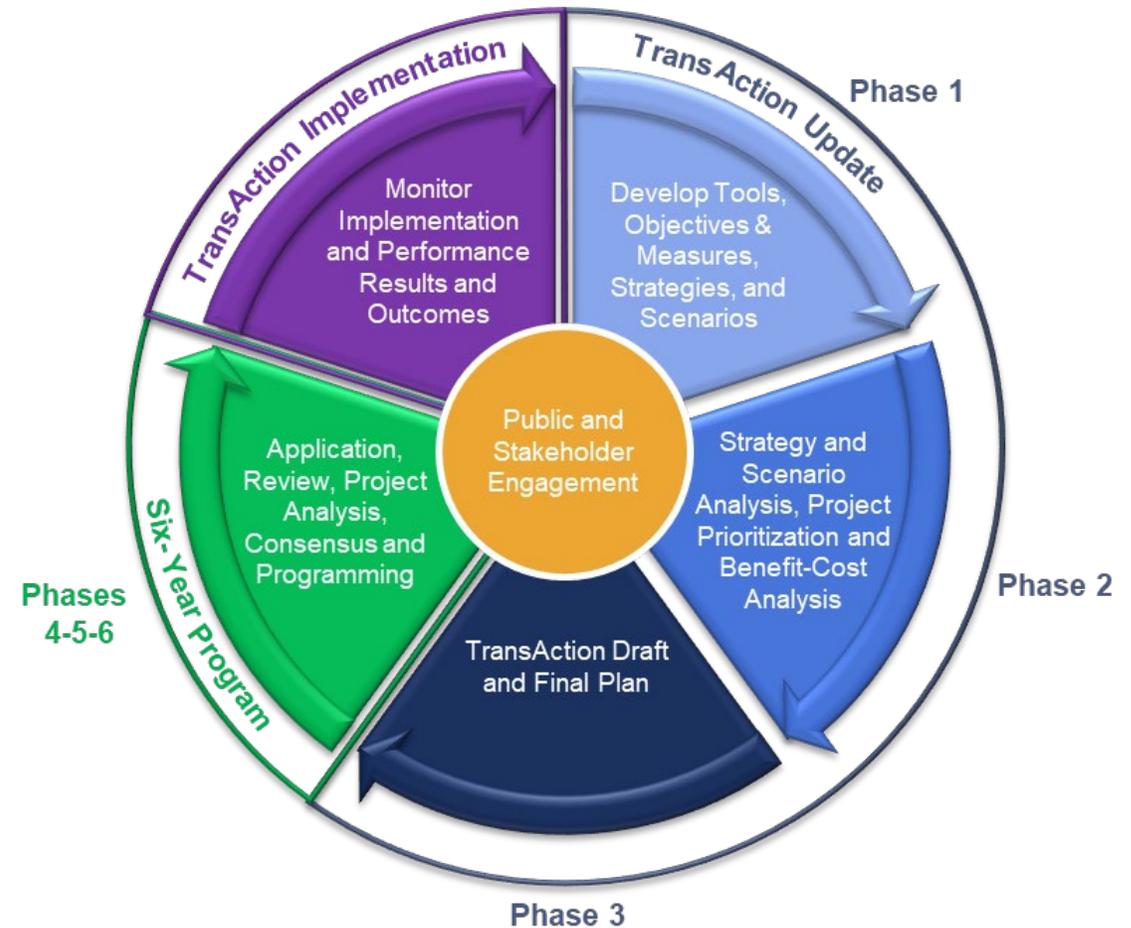
# Agenda

1. Goals, Objectives, Performance Measures & Core Values
2. Scenario Analysis
3. Next Steps

# General Approach

» Phase 1 through October 2021 includes:

- Objectives, Performance Measures & Weights
- Project Lists (Bottom-Up & Top-Down)
- Needs Assessment
- Definition of Scenarios for Analysis
- Building model and networks for analysis



# Objectives



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# Definitions/Guidelines

- » **Vision:** Articulates a preferred idealized states and incorporates the Core Values
- » **Goals:** State priorities and outcomes the region desires to move forward.
- » **Objectives:** Measurable and targeted actions that result in incremental but tangible advancement towards the goals. Can and should change over time as the region progresses.
- » **Performance Measures:** Evaluate potential performance of the transportation network. Derived from the objectives.
- » **Weights:** Reflect the relative importance associated with each performance measure.

## Core Values:

Overarching principles for TransAction that are part of the Vision statement and should be incorporated into the process and resulting plan.



# Current TransAction

## » Vision Statement:

“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.”

