



July 2024
Monthly Project Report
I-64 HAMPTON ROADS
BRIDGE-TUNNEL
EXPANSION

Report No. 64
Project No. 0064-M06-032



Table of Contents

1. Executive Summary.....	1
1.1 Overview.....	1
1.2 Priorities.....	1
1.3 Key Updates	2
2. Project Schedule.....	6
2.1 Schedule Status.....	6
2.2 Longest Path	6
2.3 Impact Analysis.....	6
3. Project Budget	9
3.1 Overall Budget.....	9
3.2 Design-Build Contract Cost Status	11
3.3 Budget by Funding Source	12
3.4 Contingency.....	13
4. Environmental.....	17
5. Construction	18
5.1 Construction Area 1: Landside Roadways.....	19
5.2 Construction Area 2: Marine Trestle Work.....	20
5.3 Construction Area 3: Tunnels and Islands	21
5.4 Construction Area 4: Landside Bridges	22
6. Operations.....	24
7. Quality	25
8. Safety.....	26
9. Civil Rights & DBE/SWaM Business Opportunities	27
10. Public Outreach & Media.....	28

Issue Date: August 7, 2024

Prepared by:

Virginia Department of Transportation

www.hrbtexpansion.org

1. Executive Summary

1.1 Overview

This report provides an overview of accomplishments and activities for the Hampton Roads Bridge-Tunnel Expansion Project from June 23, 2024 – July 20, 2024. The Design-Builder for the project is Hampton Roads Connector Partners (HRCP), a consortium that includes lead contractors Dragados, Vinci, Flatiron, and Dodin Campenon Bernard, with lead designers HDR and Mott MacDonald.

The current reporting period is aligned with HRCP's fiscal-month structure, on which the project's design-build schedule updates and invoiced construction progress are based. Reporting periods typically close on the Saturday on or preceding the 24th of each month.

During this reporting period, project accomplishments included the following:

- South Island Progress:
 - Installation of south portal external walls 67% complete.
 - Installation of south portal internal walls 15% complete.
- Tunnel Progress:
 - Completed U-Turn of TBM shield, now positioned at GP Tunnel.
 - Began work for pulling, lifting, and turning of the gantries.
- North Island Progress:
 - Installation of rectilinear approach temporary struts 92% complete.
 - Excavation for the rectilinear approach 27% complete.
- Landside Progress:
 - Began installation of pedestrian fence at Mallory St. Bridge.
 - Completed installation of deck concrete at Spans 15 – 17 at Willoughby Bay Bridge.
 - Began installation of panels and columns for Soundwall 4-1A near Mason Creek Road.
- Marine Progress:
 - South Trestle eastbound decks 64% complete.

1.2 Priorities

VDOT's priorities for the Project are to achieve the following objectives:

- To provide mobility enhancements and travel-time reliability along the Project corridor.
- To minimize Project impacts on adjacent communities.
- To improve transportation operations and safety throughout the Project corridor.
- To develop public infrastructure in a financially responsible manner.

1.3 Key Updates

Project Schedule

The last approved schedule for the project is Update 58 (data date: May 19, 2024), and the schedule information in this report reflects this update. Schedule 58 was returned Approved as Noted on June 18, 2024.

- Contractual Substantial and Final Completion Dates remain unchanged.
- Substantial Completion on February 26, 2027
- Final Completion on August 27, 2027

Project Budget

The project budget summary below now includes all billed to date costs through July 20, 2024 and does not include forecasted cost outside of the reporting period.

- Project budget overview:

Current total project budget:	\$ 3,935,451,641
Total costs to date:	\$ 2,489,495,153
Remaining project budget:	\$ 1,445,956,488

- Design-build contract overview:

Design-build contract original amount:	\$ 3,299,997,227
Net change orders:	\$ 5,655,285
Exercised Options:	\$ 73,454,414
Material Price Adjustments to Date:	\$ 93,500,546
Assessed Liquidated Damages (LD):	\$ (957,500)
Design-build contract sum to date:	\$ 3,471,649,971
Expenditures to date:	\$ 2,368,490,347
Remaining design-build contract amount:	\$ 1,103,159,624

- Design-build progress to date:

Project Management:	83.5%
Design:	95.0%
Physical Construction Progress:	50.3%
Overall:	68.2%

Environmental

Environmental updates for this reporting period include:

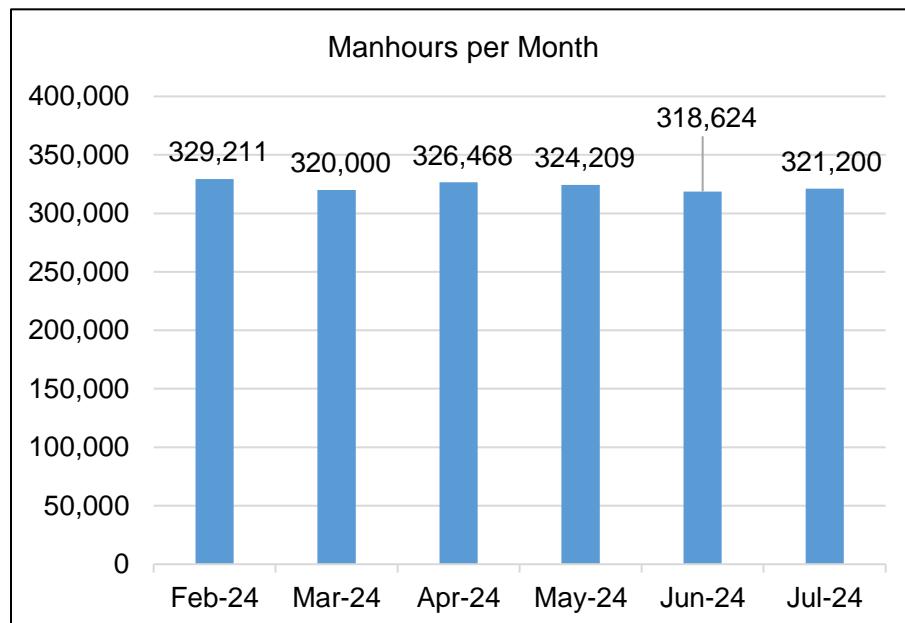
- HRCP continues to coordinate with the regulatory agencies on a variety of permit modifications and new permits covering the North Island Bi-component Plant, North Island and South Island air permits for the generators, and Joint Permit modification #11 that covers additional dredging, the South Island Expansion changes, and a dock extension at Willoughby Bay.
- HRCP continues upkeep on the bird deterrent measures and the dog patrolling of North Island, South Island, and Willoughby Spit. In addition, increased barn swallow nesting activities have been identified at the Willoughby Bay, Oastes and Mason Creek bridges. HRCP has been removing inactive nests when identified.

Construction

Summary progress updates for this reporting period include:

- Landside Roadways
 - Continued Mallory St. Bridge approach work for Phase 1 bridge shift.
 - Continued installation of coping and moment slab at retaining wall 407 between Bayview Bridge and Oastes Creek Bridge.
- Marine Works
 - Placed caps at HOT lanes trestle (3 installed this period).
 - Placed beams at North westbound permanent trestle (7 installed this period).
- Tunnels and Islands
 - 52% complete for stage 1 ballast placement for HT tunnel.
 - 59% complete for rectilinear approach permanent struts at South Island.
 - Completed U-Turn of the TBM shield.
- Landside Bridges
 - Completed installation of approach slab at Abutment A at Mallory Street Bridge for eastbound widening.
 - Began and completed pile driving at Abutment A at Bayville/13th View St. Bridge for eastbound widening.
 - Completed installation of Pier 15 piles at Bay Avenue Bridge for eastbound widening.
 - Began installation of column for Soundwall at Oastes Creek Bridge for eastbound widening.
 - Completed footings and columns at Pier 2 at 13th View St. Bridge.

