



Northern Virginia Transportation Authority
The Authority for Transportation in Northern Virginia

PLANNING AND PROGRAMMING COMMITTEE

Monday, October 4, 2021, 5:00pm

NVTA Office

3040 Williams Drive, Suite 200

Fairfax, Virginia 22031

The meeting will be livestreamed on [NVTA's YouTube Channel](#)

AGENDA

- I. Call to Order/Welcome** Chair

Action

- II. Summary Notes of July 12, 2021 Meeting**
Recommended action: Approve meeting notes

Discussion/Information

- III. TransAction: Public Engagement Activities** Mr. Jasper, Principal
Transportation Planning and Programming
- IV. TransAction: Goals, Objectives, and Measures** Mr. Jasper, Principal
Transportation Planning and Programming
- V. NVTA Update** Ms. Backmon, CEO

Adjournment

- VI. Adjourn**

Next Meetings (subject to Committee approval): November 1 & November 29



Northern Virginia Transportation Authority

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PLANNING AND PROGRAMMING COMMITTEE

Monday, July 12, 2021, 5:00 pm
Northern Virginia Transportation Authority

SUMMARY NOTES

I. Call to Order/Welcome

- Chairman Wilson called the meeting to order at 5:05 pm.
- Attendees:
 - **PPC Members:** Mayor Wilson (City of Alexandria); Council Member Snyder (City of Falls Church); Mayor Rishell (City of Manassas Park); Chair Wheeler (Prince William County).
 - **Other NVTA Members:** None.
 - **NVTA Staff:** Monica Backmon (Executive Director); Keith Jasper (Principal); Sree Nampoothiri (Senior Transportation Planner).
 - **Jurisdiction/Agency Staff:** Several staff members followed the proceedings on livestreaming on YouTube Live.
 - **Others:** Thomas Harrington (Cambridge Systematics); Dalia Leven (Cambridge Systematics).

Action

II. Summary Notes of May 3, 2021 Meeting

- The May 3, 2021 Planning and Programming Committee meeting summary was approved unanimously.

Discussion/Information

III. TransAction: Goals, Objectives, Measures

- Mr. Jasper informed the Committee about the TransAction update process underway and introduced the consultant team Cambridge Systematics.
- Mr. Nampoothiri noted that the Phase 1 of TransAction, including development of goals, objectives, performance measures/weights, and bottom-up project list are underway. He added that the public engagement activities are starting with Focus Group meetings next week and MetroQuest survey in August. In addition, a computer model based on that of the Transportation Planning Board (TPB) is being developed for needs assessment, project evaluations, and scenario analysis to be carried out in Phase 2. The Phase 1 activities are expected to be completed by the end of the year.

- In response to Mayor Rishell's clarification question on needs assessment, Mr. Nampoothiri noted that the needs assessment includes identification of transportation problems in the region, not individual projects.
- In response to Mayor Wilson's question on examples of top-down projects, Mr. Jasper noted that top-down projects are projects that are not conceived by a specific jurisdiction/agency but the TransAction team comes up with to address any unmet needs after considering all the projects submitted by the jurisdictions and agencies. He added that project such as a Bus Rapid Transit (BRT) line on Route 50 is an example of top-down project in the current TransAction. Ms. Backmon added that a transit connection across American Legion Bridge or Metrorail extension on Orange Line or Blue Line would be other examples.
- Mr. Nampoothiri noted that the public engagement results will be provided to the NVTAT statutory and standing committees, including the PPC, for further discussion and recommending performance measures by October and weights by November.
- Mr. Nampoothiri noted that the current goals, objectives, measures, and weights will be reviewed and revised as appropriate. Ms. Backmon noted that there are 15 performance measure in the current TransAction and there is a potential need to reduce the number in order to avoid importance of measures being diluted by too many measures.
- Mr. Nampoothiri noted that the measures need to be finalized by November and weights by December for the team to work them into the computer models for various analyses.
- Ms. Leven presented three goals – mobility, accessibility, and resiliency – that were developed from the vision statement. She noted the core values of equity, sustainability, and safety, that will be the guiding principles for the development of the Plan and the plan update process. These core values will also help in identifying needs, performance measures, scenarios, policies, and projects.
- Ms. Leven noted the eight proposed objectives under the three goals and a number of potential performance measures.
- In response to Chair Wheeler's question on evaluation of projects based on vehicle miles traveled (VMT), Ms. Leven noted that the focus of this measure is to provide higher scores to projects that can reduce emissions. Chair Wheeler encouraged everyone to consider the need to accommodate growth in the outer jurisdictions that do not have mass transit access and could lead to VMT increase. Council member Snyder noted that the objective is the right one and how we achieve it can be in different ways. Mayor Wilson added that the objective is good and more thought could be given to fine tune the measure.
- Council Member Snyder encouraged consideration of reducing idling under the emission reduction objective.
- Council Member Snyder urged to broaden the definition of resiliency to include better management of frequent system breakdowns as well as climate resiliency. Mayor Wilson agreed with Council Member Snyder that both macro- and micro-level resiliency need to be considered.

