



# Northern Virginia Transportation Authority

The Authority for Transportation in Northern Virginia

## TECHNICAL ADVISORY COMMITTEE

**Tuesday, June 14, 2022, 6:30pm**

**3040 Williams Drive, Suite 200**

**Fairfax, Virginia 22031**

(In-person meeting and livestreamed via [YouTube](#))

### AGENDA

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

#### Action

- II. Summary Notes of March 16<sup>th</sup>, 2022 Meeting** Chair Boice  
*Recommended action: Approve meeting notes*

- III. Summary Notes of April 20<sup>th</sup>, 2022 Meeting** Chair Boice  
*Recommended action: Approve meeting notes*

- IV. Summary Notes of May 18<sup>th</sup>, 2022 Meeting** Chair Boice  
*Recommended action: Approve meeting notes*

- V. Review FY 2022-2027 Six Year Program Staff Recommendations** Mr. Jasper  
*Recommended action: Recommend the Authority to adopt FY2022-2027 Six Year Program*

### Discussion/Information

- VI. Status of TransAction Plan Update** Mr. Jasper, Principal,  
Transportation Planning  
and Programming

- VII. NVTA Updates** Ms. Backmon, CEO

### Adjournment

- VIII. Adjourn**

#### **Next Meeting**

*July 15<sup>th</sup>, 2022*



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

**TECHNICAL ADVISORY COMMITTEE**  
**Wednesday, March 16th, 2022, 7:00 pm**  
**Northern Virginia Transportation Authority**  
**Live-streamed on [YouTube](#)**

**MEETING SUMMARY**

**I. Call to Order/Welcome**

- Chairman Boice called the meeting to order at 7:03 pm at the NVTA Office.
- Attendees:
  - **TAC Members:** Randy Boice, Karen Campblin, Armand Ciccarelli, Amy Morris, Frank Spielberg, and Dr. Shanjiang Zhu.
  - **NVTA Staff:** Keith Jasper, Principal, Transportation Planning and Programming; Dr. Sree Nampoothiri, Senior Transportation Planner; and Mackenzie Love, Regional Transportation Planner.
  - **Consultants:** Tom Harrington (Cambridge Systematics Inc.)

**II. Summary of November 22, 2021, Meeting**

- The motion to accept the meeting summary was approved unanimously.

**III. Approval of Meeting Schedule for Calendar Year 2022**

- Mr. Jasper noted that NVTA Staff intend to seek endorsements for the FY2022-2027 Six Year Program (SYP) during the June 15<sup>th</sup> meeting.
- The motion to accept the draft meeting schedule was approved unanimously.

**IV. Status of FY2022-2027 Six Year Program Update**

- Dr. Nampoothiri provided an update on the process that had been undertaken as of March 16<sup>th</sup>, 2022, to evaluate the 26 projects that had been submitted for consideration in NVTA's FY2022-2027 Six Year Program (SYP.) This included calculation of the TransAction Performance Measures and weightings, which can be found in Attachment A.

**TransAction Ratings.** These ratings represent the difference in each of the Performance Measures included in TransAction that NVTA's model anticipates would occur if the project were built. For each Performance Measure, the project that receives the best result is assigned a score of 100 and all other projects are assigned a score that is relatively proportionate. Once each project has been assigned a score for each Performance Measure, the weights previously approved by the Authority are applied to

those scores, which are summed to get an overall TransAction Rating for each project.

NVTA Staff have shared the preliminary TransAction Ratings for each project submitted by a jurisdiction, to ensure no errors were made in modeling any project.

**Congestion Reduction Relative to Cost (CRRC).** To calculate this, NVTA's model is used to assess potential congestion reduction in the region due to the project being built in 2030 and in 2045. This is reported in TransAction Performance Measures A1 and A2, and staff are able to use these results to extrapolate changes for each year between 2030 and 2045. The results for all years from the year of project completion are then summed for each project, and that is divided by the total cost of that project.

**Long Term Benefit (LTB).** Virginia Code states that over the long term, jurisdictions should receive a benefit from NVTA's investments that are approximately equal to the share of revenues that can be attributed to that jurisdiction, in the long term.

Mr. Jasper explained that the Code does not describe how to calculate this Long Term Benefit, so in 2014 NVTA worked with its committees to determine that "long term" would be considered to mean 10 years, and that LTB would be calculated on a rolling basis. They also worked to establish a methodology, which would use two factors to create a score. 50% of said score would be based on the amount of revenues allocated to projects by a jurisdiction, and the remaining 50% would be related to where the benefits of projects could be attributed. He went on to explain that because NVTA has recently allocated 10 years of funding, it is now time to begin calculating LTB. He cautioned that it is unlikely that all jurisdictions will be in perfect balance in regards to LTB at any point, and that corrections would take multiple SYP cycles. Despite this, LTB balance may inform project selection in a given SYP cycle, but would not be the primary factor in funding recommendations.

- Dr. Nampoothiri distributed copies of a table that detailed the factors that will be considered in evaluating projects for the FY2022-2027 SYP. It included columns for CRRC rating and rank, which will be used to order candidate projects in the table; TransAction rating and rank; and LTB scores. The remaining factors are qualitative and include:

- Amount and type of external funding already committed to the project
    - Past performance of the applicant in using NVT A funds, and, if applicable, past performance of that particular project in using NVT A funds
    - Project readiness.
  - Dr. Nampoothiri also noted that public comment will also be considered. Mr. Jasper noted that NVT A is also interested in geographic and modal balance, but that assessment of these factors can only be done at the end of the process.
    - Mr. Spielberg asked if this approach favors adding highway capacity? Chairman Boice highlighted that in one year, Virginia Railway Express (VRE) and an Intelligent Transportation System (ITS) were actually the top two highest performing projects. Mr. Jasper added that the Consultant team working on TransAction does a good job addressing all modes.
- Dr. Nampoothiri shared upcoming opportunities for the public to provide input:
- A Public Comment Period will begin on April 15<sup>th</sup> and end on May 22<sup>nd</sup>,
  - A Public Hearing will be held on May 12<sup>th</sup>, on the same evening as the Authority meeting; and
  - An Open House will be held as part of the Joint Transportation Agency meeting, that will take place on May 4<sup>th</sup> at the Virginia Department of Transportation offices.
- NVT A Staff hope to seek Authority adoption of the SYP 2022-20227 at its July meeting.

## **V. Status of TransAction Plan Update**

- Dr. Nampoothiri informed the Committee that the model being developed for TransAction is now ready and has been used to create a baseline to which projects will be compared. The team is now working to finalize top-down project lists, based on gaps identified in the region. Once that list is finalized, NVT A Staff will share the full TransAction project list (including both top-down and those contributed by jurisdictions) with the Committee. After that, the model will be run to evaluate the projects. Next, work will begin on the TransAction scenario analysis process.

Dr. Nampoothiri also provided an update on TransAction public engagement, indicating that NVT A Staff intend to ask the Authority to approve a date for a Public Hearing, likely in September, on the same evening they are asked to adopt

the SYP. This timing would align with hopeful adoption of TransAction by the end of this calendar year. Other recent engagement activities included the 4<sup>th</sup> iteration of the NVTa Perceptions survey; creation of “micro-moments” on NVTa’s social media; and publishing a series of monthly blog posts about the TransAction process.

