



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

Report No. 59
Project No. 0064-M06-032



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1. Executive Summary

1.1 Overview

This report provides an overview of accomplishments and activities for the Hampton Roads Bridge-Tunnel Expansion Project from January 21, 2024 – February 24, 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:

- Execution of Comprehensive Agreement Amendment #1 on February 7, 2024.
- South Island Progress:
 - Installation of south portal external walls 26% complete.
- Tunnel Progress:
 - Excavated 1,363 ft this period (6,259 ft total excavation) for High Occupancy Toll (HT) tunnel.
 - Record day for TBM production on February 8, 2024, with 107 ft excavated and 16 rings installed in 24 hours. This is a record for any roadway tunnel construction by TBM in the U.S.
- North Island Progress:
 - Completed installation of concrete for headwall.
 - Completed Cell 2 excavation.
- Landside Progress:
 - Completed installation of wick drains at retaining wall 302 on Bayville Street between 13th View and the eastbound off ramp
 - Completed retaining wall 307 on I-64 eastbound between 13th View Street Bridge and Willoughby Bay Bridge
 - Completed retaining wall 313 on I-64 westbound between 13th View Street Bridge and Willoughby Bay Bridge.
- Marine Progress:
 - South Trestle HOT bridge piles 53% complete.
 - South Trestle MOT westbound bridge piles 93% 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 Revised Baseline Schedule (RB07) was approved by the Department on February 7, 2024. Current Substantial and Final Completion milestones are shown below:

- Project Substantial Completion: February 26, 2027
- Project Final Completion: August 27, 2027

Project Budget

The project budget summary below now includes all incurred to date costs through February 24, 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:	\$ 2,300,942,115
Remaining project budget:	\$ 1,634,509,526

- Design-build contract overview:

Design-build contract original amount:	\$ 3,299,997,227
Net change orders:	\$ (9,974,795)
Exercised Options:	\$ 73,454,414
Material Price Adjustments to Date:	\$ 3,908,554
Assessed Liquidated Damages (LD):	\$ (939,000)
Design-build contract sum to date:	\$ 3,366,466,401
Expenditures to date:	\$ 2,188,902,810
Remaining design-build contract amount:	\$ 1,177,543,590

- Design-build progress to date:

Project Management:	76.3%
Design:	93.2%
Physical Construction Progress:	45.4%
Overall:	65.0%

Environmental

Environmental updates for this reporting period include:

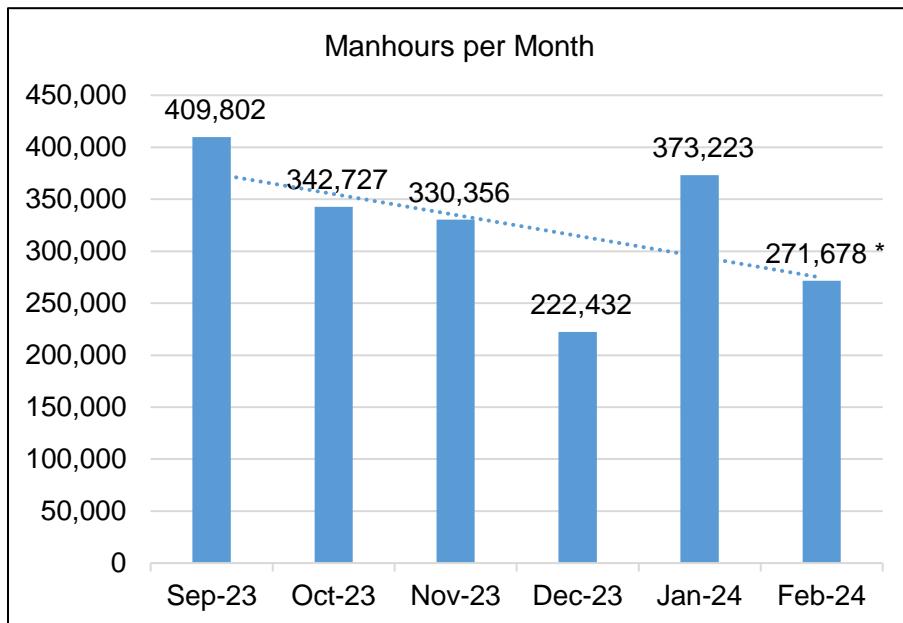
- HRCP initiated plans for the 2024 bird nesting season. Inspections and repairs to bird deterrent measures are ongoing.
- HRCP provided weekly inspection reports to the U.S. Army Corps of Engineers.