The number of construction manhours worked each month is provided by HRCP and is current as of July 31, 2024:



Project Manhours to Date:
12,153,212

Operations

The following operations activities took place during this reporting period:

- Traffic shift on 13th View St. underpass beneath I-64, single lane shifted to opposite side of the roadway for bridge widening and rehabilitation.
- Temporary detour of Mallory Street eastbound onramp for bridge widening activities.
- Temporary detour of W. Bay Ave. eastbound onramp for bridge widening activities.

Quality

Quality updates for this reporting period include:

- VDOT continues to monitor HRCP's QA and QC material testing. VDOT also performed Independent Testing and Verification Testing on materials in accordance with VDOT requirements and coordinated with VDOT Materials Division for shop inspections as required.
- VDOT continues to engage HRCP in discussions on HRCP's implementation of their Quality Management System Plan (QMSP) and the effectiveness of the plan.



Safety

The following safety performance indicator information is provided by HRCP and is current as of July 31, 2024:

- Total Recordable Incidence Rate: 1.57 (National Average: 2.5)
- Lost Time Incidence Rate: 0.28 (National Average 1.6)

Civil Rights & DBE/SWaM Business Opportunities

HRCP has awarded **371** subcontracts, subconsultant agreements, and purchase orders to certified DBE/SWaM firms on the project. These contract awards represent a total of **\$567.6 million** to certified DBE/SWaM firms.

Public Outreach & Media

Public outreach and project media updates provided by VDOT and HRCP for this reporting period include:

- HRBT Communications Team published a video highlighting the TBM U-Turn at North Island, featuring in-depth explanations about the coordination and technology implemented.
- Hampton Roads District Engineer and HRBT Expansion Project Director hosted a site visit for members of the Federal Highway Administration Major Projects team.
- HRBT Communications Team published a video to discuss the beam launcher on North Trestle westbound.

2. Project Schedule

2.1 Schedule Status

The following table depicts key milestone dates for the project and has been updated as of the current approved schedule. The last approved schedule for the project is Update 58 (data date: May 19, 2024), and the schedule information in this report reflects this update. Contractual Substantial and Final Completion dates remain unchanged from the Contract Amendment; February 26, 2027 and August 27, 2027 respectively.

	Contract Requirement	May 2024 Schedule	Actual
NTP		Sep 11, 2020	Sep 11, 2020
Substantial Completion	Feb 26, 2027	Feb 26, 2027	
Final Completion	Aug 27, 2027	Aug 27, 2027	

2.2 Longest Path

The longest path/critical path in Project Schedule Update 58

is driven by the following activities:

- TBM U-Turn on North Island
- TBM drive in General Purpose Tunnel
- TBM disassembly in south pit
- South Island Tri-Cell Permanent Structures
- South Island Ventilation Building and Commissioning
- Commissioning – High Occupancy Toll and General Purpose Operational Testing
- Commissioning – Tunnel, Buildings, Roadways, and Trestles Integration Testing
- ITT Reversal
- Substantial Completion

2.3 Impact Analysis

Several elements of work are near-critical and could affect schedule performance if they are not addressed diligently. VDOT and HRCP are closely monitoring these activities. The following work elements have been identified as near critical, meaning there is less than one month of float in the current schedule.

South Portal

- **South Portal – Gantry Cradle Demolition, Thrust frame and Steel Ring Removal**
- South Portal Cell 1 Permanent Structures – Interior Walls & Roadway Slab, Plenum Slab, Roof Slab
- South Portal - East External Walls – Permanent Headwall and Roadway Slab

South Island

- None

Tunneling

- High Occupancy Tunnel – Installation final rings
- High Occupancy Tunnel – Interior Structures – Remove Ventilation & Install Booster Fans, Ballast Stage II, Construction of Egress Footer
- General Purpose Tunnel – Interior Structures – Stage I & II Ballast

North Portal

- North Portal – Temporary U-Turn Structures - High Occupancy Tunnel TBM Shield Receiving Cradle, General Purpose Tunnel TBM Launch Cradle, Post Breakout Cell1 Cleaning, Nitrogen Table Mobilization, Cell 1 Thrust Frame Installation, Gantry Cradles, Gantry 4 Lift out and Reassembly.
- North Portal – Rectilinear Approach Excavation, Permanent Struts Installation, Cross Wall demolition

North Island

- None

Roadway and Land Bridges

- Segment 1 Phase 1, 1A, 2 – I-64 North Shore Roadway Widening, Temporary Lighting, Permanent Barrier Wall, Storm Drainage, Retaining Wall 106
- Segment 3b Phase 2, 2A, 2B, 3, 3A, 4 – I-64 Willoughby Spit – Widening, Drainage, PV Drains/Ground Improvement, Retaining Wall 302, 306, 307, 312, 313, Lighting, Ramp F.
- Segment 4 Phase 2, 2A, 3, 3A, 4, 4A – Norfolk to Navy – Storm Drainage, Roadway Widening, Retaining Wall 406, 407, 408, 409, 501, Permanent Barrier Wall, Widening &
- ITS Segment 1 Phases 1 & 1A – Installation
- ITS Segment 3 Phases 2, 3 & 4 - Installation
- ITS Segment 3B Phases 2, 3A & 4 - Installation
- ITS Segment 3C Phases 2 - Installation
- ITS Segment 4 Phases 2, 3 - Installation
- 13th View Bridge – Eastbound Widening & Rehabilitation, Westbound Widening & Rehabilitation
- Willoughby Bay Bridge – Eastbound Superstructure & Rehabilitation, Westbound Rehabilitation
- 4th View Bridge – Eastbound Rehabilitation
- Mason Creek Bridge - Eastbound Rehabilitation
- 1st View Bridge - Eastbound Rehabilitation

- Bay Avenue Bridge – Eastbound Widening & Rehabilitation, Westbound Rehabilitation
- Evans Street Bridge - Eastbound Widening
- Bayview Blvd. Bridge - Eastbound Widening & Rehabilitation
- Oastes Creek Bridge – Eastbound Widening, Westbound Widening
- Patrol Road Bridge – Eastbound Widening & Rehabilitation

Trestles

- North Trestle Temporary Work Trestle N3 – Construction & Demolition
- North Trestle Temporary Work Trestle N4 & N2 – Demolition
- North Trestle – Eastbound Zone 1, 2, 3, 4, 5 Construction, Westbound Zone 8 & 10 Construction
- North Trestle Utilities – Eastbound Phase 2 & 3A, Westbound Phase 7
- North Trestle Demolition Existing Eastbound Trestle
- South Trestle Temporary Work Trestle S2 – Demolition
- South Trestle Temporary Work Trestle S3 – Construct
- South Trestle Temporary Work Trestle S4 – Construct
- South Trestle Temporary Work Trestle S5 – Construct and Demolition
- South Trestle – Zone 2 Deck Construction & Finishes
- South Trestle – Zone 4 – WB MOT Finishes
- South Trestle – Zone 6 Construction & Finishes
- South Trestle – Zone 7 Construction & Finishes
- South Trestle – Zone 8 Construction & Finishes
- South Trestle – Zone 9 Construction & Finishes
- South Island Expansion – Marine Work – Rock Placement & Substructure
- South Trestle – Existing Trestle Demolition

