



March 2021
Monthly Project Report

I-64 HAMPTON ROADS BRIDGE-TUNNEL EXPANSION

Report 24

Project No. 0064-M06-032



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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 February 21, 2021 – March 20, 2021. 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, the following project accomplishments were recorded:

- The design of the project continues to progress, with 29% of the project construction plans approved as Released for Construction (RFC).
- HRCP resumed the use of patrol dogs to discourage bird nesting on the South Island and will continue throughout the 2021 nesting season.
- Construction began on the S1 temporary construction trestle to prepare to build the new permanent South Trestle Bridge.
- At the South Island, 69% of the slurry wall panels required to begin excavation of the TBM Launch Pit are complete.
- North Island Expansion activities continue with placement of the rock establishing the perimeter of the expansion.
- The HRBT Project Team presented a virtual Tunnel Boring Machine Naming Contest Announcement Ceremony, with over 2,000 views to date. The TBM will be named "Mary," after NASA mathematician and aerospace engineer Mary Jackson.

1.2 Priorities

The Department'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

Schedule updates for this reporting period include:

- HRCP remains on track to achieve Substantial Completion in advance of the contract milestone of September 1, 2025.
- HRCP remains on track to achieve Final Completion in advance of the contract milestone of November 1, 2025.
- Approximately 28% of the estimated scheduled time has progressed to date.

Project Budget

Updates through the March 2021 payment application, including pending payment:

- Project budget overview:

Original total project budget:	\$	3,861,997,227
Total expenditures to date:	\$	817,020,390
Remaining project budget:	\$	3,044,976,837

- Design-build contract overview:

Design-build contract original amount:	\$	3,299,997,227
Net change orders:	\$	11,784,675
Exercised options:	\$	73,454,414
Design-build contract sum to date:	\$	3,385,236,316
Expenditures to date:	\$	781,045,084
Remaining design-build contract amount:	\$	2,604,191,232

- Design-build progress to date:

Overall:	22.99%
Project Management:	22.16%
Design:	66.05%
Physical Construction Progress:	8.22%

Environmental

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

- HRCP submitted permit modification request #3, concerning construction sequencing of the North Island Expansion fill, to the US Army Corps of Engineers on March 11, 2021.
- HRCP sent a final round of sound wall surveys on March 17, 2021 that included approximately 21 recipients. The deadline for responses is March 31, 2021.
- HRCP's Health and Safety Team continues to conduct noise monitoring for construction activities, with a focus on the Hampton and Norfolk shorelines that are adjacent to ongoing marine construction work.
- HRCP received approval from NOAA on March 2, 2021 to utilize the Incidental Harassment Authorization (IHA) to begin installation of the temporary work trestle at Willoughby Spit.
- HRCP continues to restore and install measures to discourage birds from using the South Island. In addition, HRCP's use of patrol dogs to discourage bird nesting on the South Island has resumed and will continue throughout the 2021 nesting season.

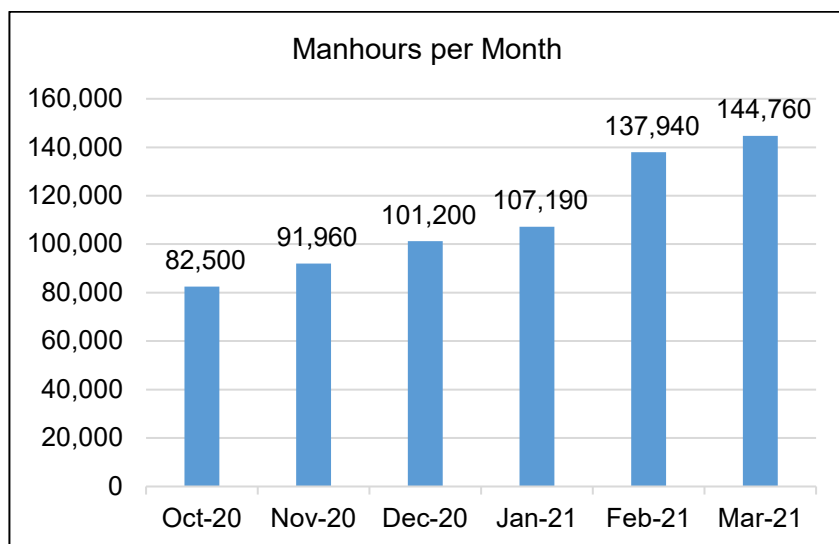
Construction

Progress updates for this reporting period include:

- Hampton Landside
 - No construction activity during this period.
- Marine Works
 - Construction began on the S1 temporary construction trestle at the North Shore of Willoughby Spit to be used to build the new permanent South Trestle Bridge.
 - Continued construction of the N1 temporary construction trestle to be used to build the new permanent North Trestle Bridge.
 - Completed the Test Pile Program for the Willoughby Bay Bridge structures.
 - Completed driving support piles for the dock at the North Island.
 - Continued placement of perimeter stone for expansion of the North Island.
 - Production of concrete precast 54" cylinder piles for the new EB North Trestle began at an off-site facility.
- Islands and Tunnels
 - 69% of the slurry wall panels required to begin excavation of the TBM Launch Pit are complete.
 - Continued installation of the conveyor system support piles at the South Island.
 - Continued construction of the temporary substation on the South Island to power the TBM.
 - Began installation of piezometers for the instrumentation and monitoring (I&M) program on the South Island.
 - Began the jet grout field trial program on the South Island.

- Continued operation for the continuous flight auger pile cut-off wall on the North Island.
- Completed work on the drainage and outfall system for the North Island.
- Completed installation of the water treatment plant on the North Island and prepared for water connection.
- Norfolk Landside
 - Continued clearing, grading, and constructing temporary access road from Patrol Road to Oastes Creek.
 - Began clearing and grubbing operations adjacent to I-64 at the Bayview Blvd Bridge.
 - Began construction of the Bay Avenue temporary work trestle.

The number of construction manhours worked continues to increase each month across the Project. The following data is provided by HRCP and is current as of March 31, 2021:



Project Manhours to Date:
1,430,660

- Tunnel Boring Machine (TBM) Progress as of March 2021:
 - TBM Design----- 100%
 - Manufacturing of Components ----- 100%
 - Final Assembly for Factory Tests-----80%

Operations

The following operations activities took place during this reporting period:

- HRCP continued to coordinate the power outages to complete utility relocations and accommodate bridge trestle tie-ins.
- Continued installation of the temporary TBM power at the Norfolk shore to connect to Dominion Energy service.

- Continued installation of instrumentation and monitoring across the project to establish baselines in advance of tunnel boring and bridge construction.
- Installed temporary traffic control signs in advance of upcoming I-64 lane shifts.
- Hosted quarterly Concept of Operations meeting which covered the design status of various ITS systems.
- HRCP and VDOT are monitoring settlement of the WB approach slab to West Evans Street.

Quality

Quality updates for this reporting period include:

- VDOT reviewed 26 Construction Quality Management Plan (CQMP) updates this period.
- VDOT continued working with HRCP's tunnel group to define the Tunnel Quality Control Plan.
- VDOT continues to track Owner's Independent Assurance (OIA) and Owner's Verification Sampling and Testing (OVST) and conduct testing as needed.
- VDOT continues to monitor HRCP's material book records for compliance.