- In response to Mayor Rishell's question of if the 60 minutes in 'accessible jobs within 60 minutes on transit' an average for the entire region, Ms. Leven elaborated that it is a sum of number of jobs accessible from different neighborhoods in the region.
- In response to Council Member Snyder's question, Ms. Leven noted that the objectives of expanding travel choices and safety help increase resiliency of the system.
- In response to Chair Wheeler's question on weight for these measures, Ms. Backmon noted that there was an agreement in keeping the congestion reduction weight similar to what Commonwealth used for Smart Scale. She noted that the evaluation factors used in Six Year Program (SYP) build upon those used in TransAction, but take into account other factors as well.
- Ms. Leven presented the four scenarios (technology, pricing, climate change, post-pandemic new normal) that will be tested to understand the performance of the projects in TransAction. Effectively, each scenario provides a sensitivity test, and will help to understand uncertainty associated with long-range transportation planning.
- In response to Mayor Rishell's question on inclusion of safety of software systems in the technology scenario, Ms. Leven noted that the model-based analysis cannot take that into consideration. Mr. Jasper added that the Transportation Technology Strategic Plan (TTSP) and Action Plan address this issue.
- Chair Wheeler encouraged to consider the fluidity of post-pandemic travel patterns when thinking about new normal.
- Council Member Snyder suggested referring to transportation element pricing/incentives, rather than road pricing.

IV. NVTa Update

- Ms. Backmon noted that there is no Authority meeting in August and the next meeting is scheduled for September 9, 2021. She noted that the Call for Regional Transportation Projects for the FY2022-2027 SYP is open with an application deadline of October 1, 2021 and the deadline to submit governing body resolution is December 3, 2021. She added that the Finance team is still working on the available amount to fund the SYP and should be available early next year.

Adjournment

V. Adjourn

- The next meeting date will be decided later. The meeting adjourned at 6:15 pm.

