



June 2022
Monthly Project Report

I-64 HAMPTON ROADS BRIDGE-TUNNEL EXPANSION

Report No. 39

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	8
3.1 Overall Budget	8
3.2 Design-Build Contract Cost Status	10
3.3 Budget by Funding Source	11
3.4 Contingency	12
4. Environmental	14
5. Construction	15
5.1 Construction Area 1: Landside Roadways	16
5.2 Construction Area 2: Marine Trestle Work	17
5.3 Construction Area 3: Tunnels and Islands	18
5.4 Construction Area 4: Landside Bridges	19
6. Operations	22
7. Quality	23
8. Safety	24
9. Civil Rights & DBE/SWaM Business Opportunities	25
10. Public Outreach & Media	26

Issue Date: July 19, 2022

Prepared by:

Virginia Department of Transportation

www.hrbtextension.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 May 22, 2022 – June 18, 2022. 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 for reinforcing steel for bottom mat at Cell 3 completed.
 - Mass excavation of TBM Launch Pit to 97%.
 - Jet Grouting at tunnel approach plug to 23%.
 - Slab placement for slurry treatment plant to 34%.
- North Island Progress:
 - Slurry walls to 45%.
- Landside Progress:
 - Precast cap installation at Oastes Creek Bridge eastbound completed.
- Marine Progress:
 - North Trestle westbound piles to 10%.
 - South Trestle piles to 64%.

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 34 (data date: May 22, 2022), and the schedule information in this report reflects this update.

- Contractual Substantial and Final Completion Dates remain unchanged.
- HRCP's Schedule Update 34 is reporting Substantial Completion date of August 1, 2026.
- HRCP's Schedule Update 34 is reporting Final Completion date of September 30, 2026.

Project Budget

The project budget summary below now includes all incurred to date costs through June 2022 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:	\$ 1,396,096,588
Remaining project budget:	\$ 2,539,355,053

- Design-build contract overview:

Design-build contract original amount:	\$ 3,299,997,227
Net change orders:	\$ 2,113,491
Exercised Options:	\$ 73,454,414
Design-build contract sum to date:	\$ 3,375,565,132
Expenditures to date:	\$ 1,330,837,992
Remaining design-build contract amount:	\$ 2,044,727,140

- Design-build progress to date:

Project Management:	43.9%
Design:	87.2%
Physical Construction Progress:	23.0%
Overall:	39.4%

Environmental

During this reporting period, HRCP took the following steps in support of environmental management:

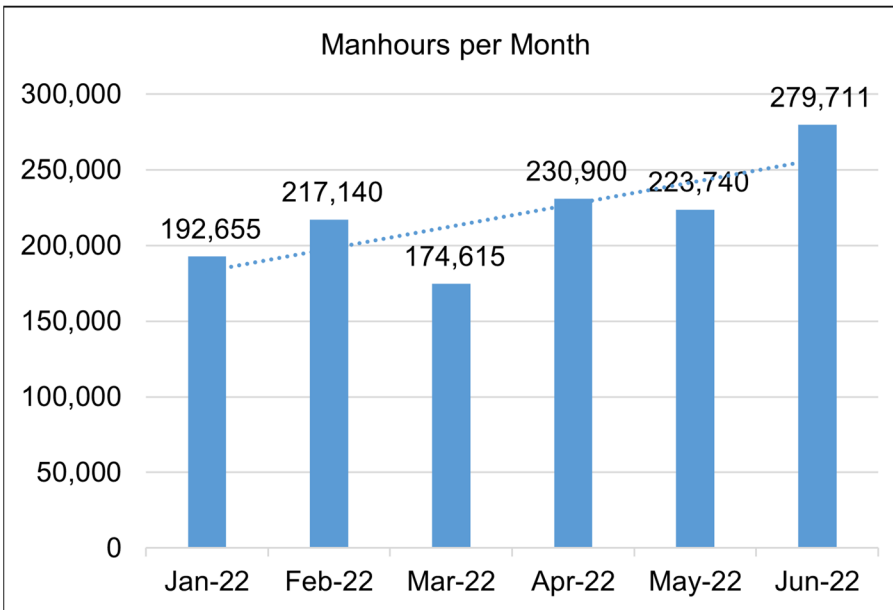
- HRCP submitted the Virginia Pollutant Discharge Elimination System (VPDES) permit modification request to DEQ on June 7, 2022, regarding new water treatment plant outfall configurations for the VPDES permit.
- HRCP received the final agency approval for JPA permit modification #7 on June 8, 2022.

Construction

Progress updates for this reporting period include:

- Landside Roadways
 - Installed drainage along I-64 in Hampton.
 - Installed drainage along I-64 median between Willoughby Bay and 4th View St.
 - Completed sections 7 through 10 of Gravity Retaining wall at 4th View St and Mason Creek Rd.
 - Completed MOT phase for trestle installation at Bay Ave.
- Marine Works
 - Beams placed at the North eastbound MOT trestle (8 installed this period).
 - Caps placed at the North eastbound permanent trestle (0.5 installed this period).
 - Beams placed at the North eastbound permanent trestle (9 installed this period).
 - Piles driven at the North westbound permanent trestle (3 installed this period).
 - Caps placed at the North westbound permanent trestle (1 installed this period).
 - Piles driven at the South eastbound MOT trestle (15 installed this period).
 - Caps placed at the South eastbound MOT trestle (1 installed this period).
 - Beams placed at the South eastbound MOT trestle (8 installed this period).
 - Piles driven at the South permanent trestle (3 installed this period).
 - Caps placed at the South permanent trestle (0.5 installed this period).
- Tunnels and Islands
 - Continued TBM cutter head assembly.
 - Began rebar installation for headwall pour at Cell 1 launch pit.
 - Completed reinforcing steel bottom mat installation for Cell 3 base slab.
- Landside Bridges
 - Completed cap placement at Oastes Creek eastbound.
 - Completed pile driving at Evans St Bridge eastbound.
 - Completed cap placement at Mason Creek Rd pier cap 2 eastbound.