Commissioning and Integration

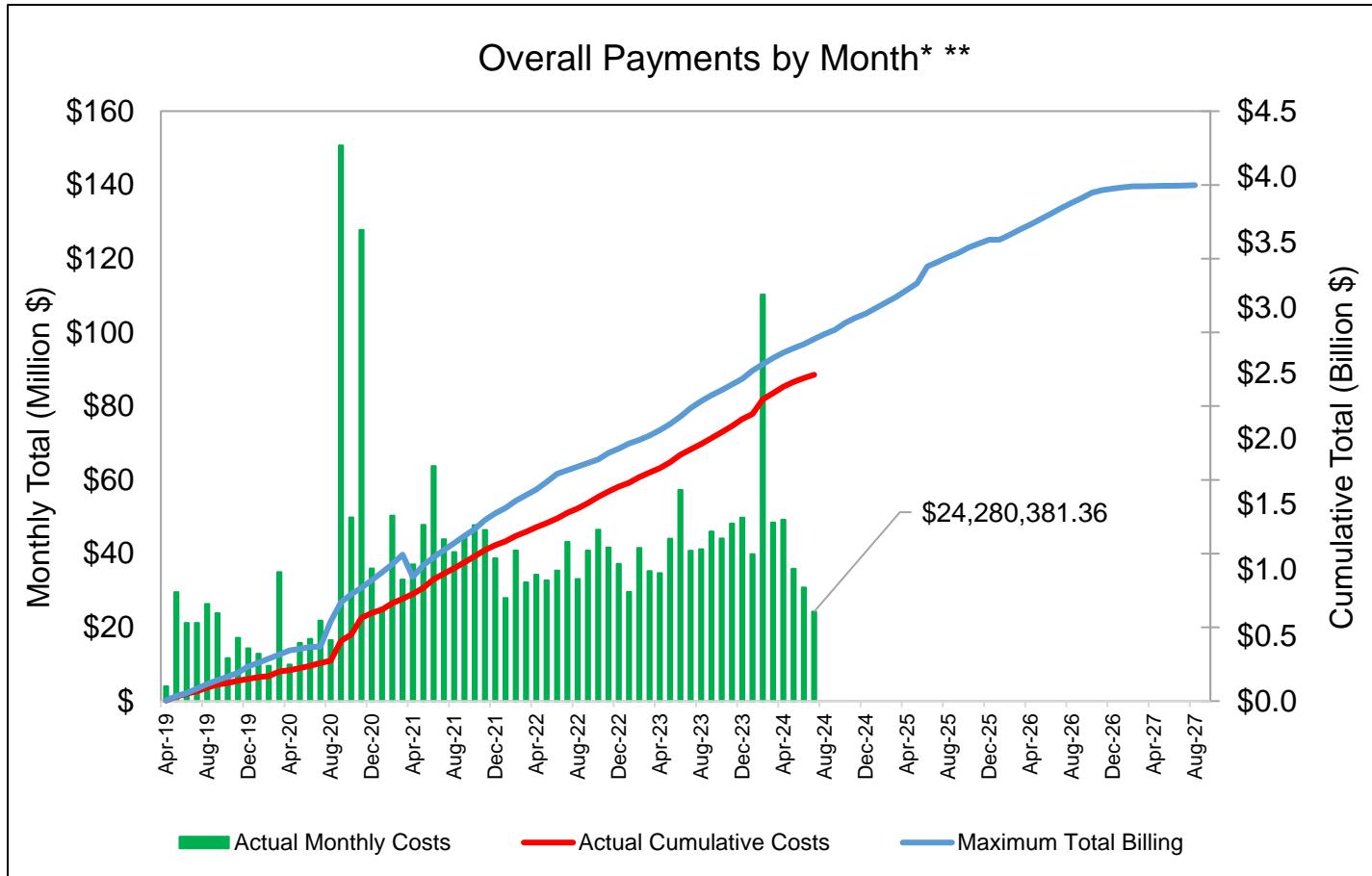
- Operational Testing – General Purpose Tunnel – Egress Corridor Pressurization System
- Commissioning Integration – Existing Westbound Tunnel, Existing Eastbound Tunnel, General Purpose Tunnel
- ITT Reversal – Preparation Work for Eastbound Tunnel Traffic Direction Change, Roadway Median Barrier Walls after EB ITT Reversal

3. Project Budget

3.1 Overall Budget

The overall budget outlined in this report is based on the terms and conditions of Article 3 (Project Funding) in the Project Agreement for Funding and Administration (PAFA). The cost curve is based on Exhibit 6 of the Comprehensive Agreement (monthly maximum cumulative compensation amount).

	Amount Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
<i>Construction</i>	\$19,751,375.45	\$2,228,654,604.01	\$3,299,997,227.00	\$1,071,342,622.99	67.54%
<u>Owner Costs</u>					
<i>Administration</i>	\$2,187,072.44	\$107,462,393.22	\$122,000,000.00	\$14,537,606.78	88.08%
<i>Right of Way</i>	\$16,364.42	\$9,542,412.41	\$15,000,000.00	\$5,457,587.59	63.62%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$1,682,698.28	\$136,514,148.81	\$335,000,000.00	\$198,485,851.19	40.75%
<i>Bridge Repair Work Option</i>	\$642,870.77	\$7,321,594.35	\$73,454,413.96	\$66,132,819.61	9.97%
Total	\$24,280,381.36	\$2,489,495,152.80	\$3,935,451,640.96	\$1,445,956,488.16	63.26%