TransAction Update

October 4, 2021

presented to

*Planning and Programming Committee
(PPC)*



NVTA's
TransAction
*Transportation Action Plan
for Northern Virginia*

Agenda



1. Public Engagement Update
2. Goals, Objectives, Performance Measures
3. Next Steps



Public Engagement Update



NVTA's
TransAction
*Transportation Action Plan
for Northern Virginia*

Phase 1 Engagement Activities

Phase 1

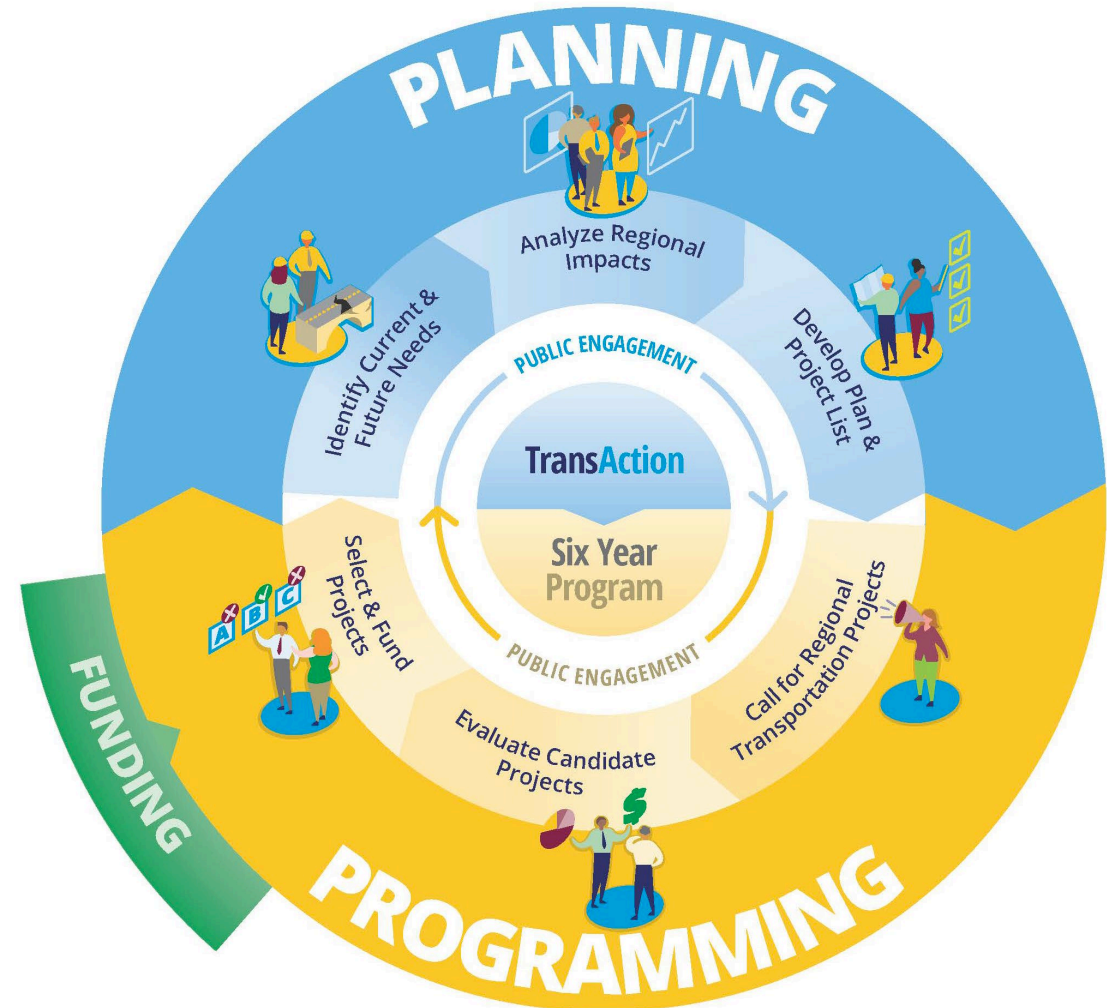
Goals: Build awareness of the project, gather input on needs and objectives

Key Engagement Strategies:

- Online Survey
- Pop-up events
- Virtual Focus Groups
- Live Chat Sessions
- Stakeholder Group

Supporting Initiatives:

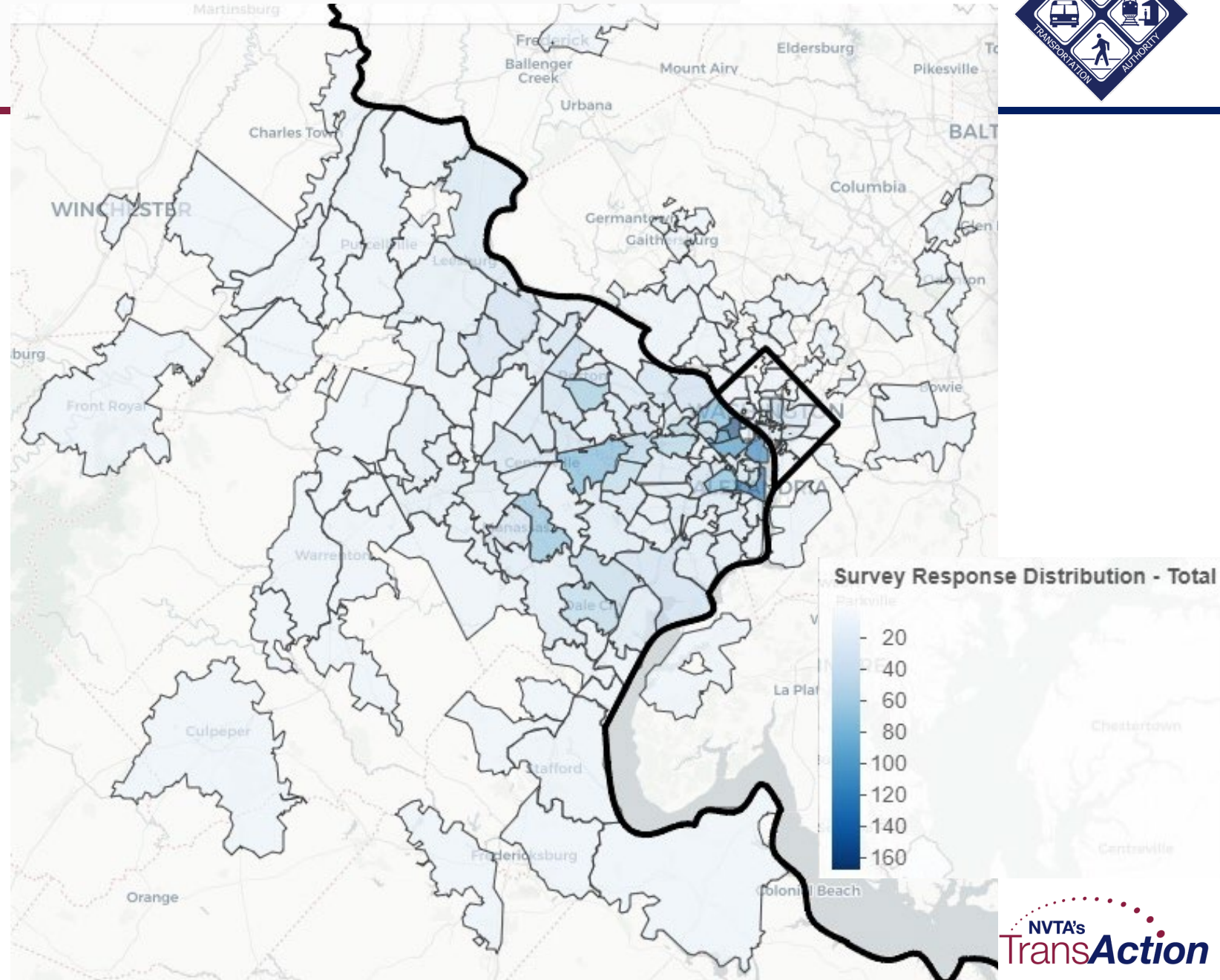
- Website refresh
- Resources and tools for stakeholders
- Social Media Messaging





Survey Update

- » Purpose: seek feedback on travel behaviors, transportation needs and priorities
- » Start Date: August 6th
- » End Date: September 19th
- » Responses :
 - English: 2,164
 - Korean: 89
 - Spanish: 65
 - TOTAL: 2,318



