

### Northern Virginia Transportation Authority

The Authority for Transportation in Northern Virginia

## TECHNICAL ADVISORY COMMITTEE Wednesday, March 20, 2024, 7:00 pm

This meeting will be held virtually and live streamed via YouTube1

#### **AGENDA**

I. Call to Order / Welcome Chair Boice

#### **Action**

II. Summary Notes of February 21, 2024, Meeting Chair Boice Recommended Action: Approve meeting notes.

III. Approve the CY2024 Revised Meeting Calendar Chair Boice Recommended Action: Approve revised CY2024 calendar.

#### **Discussion/Information**

IV. FY2024-2029 Six Year Program Update Dr. Nampoothiri, Senior Manager

V. NVTA Update Ms. Backmon, CEO

#### **Adjournment**

VI. Adjourn

Next Meeting April 17, 2024, 7:00 PM

<sup>&</sup>lt;sup>1</sup> If technical difficulties arise, the meeting may be audio or video recorded. Any recordings will be made available on the <u>Technical Advisory Committee meetings'</u> webpage.



#### TECHNICAL ADVISORY COMMITTEE

Wednesday, February 21, 2024, 7:00 pm
Northern Virginia Transportation Authority
In-Person Meeting at NVTA Offices
Live-streamed on YouTube

#### MEETING SUMMARY

#### I. Call to Order/Welcome

• The meeting was conducted in-person and virtually over Zoom. Chairman Boice called the meeting to order at 7:01 PM.

#### Attendees:

- o **TAC Members:** Randy Boice, Karen Campblin, Michelle Cavucci, Kerianne Masters, Amy Morris, Frank Spielberg, and Shangjiang Zhu. Armand Ciccarelli participated virtually due to personal reasons.
- NVTA Staff: Monica Backmon, CEO; Keith Jasper, Principal,
   Transportation Planning and Programming; Sree Nampoothiri, Senior
   Manager; and Ian Newman, Regional Transportation Planner.
- Others: Dalia Leven (Cambridge Systematics). The meeting was also live streamed on YouTube.

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

 Motion to approve the summary notes of the November 16, 2022 meeting was made by Mr. Spielberg. Seconded by Ms. Masters. The motion passed unanimously.

### III. Approve the CY2024 Meeting Calendar

Motion to approve the CY2024 Meeting calendar was made by Ms. Morris.
 Seconded by Ms. Masters. The motion passed unanimously. Due to the scheduled June meeting falling on June 19<sup>th</sup> (Juneteenth Holiday), the Committee agreed to set the June meeting date later.

#### IV. FY2024-2029 Six Year Program Update

- Dr. Nampoothiri, Senior Manager, Transportation Planning and Programming at NVTA, presented on the following topics:
  - 1. NVTA's Core Values.

- 2. Goals, objectives, and measures of NVTA's long range multimodal transportation plan, TransAction.
- 3. Overview of the six adopted funding programs.
- 4. Overview of the Project Selection Process, including Eligibility, Congestion Reduction Relative to Cost (CRRC), TransAction Rating, Long Term Benefit, Qualitative Considerations, and Public Comments.
- 5. Project Description Forms for every candidate project.
- 6. A Summary of Applications.
- 7. The Current Six Year Program Schedule.
- Concerning the third topic above, Mr. Spielberg asked why the amount requested
  for this current Six Year Program is lower than previous Six Year Programs. Dr.
  Nampoothiri responded that past programs had mega projects such as Route 1
  Widening, Fairfax County Parkway Widening, and Richmond Highway BRT that
  were requesting significant sums of money. This round is for relatively smaller
  projects.
- Concerning the seventh topic above, Chair Boice asked if the evaluations of projects will be shared with the TAC members in advance of the May 9<sup>th</sup> Authority Meeting. Dr. Nampoothiri answered in the affirmative. Mr. Spielberg asked about the involvement of the proposed sports facilities on Route 1 (Potomac Yard arena and area development) on the Six Year Program project evaluations analysis. Ms. Backmon answered in the negative. She added that the Commonwealth Transportation Board (CTB) had met the day prior, and the funding component had been shared, and according to the Secretary of Transportation's presentation, it is the city of Alexandria and Commonwealth that are backing the deal. Mr. Spielberg was wondering about the travel demand from the impact of these facilities that could impact the Six Year Program. Dr. Nampoothiri mentioned that the deadline for applications was before announcements were made concerning the sports facilities. He added that one application was received from the City of Alexandria in the vicinity of the proposed arena – an extension of dedicated lanes for Metroway. Much of the expected traffic is expected to be off-peak due to the timings of the events.

