Fairfax County Parkway Widening -Southern Segment

Initial Financial Plan

September 29, 2023

State Project #: 0286-029-489; P101, R201, C501, B624, B625, B627, B629, D621
UPC Number: 122982
Financial Plan Data Date: June 30, 2023

Table of Contents

1. Project Description 3
2. Schedule 4
Project Schedule Overview 5
3. Project Cost 5
Project Cost by Phase 5
4. Project Funds 5
Summary of Project Funding by Source 6
5. Cash flow 7
Cash Flow Analysis 7
6. P3 Assessment 7
7. Risk and Response Strategies 7
8. Annual update cycle 9

1. PROJECT DESCRIPTION

Fairfax County Parkway Southern Segment (FCPSS) numbered State Route 286 (SR 286, formerly SR 7100) serves as a major route in Fairfax County with a mix of interchanges and signalized and unsignalized intersections. The project location in Fairfax County primarily consists of single-family residential development. This project will be completed via Design-Build delivery method.

The purpose of this project is to widen Fairfax County Parkway from four lanes to six lanes between Nomes Court and the Route 123 interchange. Widening from four lanes to six lanes will help relieve congestion during peak hours, improve air quality, and improve operations and safety. The project also includes Shared Use Paths (SUPs) and does not preclude future High Occupancy Vehicle (HOV) additions or conversion.

Fairfax County Parkway is a highly congested corridor and currently serves on average about 78,000 vehicles a day. The posted speed limit is 50 mph. Widening will be accomplished by adding one lane in each side of the existing roadway, generally in the median.

The existing road consists of four 12-foot lanes (asphalt) separated by a 42-foot wide graded / grass median. The widening will occur in the median, and when completed the road will consist of six 12-foot lanes (asphalt) with an 18-foot wide graded / grass median separating opposing traffic. A combination of cable guardrail (typical), conventional strong-post guardrail, and concrete barrier will be placed in the median to help ensure a positive separation.

A project website (https://www.virginiadot.org/projects/northernvirginia/ffx_co_pkwy_widening.asp) has been established, which includes project background, preliminary design exhibits, information presented at the Public Information Meeting and Design Public Hearings in 2016 (including the Environmental Assessment documentation/technical reports), and contact information for the project team. Right of Way acquisition for the project will be limited to strip takes, and no residential or commercial relocations are required.

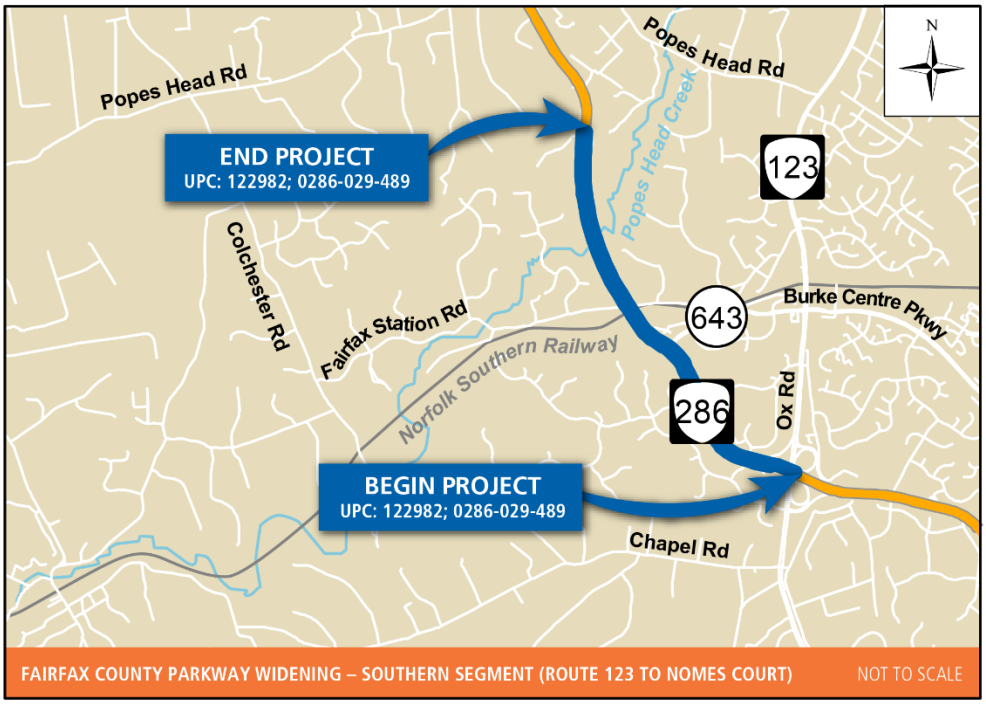
Traffic will be maintained on the Parkway during construction, and provisions are included in the construction contract for coordination between the contractor constructing this project and the contractor responsible for the construction of the proposed adjacent projects:

1. Fairfax County Parkway Widening – Northern Segment:
   Location: North of Fairfax County Parkway Southern Segment Project
   Project No.: 0286-029-259, P101, R201, C501, B628, B630, B631, B632, D605 (UPC # 107937)
   Status: Design-Bid-Build contract anticipated to be awarded in June 2024
   VDOT Contact: Chan Basnayake (703) 259-2947, chan.basnayake@vdot.virginia.gov

2. Popes Head Road Interchange:
   Location: North of Fairfax County Parkway Southern Segment Project
   Project No.: 0286-029-365, P101, R201, C501, B619, B620, D616 (UPC # 111725)
   Status: Design-Bid-Build contract anticipated to be awarded in January 2024
   VDOT Contact: Chan Basnayake (703) 259-2947, chan.basnayake@vdot.virginia.gov

3. Route 29 Widening:
   Location: North of Fairfax County Parkway Southern Segment Project
   Project No.: 0029-029-350, P101, R201 (UPC #110329)
   Status: Design-Build contract was awarded in June 2022
   VDOT Contact: Sanjeev Suri (703) 259-2232, sanjeev.suri@vdot.virginia.gov

FIGURE 1: FAIRFAX COUNTY PARKWAY SOUTHERN SEGMENT LOCATION MAP:



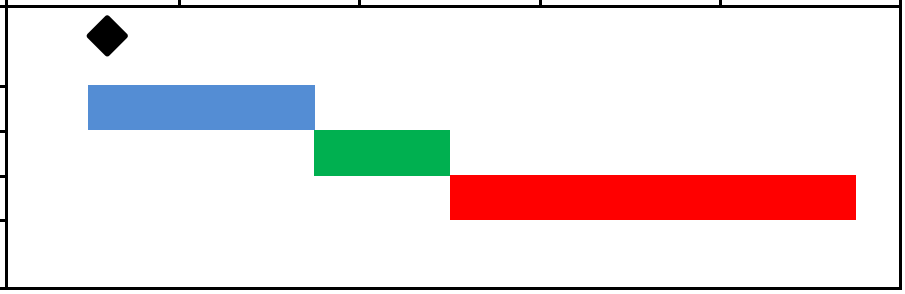
2. SCHEDULE

As noted above, this project is being advanced via Design-Build delivery method. A Request for Qualifications (RFQ) was released on June 29, 2023. The Request for Proposals (RFP) is anticipated to be released on October 12, 2023. Project Award is anticipated in April 2024.

The Design-Builder will start final design soon after Award in April 2024. Right of way acquisition and utility relocation are anticipated to begin October 2024, with construction activities to begin approximately March 2025. Construction completion and VDOT acceptance is anticipated August 2027.

FIGURE 2: PROJECT SCHEDULE (BY YEAR)

Task		Start	Finish
PE Authorization		Jul-23	Jul-23
UPC# 122982	PE- Design	Jul-23	Oct-24
	RW/Utilities	Oct-24	Mar-25
	CN	Mar-25	Aug-27
Construction Complete		Aug-27	



Construction Final Completion: 8/2027

3. PROJECT COST

The total project cost is $123,384,976. The project cost by phase can be found in the table below, in year-of-expenditure dollars. The estimate includes all costs necessary to perform the preliminary engineering (including the cost of NEPA and other environmental documentation), right-of-way, environmental mitigation, construction, project management, public outreach, and costs of external third-party work, including utility relocations. The construction cost estimate was prepared using VDOT's PreCon estimating system and includes necessary contingency and construction engineering and inspection. The preliminary engineering phase is nearing completion for purposes of charges (after award, all charges are made to the right-of-way and/or construction phases), and expenditures are approaching the preliminary engineering phase estimate. The right-of-way phase was estimated using VDOT's PCES system, with contingency included.