Construction

Summary progress updates for this reporting period include:

- Landside Roadways
 - Began installation of retaining wall 409 between Oastes Creek and Patrol Rd. for eastbound widening.
 - Began placement of surcharge along Bayville Street between 13th View and the eastbound off ramp.
- Marine Works
 - Placed decks at North eastbound permanent trestle (2 installed this period).
 - Drove piles at South MOT westbound trestle (5 installed this period).
 - Drove piles at South trestle Ramp B (6 installed this period).
- Tunnels and Islands
 - Excavated 1,363 ft this period (6,259 ft total excavation) for High Occupancy Toll (HT) tunnel.
 - Completed excavation of Cell 2 of the receiving pit on North Island.
- Landside Bridges
 - Completed abutment backwalls at east half of Mallory St. Bridge.
 - Completed installation of deck Spans 1 and 2 at east half of Mallory St. Bridge.
 - Completed parapet demolition in Spans 1 – 17 at Willoughby Bay Bridge for eastbound widening.
 - Began and completed abutment backfill at Mason Creek Bridge for eastbound widening.
 - Completed installation of footing at Abutment B at Oastes Creek Bridge for eastbound widening.
 - Completed preparation of slope protection at Abutment B at Patrol Road Bridge for eastbound widening.

The number of construction manhours worked each month is provided by HRCP and is current as of February 29, 2024:



Project Manhours to Date:
10,475,127

*HRCP Estimated for February 2024

Operations

The following operations activities took place during this reporting period:

- Temporary stoppages on Mallory Street eastbound on-ramp for overhead utility work.
- Slow rolls and all stops on I-64 east and west for Mallory deck pours.
- All stops on I-64 at Mallory for ITS and sign structure foundation installation.
- Installation of ITS devices on new North Trestle Eastbound.
- Traffic shifted on 4th View Street to facilitate bridge widening and rehabilitation.

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 February 29, 2024:

- Total Recordable Incidence Rate: 1.59 (National Average: 2.5)
- Lost Time Incidence Rate: 0.25 (National Average 1.6)

Civil Rights & DBE/SWaM Business Opportunities

HRCP has awarded **355** subcontracts, subconsultant agreements, and purchase orders to certified DBE/SWaM firms on the project. These contract awards represent a total of **\$553 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:

- VDOT published the February 2024 project newsletter update.
- VDOT presented project updates to the Military Officers Association of America – Hampton Roads Chapter in Virginia Beach, VA.

2. Project Schedule

2.1 Schedule Status

The following table lists key milestone dates for the Project based on the Revised Baseline schedule approved on February 7, 2024.

	Contract Requirement	Revised Baseline 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 Revised Baseline Schedule (RB07) is driven by the following activities:

- TBM drive in High Occupancy Toll Tunnel
- TBM U-Turn on North Island
- TBM drive in General Purpose Tunnel
- TBM disassembly in south pit
- General Purpose Tunnel Interior Fit Out – Section 8
- General Purpose Egress Corridor – Fire Life Safety System
- Commissioning – General Purpose Tunnel – Functional Testing
- 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

- None

South Island

- None

Tunneling

- Tunneling U-Turn – Preparation in Cell 1
- General Purpose Tunnel – Interior Structures Construction

North Portal

- North Portal – Cell 2 Excavation
- North Portal – Cell 2 Base Slab

North Island

- None

Roadway and Land Bridges

- Segment 3 – ITS – Pole Mounted Cabinet
- Segment 3b – ITS – Underground Ductbank and Fiber, Temporary WB Aerial Power Poles
- Segment 4 – ITS – Temporary ITS Cabinet, Temporary WB CCTV
- Segment 3b Phase 2 – I-64 Willoughby Spit PV Drains/Ground Improvement, Retaining Wall 313
- Segment 3b Phase 2b – I-64 Willoughby Spit Permanent Barrier Wall, Roadway Widening & Asphalt
- Segment 3d Phase 4 – Willoughby Bridge to Mason Creek – WB Widening, Storm Drainage, 4th View Ramp H
- Segment 4 Phase 2 – Norfolk to Navy – Retaining Wall 409
- Segment 4 Phase 3 – Norfolk to Navy – Storm Drainage
- Segment 4 Phase 3A – Norfolk to Navy – Roadway Widening
- Segment 4 Phase 4 - Norfolk to Navy – Storm Drainage and Permanent Barrier Wall
- 13th View Bridge – Eastbound & Westbound Rehabilitation
- Willoughby Bay Bridge – Westbound Substructure, Superstructure Construction & Rehabilitation
- 4th View Bridge – Eastbound Rehabilitation
- Bay Avenue Bridge – Westbound Rehabilitation
- Oastes Creek Bridge – Eastbound Substructure, Superstructure Construction
- Patrol Road Bridge – Eastbound Substructure, Superstructure Construction, Eastbound Rehabilitation

Trestles

- South Trestle Temporary Work Trestle S5 – Construct and Demolition
- South Trestle – Zone 2 Finishes

- South Trestle – Zone 5 Girders
- South Trestle – Zone 8 Substructure
- South Trestle – Existing Trestle Demolition