### V. NVTA Transportation Perception Survey

- Mr. Jasper, Principal, Transportation Planning and Programming, presented on the following topics:
  - 1. Key findings of the Transportation Perception Survey with fieldwork conducted in December 2023..
  - 2. Quality of life factors affecting Northern Virginians.
  - 3. The region's performance in planning and implementing transportation solutions from 2015 to 2023.

- 4. Awareness of existing Bus Rapid Transit (BRT) system initiatives, and familiarity and favorability concerning BRT and its benefits.
- 5. How likely Northern Virginians would use BRT and for what trip purposes.
- 6. The Top influential benefits of using BRT.
- Concerning the fourth topic, Mr. Spielberg asked if the survey mentioned that a lane might need to be taken from existing traffic lanes. Mr. Jasper repeated the definition of BRT and noted that BRT could include this. Mr. Spielberg mentioned that favorability may change a bit if a lane is taken for BRT. Mr. Jasper mentioned that this is too detailed for this stage in the process but something that would be flagged moving forward in the process.

### VI. Preliminary Deployment Plan – Bus Rapid Transit (PDP-BRT)

- Mr. Jasper, Principal, Transportation Planning and Programming, presented on the following topics:
  - 1. BRT projects in the Six Year Program and TransAction.
  - 2. The purpose and schedule of the Preliminary Deployment Plan (PDP).
  - 3. Phase 1 of the PDP-BRT's details in a flow chart.
- Mr. Spielberg mentioned that it may be instructive to talk to people in Montgomery County who have been working on trying to put together a BRT system for approximately 20 years. Mr. Jasper mentioned that there is a BRT planning working group, originally made for TransAction, but that it includes all folks in Northern Virginia, Montgomery County, Washington DC, Prince George's County, WMATA, NVTC, and VRE to have a broad range of opinions. Mr. Spielberg highlighted that Montgomery County's journey from plan to implementation is very instructive. Mr. Jasper mentioned that he hopes to learn from their experiences. Mr. Spielberg also highlighted how Montgomery County is quite an interesting example when it comes to their public participation efforts.

#### VII. NVTA Update

• Ms. Backmon mentioned that the 2023 Annual Report has been published and encouraged members to pick up a copy of the report. She also shared that the NVTA is moving its offices and that the March authority meeting will be the last Authority meeting in the current space. She added that NVTA is moving close to the Dunn-Loring Merrifield Metro Station. Ms. Backmon added that the TAC is legislatively a nine-member committee. The TAC currently has eight members. She mentioned that State Senator Ms. Boysko submitted a bill that has received support concerning resolving the confusion around the language on the six members appointed by localities embraced by the Authority. Assuming the passage of the bill, NVTA will try to get the vacancy of the TAC filled soon.

• Ms. Backmon finally shared the passing of John Mason, former City of Fairfax Mayor, and previous Executive Director of NVTA and offered NVTA's condolences.

### VIII. Adjourn

• The meeting adjourned at 8:03 pm. The next meeting will be on March 20<sup>th</sup>, 2024, at 7 PM and will be held virtually.

## Calendar Year 2024 – NVTA TAC Meetings

Monthly Meeting	Date and Time	Location
February	February 21, 7 – 8 PM	NVTA Offices
March	March 20, 7 – 8 PM	Virtual
April	April 17, 7 – 8 PM	NVTA Offices
May	May 15, 7 – 8 PM	NVTA Offices
June	June 20, 7-8 PM	NVTA Offices
July	July 17, 7 – 8 PM	NVTA Offices
August	No Mo	eeting
September	September 18, 7 – 8 PM	NVTA Offices
October	October 16, 7 – 8 PM	NVTA Offices
November	November 20, 7 – 8 PM	NVTA Offices
December	December 18, 7 – 8 PM	NVTA Offices



