



# NVTC RFP 24-05 Pre-Bid Conference

## *Consultant Services for Envision Route 7 Phase 4-2 Mobility Analysis Study*

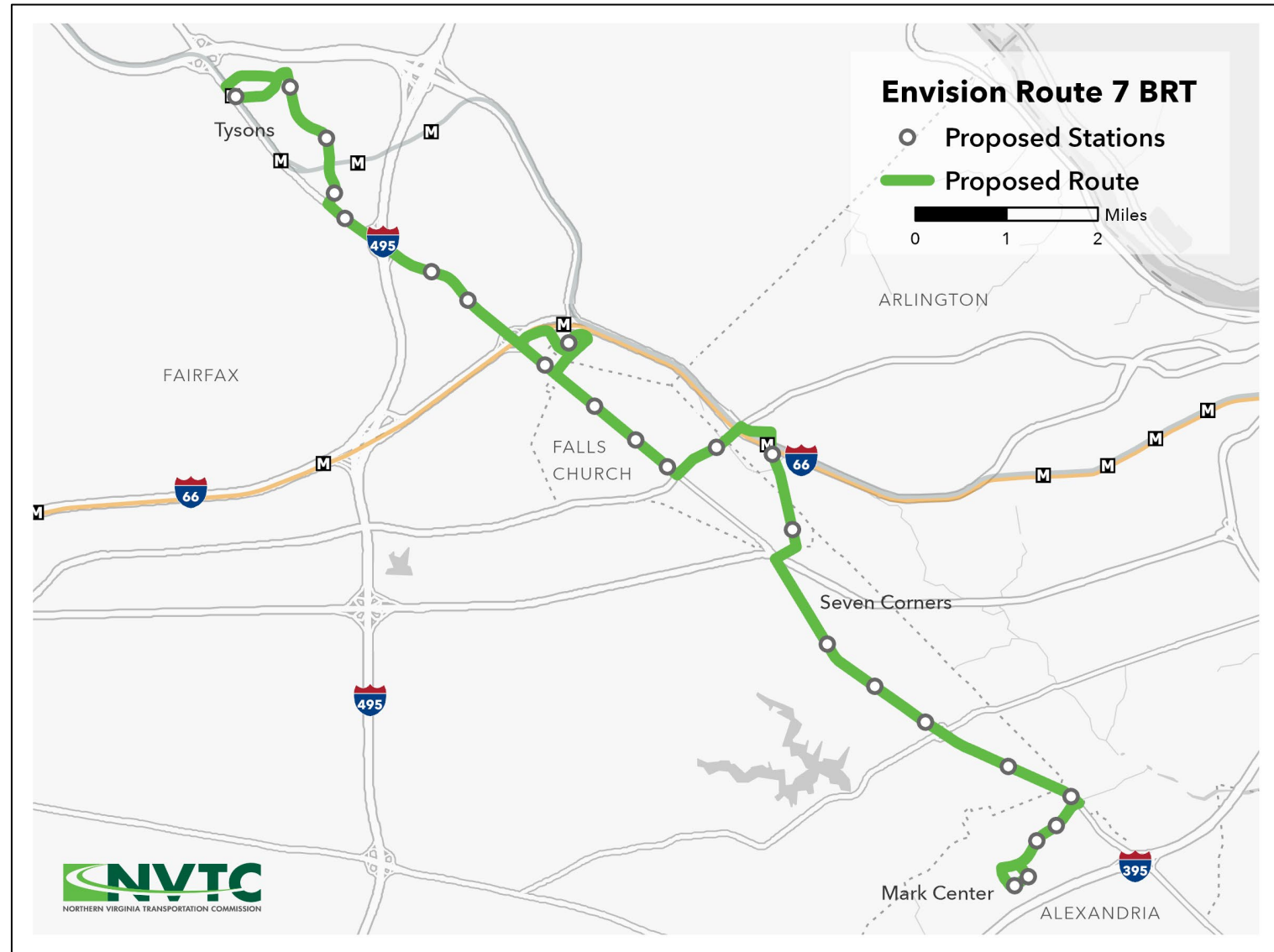
RFP available at [www.novatransit.org/procurement](http://www.novatransit.org/procurement)