Safety

Safety procedures and activities during this reporting period include:

- VDOT conducted 14 safety site visits this period. Minor safety deficiencies were noted and corrected.
- The Project Team hosted quarterly site visits for first responders from the City of Hampton and the City of Norfolk at the North and South Islands.
- The following safety performance indicator information is provided by HRCP and is current as of March 31, 2021. HRCP is performing better than the national averages.
 - Total Recordable Incidence Rate: 1.96 (National Average: 2.8)
 - Lost Time Incidence Rate: 0.00 (National Average: 1.1)

Civil Rights & DBE/SWaM Business Opportunities

As of this reporting period, HRCP has awarded a total of **207** subcontracts, subconsultant agreements, and purchase orders to DBE/SWaM certified firms for a total of **\$122.2 million**, towards a project goal of \$394.5 million.

Civil Rights activities attended, including DBE and SWaM business opportunities, for this reporting period are as follows:

- VDOT conducted 6 formal DBE compliance reviews.
- HRCP finalized an EEO and Affirmative Action Anonymous Hotline and displayed required EEO and labor posters at various locations throughout the project and corporate headquarters.
- VDOT and HRCP participated in the Graduation & Closing session of the 2nd HRBT hosted Bonding Education Program.

- VDOT and HRCP participated in the Cities of Norfolk and Hampton's Bridging the Connection small business outreach event.
- Blackstar Diversified Enterprises, a certified DBE firm on the HRBT Expansion Project, was featured in an edition of The Virginian Pilot's Inside Business.

Public Outreach & Media

Public outreach and project media updates provided by VDOT and HRCP for this reporting period are as follows:

- HRBT Expansion Team presented a virtual Tunnel Boring Machine Naming Contest Announcement Ceremony.
- HRBT Expansion Team held a Mallory Street Bridge Stakeholder's meeting.
- HRBT Expansion Team presented to the Hampton Maritime Academy class virtually about marine construction and job opportunities.
- HRBT Expansion Communications Team presented to the Broad Bay Sailing Association.
- HRCP design firm HDR provided a geotechnical presentation to the American Society of Civil Engineers.
- 9 articles/stories released regarding the naming contest of the TBM hosted by VDOT.
- Article released from Inside Business regarding "Chesapeake native and NSU grad helps company score bridge-tunnel project contract".
- ARTBA article on "Federal Investment Helped Advance 22,000 Highway Improvement Projects in 2020, New Data Reveals" mentions HRBT Expansion Project.

2. Project Schedule

2.1 Schedule Status

The following table depicts key milestone dates outlined in the contract requirements. This table will be updated to reflect these dates and used as a benchmark to track milestone achievements and has been updated as of the current approved schedule. The dates below are reflective of the most recent approved schedule update, which is the Schedule of Record compared with Schedule Update 19.

	Contract Requirement	Schedule of Record Dates	February 2021 (Update 19)	Actual
NTP		Sep 9, 2020	Sep 11, 2020	Sep 11, 2020
Substantial Completion	Sep 1, 2025	Aug 27, 2025	Sep 1, 2025	
Final Completion	Nov 1, 2025	Nov 1, 2025	Nov 1, 2025	

2.2 Longest Path

The longest path to achieve the completion date of the Project schedule is driven by the following activities:

- Design of New Arch Panels at Cell 2 & VDOT Acceptance.
- S Portal New Slurry Walls Construction, Capping Beam Cell 2, Excavation.
- S Portal Cell 1 Base Slab Concrete Works.
- Assembly of the Tunnel Boring Machine (TBM) in the launching pit.
- TBM drive in High Occupancy Toll (HOT) Tunnel.
- TBM U-turn then drive in General Purpose (GP) Tunnel.
- N Portal Cell 1 Structures Phase 3 and Cell 2 Structures Phase 2 (External Walls, Internal Walls, and Slab).
- S Portal Cut & Cover-Structures Phase 3 Cells 1 & 2 and Phase 4 Cell 1 (TBM Window).
- TBM Disassembly.
- Tunnel Fit Out, Finishes and Roadway Construction-Civil, MEP, Site Integration.
- N Island, S Island Buildings-MEP.
- S Portal MEP.
- Tunnel Commissioning and Systems Integration.

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 Schedule Update 19:

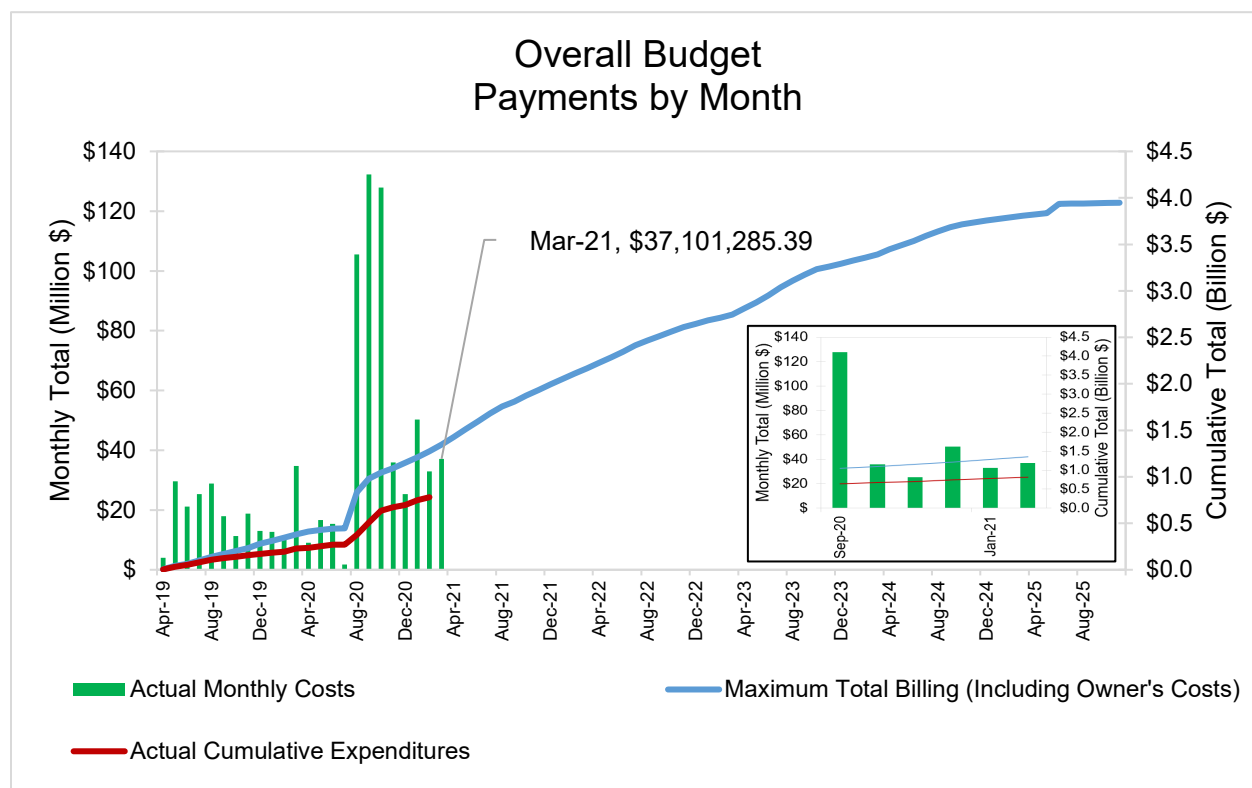
- Segment 4 Miscellaneous Structures Design and Geotechnical Report.
- Segment 5 Roadway Traffic Signal Plans.
- Utility Relocation South Trestle Tie-in to 13th before start of roadway.
- Site Jet Grout, Portal Launching Pit, Portal Structures.
- N Portal Structures, N Portal MEP.
- Tunnel Finishes-Civil, Finishes, MEP.
- Land Bridges-13th Ave, 4th View, Mason Creek, 1st View, Bay Ave, Oastes Creek.
- Land Roadway Segment 4 (4th Ave to BAY) and Segment 5 (BAY to GBY).