## FY2024-2029 Six Year Program

Sree Nampoothiri, Senior Manager, NVTA



Technical Advisory Committee March 20, 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

Updated on 3/7/2024

#	Project ID#	Jurisdiction / Agency	Project	F	und request	Pi	revious NVTA funds	Ot	ther committed funds	To	otal project cost	Funding gap ccluding NVTA request	Phases for which funds are requested	Phases for which there is still a funding gap	sup	rimary and porting modal omponents	Local Priority
1	ARL-023	Arlington County	CC2DCA Multimodal Connection (formerly known as CC2DCA Intermodal Connector)	\$	21,100,000	\$	18,000,000	\$	18,100,000	\$	57,200,000	\$ -	CN		魚が	s <u>#</u> #	1
2	ARL-022	Arlington County	Shirlington Bus Station Expansion	\$	11,600,000			\$	200,000	\$	11,800,000	\$ -	PE, ROW, CN		Œ	<b>★</b> de	2
3	FFX-134	Fairfax County	Frontier Drive Extension and Intersection Improvements	\$	164,992,286	\$	27,000,000	\$	49,638,314	\$	241,630,600	\$ -	PE, ROW, CN		A	<b>公太屋屋</b>	1
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		#	≴ కాట	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		A	□ ★ ∞	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		A	事太が	4
7	LDN-034	Loudoun County	Route 15 at Braddock Road Roundabout	\$	10,000,000			\$	15,655,000	\$	25,655,000	\$ -	ROW, CN		#	太如	1
8	LDN-033	Loudoun County	Sycolin Road Widening - Loudoun Center Place to Crosstrail Boulevard	\$	15,000,000			\$	17,861,000	\$	32,861,000	\$ -	ROW, CN		A	太师	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	A de	3
10	PWC-040	Prince William County	Route 234 and Sudley Manor Drive Interchange	\$	115,000,000			\$		\$	115,000,000	\$ -	PE, ROW, CN		#	煮 die	1
11		Prince William County	Route 234 Bicycle and Pedestrian Facility Over I-95	\$	12,000,000			\$		\$	12,000,000	-	PE, ROW, CN		★ d		2
12	PWC-043	Prince William County	The Landing at Prince William Transit Center	\$	25,000,000			\$		\$	25,000,000	\$ -	PE, ROW, CN			P	3
13	PWC-044	Prince William County	Triangle Mobility Hub and First/Last Mile Connection Improvements	\$	10,000,000			\$	-	\$	10,000,000	\$ -	PE, ROW, CN		₽	A de	4
14	PWC-042	Prince William County	Route 234 Operational Improvements	\$	10,000,000			\$	-	\$	10,000,000	\$ -	PE, CN, Asset		ক্		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	🏃 d	e QA∰?	1
16	ALX-033	City of Alexandria	Alexandria Metroway Enhancements	\$	7,000,000			\$	7,924,792	\$	14,924,792	\$ -	ROW, CN		$\Box$	A.要令太命	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			A to	3
18	ALX-037	City of Alexandria	Smart & Connected Vehicle Infrastructure	\$	5,000,000	\$	-	\$	50,000	\$	5,050,000	\$ -	PE, CN		<b>?</b>	A & t de	4
19	CFX-019	City of Fairfax	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		A	\$ £ de	2
21	CFC-011	City of Falls Church	City of Falls Church Signal Prioritization Project	\$	1,400,000			\$	-	\$	1,400,000	\$ -	PE, CN		Ŷ	Q	1
22	MAN-003	City of Manassas	Roundabout at Route 28 and Sudley Rd	\$	4,020,000			\$	1,475,000	\$	5,495,000	\$ -	CN		#	A.Q 太 🏍	1
23	CMP-001	City of Manassas Park	Route 28-Centreville Road Corridor Improvements	\$	40,000,000			\$	-	\$	40,000,000	\$ -	PE, ROW, CN		#	A	1
24	VRE-017	VRE	VRE Backlick Road Station Improvements	\$	6,145,103			\$	2,500,000	\$	8,645,103	\$ -	CN		层	P	1
			TOTAL	\$	947,219,560	\$	67,200,000	\$	191,779,361	\$	1,222,698,921	\$ 16,500,000					

