



## July 2022 Monthly Project Report

### I-64 HAMPTON ROADS BRIDGE-TUNNEL EXPANSION

**Report No. 40**

Project No. 0064-M06-032



## Table of Contents

<b>1. Executive Summary .....</b>	<b>1</b>
1.1    Overview .....	1
1.2    Priorities .....	1
1.3    Key Updates .....	2
<b>2. Project Schedule .....</b>	<b>6</b>
2.1    Schedule Status .....	6
2.2    Longest Path.....	6
2.3    Impact Analysis .....	6
<b>3. Project Budget .....</b>	<b>8</b>
3.1    Overall Budget.....	8
3.2    Design-Build Contract Cost Status .....	10
3.3    Budget by Funding Source .....	11
3.4    Contingency.....	12
<b>4. Environmental .....</b>	<b>15</b>
<b>5. Construction.....</b>	<b>16</b>
5.1    Construction Area 1: Landside Roadways .....	17
5.2    Construction Area 2: Marine Trestle Work .....	18
5.3    Construction Area 3: Tunnels and Islands .....	19
5.4    Construction Area 4: Landside Bridges .....	20
<b>6. Operations .....</b>	<b>22</b>
<b>7. Quality.....</b>	<b>23</b>
<b>8. Safety.....</b>	<b>24</b>
<b>9. Civil Rights &amp; DBE/SWaM Business Opportunities .....</b>	<b>25</b>
<b>10. Public Outreach &amp; Media.....</b>	<b>26</b>

**Issue Date: August 18, 2022**

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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 June 19, 2022 – July 23, 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 24<sup>th</sup> of each month.

During this reporting period, project accomplishments included the following:

- South Island Progress:
  - Excavation of the TBM launch pit completed.
  - Placed 3,580 CY of concrete for Cell 3 base slab in TBM launch pit.
  - Jet grouting at tunnel approach plug to 35%.
  - Headwall installation at Cell 1 launch pit to 18% complete.
- North Island Progress:
  - Began work on capping beam in Receiving Pit.
- Landside Progress:
  - Completed temporary paving at 15<sup>th</sup> View westbound off ramp.
  - Completed remaining sections of gravity retaining wall between 4<sup>th</sup> View St and Mason Creek Rd for eastbound widening.
  - Completed Pier 1 cap installation at Mason Creek for eastbound widening.
- Marine Progress:
  - North Trestle eastbound caps to 55%.
  - North Trestle westbound caps to 9%.
  - North Trestle eastbound beams to 18%.
  - Began North Trestle eastbound rebar installation for first deck placement.

### 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 35 (data date: June 19, 2022), and the schedule information in this report reflects this update.

- Contractual Substantial and Final Completion Dates remain unchanged.
- HRCP's Schedule Update 35 is reporting Substantial Completion date of August 13, 2026.
- HRCP's Schedule Update 35 is reporting Final Completion date of October 12, 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:	\$ 1,439,265,331
<b>Remaining project budget:</b>	<b>\$ 2,496,186,310</b>

- Design-build contract overview:

Design-build contract original amount:	\$ 3,299,997,227
Net change orders:	\$ 2,147,574
Exercised Options:	\$ 73,454,414
Design-build contract sum to date:	\$ 3,375,599,215
Expenditures to date:	\$ 1,370,390,125
<b>Remaining design-build contract amount:</b>	<b>\$ 2,005,209,090</b>

- Design-build progress to date:

Project Management:	45.5%
Design:	88.5%
Physical Construction Progress:	23.7%
<b>Overall:</b>	<b>40.6%</b>

## Environmental

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

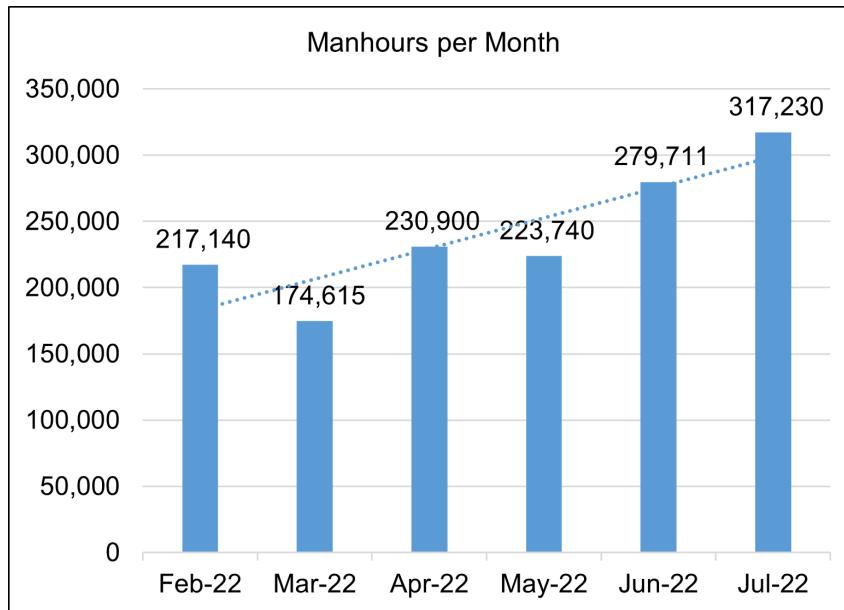
- DEQ notified HRCP on July 14, 2022 that Virginia Pollutant Discharge Elimination System (VPDES) modification request was deemed complete and that the draft permit is pending.
- HRCP is preparing to submit air permit applications for the South Island slurry treatment plant, bi-component grout plant, and concrete plant.

