

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

PLANNING AND PROGRAMMING COMMITTEE Monday, April 8, 2024, 5:00 p.m. 2600 Park Tower Drive, Suite 601 Vienna, Virginia 22180 The meeting will be livestreamed on <u>NVTA's YouTube Channel¹</u>

AGENDA

I. Call to Order/Welcome

Chair Wilson

Ms. Backmon, CEO

<u>Action</u>

II. Summary Notes of November 21, 2022, Meeting Recommended action: Approve meeting notes

Discussion/Information

- III. FY2024 Six Year Program Update Dr. Nampoothiri, Senior Manager
- IV. Preliminary Deployment Plan for Regional BRT System Mr. Jasper, Principal
- V. NVTA Update

<u>Adjournment</u>

VI. Adjourn

Next Meeting: May 6, 2024, 5 p.m.

¹ If technical difficulties arise, the meeting may be audio or video recorded. Any recordings will be made available on the <u>Planning and Programming Committee Meetings</u>' webpage.



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

PLANNING AND PROGRAMMING COMMITTEE Monday, November 21, 2022, 5:00 p.m. Northern Virginia Transportation Authority

SUMMARY NOTES

I. Call to Order/Welcome

- Chairman Wilson called the meeting to order at 5:05 p.m.
- Attendees:
 - PPC Members: Mayor Wilson (City of Alexandria); Mayor Rishell (City of Manassas Park); Chair Wheeler (Prince William County). Council Member Snyder (City of Falls Church) joined virtually from home due to personal reasons.
 - NVTA Staff: Monica Backmon (CEO); Keith Jasper (Principal); Sree Nampoothiri (Senior Transportation Planner), Ian Newman (Regional Transportation Planner).
 - Jurisdiction/Agency Staff: None
 - **Others:** Dalia Leven (Cambridge Systematics). Proceedings were livestreamed on YouTube Live.

Action

II. Summary Notes of October 3, 2022, Meeting

• The October 3, 2022, Planning and Programming Committee meeting summary was unanimously approved.

Discussion/Information

III. TransAction: Status Update

• Mr. Jasper presented the feedback received on TransAction Update from Planning Coordination Advisory Committee (PCAC), Technical Advisory Committee (TAC), and Planning and Programming Committee (PPC) at their September, October, and November meetings. These included comments on levels and causes of emission reduction, assumptions and results of scenarios, details of projects, public comments, simplifying jargons, and providing the larger picture of the Plan. He added that both PCAC and TAC unanimously approved recommendation to the Authority to adopt the TransAction Plan and associated Project List.

- Mr. Jasper walked the Committee through the enhancements made to the Plan document and Project List to incorporate the feedback. The enhancements included simplifying technical language, removal of duplicate projects, removing one of the emission reduction bars on the chart showing Plan results, addition of language on bus rapid transit (BRT) system, incorporating previous section 7 into section 6, revision of key takeaways, visual enhancements, etc. He also added that some more minor revisions may be made to ensure consistency, better wording, appearance, etc.
- Mr. Jasper noted that the PPC is requested to take action on approval of recommendation to the Authority to adopt TransAction tonight and the Authority is expected to take up action at its meeting on December 8.
- In response to Mayor Rishell's question on how the timeline of the proposed Preliminary Deployment Plan for a Regional BRT System (PDP-BRT) and the TransAction update match, Mr. Jasper reminded the Committee members that the PDP-BRT is not necessarily depending on TransAction update. However, the idea of PDP-BRT came from the TransAction update. If approved, PDP-BRT can be completed by the end of 2025, in time for anticipated call for regional transportation projects for FY2026-2031 Six Year Program (SYP).
- In response to Mayor Wilson's question on how Transportation Technology Strategic Plan (TTSP) and BRT Planning Working Group advance the technology and regional BRT projects, Mr. Jasper noted that the TTSP developed under the Transportation Technology Committee (TTC) and the BRT Planning Working Group provided inputs in developing several projects in TransAction, but both types of projects have been funded already by NVTA under its SYPs.
- In response to Chair Wheeler's question of BRT lines in Prince William County, Mr. Jasper and Ms. Leven noted that the Route 1 BRT connects Fairfax County with area near Quantico Marine Base and Route 28 BRT connects Fairfax County with City of Manassas Park, City of Manassas and Prince William County.
- In response to Chair Wheeler's question on the cost of total transit projects and that of BRT projects, Mr. Jasper noted that of the total cost of about \$75 billion, about \$44.5 billion is the total cost of transit projects while the cost of BRT, high capacity transit, and supporting projects is about \$10 billion. He added that a large part of the \$45 billion is on some of the Metro extensions and core capacity realignments, which may take decades to accomplish.
- Mr. Jasper agreed to Chair Wheeler that TransAction, updated every five years, is a fiscally unconstrained plan. Ms. Backmon added that TransAction is both fiscally and geographically unconstrained.
- Council Member Snyder requested to add mention of City of Falls Church in the Route 7 BRT project since the project is expected to connect City of Falls Church.

- Council Member Snyder referenced the Metropolitan Washington Council of Government's (MWCOG) regional greenhouse gas reduction targets and enquired how the Plan references and/or addresses it. Mr. Jasper noted that the Plan evaluation is based on the ten Authority-approved weighted performance measures, one of which is emission reduction. Several other measures such as congestion reduction offers additional emission reduction benefits. He added that several external factors such as manufacturing and cost can impact the emission reduction. Council Member Snyder asked how the emission goes up even if the region implements all BRT/transit/technology/bike-pedestrian projects. Mr. Jasper noted that the small increase in emission is if all 424 projects are implemented without any consideration of other forces such as cost of electric vehicles, customer adoption, etc. However, the region can decide what the priorities are.
- Council Member Snyder enquired if one can say that there are a lot of projects such as BRT that can move the needle in the right direction and Mr. Jasper agreed. Council Member Snyder emphasized the need to explore this option in the Draft Plan before presenting to the Authority for adoption.
- <u>Chair Wilson called for a motion to approve the recommendation to the</u> <u>Authority to adopt the TransAction Plan and associated Project List. Motion</u> <u>was made by Mayor Rishell and seconded by Chair Wheeler. The motion passed</u> <u>unanimously.</u>

IV. NVTA Update

- Ms. Backmon reminded that the next Authority meeting is on December 8th and the agenda includes the adoption of TransAction and legislative program that focuses on protecting NVTA's revenues and supporting transportation technology. She thanked the members for their contribution to the development of TransAction and SYP.
- Committee members thanked the staff for the excellent work on TransAction update.

Adjournment

V. Adjourn

- There are no further meetings scheduled.
- The meeting adjourned at 6:30 p.m.