Pop-Up Events

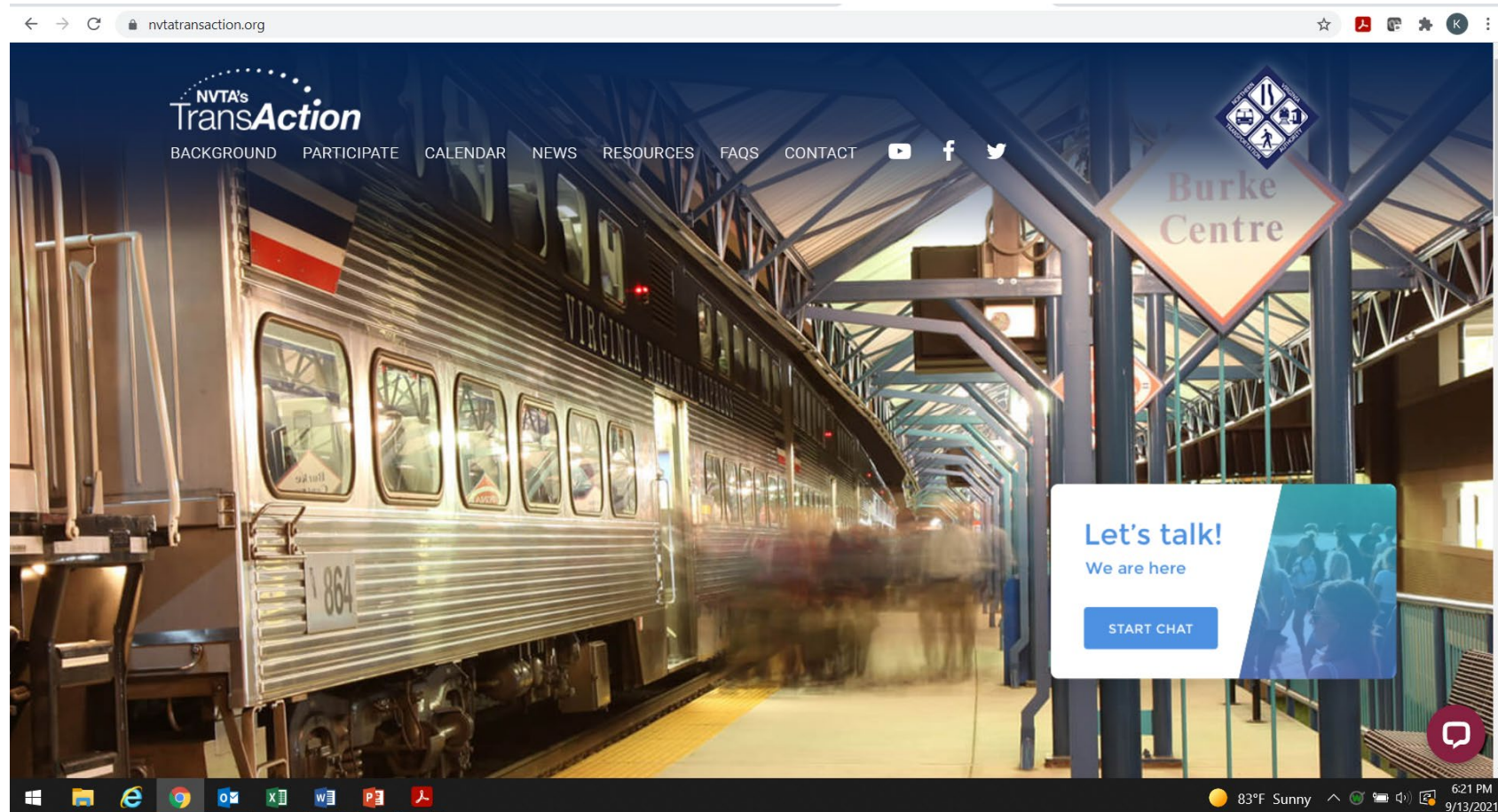
- » Purpose: awareness raising, encourage survey participation
- » 12 outdoor/in-person events, located with a focus on Equity Emphasis Areas
 - August 25th thru September 15th
 - Weekdays, mostly late afternoon/early evening; Weekends, mostly midday/early afternoon
 - Translators available (varies by location)
 - Spanish
 - Korean
 - Amharic
 - Vietnamese



Live Chats



- » Purpose: making NVTA staff available for one-on-one conversations with citizens, awareness raising, encourage survey participation
- » Promoted four Live Chat sessions
 - August 26th thru September 16th
 - Thursdays, 1:00pm – 3:00pm
 - Randomly at other times
 - English language only
- » Experimental





Stakeholder Group

- » Purpose: create a new line of communications with organizations that represent citizens and businesses, amplify NVTA's messaging, provide feedback to NVTA, awareness raising
- » Augments, but does not replace, access to NVTA
- » Currently comprises approximately 50 organizations
 - Organizations mostly representing citizens
 - Civic groups
 - Advocacy groups
 - Organizations mostly representing businesses
 - Chambers of Commerce
 - Business Associations
- » Initially drawn from NVTA Mail Chimp databases, but expected to grow over time
- » Meet 3-4 times per year to share information and feedback on NVTA's primary responsibilities (Planning and Programming)
- » First meeting in October 2021



Focus Groups – Key Findings

» Eight online discussion groups held July 20-29, 2021

- 95 total participants
- Two groups of each of four market segments

» Discussion Topics:

- Current travel choices
- Issues getting around in NoVA
- Core Values
- Prioritization of objectives
- Types of transportation improvements
- Emerging travel options

Transit Focused:

Residents of Arlington, Alexandria,
or with 1 mile of Metrorail station

Non-Transit Focused:

Residents of other areas in Northern
Virginia

Title VI Populations:

Those who belong to a protected
Title VI group

Non-Title VI Populations:

General Population

Focus Groups – Travel Choices and Issues



- » Focus was on pre-pandemic travel patterns and expected travel post-pandemic
 - Single occupancy vehicles (SOV) are chosen specifically for their reliability and flexibility
 - Metrorail was used (pre-pandemic) to get to work or for occasional discretionary into DC
 - Limited use/awareness of other transit options
 - Those without transit access explained that they would be more willing to use public transportation if they understood it better
 - Housing prices make it more difficult to live close to a Metro station
 - Those currently telecommuting generally expect that they will continue telecommuting in the future at a minimum of a hybrid schedule

Focus Groups – Core Values



» How focus group participants think about Equity

What does Equity mean?