- Mr. Spielberg asked two questions about the TransAction Technical Memo, which had been shared with the Committee before the meeting:
  - How would free-flow be calculated for use in evaluation of Person Hours of Delay, or PHD, a TransAction Performance Measure? Mr. Harrington indicated that this would be calculated based on the speed limit of a road.
  - What are the origins of the Crash Mitigation Factors (CMFs) utilized in the TransAction Performance Measures around safety? Mr. Harrington explained that most of the CMFs are standard from SmartScale, which is the Commonwealth’s competitive grant program for transportation projects. Chairman Boice added that the CMFs are based on the national Highway Safety Manual.

## **VI. NVTa Updates**

- Mr. Jasper reminded the Committee that NVTa would be hosting the 7<sup>th</sup> Annual Northern Virginia Transportation Roundtable on Wednesday, March 30<sup>th</sup>, and invited them to register.
- Mr. Jasper informed the Committee that the Authority meeting scheduled for April 14<sup>th</sup> was being rescheduled, and that April 21<sup>st</sup> was the most likely option.

## **VII. Adjournment**

- The meeting adjourned at 7:53 pm.

### **Attachment:**

#### **A. Weights for the Ten Performance Measures Recommended by the Authority**

### Weights for the Ten Performance Measures Recommended by the Authority

Approved by the Authority			
Goal		Performance Measure	Weight
Mobility	A1	Total Person-Hours of Delay in autos*	10
	A2	Total Person-Hours of Delay on Transit*	10
	B1	Duration of Severe Congestion*	10
	B2	Transit person-miles in dedicated/priority ROW*	10
Accessibility	C1	Access to jobs by car, transit, and bike*	10
	C2	Access to jobs by car, transit, and bike for EEA populations	10
	D1	Quality of access to transit and the walk/bike network	15
Resiliency	E1	Potential for safety and security improvements	10
	F1	Vehicle Emissions	10
	G1	Transportation System Redundancy*	5

\* HB599 measures



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

**TECHNICAL ADVISORY COMMITTEE**  
**Wednesday, April 20<sup>th</sup>, 2022, 7:00 pm**  
**Northern Virginia Transportation Authority**  
**Live-streamed on [YouTube](#)**

**MEETING SUMMARY**

**I. Call to Order/Welcome**

- Vice Chairman Ciccarelli called the meeting to order at 7:04 pm at the NVTa Office.
- Attendees:
  - **TAC Members:** Armand Ciccarelli, Amy Morris, Frank Spielberg, and Dr. Shanjian Zhu.
  - **NVTa Staff:** Monica Backmon, Chief Executive Officer; Dr. Sree Nampoothiri, Senior Transportation Planner; and Mackenzie Love, Regional Transportation Planner.
  - **Consultants:** Tom Harrington, Cambridge Systematics Inc.
  - **Others:** via YouTube

**II. Summary of March 16, 2022, Meeting**

- The meeting summary for the March 16, 2022, was reviewed. Mr. Frank Spielberg requested that the summary be revised to reflect the correct time of adjournment as 7:53pm and that change was subsequently incorporated.
- Due to a lack of quorum, the Committee was unable to vote to adopt the summary. Meeting notes will be tabled until the next quorum met meeting.

**III. Status of FY2022-2027 Six Year Program Update**

- Dr. Nampoothiri provided an update on the efforts to evaluate the 26 projects that have been submitted for consideration in NVTa's FY2022-2027 Six Year Program (SYP) that represent a total request of \$1.2 billion.
  - i. Ms. Backmon added that the Authority was anticipated to take action to approve the amount of Regional Revenue funds available for FY26/27 Programming (PayGo) during their May 12<sup>th</sup> meeting.
- Evaluations included calculating TransAction Ratings, Congestion Reduction Relative to Cost (CRRC), and Long-Term Benefit (LTB) for each project. The preliminary results of these evaluations were shared with the Committee for the first time, as were project rankings based on that data.

- i. Mr. Spielberg asked how CRRC would be used in making funding recommendations.
  - ii. Ms. Backmon said that CRRC would be prioritized, as statutorily required, but NVTa's enabling legislation also directs Staff to consider the other quantitative and qualitative elements. Staff endeavor to balance all of these, along with public comment as well as geographic and modal balance, in making their recommendations to the Authority.
  - iii. Dr. Nampoothiri added that public comment is also an important factor in making funding recommendations. He highlighted several upcoming opportunities for individuals to provide comment, including NVTa's SYP Open House, which will take place on May 4<sup>th</sup>, as part of the Annual NOVA Joint Transportation Meeting, and a Public Hearing that will take place on May 12<sup>th</sup>, immediately preceding an Authority meeting.
- There was also a discussion of how the LTB is calculated and applied.
  - i. In 2014 NVTa convened a subcommittee of the Financial Working Group and the Council of Counsels to set up principles for evaluating LTB, which included three components:
    - "Long term" – this was determined to mean approximately 10 years. Since NVTa is currently in the process of programming revenues for FY 2026 and 2027, which will be ten years after the first funding program in 2016, now is an appropriate time to increase consideration of LTB.
    - Which projects to consider in evaluating LTB – the subcommittee advised considering completed projects only. However, this became a complex question because NVTa funds different phases of projects, meaning some projects may not be "complete" until long after NVTa contributions were fully utilized. Additionally, due to the amount of time capital projects can take, only about 25 of the 106 projects NVTa has funded are currently considered "complete". For those reasons, all NVTa funded projects will be considered in calculation of LTB.
    - LTB calls for jurisdictions to receive benefits approximately equal to the revenues they contribute. Three components are considered in determining the benefit a jurisdiction has received:
      - a. The amount of funding that has been programmed in a jurisdiction.
      - b. The amount of congestion reduction that occurred inside a jurisdiction.
      - c. How much congestion reduction was experienced by residents of a jurisdiction, regardless of their destination.



- ii. Currently only one jurisdiction, Arlington, is estimated to be receiving less benefits than their revenue share. Only one jurisdiction is estimated to be receiving more benefits than their revenue share, Prince William County.
  - iii. Based on this, NVTa Staff are not proposing any drastic or immediate changes. Dr. Nampoothiri reiterated Staff's position that any efforts to balance LTB would likely take multiple funding rounds and that the Authority's ongoing commitment to geographical and modal balance helps maintain LTB balance on a regular basis.
- Vice Chairman Ciccarelli asked if NVTa could encourage jurisdictions to apply for things, based on the results of the LTB calculations.
  - i. Dr. Nampoothiri indicated that NVTa cannot influence jurisdictions in that way but have advised jurisdictional leadership that if they submit quality applications, they stand a chance to receive additional funding to fill the gap. However, it is important to avoid placing too much emphasis on the number of projects, as there are also other ways to achieve benefits.
- Mr. Spielberg asked if the Authority could make changes to staff recommendations for programming of funds.
  - i. Ms. Backmon highlighted that Staff recommendations are made to all committees, with the final committee recommendation coming from the Planning and Programming Committee (PPC) to the Authority. The Authority then has the final decision on programming of funds. Moreover, staff recommend full funding such that any changes would necessitate a rebalancing of allocations.
- Dr. Zhu asked if NVTa funding will be conditional on securing funding for phases where a gap may remain.
  - i. Ms. Backmon indicated that these types of decisions are made on a case-by-case basis, as some jurisdictions have different abilities to fill gaps. She also noted that NVTa prefers not to be the only funding source on a project.

#### **IV. Status of TransAction Plan Update**

- NVTa Staff informed the Committee that the model developed for TransAction is being used to analyze the potential impact of projects by comparing analysis of "build" and "no-build" scenarios for the horizon year of 2045.
  - Projects included in this analysis will consist of both those in the bottom-up (projects from local plans) and top-down (regional projects identified by the staff and consultant team) project lists. Currently this represents a combined total of approximately 430 projects, and there is a potential for that number to expand if additional gaps are identified.
- The scenario analysis process will begin after that evaluation is complete.