FY2024-2029 Six Year Program

Sree Nampoothiri, Senior Manager, NVTA

Planning and Programming Committee April 8, 2024



Project Selection Process



Multiple Components:

- 1. Eligibility
 - TransAction ID; project descriptions will be verified
 - Project location
 - Governing Body resolution(s)
- 2. Quantitative Analyses
 - Congestion Reduction Relative to Cost (CRRC) initial ranking uses this measure
 - TransAction Project Ratings, formerly HB 599 (2012)
 - Long Term Benefit (LTB)
- 3. Qualitative Considerations
 - Past performance
 - Previous NVTA allocation
 - Funding gaps
 - External funding (committed sources only)
 - Alignment with Core Values
 - Geographic/modal balance
- 4. Public Comment

Summary of Applications



Northern Virginia Transportation Authority

Summary of FY2024-2029 Six Year Program Candidate Projects

#	Project ID#	Jurisdiction / Agency	Project	F	und request	P	revious NVTA funds	Oth	her committed funds	Tot	tal project cost	exc	unding gap luding NVTA request	Phases for which funds are requested	Phases for which there is still a funding gap	supp	imary and orting modal mponents	Local Priority
1	ARL-023	Arlington County	CC2DCA Multimodal Connection (formerly known	\$	21,100,000	\$	18,000,000	\$	18,100,000	\$	57,200,000	\$	-	CN		大心		1
			as CC2DCA Intermodal Connector)															
2	ARL-022	Arlington County	Shirlington Bus Station Expansion	\$	11,600,000			\$	200,000	\$	11,800,000	\$		PE, ROW, CN		Û,	\$ 00	2
3	FFX-134	Fairfax County	Frontier Drive Extension and Intersection	\$	164,992,286	\$	27,000,000	\$	49,638,314	\$	241,630,600	\$	-	PE, ROW, CN		A	的太星星	1
			Improvements														4.5	
4	FFX-136	Fairfax County	Braddock Road Multimodal Improvements Phase II (Humphries Drive to Southampton Drive)	\$	90,000,000			\$	5,286,334	\$	95,286,334	\$	-	PE, ROW, CN		*	A dito	2
5	FFX-135	Fairfax County	Route 7 Multimodal Improvements (I-495 to I-66)	\$	210,000,000			\$	34,407,921	\$	244,407,921	\$	-	PE, ROW, CN		А	Gant des	3
6	FFX-138	Fairfax County	Seven Corners Ring Road Improvements	\$	122,229,417	\$	4,200,000	\$	6,261,000	\$	132,690,417	\$	-	PE, ROW, CN		А	審太 690	4
7	LDN-034	Loudoun County	Route 15 at Braddock Road Roundabout	\$	10,000,000			\$	15,655,000	\$	25,655,000	\$	-	ROW, CN		Ŧ	太 die	1
8	LDN-033	Loudoun County	Sycolin Road Widening - Loudoun Center Place to Crosstrail Boulevard	\$	15,000,000			s	17,861,000	\$	32,861,000	\$	-	ROW, CN		л	* **	2
9	LDN-029	Loudoun County	Old Ox Road Widening - Shaw Road to Oakgrove Road	\$	30,000,000			\$	19,350,000	\$	49,350,000	\$	-	CN		A	<u>k</u> 10	3
10	PWC-040	Prince William County	Route 234 and Sudley Manor Drive Interchange	\$	115,000,000			\$	-	\$	115,000,000	\$	-	PE, ROW, CN		1	A de	1
11	PWC-041	Prince William County	Route 234 Bicvcle and Pedestrian Facility Over I-95	\$	12,000,000			\$	-	\$	12,000,000	\$	-	PE, ROW, CN		t de		2
12	PWC-043	Prince William County	The Landing at Prince William Transit Center	\$	25,000,000			\$	-	\$	25,000,000	\$	-	PE, ROW, CN				3
13	PWC-044	Prince William County	Triangle Mobility Hub and First/Last Mile Connection Improvements	\$	10,000,000			s		\$	10,000,000	\$	-	PE, ROW, CN		9	t de	4
14	PWC-042	Prince William County	Route 234 Operational Improvements	\$	10,000,000			\$	-	\$	10,000,000	\$	-	PE, CN, Asset		?		5
15	ALX-029	City of Alexandria	Safety Improvements at High-Crash Intersections	\$	3,000,000			\$	1,000,000	\$	20,500,000	\$	16,500,000	PE	ROW, CN	大山	QA∰??	1
16	ALX-033	City of Alexandria	Alexandria Metroway Enhancements	\$	7,000,000			\$	7,924,792	\$	14,924,792	\$	-	ROW, CN			小那家太心	2
17	ALX-032	City of Alexandria	South Van Dorn Street Bridge Enhancements	\$	10,000,000	\$	5,000,000	\$	70,000	\$	15,070,000	\$	-	CN			Ato	3
18	ALX-037	City of Alexandria	Smart & Connected Vehicle Infrastructure	\$	5,000,000	\$	-	\$	50,000	\$	5,050,000	\$	-	PE, CN			AS & do	4
19	CFX-019	City of Fairfax	Blenheim Boulevard Multimodal Improvements (formerly, Old Lee Highway Multimodal Improvements)	\$	5,400,000	\$	13,000,000	\$	12,000,000	\$	30,400,000	\$	-	CN			A	1
20	CFX-018	City of Fairfax	Northfax Network Improvements - Northfax East- West Road	\$	18,332,754			\$	-	\$	18,332,754	\$	-	PE, ROW, CN			≡ ★ dfe	2
21	CFC-011	City of Falls Church	City of Falls Church Signal Prioritization Project	\$	1,400,000			\$	-	\$	1,400,000	\$	-	PE, CN		(i•	-	1
22		City of Manassas	Roundabout at Route 28 and Sudley Rd	\$	4,020,000			\$	1,475,000	\$	5,495,000			CN			A目点の	1
23	CMP-001	City of Manassas Park	Route 28-Centreville Road Corridor Improvements	\$	40,000,000			\$	-	\$	40,000,000	\$	1.1	PE, ROW, CN		田	A	1
24	VRE-017	VRE	VRE Backlick Road Station Improvements	\$	6,145,103			\$	2,500,000	\$	8,645,103	\$	-	CN				1
			TOTAL	\$	947,219,560	\$	67,200,000	\$	191,779,361	\$	1,222,698,921	\$	16,500,000					

Modal Components

- A New or improved roadway capacity and/or alignment
- 8 New or improved intersection/interchange
- Improvement/access to Metrorail/VRE commuter rail
- 0 New or improved bus/BRT facility
- đĐ New or improved bicycle facility
- × New or improved pedestrian facility
- <u></u> Transportation Technology
- P Parking