Overall, participants identified “Equity” as relating to fairness. That is, a transportation system that serves everyone fairly.

How is the region doing on Equity?

Northern Virginia has some work to do to address equity: it feels to many that decisions are made to prioritize wealthier areas in the region

How should NVRTA consider/ incorporate Equity?

More fairly distribute projects and improvements geographically and to help lower-income residents

Focus Groups – Core Values



» How focus group participants think about Sustainability

What does Sustainability mean?

Sustainability, for nearly all respondents, first brought to mind thoughts of maintenance and infrastructure that is built to last

How is the region doing on Sustainability?

Considerations such as responsibility to the environment are nearly always trumped by the importance of their commute

How should NVTA consider/ incorporate Sustainability?

NVTA needs to work to make sustainable choices and modes work for people

Focus Groups – Core Values



» How focus group participants think about Safety

What does Safety mean?

Two components were highlighted: safety from crime and safety from accidents

How is the region doing on Safety?

Metro was often mentioned by participants concerned with safety.

How should NVTA consider/ incorporate Safety?

NVTA should encourage safe driving practices and work to provide things like safer bike lanes, proper maintenance of roads and bridges, and more crosswalks and sidewalks to promote pedestrian safety



Focus Groups – Priorities

» Objectives

- Highest priorities across groups were to reduce congestion and delay
- Those who live in areas without Metro access were more likely to see expansion of transportation choices as a high priority

» Improvements

- “Build new roads or widen roads” was chosen by majority of participants
 - But vocal minority of participants pointed out that over the years, building new roads or widening roads has not seemed to help the traffic situation

» Emerging technology

- “Get roads ready for automated vehicles” was viewed as a low short-term priority, but it should be a priority for the future
- Most are open to owning an electric car, but identified potential drawbacks - car’s range and availability of charging stations (i.e., range anxiety), the lack of infrastructure in their homes, and concerns about using clean or dirty energy to charge their cars

Goals, Objectives & Measures





Development & Approval Process

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
- » September: Discuss preliminary results of public engagement with NVTA committees; additional discussion with NVTA committees on goals, objectives, and measures
 - PCAC: September 22
 - TAC: September 29
 - PPC: October 4



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.”



Core Values:

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

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



Key Feedback from the July 12th PPC

- » Resiliency Goal doesn't seem to match committee members' ideas of resiliency. "Unusual conditions" seems particularly problematic.
 - Action: Refined Goal based on FHWA definition of resiliency (see slide 22)
- » Emissions reduction objective/measure needs to consider decreasing idling
 - Action: Performance Measure stratifies VMT by speed (see slide 24)



Key Feedback from the July 21st TAC

- » Safety objective and measure needs to account for all modes, not just drivers
 - Action: Measure and methodology incorporates all modes and personal security (see slide 26)
- » Resiliency Goal doesn't seem to match committee members' ideas of resiliency. "Unusual conditions" seems particularly problematic.
 - Action: Refined Goal based on FHWA definition of resiliency (see slide 22)
- » Objectives need to account for all aspects of usability (e.g., affordability, disability, cost, etc.)
 - Action: Some aspects incorporated into revised accessibility objective/measure. Others not incorporated primarily because NVTA cannot affect them (see slide 25)
- » Emissions reduction objective/measure needs to consider decreasing idling
 - Action: Performance Measure stratifies VMT by speed (see slide 24)
- » Discussion about measures for congestion/delay – potentially accounting for delay based on the length of a given trip
 - Action: Not changed. Internal discussions and other stakeholder discussions indicate that all delay should be counted as the same.



