HRBT EXPANSION Magazine

Fall 2025

IN THIS ISSUE : HRBT EXPANSION PROJECT – MARY'S FINAL BREAKTHROUGH

Project Director Message

Ryan Banas, PE, CCM

Just as promised in the Spring 2025 edition of HRBT Expansion Magazine, 2025 is shaping up to be the year of meaningful improvements across the project. Motorists have already had the opportunity to experience the benefits of the years of hard work by driving on new and rehabilitated structures throughout Norfolk. Additionally, lane shifts throughout the project corridor have continued to benefit traffic flow with upgraded geometry and shoulder improvements.

But what has been most notable of all in 2025 was the amazing feat accomplished on September 24, 2025, as Mary the Tunnel Boring Machine completed her final push breaking through the South Island headwall. More than 17 million man-hours, 3 miles of tunneling, and 21,420 segments later, Mary's mission is complete. The entire team of Hampton Roads Connector Partner (HRCP) and VDOT staff planned and executed what will go down as one of the most complex engineering solutions in Hampton Roads history and executed it with unparalleled professionalism and precision.

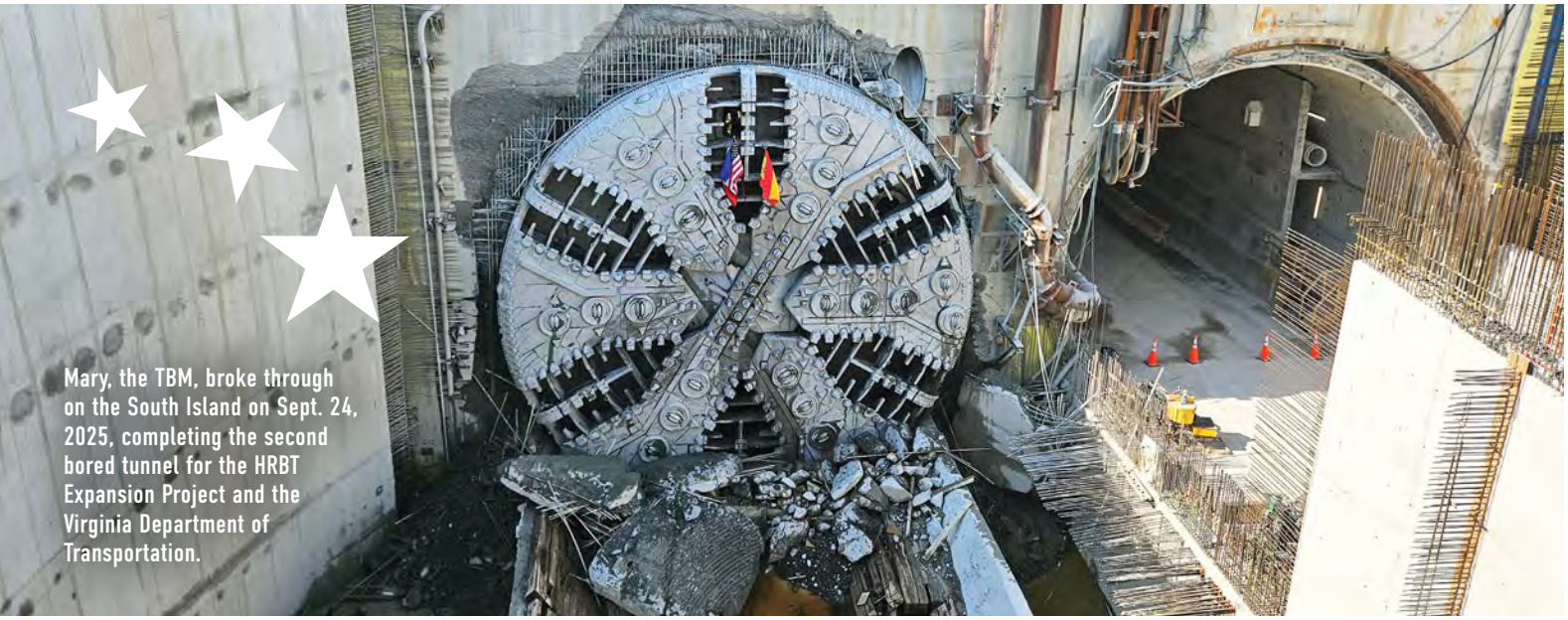
The list of milestones is not done yet for 2025. We look forward to sharing stories of continued progress in the last few months of the year as meaningful improvements take shape across the harbor and throughout Hampton and Norfolk.