First symbol reflects the primary modal component, other symbols denote supporting modal components

Phases

- PE Design/Engineering/Environmental ROW
 - **Right of Way/Utilities**
- CN Construction
- Asset Acq Asset Acquisition



Summary of Applications



Northern Virginia Transportation Authority

Summary of FY2024-2029 Six Year Program Candidate Projects

#	Jurisdiction	Number of applications	% of Total	Request	Pr	evious NVTA 70% Funds	Other Funds	Total Cost	Gap	% of Total Request
1	Arlington County	2	8%	\$ 32,700,000	\$	18,000,000	\$ 18,300,000	\$ 69,000,000	\$ -	3%
2	Fairfax County	4	17%	\$ 587,221,703	\$	31,200,000	\$ 95,593,569	\$ 714,015,272	\$ -	62%
3	Loudoun County	3	13%	\$ 55,000,000	\$	-	\$ 52,866,000	\$ 107,866,000	\$ -	6%
4	Prince William County	5	21%	\$ 172,000,000	\$	-	\$ -	\$ 172,000,000	\$ -	18%
5	City of Alexandria	4	17%	\$ 25,000,000	\$	5,000,000	\$ 9,044,792	\$ 55,544,792	\$ 16,500,000	3%
6	City of Fairfax	2	8%	\$ 23,732,754	\$	13,000,000	\$ 12,000,000	\$ 48,732,754	\$ -	3%
7	City of Falls Church	1	4%	\$ 1,400,000	\$	-	\$ -	\$ 1,400,000	\$ -	0%
8	City of Manassas	1	4%	\$ 4,020,000	\$	-	\$ 1,475,000	\$ 5,495,000	\$ -	0%
9	City of Manassas Park	1	4%	\$ 40,000,000	\$	-	\$ -	\$ 40,000,000	\$ -	4%
10	VRE	1	4%	\$ 6,145,103	\$	-	\$ 2,500,000	\$ 8,645,103	\$ -	1%
	TOTAL	24	100%	\$ 947,219,560	\$	67,200,000	\$ 191,779,361	\$ 1,222,698,921	\$ 16,500,000	100%

#	Mode	Number of applications	% of Total	Request	% of Total Request	Other Funds	То	tal project cost
1	Roadway	6	25%	\$ 560,554,457	59%	\$ 127,518,235	\$	719,272,692
2	Interchange/Intersection	5	21%	\$ 259,020,000	27%	\$ 22,416,334	\$	281,436,334
3	Commuter Rail	1	4%	\$ 6,145,103	1%	\$ 2,500,000	\$	8,645,103
4	Bus	5	21%	\$ 63,600,000	7%	\$ 8,194,792	\$	76,794,792
5	Bike-ped	4	17%	\$ 41,500,000	4%	\$ 31,100,000	\$	120,100,000
6	Technology	3	13%	\$ 16,400,000	2%	\$ 50,000	\$	16,450,000
	Total	24	100%	\$ 947,219,560	100%	\$ 191,779,361	\$	1,222,698,921
Number of	f continuation projects	5		\$ 323,721,703			\$	476,991,017

Summary of Applications





CRRC Rating





Northern Virginia Transportation Authority

FY2024-29 Six Year Program Candidate Projects: Congestion Reduction Relative to Cost (CRRC)

•		<u> </u>					
Application ID	Jurisdiction	Project Title	To	tal Project Cost	NVTA Request	CRRC Rating	CRRC Rank
CFC-011	City of Falls Church	City of Falls Church Signal Prioritization Project	\$	1,400,000	\$ 1,400,000	653.6	1
ALX-037	City of Alexandria	Smart & Connected Vehicle Infrastructure	\$	5,050,000	\$ 5,000,000	277.6	2
PWC-042	Prince William County	Route 234 Operational Improvements	\$	10,000,000	\$ 10,000,000	240.4	3
FFX-138	Fairfax County	Seven Corners Ring Road Improvements	\$	132,690,417	\$ 122,229,417	114.2	4
MAN-003	City of Manassas	Roundabout at Route 28 and Sudley Rd	\$	5,495,000	\$ 4,020,000	113.8	5
VRE-017	VRE	VRE Backlick Road Station Improvements	\$	8,645,103	\$ 6,145,103	102.6	6
ALX-032	City of Alexandria	South Van Dorn Street Bridge Enhancements	\$	15,070,000	\$ 10,000,000	33.0	7
ALX-033	City of Alexandria	Alexandria Metroway Enhancements	\$	14,924,792	\$ 7,000,000	25.6	8
CMP-001	City of Manassas Park	Route 28-Centreville Road Corridor Improvements	\$	40,000,000	\$ 40,000,000	24.8	9
CFX-019	City of Fairfax	Blenheim Boulevard Multimodal Improvements (formerly, Old Lee Highway Multimodal	\$	30,400,000	\$ 5,400,000	24.6	10
		Improvements)					
ALX-029	City of Alexandria	Safety Improvements at High-Crash Intersections	\$	20,500,000	\$ 3,000,000	24.1	11
PWC-040	Prince William County	Route 234 and Sudley Manor Drive Interchange	\$	115,000,000	\$ 115,000,000	23.3	12
PWC-043	Prince William County	The Landing at Prince William Transit Center	\$	25,000,000	\$ 25,000,000	17.9	13
LDN-034	Loudoun County	Route 15 at Braddock Road Roundabout	\$	25,655,000	\$ 10,000,000	16.3	14
PWC-044	Prince William County	Triangle Mobility Hub and First/Last Mile Connection Improvements	\$	10,000,000	\$ 10,000,000	15.8	15
ARL-022	Arlington County	Shirlington Bus Station Expansion	\$	11,800,000	\$ 11,600,000	14.5	16
PWC-041	Prince William County	Route 234 Bicycle and Pedestrian Facility Over I-95	\$	12,000,000	\$ 12,000,000	13.6	17
CFX-018	City of Fairfax	Northfax Network Improvements - Northfax East-West Road	\$	18,332,754	\$ 18,332,754	13.5	18
LDN-029	Loudoun County	Old Ox Road Widening - Shaw Road to Oakgrove Road	\$	49,350,000	\$ 30,000,000	11.2	19
FFX-136	Fairfax County	Braddock Road Multimodal Improvements Phase II (Humphries Drive to Southampton Drive)	\$	95,286,334	\$ 90,000,000	8.3	20
FFX-134	Fairfax County	Frontier Drive Extension and Intersection Improvements	\$	241,630,600	\$ 164,992,286	6.3	21
LDN-033	Loudoun County	Sycolin Road Widening - Loudoun Center Place to Crosstrail Boulevard	\$	32,861,000	\$ 15,000,000	5.2	22
FFX-135	Fairfax County	Route 7 Multimodal Improvements (I-495 to I-66)	\$	244,407,921	\$ 210,000,000	2.2	23
ARL-023	Arlington County	CC2DCA Multimodal Connection (formerly known as CC2DCA Intermodal Connector)	Ş	57,200,000	\$ 21,100,000	1.0	24