The number of construction manhours worked each month is provided by HRCP and is current as of June 30, 2022:



Project Manhours to Date:
4,235,502

Operations

The following operations activities took place during this reporting period:

- I-64 temporary lighting installation near Oastes Creek in Norfolk.
- Long-term lane closures at Bay Avenue, Bayview Blvd, Mallory St, and West Ocean Ave.
- Short-term lane closures near I-64 at Willoughby Bridge and Willoughby Shore, Mallory St, and 15th View Ramp Interchange.
- Nightly detours on the West Bay Ave on-ramps and 15th View westbound on-ramp.

Quality

Quality updates for this reporting period include:

- HRCP obtained formal Precast/Prestressed Concrete Institute (PCI) certification on June 2, 2022 to fabricate prestressed girders at their Chesapeake yard and VDOT Materials Department established its shop inspection for this facility.
- 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 Procedures (QMSP) and the effectiveness of the plan.

Safety

Safety procedures and activities during this reporting period include:

- VDOT continued to conduct routine visits to promote safe work practices throughout the project.
- The following safety performance indicator information is provided by HRCP and is current as of June 30, 2022:
 - Total Recordable Incidence Rate: 1.70 (National Average: 2.5)
 - Lost Time Incidence Rate: 0.19 (National Average 1.6)

Civil Rights & DBE/SWaM Business Opportunities

HRCP has awarded **309** subcontracts, subconsultant agreements, and purchase orders to certified DBE/SWaM firms on the project. These contract awards represent a total of **\$430.7 million** to certified DBE/SWaM firms.

- HRCP continued to make progress towards the 80 participant On-the-Job Training (OJT) contract goal. To date, 14 have graduated with 18 currently active in the program.
- VDOT/HRCP Civil Rights Compliance Team participated in several meetings during the reporting period to discuss civil rights reporting requirements, document submissions, and on-site labor compliance reviews.
- VDOT and HRCP participated in several business outreach events during the reporting period, which included the SWaMmy Honors, Virtual Transportation Industry Week, and the Department of the Navy's Contracting Summit.

Public Outreach & Media

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

- HRBT Project Team presented to travel and tourism organizations.
- HRBT Project Team presented to Crown Colony Club in Williamsburg.
- HRBT Project Team manned a booth at the Buckroe Beach Farmer's Market.
- HRBT Project featured in "Tunnel Segment" Podcast.

2. Project Schedule

2.1 Schedule Status

The following table depicts key milestone dates outlined in the contract requirements. This table will be used as a benchmark to track milestone achievements and has been updated as of the current approved schedule. The last approved schedule for the project is Update 34 (data date: May 22, 2022), and the schedule information in this report reflects this update. Contractual Substantial and Final Completion dates remain unchanged.

	Contract Requirement	Schedule of Record	May 2022	Actual
NTP		Sep 9, 2020	Sep 11, 2020	Sep 11, 2020
Substantial Completion	Sep 1, 2025	Aug 27, 2025	Aug 1, 2026	
Final Completion	Nov 1, 2025	Nov 1, 2025	Sep 30, 2026	

2.2 Longest Path

The longest path in Project Schedule Update 34 is driven by the following activities:

- South Portal Tricell Headwall Construction
- South Portal Tunnel Boring Machine Base Slab
- Assembly of the Tunnel Boring Machine (TBM) in launching pit
- TBM Assembly
- TBM Commissioning
- TBM drive in High Occupancy Toll (HOT) Tunnel
- TBM U-Turn
- TBM drive in General Purpose (GP) Tunnel
- TBM Disassembly in south pit
- South Portal Cut & Cover Structures Phase 4 Cell 1
- South Island Ventilation Building & Gate House – Phase 2
- South Ventilation Building Commissioning
- South Island Buildings Integrated Functional Testing
- Tunnel Systems Integration-ITS
- Commissioning – HT & GP Operational Testing
- Commissioning – Tunnel + Buildings + Roadways + Trestles Integration Testing
- ITT Reversal
- South Trestle Median Barrier
- Mandatory 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 critical or near critical, meaning there is less than one month of float in the Schedule Update 34:

Construction

South Portal

- Completion of South Island Expansion
- South Island – External Works
- Fire Fighting Piping & Deluge Valve Cabinet
- Slurry Treatment Plant Slabs
- Slurry Treatment Plant Construction
- Slurry Treatment Plant Commissioning
- South Portal Cut & Cover Structures – Phase 2
- South Portal Cut & Cover Structures – Phase 5
- South Portal Cut & Cover Structures – Phase 6
- South Island Ventilation Building & Gate House – Phase 1

South Island Expansion

- South HOV Trestle – Bents 1 – 6

South Trestle

- South MOT Trestle – Bents 1 – 27
- Existing South Trestle Spans 1 – 16 – Demolition