TABLE 1: PROJECT COST BY PHASE*

UPC	Phase	Current Estimate	Current Expenditures (June 30, 2023)	Balance to Complete
122982	PE	$ 350,000	$ -	$ 350,000
	RW	$ 4,872,300	$ -	$ 4,872,300
	CN	$118,162,676	$ -	$ 118,162,676
	Total	$123,384,976	$ -	$ 123,384,976

* As of September 18, 2023, there is a pending cost estimate increase of $5.39M, increasing the cost estimate from this Initial Financial Plan from $123,384,976 to $128,770,360. The cost estimate increase is due to design updates, inflation, and the higher cost of construction since the data date of June 30, 2023.

4. PROJECT FUNDS

Project funding is demonstrated in the National Capital Region Transportation Board's (TPB) Long Range Transportation Plan (LRTP) and Transportation Improvement Program (TIP), as well as the Commonwealth's Statewide Transportation Program (STIP). UPC 122982 (TIP ID T13567) was included in the TPB's FY23-26 TIP adopted June 15, 2022.

TABLE 2: SUMMARY OF PROJECT AUTHORIZATIONS

Project Authorization Summary as of June 30, 2023						
Federal Project	**UPC(s)**	**Phase**	**Date Authorized by FHWA**	**Cost**	**Federal Funds**	**Advance Construction**
	122982	PE		$0	$0	$0
		RW		$0	$0	$0
		CN		$0	$0	$0
Total				**$0**	**$0**	**$0**

This project is currently funded with Regional Surface Transportation Program (RSTP), Fairfax County Local Funds and Northern Virginia Transportation Authority Funds. This project has been developed utilizing the federal process.

TABLE 3: SUMMARY OF PROJECT FUNDING BY SOURCE**
(Amounts in 000's)

	Funding Source	**Previous Thru FY 23**	**FY 24**	**FY 25**	**FY 26**	**FY 27**	**FY 28**	**FY 29**	**Total ***
UPC # 122982	**FEDERAL**								
	RSTP: MAP 21: Northern Virginia	$0	$2,907	$800	$0	$6,008	$0	$0	$9,715
	STATE								
	MAP21 RSTP: RSTP Match	$0	$727	$200	$0	$1,502	$0	$0	$2,429
	LOCAL								
	Accounts Receivable: A/R - Access	$0	$3,241	$0	$0	$0	$0	$0	$3,241
	Accounts Receivable: NVTA A/R Funds	$0	$0	$0	$0	$108,000	$0	$0	$108,000
Total		**$0**	**$6,875**	**$1,000**	**$0**	**$115,510**	**$0**	**$0**	**$123,385**

** As of September 18, 2023, there is a pending cost estimate increase of $5.39M as outlined in Section 3. Fairfax County is committed to providing additional funds to keep the project fully funded for this and any other future cost increases.

5. CASH FLOW

An annual schedule of cash revenues and expenditures, through project completion, can be found in the table below. The initial estimated cost computations relay deficits in fiscal years 2025 and 2026. The deficit in cash flow will be addressed in upcoming SYIP's where funding may be adjusted in the outer years against actual and projected cumulative expenditures.

TABLE 4: CASH FLOW ANALYSIS***
(Amounts in 000's)

Expenditures		Previous thru FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Total
UPC # 122982	PE	$0	$340	$10	$0	$0	$0	$350
	Right of Way	$0	$0	$500	$2,200	$1,700	$472	$4,872
	Construction	$0	$1,144	$16,912	$43,731	$46,034	$10,342	$118,163
Cumulative Expenditures		$0	$1,484	$18,906	$64,837	$112,571	$123,385	$123,385
Total Annual Allocations		$0	$6,875	$1,000	$0	$115,510	$0	$123,385
Cumulative Allocations		$0	$6,875	$7,875	$7,875	$123,385	$123,385	$123,385
Cash Flow Per Year		$0	$5,391	($11,031)	($56,962)	$10,814	$0	$0

*** As of September 18, 2023, there is a pending cost estimate increase of $5.39M as outlined in Section 3. As outlined in Section 4, Fairfax County is committed to providing additional funds to keep the project fully funded for this and any other future cost increases and the cash flow table will show all changes in the annual update next year.