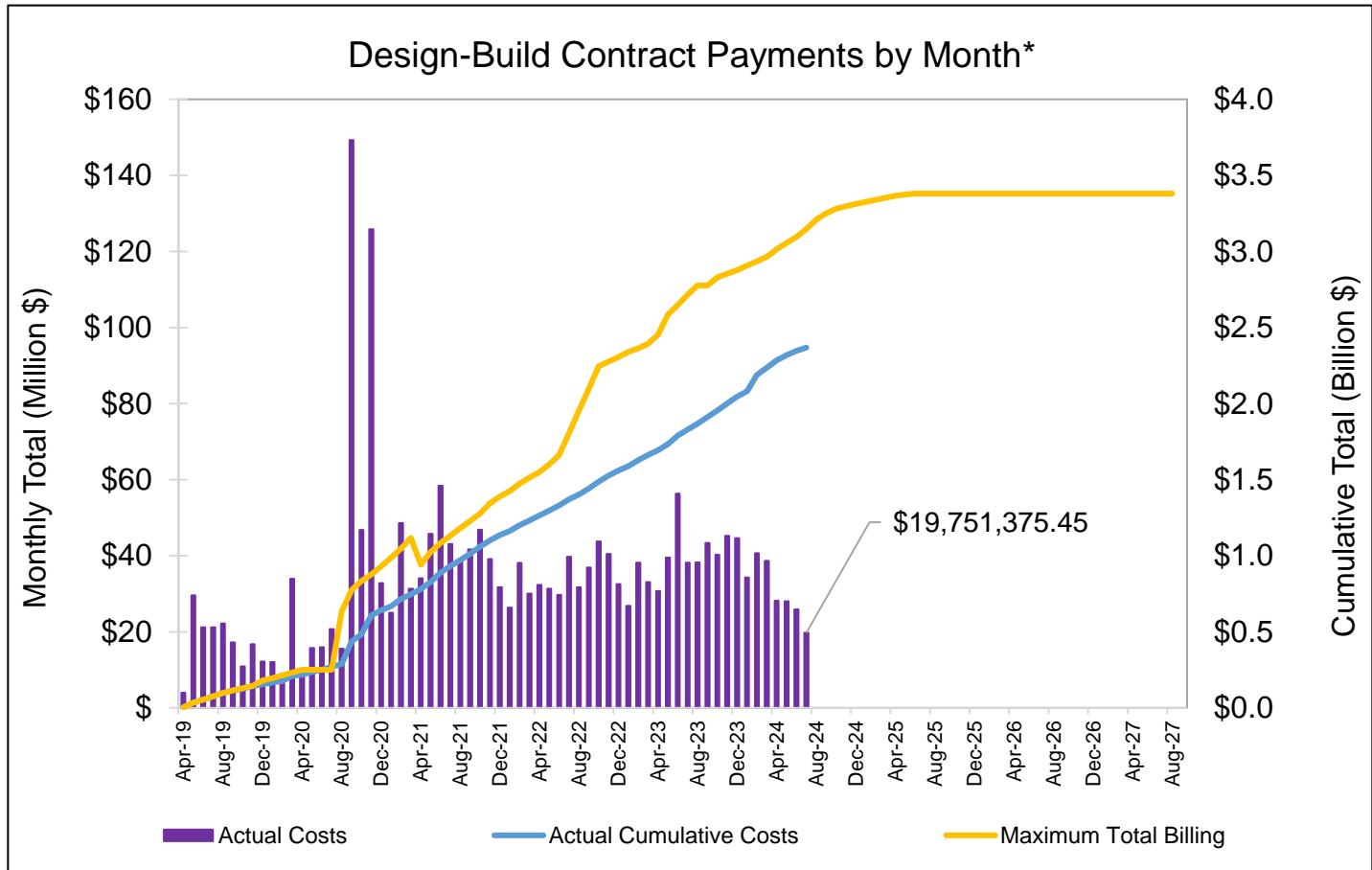


*The Maximum Total Billing showed an adjustment in May 2021 due to the executed Change Order #40 – Update Maximum Cumulative Cost Curve.

** The increase to monthly costs during February 2024 is primarily due to initial Material Price Adjustments associated with CA Amendment #1.

3.2 Design-Build Contract Cost Status

The budget and planned cost have been established based on the maximum cumulative compensation amount. For this period, the invoiced expenditures cover the activities noted in this report.



3.3 Budget by Funding Source

The budget for expenditures by funding source is based on the terms and conditions of Article 3 (Project Funding) and Exhibit 5 of the PAFA. This section outlines planned expenditures of both HRTAC and VDOT funds. The cost curve has been developed based on the monthly maximum cumulative compensation amount in the Comprehensive Agreement and will be updated as HRCP refines its design, construction means-and-methods, activity sequences, and project resourcing.

3.3.1 HRTAC and Smart Scale

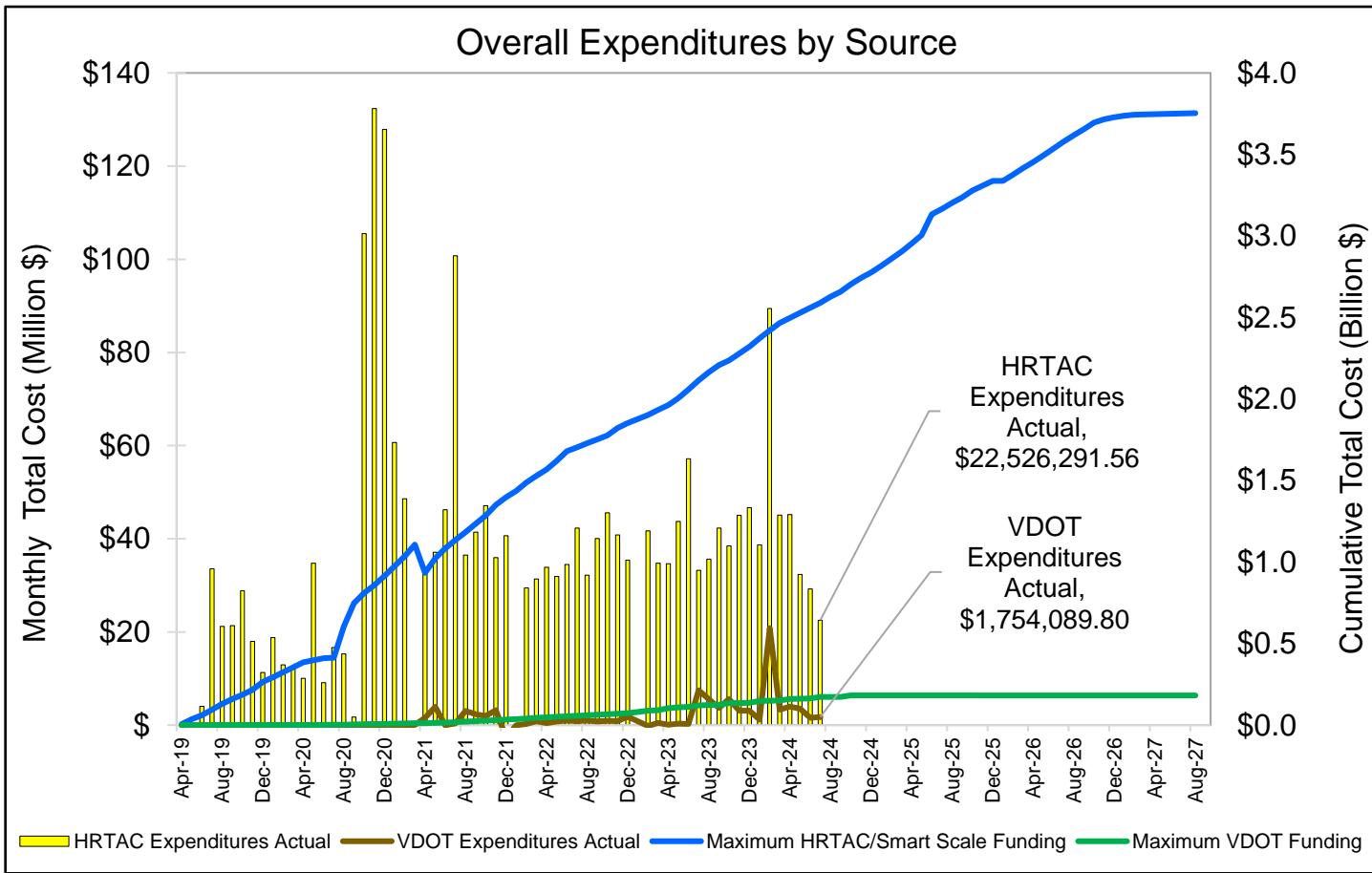
	Amount Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
Construction	\$18,981,203.38	\$2,179,592,997.50	\$3,204,569,251.00	\$1,024,976,253.50	68.02%
<u>Owner Costs</u>					
Administration	\$2,032,827.52	\$102,774,260.50	\$118,472,054.00	\$15,697,793.50	86.75%
Right of Way	\$16,364.42	\$9,542,412.41	\$15,000,000.00	\$5,457,587.59	63.62%
No-Excuses Incentive	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
Contingency	\$1,495,896.24	\$108,778,122.01	\$325,428,276.00	\$216,650,153.99	33.43%
Total	\$22,526,291.56	\$2,400,687,792.42	\$3,753,469,581.00	\$1,352,781,788.58	63.96%