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%

\* Measure included in HB 599 rating process.



# Development & Approval Process

## Tentative Schedule for Approval of Objectives, Weights & Measures

- » June: Identification of relevant questions to include in public engagement efforts
- » July: Initial discussions with NVTA committees (PPC, TAC, PCAC)
- » Summer: Public Engagement
- » Fall: Discuss preliminary results of public engagement with NVTA committees
- » October: NVTA committees recommend measures to NVTA for action in November
- » November: NVTA committees recommend weights to NVTA for action in December



# New Vision Statement

“Northern Virginia will plan for, and invest in, a safe, equitable, sustainable, and integrated multimodal transportation system that enhances quality of life, strengthens the economy, and builds resilience.”

Two Purposes:

Develop goals

Outlines Core Values:

- Safety
- Equity
- Sustainability

Vision statement approved by NVTA in December 2020.

# Core Values

## » Equity

- Ensure fairness in mobility and accessibility to meet the needs of the region/sub-regions/communities
- Facilitate social and economic opportunities by providing equitable levels of access to affordable and reliable transportation option to serve the needs of all, and in particular underserved populations (e.g., low-income, minority, elderly, children, people with Limited English Proficiency (LEP), people with disabilities)

## » Sustainability

- Focus on meeting the needs of the present without compromising the ability of future generations to meet their needs
- Consider three pillars of sustainability : economic, environmental, and social

## » Safety

- Minimize transportation system fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all



Source: BetterBikeShare.org

# Core Values

## *How to use them?*



- » The TransAction **process** and **product** should holistically address each Core Value
- » Each of the Core Values may be used in different ways:

Core Value	Identifying Needs & Projects	Performance Measure	Scenario Analysis	Regional Policy Development
Safety	X	X		X
Equity	X	X		X
Sustainability	X	X	X	X

Draft Table for discussion – will likely change as the project progresses

# Goals



## » Proposed TransAction Goals

- 1. Mobility:** Enhance quality of life by improving the mobility of Northern Virginians on the region's multimodal transportation system
- 2. Accessibility:** Strengthen the region's economy by increasing access to jobs, employees, markets, and destinations
- 3. Resiliency:** Enhance operational performance of the multimodal transportation system during unusual conditions and its ability to recover from disruptions

# Potential Objectives & Measures

## *Mobility*



**Mobility:** Enhance quality of life by improving the mobility of Northern Virginians on the region's multimodal transportation system

Potential Objectives	Sample Measures
Reduce congestion and delay*	Total person-hours of delay (in cars and on transit), transit crowding
Improve travel time reliability*	Congestion duration, transit person-miles on dedicated Right Of Way (ROW)
Reduce transportation related emissions	Vehicle Miles Traveled (VMT) by non-Zero Emissions Vehicles (ZEV)

\*Objectives align with HB599 requirements

# Potential Objectives & Measures

## Accessibility



**Accessibility:** Strengthen the region’s economy by increasing access to jobs, employees, markets, and destinations

Potential Objectives	Sample Measures
Improve access to jobs*	Access to jobs within 45 minutes by auto or 60 minutes by transit – region wide and by Equity Emphasis Area (EEA) populations
Improve multimodal connectivity to improve access while reducing dependence on driving alone	Access to Regional Activity Centers (RAC), walkable/bikeable improvement in RAC, improvements to First Mile Last Mile (FMLM) connections

\*Objectives align with HB599 requirements

# Potential Objectives & Measures

## *Resiliency*



**Resiliency:** Enhance operational performance of the multimodal transportation system during unusual conditions and its ability to recover from disruptions

Potential Objectives	Sample Measures
Maintain operations of the regional transportation system during extreme conditions*	Person-hours of delay caused by 10% increase in peak hour demand
Expand travel choices to reduce dependence on driving alone	Number of jobs accessible within 60 minutes on transit as compared to 45 minutes via auto; Qualitative – providing high-quality information about options
Improve the safety of the transportation system	Alignment of project with advanced safety practices

\*Objectives align with HB599 requirements

# Scenario Analysis



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# Identifying Scenarios

## Purpose of Scenario Analysis:

- » Avoid investment obsolescence: Identify which projects will still be good investments if X happens
- » Not predicting a 'most likely' future or picking a preferred future
- » Assumptions-based analysis

## Elements to test in Scenarios:

- » Technology – Connected/ Automated/ Shared/ Electric
- » Transportation Pricing/ Incentives
- » Climate Change
- » Post Pandemic New Normal - Telework and e-commerce growth

# Next Steps



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