Commissioning and Integration

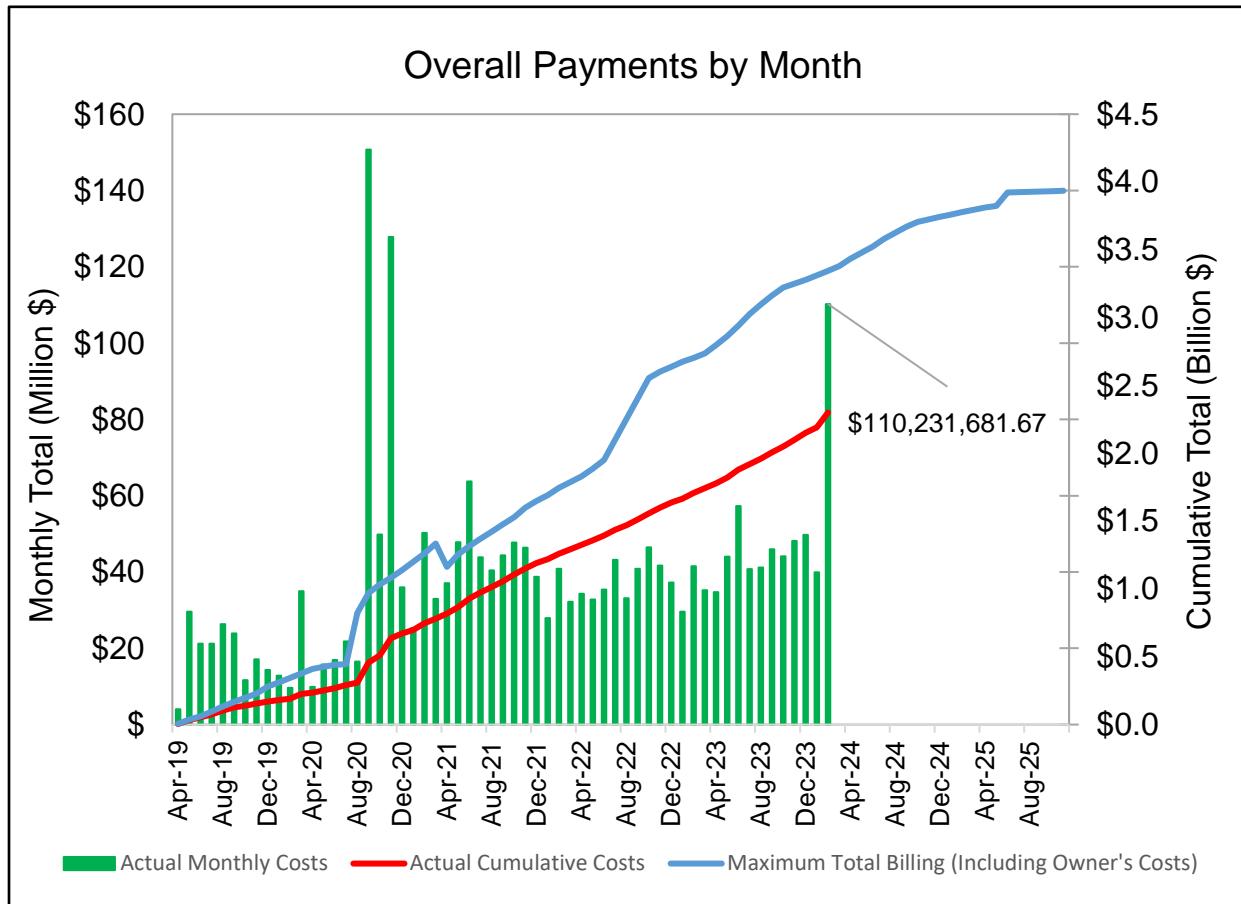
- Operational Testing – General Purpose Tunnel – Egress Corridor Pressurization System
- Commissioning Integration – Existing Westbound Tunnel, Existing Eastbound Tunnel, General Purpose Tunnel
- ITT Reversal – Preparation Work for Eastbound Tunnel Traffic Direction Change, Roadway Median Barrier Walls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