Commissioning and Integration

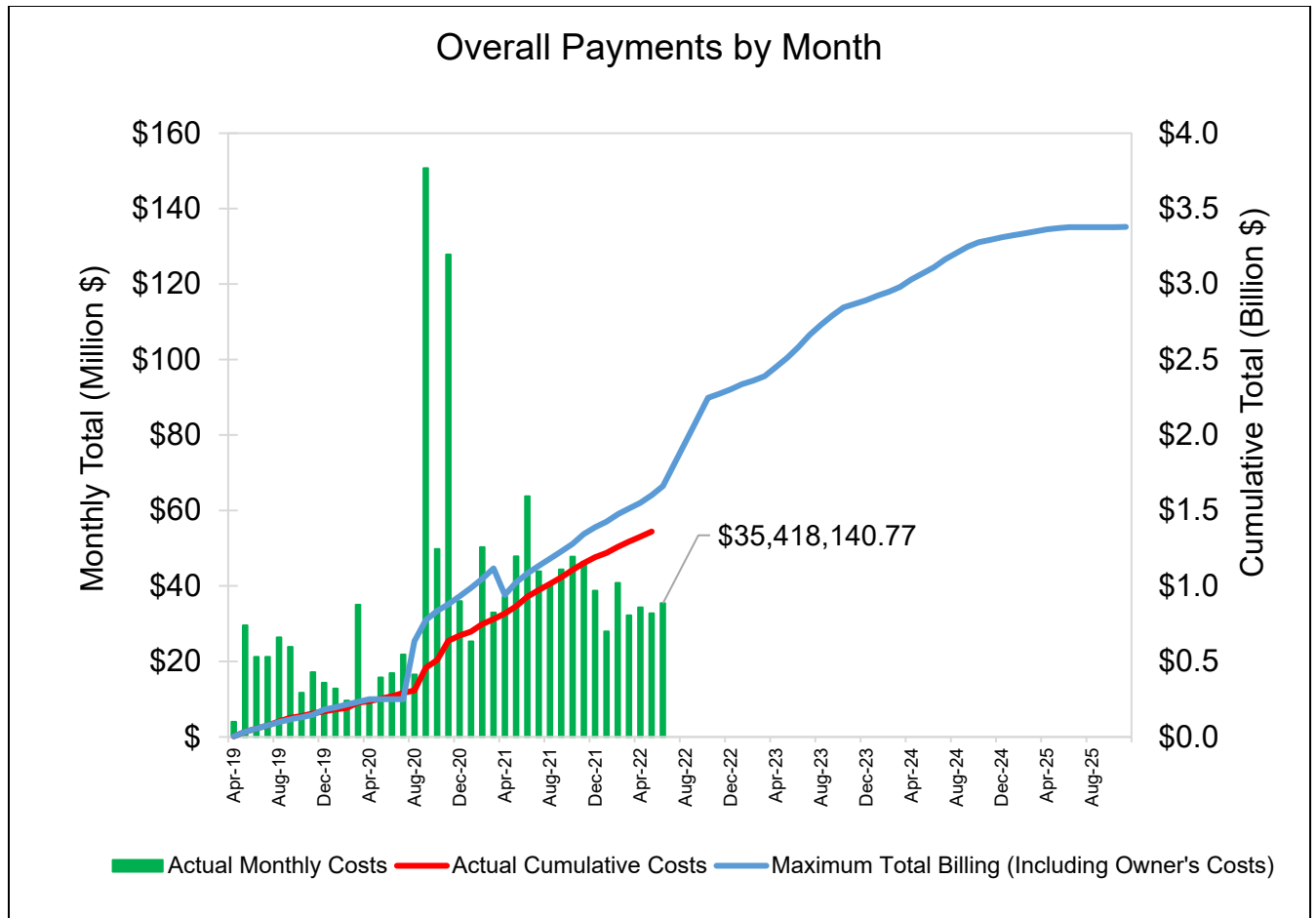
- GP Egress Corridor – Fire Fighting Piping & Deluge Valve Cabinet
- GP Egress Corridor – Low Point Pump Station (LPPS) – DRN / WS – Drainage Main
- GP Tunnel – LPPS Drainage
- GP Tunnel – Fire Suppression & Detection
- South Island Buildings – Electrical Functional Testing
- Commissioning – Operational Testing – GP Fire System
- Commissioning – Operational Testing – GP Medium Voltage/Low Voltage
- Commissioning – Operational Testing – GP Drainage System

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).