- The next TAC meeting will focus more on the TransAction update. This will include updates on technical work currently underway, as well as feedback received during an upcoming NVTa Stakeholder Group meeting on May 10<sup>th</sup>. Future meetings will receive additional feedback from an Authority Work Session on May 19th, and a public comment period, which is anticipated to begin in August 2022.

#### **V. NVTa Updates**

- Ms. Backmon provided the Committee with an update on happenings at the Virginia General Assembly, which is in Special Session. She brought the Committee's attention to a bill that proposes changes to the Freedom of Information Act (FOIA) requirements, which would allow certain committees, including TAC, to meet virtually.
- Finally, Ms. Backmon informed the Committee that she continues to seek appointments for the two vacant TAC positions by the Virginia Transportation Secretary.

#### **VI. Adjournment**

- The meeting adjourned at 7:48 pm.



## Northern Virginia Transportation Authority

*The Authority for Transportation in Northern Virginia*

### TECHNICAL ADVISORY COMMITTEE

Wednesday, May 18th, 2022, 7:00 pm

Northern Virginia Transportation Authority

Live-streamed on [YouTube](#)

### MEETING SUMMARY

#### I. Call to Order/Welcome

- Chairman Boice called the meeting to order at 7:03 pm at the NVTA Office. Chairman Boice announced that two new members of the TAC were appointed by the Virginia Secretary of Transportation: Michelle Smith Cavucci and Kerianne Masters.
- Attendees:
  - **TAC Members:** Randy Boice, Amy Morris, Armand Ciccarelli, and Frank Spielberg.
  - **NVTA Staff:** Keith Jasper, Principal, Transportation Planning and Programming; Dr. Sree Nampoothiri, Senior Transportation Planner; and Ian Newman, Regional Transportation Planner.
  - **Consultants:** Tom Harrington (Cambridge Systematics Inc.).
  - **Others:** Jeff Rodgers (KCI Technologies), Meeting was also live streamed on YouTube.

#### II. Summary Notes of March 16th, 2022, Meeting

- There was no action to approve meeting notes from March 16<sup>th</sup>, 2022, as quorum was not present for this meeting. This agenda item was therefore skipped.

#### III. Summary Notes of April 20<sup>th</sup>, 2022, Meeting

- There was no action to approve meeting notes from April 20<sup>th</sup>, 2022, as quorum was not present for this meeting. This agenda item was therefore skipped.

#### IV. Status of TransAction Plan Update

- Mr. Jasper introduced Mr. Harrington who was the primary presenter of this agenda item. He also mentioned that there has been a considerable amount of activity in the FY2022-2027 Six Year Program (SYP) over the last several months and the consultants are working on TransAction, which is occurring simultaneously with the work occurring on the SYP.

- Mr. Harrington reviewed the TransAction project list with a breakdown of the number, type, and cost of projects included in TransAction. In addition, he explained the projects that are new from the last update of TransAction as well as the number of projects removed from the list due to completion, receiving full funding, or changed priorities of jurisdictions/agencies. He shared charts of the project cost estimates by sponsor, and the number of projects by sponsor.
- Mr. Spielberg asked for clarification on the Y-axis label for WMATA's planning-level project costs, asking if this cost is approximately \$26 billion since it shows as \$26,762 million, to which Mr. Harrington confirmed Mr. Spielberg's inference.
- Mr. Harrington then presented two pie charts further breaking down project type by primary mode and both primary and secondary modes. He also showed estimated planning-level project costs from the complete list, and a two-ring chart showing number and cost of projects.
- Chair Boice asked if we will discuss what these projects are in more detail.
  - i. Mr. Harrington mentioned that the project list is not currently present at the meeting.
  - ii. Chair Boice responded with his curiosity on the fiscally significant WMATA project, to which Mr. Harrington responded that this is the core capacity project for improving the Blue, Orange, and Silver Lines across the Potomac River and potential new alignment in the District of Columbia.
- Mr. Harrington then presented preliminary modeling results. He mentioned that this is a two-part model, macroscopic, using an enhanced version of the TPB regional model, and mesoscopic which helps leverage dynamic traffic assignment techniques. He then presented the results of the build and no-build networks for the year 2045 and shared a map showing the changes in volume on roadways for the build scenario.
- Mr. Spielberg asked if increases include roads that have not been built yet.
  - i. Mr. Harrington confirmed.
  - ii. Mr. Spielberg responded by mentioning that this ought to be shown in a different color than the color also showing volume increase since there will not be any traffic before the road is built.
- Mr. Harrington shared a map showing change in delay from the full-build network results in morning peak.
  - i. Mr. Spielberg then mentioned that he found it interesting and hard to believe that barely any roads inside the Beltline had delay increases.
- Mr. Harrington then showed a series of maps highlighting accessibility (number of jobs accessible) by auto, transit, and by bike.
  - i. Mr. Jasper then clarified for those in the meeting that the build scenario signifies that all 429 projects would be implemented. However, this is an

- extreme stretch to fund over \$70 billion worth of projects and what was shown is the best outcome but is unrealistic.
- ii. Dr. Nampoothiri mentioned that \$2.5 billion has been funded with NVTAs regional funds and the total project cost for these NVTAs-funded projects is approximately \$3.5 billion which has an additional one billion dollars coming from other sources.
  - iii. Ms. Morris asked if the number of jobs increase shown is on an annual basis. Mr. Harrington responded that this is on any given weekday.
  - iv. Mr. Harrington mentioned that the model was calibrated on survey data from 2017 and the baseline continues with that trend.
- Mr. Harrington presented the three scenarios. He mentioned that scenario work allows modelers to test sensitivity of travel behaviors. These are used to see how different assumptions and factors about potential alternate futures can impact results. The three specific alternatives included the Pandemic-Created New Normal, Transportation Technology, and Transportation Policy and Mechanisms, and their accompanying assumptions and implications on type, and number, of trips. The analyses presented were for the no-build conditions in 2045.
    - i. Ms. Morris asked what a TNC is, in relation to the Transportation Technology alternative. Mr. Harrington responded that it meant Transportation Network Companies such as Uber or Lyft.
    - ii. Mr. Ciccarelli asked what the time frame of these results would be. Mr. Harrington responded that the time frame is still for 2045.
    - iii. Mr. Spielberg asked why there are increases in delay scattered in various parts of the region and asked if this is an anomaly to the modeling process. Mr. Harrington responded that he believes it is part of the noise in of the modeling process.
    - iv. Mr. Jasper reminded everyone to keep in mind that these changes in no-build results under each scenario are in 2045 and ought to be compared to the build versus no-build numbers of network results, and that there was a 3.3% increase in VMT in the build scenario as presented earlier.
    - v. Chair Boice asked if these results corresponded to days or weeks, and Mr. Harrington responded that these numbers represent increases and decreases on an average weekday.
    - vi. Mr. Ciccarelli asked for further clarification behind the shared element of Connected Automated Shared Electric (CASE) vehicles in the Transportation Technology alternative.
    - vii. Mr. Harrington mentioned that the private vehicles are CAE vehicles and are not shared.
    - viii. Mr. Ciccarelli followed up by mentioning that he has read a significant amount about car-sharing looking more like bike sharing and scooter

sharing in the future. Mr. Harrington said that there will be more penetration of the TNCs as CASE vehicles that will show more shared usage.

