

I-64 Hampton Roads Express Lanes (HREL) Segment 1A

Initial Financial Plan

April 30, 2022

State Project Number 0064-122-470 UPC 117840/119637/120944

Table of Contents

1.	Project Description	3
	Schedule	
	Project Schedule Overview	
3.	Project Cost	
	Project Cost by Phase	
4.	Project Funds	7
	Financing issues	
	Cash flow	
7.	P3 Assessment	9
	Risk and Response strategies	
	Annual update cycle	

1. PROJECT DESCRIPTION

This project is located in the City of Norfolk and is part of the Hampton Roads Express Lanes (HREL) Network. The scope includes converting the inside shoulder along I-64 to a part time Express managed lane. The existing eastbound (EB) and westbound (WB) general purpose lanes from approximately 0.15 miles east of Patrol Road to the I-564 interchange a general purpose lane will be added in the eastbound direction and the westbound direction will be widened to meet the Hampton Roads Bridge Tunnel (HRBT) Widening Project and the remaining sections will remain as is with three lanes in each direction. This project is approximately 2.4 miles in length. It is from approximately 0.15 miles east of Patrol Road bridge (end WB full roadway section for the HRBT Widening project) to approximately 0.667 miles east of Tidewater Drive. There will be some widening in spot locations to maintain a minimum shoulder width in both directions.

This section of interstate includes eight mainline bridges. The EB and WB bridges over Tidewater Drive will be widened and rehabilitated. The EB bridges over Granby Street, I-564, and Little Creek Road will be widened and rehabilitated. The WB bridges over Granby Street, Little Creek Road and the I-64 Reversible Bridge will be rehabilitated.

The widening is expected to occur mostly to the inside for the section of roadway between Patrol Road and I-564 and outside of the existing interstate from I-564 to past Tidewater Drive. This limits the amount of right of way required to construct the project and avoids impacts to existing interchanges. Interstate ramps will be realigned as needed. It is anticipated that right of way and/or easements will be acquired along the EB directions with approximately 3 parcels impacted. The number of impacted parcels is pending on final design of drainage ditches, roadway embankments, retaining walls, noise barrier wall, and potential utility relocations.

164 HREL Segment 1A Location Map



In accordance with the requirements of the National Environmental Policy Act (NEPA) and other Federal and state laws and regulations, environmental studies assessing the project's potential impacts have been documented in a Categorical Exclusion (CE) for this project. NEPA Document Concurrence was received on February 24, 2021. The Federal Highway Administration (FHWA) provided final CE approval on December 20, 2022.

A project website has been established at the following location: http://www.64expresslanes.org/under-design/norfolk.asp

This website provides a project summary, cost, schedule overview, location map and a link to the Request for Qualifications (RFQ) website.

2. SCHEDULE

The RFQ was advertised on January 20, 2022. The Request for Proposals (RFP) will be released to the three short-listed teams on April 27, 2022. The anticipated notice to proceed date for the design-build contract is November 19, 2022. Based on a preliminary schedule, the remaining design efforts are estimated to take place between November 2022 and November 2024. Remaining right of way acquisitions and utility relocations are anticipated to occur between November 2022 and November 2024. Construction activities are anticipated to begin in November 2022. The final completion date is December 19, 2025, or the Offeror's proposed early completion date.

Below is a listing of milestone dates for this design-build contract:

RFP Release	April 27, 2022
Technical Proposals Due	August 10, 2022
Price Proposals Due	September 20, 2022
Open Price Proposals	September 20, 2022
Notice of Intent to Award	September 23, 2022
Commonwealth of Transportation Board (CTB) Award	October 19, 2022
Design Build Contract Execution	November 16, 2022
Notice to Proceed	November 19, 2022
Final Project Acceptance and Final Payment	December 19, 2025

Below is an approximate anticipated schedule for the selected design-build team:

PROJECT SCHEDULE OVERVIEW Finish 2022 Start 2023 2024 2025 2026 Task Notice to Proceed 11/22 11/22 UPC 117840 11/22 11/24 PE-Design UPC 119637 and UPC 120944 PE-Design 11/22 11/24 RW/Utilities 11/24 11/22 Construction 11/22 12/25 Construction Complete 12/25 12/25