3. Project Budget

3.1 Overall Budget

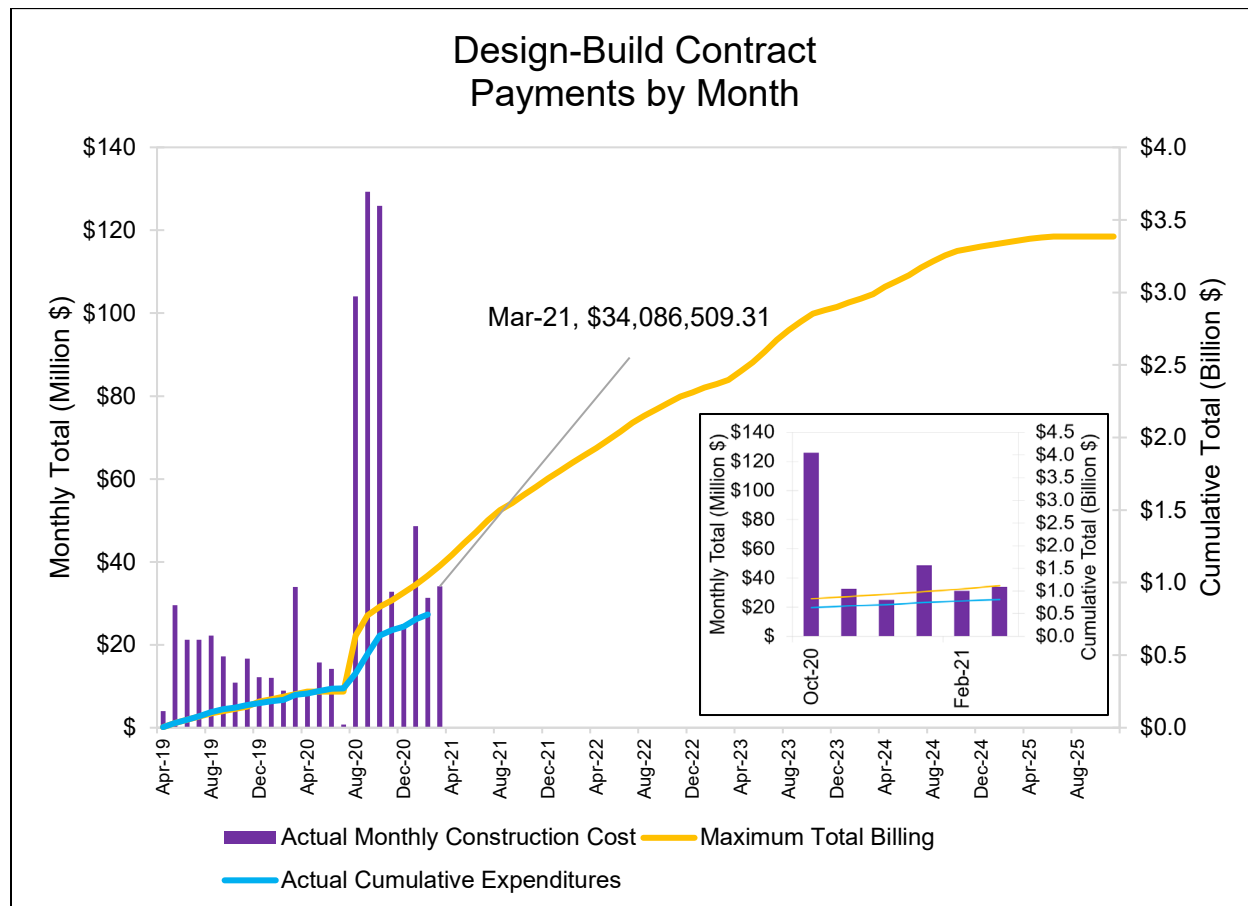
The overall budget outlined in this report is based on the terms and conditions of Article 3 (Project Funding) in the Project Agreement for Funding and Administration (PAFA). The cost curve is based on Exhibit 6 of the Comprehensive Agreement (monthly maximum cumulative compensation amount). Amounts this period reflects payments invoiced for Construction, Engineering Administration, Right of Way, and Contingency between February 21, 2021 – March 20, 2021.

	Amount Accrued this Period:	Total to Date:	Original Total Budget:	Total Remaining Budget:	Percent Accrued To-date:
Comprehensive Agreement					
Construction	\$34,086,509.31	\$781,045,084.20	\$3,299,997,227.00	\$2,518,952,142.80	23.67%
Owner Costs					
Administration	\$3,012,622.86	\$25,501,944.49	\$122,000,000.00	\$96,498,055.51	20.90%
Right of Way	\$2,153.22	\$6,473,361.48	\$15,000,000.00	\$8,526,638.52	43.16%
No-Excuses Incentive	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
Contingency	\$0.00	\$4,000,000.00	\$335,000,000.00	\$331,000,000.00	1.19%
Total	\$37,101,285.39	\$817,020,390.17	\$3,861,997,227.00	\$3,044,976,836.83	21.16%