January 6, 2025

**Vikram Sinha**  
Senior Program Manager

# Agenda

- 1) Intro
- 2) Background of Project
- 3) Overview of RFP
- 4) Description of 9 Tasks
- 5) Procurement Schedule
- 6) Written Q&A Process



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# Disclaimer

The information contained in this conference is for informational purposes only. In the event of a discrepancy between the information contained herein and the RFP documents, the RFP documents will take precedence.

*All times noted in this presentation are local, Eastern Standard Time*

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# BRT Planning: Phase 4-2

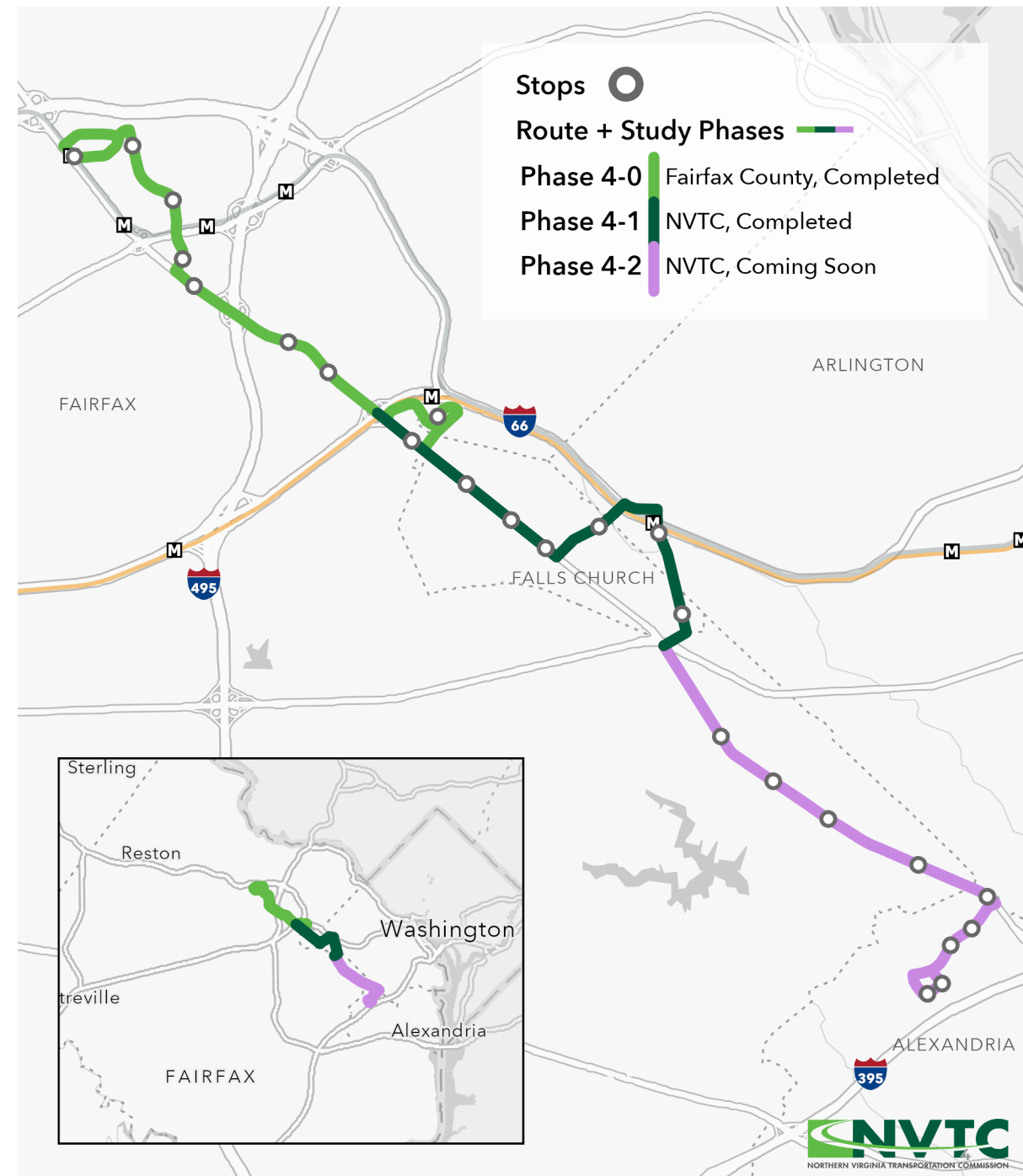
The Phase 4-2 Mobility Analysis Study will examine the segment from Seven Corners in Fairfax County to the Mark Center in Alexandria, as well as do a deeper dive on operational options in the City of Falls Church, completing the corridor's mobility analysis.