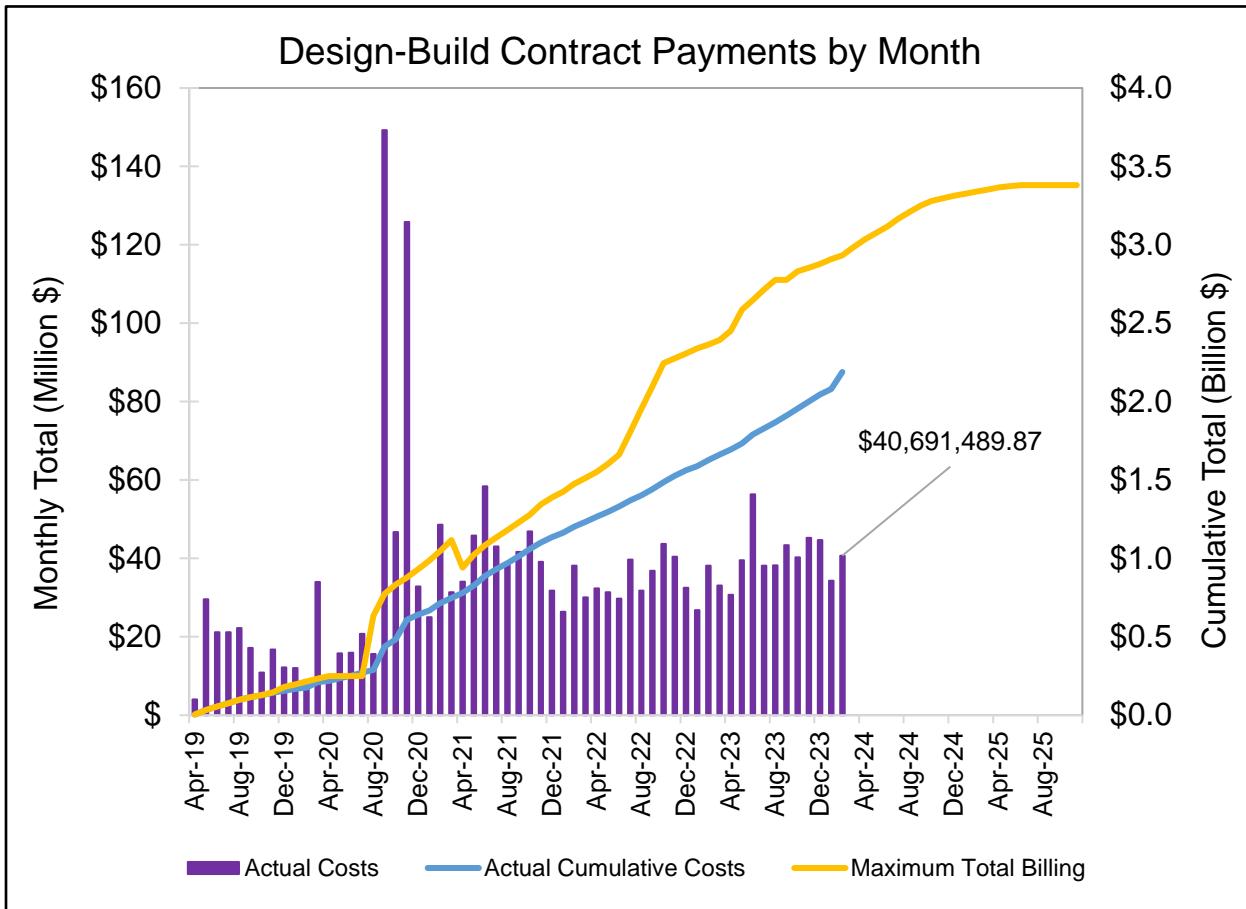
	Amount Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
<i>Construction</i>	\$40,691,489.87	\$2,088,222,498.87	\$3,299,997,227.00	\$1,211,774,728.13	63.28%
<u>Owner Costs</u>					
<i>Administration</i>	\$2,157,630.12	\$98,540,481.30	\$122,000,000.00	\$23,459,518.70	80.77%
<i>Right of Way</i>	\$55,126.26	\$9,498,823.49	\$15,000,000.00	\$5,501,176.51	63.33%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$67,250,761.68	\$99,248,551.74	\$335,000,000.00	\$235,751,448.26	29.63%
<i>Bridge Repair Work Option</i>	\$76,673.74	\$5,431,759.73	\$73,454,413.96	\$68,022,654.23	7.39%
<u>Total</u>	\$110,231,681.67	\$2,300,942,115.13	\$3,935,451,640.96	\$1,634,509,525.83	58.47%



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

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.