#### Modal Components

New or improved roadway capacity and/or alignment

New or improved intersection/interchange

Improvement/access to Metrorail/VRE commuter rail

New or improved bus/BRT facility

New or improved bicycle facility

New or improved pedestrian facility

Transportation Technology

D Parking

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

Phases

PE Design/Engineering/Environmental

Asset Acquisition

ROW Right of Way/Utilities CN Construction



## **Summary of Applications**





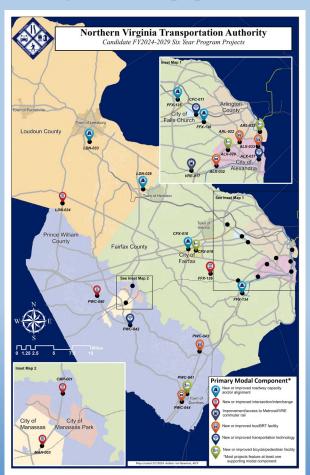
## Northern Virginia Transportation Authority Summary of FY2024-2029 Six Year Program Candidate Projects

#	Jurisdiction	Number of applications	% of Total	Request	Pr	revious NVTA 70%	Other Funds	Total Cost	Gap	% of Total
						Funds				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	To	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 o	f continuation projects	5		\$ 323,721,703				\$	476,991,017

## **Summary of Applications**





## **CRRC Rating**





## Northern Virginia Transportation Authority

3/7/2024

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

Application ID	Jurisdiction	Project Title	Tot	tal Project Cost	N/	/TA 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	\$ 1	22,229,417	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	Old Lee Highway Multimodal Improvements	\$	30,400,000	\$	5,400,000	24.6	10
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	\$ 1	15,000,000	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	\$ 1	64,992,286	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	\$ 2	10,000,000	2.2	23
ARL-023	Arlington County	CC2DCA Multimodal Connection (formerly known as CC2DCA Intermodal Connector)	\$	57,200,000	\$	21,100,000	1.0	24

## **TransAction Rating**



3/7/2024

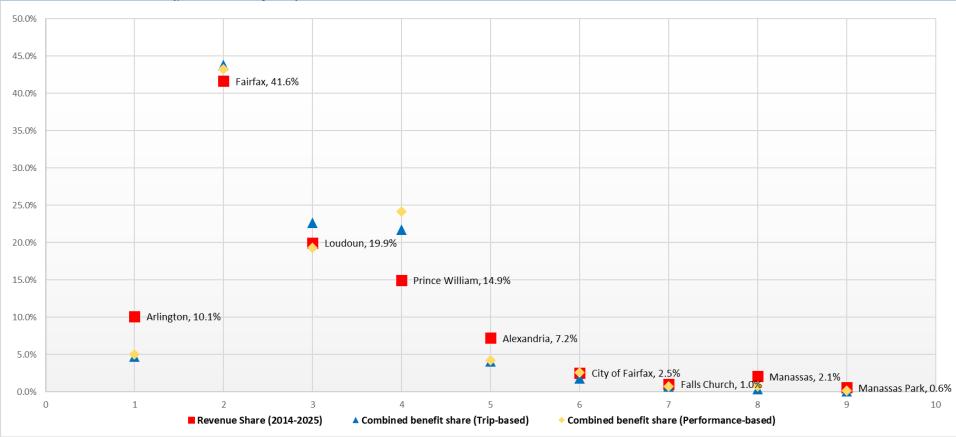


Northern Virginia Transportation Authority
FY2024-29 Six Year Program Candidate Projects: TransAction Rating

Application	Jurisdiction	Project Title	Auto PHD	Transit PHD	Congestion	Growth in	Growth in	Growth in	Ped /Bike/	Safety	Emissions	Surge	TransAction	TransAction
ID			Reduction	Reduction	Duration	PMT in	<b>Total Access</b>	Total EEA	Transit	(E1)	Reduction	Person	Rating	Rank
			(A1)	(A2)	Reduction	Dedicated	(C1)	Access (C2)	Environment		(F1)	Hours of		
					(B1)	ROW (B2)			(D1)			Travel (G1)		
		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	0.25	0.00	0.00	41.16	31.77	7.28	83.46	19.05	0.00	50.46	24.99	10
		Intermodal Connector)												
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	1.14	0.00	0.00	0.00	58.60	63.97	3.47	47.62	2.92	100.00	22.94	14
		Boulevard												
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	5.65	0.00	23.43	0.00	1.38	0.00	14.88	71.43	14.94	50.76	16.45	19
		Drive to Southampton Drive)												
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	0.19	4.75	5.44	0.00	39.95	7.84	21.05	23.81	0.60	52.80	14.05	22
		Improvements												
CFX-019	City of Fairfax	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