3.3.2 VDOT

	Amount Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
Construction	\$770,172.07	\$49,061,606.51	\$95,427,976.00	\$46,366,369.49	51.41%
<u>Owner Costs</u>					
Administration	\$154,244.92	\$4,688,132.72	\$3,527,946.00	(\$1,160,186.72)*	132.89%
Right of Way	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
No-Excuses Incentive	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
Contingency	\$186,802.04	\$27,736,026.80	\$9,571,724.00	(\$18,164,302.80)**	289.77%
Bridge Repair Work Option	\$642,870.77	\$7,321,594.35	\$73,454,413.96	\$66,132,819.61	9.97%
Total	\$1,754,089.80	\$88,807,360.38	\$181,982,059.96	\$93,174,699.58	48.80%

* The VDOT Administration costs are due to higher Owners Costs for South Trestle work oversight, bird management, bridge repair oversight, and Visitor Center Costs.

** The VDOT Contingency costs are primarily due to the VDOT portion of the CA Amendment material price adjustments.



3.4 Contingency

3.4.1 Contract Changes

	Description	Date	Value	Time
CO-1	VDOT's Acquisition of Willoughby Staging Area	2/11/2020	\$ (3,000,000.00)	0 days
CO-2	Minor Revisions to Technical Requirements	3/18/2020	\$ -	0 days
CO-3	Tunnel Approach Structure Support of Excavation Requirements Refinement	4/28/2020	\$ -	0 days
CO-4	Dispute Resolution Board (DRB) Allowance	5/12/2020	\$ 200,000.00	0 days
CO-5	North Island Armor Stone Value Engineering Change Proposal (VECP)	4/28/2020	\$ (2,011,117.50)	0 days
CO-6	Exit Ramp at Bayville Avenue	5/29/2020	\$ 46,906.29	0 days
CO-7	Minor revisions to the Technical Requirements	7/16/2020	\$ -	0 days
CO-8	Zero Spread Drainage	9/16/2020	\$ 3,239,212.24	0 days
CO-9	Roadway and Bridge Scope Validation Issues	9/4/2020	\$ 15,516,248.00	0 days
CO-10	Slurry Walls as Permanent Structures	8/28/2020	\$ -	0 days
CO-12	Road and Bridge Lighting Requirements	8/27/2020	\$ 2,495,000.00	0 days
CO-13	Bridge Repair Work-Exercise Option	10/9/2020	\$ 73,454,413.96	0 days
CO-14	Trestle Barrier Form Liner Elimination	7/29/2020	\$ (99,571.80)	0 days

CO-15	South Island Ground Improvement Value Engineering Change Proposal (VECP)	9/17/2020	\$ (5,338,000.00)	0 days
CO-16	Navy Security Fencing Design	7/15/2021	\$ 150,000.00	0 days
CO-17	Westbound ITT Reduced Instrumentation	10/30/2020	\$ (184,277.50)	0 days
CO-18	Willoughby Bay Bridge Barriers	9/10/2020	\$ -	0 days
CO-19	GeoPak Version Software Updates	8/3/2020	\$ -	0 days
CO-21	Material Price Adjustment for Asphalt Materials	2/26/2021	\$ -	0 days
CO-22	South Island Asbestos Conduits	9/16/2020	\$ 81,973.93	0 days
CO-23	Island & Tunnel Baseline Monitoring Requirements	7/22/2020	\$ -	0 days
CO-24	Construction Water Supply	9/10/2020	\$ (609,157.27)	0 days
CO-25	Solids Handling Pumps Requirements	11/12/2020	\$ -	0 days
CO-26	Mass Notification Independent System Requirements	11/12/2020	\$ -	0 days
CO-27	Fixed Fire Fighting System Requirements	11/16/2020	\$ -	0 days
CO-28	HOT Lane Shoulder Width	3/29/2021	\$ 2,950,000.00	0 days
CO-30	Willoughby Bay Bridges Fender & Lighting Replacement	2/12/2021	\$ 1,495,000.00	0 days
CO-31	Builder's Risk Insurance	10/21/2021	\$ 1,500,000.00	0 days
CO-32	VCU Fisheries and SAV Mitigation Plan	4/16/2021	\$ (1,042,144.00)	0 days
CO-33	Tunnel Finishes Height	12/18/2020	\$ -	0 days
CO-38	H-Piles in Aggressive Soils	12/18/2020	\$ (47,541.00)	0 days
CO-39	Re-use of Existing Drainage Pipes	4/20/2021	\$ (100,984.25)	0 days
CO-40	Update Maximum Cumulative Cost Curve	7/15/2021	\$ -	0 days
CO-41	Wetland Mitigation Costs	4/26/2021	\$ 3,503,400.00	0 days
CO-42	Navy Gate 22 Drainage Design and Construction	8/19/2022	\$ 1,524,940.16	0 days
CO-43	Hybrid Trestle Beam Design	7/2/2021	\$ -	0 days
CO-44	SCADA Control of Deluge Valves	7/27/2021	\$ -	0 days
CO-45	HRCP Project Executive/Representative Change	5/24/2021	\$ -	0 days
CO-46	Tunnel Sprinkler Heads Material Change	7/28/2021	\$ -	0 days
CO-47	Evans Street Approach Slab Settlement Repair	6/22/2022	\$ 34,082.83	0 days
CO-48	Scope Reduction – City of Hampton	8/24/2022	\$ (6,072,941.31)	0 days
CO-49	HRCP Senior Representative Change	7/2/2021	\$ -	0 days
CO-50	Change in Precast Form Tolerance & Curing Methods	1/10/2022	\$ -	0 days
CO-53	Sound Wall Quantity Reconciliation	12/6/2021	\$ (16,561,217.63)	0 days
CO-54	4th View Interchange Design and Construction Drainage	8/17/2022	\$ 984,598.45	0 days
CO-55	HREL Overlap Scope Change in Norfolk - Proposal Costs	8/12/2022	\$ 157,237.34	0 days
CO-56	Building Code Changes - Design	10/21/2022	\$ 2,186,150.00	0 days
CO-57	Design-Builder's Senior and Representative Changes	1/11/2022	\$ -	0 days
CO-58	Scope Reduction – City of Norfolk	5/16/2023	\$ (18,739,670.82)	0 days
CO-59	Fisheries and SAV Mitigation Plan - VCU	6/16/2022	\$ (70,238.22)	0 days
CO-60	Navy Fence (remaining design costs)	8/17/2022	\$ 180,142.36	0 days
CO-61	HRELN Tie-In Zero Drainage Spread	11/29/2022	\$ 2,965,469.69	0 days
CO-62	SIP Forms for Marine Bridges	6/28/2022	\$ -	0 days
CO-63	Bridge Repair Item – Insert Plates - New Unit Prices	8/30/2023	\$ -	0 days
CO-64	Tolling Infrastructure Proposal Costs	10/21/2022	\$ 645,242.40	0 days
CO-65	Snowplowable Raised Pavement Markers (SRPMs)	3/3/2023	\$ 256,174.09	0 days