## Construction

Progress updates for this reporting period include:

- Landside Roadways
  - Completed temporary paving along I-64 westbound off ramp to 15<sup>th</sup> St View.
  - Completed temporary paving along I-64 westbound inspection station at 15<sup>th</sup> St View.
  - Completed temporary slip lining of existing sewer line at 1<sup>st</sup> View St.
  - Began grading work for permanent pavement along I-64 median between Willoughby Bay and 4<sup>th</sup> View St for westbound widening.
- Marine Works
  - Beams placed at the North eastbound MOT trestle (8 installed this period).
  - Beams placed at the North eastbound permanent trestle (19 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 (3 installed this period).
  - Beams placed at the South eastbound MOT trestle (12 installed this period).
  - Piles driven at the South permanent trestle (5 installed this period).
- Tunnels and Islands
  - Continued TBM cutter head assembly.
  - Began South Island launch pit shotcrete and waterproofing preparations for Cell 1.
  - Began North Island receiving pit excavation and slurry wall demolition for capping beams.
- Landside Bridges
  - Completed installation of temporary trestle at Willoughby Bay eastbound northside.
  - Began demolition work for bridge widening at Oastes Creek eastbound.
  - Began footing construction at Abutment B at Mason Creek Rd eastbound.

The number of construction manhours worked each month is provided by HRCP and is current as of July 31, 2022:



**Project Manhours to Date:**  
4,475,333

## Operations

The following operations activities took place during this reporting period:

- Temporary lighting installation at Willoughby Bridge and Willoughby Shore.
- Long-term lane closures at Bay Avenue, Bayview Blvd, Mallory St, and West Ocean Ave.
- Short-term lane closures near I-64 at Willoughby Bay Bridge, Willoughby Shore, North Trestle, and South Trestle.
- Nightly detours on West Bay Ave on-ramps and 15<sup>th</sup> St View westbound off-ramp completed.

## Quality

Quality updates for this reporting period include:

- 4 Notice of Design Change (NDC) updates reviewed this period, including the CQMP updates for NDC packages received.
- 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 and HRCP continue to follow latest CDC Guidelines regarding COVID-19.

The following safety performance indicator information is provided by HRCP and is current as of July 31, 2022:

- Total Recordable Incidence Rate: 1.7 (National Average: 2.5)
- Lost Time Incidence Rate: 0.18 (National Average 1.6)

## Civil Rights & DBE/SWaM Business Opportunities

HRCP has awarded **312** subcontracts, subconsultant agreements, and purchase orders to certified DBE/SWaM firms on the project. These contract awards represent a total of **\$455 million** to certified DBE/SWaM firms.

- HRCP continued to make progress towards the 80 participant On-the-Job Training (OJT) contract goal. To date, 16 participants have graduated with 19 currently active in the program.
- VDOT/HRCP Civil Rights Work Group met on July 19, 2022 for the monthly project and compliance update, which provided an opportunity to discuss equal employment opportunity, compliance, and business development matters.
- VDOT and HRCP participated in several business outreach events during the reporting period, which included the Virginia Employment Commissions Super Tuesday Hiring Event and the LinkUp Expo & Job Fair.

## Public Outreach & Media

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

- HRBT Project Team held virtual information sessions for local tourism and travel organizations.
- HRBT Expansion Project Regional Stakeholder Meeting held at The Hampton Roads Planning District Commission Regional Building.
- HRBT Project Director presented a project status briefing at the HRTPO meeting.

## 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 35 (data date: June 19, 2022), and the schedule information in this report reflects this update. Contractual Substantial and Final Completion dates remain unchanged.

	Contract Requirement	June 2022 Schedule	Actual
<b>NTP</b>		Sep 11, 2020	Sep 11, 2020
<b>Substantial Completion</b>	Sep 1, 2025	Aug 13, 2026	
<b>Final Completion</b>	Nov 1, 2025	Oct 12, 2026	

### 2.2 Longest Path

The longest path in Project Schedule Update 35 is driven by the following activities:

- South Portal Tricell Headwall Construction
- Assembly of the Tunnel Boring Machine (TBM) in launching pit
- 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
- Substantial Completion

## 2.3 Impact Analysis

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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 Schedule Update 35:

### **Construction**

#### **South Portal**

- Slurry Treatment Plant Slabs
- Slurry Treatment Plant Construction
- Slurry Treatment Plant Commissioning
- South Portal Tri-Cell Base Slabs
- 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**

- Completion of South Island Expansion
- South HOV Trestle – Bents 1 – 6

#### **Tunneling**

- GP Tunnel Civil Works – Sta 598+44 to 677+85

#### **North Trestle Construction**

- North Trestle Zone 7
- North Trestle Zone 10
- North Trestle Demolition EB – Spans 15-41