- ix. Mr. Ciccarelli then asked if this will result in a reduction in the number of private vehicles. Mr. Harrington mentioned he could not recall whether there was an adjustment on the number of private vehicles from these scenarios examined.
- x. Chair Boice asked if we know how much money we will have for these projects for the next cycle. Mr. Jasper mentioned that for the FY 2022-2027 Six Year Program, the authority has just approved \$626 million in regional revenues.

#### **V. Status of FY2022-2027 Six Year Program Update**

- Dr. Nampoothiri informed the Committee that the total request for the Six Year Program (SYP) was \$1.2 billion for 26 projects but the available funding is only \$626 million. Staff have not reached the point yet where recommendations are being looked at. Currently, the public comment period is underway through May 22<sup>nd</sup>. On May 4<sup>th</sup> there was an open house at the VDOT office, which was on the same day as Northern Virginia Joint Transportation meeting. This included all regional transportation agencies in northern Virginia. NVTa used the opportunity to receive feedback on projects in the SYP and Dr. Nampoothiri reported that many people came up to NVTa's booths. He then mentioned that on May 12<sup>th</sup>, NVTa held a formal Public Hearing with a total nine people speaking, with two in-person and seven virtually. He added that comments are still being received by mail, email, comment form on the NVTa website, and voicemail. He noted that there were over 200 individuals commenting with over 450 comments till earlier in the day. He mentioned that on Sunday the public comment period will conclude, and the results will be presented to the TAC and other committees at the June meetings along with staff recommendations.

#### **VI. NVTa Updates**

- Mr. Jasper provided the update and mentioned that there is a Work Session for the Authority members tomorrow at the City of Fairfax City Hall and the Authority members will see much of the information seen tonight. He added that this will be livestreamed.
- Chair Boice mentioned that there appears to be a schedule conflict with the next meeting with board members attending the VASITE conference.

#### **VII. Adjournment**

- The meeting adjourned at 7:53 pm.

# ***FY2022-2027 Six Year Program***

*NVTA Staff Recommendations  
June 14, 2022*



Presented by:  
Keith Jasper, Principal, Transportation Planning and Programming, NVTA



# Topics



1. Context
2. Key Components of Project Selection Process
3. Public Comments
4. Overview of NVTA Staff Recommendations
5. NVTA Staff Recommendations
6. Next Steps







# Context: Summary of Previous Funding Programs



Funding Program	Amount Requested (\$)	Amount Approved (\$)	Approved/Requested (%)
FY2014	339,693,000	188,993,000	56
FY2015-2016	467,124,215	336,944,000	72
FY2017	297,949,000	166,043,951	56
FY2018-2023	2,470,139,861	1,285,273,281	52
FY2020-2025	1,444,826,078	539,110,783	37
<b>Total Funding To Date</b>	<b>5,019,732,154</b>	<b>2,516,365,015</b>	<b>50</b>
FY2022-2027	1,229,166,553	626,290,870	51



## Context: Extent of Previous Funding Programs



- Using regional revenues from its first 12 funding years (FY2014-FY2025), NVTA has invested nearly **\$2.5 billion** in **106** regional transportation projects:

Primary Mode	Projects	NVTA Funding (\$)	Types of Project
Roadway (see slide #5)	38	1,466,032,632	New and widened facilities, including sidewalks and trails
Transit (see slide #6)	19	475,680,661	BRT, bus acquisitions, maintenance and storage facilities
Rail	13	243,421,209	New and expanded stations, new and upgraded track
Intersection	17	223,997,000	Enhanced intersections and grade-separated interchanges
Bike and Pedestrian	10	63,899,187	Enhanced and new facilities, Complete Streets
Transportation Technology	6	17,195,491	Transit Signal Priority, Intelligent Transportation Systems
Park and Ride	3	5,800,000	New lots and garages
<b>Total</b>	<b>106</b>	<b>2,496,026,180</b>	

Note: Total adjusted for approved projects that were subsequently withdrawn



# Context: Extent of Previous Funding Programs (Roadway)



Functional Classification	NVTA-funded Projects	New/Widened Facility	New Lane Miles	NoVA Lane Miles	Increase in Lane Miles (%)	Example Facility Type
Interstate	0	0	0.00	442.30	0.00	I-66, I-95, I-395, I-495
Principal Arterial (Limited Access)	4	0/4	16.54	144.31	11.46	Route 28 (N of Route 50)
Principal Arterial	11	1/10	69.51	695.80	9.99	Routes 1, 7, 15, 28, Fairfax County Parkway
Minor Arterial	7	3/4	30.68	1585.54	1.93	Loudoun County Parkway, Rolling Road, Elden Street
Major Collector	4	3/1	9.02	1219.69	0.74	Frontier Drive, Soapstone Drive, Dulles West Blvd.
Minor Collector	7	5.5/1.5	14.07	627.38	2.24	Rock Hill Road, Summit School Road
Local	0	0	0.00	4718.60	0.00	
<b>Total</b>	<b>33</b>	<b>12.5/20.5</b>	<b>139.82</b>	<b>9433.62</b>	<b>1.48</b>	
Total (excluding Interstate and Local)	33	12.5/20.5	139.82	4272.72	3.27	



## Context: Extent of Previous Funding Programs (BRT)



Project	Jurisdiction	Centerline Miles	Dedicated Lane Miles
Duke Street Transitway	Alexandria	4.12	TBD
West End Transitway	Alexandria	8.22	TBD
Metroway Northern Extension	Arlington County	1.27	2.54
Route 1/Richmond Highway BRT	Fairfax County	7.40	14.80
Route 7 (Tysons to Alexandria)	Fairfax County, Falls Church, Arlington County, Alexandria	11.75	TBD
		<b>32.76</b>	

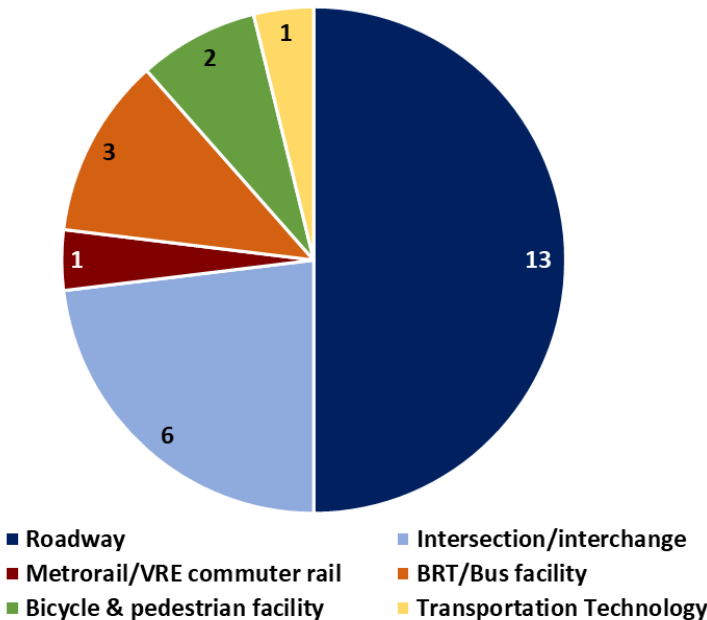


# Context: Summary of Candidate Projects



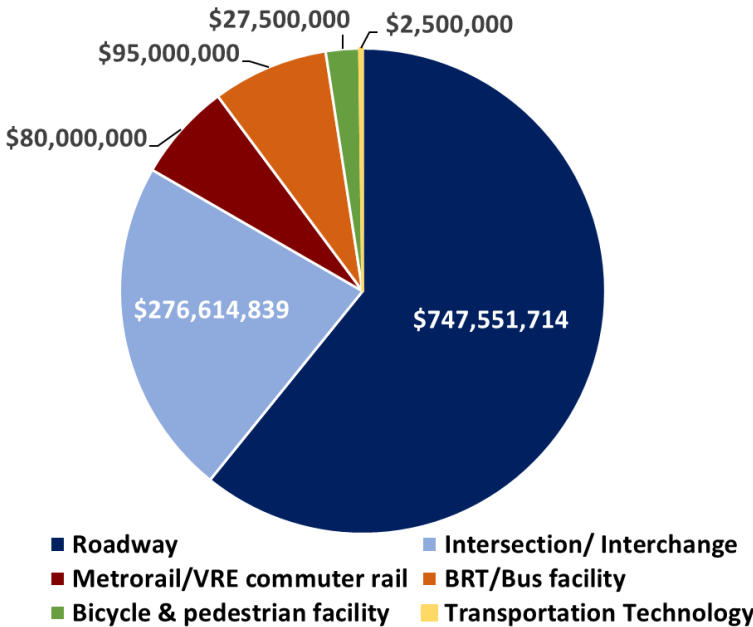
NVTA FY2022-2027 SYP: Number of Applications