Phase 4-2 includes the following objectives:

- To determine the mobility benefits of BRT along this portion of Route 7;
- To gain a better appreciation of the traffic impacts of BRT along this portion of Route 7;
- To gain an understanding of the traffic operational issues with a BRT operating along this portion of Route 7;
- To facilitate the public understanding of how a BRT would operate along Route 7.
- Determine if BRT should be median running or curb-running in Fairfax County and if any portion can operate in mixed-traffic.

Furthermore, there are two additional tasks associated with the work:

- Falls Church Analysis: BAT vs. HOV, queue jump layout/cross-section
- Investigate BRT southern terminus in City of Alexandria



# Overview of RFP Tasks



Task 1	Project Management
Task 2	Data Collection
Task 3	Balance Traffic Volumes
Task 4	Develop Existing Traffic Simulation Model
Task 5	Future Years Traffic Simulation and Analysis
Task 6	Public Outreach
Task 7	Report
Task 8	Falls Church Restricted Traffic Lane Analysis and Queue Jump Geometric Analysis
Task 9	City of Alexandria BRT Terminus Analysis - Southern Towers vs. Mark Center

# Task 1

## Project Management

- The NVTC project manager will collaborate closely with the consultant team project manager to monitor the project scope, schedule and budget.
- To achieve this, the consultant team project manager will meet with the NVTC project manager at least every two weeks to discuss topics including but not limited to status of project and deliverables, invoicing, areas of concern, opportunities for efficiency, project budget, and other project and/or administrative tasks.
- The consultant will also attend a meeting with Fairfax County DOT and VDOT in the first 45 days of project initiation and come prepared to discuss the study and deliverables.
- Progress reports will be required monthly. The consultant shall brief the Project Technical Advisory Committee (PTAC) with Project Manager present after each milestone/deliverable and seek input. These meetings will consist of representatives from the jurisdictions and other stakeholders.
- The consultant shall take direction only from the NVTC Project Manager.

# Task 2

## Data Collection



- The data collection for this effort is extensive because of the nature of the traffic micro-simulation modeling.
- The additional network to be added to the current model is 4.5 miles in length and will require counts at a minimum of 29 intersections along with a minimum of four 24-hour vehicle counts locations.
- The consultant may suggest additional counts if it is thought that more count data will be required. Traffic counts should be collected according to VDOT TOSAM Section 6.2.1: Traffic Count Data Collection Best Practices, including vehicle classification.
- Travel Time and queue length will be collected during the morning and evening peak hours along Route 7 in the study area and will be used to calibrate the traffic model.

# Task 3

## Balance Existing Traffic Volumes

- The traffic count data should be reviewed and refined to present a set of balanced traffic movements throughout the entire length of the study corridor.
- The study corridor is defined as the area from Seven Corners to the Mark Center. The balance count data should represent the morning and evening peak periods as well as the peak hours.