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

3.3 Budget by Funding Source

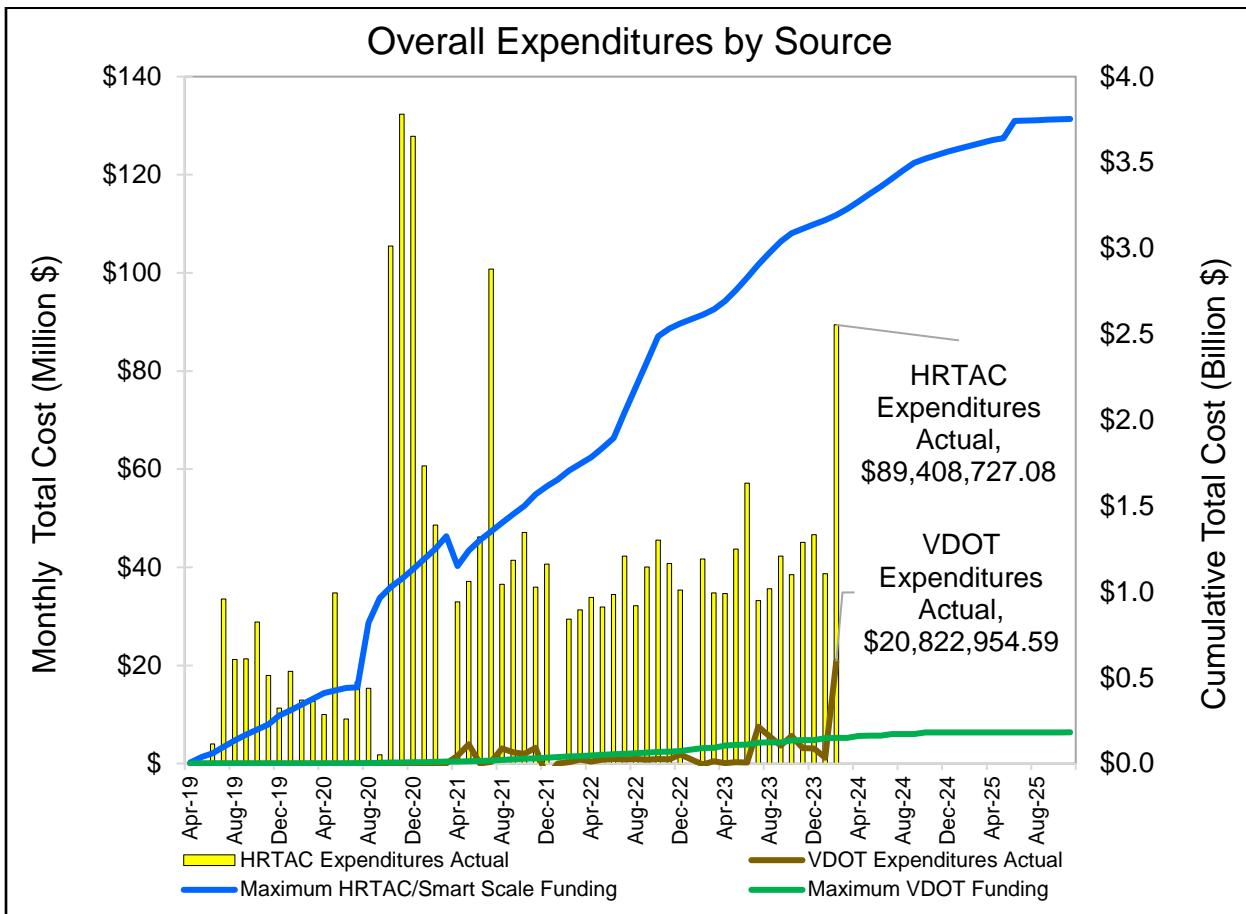
The budget for expenditures by funding source is based on the terms and conditions of Article 3 (Project Funding) and Exhibit 5 of the PAFA. This section outlines planned expenditures of both HRTAC and VDOT funds. The cost curve has been developed based on the monthly maximum cumulative compensation 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	\$39,086,068.85	\$2,046,019,641.86	\$3,204,569,251.00	\$1,158,549,609.14	63.85%
<u>Owner Costs</u>					
Administration	\$2,006,360.17	\$94,596,413.30	\$118,472,054.00	\$23,875,640.70	79.85%
Right of Way	\$55,126.26	\$9,498,823.49	\$15,000,000.00	\$5,501,176.51	63.33%
No-Excuses Incentive	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
Contingency	\$48,261,171.80	\$76,170,324.08	\$325,428,276.00	\$249,257,951.92	23.41%
Total	\$89,408,727.08	\$2,226,285,202.73	\$3,753,469,581.00	\$1,527,184,378.27	59.31%

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	\$1,605,421.02	\$42,202,857.01	\$95,427,976.00	\$53,225,118.99	44.22%
<u>Owner Costs</u>					
Administration	\$151,269.95	\$3,944,068.00	\$3,527,946.00	(\$416,122.00)	111.80%
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	\$18,989,589.88	\$23,078,227.66	\$9,571,724.00	(\$13,506,503.66)	241.11%
Bridge Repair Work Option	\$76,673.74	\$5,431,759.73	\$73,454,413.96	\$68,022,654.23	7.39%
Total	\$20,822,954.59	\$74,656,912.40	\$181,982,059.96	\$107,325,147.56	41.02%



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-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	Hurricane Ian – Marine Fleet Safe Harbor	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-83	Marine Fleet Safe Harbor – Tropical Storms Idalia/Ophelia	1/11/2024	\$ 200,262.16	0 days
CO-86	OHSS No. 36 Foundation – Archaeologist Assessment	2/20/2024	\$ 14,641.81	0 days
		TOTAL	\$ 63,479,619.33	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			
Exhibit 9 - Asphalt	\$2,904.76	\$160,819.09	December 2023
Exhibit 10 - Fuel	\$11,504.12	\$453,896.03	December 2023
Exhibit 11 - Steel	\$380,374.67	\$3,293,839.12	August 2023
Total	\$394,783.55	\$3,908,554.24	
Per CA Amendment Adjustment			
Exhibit 9 - Asphalt	\$0.00	\$0.00	December 2023
Exhibit 10 - Fuel	\$28,099.68	\$28,099.68	December 2023
Exhibit 11 - Steel	\$5,744,887.72	\$5,744,887.72	August 2023
Exhibit 10A – A-Typical Price Adjustments for Fuel	\$1,430,472.59	\$1,430,472.59	December 2023
Exhibit 15A – Index-Adjusted Commodities	\$44,689,830.44	\$44,689,830.44	August 2023
Exhibit 15B – Escrow-Adjusted Commodities	\$13,589,352.55	\$13,589,352.55	December 2023
Total	\$65,482,642.99	\$65,482,642.99	

* The finalization of the steel index takes the Federal government about 4 months to complete.