CO-68	Buoyancy Calculations	3/3/2023	\$ -	0 days
CO-69	Change of Department's Senior Representative	4/6/2023	\$ -	0 days
CO-70	Reuse of Existing Pipe 29-26 to 29-31	7/26/2023	\$ (117,734.20)	0 days
CO-71	Addendum to WO-24 Water Supply Line	4/25/2023	\$ -	0 days
CO-72	Bay Avenue Approach Ramp	6/29/2023	\$ 120,053.43	0 days
CO-73	Pile Jackets – Additional Chloride Sampling/Testing	1/10/2024	\$ 118,665.12	0 days
CO-74	South Island – Asbestos Pipes	7/7/2023	\$ 128,883.51	0 days
CO-76	Northern Long-Eared Bat (NLEB) Consultation Process	5/1/2024	\$ 45,463.00	0 days
CO-77	Scope Reduction – Segment 5 ITS Trunk Line	11/12/2023	\$ (153,079.38)	0 days
CO-78	Steel Escalation Price Adjustments	9/19/2023	\$ 2,835,839.00	0 days
CO-79	WB Willoughby Bay Bridge Obstructions	1/10/2024	\$ 50,682.44	0 days
CO-80	Marine Fleet Safe Harbor – Hurricane Ian	1/10/2024	\$ 452,075.00	0 days
CO-81	3-Coat Paint System for Steel on Applicable Bridges	1/10/2024	\$ 140,000.00	0 days
CO-82	CA Amendment Disputed Items Resolution	3/21/2024	\$ 9,910,582.34	0 days
CO-83	Marine Fleet Safe Harbor – Tropical Storms Idalia/Ophelia	1/11/2024	\$ 200,262.16	0 days
CO-84	Bird Management Outside of South Island 2023	2/29/2024	\$ 458,375.51	0 days
CO-85	DRBISC #08 SMOT WB Rock Removal	4/3/2024	\$ 1,135,513.87	0 days
CO-86	OHSS No. 36 Foundation – Archaeologist Assessment	2/20/2024	\$ 14,641.81	0 days
CO-88	Bird Management 2024 to Project Completion	5/1/2024	\$ 2,369,359.64	0 days
CO-91	DRBISC #08 ST Zone 6 Rock Removal	5/8/2024	\$ 1,710,784.92	0 days
CO-94	HRCP Representative Change	6/11/2024	\$ -	0 days
		TOTAL	\$ 79,109,698.61	0 days



3.4.2 Material Price Adjustments

This progress period included the following material price adjustments:

Material	Current Amount	Total to Date	Material Price Adjustment Through*
Per Contract Adjustments (Federally Eligible Costs)			
Exhibit 9 - Asphalt	\$16,642.71	\$206,848.90	May 2024
Exhibit 10 - Fuel	\$21,887.41	\$522,401.82	May 2024
Exhibit 11 - Steel	\$260,406.68	\$6,696,851.80	January 2024
Total	\$298,936.80	\$7,426,102.52	
Per CA Amendment Adjustments (Non-Federally Eligible Costs)			
Exhibit 9 - Asphalt	\$0.00	\$0.00	May 2024
Exhibit 10 - Fuel	\$0.00	\$35,596.75	May 2024
Exhibit 11 - Steel	\$165,721.09	\$8,647,466.87	January 2024
Exhibit 10A – Fuel (Atypical Items)	\$14,045.30	\$1,488,716.40	May 2024
Exhibit 15A – Index-Adjusted Commodities	\$983,094.69	\$58,688,395.64	January 2024
Exhibit 15B – Escrow-Adjusted Commodities	\$0.00	\$17,214,267.35	May 2024
Total	\$1,162,861.08	\$86,074,443.01	

* Steel price adjustments are based on Federal index data finalized 4 months after each period.

4. Environmental

The following environmental management activities occurred during this reporting period:

Permits:

- HRCP provides weekly inspection report summaries to the U.S. Army Corps of Engineers (USACE).
- HRCP submitted JPA permit modification #11 to the agencies on June 28, 2024.
- HRCP received an air permit from Department of Environmental Quality (DEQ) for the North Island Bi-component Plant on July 3, 2024.
- HRCP's subcontractor completed installation of wetland plantings and seed mix in areas of temporary wetland impact that require restoration.
- HRCP received approval from DEQ of the latest Sediment Testing and Material Management Plan on July 11, 2024.
- HRCP continued coordination with DEQ on the North Island and South Island generator air permits.

Marine Mammal Protection:

- No new activities.

Bird Mitigation:

- HRCP continues upkeep on the bird deterrent measures and the dog patrolling of North Island, South Island, and Willoughby Spit. In addition, increased barn swallow nesting activities have been identified at the Willoughby Bay, Oastes and Mason Creek bridges. HRCP has been removing inactive nests when identified.

Programmatic Agreement:

- No new activities.

Archeological Discoveries:

- No new activities.

Protected Species:

- No new activities.

5. Construction

The figure below illustrates a map of the project corridor. The project is further categorized into four construction areas.

- Construction Area 1 is composed of landside road work.
- Construction Area 2 is composed of marine work, including the North Trestle, South Trestle, and island expansions.
- Construction Area 3 is composed of tunnel and island site work.
- Construction Area 4 is composed of landside road and bridge work.



5.1 Construction Area 1: Landside Roadways

I-64 (Segment 1):

- Continued trench drain installation in the I-64 median south of Mallory Street Bridge.
- Continued installation of gabion wall at Abutment A at Mallory Street Bridge.
- Continued Mallory St. Bridge approach work for Phase for Phase 1 bridge shift.
- Continued installation of sidewalk and approach grade work at retaining wall 105 near Abutment B at Mallory Street Bridge.
- Began Ramp E and Ramp H asphalt work for Mallory Street Phase 1 bridge shift.

I-64 (Segment 3):

- Continued installation of base leveling pads and wall panels at retaining wall 302 on Bayville Street between 13th View and eastbound off ramp.
- Continued drainage work at Bayville Street.
- Continued installation of coping at retaining wall 308 between Willoughby Bay Bridge and 4th View eastbound.

I-64 (Segment 4):

- Continued installation of coping and moment slab at retaining wall 407 between Bayview Bridge and Oastes Creek Bridge.
- Began installation of panels and columns for sound wall 4-1A near Mason Creek Road.



► I-64 near
Mason Creek
Road
Panels installed at
sound wall 4-1A.

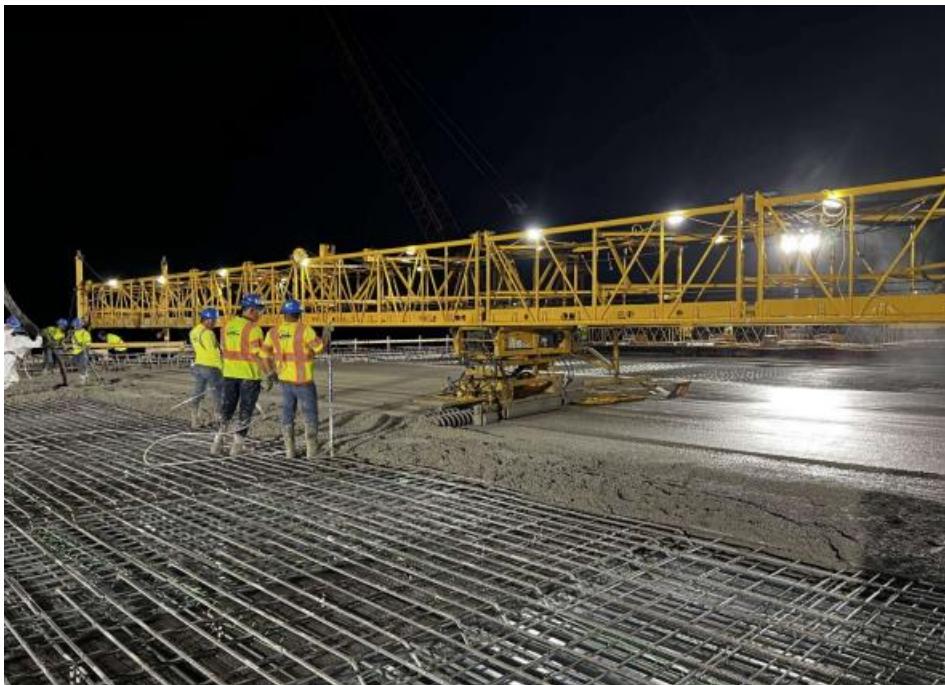
5.2 Construction Area 2: Marine Trestle Work