# Task 4

## Develop Existing Traffic Simulation Model

- Using the Vissim files from previous phases, which will be provided by NVTC, the consultant should add on any additional roadway network required to adequately cover the 4.5 miles of the project corridor.
- BRT treatments to be modeled include both center running and curb running BRT within the Fairfax County/ Virginia Department of Transportation (VDOT) portion of the subject area.
- Since Envision Route 7 will utilize the West End Transitway within Alexandria, modeling within Alexandria is not requested.
- The calibration effort should be conducted focusing on the following elements per guidance from the VDOT Traffic Operations and Safety Analysis Manual (TOSAM)

# Task 5

## Future Years Traffic Simulation and Analysis

Determining the benefits and impact of the Envision Route 7 BRT for the community along the corridor is important for building consensus and support. For the BRT to be a success, the communities impacted by its construction and operation will need to understand the benefits it will bring. To better understand the operations and impacts, the traffic model will be used to determine a set of measure(s) of effectiveness.

This will include but is not limited to the following measures:

- Intersection Level of Service;
- Seconds of delay;
- Queue length at intersections noted in Travel Time and Queue Length section;
- Travel times and average speeds for automobiles and transit; and
- Person throughput, vehicle miles traveled, and person miles of travel.

Other measures, if feasible, include greenhouse gas reduction, transit ridership, and safety enhancements or other factors at suggestion of consultant.

# Task 5

## Report Example

Intersection Information				2045 Baseline AM						
No.	Intersection	Traffic Control	Approach	Movement	LOS	Max Queue (feet)	Volume (veh)	Delay (sec)		
49	Washington Street & Route 7	Signalized	EB	EBL	E	380	238	55.6		
				EBT	C	380	455	27.5		
				EBR	C	380	77	30.4		
			EB Approach				D			36.5
			WB	WBL	C	462	45	23.2		
				WBT	D	462	709	42.8		
				WBR	D	462	46	44.2		
			WB Approach				D			41.8
			NB	NBL	C	385	98	25.6		
				NBT	D	385	640	37.2		
				NBR	D	385	44	38.1		
			NB Approach				D			35.8
			SB	SBL	C	456	188	29.7		
				SBT	C	456	627	32.3		
SBR	C	456		61	32.9					
SB Approach				C			31.8			
Overall LOS				D			36.4			
50	Washington Street & Park Avenue	Signalized	EB	EBL	D	304	150	50.0		
				EBT	N/A	--	--	--		
				EBR	D	308	54	35.4		
			EB Approach				D			46.1
			WB	WBL	N/A	--	--	--		
				WBT	N/A	--	--	--		
				WBR	N/A	--	--	--		
			WB Approach				N/A			--
			NB	NBL	B	413	11	10.7		
				NBT	A	413	912	7.1		
				NBR	N/A	--	--	--		
			NB Approach				A			7.1
			SB	SBL	N/A	--	--	--		
				SBT	B	430	822	16.5		
SBR	B	443		105	15.4					
SB Approach				B			16.4			
Overall LOS				B			15.1			

# Task 6

## Public Outreach

- The objective of the outreach effort will be to engage decision-makers, stakeholders, and the public to educate and inform them of the features and benefits of this type of premium transit service and obtain their feedback on the project. An additional objective of the outreach task is to create momentum for the project by demonstrating the benefits in a way that is easy to understand and comprehend.
- The consultant shall develop and maintain a comprehensive plan and schedule for community relations and outreach. The consultant shall coordinate meeting logistics, draft notices, conduct presentations and document public meetings as requested.
- In accordance with the work program, the consultant will support the development of information for consumption by the public and stakeholders.
- Public outreach will require community conversation in multiple languages; therefore, translation services for the most spoken languages will be required (Spanish plus additional languages as needed) for both verbal and written communication.
- Metrics of effectiveness include number of participants engaged, number of staff attending, engagement opportunities attended, along with a summary of the input received.