4. Environmental

The following environmental management activities occurred during this reporting period:

Permits:

- HRCP provided several submittals of additional information to the Department of Environmental Quality regarding the modification of the generator air permits for the North and South Islands.
- HRCP provided weekly inspection report summaries to the U.S. Army Corps of Engineers.
- HRCP conducted in-house environmental compliance training with work crews from Landside, Islands, and Trestle construction areas.
- HRCP continues to work with the DEQ in finalizing the Air Permits.

Marine Mammal Protection:

- No new activities.

Bird Mitigation:

- HRCP initiated plans for the 2024 bird nesting season by bringing Flyaway Geese staff and dogs to the project site. Inspections and repairs to bird deterrent measures have been ongoing during the period.

Programmatic Agreement:

- No new activities.

Archeological Discoveries:

- No new activities.

Protected Species:

- A sea turtle was discovered on shore at South Island within the perimeter rocks. HRCP contacted the proper authorities.

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 construction of permanent median barrier wall between Mallory St. and N. Trestle.
- Completed settlement period for retaining wall 108 adjacent to North Trestle Abutment A.

I-64 (Segment 3):

- Completed installation of wick drains at retaining wall 302 on Bayville Street between 13th View and the eastbound off ramp; retaining wall 307 on I-64 eastbound between 13th View Street Bridge and Willoughby Bay Bridge; and retaining wall 313 on I-64 westbound between 13th View Street Bridge and Willoughby Bay Bridge.
- Began placement of surcharge along Bayville Street between 13th View and the eastbound off ramp.

I-64 (Segment 4):

- Continued grading for embankment between Mason Creek and 1st View bridges for eastbound widening.
- Continued grading for embankment adjacent to Evans St. Abutment A for eastbound widening.
- Began installation retaining wall 409 between Oastes Creek and Patrol Road for eastbound widening.



◀ Retaining Wall 409

Wall panel installation begins between Oastes Creek and Patrol Road.

5.2 Construction Area 2: Marine Trestle Work

North Trestle:

- **Westbound Trestle**
 - 2 decks placed during this period (7.5 out of 45 total decks placed).
 - 1 cap placed during this period (10.5 out of 46 total caps placed).

South Trestle:

- **Eastbound Trestle**
 - 3.2 decks placed during this period (23.2 out of 53 total decks placed).
 - 1 cap placed during this period (36 out of 54 total caps placed).
- **Westbound Trestle MOT**
 - 5 piles driven during this period (99 out of 107 total piles driven).
- **HOT Lanes Trestle**
 - 13 piles driven during this period (35 out of 66 total piles driven).
 - 1 cap placed during this period (6 out of 16 total caps placed).
- **Ramp B**
 - 6 piles driven during this period (15 out of 28 total piles driven).



◀ **South Trestle Ramp B**
Abutment A pile driving

5.3 Construction Area 3: Tunnels and Islands

South Island:

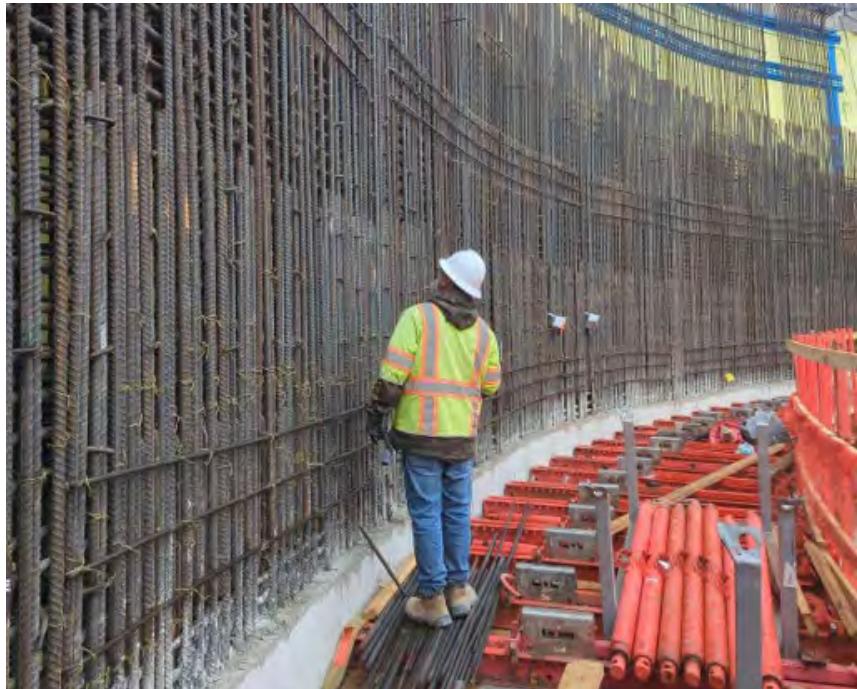
- 26% complete for installation of south portal external walls.
- Continued work on rectilinear approach capping beams, and rectilinear approach temporary and permanent struts.