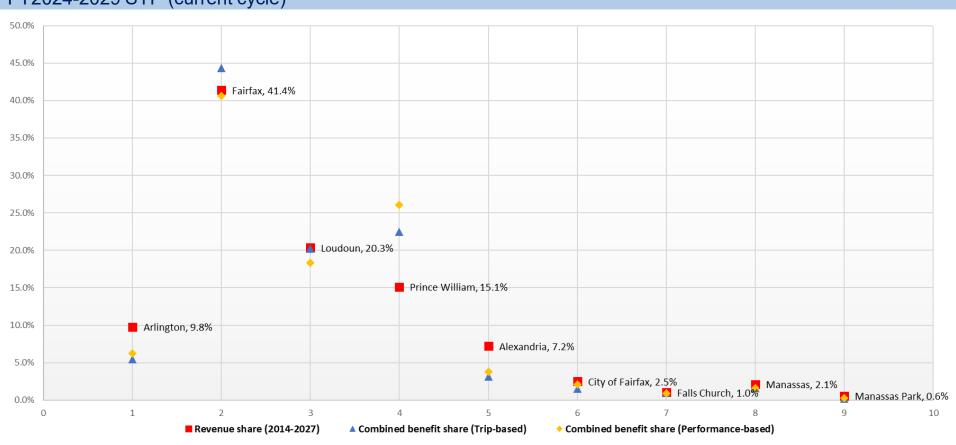


## FY2022-2027 SYP (previous cycle)





## 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

	112024-23	9 SIX Year Program Candidate P	rojects. 3u	initially 0	Qualitit	acive anu	Quantativ	e radiu	acions				Past performance	ce (% of					Alignme	nt with Cor	re Values					CRRC	
Application ID	Jurisdiction / Agency	Project	Primary and supporting modal components	Fund request	Previously Approved NVTA Regional Funds	Other committed funds	Total project cost	Phases for which funds are requested	Funding Gap	Phases for which there is still a funding gap	Local priority	External funds	expected funds re by 12/31/20 Continuation Juri Projects	123)	compliance: # of projects 18-month substantive progress	compliance: # of projects - SPA within three meetings of fund appropriation	SPA with no invoices for 12+ months	First fiscal year of expected drawdown	driph	Safety	Sustain- ability	Long Term Benefit		TransAction project rating (incl. HB 599)	599)	(Reduction in annual person hours of delay / Total project cost in \$2000's)	CRRC rank
CFC-011	City of Falls Church	City of Falls Church Signal Prioritization Project	<b>♀</b> 🖫	\$ 1,400,000		\$ -	\$ 1,400,000	PE, CN																25.70	9	653.57	1
ALX-037		Smart & Connected Vehicle Infrastructure	❤ ▲ 素 煮 炒	\$ 5,000,000		\$ 50,000	\$ 5,050,000	PE, CN																21.70	15	277.60	2
PWC-042	Prince William	Route 234 Operational Improvements	P	\$ 10,000,000		\$ -	\$ 10,000,000	PE, CN, Acq																29.19	8	240.43	3
FFX-138	Fairfax County	Seven Corners Ring Road Improvements	₩ ± de	\$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	\$ AQto	\$ 4,020,000		\$ 1,475,000	\$ 5,495,000	CN																23.34	13	113.76	5
VRE-017	VRE	VRE Backlick Road Station Improvements	₽ □	\$ 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	□ A & ∞	\$ 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	A A SP i a	\$ 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	₿ W	\$ 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	太如春	\$ 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	力がも	\$ 3,000,000		\$ 1,000,000	\$ 20,500,000	PE	\$16,500,000	ROW, CN														24.25	11	24.07	11
PWC-040	Prince William County	Route 234 and Sudley Manor Drive Interchange	■ 太砂	\$115,000,000		\$ -	\$ 115,000,000	PE, ROW, CN																37.41	3	23.29	12
PWC-043	Prince William County	The Landing at Prince William Transit Center	<b>₽ 0</b>	\$ 25,000,000		\$ -	\$ 25,000,000	PE, ROW, CN																20.27	17	17.86	13
LDN-034	Loudoun County	Route 15 at Braddock Road Roundabout	事 煮 de	\$ 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	日本か	\$ 10,000,000		\$ -	\$ 10,000,000	PE, ROW, CN																14.05	22	15.82	15
ARL-022	Arlington County	Shirlington Bus Station Expansion	□ ★40	\$ 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	∱ de	\$ 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 Show	\$ 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 Road	A Ado	\$ 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)	<b>8</b> ★ 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. 22	\$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 Crosstrail Boulevard	A & so	\$ 15,000,000		\$ 17,861,000	\$ 32,861,000																	22.94	14	5.19	22
FFX-135	Fairfax County	Route 7 Multimodal Improvements (I-495 to I-66)	▲ □太 がも	\$210,000,000		\$ 34,407,921	\$ 244,407,921	PE, ROW, CN															Note A	31.53	6	2.24	23
ARL-023	Arlington County	as CC2DCA Intermodal Connection (formerly known	A60 星星	\$ 21,100,000	\$ 18,000,000	\$ 18,100,000	\$ 57,200,000																Note B	24.99	10	0.96	24
		TOTAL		CO47 210 ECO	£ 67 200 000	£ 101 770 261	\$1,222,698,921		\$16,500,000																		