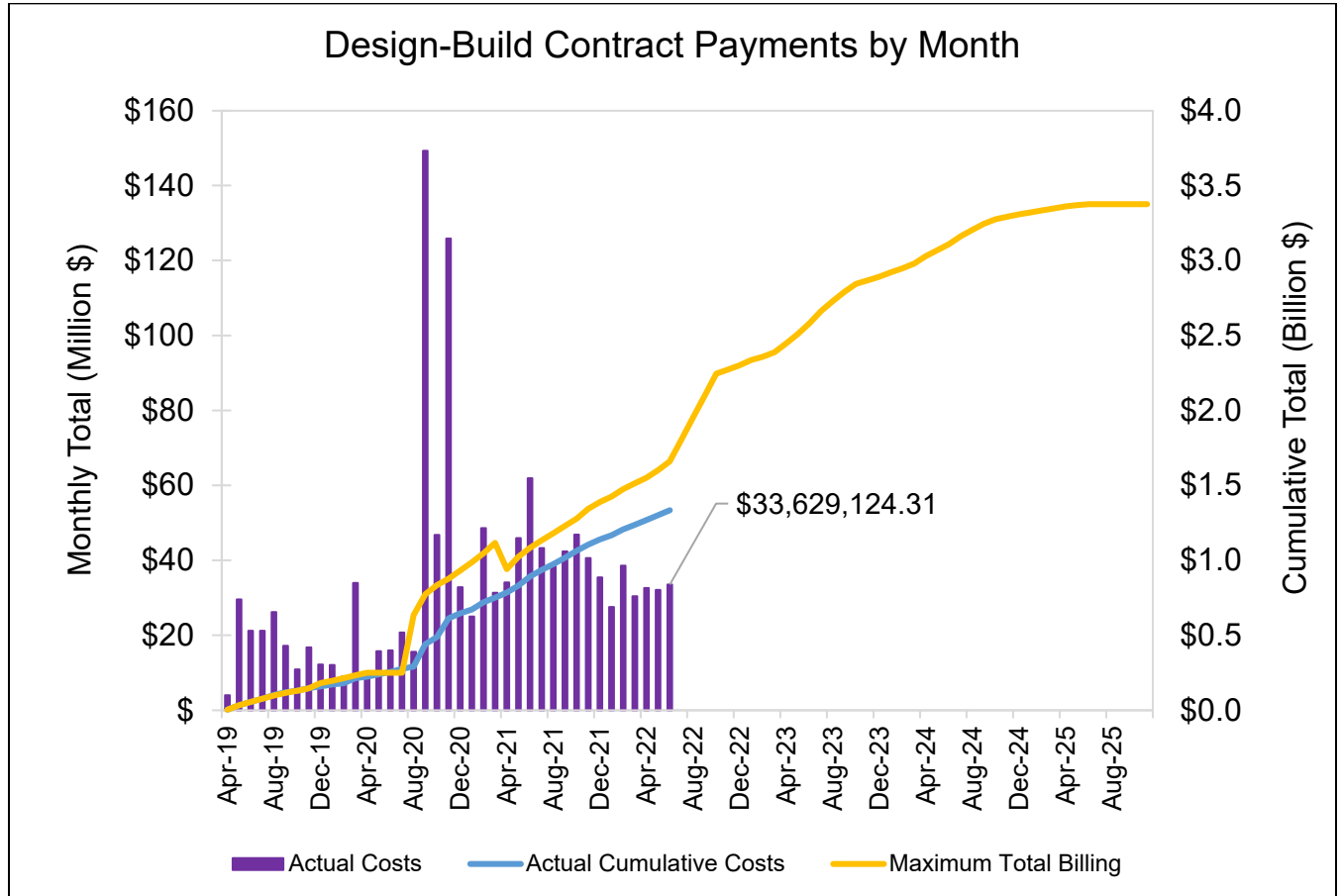
	Amount this Period:	Total to Date:	Original Total Budget:	Total Remaining Budget:	Percent To-date:
<u>Comprehensive Agreement</u>					
<i>Construction</i>	\$29,709,424.40	\$1,313,819,671.06	\$3,299,997,227.00	\$1,986,177,555.94	39.81%
<u>Owner Costs</u>					
<i>Administration</i>	\$1,773,114.02	\$52,668,067.13	\$122,000,000.00	\$69,331,932.87	43.17%
<i>Right of Way</i>	\$15,902.44	\$8,590,528.69	\$15,000,000.00	\$6,409,471.31	57.27%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$3,825,339.35	\$20,238,992.16	\$335,000,000.00	\$314,761,007.84	6.04%
<i>Bridge Repair Work Option</i>	\$94,360.56	\$779,329.12	\$73,454,413.96	\$72,675,084.84	1.06%
<u>Total</u>	\$35,418,140.77	\$1,396,096,588.16	\$3,935,451,640.96	\$2,539,355,052.80	35.47%



**The Maximum Total Billing is now showing 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 is now showing 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 HRCF refines its design, construction means-and-methods, activity sequences, and project resourcing.