We thank all those who call Hampton Roads home and the many visitors to our region for your continued support and patience. We continue to strive to deliver this monumental undertaking as safely and efficiently as possible. Whether it be the continued hard work of our construction crews, detailed analysis by our engineers, or the safe driving of all motorists using the corridor, success at the HRBT Expansion Project requires all participants to do their collective part.

I hope you enjoy reading about Mary's remarkable journey, the success of our environmental stewardship programs, and learn a little more about the incredible efforts by the construction professionals hard at work each and every day at the HRBT Expansion Project.

Drive Safe!

Ryan Banas



Mary, the TBM, broke through on the South Island on Sept. 24, 2025, completing the second bored tunnel for the HRBT Expansion Project and the Virginia Department of Transportation.

PROJECT PROGRESS/MILESTONES

2025 has brought visible and meaningful construction progress for the HRBT Expansion. From Mallory Street to Patrol Road, the project landscape has changed dramatically as crews have expanded bridges and widened roadways throughout the project corridor. Below the surface, crews have hit a major milestone with the final breakthrough.

SOUTH TRESTLE

Final preparation is underway for two eastbound lanes of traffic to be shifted onto the new South Trestle superstructure.

EAST BOUND TRAFFIC

Eastbound traffic was shifted onto newly widened roadway and bridges along Norfolk.

NORTH ISLAND

On the North Island, new concrete base slabs form the approaches for the new twin east-bound tunnels.

MALLORY STREET BRIDGE

Girders were placed for the northern portion of the new Mallory Street Bridge in Hampton.

WIDENING I-64 WEST

Crews are widening I-64 West overpasses by expanding bridges in the median.

WILLOUGHBY BAY BRIDGE

Coming soon: I-64 traffic will shift onto the newly widened section of eastbound Willoughby Bay Bridge.

Mary

Mary W. Jackson
1921 – 2005

Mary, the TBM (right), is named in honor of Mary W. Jackson (above), the first Black female engineer at NASA.

ANOTHER REMARKABLE BREAKTHROUGH!

Step by step, these images show Mary, the TBM, breaking through the second HRBT Expansion tunnel.

Mary the Magnificent:
Breakthrough, accomplishments, highlights, and reactions

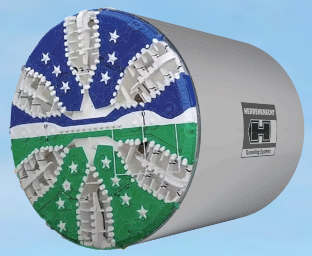
Mary completes second tunnel for the HRBT Expansion Project

On October 17, 2024, exactly six months to the day after completing the first bored tunnel, Mary left the North Island to begin her mission back across the bay to South Island. Ring by ring, Mary excavated and installed 1,194 rings, each comprised of nine 10-ton concrete segments on her way to completing the 7,960 foot-long tunnel.

After 48 weeks, the TBM's excavation culminated in the final breakthrough at the South Island on September 24, 2025. Mary broke her own record completing the second tunnel 3 weeks faster than her first tunnel. Years of planning, design, construction, and hard work paid off in grand fashion as Mary emerged! Hundreds of federal, state and local dignitaries, and project staff cheered as they witnessed this momentous occasion.

Governor Glenn Youngkin said "Today's breakthrough brings us one step closer to ending gridlock in the region, unlocking new opportunities for the free flow of people and commerce through the Commonwealth, and ensuring our military personnel in the region are ready to respond more quickly when duty calls."