6. P3 ASSESSMENT

A P3 delivery was not pursued for this project due to the relatively lower level of project complexity. Design-Build delivery, however, is being utilized for project delivery in order to accelerate project completion to meet public expectation.

7. RISK AND RESPONSE STRATEGIES

A risk assessment workshop has been conducted and associated mitigation strategies have been developed to address the significant risks identified for this project. The most significant risk categories are as follows:

1. Technical Issues

a) Widening over existing buttress (previous slope failure) - The proposed widening of the Fairfax County Parkway in the northbound direction will take place over an area where a slope failure occurred in the past. The previous slope failure occurred in the vicinity of Norfolk Southern Railroad (NSRR) bridge just north of the Burke Center Parkway Intersection. This past slope failure area was repaired by installing a rock buttress to stabilize the slope.

Mitigation Strategy – The RFP will clearly identify the area of the past slope failure including the location of the existing rock buttress. The Design-Build team will be required to account for this area during design and construction of the Project. VDOT will obtain borings and perform a preliminary geotechnical investigation in the vicinity of the area of the past slope failure and incorporate the results in the RFP. VDOT will also include a feasible concept design for the proposed roadway construction in the RFP.

b) Unsuitable Materials used in toes of embankment fills – There may be unsuitable material located within the side slopes of the embankment fills throughout the existing Fairfax County Parkway corridor. When the original construction occurred, design standards allowed unsuitable materials to be placed outside of the "roadway prism" (i.e. outside the vertical projection of the edge of pavement).

Mitigation Strategy – VDOT will research any available past project documentation, obtain borings and perform a preliminary geotechnical investigation and laboratory testing to clearly define the limits of unsuitable materials. The results will be incorporated into the RFP.

c) Coordination with both Fairfax County Parkway corridor projects (Segment II (North) and Popes Head Interchange) - Two adjacent projects which will be under construction on the Fairfax County Parkway corridor could complicate maintenance of traffic at the tie-ins between the projects and various phases of construction.

Mitigation Strategy – VDOT will include specific requirements in RFP Technical Requirements for MOT coordination with the adjacent projects that will be under construction during the same time period.

d) Maintenance of Traffic (MOT) in highly congested corridor) - The Fairfax County Parkway corridor is a heavily travelled and highly congested corridor. If not carefully planned and coordinated, work zone incidents could cause safety issues and construction delays leading to increased cost and schedule impacts.

Mitigation Strategy – VDOT will include in RFP Technical Requirements that two lanes of traffic in each direction (existing condition) will be maintained throughout each phase of construction, except for allowable off-peak lane closures. The RFP will also include requirements for the Design-Builder to prepare a Transportation Management Plan (TMP) and Incident Management Plan (IMP) for all phases of construction to help ensure the safety of the traveling public.

2. External Factors

e) Inflation / cost escalation - Offerors' Price Proposals may be higher than VDOT’s estimate due to a higher than anticipated assumption of inflation cost and market conditions.

Mitigation Strategy – VDOT will utilize tools from the VDOT Cost Estimating Office to prepare the cost estimate for the project, including but not limited to utilizing Project Management Guidance document PMO 3.7 dated March 29, 2023. VDOT will keep the Cost Estimating Workbook (CEWB) updated up until receipt of Price Proposals from Offerors to account for any changes in market conditions. If necessary, VDOT can take appropriate action for any unforeseen increases in the estimate.

8. ANNUAL UPDATE CYCLE

The submission date of the Initial Financial Plan is September 29, 2023. The first annual update will be submitted by September 30, 2024 and will be based on a "data as of" date of June 30, 2024. Future annual updates will be submitted by September 30 of that year, with a "data as of" date of June 30 of that year.