3.2 Design-Build Contract Cost Status

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



3.3 Budget by Funding Source

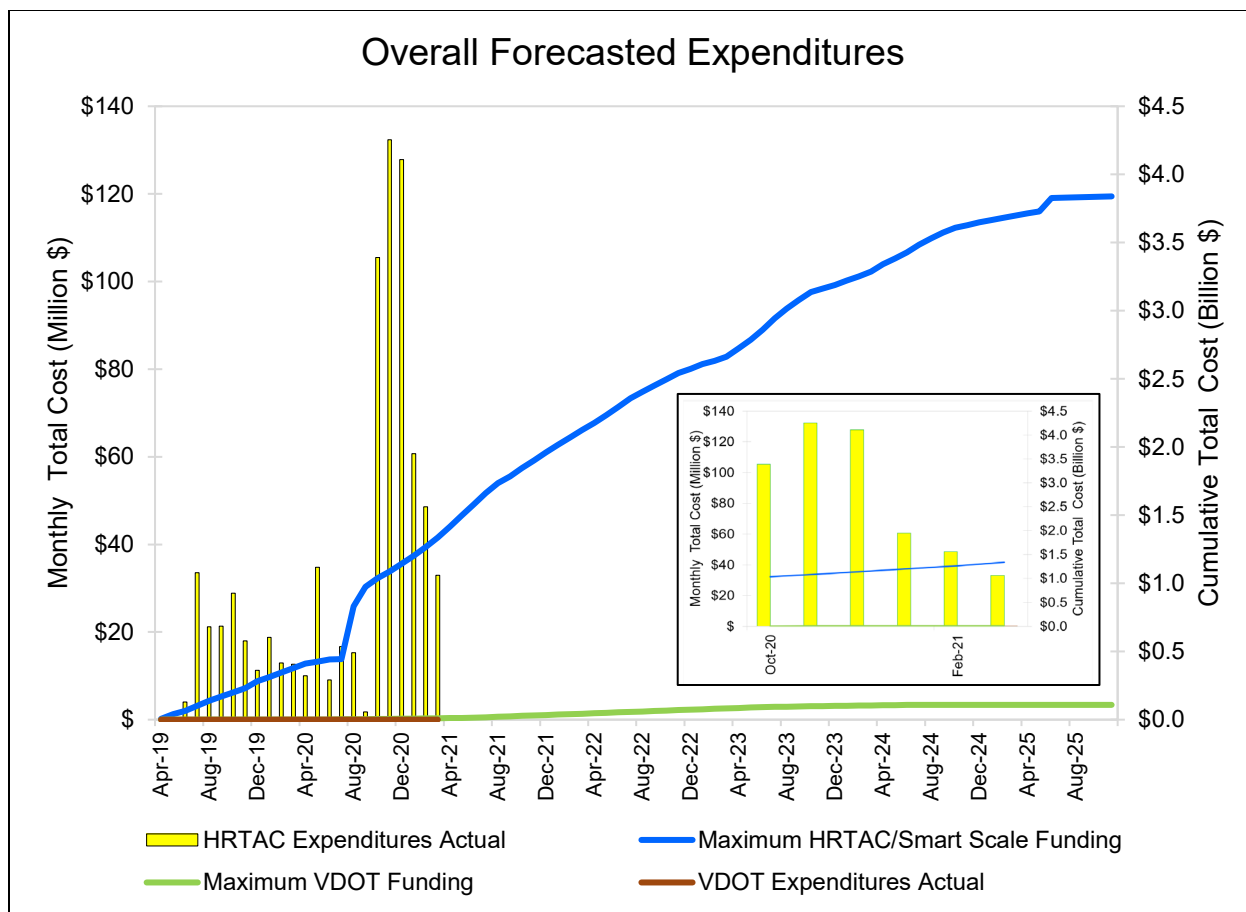
The budget for expenditures by funding source is based on the terms and conditions of Article 3 (Project Funding) and Exhibit 5 of the PAFA. This section outlines planned expenditures of both HRTAC and VDOT funds. The cost curve has been developed based on the monthly maximum cumulative compensation amount in the Comprehensive Agreement and will be updated as HRCP refines its design, construction means-and-methods, activity sequences, and project resourcing. Amounts this period reflect amounts paid for Construction, Engineering, Administration, Right of Way, and Contingency between February 21, 2021 – March 20, 2021.

3.3.1 HRTAC and Smart Scale

	Amount Spent this Period:	Total Spent to Date:	Original Total Budget Including Smart Scale:	Total Remaining Budget:	Percent Spent To-date:
<u>Comprehensive Agreement</u>					
<i>Construction</i>	\$31,323,647.79	\$746,958,574.89	\$3,204,569,251.00	\$2,457,610,676.11	23.31%
<u>Owner Costs</u>					
<i>Administration</i>	\$1,630,593.88	\$22,489,321.63	\$118,472,054.00	\$95,982,732.37	18.98%
<i>Right of Way</i>	\$2,696.50	\$6,471,208.26	\$15,000,000.00	\$8,528,791.74	43.14%
<i>No-Excuses Incentive</i>	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
<i>Contingency</i>	\$0.00	\$4,000,000.00	\$325,428,277.00	\$321,428,277.00	1.23%
<u>Total</u>	\$32,956,938.17	\$779,919,104.78	\$3,753,469,582.00	\$2,973,550,477.22	20.78%

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>	\$0.00	\$0.00	\$95,427,976.00	\$95,427,976.00	0.00%
<u>Owner Costs</u>					
<i>Administration</i>	\$14,757.17	\$266,586.82	\$3,527,946.00	\$3,261,359.18	7.56%
<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	\$0.00	\$9,571,724.00	\$9,571,724.00	0.00%
<u>Total</u>	\$14,757.27	\$266,586.82	\$108,527,646.00	\$108,261,059.18	0.25%



3.4 Contingency

Contract Changes

	Description	Date	Value	Time
CO-1	Department'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	\$ 73,454,313.00	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-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-30	Willoughby Bay Bridges Fender & Lighting Replacement	2/12/2021	\$ 1,495,000.00	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

Material Price Adjustments

- A No-Cost/No-Time Work Order was executed on 2/26/2021 to add three asphalt items as substitutes for three similar asphalt items currently listed in Exhibits 9 and 10 of the Comprehensive Agreement.

Miscellaneous

- Unsuccessful Offeror Payment – executed 5/8/2019 for \$4,000,000.00.

4. Environmental

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

Permits - DEQ issued the Virginia Pollutant Discharge Elimination General Permit for Nutrient Discharge (Nutrient GP), NTGP Permit Number VAN040176, and VPDES Industrial Minor Permit VA0093084, effective February 1, 2021. During this reporting period HRCP began discharging from the South Island water treatment plant and discontinued hauling discharge water under the Hampton Roads Sanitation District (HRSD) permit. HRCP submitted permit modification request #3, concerning construction sequencing of the North Island Expansion, to the US Army Corps of Engineers on March 11, 2021. Approval of the modification request is anticipated within a 30-day period.

Sound Wall Surveys - HRCP sent a final round of sound wall surveys on March 17, 2021, due to receiving fewer responses than required in the second survey. This final, 14-day comment period will end on March 31, 2021.