#### **South Trestle Construction**

- 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

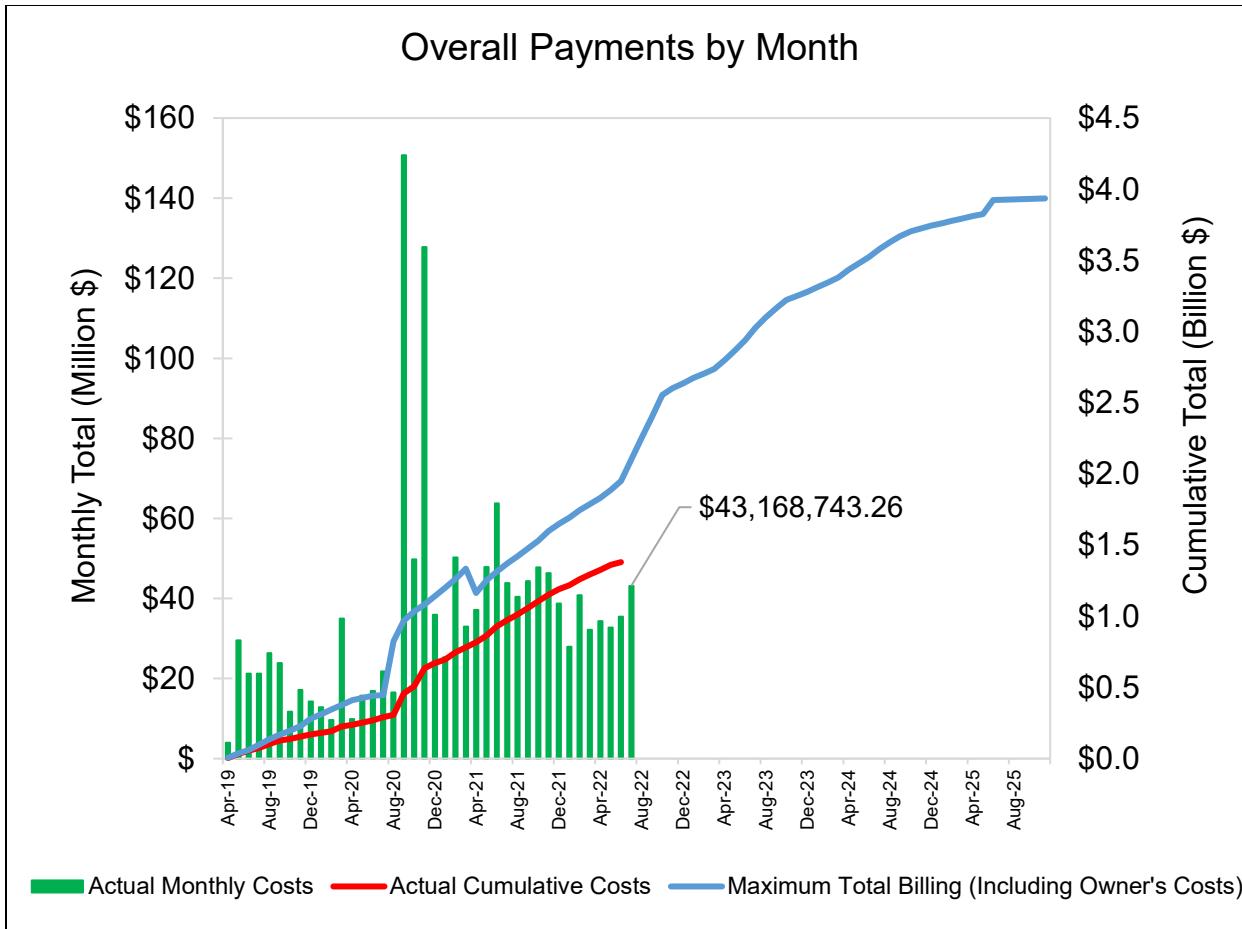
### 3. Project Budget

#### 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:
<b>Comprehensive Agreement</b>					
<i>Construction</i>	\$39,688,871.70	\$1,353,508,542.76	\$3,299,997,227.00	\$1,946,488,684.24	41.02%
<i>Owner Costs</i>					
<i>Administration</i>	\$3,611,398.29	\$56,279,465.42	\$122,000,000.00	\$65,720,534.58	46.13%
<i>Right of Way</i>	\$5,212.28	\$8,595,740.97	\$15,000,000.00	\$6,404,259.03	57.30%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency*</i>	(\$626,721.33)	\$19,612,270.83	\$335,000,000.00	\$315,387,729.17	5.85%
<i>Bridge Repair Work Option</i>	\$489,982.32	\$1,269,311.44	\$73,454,413.96	\$72,185,102.52	1.73%
<b>Total</b>	<b>\$43,168,743.26</b>	<b>\$1,439,265,331.42</b>	<b>\$3,935,451,640.96</b>	<b>\$2,496,186,309.54</b>	<b>36.57%</b>