3/28/2024

TransAction Rating



Northern Virginia Transportation Authority

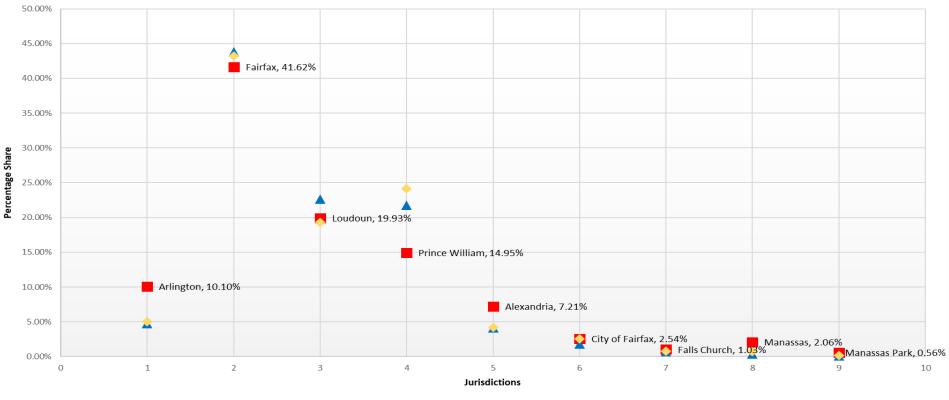
FY2024-29 Six Year Program Candidate Projects: TransAction Rating

Application	Jurisdiction	Project Title	Auto PHD	Transit PHD	Congestion	Growth in	Growth in	Growth in	Ped /Bike/	Safety	Emissions	Surge Person	TransAction	TransAction
ID			Reduction	Reduction	Duration	PMT in	Total Access	Total EEA	Transit	(E1)	Reduction	Hours of	Rating	Rating Rank
			(A1)	(A2)	Reduction	Dedicated	(C1)	Access (C2)	Environment		(F1)	Travel (G1)		
					(B1)	ROW (B2)			(D1)					
		Weights	10%	10%	10%	10%	10%	10%	15%	10%	10%	5%	100%	
FFX-138	Fairfax County	Seven Corners Ring Road Improvements	100.00	100.00	36.82	0.00	100.00	79.63	54.18	47.62	100.00	41.58	66.61	1
ALX-032	City of Alexandria	South Van Dorn Street Bridge Enhancements	0.42	38.64	0.00	100.00	40.55	23.63	89.41	19.05	3.57	52.27	38.61	2
PWC-040	Prince William County	Route 234 and Sudley Manor Drive Interchange	19.63	0.00	23.85	0.00	89.97	100.00	15.64	38.10	48.86	60.51	37.41	3
CFX-018	City of Fairfax	Northfax Network Improvements - Northfax East-West Road	2.41	0.00	0.00	0.00	62.69	56.70	29.80	47.62	85.98	50.54	32.54	- 4
ALX-033	City of Alexandria	Alexandria Metroway Enhancements	0.12	25.22	0.00	46.36	39.14	13.18	100.00	23.81	4.53	42.53	32.36	5
FFX-135	Fairfax County	Route 7 Multimodal Improvements (I-495 to I-66)	0.95	34.11	0.00	32.03	83.73	19.61	41.82	57.14	2.68	44.68	31.53	6
FFX-134	Fairfax County	Frontier Drive Extension and Intersection Improvements	3.70	85.83	19.25	0.00	22.56	15.99	42.39	57.14	8.22	66.70	30.96	7
PWC-042	Prince William County	Route 234 Operational Improvements	13.02	4.78	100.00	0.00	59.72	37.39	0.00	4.76	41.97	60.51	29.19	8
CFC-011	City of Falls Church	City of Falls Church Signal Prioritization Project	0.11	83.11	0.00	33.89	46.08	22.69	18.57	4.76	8.33	60.39	25.70	9
ARL-023	Arlington County	CC2DCA Multimodal Connection (formerly known as CC2DCA Intermodal Connector)	0.25	0.00	0.00	41.16	31.77	7.28	83.46	19.05	0.00	50.46	24.99	10
ALX-029	City of Alexandria	Safety Improvements at High-Crash Intersections	3.64	0.00	15.06	0.00	13.81	6.73	42.46	100.00	9.76	59.58	24.25	11
VRE-017	VRE	VRE Backlick Road Station Improvements	0.38	50.28	0.00	51.41	63.93	21.61	0.00	9.52	13.99	56.09	23.92	12
MAN-003	City of Manassas	Roundabout at Route 28 and Sudley Rd	4.32	0.00	0.00	0.00	35.36	30.73	16.51	80.95	9.52	95.51	23.34	13
LDN-033	Loudoun County	Sycolin Road Widening - Loudoun Center Place to Crosstrail Boulevard	1.14	0.00	0.00	0.00	58.60	63.97	3.47	47.62	2.92	100.00	22.94	14
ALX-037	City of Alexandria	Smart & Connected Vehicle Infrastructure	2.49	85.56	21.34	0.00	43.05	14.49	0.00	23.81	4.18	44.10	21.70	15
LDN-029	Loudoun County	Old Ox Road Widening - Shaw Road to Oakgrove Road	3.29	0.00	2.51	0.00	57.62	53.05	19.86	14.29	14.69	59.24	20.49	16
PWC-043	Prince William County	The Landing at Prince William Transit Center®	0.45	31.92	0.00	20.11	35.15	9.99	26.69	4.76	29.64	61.21	20.27	17
ARL-022	Arlington County	Shirlington Bus Station Expansion	0.14	10.81	0.00	37.34	43.87	17.77	25.30	4.76	1.19	63.12	18.54	18
FFX-136	Fairfax County	Braddock Road Multimodal Improvements Phase II (Humphries Drive to Southampton Drive)	5.65	0.00	23.43	0.00	1.38	0.00	14.88	71.43	14.94	50.76	16.45	19
LDN-034	Loudoun County	Route 15 at Braddock Road Roundabout	3.03	0.00	0.00	0.00	48.72	25.53	1.07	28.57	11.64	78.95	15.86	20
CMP-001	City of Manassas Park	Route 28-Centreville Road Corridor Improvements	7.56	0.00	48.54	0.00	0.30	0.00	9.08	33.33	31.49	42.08	15.59	21
PWC-044	Prince William County	Triangle Mobility Hub and First/Last Mile Connection Improvements	0.19	4.75	5.44	0.00	39.95	7.84	21.05	23.81	0.60	52.80	14.05	22
CFX-019	City of Fairfax	Blenheim Boulevard Multimodal Improvements (formerly, Old Lee Highway Multimodal Improvements)	3.91	0.00	21.76	0.00	2.47	0.00	28.32	33.33	5.89	47.83	13.38	23
PWC-041	Prince William County	Route 234 Bicycle and Pedestrian Facility Over I-95	1.14	0.00	0.00	0.00	0.00	0.00	7.18	14.29	0.00	34.82	4.36	24