- A New or improved roadway capacity and/or alignment
- New or improved intersection/interchange
- Improvement/access to Metrorail/VRE commuter rail □ New or improved bus/Bus Rapid Transit facility New or improved bicycle/pedestrian facility
- New or improved bicycle facility New or improved pedestrian facility Transportation technology

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

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

- Design/Engineering/Environmental
- Right of Way/Utilities Construction
- Asset Acquisition
- Standard Project Agreement for NVTA regional funding CRRC Congestion reduction relative to cost

#### \* Funding Gap Higher of % or \$ Very high Gap> 80% or >100M High Gap= >60-80% or >50-100M Medium Gap= >40-60% or >10-50M

Low Gap= >20-40% or >1-10M

Very low Gap= >0-20% or upto 1M

N/A N/A # External Funds Higher of % or \$ Non-NVTA > 80% or > 100M Non-NVTA=>60-80% or >10-100M Non-NVTA= >40-60% or >1-10M

down of down of

Non-NVTA= >20-40% or >100K-1M Non-NVTA= >0-20% or upto 100,000 No external funds

#### Anticipated next three SYP updates

Less than % share of revenue

EY2026 FY2028



## **Evaluation Summary**

			Discount	Phases for			Past perform		Policy 29 non-	Policy 29 non- compliance: #	CDA with an	First fiscal		Alignme	ent with Co	ore Values			TransAction	TransAction	CRRC (Reduction in		
Application ID	Jurisdiction / Agency	Project	Primary and supporting modal components	which there is still a funding gap	Local priority	External funds	by 12/3: Continuation Projects	./2023)	# of projects	of projects - SPA within three meetings of fund appropriation	invoices for	year of expected	Year of opening	Equity	Safety	Sustain- ability	Long Term Benefit	Other		rank (incl. HB	annual person hours of delay / Total project cost in \$1000's)	, CRRC Idlik	
CFC-011	City of Falls Church	City of Falls Church Signal Prioritization Project	<b>∻</b> □																25.70	9	653.57	1	
ALX-037	City of Alexandria	Smart & Connected Vehicle Infrastructure	常 ▲集太师																21.70	15	277.60	2	
PWC- 042	Prince William County	Route 234 Operational Improvements	<u>হ</u>																29.19	8	240.43	3	
	Fairfax County	Seven Corners Ring Road Improvements	A # 太 が																66.61	1	114.19	4	
MAN- 003	City of Manassas	Roundabout at Route 28 and Sudley Rd	● ▲□太が																23.34	13	113.76	5	
VRE-017		VRE Backlick Road Station Improvements	<u> </u>																23.92	12	102.62	6	
ALX-032	City of Alexandria	South Van Dorn Street Bridge Enhancements	<b>□ A</b> <u>k</u> ≪															Note A	38.61	2	33.00	7	
ALX-033		Alexandria Metroway Enhancements	APA de																32.36	5	25.61	8	
CMP- 001	City of Manassas Park	Route 28-Centreville Road Corridor Improvements	₩ A																15.59	21	24.75	9	
	City of Fairfax	Old Lee Highway Multimodal Improvements	★如 AA															Note B	13.38	23	24.56	10	
ALX-029	City of Alexandria	Safety Improvements at High-Crash Intersections	Atto #⊒A?	ROW, CN															24.25	11	24.07	11	
PWC- 040		Route 234 and Sudley Manor Drive Interchange	事 太命																37.41	3	23.29	12	