Key Feedback from the July 28th PCAC

- » Resiliency Goal seems too undefined (“unusual conditions”)
 - Action: Refined Goal based on FHWA definition of resiliency (see slide 22)
- » Definition of safety needs to be expanded to include personal safety (particularly related to public transit)
 - Action: Updated objective (see slide 26)
- » Focus objectives and measures on improving the pedestrian environment to encourage non-motorized transit and improvement transit access
 - Action: Updated objectives (see slide 25)



Updated Goals

| Proposed Goals | Original (July versions) | Notes |
|--|--|--|
| Mobility: Enhance quality of life of Northern Virginians by improving performance of the multimodal transportation system | Mobility: Enhance quality of life by improving the mobility of Northern Virginians on the region's multimodal transportation system | Improved legibility |
| Accessibility: Strengthen the region's economy by increasing access to jobs, employees, markets, and destinations for all communities | Accessibility: Strengthen the region's economy by increasing access to jobs, employees, markets, and destinations | Incorporate equity at the goal level |
| Resiliency: Improve the transportation system's ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions. | Resiliency: Enhance operational performance of the multimodal transportation system during unusual conditions and its ability to recover from disruptions | Based on FHWA's definition of resilience |



Objectives & Performance Measures

» Performance Measures:



- Will be used to evaluate the impacts of potential projects and measure progress towards goals and objectives
- Each performance measure can be weighted differently (to be determined later in the Fall)

» Performance Measures should:

- Incorporate all modes and project types
- Reflect Core Values
- Be simple enough and few enough measures for the public to understand

Updated Objectives & Proposed Measures





» **Mobility:** Enhance quality of life of Northern Virginians by improving performance of the multimodal transportation system

| Revised Objectives | Proposed Measures | Analysis Methodology |
|---|---|--|
| Reduce congestion and delay* | <ul style="list-style-type: none"> Total person-hours of delay in cars and on transit (two separate metrics) | <ul style="list-style-type: none"> Model  |
| Improve travel time reliability* | <ul style="list-style-type: none"> Congestion duration Transit person-miles with dedicated/priority ROW | <ul style="list-style-type: none"> Model |
| Reduce transportation related emissions | <ul style="list-style-type: none"> VMT by non-Zero Emissions Vehicles (ZEV) stratified by speed | <ul style="list-style-type: none"> Model Assumptions of baseline ZEV market penetration  |

*Objectives align with HB599 requirements

Updated Objectives & Proposed Measures



» **Accessibility:** Strengthen the region's economy by increasing access to jobs, employees, markets, and destinations for all communities

| Revised Objectives | Proposed Measures | Analysis Methodology |
|---|--|--|
| Improve Access to jobs* | Access to jobs within 45 minutes by auto or 60 minutes by transit (region wide and by EEA populations) | <ul style="list-style-type: none"> Model  |
| Reduce dependence on driving alone by improving conditions for people accessing transit and using other modes | Qualitative: <ul style="list-style-type: none"> Improve access to high-capacity transit Improve walk/bike environment, including disabled access Improve availability of information about travel options | <ul style="list-style-type: none"> Project descriptions    |

*Objectives align with HB599 requirements

Updated Objectives & Proposed Measures

- » **Resiliency:** Improve the transportation system's ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.

| Revised Objectives | Proposed Measures | Analysis Methodology |
|--|--|---|
| Improve safety and security of the multimodal transportation system | Potential for crash reduction | <ul style="list-style-type: none"> Crash reduction factors (similar to SMARTSCALE methodology)  |
| Maintain operations of the regional transportation system during extreme conditions* | Person-hours of delay caused by 10% increase in peak hour demand | <ul style="list-style-type: none"> Model  |

*Objectives align with HB599 requirements

Next Steps



NVTA's
TransAction
*Transportation Action Plan
for Northern Virginia*



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
- » September: Discuss preliminary results of public engagement with NVTA committees; additional discussion with NVTA committees on goals, objectives, and measures
- » **October: NVTA committees recommend measures to NVTA for action in November** (TAC 10/20, PCAC 10/27, PPC - TBD)
- » **November: NVTA committees recommend weights to NVTA for action in December** (TAC 11/22, PCAC 12/1, PPC – TBD)

Reference Slides



Goals



» Proposed TransAction Goals

1. **Mobility:** Enhance quality of life of Northern Virginians by improving performance of the multimodal transportation system
2. **Accessibility:** Strengthen the region's economy by increasing access to jobs, employees, markets, and destinations for all communities
3. **Resiliency:** Improve the transportation system's ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.



Previous 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.