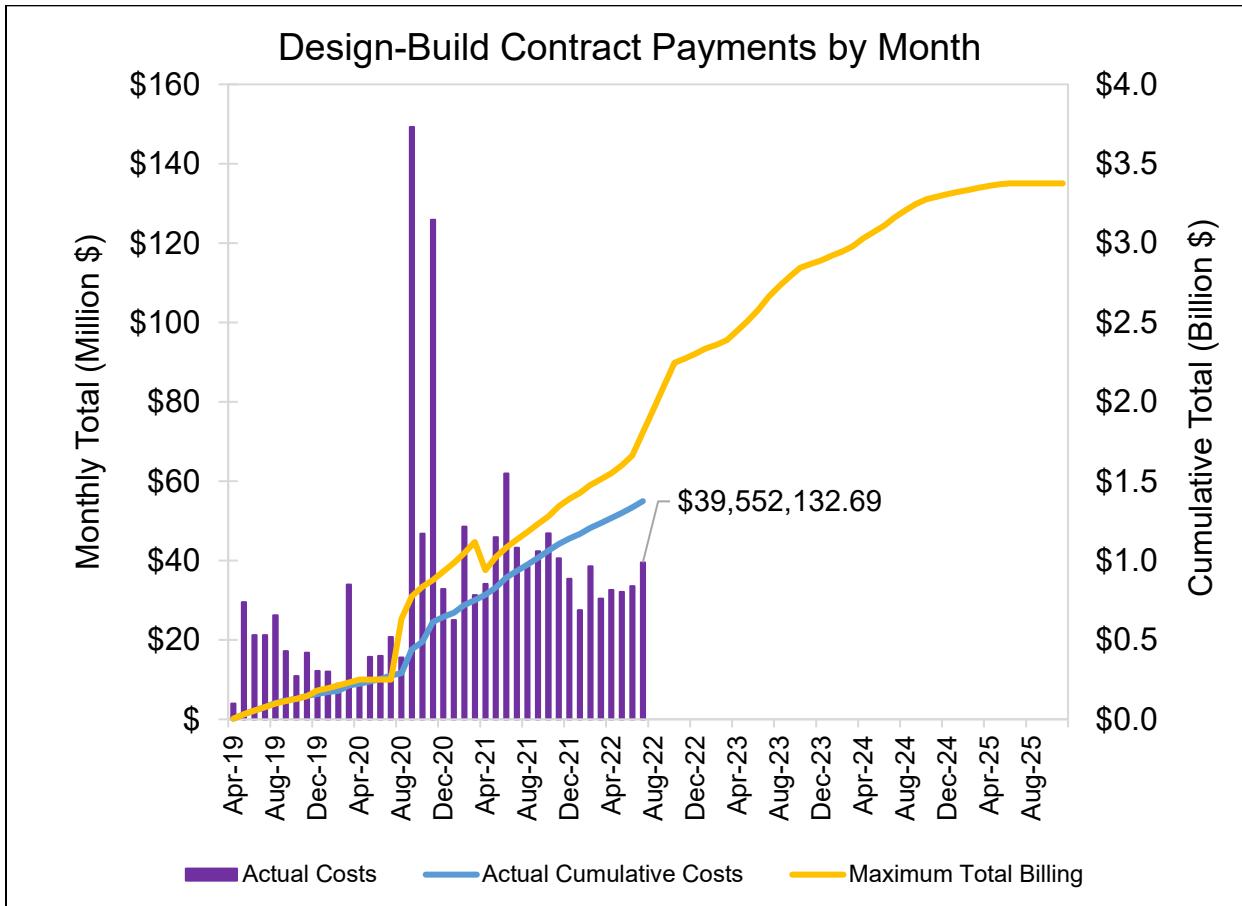
*\*Contingency credit due to material price adjustment in HRCP Payment Application #40*