PWC- 043	Prince William	The Landing at Prince William Transit Center																	20.27	17	17.86	13	
	County Loudoun County	Route 15 at Braddock Road Roundabout	# ★ が																15.86	20	16.34	14	
PWC- 044		Triangle Mobility Hub and First/Last Mile	<b>₽</b> & ∞																14.05	22	15.82	15	•
	County Arlington	Connection Improvements Shirlington Bus Station Expansion	<b>□</b> \$ 6%																18.54	18	14.52	16	
PWC-	County Prince William	Route 234 Bicycle and Pedestrian Facility Over I-	£ 6€0																4.36	24	13.59	17	
041 CFX-018	County City of Fairfax	Northfax Network Improvements: Northfax East-	<b>A</b> \$ ★ ♂o																32.54	4	13.46	18	N
LDN-029	Loudoun County	West Road Old Ox Road Widening - Shaw Road to Oakgrove	A Ade																20.49	16	11.22	19	,
FFX-136	Fairfax County	Braddock Road Multimodal Improvements	\$ <u>\$</u> \$60																				
		Phase II (Humphries Drive to Southampton Drive)																	16.45	19	8.35	20	
	Fairfax County	<u>Improvements</u>	▲ □□太命															Note B	30.96	7	6.26	21	N
		Sycolin Road Widening - Loudoun Center Place to Crosstrail Boulevard																	22.94	14	5.19	22	N
	Fairfax County	<u>66)</u>	A ⊋≵do															Note A	31.53	6	2.24	23	
ARL-023	Arlington County	CC2DCA Multimodal Connection (formerly known as CC2DCA Intermodal Connector)	in E⊆															Note B	24.99	10	0.96	24	



Project proposed to
add dedicated ROW
for future Bus Rapid
Transit services

All or some phases
of the project were

of the project were Note considered fully B funded with the previous NVTA allocation

## **Project Description Forms**



#### Northern Virginia Transportation Authority FY2024-2029 Six Year Program

CC2DCA Multimodal Connection (formerly known as CC2DCA Intermodal Connector)

Date Submitted: 07/26/2023

APPLICATION #: ARL-023

Crystal City to Ronald Reagan Washington National Airport Multimodal Connection

#### Project Description

The goal of the project is to create an intermodal connection designed to meet the needs of a broad range of pedestrians, bicyclists, and micro-mobility users of all ages and abilities between the core of Crystal City, the Mount Vernon Trail, and Ronald Reagan Washington National Airport (DCA). The Preferred Alternative would consist of a bridge extending from the future VRE Crystal City Station south entrance stair tower towards the northwest corner of the DCA Terminal 2 parking garage. The alignment and limits of disturbance of the Preferred Alternative is shown in Figure 4, attached. Access to Crystal Drive in Crystal City would be provided through the planned VRE stair tower, connecting bridge, and vertical circulation elements located at 2011 Crystal Drive. Access to the airport terminal would be determined at a later stage of design. The south stair tower connection would provide VRE and Amtrak passengers with direct access to CC2DCA, A link with the Mount Vernon Trail would be provided on the north side of the CC2DCA bridge. The Preferred Alternative is a girder style bridge that would connect to the east side of the south entrance of the future VRE Crystal City Station located at 2011 Crystal Drive.