Total candidates - 26



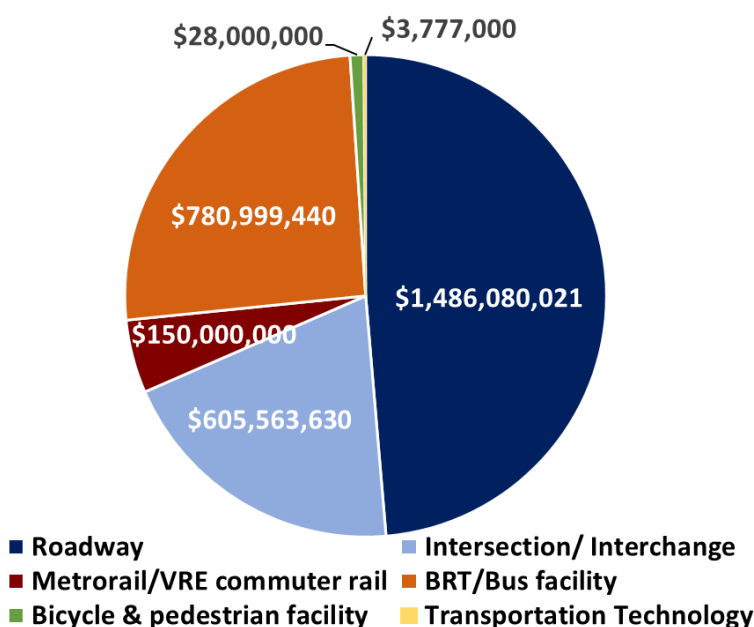
NVTA FY2022-2027 SYP: Requested Amount

Total request - \$1,229,166,553



NVTA FY2022-2027 SYP: Total Project Cost

Total project cost - \$3,054,420,091





# Key Components of the Project Selection Process



- While NVTA has no direct role in deciding which projects/modes are submitted by eligible applicants, projects submitted for funding consideration must be included in the current version of TransAction.
  - Each application must include a resolution of support from the Governing Body in order to be eligible for consideration.
- Eligible applicants determine which, if any, projects to submit to NVTA for funding consideration.
  - Each applicant has its own process for making this determination.
- The available funding amount for each Six Year Program Update is usually determined as part of the fiscal year budgeting process, which is after the application deadline.
- NVTA's project selection process adheres to all applicable parts of the Code of Virginia.
- NVTA staff project selection recommendations are not based on a single factor, although congestion reduction relative to cost provides the initial ranking.



# Key Components of the Project Selection Process



- **Eligibility Review** (TransAction, Governing Body resolution, candidate project located in NoVA)
- **Quantitative Analysis** (Congestion Reduction Relative to Cost, TransAction Project Ratings, Long-Term Benefit)
- **Qualitative Analysis** (Continuation project, past performance, extent of committed external funding, funding gap, project readiness, supporting resolutions from other Governing Bodies, other factors specific to individual candidate projects, modal and geographic balance)
- **Public Comment** received during the public comment period (online, email, testimony, USPS/delivery, phone)



# Key Components of the Project Selection Process

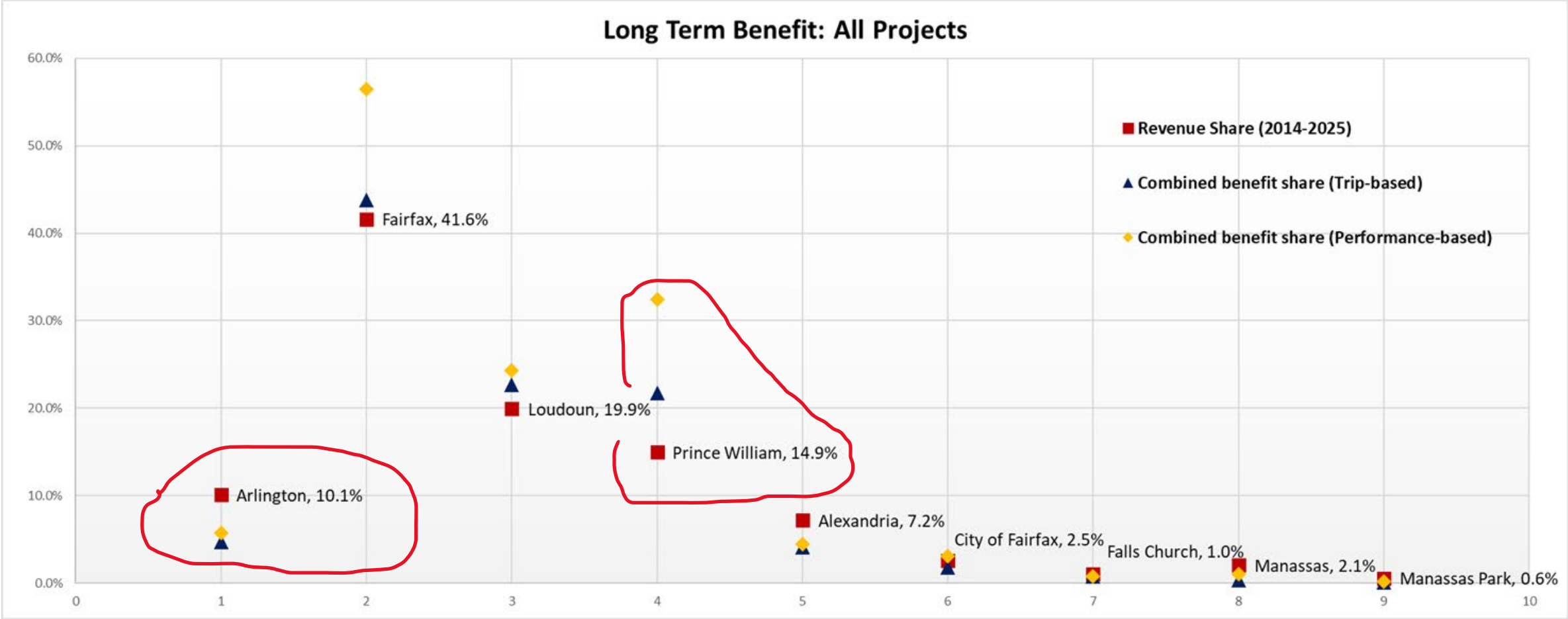


- The **Long-Term Benefit (LTB)** requirement of the Code of Virginia, enacted through House Bill 2313 (2013), means NVTA must ensure that, over the long term, each member jurisdiction receives a benefit that is approximately equal to the share of regional revenues attributed to that locality.
- Application of the **LTB requirement**:
  - Depends on the number/applicants of projects, and associated funding requests, in the candidate pool.
  - Process seeks to find an appropriate balance between accuracy/precision without unduly expending resources that could otherwise be used for funding projects.
  - Does not reverse any previous funding approvals; intended to balance funding approvals until benefit is approximately equal across all nine member jurisdictions.
- The **LTB process** will continue to evolve over future SYP update cycles.