MARY'S INCREDIBLE JOURNEY



Fabricating Mary

Mary is a highly specialized, custom built, variable density TBM. At 46.1 feet in diameter, Mary is the second largest TBM used in North American history. She has been powered by 16 electric motors that together generate 7,510 horsepower, consuming the equivalent amount of electricity used by more than 6,000 homes each day.

Once fabricated by German company Herrenknecht, Mary was shipped from Europe to the U.S. as 173 parts, pieces, and shipping containers. She arrived at Portsmouth Marine terminal in December 2021 where she was then transported to South Island and her reassembly began.

Breaking New Ground

Unlike previous tunnels in Hampton Roads built using immersed tube methods, Mary is the first TBM to complete a bored roadway tunnel in Virginia and only the third in the United States. With a 46-foot cutterhead spinning up to 2 revolutions per minute, Mary excavated soil at depths as low as 173 feet, with the new twin tunnels sitting beneath the bay bottom. She used 198 scrapers and 26-disc cutters, aided by a pressurized slurry mixture of bentonite clay and water, which stabilized the ground in front of the cutterhead and also served as the medium for transporting excavated material back to the surface.

Trailing behind Mary are the electrical lines and slurry pipes that powered her systems and connected her to Katherine, the slurry treatment plant named in honor of NASA mathematician Katherine Johnson. Katherine is the largest slurry treatment plant in North America. The plant was at the center of the slurry loop, providing clean slurry to the machine and separating spoils from the slurry returned to the machine after being mixed with soil at the cutterhead.

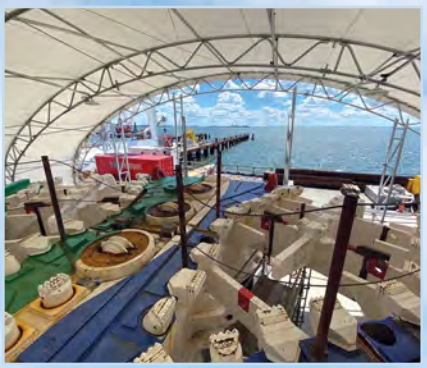
From Cape Charles to the Depths

The concrete segments forming the tunnel's lining were produced in Cape Charles, Virginia. Thousands of high-strength precast segments were fabricated using 10,000 PSI concrete under tightly controlled conditions to ensure durability and precision.

Once cured, 20 rings (180 segments) at a time were carefully transported by barge across the Chesapeake Bay to the South Island, where they were staged. Special motorized vehicles delivered the segments to the tunnel boring machine, where they were fed onto a segment feeder beneath Mary and installed ring by ring.

Forging the Tunnel

As Mary advanced, she moved forward 6 feet, 6 inches at a time, cutting



away nearly 600 tons of material with each push. Behind the cutterhead, she immediately began building the permanent tunnel lining.

Using a vacuum erector mounted on her erector bridge, she lifted and rotated nine massive precast concrete segments—some as large as 16 feet wide, 6 feet 6 inches long, 18 inches thick, and weighing 10 tons—into precise position. Thrust cylinders held the pieces steady so they could be bolted together, forming a complete ring.

Once a ring was finished, Mary advanced by pushing off the newly installed ring. By the end of excavation, she had installed 2,385 rings, totaling 21,465 segments, creating the twin bored tunnels' final lining.