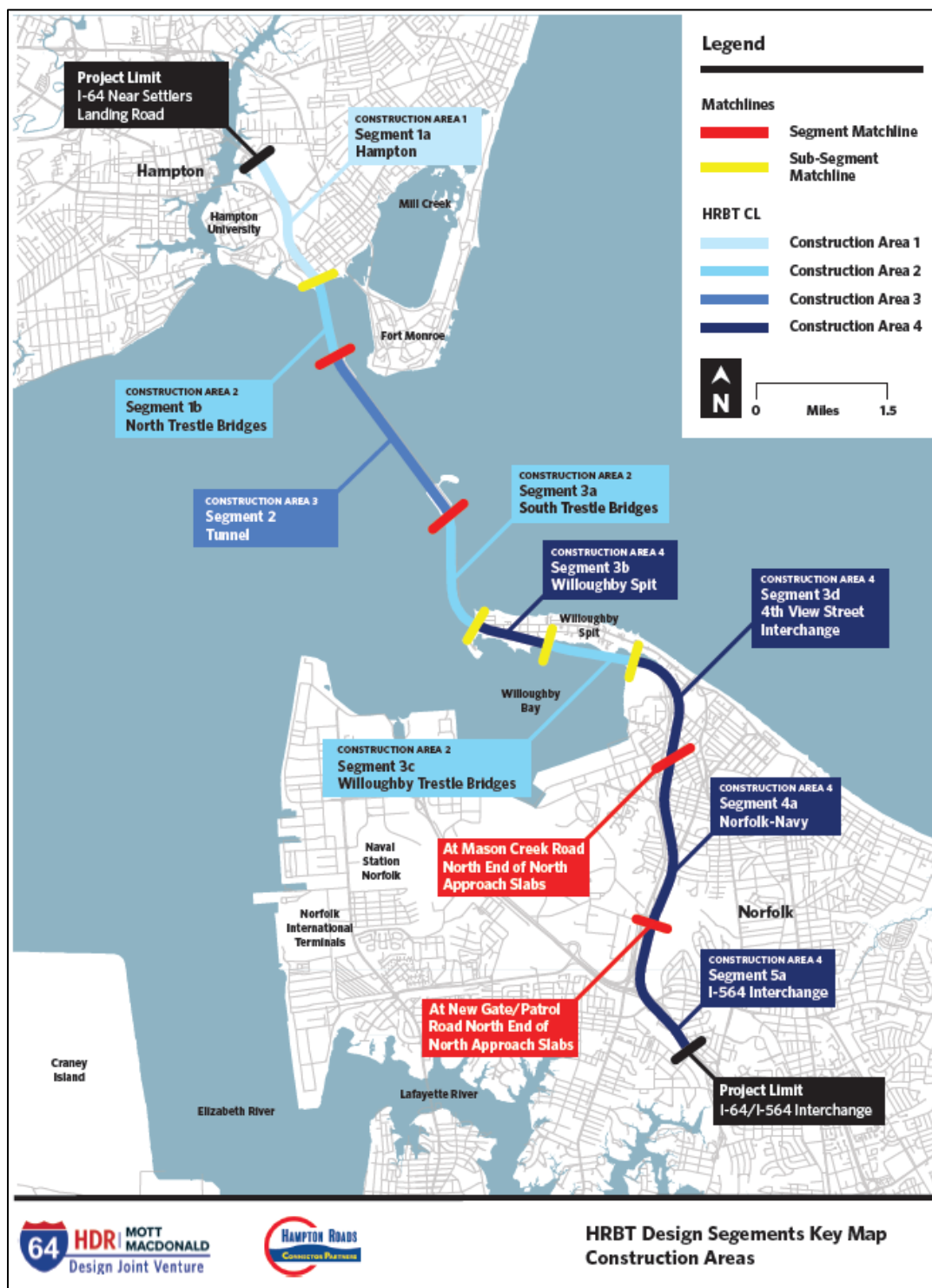
Noise Monitoring - HRCP continues to coordinate with Virginia Commonwealth University (VCU) to develop and schedule approved underwater acoustic noise monitoring during pile driving.

NOAA/Proposed Rule - NOAA published the Proposed Rule for the Letter of Authorization (LOA) in the Federal Register on January 8, 2021, and the public comment period ended on February 8, 2021. No major comments were received, and HRCP has submitted responses to NOAA requests. NOAA completed their final evaluation and is expected to publish the Final LOA Rule by the end of March 2021.

Bird Mitigation - HRCP continues to restore and install measures to discourage birds from using the South Island. In addition, HRCP's use of patrol dogs to discourage bird nesting on the South Island was resumed during this period and will continue throughout the 2021 nesting season.

5. Construction

The figure below illustrates the project limits and the four construction areas throughout the project identified by HRCP.



5.1 Area 1: Hampton Landside

No construction activity during the reporting period. The Commercial Ready-Mix Products (CRMP) batch plant continues to operate and provide concrete for project operations.

5.2 Area 2: Marine Work

During the reporting period, HRCP performed the following work in Area 2:

S1 Temporary Construction Trestle - Began driving piles for Bent 1 at the North Shore of Willoughby Spit. This trestle will be used for building the new permanent South Trestle.

N1 Temporary Construction Trestle - Continued to drive piles, set beams, and install decking to extend the N1 temporary construction trestle towards the Hampton Shore. This trestle will be used for building the new permanent North Trestle.

Test Pile Program - Completed dynamic and static load tests at the Willoughby Bay structures.

North Island Circulation Dock - Completed driving support piles for the temporary dock for barges. Framing and decking installation remains.

North Island Expansion Work - Continued expansion of the North Island. Multiple crews are working at the north and south termini of the work to place small diameter stone (“bund”) to define the perimeter of the expanded island. Layers of progressively larger stone are being placed on the bayside of the smaller stone.



◀ Willoughby Spit

Pile driving operation for the S1 Temporary Construction Trestle

5.3 Area 3: Tunnels and Islands

During the reporting period, HRCP performed the following work in Area 3:

South Island Slurry Wall Construction - Slurry wall construction continued for the tri-cell TBM launching pit as well as the bored tunnel proximity walls. Excavation for the walls was accomplished using three hydromill excavators and one clamshell bucket. The slurry wall panel reinforcing cages continue to be fabricated on-site and lifted utilizing a crawler crane followed by concrete placement. To date, 69% of the slurry wall panels required to begin excavation of the South Portal are complete. Work also continued on the first Y-panel at the joint between cells in the tri-cell structure.

South Island TBM Quay Install - Began installation of the offshore gantry and fender piles for the quay (dock). Work also continued on the installation of onshore quay piles. Overall a total of 37 piles have been driven to date.

South Island Temporary Substation - Continued construction for the temporary electrical substation to power the tunnel boring machine.

South Island Instrumentation and Monitoring (I&M) Install - Began installation of piezometers to monitor groundwater levels for the I&M program. 8 piezometers have been installed to date.

South Island Temporary Drainage - Began work on the jack and bore for the installation of temporary 24" drainage line at the south end of the island.

South Island Ground Improvement Operations - Began the jet grouting field trial program for the break-in/break-out block along the path of the tunnel. Equipment for the deep soil mixing operation was mobilized to site and the mixing plant was assembled.

North Island Cut-Off Wall Operation - Continued installation of Continuous Flight Auger (CFA) piles to mitigate potential settlement induced by the North Island Expansion and potential impacts to the existing eastbound tunnel and approach structure. To date, 185 out of 213 CFA Piles have been installed.

North Island Site Offices - The Memorandum of Understanding (MOU) for the water supply connection was returned to HRCP for approval. The next upcoming activity is to begin the waterline connection from the hydrant to the water treatment plant, pending final MOU approval and procurement of materials.



◀ **South Island**
Jet Grouting Field Trial
Program



◀ **North Island**
Cut-off Wall - CFA Pile Installation

Herrenknecht, the TBM manufacturer, reported the following progress in March 2021:



Overview of TBM Assembly

Copyright Herrenknecht

TBM Schedule Milestones:

- TBM Ordered by HRCP ----- Feb 2020
- TBM Factory Tests & Acceptance ----- May 2021
- Delivery at Project Site----- Fall 2021
- Planned Start of TBM Excavation ----- Spring 2022

Progress:

- TBM Design ----- 100%
- Manufacturing of Components ----- 100%
- Final Assembly for Factory Tests ----- 80%

Final Assembly by Component:

- Shield ----- 100%
- Cutterhead ----- 0%
- Main Drive ----- 100%
- Screw Conveyor ----- 100%
- Erector ----- 95%
- Systems ----- 60%
- Man Locks ----- 100%
- Gantries ----- 90%



TBM Shield Concept

Copyright Herrenknecht

5.4 Area 4: Norfolk Landside

During the reporting period, HRCP performed the following work in Area 4:

Tree Clearing and Grading for Temporary Access Road - Continued clearing of vegetation and initial grading for temporary access road to Oastes Creek Bridge. The access road will be used for construction of the temporary work trestle adjacent to Oastes Creek Bridge.