3/28/2024



FY2022-2027 SYP (previous cycle)



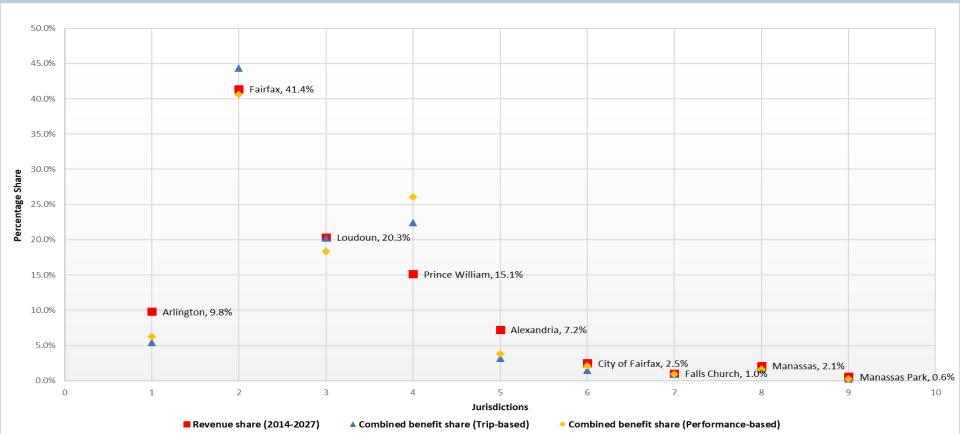
Revenue Share (2014-2025)

Combined benefit share (Trip-based)

Combined benefit share (Performance-based)



FY2024-2029 SYP (current cycle)



Evaluation Summary

3/7/2024

Northern Virginia Transportation Authority

FY2024-29 Six Year Program Candidate Projects: Summary of Quantitative and Qualitative Evaluations

			Primary and	·						Phases for			Past performan				SPA with no	First fiscal		Allgnment wi	th Core Values	Long		TransAction	TransAction	CRRC (Reduction in	
Application ID	Jurisdiction / Agency	Project	supporting model components	Pand request	Previously Approved NVTA Regional Funds	Other committed funds	Total project cost	which funds are requested	Funding Gep	which there is still a funding gap	Local priority	External funds	by 12/31/20 Continuation Jur Projects	025) risdiction /Agency	e of projects 18-month substantive progress	of projects - SPA within three meetings of fund appropriation	Invoices for 12+ months	year of expected drawdown		şuity Safet	y Sustain ability		Other	project rating (Incl. HB 599)	project rating rank (incl. HB 599)	ennual person hours of delay / Total project cost in \$1000's)	:
	Church		? .	\$ 1,400,000		\$ -	\$ 1,400,000																	25.70	9	653.57	1
ALX-037	City of Alexandria	Smart & Connected Vehicle Infrastructure	♀ ▲第太兆	\$ 5,000,000		\$ 50,000	\$ 5,050,000	PE, CN																21.70	15	277.60	2
PWC-04	Prince William County	Route 234 Operational Improvements	ę	\$ 10,000,000		\$ -	\$ 10,000,000	PE, CN, Acq																29.19	8	240.43	3
FFX-138	Fairfax County	Seven Corners Ring Road Improvements	書大の	\$122,229,417	\$ 4,200,000	\$ 6,261,000	\$ 132,690,417	PE, ROW, CN																66.61	1	114.19	4
MAN- 003	City of Manassas	Roundabout at Route 28 and Sudley Rd	書 再日本の	\$ 4,020,000		\$ 1,475,000	\$ 5,495,000	CN																23.34	13	113.76	5
VRE-017	VRE	VRE Backlick Road Station Improvements	8 🛛	\$ 6,145,103		\$ 2,500,000	\$ 8,645,103	CN																23.92	12	102.62	6
ALX-032	City of Alexandria	South Van Dorn Street Bridge Enhancements		\$ 10,000,000	\$ 5,000,000	\$ 70,000	\$ 15,070,000	CN															Note A	38.61	2	33.00	7
ALX-033		Alexandria Metroway Enhancements	Q A89100	\$ 7,000,000		\$ 7,924,792	\$ 14,924,792	ROW, CN																32.36	5	25.61	8
CMP-001		Route 28-Centreville Road Corridor Improvements	ŧυ.	\$ 40,000,000		\$ -	\$ 40,000,000	PE, ROW, CN																15.59	21	24.75	9
CFX-019	City of Fairfax	Old Lee Highway Multimodal Improvements	1 - A	\$ 5,400,000	\$ 13,000,000	\$ 12,000,000	\$ 30,400,000	CN															Note B	13.38	23	24.56	10
ALX-029	City of Alexandria	Safety Improvements at High-Crash Intersections	素ける	\$ 3,000,000		\$ 1,000,000	\$ 20,500,000	PE	\$16,500,000	ROW, CN														24.25	11	24.07	11
PWC-040		Route 234 and Sudley Manor Drive Interchange	₹ <u>*</u> 00	\$115,000,000		\$ -	\$ 115,000,000																	37.41	3	23.29	12
PWC-043		The Landing at Prince William Transit Center	20	\$ 25,000,000		\$ -	\$ 25,000,000																	20.27	17	17.86	13
LDN-034		Route 15 at Braddock Road Roundabout	★ dep	\$ 10,000,000		\$ 15,655,000	\$ 25,655,000	ROW, CN																15.86	20	16.34	14
PWC-044	Prince William County	Triangle Mobility Hub and First/Last Mile, Connection Improvements	日本の	\$ 10,000,000		\$ -	\$ 10,000,000	PE, ROW, CN																14.05	22	15.82	15
ARL-022	Arlington County	Shirlington Bus Station Expansion	日本地	\$ 11,600,000		\$ 200,000	\$ 11,800,000	PE, ROW, CN																18.54	18	14.52	16
PWC-04	Prince William County	Route 234 Bicycle and Pedestrian Facility Over I-95	£ d©	\$ 12,000,000		\$-	\$ 12,000,000	PE, ROW, CN																4.36	24	13.59	17
CFX-018	City of Fairfax	Northfax Network Improvements: Northfax East- West Road	A Stoo	\$ 18,332,754		\$ -	\$ 18,332,754	PE, ROW, CN																32.54	4	13.46	18
LDN-029	Loudoun County	Old Ox Road Widening - Shaw Road to Oakgrove	A to	\$ 30,000,000		\$ 19,350,000	\$ 49,350,000	CN																20.49	16	11.22	19
FFX-136	Fairfax County	Braddock Road Multimodal Improvements Phase II. (Humphries Drive to Southampton Drive)	₹ <u>*</u> de	\$ 90,000,000		\$ 5,286,334	\$ 95,286,334	PE, ROW, CN																16.45	19	8.35	20
FFX-134	Fairfax County	Frontier Drive Extension and Intersection	A . <u>99</u>	\$164,992,286	\$ 27,000,000	\$ 49,638,314	\$ 241,630,600	PE, ROW, CN															Note B	30.96	7	6.26	21
LDN-033	Loudoun County	Sycolin Road Widening - Loudoun Center Place to Crosstrall Boulevard	A to	\$ 15,000,000		\$ 17,861,000	\$ 32,861,000																	22.94	14	5.19	22
FFX-135	Fairfax County		▲≌≴⊲∿	\$210,000,000		\$ 34,407,921	\$ 244,407,921	PE, ROW, CN															Note A	31.53	6	2.24	23
ARL-023	Arlington County	CC2DCA Multimodal Connection (formerly known as CC2DCA Intermodal Connector)	\$16 BQ	\$ 21,100,000	\$ 18,000,000	\$ 18,100,000	\$ 57,200,000																Note B	24.99	10	0.96	24
		TOTAL		\$947,219,560	\$ 67,200,000	\$ 191.779.361	\$1,222,698,921		\$16,500,000										_								