The First Tunnel

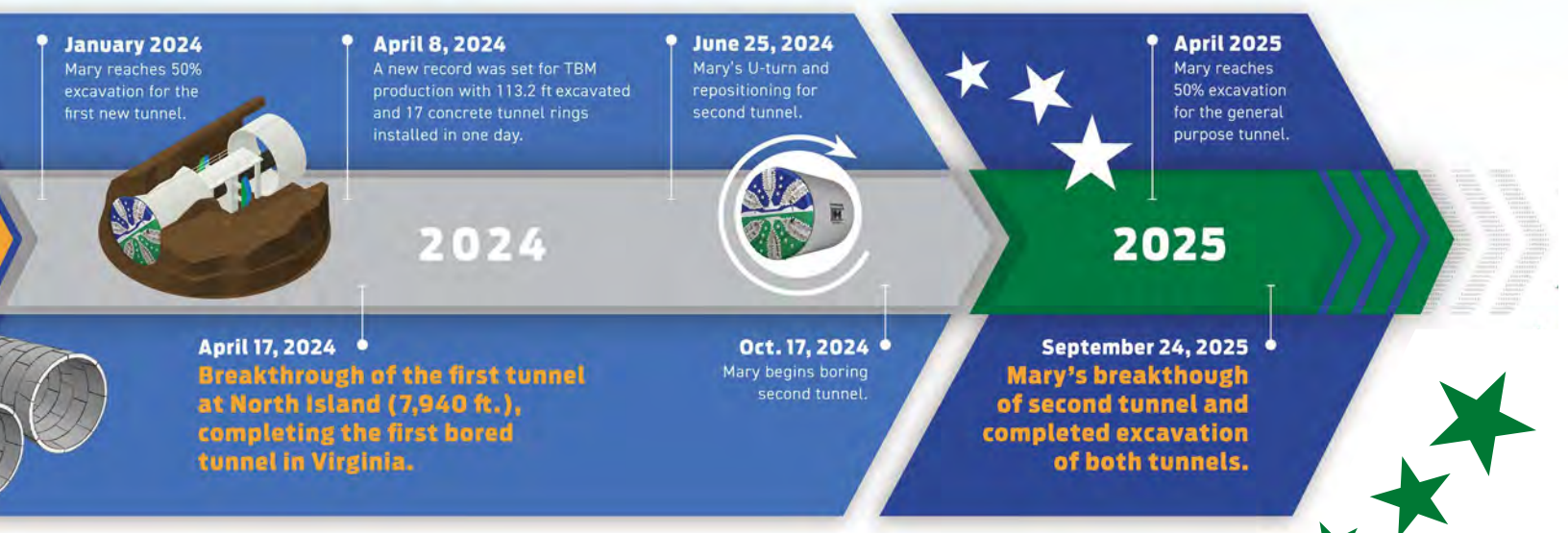
Mary launched on her inaugural journey on April 24, 2023. After 51 weeks of tunneling beneath the Hampton Roads harbor, Mary completed her first trip between the islands on April 17, 2024, becoming VDOT's first ever bored tunnel. During her time underground, Mary traveled 7,940 feet and installed 1,191 rings.

Following her first breakthrough, Mary was put through a rigorous inspection process prior to crews performing repairs, replacements, and modifications. Cutting tools were replaced and testing, cleaning, and commissioning of her mission critical systems were completed.

The Turnaround

After completing the first tunnel, Mary had to be turned 180 degrees inside the HRBT North Island receiving pit to begin her return trip to South Island. At 430 feet in length and 4,700 tons, even partially disassembled, she was far too massive for a standard crane lift.

Instead, crews prepared to complete another historical milestone by separating Mary's shield and cutterhead from her gantries and rotating her using nitrogen table technology. The friction reducing, innovative technology, never used in the U.S until Mary's turnaround, allowed a 180-degree rotation of the 2,350 ton, 46-foot shield in just 11 hours with 35 crew members assisting.



The expansion project set a world record for both diameter and weight for the rotation of a TBM using this technology.

The Second Tunnel

Exactly six months to the day from her first breakthrough, Mary started her return trip to South Island by starting excavation of HRBT's second tunnel on October 17, 2024. During her return trip, Mary excavated 7,960 feet and installed 1,188 rings. Following breakthrough, Mary will install her last six rings, marking the end of her incredible journey.

During the two mining missions, Mary tunneled exactly 3 miles. Additionally, she has set many records given her sheer size as the second largest TBM in North America, as well as her productivity installing 440 feet of tunnel in a single week—believed to be a world record for her class of TBM.

While she may no longer be needed at the HRBT, she will long live on in the history of Virginia and the story of Hampton Roads.

What Happens to Mary after the Breakthrough?