3. PROJECT COST

Narrative of Project Cost

The current total project estimate is \$170,172,514. The project will be completed as a Design-Build project. The estimates, as well as current expenditures for Preliminary Engineering (PE), Right of Way (RW) and Construction (CN) costs are summarized in the table below. The project will be funded by the Hampton Roads Transportation Accountability Commission (HRTAC) using Hampton Roads Transportation Funds (HRTF). Authorization to complete advanced PE work (Phase 1 PE) to complete tasks necessary to include this project in the 2045 Long Range Transportation Plan (LRTP), the Transportation Improvement Program (TIP)/Statewide Transportation Program (STIP) and to advance this design-build project was approved by HRTAC per the Standard Project Agreement between VDOT and HRTAC executed on April 1, 2021. PE expenditures as of

January 31, 2022 are \$1,981,680. Work to execute a Standard Project Agreement between VDOT and HRTAC for the remaining PE, RW and CN activities is currently underway. In connection with the work being done for the Express Lanes, VDOT will procure on a concurrent basis from the contractor(s) needed bridge maintenance work on numerous bridges within the HREL Segment 1A corridor under UPC 120944. This work will be funded through the VDOT Highway Maintenance Program.

PROJECT COST BY PHASE

			Expenditures as of	
UPC	Phase	Estimate/Budget	1/31/22	Balance to Complete
*117840	PE (Phase 1 PE)	\$1,981,680	\$1,981,680	\$0
117840	SUBTOTAL	\$1,981,680	\$1,981,680	\$0
	PE	\$2,918,320	\$0	\$2,918,320
119637	RW	\$8,960,755	\$0	\$8,960,755
119037	CN	\$151,011,759	\$0	\$151,011,759
	SUBTOTAL	\$162,890,834	\$0	\$162,890,834
120944	CN	\$5,300,000	\$0	\$5,300,000
120944	SUBTOTAL	\$5,300,000	\$0	\$5,300,000
+ +	PE	\$4,900,000	\$1,981,680	\$2,918,320
37 944	RW	\$8,960,755	\$0	\$8,960,755
117840 · 119637 · 120944	CN	\$156,311,759	\$0	\$156,311,759
A A T	TOTAL	\$170,172,514	\$1,981,680	\$168,190,834

*NOTE: HRTAC allocated a total of \$5,621,500 for UPC 117840 (Segment 1 - Phase 1 PE for Segments 1A and 1B). Only \$1,981,680 is needed for Segment 1A, remainder needed for Segment 1B.

Cost Estimating Methodology

Work elements associated with the HREL Segment 1A project can be summarized in two components: (1) PE Advanced Activities (Phase 1 PE) and (2) the full build Remaining PE, full RW and CN.

PE Advanced Activities (Phase 1 PE) UPC 117840: The work associated with this component is to complete tasks necessary to include this project in the 2045 Long Range Transportation Program (LRTP), the Transportation Improvement Program (TIP)/Statewide Transportation Improvement Program (STIP) and to advance this design-build project to a Public Hearing. The Phase 1 PE tasks include field investigation costs for survey, aerial mapping, subsurface utility designation, bridge investigation, traffic studies, scoping plan development, risk analysis & matrix, pavement design, noise wall investigations and schedule and estimate refinements.

Full Build Remaining Activities (Remaining PE, Full RW and CN) UPC 119637: This work includes the remaining activities to develop design plans and construction documents. The right of way phase estimate includes the estimated cost of right of way and

easements acquisition, miscellaneous fees associated with real estate closings as part of the project and oversight of the right of way acquisition, payment, and condemnation process. The right of way phase also includes utility design and public utility relocation fees. The project construction cost estimate was developed through VDOT's Preconstruction (PRECON) estimate program and includes all roadway, bridge, drainage, traffic, maintenance of traffic, lighting, traffic control devices, traffic management systems, landscape and other items.

VDOT Funded Bridge Maintenance Work: VDOT has identified needed maintenance work on numerous bridges within the HREL Project corridor. This bridge maintenance work is VDOT's sole responsibility, not HRTAC's. VDOT has identified separate funding through the VDOT Highway Maintenance Program to fully fund the recommended bridge improvements. To eliminate any disruptions to the express lane tolling network, VDOT intends to add the work to this contract.