Bayview Blvd - Began clearing and grubbing operations adjacent to I-64 at the Bayview Blvd Bridge.

Bay Avenue Temporary Work Trestle - Began construction of the temporary work trestle 2A adjacent to I-64 EB on-ramp. Construction is approximately 50% complete.

4th View - Completed survey/staking of LDL for the eastbound entrance and exit ramps.

Willoughby Spit - Completed TBM power temporary works at the North Shore.



◀ **Bay Avenue**
Impact driving of first piles
for the 2A Temporary
Construction Trestle

6. Operations

Operation 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, coordination with first responders, and communication with the Hampton Roads Harbor Tunnels (HRHT) facility. The following operation activities occurred during this reporting period:

Shoulder and Lane Closures - Conducted for maintenance of equipment for tunnel baseline instrumentation and monitoring, installation of North and South Trestle instrumentation and monitoring equipment, and clearing and grubbing.

Long Term Lane Closure - Implemented on Bay Avenue in Norfolk to facilitate access to a staging area for the widening of the Oastes Creek Bridge.

Preparation for Upcoming Lane Shifts - Shoulder and lane closures were performed to install temporary traffic control signs in advance of upcoming mainline I-64 lane shifts to accommodate roadway widening work.

Temporary Power for the Tunnel Boring Machine - Continued installation, testing, and certification of temporary power in advance of energization by Dominion Energy.

Quarterly Concept of Operations Meeting - Held quarterly meeting on March 17, 2021, which covered advancement in design of the ITS and over-height detection system as well as an update on the design and integration of existing and proposed tunnel systems.

West Evans Street Bridge Approach Slab - HRCP and VDOT are monitoring settlement of the WB approach slab to West Evans Street. On March 12, 2021, Virginia State Police stopped all traffic for an inspection of the settlement to be performed. The roadway was closed for nearly two hours and reopened following a safety inspection. Later that evening, HRCP performed a temporary repair, which included a pavement patch in an area of the shoulder that had settled. The structure continues to be monitored daily, and HRCP will address further required repair of the slab.

Routine Management - HRCP performed routine incident management and maintenance operations within the corridor. VDOT continues to monitor HRCP's approved maintenance management plan for compliance.

7. Quality

Quality updates for this reporting period include:

Construction Quality Management Plan (CQMP) Updates - VDOT reviews as part of final “Released for Construction” (RFC) design packages. There were 26 updates reviewed this period. The CQMP updates include 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.

Quality Management System Plan (QMSP) - HRCP forwarded a draft of the updated QMSP. VDOT is conducting a review.

Material Book Records - HRCP continues to update the material book records in response to VDOT’s first audit of the material notebook. VDOT monitored this process and reviewed updated documentation for compliance. VDOT also conducted a monthly review of the current records.

Routine Quality Activities - Conducted reviews of deficiencies and nonconformance reports (NCRs) and coordinated with the resident engineers for acceptance of root causes and dispositions of deficiencies. Conducted reviews of QA and QC records for accuracy and quality issues. Coordinated documentation reviews through VDOT’s Material Department.

8. Safety

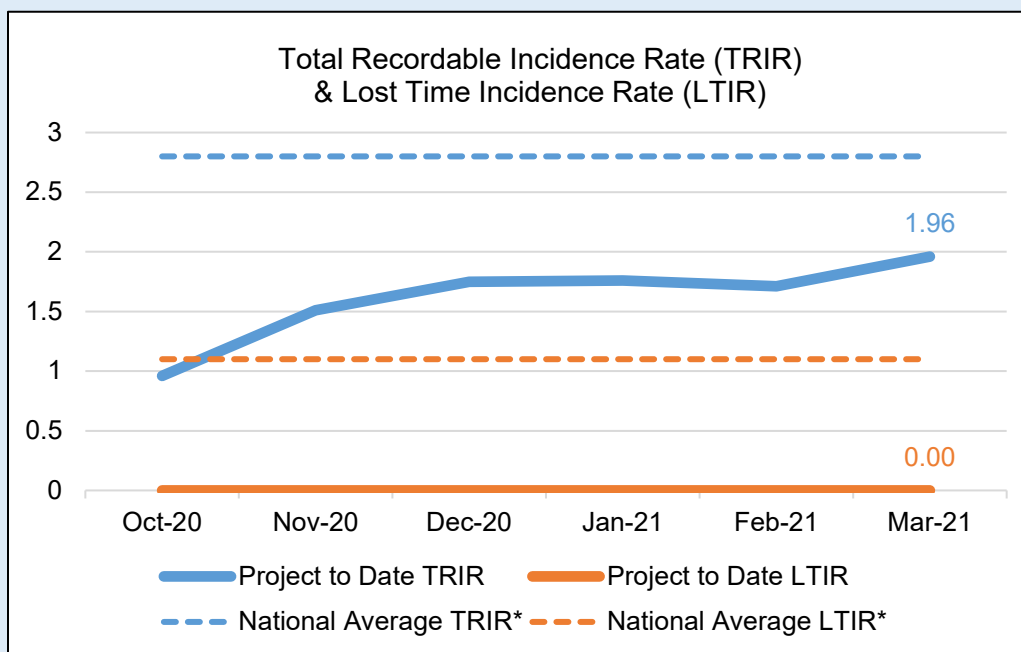
Safety procedures and activities during this reporting period include:

COVID-19 Policies - HRCP and VDOT continue to enforce COVID-19 policies on the job site and at the project office. VDOT and HRCP office staff have returned to a normal work schedule with health protocols in place.

Safety Site Visits - VDOT conducted 14 safety site visits this period. Minor safety deficiencies were noted and corrected. Additional marine training was conducted with crews working on barges.

First Responder Tours - A series of tours was provided to both Hampton and Norfolk first responders on the North and South Islands to provide awareness of the current construction operations and the layout of the islands in the event of emergencies.

Safety Performance Indicators - The following safety performance indicator information is provided by HRCP and is current as of March 31, 2021. HRCP is performing better than the national averages.



**National averages are from the Bureau of Labor Statistics, US Department of Labor – 2019 Data for Construction Industry, Published November 4, 2020.*

9. Civil Rights & DBE/SWaM Business Opportunities

As of this reporting period, HRCP has awarded a total of **207** subcontracts, subconsultant agreements, and purchase orders to DBE/SWaM certified firms for a total of **\$122.2 million**, towards a project goal of \$394.5 million. Contract awards include those issued to lowered-tiered subcontractors. HRCP continues to demonstrate good faith efforts towards achieving the established DBE/SWaM and On-the-Job Training (OJT) contract goals.

Compliance Activities - HRCP and VDOT Civil Rights Work Group met on March 16, 2021 for the monthly project and compliance update, which provided an opportunity to address equal employment opportunity, compliance, and business development matters. Project field support and compliance monitoring continued, which included field visits to conduct Davis-Bacon labor compliance interviews of contractor personnel working on the project site. VDOT's Compliance Team conducted six (6) formal DBE commercially useful function reviews during the reporting period. These extensively detailed reviews were conducted on DBE firms actively working on-site to ensure participation credit is appropriately counted towards the Design-Builder's DBE goal. The reviews are submitted to VDOT's Civil Rights Division for concurrence. In addition, a total of 934 civil rights compliance documents have been submitted by HRCP, which includes certified payrolls, subcontract agreements, required construction forms, and DBE/SWaM/Workforce Participation plans.