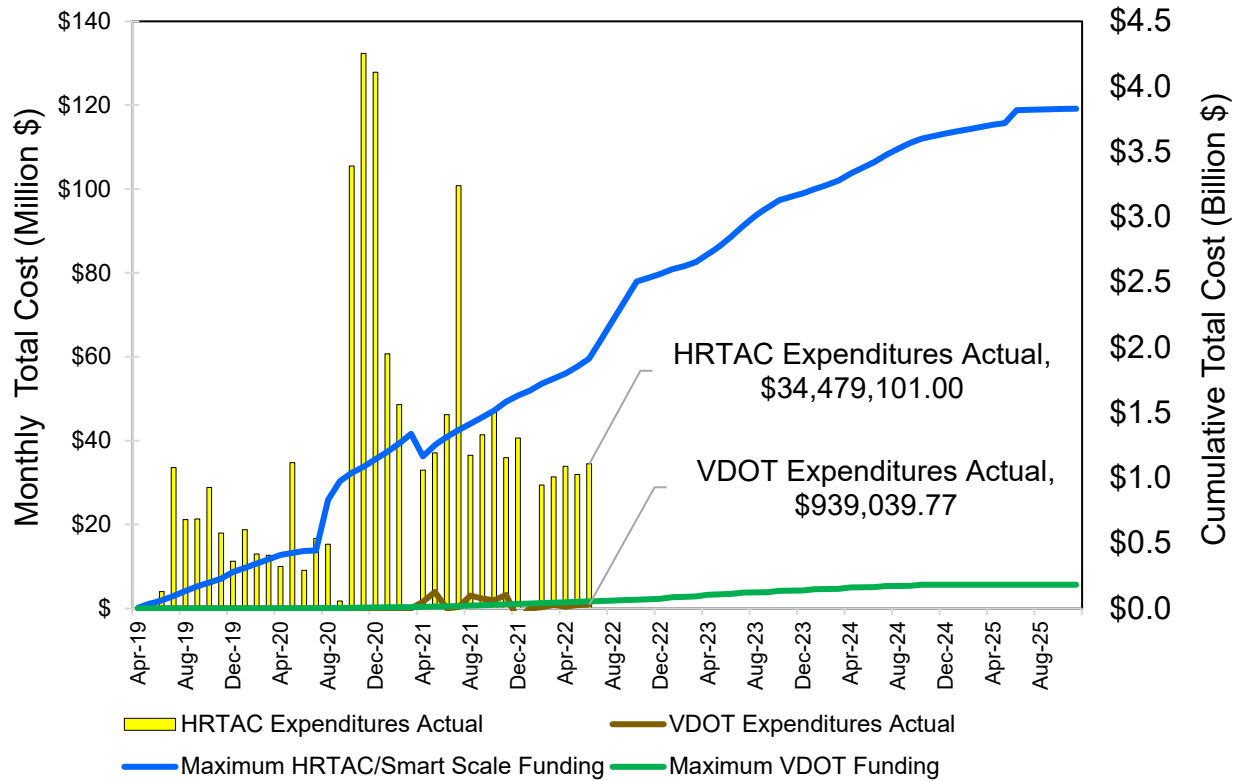
3.3.1 HRTAC and Smart Scale

	Amount Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
<i>Construction</i>	\$29,020,502.40	\$1,301,019,754.30	\$3,204,569,251.00	\$1,903,549,496.70	40.60%
<u>Owner Costs</u>					
<i>Administration</i>	\$1,617,356.81	\$51,401,115.13	\$118,472,054.00	\$67,070,938.87	43.39%
<i>Right of Way</i>	\$15,902.44	\$8,590,528.69	\$15,000,000.00	\$6,409,471.31	57.27%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$3,825,339.35	\$19,254,026.03	\$325,428,276.00	\$306,174,249.97	5.92%
<u>Total</u>	\$34,479,101.00	\$1,380,265,424.15	\$3,753,469,581.00	\$2,373,204,156.85	36.77%

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>					
<i>Construction</i>	\$688,922.00	\$12,799,916.76	\$95,427,976.00	\$82,628,059.24	13.41%
<u>Owner Costs</u>					
<i>Administration</i>	\$155,757.21	\$1,266,952.00	\$3,527,946.00	\$2,260,994.00	35.91%
<i>Right of Way</i>	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
<i>Contingency</i>	\$0.00	\$984,966.13	\$9,571,724.00	\$8,586,757.87	10.29%
<i>Bridge Repair Work Option</i>	\$94,360.56	\$779,329.12	\$73,454,413.96	\$72,675,084.84	1.06%
<u>Total</u>	\$939,039.77	\$15,831,164.01	\$181,982,059.96	\$166,150,895.95	8.70%

Overall Expenditures by Source



3.4 Contingency

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-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-49	HRCP Senior Representative Change	7/2/2021	\$ -	0 days
CO-50	Change in Precast Form Tolerance & Change in Curing Methods	1/10/2022	\$ -	0 days
CO-53	Sound Wall Quantity Reconciliation	12/6/2021	\$ (16,561,217.63)	0 days
CO-57	Design-Builder's Senior and Representative Changes	1/11/2022	\$ -	0 days
CO-59	Fisheries and SAV Mitigation Plan - VCU	6/16/2022	\$ (70,238.22)	0 days
TOTAL			\$ 75,567,905.25	0 days

Material Price Adjustments

This progress period included the following material price adjustments:

Material	Current Amount	Total to Date	Material Price Adjustment Through
Asphalt	\$ 1,781.15	\$ 16,760.69	May 2022
Fuel	\$ 37,449.75	\$ 82,586.43	May 2022
Steel	\$ 520,886.13	\$ 537,635.97	January 2022*

*Reflects the latest date that the Producers Price Index has been updated

4. Environmental

HRCP has completed or is performing several compliance tasks included in permit conditions:

Permits:

- HRCP submitted the Virginia Pollutant Discharge Elimination System (VPDES) permit modification request to DEQ on June 7, 2022, regarding new water treatment plant outfall configurations for the VPDES Permit.
- HRCP received the final agency approval for JPA permit modification #7 on June 8, 2022. This modification includes changes to configuration of the water treatment plant discharge pipes located on the North and South Islands.
- HRCP submitted an updated list to DEQ of generators covered under the draft air permit.

Marine Mammal Protection:

- Dolphin sightings occurred during the reporting period but did not result in any work delays.

Bird Mitigation:

- HRCP continued use of patrol dogs and handlers on the North Island, South Island, and Willoughby Spit to deter birds from nesting within the project.
- There were two active nest sites within the project area however work activities were not impacted.