The work intended for completion under the VDOT Highway Maintenance Program consists of the maintenance work on existing bridges within the HREL Segment 1A Project corridor, which is primarily preventative maintenance and includes joint elimination and rigid overlays, in order to preserve structures, extend service life, and avoid disruption to managed lanes for future maintenance activities. The structures are:

- Federal ID 20894 I-64W over Little Creek Road
- Federal ID 20904 I-64W over US 460 Granby Street
- Federal ID 23214 I-64 HOV over I-564 and SR 165

4. PROJECT FUNDS

The project will be funded through Hampton Roads Transportation Funds (HRTF) and VDOT Highway Maintenance Funds (for certain work). The current total project cost estimate is \$170,172,514. On April 1, 2021, the Hampton Roads Transportation Accountability Commission (HRTAC) executed a Standard Project Agreement for Funding and Administration with VDOT that authorized \$5,621,500 of funding for Phase 1 PE project costs for Segment 1A and Segment 1B. Although it appears the Phase 1 PE project (UPC 117840) is over-expended, the excess expenditures will be transferred to the appropriate Segment 1A or 1B UPC.

The remaining PE, RW and CN funding under UPC 119637 is anticipated to be funded entirely from HRTAC. The VDOT-HRTAC resolution and a Standard Project Agreement to fund the remaining PE, Right of Way and Construction phases of the project for \$162,890,834 is planned to be executed in May 2022.

In addition, the VDOT Highway Maintenance Program budget will fund the bridge maintenance work associated with the structures listed in Section 3. This bridge

maintenance work is anticipated to cost \$5,300,000 and will be funded through the VDOT Highway Maintenance Program.

The below table summarizes the funding allocated to the HREL 1A project improvements by fund source and year.

SUMMARY OF PROJECT FUNDING BY SOURCE AND YEAR								
Funding Source		Previous	FY 2023	FY 2023 FY 2024	FY 2025	FY 2026	FY 2027	TOTAL
UPC	Funding	Previous	F1 2023	F1 2024	F1 2025	F1 2026	F1 2027	IOIAL
*117840	HRTAC (NPRH22)	\$1,981,680	\$0	\$0	\$0	\$0	\$0	\$1,981,680
119637	HRTAC (NPRH22)	\$3,942,541	\$36,506,327	\$48,976,788	\$48,976,788	\$24,488,390	\$0	\$162,890,834
120944	HSM (MNS000)	\$0	\$1,002,701	\$1,718,916	\$1,718,916	\$859,467	\$0	\$5,300,000
GRAND TOTAL		\$5,924,221	\$37,509,028	\$50,695,704	\$50,695,704	\$25,347,857	\$0	\$170,172,514

*NOTE: HRTAC allocated a total of \$5,621,500 for UPC 117840 (Segment 1 - Phase 1 PE for Segments 1A and 1B). Only \$1,981,680 is needed for Segment 1A, remainder needed for Segment 1B.

Federal Fund Sources and Special Funding Techniques

The Hampton Roads Transportation Planning Organization (HRTPO) has included all phases of this project in its Long Range Transportation Plan. The PE Phase 1 phase of this project is included in HRTPO's TIP as well as the Commonwealth's FFY21-24 STIP to include \$5,621,500 of HRTF funding authorized by HRTAC.

VDOT is working with the HRTPO to include the remaining PE, RW and CN in the HRTPO's TIP and the Commonwealths STIP which should be finalized in May 2022 which is anticipated to be funded entirely with HRTF funds.

5. FINANCING ISSUES

Work to execute a Standard Project Agreement between VDOT and HRTAC to fund the remaining PE, Right of Way and Construction phases of the project for \$162,890,834 is planned to be executed in May 2022. No financing issues are anticipated at this time.

6. CASH FLOW

The HREL Segment 1A project annual cash expenditures are based on the project schedule developed by VDOT and the design team. The below table summarizes the cash flow analysis for the project, and it will be updated annually as expenditures are incurred. It shows the comparison of previously expended and projected expenditures by fiscal year by phase against the total annual allocations.