# Key Components of the Project Selection Process





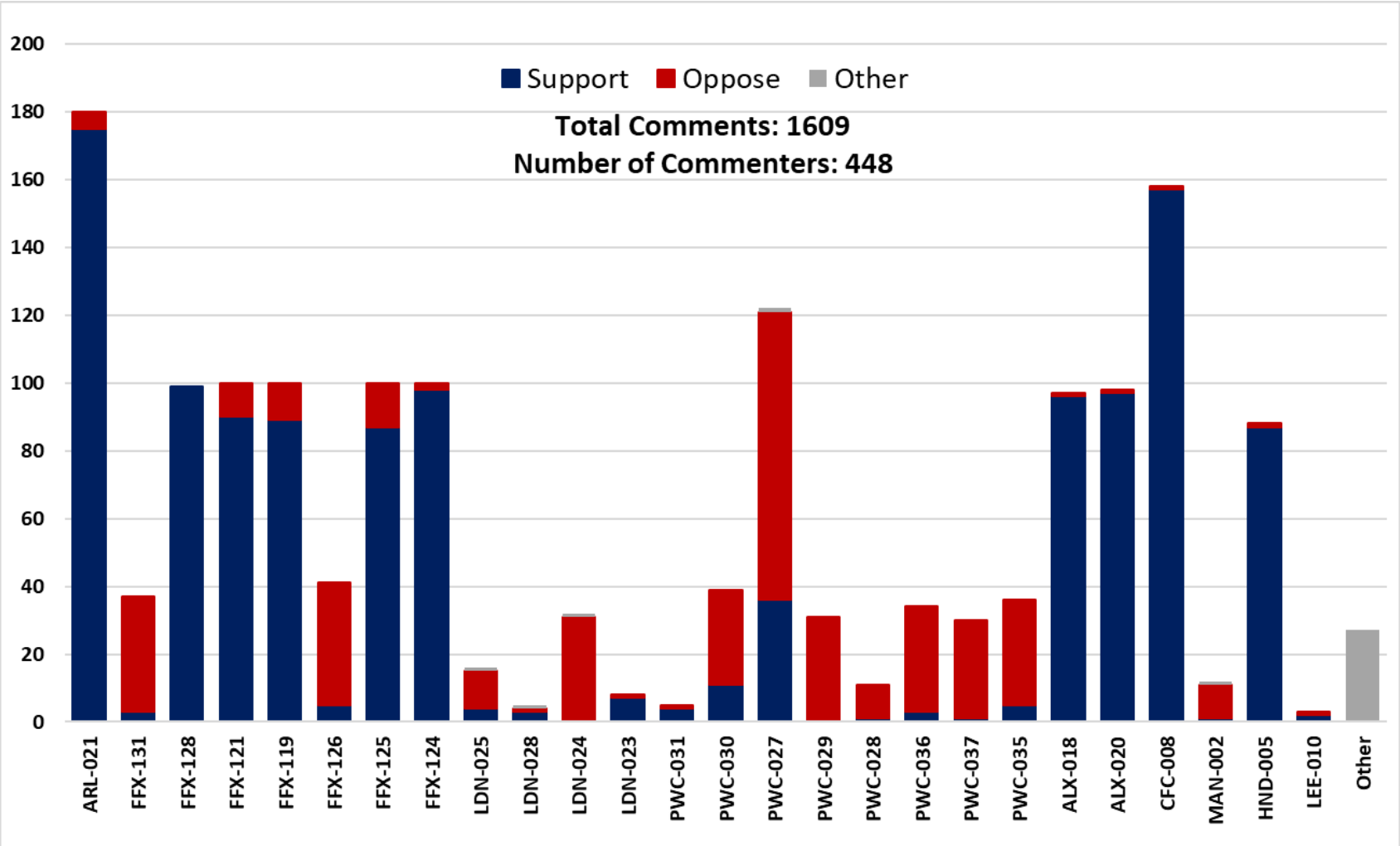
# Quantitative and Qualitative Analyses



Application ID	Jurisdiction / Agency	Project	Primary and supporting modal components	Fund request	Total project cost	Phases for which funds are requested	Previously Approved NVTA Regional Funds	Phases for which there is still a funding gap	Local priority	External funds	Past performance (% of expected funds reimbursed by FY2022 Q2) Continuation Projects	Jurisdiction/ Agency	Past performance (% of allocated funds reimbursed by FY2022 Q2) Continuation Projects	Jurisdiction/ Agency	Reimb. Request to SPA ratio (FY2021)	First fiscal year of expected drawdown	Year of opening	Long Term Benefit	Other	TransAction project rating (Incl. HB 599)	TransAction project rating rank (Incl. HB 599)	CRRC (Reduction in annual person hours of delay / Total project cost in \$1000's)	CRRC rank	
LDN-023	Loudoun Co	Route 7 Corridor ITS Implementation Program		\$ 2,500,000	\$ 3,777,000	CN															20.10	9	2064.26	1
LDN-025	Loudoun Co	Route 7 Improvements: Route 9 to Dulles Greenway		\$ 20,000,000	\$ 130,992,500	ROW, CN		PE, ROW, CN													33.32	5	110.79	2
FFX-126	Fairfax Co	Fairfax County Parkway Widening: Nomes Court to Route 123		\$ 108,000,000	\$ 115,035,882	PE, ROW, CN															56.20	1	105.22	3
PWC-035	Prince William Co	Old Centreville Road Widening: Fairfax County Line to Route 28		\$ 96,000,000	\$ 96,000,000	PE, ROW, CN													Note A		36.15	4	104.72	4
PWC-028	Prince William Co	University Boulevard Extension: Devlin Road to Wellington Road		\$ 53,000,000	\$ 100,000,000	CN															27.21	7	88.43	5
PWC-027	Prince William Co	Van Buren Road North Extension: Route 234 to Cardinal Drive		\$ 80,000,000	\$ 82,000,000	PE, ROW, CN															17.16	13	70.77	6
MAN-002	City of Manassas	Liberia Avenue 3rd Lane Eastbound: Route 28 to Euclid Avenue		\$ 8,851,639	\$ 8,851,639	PE, ROW, CN															7.79	24	69.11	7
PWC-036	Prince William Co	Old Bridge Road Widening: Colby Drive to Minnieville Road		\$ 25,000,000	\$ 25,000,000	PE, ROW, CN															12.03	18	64.48	8
FFX-124	Fairfax Co	8 New Battery Electric Buses - Fairfax Connector Buses for Tysons to Franconia Service		\$ 10,000,000	\$ 10,000,000	Asset Acq															15.99	14	48.88	9
PWC-029	Prince William Co	Devlin Road (South) Widening: Linton Hall Road to University Boulevard		\$ 35,000,000	\$ 40,000,000	ROW, CN															9.04	21	28.99	10
FFX-131	Fairfax Co	Richmond Highway Widening From Mt. Vernon Memorial Highway/Jeff Todd Way to Sherwood Hall Lane		\$ 60,207,038	\$ 415,000,000	PE, ROW, CN	\$ 248,387,962														37.98	3	21.95	11
HND-005	Town of Herndon	Herndon Parkway Improvements at Worldgate Drive Extension		\$ 4,581,000	\$ 6,536,000	ROW, CN															17.52	12	17.94	12
LDN-024	Loudoun Co	Ryan Road Widening (Phase 2): Evergreen Mills Road to Beaverdam Drive		\$ 16,000,000	\$ 31,500,000	ROW, CN															9.28	20	17.50	13
PWC-031	Prince William Co	Construct Interchange at Prince William Parkway and Minnieville Road		\$ 67,500,000	\$ 70,000,000	ROW, CN															13.75	16	13.55	14
PWC-030	Prince William Co	Route 1 at Route 123 Interchange		\$ 61,200,000	\$ 68,000,000	PE, CN															10.91	19	7.37	15
LDN-028	Loudoun Co	Loudoun County Parkway Interchange at US 50		\$ 35,250,000	\$ 181,152,680	PE, ROW, CN															12.80	17	6.87	16
FFX-128	Fairfax Co	Richmond Highway (Route 1) BRT		\$ 80,000,000	\$ 730,000,000	PE, ROW, CN	\$ 250,000,000	PE, ROW, CN													44.50	2	5.97	17
FFX-125	Fairfax Co	Seven Corners Ring Road Improvements: Arlington Boulevard (Route 50) Westbound Ramp to Castle Place/Sleepy Hollow Road		\$ 94,800,000	\$ 94,800,000	PE, ROW, CN															8.83	22	5.13	18
FFX-121	Fairfax Co	Soapstone Drive Extension: Sunset Hills Road to Sunrise Valley Drive		\$ 73,793,037	\$ 235,000,000	PE, ROW, CN	\$ 15,000,000				N/A		N/A								19.65	10	4.65	19
PWC-037	Prince William Co	Neabsco Road Improvements - Neabsco Road Widening: Route 1 to Daniel Ludwig Drive		\$ 26,500,000	\$ 26,500,000	PE, ROW, CN															3.12	26	3.85	20
FFX-119	Fairfax Co	Frontier Drive Extension and Intersection Improvements		\$ 145,200,000	\$ 180,200,000	PE, ROW, CN	\$ 27,000,000														8.46	23	3.79	21
ALX-018	City of Alexandria	West End Transitway Phase 1b: South Van Dorn Street and Bridge Design		\$ 5,000,000	\$ 40,999,440	PE		ROW, CN													30.73	6	2.77	22