North Island:

- Completed headwall concrete placement at Cell 1 of receiving shaft.
- Completed third level of strut installation in Cell 2.
- Completed Cell 2 excavation.
- Began preliminary work for Cell 2 base slab.

Tunnel:

- 78.8% complete for High Occupancy Toll (HT) tunnel excavation (6,259 ft out of 7940 total ft excavated).
- 204 concrete tunnel rings installed this period (932 out of 1,194 total rings installed).
- 5.6% complete for stage 1 installation of cement-treated base (CTB) ballast for tunnel roadway.



◀ **South Island**
Rebar for exterior wall Cell 3
East Pour 3

Total Segments Required:	Conforming Segments Cast To-Date:	Percentage Complete:
21,492	21,277	99%

5.4 Construction Area 4: Landside Bridges

Mallory Street Bridge:

- Completed abutment backwalls for east half of new bridge.
- Completed installation of deck reinforcement and concrete placement at Spans 1 and 2 for east half of new bridge.

Willoughby Bay Bridge:

- Continued repair/rehabilitation of existing westbound bridge.
- Continued installation of precast cap for westbound widening.
- Completed hydro-demolition of existing bridge deck for eastbound widening.
- Completed parapet demolition in Spans 1 – 17 for eastbound widening.

4th View Street Bridge:

- Continued demolition of parapet/overhang to facilitate bridge widening.

Mason Creek Bridge:

- Continued repair/rehabilitation of existing eastbound and westbound bridges.
- Began and completed abutment backfill for eastbound widening.

1st View Street Bridge:

- Completed installation of deck overhangs and formwork for eastbound widening.
- Continued repair/rehabilitation of existing eastbound bridge.

Bay Avenue Bridge:

- Continued installation of mainline stay-in-place (SIP) deck forms and overhangs for eastbound widening.
- Continued demolition of mainline parapet and deck overhang for eastbound widening.

Oastes Creek Bridge:

- Completed preparation of slope protection at Abutment A for eastbound widening.
- Completed installation of footing at Abutment B for eastbound widening.

Patrol Road Bridge:

- Completed preparation of slope protection at Abutment B for eastbound widening.



◀ **Patrol Road Bridge
Eastbound**
Abutment B slope protection
work

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 and pavement marker removal throughout project corridor.
- Slow rolls and lane closures on I-64 at Willoughby for temporary lighting installation.
- Temporary stoppages on the Mallory Street EB on ramp for overhead utility work.
- Slow rolls and all stops on I-64 east and west for Mallory deck pours.
- All stops on I-64 at Mallory for ITS and 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 Lane Shifts:

- Traffic shifted on 4th View Street to facilitate bridge widening and rehabilitation.

Detours:

- Short-term daily detours at W. Bay Ave. on-ramp eastbound to facilitate bridge widening.
- Long-term detour on Mason Creek Road was established to facilitate bridge widening.

Intelligent Transportation System (ITS):

- Installation of ITS devices on new North Trestle Eastbound.
- Installation of ITS and private utility conduit on North Trestle.

Overhead Sign Structures:

- Installation of overhead sign structure foundations at various locations through corridor.

Roadway Lighting:

- Continued temporary lighting installation.
- Installation of permanent lighting conduit and junction chambers at Willoughby Bridge and North Trestle.

Routine Maintenance:

- HRCP performed routine incident management / maintenance operations within corridor.
- Removal of raised pavement markers throughout the corridor is ongoing.

7. Quality

Quality updates for this reporting period include:

Construction Quality Management Plan (CQMP) Updates:

- HRCP submitted quarterly update V16 of the CQMP last period, which was returned Revise and Resubmit this period.
- VDOT reviews CQMP updates as part of final “Released for Construction” (RFC) design packages and “Notice of Design Change” (NDC) packages. HRCP submitted five packages this period, with four returned as approved. Two packages from last period were returned to HRCP; one as Approved and one as Revise and Resubmit.

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. Technopref’s precast yard in Cape Charles is currently not producing tunnel lining segments.

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 V23 of the QMSP last period, which was returned this period as Approved as Noted.

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 twenty-two volumes of Material Book records and is currently auditing two volumes of the 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 38 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