Workforce Development Activities - HRCP met with the City of Norfolk's Department of Economic Development to continue discussions on hiring goals and supplier diversity efforts on the HRBT project for all trades, technical and professional level positions. The Hampton Roads District Civil Rights Manager met with the Virginia Transportation Construction Alliance's (VTCA) Construction Director on March 2, 2021, to develop a plan for addressing additional on-the-job training work classification requests from contractors, including HRCP's recent recommendations submitted to VDOT. It was determined that each District Civil Rights Manager is granted authority to render a decision on requests received. Those approved would be submitted to the VTCA/VDOT Steering Committee for inclusion in the statewide OJT Program Manual for Standard Pre-Approved Job Classifications. This will give contractors the ability to utilize the approved classifications on other VDOT projects in achieving their OJT contract goals. This process contributes to enhancing the overall OJT program, while providing increased training opportunities for minority and women candidates participating in the program. HRCP has also finalized an EEO and Affirmative Action Anonymous Hotline and displayed required EEO and labor posters at various locations throughout the project and corporate headquarters.

Business Development Activities - VDOT and HRCP participated in the Graduation & Closing session for the 2nd HRBT hosted Bonding Education Program (BEP) in partnership with the USDOT Small Business Transportation Resource Center (SBTRC) held on March 4, 2021. Fourteen (14) firms participated in the 3-week program, representing areas of construction clean-up, welding, general contractor, trucking/hauling, and landscaping. Participants will continue to receive business counseling from SBTRC to obtain or expand their bonding

capacity. Some of the greatest challenges identified by firms included access to capital and identifying contract opportunities. Based on these identified needs, the BEP continues to be another relevant source for assisting small businesses. Ms. Sandra Norman, VDOT's Civil Rights Division Administrator, was the guest speaker for the closing event.



Virtual BEP Event Panel ▲

(left to right, from top row)

Shara Gibson (SBTRC); Queen Crittendon (VDOT); Courtney Seed (Assured Partners); Alyssa Mako (SBTRC); LaShawda Williams (City of Norfolk); Malcom Kates (HRCP); Nina Britton (SBSD); Erica Spencer (City of Hampton); and Calvin Thweatt (SBSD).



BONDING EDUCATION PROGRAM SERIES
An Interactive Virtual Program

SBTRC
Small Business Transportation Resource Center

HAMPTON ROADS BRIDGE TUNNEL EXPANSION
Subcontract Opportunities for DBE Businesses

The Bonding Education Program (BEP) is a collaboration between the U.S. Department of Transportation (USDOT), Virginia Department of Transportation (VDOT), and the Hampton Roads Connector Partners, designed to help DBE and SWaM businesses become bond-ready and learn about upcoming opportunities to participate with the Hampton Roads Bridge Tunnel Project.

ATTEND ONLINE
Attend live sessions online. Sessions include live Q&A so you can get immediate answers to questions specific to your small business concerns.

ACCESS TO INDUSTRY EXPERTS
Connect with technical experts with real-world experience. Get professional advice you can immediately apply to strengthen your business.

EARN YOUR CERTIFICATE
Upon completion of all online courses you will graduate the program and earn a certificate from the U.S. Department of Transportation (USDOT).

OPPORTUNITIES
Learn about upcoming opportunities on the US Hampton Roads Bridge Tunnel Project and how you can get involved.

FOR AN APPLICATION OR MORE INFORMATION:
Alyssa Mako, Project Director
amako@TheInstituteNC.org | 919.956.2331


CLASS DATES

- February 16, 2021
- February 18, 2021
- February 23, 2021
- February 25, 2021
- March 2, 2021
- March 4, 2021

CLASS TIMES
Each class session:
8:00AM—10:00 AM

Logos: VDOT, HAMPTON VA, SBSD, HAMPTON BRIDGE, Insurance Services, CENTENNIAL, NORFOLK

VDOT and HRCP participated in the Cities of Norfolk and Hampton's Bridging the Connection small business outreach event held on March 16-17, 2021. HRCP provided an update of the project and upcoming contracting opportunities to attendees on the first day of the event. VDOT's BOWD served as a virtual resource exhibitor along with several local small business development partners on the second day of the event. Both localities are strategic partners and have been actively engaged in promoting the project and sharing business and workforce opportunities available to their constituents.

A promotional poster for a webinar titled "BRIDGING THE CONNECTION ~ TWO CITIES. TWO SESSIONS. MANY PROCUREMENT OPPORTUNITIES." presented by the City of Norfolk and Hampton, VA. The poster includes a green banner at the top left that says "Free Interactive Webinars Register Today!". Below the title, it lists the dates and times for two sessions: Tuesday, March 16, 2021 (9am-12pm) and Wednesday, March 17, 2021 (9am-12pm). A central section features four circular icons representing topics: "HRBT Tunnel Expansion Presentation", "How to Do Business with the City", "Major City Project Updates", and "Access To Top Industry Partners". A green button labeled "Register Here" is positioned below these icons. At the bottom, it states "in partnership with" followed by logos for HRBT Expansion, Hampton Roads Connects People, and VDOT.

Free Interactive Webinars
Register Today!

Presented By
NORFOLK THE CITY OF **HAMPTON VA**

~ **BRIDGING THE CONNECTION ~**
**TWO CITIES.
TWO SESSIONS.
MANY PROCUREMENT
OPPORTUNITIES.**

You could be missing out on valuable resources.

Tue. March 16, 2021 | **Wed. March 17, 2021**
9am-12pm | 9am-12pm

**HRBT Tunnel
Expansion
Presentation**

**How to Do
Business with
the City**

**Major City
Project Updates**

**Access To
Top Industry
Partners**

Register Here

in partnership with »

**HRBT
EXPANSION**

**HAMPTON ROADS
Connects People**

VDOT
Virginia Department of Transportation

Small Business Profile - Blackstar Diversified Enterprises, a certified DBE firm, was featured in the March 1, 2021, edition of The Virginian Pilot's Inside Business. The firm has offices in Baltimore and New Orleans, providing key electrical components and manufacturing traffic equipment like traffic signals, traffic control cabinets, and parking gates for major infrastructure projects. The firm will provide transformers to the HRBT project. The transformers will help power equipment like the tunnel boring machine in remote locations. This is the first contract in Hampton Roads for the firm.



Featured Article - Virginia's Secretary of Transportation, Shannon Valentine, was featured in the 2021 winter edition of the *American DBE Magazine*, a national publication distributed across the country for individuals and stakeholders who work within the federal DBE program administration. Secretary Valentine was highlighted for her support of the Civil Rights Program and commitment to helping to advance a shared vision for inclusion of diverse companies in government contracting opportunities. She also discussed the role of the HRBT project in providing DBE and SWaM firms access to opportunities. Visit <https://americandbe.com/winter-2021> to view more information.