Modal Components

- A New or improved roadway capacity and/or alignment
- New or improved intersection/interchange
- R Improvement/access to Metrorall/VRE commuter rail New or improved bus/Bus Rapid Transit facility
- New or improved bicycle/pedestrian facility
- New or improved bicycle fadility A New or improved pedestrian fadlity Transportation technology
- Parking First symbol reflects the primary modal component:
- other symbols denote supporting modal components

Notes

- A Project proposed to add dedicated ROW for future Bus Rapid Transit services
- B All or some phases of the project were considered fully funded with the previous NVTA allocation

- Acronym
- PE Design/Engineering/Environmental
- ROW Right of Way/Utilities
- CN Construction Acg Asset Acquisition
- SPA Standard Project Agreement for NVTA regional funding
- CRRC Co

Congestion	reduction	relative to cos	t	

	Very low	Next 3	High	>80-100%	>80-100%	1	1	1	FY29	FY29		Less than % share of revenue
	Low	All others	Medium	>60-80%	>60-80%	2	2	2	FY30	FY30	Low alignment	
	Medium		Low	>40-60%	>40-60%	3	3	3		FY31	Medium alignment	Approx, equal to % share of revenue
	High		Very low	>20-40%	>20-40%	4	4	4		FY32	High alignment	
	Very high		None	0-20%	0-20%	5 or more	5 or more	5 or more		FY33		More than % share of revenue
				N/A	N/A							
	* Funding	Gap		# External F	unds							Anticipated next three SYP updates
	Higher of 1	6 or \$		Higher of %	or\$							Adopt
Very high	Gap> 80%	or >100M		Non-NVTA>	80% or >10	M						FY2026
High	Gap= >60-	80% or >50	0-100M	Non-NVTA=	>60-80% or	>10-100M						FY2028
Medium	Gap= >40-	60% or >10	0-50M	Non-NVTA=	>40-60% or	>1-10M						FY2030
Low	Gap= >20-	40% or >1-	10M	Non-NVTA=	>20-40% or	>100K-1M						
Very low	Gap= >0-2	0% or upto	1M	Non-NVTA=	>0-20% or u	pto 100,000						
None	No gap			No external	funds							

% drawn % drawn See See down of down of definition definition expected expected below* below# drawdown drawdown

None Ton 3 Very bish > 100% > 100% 0 0 0 FY28 FY28

Evaluation Summary

				Phases for			Past perfor expected fun	mance (% of ds reimbursed	non-	Policy 29 non- compliance: #		First fiscal		Alignmer	nt with Co	re Values			TransAction	TransAction	CRRC (Reduction in			
Applicatio ID	ⁿ Jurisdiction / Agency	Project	Primary and supporting modal components	which there	Local priority	External funds	by 12/3	1/2023) n Jurisdiction /Agency	compliance: # of projects - 18-month substantive progress	of projects - SPA within three meetings of fund appropriation	invoices for	year of	Year of opening	Equity !	Safety	Sustain- ability	Long Term Benefit	Other	project rating (incl. HB 599)	project rating rank (incl. HB 599)	annual person hours of delay / Total project cost in \$1000's)	CRRC rank		·
	City of Falls Church		(† 1																25.70	9	653.57	1		
ALX-037	Alexandria		≈ ∧ ₿∧ ≈																21.70	15	277.60	2		
PWC-042	Prince William County		ŕ																29.19	8	240.43	3		
FFX-138	Fairfax County		▲ ●太の																66.61	1	114.19	4		
MAN- 003	City of Manassas	Roundabout at Route 28 and Sudley Rd	▮ А⊋≴Ф																23.34	13	113.76	5		
VRE-017																			23.92	12	102.62	6		
ALX-032	Alexandria																	Note A	38.61	2	33.00	7		
ALX-033	Alexandria																		32.36	5	25.61	8		
	Park	Route 28-Centreville Road Corridor Improvements	ŝ v																15.59	21	24.75	9		
CFX-019	City of Fairfax	Blenheim Boulevard Multimodal Improvements (formerly, Old Lee Highway Multimodal Improvements)	A or A															Note B	13.38	23	24.56	10		
ALX-029	City of Alexandria	Safety Improvements at High-Crash Intersections	100 #QA?	ROW, CN															24.25	11	24.07	11		
PWC-040	Prince William County	Route 234 and Sudley Manor Drive Interchange	妻 太如																37.41	3	23.29	12		
PWC-043	Prince William County	The Landing at Prince William Transit Center																	20.27	17	17.86	13		
	Loudoun County	Route 15 at Braddock Road Roundabout	畫太咖																15.86	20	16.34	14		
	Prince William County	Connection Improvements	日 太 ざも																14.05	22	15.82	15		
ARL-022	Arlington County	Shirlington Bus Station Expansion	🛱 📩 🏍																18.54	18	14.52	16		
PWC-04:	Prince William County	Route 234 Bicycle and Pedestrian Facility Over I-95																	4.36	24	13.59	17		Project proposed to
CFX-018	City of Fairfax	Northfax Network Improvements: Northfax East- West Road	A \$≴ #6																32.54	4	13.46	18	Note	add dedicated ROW
LDN-029	Loudoun County	Old Ox Road Widening - Shaw Road to Oakgrove Road	A Koo																20.49	16	11.22	19	Α	
FFX-136	Fairfax County	Braddock Road Multimodal Improvements Phase II (Humphries Drive to Southampton Drive)	\$ <u>*</u> 40																16.45	19	8.35	20		Transit services All or some phases
FFX-134	Fairfax County	Frontier Drive Extension and Intersection	的太星日 办															Note B	30.96	7	6.26	21		of the project were
LDN-033	Loudoun County	Sycolin Road Widening - Loudoun Center Place to Crosstrail Boulevard	A 🕺 40																22.94	14	5.19	22		e considered fully
FFX-135	Fairfax County		▲冒点がも															Note A	31.53	6	2.24	23	В	funded with the previous NVTA
ARL-023	Arlington County	CC2DCA Multimodal Connection (formerly known as CC2DCA Intermodal Connector)	1.00 BB															Note B	24.99	10	0.96	24		allocation