\*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

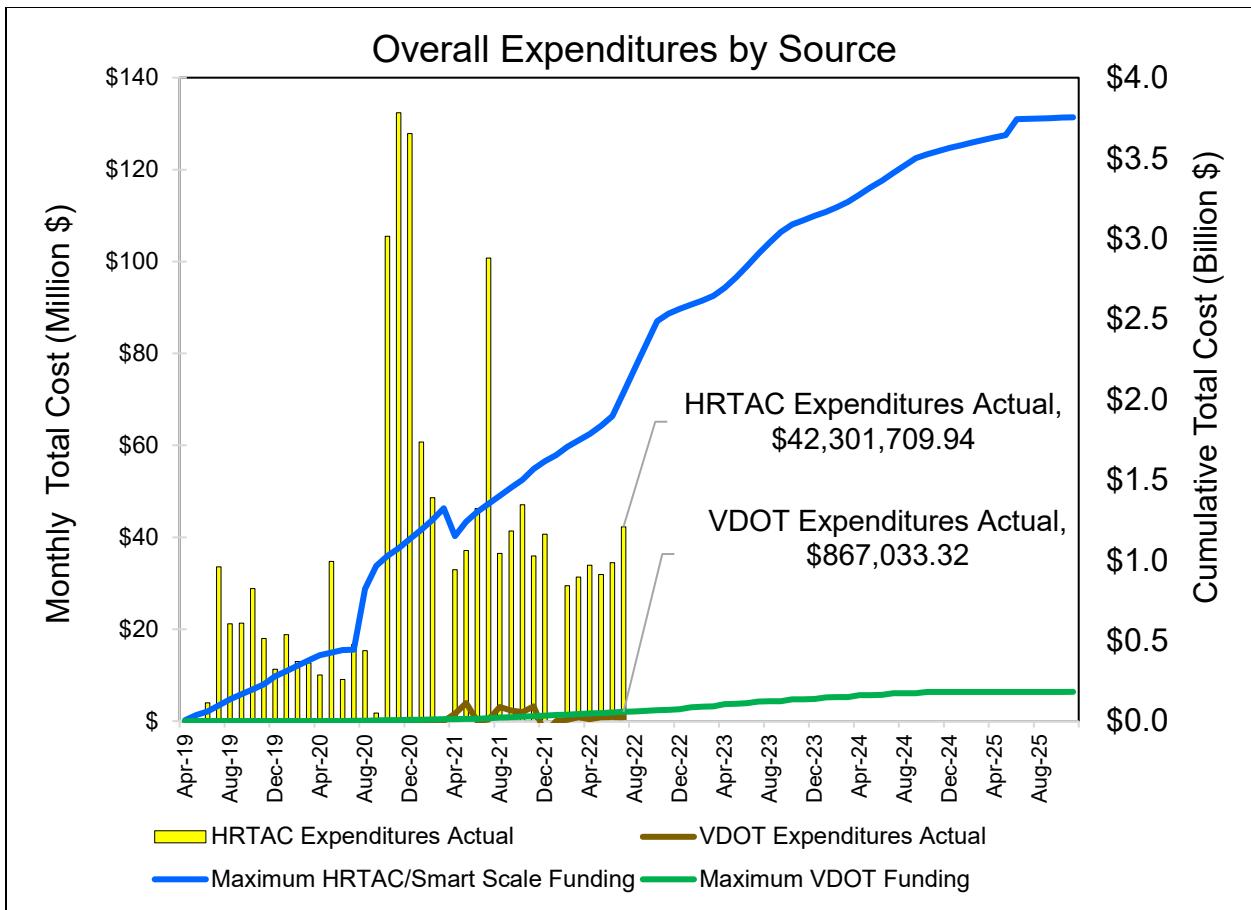
The budget for expenditures by funding source is based on the terms and conditions of Article 3 (Project Funding) and Exhibit 5 of the PAFA. This section outlines planned expenditures of both HRTAC and VDOT funds. The cost curve has been developed based on the monthly maximum cumulative compensation amount in the Comprehensive Agreement and will be updated as 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:
<b>Comprehensive Agreement</b>					
<i>Construction</i>	\$39,316,234.70	\$1,340,335,989.00	\$3,204,569,251.00	\$1,864,233,262.00	41.83%
<b>Owner Costs</b>					
<i>Administration</i>	\$3,606,984.29	\$55,008,099.42	\$118,472,054.00	\$63,463,954.58	46.43%
<i>Right of Way</i>	\$5,212.28	\$8,595,740.97	\$15,000,000.00	\$6,404,259.03	57.30%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	(\$626,721.33)	\$18,627,304.70	\$325,428,276.00	\$306,800,971.30	5.72%
<b>Total</b>	<b>\$42,301,709.94</b>	<b>\$1,422,567,134.09</b>	<b>\$3,753,469,581.00</b>	<b>\$2,330,902,446.91</b>	<b>37.90%</b>

#### 3.3.2 VDOT

	Amount Spent this Period:	Total Spent to Date:	Original Total Budget:	Total Remaining Budget:	Percent Spent To-date:
<b>Comprehensive Agreement</b>					
<i>Construction</i>	\$372,637.00	\$13,172,553.76	\$95,427,976.00	\$82,255,422.24	13.80%
<b>Owner Costs</b>					
<i>Administration</i>	\$4,414.00	\$1,271,366.00	\$3,527,946.00	\$2,256,580.00	36.04%
<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>	\$489,982.32	\$1,269,311.44	\$73,454,413.96	\$72,185,102.52	1.73%
<b>Total</b>	<b>\$867,033.32</b>	<b>\$16,698,197.33</b>	<b>\$181,982,059.96</b>	<b>\$165,283,862.63</b>	<b>9.18%</b>



### 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-29	US Navy Fencing – Monkey Bottom	No Contract Change	\$ -	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-34	Overhead Sign Lighting	No Contract Change	\$ -	0 Days
CO-35	UPS for ITS Field Cabinets	No Contract Change	\$ -	0 Days
CO-36	Fiber Optic Splicing	No Contract Change	\$ -	0 Days
CO-37	Work Zone Advance Signs – Cell Phone Usage	No Contract Change	\$ -	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-47	Evans Street Approach Slab Settlement Repair	6/22/2022	\$ 34,082.83	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
CO-62	SIP Forms for Marine Bridges	6/28/2022	\$ -	0 days
<b>TOTAL</b>			<b>\$ 75,601,988.08</b>	<b>0 days</b>

## Material Price Adjustments

This progress period included the following material price adjustments:

Material	Current Amount	Total to Date	Material Price Adjustment Through
Asphalt	\$ -	\$ 16,760.69	May 2022
Fuel	\$ -	\$ 82,586.43	May 2022
Steel	\$ -	\$ 537,635.97	January 2022

## 4. Environmental

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

### Permits:

- On July 14, 2022, DEQ notified HRCP that the Virginia Pollutant Discharge Elimination System (VPDES) modification request was deemed complete and that the draft permit and fact sheet are pending.
- HRCP submitted an updated list to DEQ of generators covered under the draft air permit.
- HRCP's subcontractor, Pacchiosi, submitted an air permit application for their grout plant on the North Island.
- HRCP is preparing to submit air permit applications for the South Island slurry treatment plant, bi-component plant, and concrete plant.
- A concrete spill and two off-site sediment discharges occurred, and the appropriate agency was notified

### Marine Mammal Protection:

- Dolphin sightings occurred but did not result in any work delays.
- An Atlantic sturgeon (Federal and State endangered species) carcass was found in the water near the North Island on June 30, 2022 and the appropriate agency was notified to recover the carcass and conduct necropsy. NOAA determined the death of this fish was not due to Project activities.

### 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):

- Completed partial installation of sidewalk, curb, and gutter work at northwest corner of Mallory St and Ramp E intersection.

### I-64 (Segment 3):

- Began removing surcharge and wire wall along I-64 eastbound near Willoughby shoreline.
- Began placing surcharge at the retaining wall near Bayville St eastbound at abutment A.
- Completed temporary paving at 15<sup>th</sup> St View westbound off ramp and inspection area.
- Continued drainage installation along I-64 median between Willoughby Bay and 4<sup>th</sup> View St for westbound widening.
- Began grading work for permanent pavement along I-64 median between Willoughby Bay and 4<sup>th</sup> View St for westbound widening.
- Continued drainage installation along eastbound on and off ramps at 4<sup>th</sup> View St.
- Began grading for temporary paving along interior of eastbound on-ramp at 4<sup>th</sup> View St.
- Completed remaining sections of gravity retaining wall between 4<sup>th</sup> View St and Mason Creek Rd for eastbound widening.

### I-64 (Segment 4):

- Completed temporary slip lining of existing sewer line at 1<sup>st</sup> View St.
- Continued embankment placement for eastbound widening between Bay Avenue and Evans St.
- Continued embankment placement for eastbound widening between 1<sup>st</sup> View St and Bay Avenue.



◀ I-64 EB (Norfolk)  
Removing temporary  
surcharge and wire  
wall from RW301 area

## 5.2 Construction Area 2: Marine Trestle Work

### North Trestle:

- **Eastbound MOT Trestle**
  - 8 beams placed during this period (16 out of 20 total NEXT beams placed).
- **Eastbound Trestle**
  - Began rebar installation for 1<sup>st</sup> deck placement.
  - 1 cap placed during this period (20 out of 37 total caps/footers placed).
  - 19 beams placed during this period (53 out of 296 total beams placed).
- **Westbound Trestle**
  - 1 cap placed during this period (4.5 out of 46 total caps/footers placed).

### South Trestle:

- **Eastbound MOT Trestle**
  - 15 piles driven during this period (95 out of 122 total piles driven).
  - 3 caps placed during this period (12 out of 28 total caps/footers placed).
  - 12 beams placed during this period (40 out of 98 total beams placed).
- **Permanent Trestle**
  - 5 piles driven during this period (310 out of 531 total piles driven).



◀ **North Trestle EB**  
Rebar installation for  
1<sup>st</sup> deck placement

## 5.3 Construction Area 3: Tunnels and Islands

### South Island:

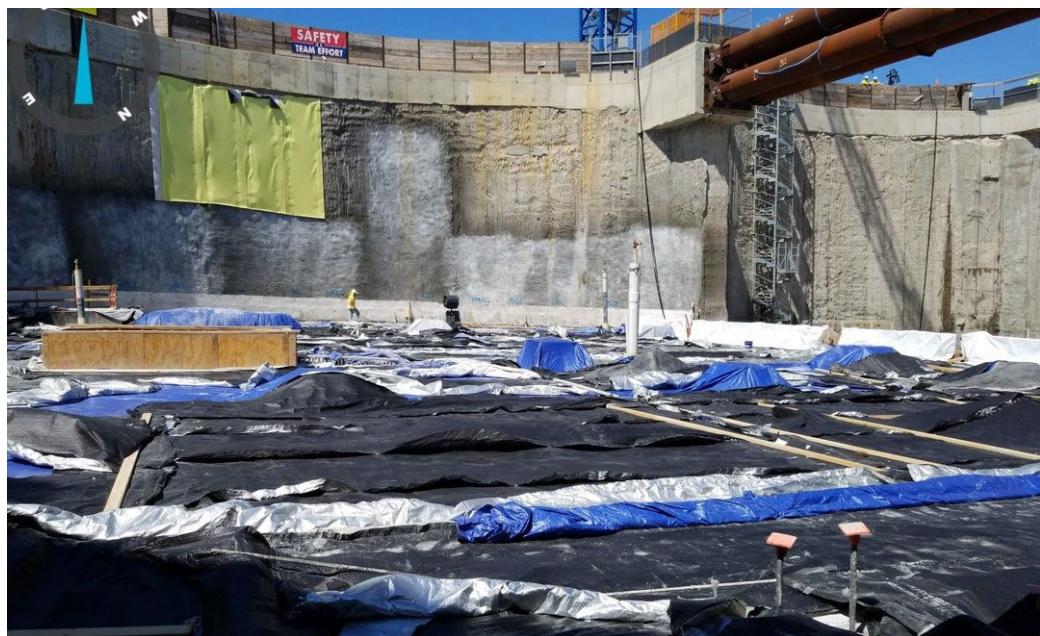
- 35% complete for jet grouting operations at tunnel approach plug.
- Mass excavation of TBM launch pit completed.
- 38% complete for base slab concrete in TBM launch pit
- 34% complete for surface slab placement at slurry treatment plant.
- 18% complete for headwall installation at Cell 1 launch pit.
- Began shotcrete and waterproofing preparations for Cell 1 launch pit.