LEE-010	Town of Leesburg	Interchange Improvements at Route 15 Leesburg Bypass and Edwards Ferry Road		\$ 13,283,839	\$ 185,074,950	ROW	\$ 7,400,000	CN													17.97	11	1.83	23
ARL-021	Arlington Co	Ballston-MU Metrorail Station West Entrance		\$ 80,000,000	\$ 150,000,000	CN	\$ 12,000,000	CN												Note B	26.08	8	1.28	24
ALX-020	City of Alexandria	Alexandria Bike and Pedestrian Trails Construction and Reconstruction: Holmes Run Trail - Dora Kelly Fair-weather Crossing Bridge		\$ 5,000,000	\$ 5,500,000	CN		PE													6.35	25	0.20	25
CFC-008	City of Falls Church	North Washington Street Multimodal Improvements Project: Great Falls Street to Gresham Place		\$ 22,500,000	\$ 22,500,000	PE, ROW, CN															14.49	15	0.15	26
TOTAL				\$ 1,229,166,553	\$ 3,054,420,091		\$ 559,787,962																	



# Public Comments



**Note:** Approximately 85 commenters stated a general opposition to roadway projects without naming any specific projects.



# Overview of NVTA Staff Recommendations



- **Recommending 20 of 26 candidate projects**
  - **17 of 20 projects** recommended for **full amount** of requested funding
  - **3 of 20 projects** recommended for **partial amount** of requested funding (Preliminary Engineering phase only)
  - **7 recommended projects** are continuation projects (or closely related to a previously funded project)
- Not recommending 6 of 26 candidate projects
  - Two continuation projects
- Recommending \$1,408,156 be unprogrammed





# Overview of NVTA Staff Recommendations



- **Multimodal/Corridor Focus**

- Continued emphasis on roadway/BRT in the Route 1 corridor
- Continued emphasis on Fairfax County Parkway corridor

- **Transportation Technology**

- Intelligent Transportation Systems deployment in the Route 7 corridor (first NVTA-funded technology project outside of Arlington/Alexandria)
- Continued commitment to decarbonization of transit fleets

- **Geographically and Modally Balanced**

- Projects recommended for 8/9 applicants
- Includes projects for all primary modes requested (roadway, transit, intersection, bike/pedestrian, transportation technology)
- All transit, bike/pedestrian, and transportation technology projects recommended for full funding



# Overview of NVTA Staff Recommendations



Primary Mode	Requested (\$)	Recommended (\$)	Rec/Req Share (%)	SYP Rec Share (%)
Roadway	842,351,714	377,051,714	44.8	60.2
Transit	175,000,000	175,000,000	100.0	28.0
Intersection	181,814,839	42,831,000	23.6	6.8
Bike and Pedestrian	27,500,000	27,500,000	100.0	4.4
Transportation Technology	2,500,000	2,500,000	100.0	0.4
N/A*		1,408,156	N/A	0.2
<b>Total</b>	<b>1,229,166,553</b>	<b>626,290,870</b>	<b>51.0</b>	<b>100.0</b>

Note:

\* Unprogrammed



# Overview of NVRTA Staff Recommendations



Jurisdiction/ Agency	Applications (#)	Requested amount (\$)	Share of Total Request	Recommended projects (#)	Recommended amount (\$)	Share of Total Recommendation
Arlington County	1	80,000,000	6.5%	1	80,000,000	12.8%
Fairfax County	7	572,000,075	46.5%	6	336,200,075	53.7%
Loudoun County	4	73,750,000	6.0%	4	73,750,000	11.8%
Prince William County	8	444,200,000	36.2%	4	89,000,000	14.2%
City of Alexandria	2	10,000,000	0.8%	2	10,000,000	1.6%
City of Falls Church	1	22,500,000	1.8%	1	22,500,000	3.6%
City of Manassas	1	8,851,639	0.7%	1	8,851,639	1.4%
Town of Herndon	1	4,581,000	0.4%	1	4,581,000	0.7%
Town of Leesburg	1	13,283,839	1.1%	0	-	0.0%
					<b>624,883,714</b>	
N/A*					1,408,156	0.2%
<b>Total</b>	<b>26</b>	<b>1,229,166,553</b>	<b>100%</b>	<b>20</b>	<b>626,290,870</b>	<b>100%</b>

Note:  
 \* Unprogrammed



## NVTA Staff Recommendations



Three largest recommended funding allocations to continuation projects (adding to previously funded projects) or projects closely related to a previously funded project – **43% of total**:

- **\$108,000,000** – Fairfax County Parkway Widening (Fairfax County)
  - CRRC\* rank #3
- **\$80,000,000** – Richmond Highway (Route 1) BRT (Fairfax County)
  - CRRC rank #17
- **\$80,000,000** – Ballston-MU Metrorail Station West Entrance (Arlington County)
  - CRRC rank #24

\*CRRC = Congestion Reduction Relative to Cost





## NVTA Staff Recommendations



Four other continuation projects, or projects closely related to a previously funded project, are recommended – **28% of total**:

- **\$73,793,037** – Soapstone Drive Extension: Sunset Hills Road to Sunrise Valley Drive (Fairfax County) – CRRC rank #19
- **\$60,207,038** – Richmond Highway Widening From Mt. Vernon Memorial Highway/Jeff Todd Way to Sherwood Hall Lane (Fairfax County) – CRRC rank #11
- **\$35,250,000** – Loudoun County Parkway Interchange at US 50 (Loudoun County) – CRRC rank #16
- **\$5,000,000** – West End Transitway Phase 1b: South Van Dorn Street and Bridge Design (City of Alexandria) – CRRC rank #22



# NVTA Staff Recommendations



Ten projects that are recommended for the first time – **27% of total:**

- **\$53,000,000** – University Boulevard Extension: Devlin Road to Wellington Road (Prince William County) – CRRC rank #5
- **\$25,000,000** – Old Bridge Road Widening: Colby Drive to Minnieville Road (Prince William County) – CRRC rank #8
- **\$22,500,000** – North Washington Street Multimodal Improvements Project: Great Falls Street to Gresham Place (City of Falls Church) – CRRC rank #26
- **\$20,000,000** – Route 7 Improvements: Route 9 to Dulles Greenway (Loudoun County) – CRRC rank #15
- **\$16,000,000** – Ryan Road Widening (Phase 2): Evergreen Mills Road to Beaverdam Drive (Loudoun County) – CRRC rank #13
- **\$10,000,000** – 8 New Battery Electric Buses - Fairfax Connector Buses for Tysons to Franconia Service (Fairfax County) – CRRC rank #9
- **\$8,851,639** – Liberia Avenue 3rd Lane Eastbound: Route 28 to Euclid Avenue (City of Manassas) – CRRC rank #7
- **\$5,000,000** – Alexandria Bike and Pedestrian Trails Construction and Reconstruction: Holmes Run Trail - Dora Kelly Fair-weather Crossing Bridge (City of Alexandria) – CRRC rank #25
- **\$4,581,000** – Herndon Parkway Improvements at Worldgate Drive Extension (Town of Herndon) – CRRC rank #12
- **\$2,500,000** – Route 7 Corridor ITS Implementation Program (Loudoun County) – CRRC rank #2



## NVTA Staff Recommendations



Partial funding allocation recommendations (for Preliminary Engineering phase only) to three additional new NVTA projects – **2% of total:**

- **\$8,000,000** (requested \$80,000,000) – Van Buren Road North Extension: Route 234 to Cardinal Drive (Prince William County) – CRRC rank #6
  - Public comment
- **\$4,200,000** (requested \$94,800,000) – Seven Corners Ring Road Improvements: Arlington Boulevard (Route 50) Westbound Ramp to Castle Place/Sleepy Hollow Road (Fairfax County) – CRRC rank #18
- **\$3,000,000** (requested \$61,200,000) – Route 1 at Route 123 Interchange (Prince William County) – CRRC rank #15



# NVTA Staff Recommendations



Six projects are not being recommended for funding:

- **\$96,000,000** – Old Centreville Road Widening: Fairfax County Line to Route 28 (Prince William County) – CRRC rank #4
  - Coordination between Prince William County and Fairfax County not sufficiently advanced
  - Overlapping functionality with an adjacent NVTA-funded project
- **\$35,000,000** – Devlin Road (South) Widening: Linton Hall Road to University Boulevard (Prince William County) – CRRC rank #10
  - Approved for funding via the County Bond Referendum
- **\$67,500,000** – Construct Interchange at Prince William Parkway and Minnieville Road (Prince William County) – CRRC rank #14
  - Approved for funding via the County Bond Referendum



## NVTA Staff Recommendations (Continued)



Six projects are not being recommended for funding:

- **\$26,500,000** – Neabsco Road Improvements - Neabsco Road Widening: Route 1 to Daniel Ludwig Drive (Prince William County) – CRRC rank #20
  - Long-Term Benefit
- **\$145,200,000** – Frontier Drive Extension and Intersection Improvements (Fairfax County) – CRRC rank #21
  - Continuation project (\$27,000,000)
  - Scale of request (largest in candidate pool); previous funding/project performance
- **\$13,283,839** – Interchange Improvements at Route 15 Leesburg Bypass and Edwards Ferry Road (Town of Leesburg) – CRRC rank #23
  - Continuation project (\$7,400,000)
  - Funding request is for ROW – not able to commit without a clear pathway to secure construction funding of \$185M



# NVTA Staff Recommendations



- The Long-Term Benefit (LTB) requirement explicitly affects 2 recommendations:
  - Ballston-MU West Metrorail Station Entrance (Arlington County) recommended for full funding – CRRC rank #24/26\*
  - Neabsco Road Improvements (Prince William County) not recommended – CRRC rank #20/26
- The extent to which any residual LTB imbalances remain, or new imbalances are created, will be assessed after adoption of the FY2022-2027 SYP.

\*Note: In addition to Long-Term Benefit, other factors included in the recommendation of funding for this project include: overwhelming public support, strong TransAction project ranking (#8/26), and modal/geographic balance.



# Extent of Previous Plus Recommended Funding Programs (Roadway)



Functional Classification	NVTA-funded Projects	New/Widened Facility	New Lane Miles	NoVA Lane Miles	Increase in Lane Miles (%)	Example Facility Type
Interstate	0	0	0.00	442.30	0.00	I-66, I-95, I-395, I-495
Principal Arterial (Limited Access)	4	0/4	16.54	144.31	11.46	Route 28 (N of Route 50)
Principal Arterial	12	1/11	75.31	695.80	10.82	Routes 1, 7, 15, 28, Fairfax County Parkway
Minor Arterial	10	3/7	34.83	1585.54	2.20	Loudoun County Parkway, Rolling Road, Elden St., Ryan Rd.
Major Collector	5	4/1	19.11	1219.69	1.57	Frontier Drive, Soapstone Drive, Dulles West Blvd., Univ. Blvd.
Minor Collector	9	7.5/1.5	25.86	627.38	4.12	Rock Hill Road, Summit School Road, Van Buren Road
Local	0	0	0.00	4718.60	0.00	
<b>Total</b>	<b>40</b>	<b>15.5/24.5</b>	<b>171.65</b>	<b>9433.62</b>	<b>1.82</b>	
Total (excluding Interstate and Local)	40	15.5/24.5	171.65	4272.72	4.02	





# Extent of Previous Plus Recommended Funding Programs (BRT)



Project	Jurisdiction	Centerline Miles	Dedicated Lane Miles
Duke Street Transitway	Alexandria	4.12	TBD
West End Transitway	Alexandria	8.22	TBD
Metroway Northern Extension	Arlington County	1.27	2.54
Route 1/Richmond Highway BRT	Fairfax County	7.40	14.80
Route 7 (Tysons to Alexandria)	Fairfax County, Falls Church, Arlington County, Alexandria	11.75	TBD
		<b>32.76</b>	

Note: Although additional funds are recommended for West End Transitway and Route 1/Richmond Highway BRT, no new centerline miles or dedicated lane miles are added.





## Next Steps



- NVTA Staff recommendations will be shared with committees for endorsement:
  - **June 14, 2022** Technical Advisory Committee (6:30 p.m.)
  - **June 22, 2022** Planning Coordination Advisory Committee (6:30 p.m.)
  - **June 23, 2022** Planning and Programming Committee (7:30 p.m.)
- **No later than June 29, 2022** Final Recommendations posted on NVTA website
  - Note: PPC recommendations to the NVTA prior to June 29, 2022 to meet posting deadline
- **July 14, 2022** Authority adopts FY2022-2027 SYP
- **May 2023** (Anticipated) Call for Regional Transportation Projects for FY2024-2029 SYP



# Thank you!



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[NVTATransAction.org](http://NVTATransAction.org)



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