Programmatic Agreement:

- No new activities during the reporting period.

Archeological Discoveries:

- No new discoveries during the reporting period.

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 bridge work.



5.1 Construction Area 1: Landside Roadways

I-64 (Segment 1):

- Continued drainage installation along I-64 in Hampton.
- Began installation of sidewalk, curb, and gutter work at Mallory St intersection northwest corner.

I-64 (Segment 3):

- Continued drainage installation along I-64 median between Willoughby Bay and 4th View St for westbound widening.
- Completed sections 7 through 10 of gravity retaining wall at 4th View St and Mason Creek Rd for eastbound widening.

I-64 (Segment 4):

- Began permanent earthwork/geogrid installation along I-64 eastbound exterior between 1st View St and Bay Ave.
- Continued repair and rehabilitation work for eastbound Willoughby Bay Bridge girders.
- Completed the MOT phase to gain access for trestle installation at Bay Ave.



◀ **I-64 EB**
Earthwork between 1st
View and Bay Ave

5.2 Construction Area 2: Marine Trestle Work

North Trestle:

- **Eastbound MOT Trestle**
 - 8 beams placed during this period (8 out of 20 total NEXT beams placed).
- **Eastbound Trestle**
 - 0.5 cap placed during this period (19 out of 37 total caps/footers placed).
 - 9 beams placed during this period (34 out of 296 total beams placed).
- **Westbound Trestle**
 - 3 piles installed during this period (27 out of 261 total piles driven).
 - 1 cap placed during this period (3.5 out of 46 total caps/footers placed).

South Trestle:

- **Eastbound MOT Trestle**
 - 15 piles driven during this period (80 out of 122 total piles driven).
 - 1 cap placed during this period (9 out of 28 total caps/footers placed).
 - 8 beams placed during this period (28 out of 98 total beams placed).
- **Permanent Trestle**
 - 3 piles driven during this period (305 out of 531 total piles driven).
 - 0.5 cap placed during this period (2.5 out of 70 total caps placed).



◀ North Trestle EB
Cap installation

5.3 Construction Area 3: Tunnels and Islands

South Island:

- 23% complete for jet grouting operations at tunnel approach plug.
- 97% complete for mass excavation of TBM launch pit.
- 34% complete for slab placement at slurry treatment plant.
- Completed reinforcing steel bottom mat installation for Cell 3 base slab.
- Began reinforcing steel installation for headwall pour at Cell 1 launch pit.

North Island:

- 45% complete for slurry wall installation at North Island receiving pit and approach section.
- Continued work on circulation dock.

Tunnel:

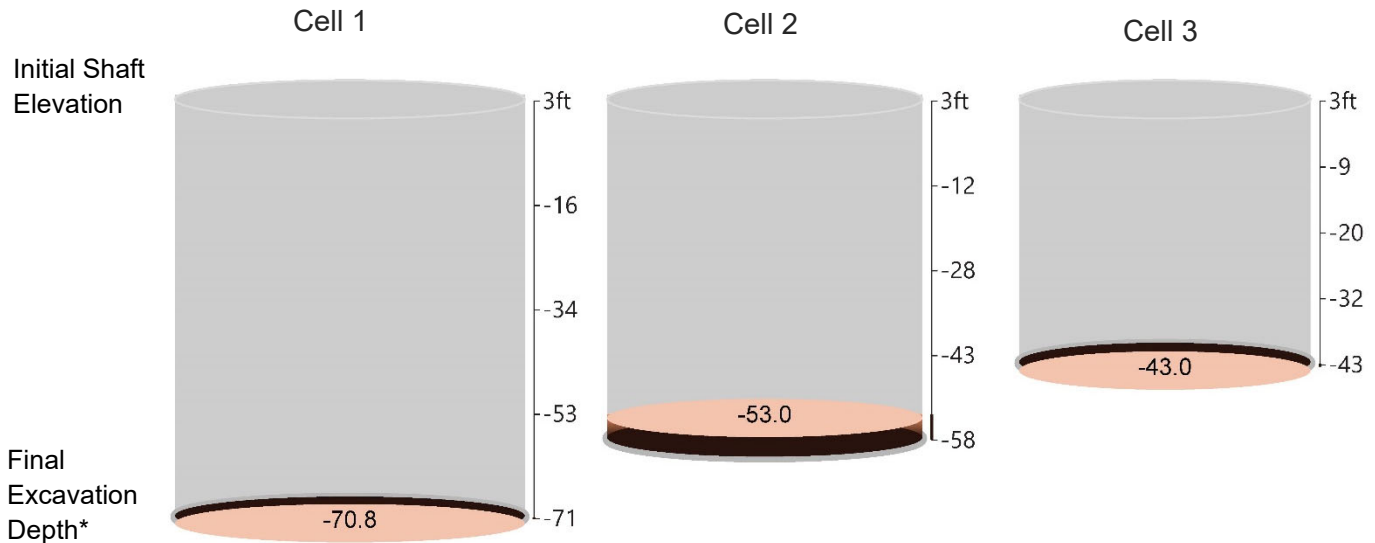
- 15.3% complete for precast tunnel segment liner production.
- Completed TBM tail skin welding.
- Delivered large TBM components (main drive, center part of cutter head, and two shield sections) from port to South Island via barge.
- Continued assembly of TBM cutter head.