### North Island:

- Completed slurry wall installation at receiving pit.
- 7% complete for slurry wall installation at approach section.
- Began excavation and slurry wall demolition for receiving pit capping beams.

### Tunnel:

- 20.5% complete for precast tunnel segment liner production.
- 67% complete for TBM cutterhead assembly and welding.
- Transported initial TBM gantry components to site for assembly in launch pit.



### ◀ South Island

Base slab pour at Cell 3.



### ◀ South Island

Inside the welding tent for the TBM cutterhead.

Total Segments Required:	Conforming Segments Cast To-Date:	Percentage Complete:
21,492	4,406	20.5%

## 5.4 Construction Area 4: Landside Bridges

### Mallory Street Bridge:

- Continued median pier cap work for Phase 1 bridge replacement.

### Oastes Creek Bridge:

- Began demolition work for eastbound bridge widening.

### Bayview Boulevard Bridge:

- Completed pile driving at Abutment A for eastbound widening (20 out of 28 total piles installed).
- Continued repair/rehabilitation of existing eastbound and westbound bridges.

### Bay Avenue Bridge:

- Completed pile driving at Bent 22 for eastbound widening (50 out of 108 total piles installed).
- Completed setting girders at Spans 34, 35, 37, 42, and 24 for eastbound widening (11 out of 37 total girder spans installed).
- Completed setting precast caps at Bents 22 and 23 for eastbound widening (10.5 out of 34 total caps installed).
- Began installation of deck overhang forms at Spans 24-28 for eastbound widening.
- Began installation of temporary trestle at eastbound north side.

### Mason Creek Road Bridge:

- Completed Pier 1 cap installation for eastbound widening (2 out of 2 total piers installed).
- Began footing construction at Abutment B for eastbound widening.

- Completed pile driving at Abutment A and Abutment B for westbound widening (24 out of 40 total piles installed).

**Willoughby Bay Bridge:**

- Completed pile driving at Bents 1-5 and 65-69 for eastbound widening (237 out of 237 total piles installed).
- Completed setting girders at Spans 55-60 for eastbound widening (15 out of 80 total girder spans installed).
- Completed setting precast caps at Bents 16 and 61-69 for eastbound widening (72 out of 79 total caps installed).
- Continued repair/rehabilitation for existing eastbound bridge.
- Completed installation of temporary trestle at eastbound north side.



◀ **Bay Ave EB Widening**  
Installing deck overhang  
forms at Span 25

## 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 placement for piles and caps, and girder installation.
- Willoughby Bay Bridge and Willoughby Shore for temporary lighting installation.
- Striping maintenance throughout the project corridor.
- Completed demolition of median raised curb at 15<sup>th</sup> View St off ramp and Willoughby inspection station westbound to facilitate upcoming traffic shift.
- Slow roll of I-64 eastbound in Hampton to support Electrical Power Distribution (EPD) conduit directional drill.

### **Long-Term Lane Closures:**

- Bay Ave in Norfolk to facilitate access to a staging area for widening of 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.
- Completed 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.
- Completed nightly detour at 15<sup>th</sup> View St westbound on-ramp to facilitate demolition of median.
- Single night detour of Mallory St eastbound off-ramp for camera pole installation.

### **Intelligent Transportation System (ITS):**

- Partial installation of traffic camera and directional drill for temporary medium voltage power relocation 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 4 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.

### **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 previously 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:

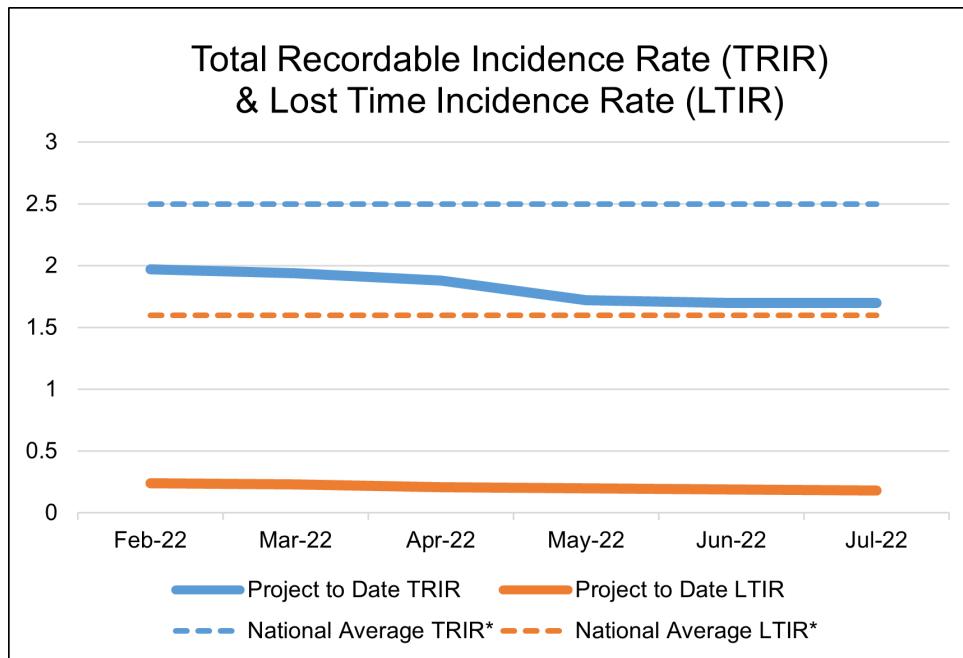
- VDOT continued to conduct routine visits to promote safe work practices throughout the project.

### Emergency Response Planning (Rescue Drill):

- VDOT and HRCP continue collaboration on Emergency Response Planning.
- Emergency Rescue Drill conducted on the South Island.

### Safety Performance Indicators:

- The following safety performance indicator information is provided by HRCP and is current as of July 31, 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 **312** subcontracts, subconsultant agreements and purchase orders to certified DBE/SWaM firms. There was a slight increase in contract awards for a total of **\$455 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:

- HRCP and VDOT Civil Rights Work Group met on July 19, 2022 for the monthly project and compliance update, which provided an opportunity to discuss equal employment opportunity, compliance, and business development matters.
- During the reporting period, HRCP submitted the *2<sup>nd</sup> Quarter Good Faith Effort Report for 2022*. The report includes:
  - HRCP's demonstrated commitment towards meeting or exceeding the 12% Disadvantaged Business Enterprise (DBE) and 20% Small, Women and Minority (SWaM) business participation goals.
  - An in-depth account of the initiatives, actions, and events of HRCP and its partners.
  - HRCP submitted the *DBE/SWaM Utilization Plan*, and *Workforce Participation Plan* in accordance with the Comprehensive Agreement, which were found to be in-compliance.

### Workforce Development Activities:

- HRCP continued to progress towards the 80 participant On-the-Job Training (OJT) contract goal. To date, 16 participants have graduated with 19 currently active in the program.
- During the reporting period, VDOT and HRCP participated in the following recruiting events:
  - July 12, 2022 – Virginia Employment Commission's Super Tuesday Hiring Event
  - July 13, 2022 – Metropolitan Business League of RVA's LinkUP Expo & Job Fair

### Business Development Activities:

- During this reporting period, other business development and outreach activities included:
  - June 29, 2022 – Hampton Roads Transit (HRT) Procurement Fair
  - July 22, 2022 – COMTO Hampton Roads' Networking Event

## 10. Public Outreach & Media

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

### Public Outreach

- June 21, 2022 – Project Team held virtual information sessions for local tourism and travel organizations
- June 23, 2022 – HRBT Expansion Project Regional Stakeholders Meeting held at The Hampton Roads Planning District Commission Regional Building in Chesapeake
- June 23, 2022 – Traffic Alert disseminated titled: “Nightly Closures of 15th View Street On-Ramp to I-64 West”
- June 29, 2022 – HRBT Tabletop Exercise with Emergency Personnel at MMBT
- July 13, 2022 – Traffic Alert disseminated titled: “Weeknight Closures & Detour of I-64 Exit 268 Off-Ramps to S. Mallory Street”
- July 18, 2022 – Traffic Alert disseminated titled: “I-64 Slow Rolls”
- July 20, 2022 – HRBT Project Team presented to Horizon Hampton Roads Summer Program in Norfolk and Portsmouth
- July 21, 2022 – HRBT Project Director presented at the HRTPO meeting held at The Regional Building in Chesapeake
- July 22, 2022 – SWaM/DBE Ice Cream Social held in Virginia Beach
- July 23, 2022 – HRBT Project Team manned a booth/table at the East Beach Farmer’s Market in Norfolk.



► **June 23, 2022**  
HRBT VDOT Project Director, Jim Utterback, presents project updates to HRTPO Members at The Regional Building in Chesapeake

## Media

- June 21, 2022 – HRBT Project Team released Summer Construction Video on social media
- July 15, 2022 – HRBT Communications Manager held a meet and greet with personnel at WAVY TV 10
- July 21, 2022 – WHRO Public TV/Radio, story titled “How to get rid of geese in Hampton Roads? Call in the dogs.”

**Visit our website to view more information:**  
**[www.hrbtexpansion.org](http://www.hrbtexpansion.org)**