As Mary, the TBM, ended her historic journey, an equally impressive and complex process begins: her removal. While the public may see the breakthrough moment as the finale, it marks the start of an intricate and highly coordinated operation to disassemble and remove the machine from the receiving pit.

To prepare for Mary's arrival back to the South Island, crews constructed a cradle to support the weight of her shield as she broke through and installs the final rings of the tunnel. Once the shield is completely exposed and the last rings installed, the disassembly process will begin. Because Mary is too large to be removed in one piece, she will be taken apart section by section. Crews will dismantle the cutterhead, shield, trailing gear, slurry pipes, electrical lines, and backup systems. Disassembling Mary is a logistical feat that will take five months to complete. Some of Mary's parts, such as the electrical drive motors, hydraulic rams and other mechanical features, will be salvaged. Other parts subject to wear and tear during mining are expected to be scrapped.

The same expert teams who assembled and operated the TBM are typically involved in her removal, ensuring that the process is carried out with the same precision and expertise that defined her groundbreaking journey. While Mary's work beneath the surface is complete, her story will continue above ground, an enduring symbol of the engineering innovation and teamwork behind the HRBT Expansion Project.

BREAKTHROUGH CEREMONY

SEPTEMBER 24, 2025

HIGHLIGHTS

[1] VDOT Commissioner Stephen Brich highlights Mary the TBM and the project team's successes. [2] Hundreds of guests and staff cheered as Mary breaks through on South Island. [3] U.S. Secretary of Transportation Sean Duffy speaks about the importance of the project. [4] Members of the tunneling team came decked out in custom-made Mary the TBM shirts. [5] Governor Glenn Youngkin acknowledges the partnership of legislators, stakeholders and staff, along with federal, state and local agencies, that made the project possible. [6] Governor Glenn Youngkin, Virginia Secretary of Transportation Shep Miller and others watch as Mary breaks through. [7] Governor Glenn Youngkin recognizes the family members of Mary Winston Jackson for whom the TBM is named.

Katherine's Closing Act

While the TBM has completed her second crossing of the Hampton Roads Harbor, her partner, the Slurry Treatment Plant (STP), remains situated on the HRBT South Island. Occupying over two acres, the STP is the largest of its kind in North America. The plant is named in honor of Katherine Johnson, the NASA mathematician who worked alongside the TBM's namesake.

Throughout mining, the STP provided slurry, a water and clay mixture, to the cutterhead, helping to support the ground near Mary's cutterhead. Mixed with the soil at the face of Mary, Katherine's slurry helped carry 1,430,400 tons of material from the TBM to the South Island since April 2023 when boring began. Katherine could process nearly 14,000 gallons of slurry per minute. The excavated materials passed through a series of screens, cyclones, and filters to separate the spoils from the slurry.

Mary's September 2025 breakthrough at South Island marked the conclusion of the project's underground tunnel boring operations. Less than a week after tunneling was completed, the STP began being dismantled. Before crews could start disassembling the STP, Katherine had to empty the remaining slurry inside the 22-inch pipes connecting the plant to the TBM.

Unlike Mary, most of Katherine's operating system can be reused. Components closer to the tunnel approach will be removed first to create space for disassembling the TBM.

Most of the STP is simple to disconnect, clean, and prepare for shipping. The large holding tanks will be broken down into small panels and recycled for scrap metal. The silos, used to store slurry additives, will be cleaned out, flipped horizontally, and loaded onto trucks for transport off site. After the area is clear, crews will demolish more than three feet of concrete foundation that was needed to stabilize the ground below Katherine.

[1] Spoils excavated by the TBM are transported by conveyor belt to an awaiting barge.

[2] Constructed on the South Island, Katherine, the STP, is the largest of its kind in North America.

[3] Tanks store mixed slurry, bentonite, recycled and fresh water for tunnel operations.

[4] Shaker tables use sieves to seperate solids from the liquid slurry.

[5] A temporary holding tank collects slurry after the initial stage of treatment.