North Trestle:

- **Westbound Trestle**
 - 7 beams placed during this period (70 out of 280 total beams placed).
 - 3 caps placed during this period (16.5 out of 46 total caps placed).
 - 1 deck placed during this period (8.5 out of 45 total decks placed).

South Trestle:

- **Eastbound Trestle**
 - 2.5 decks placed during this period (34 out of 53 total decks placed).
- **HOT Lanes Trestle**
 - 3 caps placed during this period (10 out of 16 total caps placed).



◀ **South Trestle
Eastbound
Span 13 deck
pour**

5.3 Construction Area 3: Tunnels and Islands

South Island:

- 67% complete for south portal external walls.
- 15% complete for south portal internal walls.
- 59% complete for rectilinear approach permanent struts.
- 69% complete for rectilinear approach temporary struts.

North Island:

- 92% complete for rectilinear approach temporary struts.
- 27% complete for rectilinear approach excavation.
- Began demolition of the cross wall between Cell 2 and the rectilinear approach.

Tunnel:

- 52% complete for HT tunnel stage 1 installation of cement-treated base (CTB) ballast for tunnel roadway.
- Continued work on concrete tunnel egress structures in the HT Tunnel.
- 3% complete for HT Tunnel installation of egress footer.
- Completed U-Turn of TBM shield, now positioned in launching position.
- Continued work to reconnect gantry 1 for U-Turn of the TBM.
- Completed disassembly of thrust frame from South Island and rebuilding frame on North Island.



► **North Island**
Rectilinear approach
excavation

5.4 Construction Area 4: Landside Bridges

Mallory Street Bridge:

- Completed installation of approach slab at Abutment A for eastbound widening.
- Began installation of pedestrian fence for eastbound widening.
- Began and completed grooving of bridge deck for eastbound widening.

Bayville/13th View St. Bridge:

- Began and completed pile driving at Abutment A for eastbound widening.
- Began lead abatement for eastbound widening.

Willoughby Bay Bridge:

- Continued repair/rehabilitation of existing westbound bridge.
- Continued installation of precast caps for westbound widening.
- Continued installation of stay-in-place (SIP) deck formwork for eastbound widening.
- Completed installation of deck concrete at Spans 15 - 17 for eastbound widening.

4th View St. Bridge:

- Began installation of pads and beam seats for eastbound widening.

Mason Creek Bridge:

- Continued repair/rehabilitation of existing eastbound and westbound bridges.

1st View Street Bridge:

- Continued repair/rehabilitation of existing eastbound bridge.

Bay Avenue Bridge:

- Continued installation of mainline SIP deck forms and overhangs for eastbound widening.
- Began and completed driving piles at Pier 15 for eastbound widening.

Oastes Creek Bridge:

- Began installation of column for sound wall for eastbound widening.

Patrol Road Bridge:

- Began repair/rehabilitation of existing substructure for eastbound bridge.



◀ Mason Creek
Bridge Eastbound



◀ Bay Avenue
Bridge Eastbound
Bent 15 cap

6. Operations

Operations activities include shoulder and lane closures, creation and maintenance of Intelligent Transportation System (ITS) architecture, other maintenance within the corridor, coordination with existing VDOT Operations, and communication with the Hampton Roads Harbor Tunnels (HRHT) facility staff. The following operations activities occurred during this reporting period:

Short-Term Lane Closures:

- Willoughby Bay Bridge, North Trestle, and South Trestle eastbound and westbound to facilitate beam placement as well as concrete placement for piles, caps, and decks.
- Striping maintenance throughout project corridor.
- Lane closures eastbound and westbound for sign structure foundation installation.

Long-Term Lane Closures:

- Bay Ave. in Norfolk to facilitate staging-area access for widening Oastes Creek Bridge.
- Bayview Blvd. in Norfolk and Mallory St. in Hampton to facilitate bridge widening.
- West Ocean Ave. in Norfolk traffic shift to facilitate bridge widening.
- 4th View St. in Norfolk traffic shift to facilitate bridge widening.
- Patrol Rd. in Norfolk traffic shift to facilitate bridge rehabilitation and widening.
- 13th View St. underpass beneath I-64 reduced to one lane to facilitate utility work. Traffic is controlled by temporary automatic one-lane, two-way traffic control signal.

Norfolk Traffic Shifts:

- 13th View St. underpass beneath I-64, single lane shifted to opposite side of the roadway for continued bridge widening and rehabilitation.

Detours:

- Temporary detour of Mallory Street eastbound onramp for bridge widening activities.
- Temporary detour of W. Bay Ave. eastbound onramp for bridge widening activities.
- Long-term detour on Mason Creek Road to facilitate bridge widening.

Intelligent Transportation System (ITS):

- Installation of ITS, Medium Voltage power, and private utility conduit on North Trestle and landside.
- Installation of traffic signal pole, mast arm, and pedestrian poles at Mallory Street
- Installation of temporary pole, junction boxes, and conduit for OH-11 relocation on eastbound South MOT Trestle.

Overhead Sign Structures:

- OHSS 35 vertical truss installation and assembly of horizontal truss.
- Foundations for OHSS 26, 39, and 50.
- Removal of existing sign structure on I-64 eastbound near Patrol Road.

Roadway Lighting:

- Continued permanent lighting installation on Willoughby Bay Bridge, Oastes Creek Bridge, and Mallory Street Bridge.
- Continued temporary lighting installation at South MOT bridge.
- Addressing maintenance of temporary lighting throughout the corridor.

7. Quality

Quality updates for this reporting period include:

Construction Quality Management Plan (CQMP) Updates:

- VDOT reviews CQMP updates as part of final “Released for Construction” (RFC) design packages and “Notice of Design Change” (NDC) packages. One package was received this period and was returned to HRCP as Revise and Resubmit.
- HRCP submitted quarterly update V18 of the CQMP this period, which is currently under submission review.

Independent Assurance (IA) Testing Activities:

- VDOT continues to monitor HRCP’s QA and QC material testing. VDOT also performed Independent Testing and Verification Testing on materials in accordance with VDOT requirements and coordinated with VDOT Materials Department for shop inspections as required. This testing included oversight of the HRCP precast yard in Chesapeake.

Design Quality Management Plan (DQMP):

- HRCP submitted quarterly update V21 of the DQMP this period, which is currently under review.

Quality Management System Plan (QMSP):

- VDOT continues to engage HRCP in discussions on HRCP’s implementation of their QMSP and the effectiveness of the plan.
- HRCP submitted quarterly update V25 of the QMSP this period, which is currently under submission review.