◀ **South Island**
Reinforcing steel installation
for Cell 3 base slab

Total Segments Required:	Conforming Segments Cast To-Date:	Percentage Complete:
21,492	3,292	15.3%

South Island Launching Pit – Mass Excavation Progress Progress of Shaft Excavation by Average Elevation



**Final excavation depth in each cell increases with proximity to tunnel opening.*

5.4 Construction Area 4: Landside Bridges

Mallory Street Bridge:

- Began median pier column and footing work.

Oastes Creek Bridge:

- Continued setting girders for eastbound widening (16 out of 18 total girder spans installed).
- Completed setting precast caps for eastbound widening (17 out of 17 total precast caps installed).
- Began preparation for demolition of eastbound Oastes Creek bridge widening.

Bayview Boulevard Bridge:

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

Evans St Bridge:

- Began pile driving for eastbound Abutment A.
- Completed pile driving for eastbound widening (32 out of 32 piles installed).

Bay Avenue Bridge:

- Continued piling driving for eastbound widening (43 out of 108 total piles installed).
- Continued setting girders for eastbound widening (8 out of 37 total girder spans installed).
- Continued setting precast caps for eastbound widening (9 out of 34 total precast caps installed).
- Continued existing deck and bent cap partial demolition on existing eastbound on-ramp exterior.

Mason Creek Road Bridge:

- Continued pile driving for eastbound widening (37 out of 38 total piles installed).
- Continued setting precast caps for eastbound widening (1 out of 2 installed).

Willoughby Bay Bridge:

- Continued pile driving for eastbound widening (226 out of 237 total piles installed).
- Continued setting girders for eastbound widening (9 out of 80 total girder spans installed).
- Continued setting precast caps for eastbound widening (61 out of 79 total caps installed).
- Continued repair/rehabilitation for existing eastbound bridge.
- Continued installation of temporary trestle at eastbound north side.



◀ **Oastes Creek**
Cap and girder installation at
Span 17



◀ **Bay Avenue Bridge**
Installed cap at Bent 37

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 to facilitate ongoing concrete pile and cap placement.
- I-64 near Oastes Creek in Norfolk for temporary lighting installation completed.
- Willoughby Bridge and Willoughby Shore for temporary lighting installation.
- Striping maintenance throughout the project corridor.
- Mallory St short term stoppages to move a crane in the median completed.
- Demolition began of median raised curb at 15th View Ramp Interchange westbound to facilitate upcoming traffic shift.

Long-Term Lane Closures:

- Bay Avenue in Norfolk to facilitate access to a staging area for the widening of the 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.

Hampton Lane Shifts:

- No new activities this period.

Norfolk Lane Shifts:

- No new activities this period.

Detours:

- Long-term detour at West Evans St to facilitate bridge widening.
- Nightly detours on West Bay Ave eastbound on-ramps for bridge widening work.
- Began daily detour of West Bay Ave westbound off-ramp for pile driving.
- Long-term detour at Mason Creek Rd in Norfolk to facilitate bridge widening.
- Began nightly detour at 15th View westbound on-ramp to facilitate demolition of median.

Intelligent Transportation System (ITS):

- Began relocation of ITS devices.
- Relocated variable speed limit sign on I-64 eastbound in Hampton.

Routine Maintenance:

- HRCP performed routine incident management and maintenance operations within the corridor.
- VDOT continues to monitor HRCP's performance with respect to the approved maintenance management plan.

7. Quality

Quality updates for this reporting period include:

Construction Quality Management Plan (CQMP) Updates:

- VDOT reviews these updates as part of final “Released for Construction” (RFC) design packages and “Notice of Design Change” (NDC) packages. There were 3 updates reviewed this period, including the CQMP updates for NDC packages received. These updates included specific testing and inspection plans for the work shown in the corresponding RFC plans and a staffing matrix showing quality assurance and quality control staffing for the work.

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 coordinates with VDOT Materials Department for shop inspections as required. This testing includes oversight of the HRCP Precast Yard in Chesapeake and Technopref’s Precast Yard in Cape Charles producing the tunnel lining segments.
- HRCP obtained their PCI certification for their planned prestressed girder production on June 2, 2022 and VDOT Materials Department proceeded with setting up shop inspection for this production. VDOT also continues to review HRCP’s Frequency of Testing data to confirm that QA and QC are performing the required tests.

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, which is updated quarterly.

Quarterly Updates of Quality Plans:

- HRCP previously submitted the quarterly updates of the Quality Management System Plan, Construction Quality Management Plan, and the Design Quality Management Plan for the second quarter of 2022. VDOT completed the review of these submitted plans and returned them to HRCP as approved as noted.

Tunnel Quality Plan (TQP):

- HRCP continues to update its Tunnel Quality Plan and address VDOT’s comments. VDOT reviewed Revision 3 and returned the plan to HRCP with comments.

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.

Routine Quality Activities:

- VDOT’s quality team conducted reviews of written deficiency notices (WDNs), nonconformance reports (NCRs), root cause analyses and dispositions of deficiencies, of QA and QC, current construction quality by performing inspections based on VDOT’s Construction Quality Improvement Program (CQIP) and coordinated documentation reviews through VDOT’s Material Department.

8. Safety

Safety procedures and activities during this reporting period include:

COVID-19 Update:

- VDOT and HRCP continue to follow latest CDC Guidelines regarding COVID-19.