Project Description Forms



Northern Virginia Transportation Authority FY2024-2029 Six Year Program

City of Falls Church Signal Prioritization Project

Date Submitted: 07/28/2023

APPLICATION #: CFC-011

Transit Signal Priority in and around the City of Falls Church

Project Description

This project includes the installation of Transt Signal Priority (TSP) technology at up to seven interscention in the City of Falls Church. Updates to cabinets, controllers, communications, and artificial intelligence, to connect the TSP technology with the City's existing Smart Cities demonstration project, are also included with the project. TSP is proposed to be installed along the future Route 7 BRT route within and adjacent to the City of Falls Church. Installing TSP improves transit operations and encourages the use of travel options other than the automobile, and is often a component of BRT systems. In addition, the City is designated as a regional activity center and has recently been a focus of infil development. Getting more people using transit will help to reduce congestion, and reduce pressure on the regional road and highway system, as the City continues to add new residents and workers.

imary Mode(s)	Secondary Mode(s)
	P
plication Number	CFC-011
imary TransAction ID Number	358
bmitting Jurisdiction/Agency	City of Falls Church
cation	Transt Signal Priority will be installed along the future Route 7 BRT route within the City of Falls Church, which mirrors the current 28A bus route The route in the City starts on WBroad St in West Falls Church and continues east until Washington St. The route Continues north Invards the East Falls Church Metrorall Station in Arlington County. The route comes back through the City following Roosevelt St and Roosevelt Blwd. The intersections of 11W Broad St. & Lee St. (2) WBroad St. & Spring St. (2) WBroad St. & St. Spring St. (2) WBroad St. & St. Jenson (4) WBroad St. & St. Unite Jan. Washington St. & Columbia St., are included in the project.
quested NVTA Funds	\$1,400,000.00
/TA Funds Approved	N/A
evious NVTA Funds Received	\$0.00
tal Cost to Complete Project	\$1,400,000.00
	-

Project Location



Т

Project Milestones

	Study	Design / Engineering / Environmental	ROW and Utilities	Construction	Asset Acquisition
Earlier					
FY23					
FY24					
FY25					
FY26					
FY27					
FY28		х			
FY29				x	
Beyond					



Year of expected project completion: FY2029

Project Funding

Source	Study	Design / Engineering / Environmental	ROW and Utilities	Construction	Asset Acquisition	Total
Total Cost	\$0	\$103,245	\$0	\$1,296,755	\$0	\$1,400,000
NVTA Funds Applied	\$0	\$103,245	\$0	\$1,296,755	\$0	\$1,400,000
Total Other	\$0	\$0	\$0	\$0	\$0	\$0
Gap	\$0	\$0	\$0	\$0	\$0	\$0

Project Analysis Highlights

Congestion Reduction Relative to Cost (CRRC) Rating	653.57
Congestion Reduction Relative to Cost (CRRC) Rank	1
TransAction Project Rating	25.70
TransAction Project Rank	9
Project's Past Performance (Percentage of expected funds that was reimbursed by 12/31/2023)	N/A
Jurisdiction/Agency's Past Performance on All Projects (Percentage of expected funds that was reimbursed by 12/31/2023)	50.94%
Percentage of Total Project Cost Covered by Funds from Sources Other than NVTA	0.00%
Local Priority	1
Number of Supporting Resolutions (does not include resolution from applicant's own Board/Council)	2
Number of NVTA-Funded Project(s) Nearby	10
Regional Funds allocated to NVTA-Funded Project(s) Nearby	\$63,661,644

FY2024-2029 SYP Schedule

- May 1, 2023: Call for regional Transportation Projects issued
- July 28, 2023: Application deadline
- October 27, 2023: Governing body resolution deadline
- Summer/Fall 2023: Eligibility review; one-on-one applicant meetings; coding
- Fall/Winter 2023: Evaluations and review with applicants
- March/April 2024: Review evaluations with TAC, PCAC, PPC
- March 2024: NVTA approval of Public Hearing date
- March 2024: NVTA releases candidate project list and evaluations for public comment
- March 28 to May 19, 2024: Anticipated public comment period
- May 9, 2024: NVTA hosts Public Hearing
- June 13, 2024: NVTA briefed on public comments
- June 2024: NVTA staff releases project recommendations for review and endorsement by TAC, PCAC, and PPC
- July 11, 2024: Anticipated NVTA adoption of FY2024-2029 SYP





Reference Slides

Congestion Reduction Relatve to Cost (CRRC)

VA Code requires NVTA to give priority to projects that achieve the greatest congestion reduction relative to cost (CRRC).

- Derive person hours of delay (PHD) reduced from individual project model runs for years 2030 and 2045 by comparing no-build and build networks.
- PHD reduction values for 2030 and 2045 are extrapolated from the year of expected project completion to 2045, and summed for each year.
- The cumulative PHD reduction is divided by total project cost.

TransAction Rating



- All eligible candidate projects will be coded into the TransAction 'No Build' network for 2045, and ratings calculated for individual projects using a single model run for 2045.
- Values for the 10 measures are calculated and are normalized with scores 0 (lowest) to 100 (highest).
- A weighted score is calculated for each project.