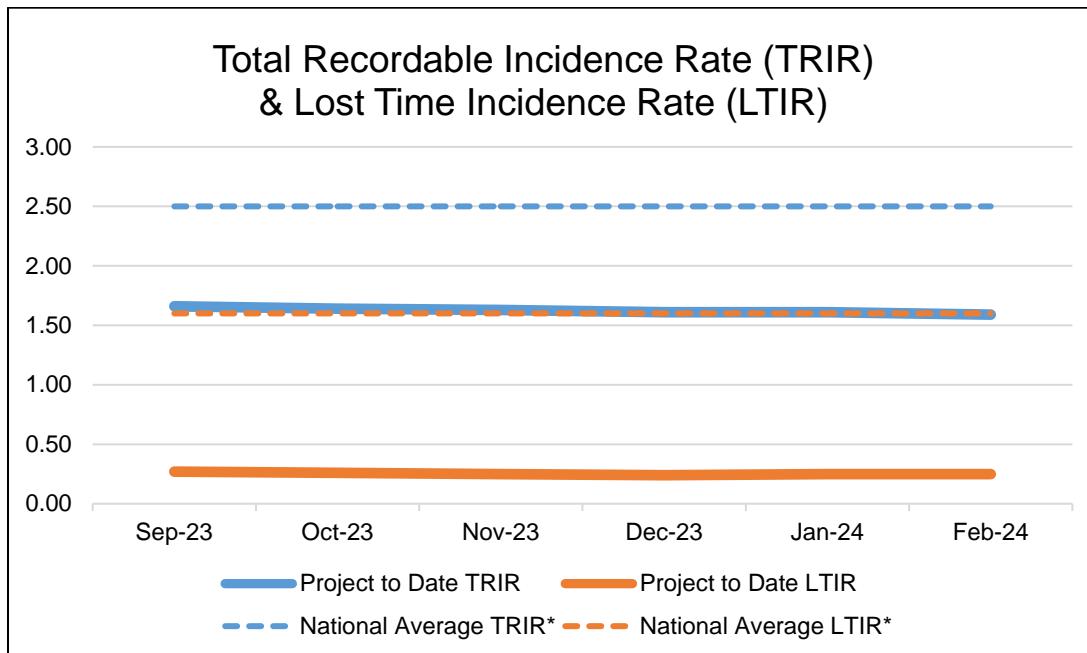
Safety procedures and activities during this reporting period include:

Safety Activities:

- HRCP field supervisors and staff began a safety committee to conduct inspections in multiple areas of the project.

Safety Performance Indicators:

- The following safety performance indicator information is provided by HRCP and is current as of February 29, 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 **355** subcontracts, subconsultant agreements and purchase orders to certified DBE/SWaM firms. There was an increase in contract awards for a total of **\$553 million** due to new change orders issued to active DBE/SWaM firms on the project. A total of **\$392 million** has been paid for work completed by DBE/SWaM firms.

Compliance Activities:

- For this reporting period, HRCP and VDOT met on February 20, 2024, to discuss progress on the submission of certified payrolls, recommended strategies for increasing OJT participation, and ongoing efforts to respond to subcontractor payment delays.
- HRCP submitted its 4th Quarter DBE/SWaM Good Faith Efforts Report/C-111, DBE/SWaM Utilization Plan, and Workforce Participation Plan during the previous reporting period, for which VDOT offered recommendations. VDOT reviewed these submittals and determined them to be compliant.

Workforce Development Activities:

- An audit was completed and of the 37 graduates previously reported only 34 met the criteria for program completion. Additional training will be provided to the three (3) enrolled candidates with a different HRCP mentor. The seven (7) remaining enrollees will be adjusted to 10 active participants in the program. HRCP continues to seek ways to increase participation by ensuring project leads are vested in the program and subcontractors have an opportunity to allow their employees to benefit from the training program.
- HRCP visited the Tidewater Community College (TCC) Skilled Trades Academy in Portsmouth, Virginia, for a meeting with Director Stan Ashemore and a guided shop tour for a potential partnership with the HRBT OJT Program on January 25, 2024.
- On February 5, 2024, HRCP's Compliance Officer attended the Hampton Roads Transit (HRT) "Transit Equity Day" in honor of Civil Rights icon Rosa Parks. HRCP recognizes the significance of Black History Month and carries out efforts in the OJT program to prioritize minority career development.

Business Development Activities:

- HRCP participated in a business and membership networking event hosted by the Hampton Roads chapters of Women's Transportation Seminar (WTS) and Conference of Minority Transportation Officials (COMTO) on February 8, 2024, in Virginia Beach.

10. Public Outreach & Media

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

Public Outreach

- January 30, 2024 – HRCP and VDOT hosted a career expo at Virginia Peninsula Community College in Hampton.
- February 14, 2024 – Project Team published the February 2024 project newsletter update.
- February 16, 2024 – Project Leadership presented project updates to the Military Officers Association of America – Hampton Roads Chapter in Virginia Beach, VA.
- February 21, 2024 – Project Leadership presented project updates at Jefferson Lab for National Engineers Week in Newport News, VA.

Lane Closures/Advisories

- January 26, 2024 – Weekly Lane Closure Report
- February 2, 2024 – Weekly Lane Closure Report
- February 6, 2024 – Travel Impacts Around Mallory Street
- February 9, 2024 – Weekly Lane Closure Report
- February 16, 2024 – Weekly Lane Closure Report
- February 23, 2024 – Weekly Lane Closure Report

Media

- February 6, 2024 – (WAVY) Construction on Mallory St. Bridge to delay travelers <https://www.wavy.com/traffic/construction-on-mallory-st-bridge-to-delay-travelers/>
- February 10, 2024 – (WTKR) Eastbound lanes of I-64 HRBT back open after brush fire: VSP <https://www.wtkr.com/traffic/eastbound-lanes-of-i-64-closed-at-hrbt-due-to-incident-vdot>

Visit our website to view more information:

www.hrbtexpansion.org