# Task 7

## Report



- A final report will be written that focuses on bus priority options for the Fairfax County project area. It should be a narrative and visual description of the traffic impacts and mobility benefits of the Envision Route 7 project on the corridor. The consultant shall take all the technical memorandum and create a final document based on these memoranda.
- The report should include both text as well as easily understandable tables, visuals, graphs, etc. to explain the findings and an Executive summary.
- The selected consultant team should plan for up to two iterations of the report between the draft and final version. NVTC will design and produce a visually compelling front and back cover.

# Task 8

## Falls Church Restricted Traffic Lane Analysis and Queue Jump Geometric Analysis



- As a follow-up task to Phase 4-1, the consultant will determine the benefits and impacts of a high-occupancy vehicle (HOV) lane versus dedicated bus lanes within Falls Church.
- The analysis will build on Phase 4-1 analysis by showing impacts on travel time through the jurisdiction for each restricted traffic lane treatment.
- Additionally, an analysis of the feasibility of a queue jump at Broad Street and N. Washington Street will be undertaken to further a recommendation from the Phase 4-1 report to allow the jurisdiction to choose a bus priority treatment to benefit the project corridor.
- Deliverable is a memo that will serve as a decision document for Falls Church that outlines advantages and disadvantages of restricted traffic lanes and geometric analysis. The selected consultant team should plan for up to two iterations of the memo between the draft and final version.
- Public engagement will not occur as part of this task.

# Task 9

## City of Alexandria BRT Terminus Analysis - Southern Towers vs. Mark Center

- Using information collected from the Data Collection and Public Outreach Tasks, the consultant will analyze ridership, demand, and community feedback to suggest a terminus for the Envision Route 7 BRT corridor.
- The consultant will be asked to assist NVTC and the City of Alexandria in the public outreach for this task.
- Deliverable is a memo that will serve as a decision document for Alexandria and the potential operator that outlines advantages and disadvantages of Mark Center versus Southern Towers as a terminus for Envision Route 7. The report should include both text as well as easily understandable tables, visuals, graphs, etc. to explain the findings and an Executive summary.

# Procurement Schedule (Section B of RFP)



## Date

## Activity

December 16, 2024

Issue RFP

January 6, 2025, 1:00 PM

Pre-proposal Conference

January 13, 2025, 12:00 PM

Submission of Written Questions

January 17, 2025

Answers to Material Questions Posted

January 31, 2025, 5:00 PM

Proposal Due Date

February 2025

Interviews (optional)

April 2025

NVTC notifies top firm of intent to recommend contract award

April 2025

Notice of Award

April 2025

Contract Signed and Notice to Proceed

September 2026

Project Completion



# Written Q&A Process (Section B of RFP)



Questions must be submitted to Scott Kalkwarf by January 13, 2025, 12:00 PM

[scottkalkwarf@novatransit.org](mailto:scottkalkwarf@novatransit.org)

NVTC will post a written response by January 17, 2025 on our Procurement webpage

<http://www.novatransit.org/procurement>

## Summary of Pre-Proposal Conference

A summary of the conference, including questions and answers provided during the virtual conference, will be posted to the NVTC procurement webpage.

**RFP available at: [www.novatransit.org/procurement](http://www.novatransit.org/procurement)**

# Thank You

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Envision Route 7*



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# Questions?

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# Appendix

# Today: Route 7 has thriving Metrobus service

## Envision Route 7 Corridor:

- 14-mile project corridor in four Jurisdictions with varied roadway and urban treatments
- Serves Equity Emphasis Areas
- \$518M in capital project funding that will support Route 7 BRT and improve bus operations

## Envision Route 7 BRT Delivers:

- High-Frequency, high-capacity service
- Enhanced bus stops and boarding islands

## Metrobus 28A:

- 12-minute service from 8am to 8pm,
- Strong Ridership
- Connects to Four Metrorail Stations