[6] An aerial view of Katherine, where excavated material is processed for disposal.

A Major Shift: Key milestones marked by traffic shifts

2025 marked a significant milestone for the HRBT Expansion Project, as carefully planned traffic shifts moved thousands of motorists onto newly built or reconfigured bridge sections without disrupting the steady flow of travel. Each shift represents a critical step in expanding the corridor's capacity and resilience, supporting the project's broader vision of a safer, more reliable crossing that will serve the region for generations.

Westbound Traffic Shift

In July 2025, there was an overnight, seamless shift of westbound I-64 traffic to the right, onto a temporary bridge at the South Island approach into the existing westbound tunnel. This move cleared the way for the start of demolition of the old westbound bridge and construction of its permanent replacement, while keeping two lanes open to motorists.

These coordinated traffic shifts are more than just lane changes. They're visible proof of the project's momentum. Each move paves the way for new construction, replacing decades-old infrastructure with modern, resilient structures designed to handle future traffic demands. As work continues across the trestles and tunnel approaches, drivers are already beginning to experience the benefits of a safer, more efficient crossing.

First Cars to Drive on the New Superstructure in Fall 2025: Eastbound lanes shift onto new South Trestle

In Fall 2025, two lanes of eastbound I-64 traffic will be shifted onto a newly completed portion of the South Trestle superstructure, spanning between the HRBT's south island and the Norfolk shoreline at Willoughby Spit. This move will mark the first major shift onto the permanent 8 lane mega-trestle, which is designed to not experience corrosion for 100 years.

The transition to the new bridge will allow crews to begin demolishing sections of the existing eastbound trestle while keeping two lanes open in each direction to maintain traffic flow. Once the entire project is complete, the South Trestle will eventually carry all eight lanes of I-64 traffic between Norfolk and the HRBT.

WEST BOUND TRAFFIC SHIFT

EAST BOUND SUPERSTRUCTURE WORK

SOUTH TRESTLES

Crews build the new South Trestles beside active traffic lanes, keeping motorists moving while expanding the facility for the future eight-lane crossing.

Aerial view showing how the Willoughby Bay Bridge spans Willoughby Spit and connects to the Hampton Roads Bridge-Tunnel.

Building on History:

Rehabilitating and Widening the Willoughby Bay Bridges

Willoughby Spit is a sandy peninsula and serves as the northern-most landmark in Norfolk. It is reported that Willoughby Spit first appeared as early as 1667 when a hurricane formed a new point of land. Over the next two centuries, several storms continued to contour the coastline into the 7-mile stretch we now know as Willoughby Spit.

When the original Hampton Roads Bridge-Tunnel (HRBT) was constructed in the 1950s, in addition to connecting the 3.5 miles between Hampton and Norfolk, engineers also had to plan for how to address this narrow peninsula. As part of the project, crews added a bridge across Willoughby Bay to provide a high-speed connection separate from local traffic. A second bridge across Willoughby Bay followed in the 1970s with the addition of the second tube at the HRBT.

As part of the HRBT Expansion Project, the 5,000-foot Willoughby Bay Bridges are getting much-needed rehabilitation to extend their service life, in addition to the widening of both bridges to accommodate eight travel lanes. For the eastbound bridge, crews have driven 245 24-square inch piles and poured concrete for the new lanes.

When traffic shifts onto the new lanes in Fall 2025, motorists traveling east on I-64 will experience an improved ride.

The shift will allow crews to continue rehab work, including placement of a new concrete overlay on the existing bridge span.

On the westbound bridge, crews have constructed the foundation for new sections of the bridge and are in the process of pouring new concrete bridge decks. Crews will continue driving piles, building pile caps, placing girders, and pouring concrete until the new westbound bridge is completed. Which is expected in 2026. Once completed, the newly widened and rehabilitated Willoughby Bay Bridges will continue to provide a vital connection to the HRBT.

5 Years of Success Gone to the Birds.

Model for Others.