[⊥] Equity

Goal	Objective	Performance Measure		Alignment with Core Values
Mobility: Enhance quality of life of	fA. Reduce congestion and delay*	A1. Total Person-Hours of Delay in autos	10	ž
Northern Virginians by improving		A2. Total Person-Hours of Delay on Transit	10	11
performance of the multimodal	B. Improve travel time reliability*	B1. Duration of Severe Congestion	10	¥ &
transportation system		B2. Transit person-miles in dedicated/priority ROW	10	T 🎽
	C. Improve access to jobs*	C1. Access to jobs by car, transit, and bike	10	ž
Accessibility: Strengthen the region's economy by increasing		C2. Access to jobs by car, transit, and bike for EEA populations	10	1
access to jobs, employees, markets, and destinations for all communities	D. Reduce dependence on driving alone by improving conditions for people accessing transit and using other modes	D1. Quality of access to transit and the walk/bike network	15	₫≱Å
Resiliency : Improve the transportation system's ability to	E. Improve safety and security of the multimodal transportation system	E1. Potential for safety and security improvements	10	Å
anticipate, prepare for, and adapt to changing conditions and	F. Reduce transportation related emissions	F1. Vehicle Emissions	10	T 🎽
withstand, respond to, and recover rapidly from disruptions.	G. Maintain operations of the regional transportation system during extreme conditions*	G1. Transportation System Redundancy	5	4 Å

Safety

Y

Sustainability



- VA Code requires that, <u>over the long term</u>, the allocation of <u>benefit</u> to member jurisdictions must be <u>approximately equal</u> to the share of the revenues attributed to each of the nine member jurisdictions. The Authority approved a set of LTB Principles in December 2014.
- Town projects will be combined with County projects for the purposes of LTB calculation.
- There is no guarantee that LTB imbalances (surpluses/deficits) will be fully eliminated in any single SYP update cycle.



- Historic share of revenues (since FY2014) is known, and can be reliably projected through FY2027.
- 'Benefit' is subdivided into two equally weighted components (includes projects thru FY2022-2027 SYP):
 - Allocated regional revenues are assigned to the respective jurisdictions based on physical location of each funded project (making some allowances for projects that cross jurisdictional boundaries or are considered 'system' level projects).
 - Geographic distribution of each funded project's transportation impact, using reduction in person-hours of delay as the performance measure. Congestion reduction will be calculated by comparing the 'total person-hours of delay' measure for 2045, with and without the funded projects in the TransAction 'No Build' network for 2045. This is analyzed in two ways to provide a range:
 - Performance-based: sum the person hours of delay experienced in all network links within each jurisdiction and assign it to the jurisdiction.
 - Trip-based: sum the person hours of delay experienced by each traveler in the network and assign it to the jurisdiction of trip origin.
- Plot the shares of revenue, performance-based benefits, and trip-based benefits for the jurisdictions on a chart.





Share of Regional Revenues from Member Localities

Thank You!





Scan the QR code to connect with us



Preliminary Deployment Plan -Regional Bus Rapid Transit System

Presented by: Keith Jasper, Principal, NVTA

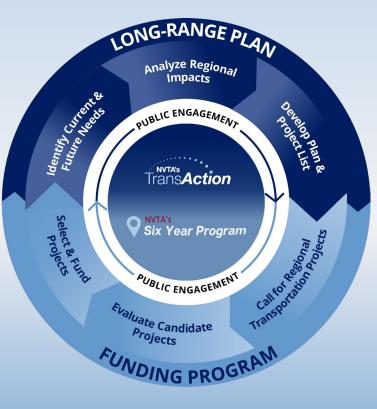


NVTA's Primary Responsibilities

Trans**Action**

Long-Range Plan

- Updated Every Five Years
- Fiscally and Geographically Unconstrained
- Identify Current and Future Transportation Needs & Priorities
- Analyze Regional Impacts
- Develop Plan and Project List
- Most Recent Update
 December 2022





Funding Program

- Allocates NVTA's Regional Revenues to Regional, Multimodal, Congestion Reducing Transportation Projects
- Updated Every Two Years
- Most Recent SYP Adopted in July 2022
- Currently working on the next SYP (FY2024-2029)

BRT in SYP and TransAction

- Nearly **\$0.5 billion** allocated to five BRT projects to date
- Approximately **\$10 billion** in BRT/High-Capacity Transit (HCT) projects included in TransAction
- Under varying stages of development from conceptual to design, but as **standalone** lines
- TransAction has established initial eligibility for future funding using NVTA's regional revenues
- FY2024-2029 SYP; CfRTP issued on May 1, 2023; adoption anticipated July 2024
- FY2026-2031 SYP; CfRTP anticipated May 2025; adoption anticipated July 2026
- Approved projects in the SYP can potentially **leverage** NVTA's regional revenues to secure other funding sources



Purpose of the Preliminary Deployment Plan

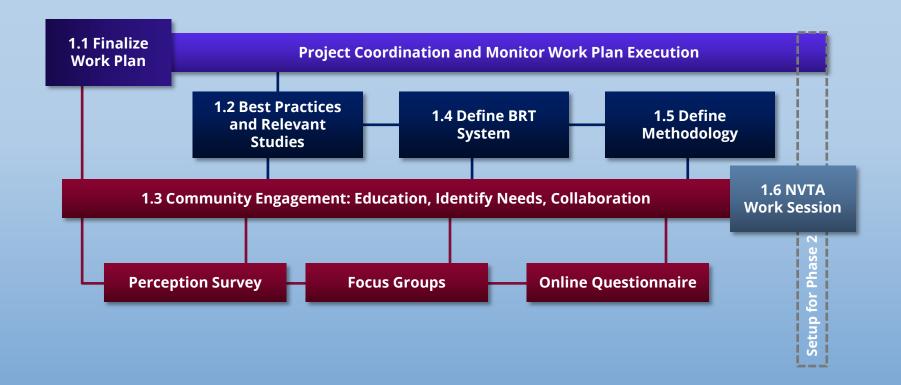
Think Big, Start Small, Build Momentum

- Offers potential regional solutions that will reduce/reverse our dependency on driving alone, decades before we will see new Metrorail extensions.
- Provides a vision and action plan for incremental deployment of a regional BRT system; thereby protecting **\$0.5 billion** investment by ensuring Northern Virginia establishes a BRT system rather than a series of loosely related BRT lines.
- Builds from, and bridges gap between, TransAction and SYP.
- Includes a detailed analysis of ridership, congestion reduction impacts, operations, capital/operating costs, funding opportunities, governance considerations; fully aligned with NVTA's Core Values.

PDP-BRT Schedule



Phase 1 Approach



Thank You!





Scan the QR code to connect with us