Material Book Records:

- VDOT conducted a monthly review of the current records, and HRCP is responding to audit comments provided by VDOT. Review of the Material Book records includes confirming that HRCP is completing the proper documentation for Buy America compliance. VDOT has completed the full audit of thirty volumes of Material Book records and is currently auditing three additional volumes of Material Book records.

Routine Quality Activities:

- VDOT’s quality team conducted reviews of written deficiency notices (WDNs), non-conformance reports (NCRs), root cause analyses and dispositions of deficiencies, with 31 NCRs reviewed for concurrence during this period. VDOT conducted reviews of QA and QC records for accuracy and quality issues and coordinated documentation reviews through VDOT’s Material Department. VDOT also continues a review of current construction quality by performing inspections based on VDOT’s Construction Quality Improvement Program (CQIP).

8. Safety

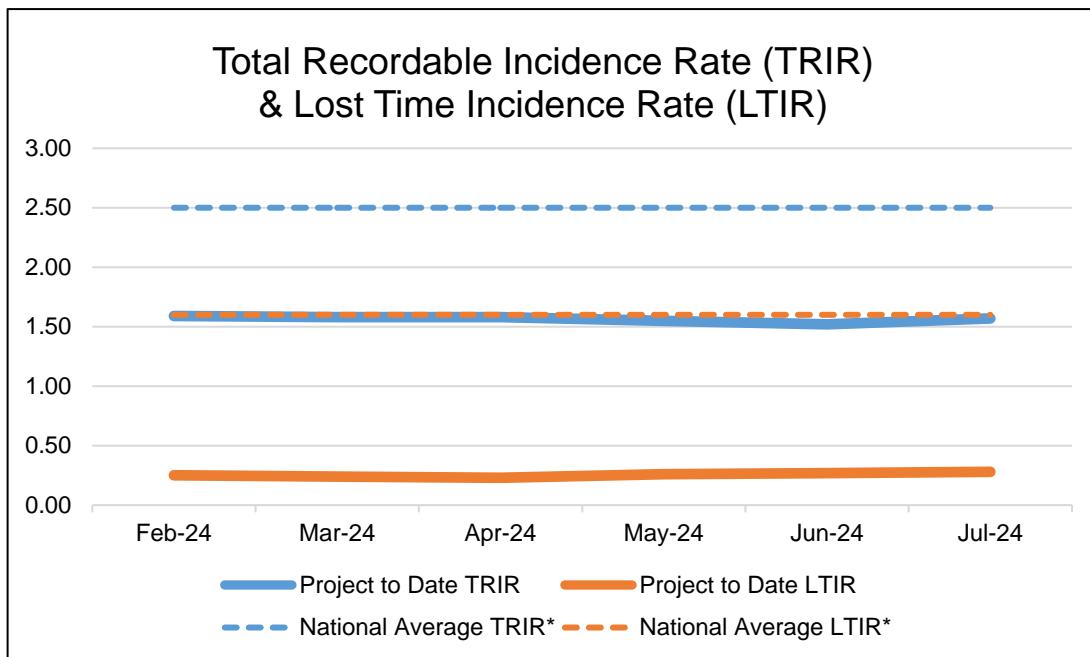
Safety procedures and activities during this reporting period include:

Safety Activities:

- HRCP continued weekly Safety Walks at North and South Island.

Safety Performance Indicators:

- The following safety performance indicator information is provided by HRCP and is current as of July 31, 2024:



**National averages are from the Bureau of Labor Statistics, US Department of Labor – 2021 Data for Construction Industry, Published November 9, 2022.*

9. Civil Rights & DBE/SWaM Business Opportunities

To date, HRCP has awarded **371** subcontracts, subconsultant agreements and purchase orders to certified DBE/SWaM firms. Contract awards increased to **\$567.6 million** for this period. A total of **\$441.5 million** has been paid for work completed by DBE/SWaM firms.

Compliance Activities:

- HRCP and VDOT met on July 16, 2024, for its monthly Civil Rights Workgroup Meeting. Discussion continued on the reporting of subcontract payments using B2G Now in an effort to meet reporting requirements, unresolved subcontract payment disputes, and the annual submission of EEO project data. The meeting concluded with the recognition of the 60th anniversary of the signing of the Civil Rights Act of 1964 into law.
- HRCP's 2nd Quarter DBE/SWaM Good Faith Efforts Report/C-111, DBE/SWaM Utilization Plan, and Workforce Participation Plan were submitted on July 15, 2024, as required for VDOT's formal review.

Workforce Development Activities:

- HRCP continued to make progress towards the OJT contract goal of 80 graduates. To date, 35 employees have graduated with 15 currently active in the program.

Business Development Activities:

- Bid solicitation and HRCP contact information for the Tunnel Support & Facility Buildings Package was shared with members of VDOT's Transportation DBE Advisory Council (TDAC) as well as other DBE firms expressing interest.

10. Public Outreach & Media

The following public outreach and project media activities occurred in this period:

Public Outreach

- June 25, 2024 – Construction Engineer Pa Ousman Njie led a technical session on the HRBT's tunnel approach structure at the 2024 North American Tunneling Conference in Nashville, TN.
- July 10, 2024 – HRBT Communications Team published a video highlighting the TBM U-Turn at North Island, featuring in-depth explanations about the coordination and technology implemented. <https://hrbtexpansion.org/>
- July 10, 2024 – HRBT Communications Team published the July episode of HRBT Tunnel Talk, discussing archeological discoveries found during construction. Featured guests were from William and Mary's Center for Archeological Research, Virginia Museum of Natural History's Assistant Curator of Paleontology, and VDOT. <https://hrbtexpansion.org/newsroom/podcast/>
- July 15, 2024 – HRBT Communications Team published a video to discuss the beam launcher on North Trestle westbound. <https://hrbtexpansion.org/videos/>
- July 16, 2024 – HRBT Expansion Project Communications Director Paula Miller presented progress updates to the Pinewell Civic League.
- July 16, 2024 – District Engineer Chris Hall and HRBT Expansion Project Director Ryan Banas hosted a site visit for members of the Federal Highway Administration Major Projects team.

Media

- June 27, 2024 – (WTKR) Mary the Tunnel Boring Machine makes a U-turn to prepare for the journey home after HRBT expansion work <https://www.wtkr.com/transportation/mary-the-tunnel-boring-machine-makes-a-u-turn-to-prepare-for-journey-home-after-hrbt-expansion-work>
- June 27, 2024 – (WAVY) S. Mallory Street on-ramp to temporarily close for HRBT Expansion Project <https://www.wavy.com/news/local-news/hampton/s-mallory-street-on-ramp-to-temporarily-close-for-hrbt-expansion-project/>
- June 27, 2024 – (American Road & Transportation Builders Association) A “Hail Mary” for a \$4 Billion Virginia Transportation Project <https://www.artba.org/news/a-hail-mary-for-a-4-billion-virginia-transportation-project/>

Lane Closures/Advisories

- June 26, 2024 – Temporary Closure of S. Mallory Street On-ramp to I-64 East
- June 28, 2024 – Weekly Lane Closure Report
- July 5, 2024 – Weekly Lane Closure Report
- July 12, 2024 – Weekly Lane Closure Report
- July 19, 2024 – Weekly Lane Closure Report



Visit our website to view more information:

www.hrbtexpansion.org