Photo credit: Anna Romano

For the past five years, protecting shorebirds—roughly 100 species near the HRBT Expansion—has been a priority for the project and its environmental partners. A coordinated team effort has deterred the birds from nesting at the construction site each breeding season and impeding project progress.

At the heart of this effort is a multi-agency collaboration, led by the Virginia Department of Wildlife Resources (DWR) in partnership with VDOT and supported by the builders' field experts, including North Carolina–based Flyaway Geese. Together, the team employs a variety of proven deterrent tactics to protect both birds and workers. Flyaway Geese, using specially trained border collies with their human-handlers, conduct daily patrols of the islands to safely discourage nesting shorebirds. These efforts have been reinforced by shoreline patrols, the installation of decoy systems and strategically placed reflectors that are designed to mimic the eyes of predators and safely deter birds from nesting on equipment or construction areas.

More than just relocation, the team also created alternative habitats. The historic Fort Wool was transformed into a temporary nesting sanctuary, now home to nearly 1.7 acres of restored nesting ground. Three nearby, flat-top barges outfitted with sand, decoys, and audio playback of colony calls provide more than an acre of additional seasonal nesting surface. Long-term plans are also underway to establish a permanent bird habitat in the Chesapeake Bay or lower James River region.

Beyond nesting season, the team's work continues in unexpected ways. They regularly receive calls about injured birds, often entangled in fishing line, trapped in netting or found along roadways. Thanks to ongoing education, deterrence and traffic coordination, bird-related incidents, including vehicle strikes and construction site casualties, have decreased significantly since 2020.

The HRBT Expansion Project is one of Virginia's most ambitious transportation initiatives. Its success depends not only on engineering excellence but on public trust, and that means showing care for the environment at every turn. The ongoing bird-monitoring program demonstrates how infrastructure and environmental protection don't have to be at odds. Instead, they can coexist through smart planning, science-based action and collaboration. The team's record of success is recognized as a model for balancing construction with conservation, setting a high bar for projects across the country.

Fort Wool and outfitted barges create more than two acres of alternative nesting space for shorebirds.

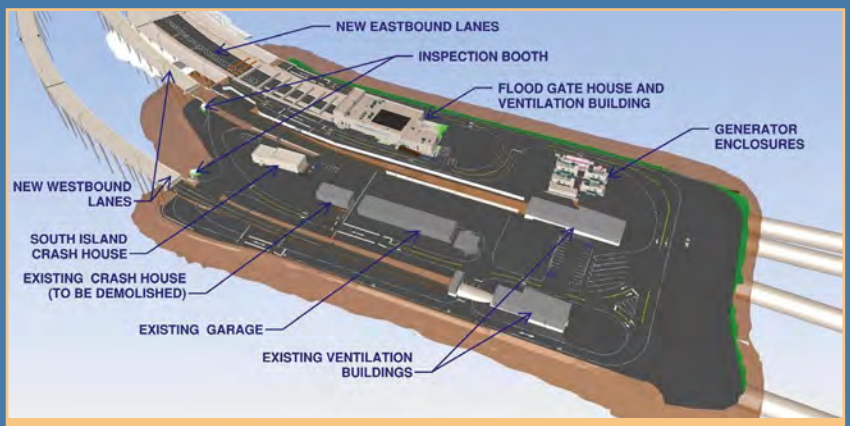
Building Support for the Tunnels

The HRBT Expansion Project is more than the construction of new twin tunnels. While Mary the Tunnel Boring Machine stole the spotlight during early phases of the project, simultaneously, planning and design for critical tunnel support buildings was underway. More than a dozen new buildings are being constructed to support future tunnel operations.