CASH FLOW ANALYSIS (IN THOUSANDS)								
Expe	nditures	Previous	FY 2023	FY 2024	FY 2025	FY 2026	TOTAL	
UPC	Phase	Previous	F1 2023	F1 2024	F1 2025	F1 2026	TOTAL	
*117840	PE	\$1,982	\$0	\$0	\$0	\$0	\$1,982	
*11/840	Total	\$1,982	\$0	\$0	\$0	\$0	\$1,982	
	PE	\$1,702	\$1,216	\$0	\$0	\$0	\$2,918	
119637	RW	\$2,240	\$6,721	\$0	\$0	\$0	\$8,961	
119037	CN	\$0	\$28,570	\$48,977	\$48,977	\$24,488	\$151,012	
	Total	\$3,942	\$36,507	\$48,977	\$48,977	\$24,488	\$162,891	
	CN	\$0	\$1,003	\$1,719	\$1,719	\$859	\$5,300	
	Total	\$0	\$1,003	\$1,719	\$1,719	\$859	\$5,300	
Cun	nulative							
Expenditures		\$5,924	\$43,434	\$94,130	\$144,826	\$170,173	\$170,173	
Total Annual								
Allocations		\$5,924	\$37,510	\$50,696	\$50,696	\$25,347	\$170,173	
Cumulative								
Allocations		\$5,924	\$43,434	\$94,130	\$144,826	\$170,173	\$170,173	
Cash Flow per Year		\$0	\$0	\$0	\$0	\$0	\$0	

*NOTE: HRTAC allocated a total of \$5,621,500 for UPC 117840 (Segment 1 - Phase 1 PE for Segments 1A and 1B). Only \$1,981,680 is needed for Segment 1A, remainder needed for Segment 1B.

Note: FY2023 through FY2026 figures in chart are showing estimated expenditures.

7. P3 ASSESSMENT

The project was evaluated for various delivery methods including alternative delivery methods. A Finding of Public Interest was signed by the Commissioner on January 3, 2022 determining that a design-build delivery for the proposed project will best serve the public interest. The project was identified as one of the Hampton Roads Regional Priority Project by HRTAC and HRTPO in March 2021. The HRTPO and the HRTAC have been committed to seek a plan to fund the project through HRTF for work under UPC 119637.

8. RISK AND RESPONSE STRATEGIES

A risk assessment has been performed and associated risk mitigation strategies have been developed to address the risk items identified for this project. The most significant risks are noted below.

A. FHWA Approval of Design Exceptions: Due to the existing and proposed geometry, multiple Design Exceptions are required, which require approval by FHWA. Some of the more critical Design Exceptions include substandard stopping sight distance due to the vertical and horizontal geometry as well as substandard proposed shoulder widths along both the roadway and bridge within the entire Project Limit. Should these design exceptions not be approved by FHWA, the risk of significant impacts to the project scope, schedule, cost and right of way footprint will be high.

- Mitigation Strategy: Design Exceptions are currently being coordinated with VDOT District and Central Offices. VDOT will coordinate with FHWA to obtain their input/concerns prior to an official approval submittal by VDOT.
- B. Constructability of the Tidewater Drive Bridges: Phased construction of the Tidewater Drive bridges will be very constrained. The Design Builder will be required to maintain three lanes of traffic throughout construction and maintain the ramp connection. This could pose risk to the Design Builder and increase cost and schedule implications.
 - Mitigation Strategy: VDOT will account for bridge complexity and constructability challenges in project schedule and estimate. RFP will allow flexibility for the Design Builders to develop innovative constructability solutions.
- C. Traffic Impacts during Construction: In order to construct this project, the Design Builder will need to reduce I-64 general purpose lanes width in the EB and WB directions during Construction. This will be a reduction of one (1) foot per lane in each direction. Traffic backups and delays are expected to increase in the work zone due to this reduction. Construction of the adjoining HRBT project is also expected to contribute to backups and delays in this corridor. Mitigation Strategy: VDOT is developing a Work Zone Traffic Analysis to determine the specific impacts due to the reduction of one lane in each direction during construction of the I-64 Mainline. VDOT will consider including specific requirements in the RFP to ensure adjacent project Transportation Management Plans (TMPs) are coordinated. Additionally, VDOT will implement a corridor-wide multi-project Maintenance of Traffic (MOT)/TMP review protocol for all corridor projects along with implementing an enhanced partnership with the City of Hampton to mitigate effects to the adjoining primary system. VDOT will increase public awareness of the planned reduced capacity in the project corridor through a coordinated Public Outreach and Communication Plan. In addition to providing project updates, this Plan will advise the travelling public to use alternate routes or allow for additional time in their commute during project construction.

9. ANNUAL UPDATE CYCLE

The submission date of the Initial Financial Plan is April 30, 2022. The first annual update will be submitted by April 30, 2023 and will be based on a "data as of" date of January 31, 2023. Future annual updates will be submitted by April 30 of that year, with a "data as of" date of January 31 of that year.