Primary Mode(s)	Secondary Mode(s)
<b>600</b>	
Application Number	ARL-023
Primary TransAction ID Number	89
Submitting Jurisdiction/Agency	Arlington County
Location	2011 Crystal Drive, Arlington VA 22202 to Ronald Reagan Washington National Airport, Arlington, VA 22202
Requested NVTA Funds	\$21,100,000.00
NVTA Funds Approved	N/A
Previous NVTA Funds Received	\$18,000,000.00
Total Cost to Complete Project	\$57,200,000.00

The Preferred Alternative would span the rail corridor perpendicularly before crossing the George Washington Memorial Parkway at a slight angle. A specific alignment across DCA property was not defined as part of the Preferred Alternative. Instead, across DCA property, the Preferred Alternative defined a broad limit of disturbance (LOD) area covering the range of potential alignments that could avoid impacts to existing and planned infrastructure on DCA property. Arlington County, the Virginia Department of Transportation (VDOT), and the Metropolitian Washington Airports Authority (MWAA) will continue coordinating through the preliminary engineering phase of the study to determine a final alignment and eastern terminus for CC2DCA that avoids or minimizes, as much as possible, impacts to DCA parking and future roadway improvement projects. The Preferred Alternative was endorsed by the Arlington County Board on May 13, 2023.

#### **Project Location**



#### Project Milestones

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

Year of expected project completion: FY2030

#### Project Funding

Source	Study	Design/Engineering/ Environmental	ROW and Utilities	Construction	Asset Acquisition	Total
Total Cost	\$3,300,000	\$7,200,000	\$200,000	\$46,500,000	\$0	\$57,200,000
NVTA Funds Applied	\$0	\$0	\$0	\$21,100,000	\$0	\$21,100,000
Previous NVTA 70%		\$0	\$0	\$18,000,000		\$18,000,000
CMAQ		\$7,200,000		\$2,300,000		\$9,500,000
Local	\$3,300,000	\$0	\$200,000	\$5,100,000		\$8,600,000
Total Other	\$3,300,000	\$7,200,000	\$200,000	\$25,400,000	\$0	\$36,100,000
Gap	\$0	\$0	\$0	\$0	\$0	\$0

#### Project Analysis Highlights

Congestion Reduction Relative to Cost (CRRC) Rating	0.96
Congestion Reduction Relative to Cost (CRRC) Rank	24
TransAction Project Rating	24.99
TransAction Project Rank	10
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)	50.22%
Percentage of Total Project Cost Covered by Funds from Sources Other than NVTA	31.64%
Local Priority	1
Number of Supporting Resolutions (does not include resolution from applicant's own Board/Council)	0
Number of NVTA-Funded Project(s) Nearby	6
Regional Funds allocated to NVTA-Funded Project(s) Nearby	\$85,150,000



## 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 2024: Review evaluations with TAC, PCAC, PPC
- March 2024: Anticipated 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 (subject to NVTA approval)
- 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.

Goal	Objective	Performance Measure		Alignment with Core Values
Mobility: Enhance quality of life of Northern Virginians by improving performance of the multimodal transportation system	A. Reduce congestion and delay*	A1. Total Person-Hours of Delay in autos	10	¥
		A2. Total Person-Hours of Delay on Transit	10	<u> </u>
	B. Improve travel time reliability*	B1. Duration of Severe Congestion	10	<b>*</b> &
		B2. Transit person-miles in dedicated/priority ROW	10	4 %
Accessibility: Strengthen the region's economy by increasing access to jobs, employees, markets, and destinations for all communities	C. Improve access to jobs*	C1. Access to jobs by car, transit, and bike	10	¥,
		C2. Access to jobs by car, transit, and bike for EEA populations	10	47
	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	T 🚜 ૈ
Resiliency: Improve the transportation system's ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.	E. Improve safety and security of the multimodal transportation system	E1. Potential for safety and security improvements	10	\$
	F. Reduce transportation related emissions	F1. Vehicle Emissions	10	T 🚜
	rG. Maintain operations of the regional transportation system during extreme conditions*	G1. Transportation System Redundancy	5	4 &







- 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.



**Allocated Regional Revenue** 

50%

٠

Transportation benefit: within jurisdictional boundaries 50%



Share of Performance-based Transportation benefit

**Allocated Regional Revenue** 

50%



Transportation benefit: Experienced by residents 50%



Share of
Trip-based
Transportation benefit

Share of Regional Revenues from Member Localities

## **Thank You!**





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