HAMPTON ROADS CONNECTOR PARTNERS
invites you to be a part of
**VIRGINIA'S LARGEST
TRANSPORTATION PROJECT**

The 14-lane Hampton Roads Bridge-Tunnel in southeastern Virginia has long been one of the region's most congested corridors. The existing 8.5-mile facility consists of two 2-lane immersed-tube tunnels on artificial islands, with trestle bridges to shore. These tunnels opened in 1957 (current westbound tunnel) and 1979 (eastbound tunnel) and are approximately 3,500 feet long.

Traffic on these four lanes exceeds 100,000 vehicles per day during peak summer traffic. The Hampton Roads Bridge-Tunnel Expansion Project will ease this congestion with the addition of two 2-lane tunnel tunnels just west of the existing eastbound tunnel. Also, two 4-lane segments of the 14-lane corridor in the cities of Hampton and Norfolk will be widened.

OVER \$100 MILLION IN PROJECT OPPORTUNITIES FOR DBE AND SWaM FIRMS

WORKFORCE PARTICIPATION GOALS FOR LOCAL MINORITY AND WOMEN JOB CANDIDATES

Visit the project's website at www.hrbtexansion.org to stay up to date on opportunities.

Hampton Roads Connector Partners | 240 Corporate Blvd. | Norfolk, VA 23502 | 757-576-9296
HAMPTON ROADS CONNECTOR PARTNERS IS AN EQUAL OPPORTUNITY EMPLOYER

CIVIL/HIGHWAY

TRANSPORTATION SECRETARY SHANNON VALENTINE MAINTAINS COMMITMENT TO DBES DURING PANDEMIC

Virginia Secretary of Transportation Shannon Valentine has faced the formidable challenge of leading the state's multimodal transportation system through the 2020 pandemic by designing the necessary skills to manage multiple priorities simultaneously. Her calm, steady and personable leadership style has helped keep employee morale high while allowing the Commonwealth's seven transportation agencies to focus on helping Virginians recover from one of the most challenging times in history.

Valentine's leadership and management values emphasize operating safely in essential workers, while acting the safe and efficient movement of people, goods and supplies throughout the Commonwealth. At the same time, she has directed the fiscal management activities of a multimodal transportation system crossing seven agencies, and led the restoration of financial resources to maintain operations while preparing for the future. Despite these two urgent and critical needs, she also has continued to champion the ongoing participation of small and diverse businesses in the transportation agencies' recovery efforts and as part of upcoming improvement projects.

HEALTH AND SAFETY COME FIRST

Keeping customers, partners, and Virginia's 10,000 transportation employees safe from the coronavirus is Valentine's highest priority. She and her team orchestrated the implementation of several safety protocols and policies to keep essential workers and administrative staff as safe as possible while still serving "keeping Virginia moving." Throughout the pandemic, Virginia transportation agencies combined the use of "work from home" policies for administrative personnel and extensive safety protocols for staff working in the field to keep programs running while maintaining safety.

It was also necessary for Valentine to focus on the role of Virginia's transportation agencies in making sure critical goods, medical supplies and essential workers were able to reach their destinations efficiently. Agencies under Secretary Valentine's leadership maintain the Commonwealth's port system, its airports, major public transit systems, passenger and freight rail, and Virginia's highway system. "We are focused on health and safety, we remain committed to transporting critical goods and connecting people to essential work, food, and medicine," Valentine said.

MAKING RESOURCES

Valentine also must determine how the Commonwealth will deal with the substantial financial impact the pandemic is having on transportation, and how the agencies will continue to weather and recover from this crisis. Virginia is anticipating an \$870 million reduction in transportation revenues through FY2022.

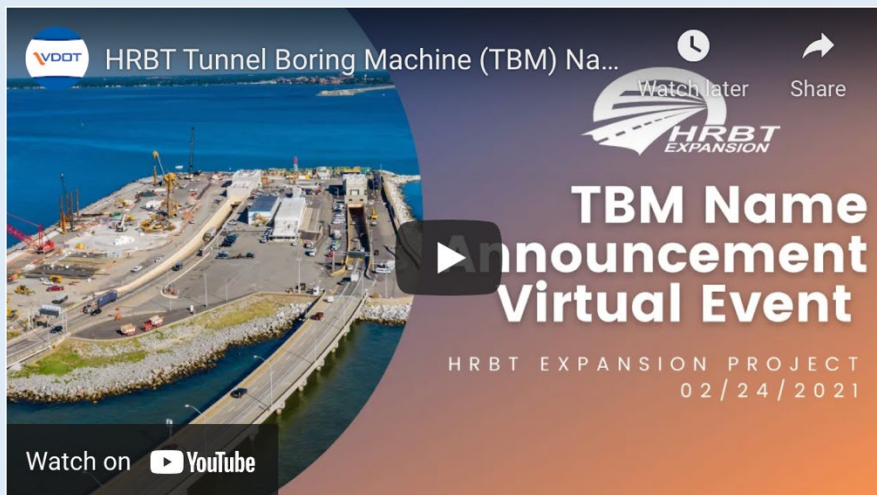
Article on DBE | <https://americandbe.com/winter-2021>

10. Public Outreach & Media

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

Public Outreach -

- February 24, 2021 - HRBT Expansion Team presented a virtual Tunnel Boring Machine Naming Contest Announcement Ceremony with over 2,000 views to date
- March 3, 2021 - HRBT Expansion Team held a Mallory Street Bridge Stakeholders Meeting
- March 4, 2021 - HRBT Expansion Team presentation to the Hampton Maritime Academy class (Hampton High School) virtually about marine construction and job opportunities
- March 15, 2021 - HRBT Expansion Communications Team along with HRCP representatives presented to the Broad Bay Sailing Association
- March 17, 2021 - HRCP design firm HDR provided a geotechnical presentation to American Society of Civil Engineers



◀ HRBT Project Team held a virtual TBM Name Announcement Ceremony on February 24, 2021 with over 2,000 views to date.

Media -

- February 23-24, 2021 - TBM Naming Announcement Contest
 - WAVY-TV story on “Hampton Roads Students to name Tunnel Boring Machine used in HRBT Expansion Project”

- Virginia Business article on “HRBT tunnel boring Machine’s Name will be ‘Mary’”
 - WTKR-TV story on “Virginia Beach Student Team Wins First Place in VDOT’s HRBT Expansion Project Tunnel Boring Machine Naming Contest”
 - WHRV-FM HearSay with Cathy Lewis interview of students from winning team of the HRBT Expansion Project Tunnel Boring Machine Naming Contest
 - WVEC-TV story on “Students win contest, name machine helping expand HRBT after NASA mathematician Mary Jackson”
 - WAVY-TV story on “Proud of Mary: Machine to create new tunnels for HRBT will be named for Hampton’s Mary Jackson”
 - WRIC-TV Proud of Mary: Machine to create new tunnels for HRBT will be named for Hampton’s Mary Jackson
 - Newsbreak Virginia Beach student team wins first place in VDOT’s HRBT Expansion Project Tunnel Boring Machine naming contest
 - CityBizList HRBT Tunnel Boring Machine’s Name will be “Mary”
- March 1, 2021 - Inside Business Chesapeake native and NSU grad helps company score bridge-tunnel project contract
 - March 16, 2021 - ARTBA Federal Investment Helped Advance 22,000 Highway Improvement Projects in 2020, New Data Reveals
 - March 19, 2021 - WVIR-TV Virginia adopts new legislation to protect migratory birds

Visit our website to view more information:

www.hrbtexpansion.org