Safety Site Visits:

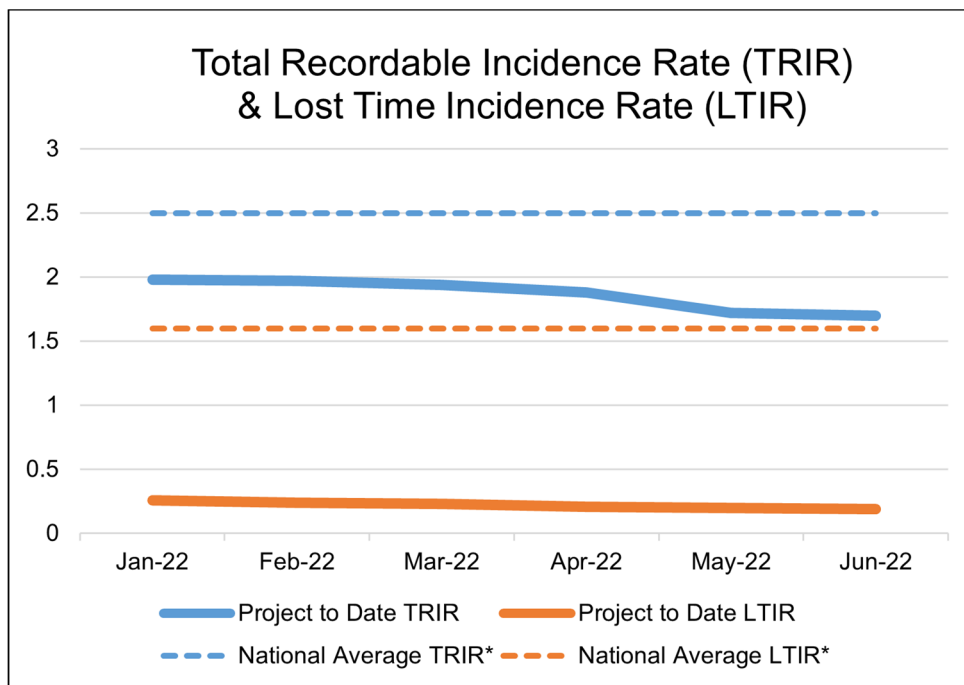
- VDOT continued to conduct routine visits to promote safe work practices throughout the project.

Emergency Response Planning (Rescue Drill):

- VDOT and HRCP continue collaboration on Emergency Response Planning.

Safety Performance Indicators:

- The following safety performance indicator information is provided by HRCP and is current as of June 30, 2022.



**National averages are from the Bureau of Labor Statistics, US Department of Labor – 2020 Data for Construction Industry, Published November 3, 2021.*

9. Civil Rights & DBE/SWaM Business Opportunities

To date, HRCP awarded **309** subcontracts, subconsultant agreements and purchase orders to certified DBE/SWaM firms. There was a slight increase in contract awards for a total of **\$430.7 million** due to change orders issued to active DBE/SWaM firms on the project. Currently, 80% of the DBE/SWaM firms are Virginia-based.

Compliance Activities:

- VDOT/HRCP Civil Rights Compliance Team participated in several meetings during the reporting period to discuss civil rights reporting requirements, document submissions, and on-site labor compliance reviews.

Workforce Development Activities:

- HRCP continued to progress towards the 80 participant On-the-Job Training (OJT) contract goal. To date, 14 participants have graduated with 18 currently active in the program.

Business Development Activities:

- During this reporting period, other business development and outreach activities included:
 - May 25, 2022 – Virginia Department of Small Business Supplier Diversity's SWaMmy Honors, recognizing small businesses throughout the state
 - June 6-9, 2022 – VDOT's Transportation DBE Advisory Council (TDAC) Virtual Transportation Industry Week
 - June 16-17, 2022 – Department of Navy's Contracting Summit in Norfolk

10. Public Outreach & Media

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

Public Outreach

- May 22, 2022 – HRBT Project Team manned booth at Buckroe Beach Farmers Market
- May 31 & June 2, 2022 – HRBT Project Team presented to travel and tourism organizations
- June 8, 2022 – HRBT Project Director presented to Crown Colony Club in Williamsburg
- June 12, 2022 – HRBT Project Team manned booth at Harvest Market on Fort Monroe



◀ **June 8, 2022**
HRBT VDOT Project Director, Jim Utterback, presents to the Crown Colony Club in Williamsburg

Media

- May 22, 2022 – WTVR-6 (Richmond) – story titled “Hampton Roads Bridge Tunnel Expansion: Crews working to mold 2,400 rings for new tunnels”
- May 26, 2022 – Local Marine Safety Notice distributed to media and marine stakeholders
- June 2, 2022 – Traffic Advisory “Ramp Detour and Traffic Shift on W. Bay Avenue in Norfolk” distributed to media and City of Norfolk
- June 3, 2022 – “Tunnel Segment” Podcast titled “Casting a New Tunnel” featuring Aurélien Gil
- June 13, 2022 – ENR Magazine, “Mid-Size Firm, Big Time Projects” – June 2022 Issue
- June 17, 2022 – May/June 2022 Project Newsletter distributed
- June 17, 2022 – Traffic Advisory “W. Bay I-64 W Off Ramp Closure in Norfolk” Distributed to media and stakeholder

Visit our website to view more information:
www.hrbtexpansion.org