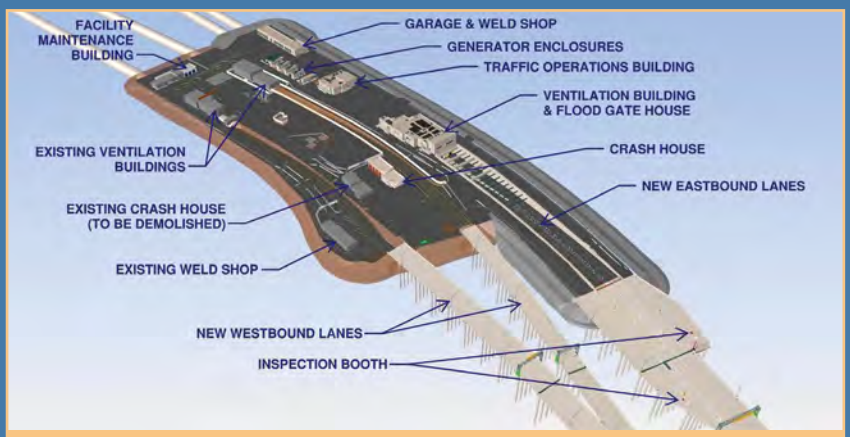
During Mary's excavation between islands, the South Island launch pit was being transformed. In what was once an open launch pit, crews began building roadway divider walls to separate traffic in the new tunnels. The walls will all be topped to enclose the approaches. In addition to serving as ceilings for the tunnel approach structures, they provide the foundation for the ventilation and floodgate buildings. The ventilation building manages air quality and temperature within the tunnel using sensors to track potentially harmful gases, such as carbon monoxide levels. The floodgate building controls the operations of the floodgates, a crucial feature of the tunnels given their coastal location and potential for hurricanes and storm surges. The inspection booth and crash house will support traffic operations, so staff can check vehicle heights, and provide a destination for disabled vehicles once removed from the roadway.

The North Island will include many of the same buildings as South Island. However, there are additional buildings being constructed on the North Island, including an expanded facility maintenance building and new traffic operations center. The expanded facility maintenance building includes garages to house vehicles, equipment storage and repair, along with a welding workshop, which will allow VDOT to carry out routine and preventative maintenance on the tunnel facilities. The new traffic operations center features cameras, sensors and computerized systems to monitor traffic in all four tunnels, enabling VDOT to share traffic alerts with motorists through overhead message boards and the VDOT 511 system.

The design and construction of the support buildings is another key component to the success of the HRBT Expansion Project. Architects and engineers made use of every square inch of the man-made islands, maximizing efficiency in a limited space. While drivers will experience wider roadways and new tunnels, it's the behind-the-scenes infrastructure that ensures the system runs safely, smoothly, and reliably for generations to come.



SOUTH ISLAND



NORTH ISLAND

One Year at the Welcome Center

Showcasing A Generational Project

Many Hampton Roads residents recognize the building on 4th View Street as the former City of Norfolk Visitors Center, but partnerships with the US Navy and the City of Norfolk allowed the Virginia Department of Transportation to reopen it as the HRBT Welcome Center in 2024. The team has welcomed more than 1,100 visitors to the project-based transportation museum designed to promote and inform the public about the expansion project. Through the center's interactive exhibits, guests can go behind the scenes of a heavy construction project. Displays include artifacts, engineering models, and a timeline dedicated to HRBT history. Each helps to tell the story of the region's transportation transformation.

A 10-foot model of Mary, the Tunnel Boring Machine, is the center's main attraction. After touring the facility, visitors leave with a better understanding of Virginia's largest construction project. Students of all ages, long-time area residents with memories of the former HRBT ferry system (precursor to the tunnels), and out-of-state visitors come to learn about HRBT's cutting-edge technology and world-class construction and tunneling team.

A Summer of STEM

For many students, summertime means a break from formal learning. This year, from June to August, Expansion staff continued to educate young residents about the project by hosting more than 250 children from camps throughout the region.

Groups representing Norfolk Public Schools, Portsmouth Public Schools, Hampton Public Schools, and homeschool cohorts spent time inside the Welcome Center, learning about Hampton Roads history and the science, engineering, technology, and math required for tunnel boring. Inquisitive questions about the TBM's functions, cost, and environmental impacts showed students' interest in engineering concepts like building underwater tunnels.

HRBT Expansion Project's ZaMari Love demonstrates to Welcome Center visitors how TBM Mary's rings lock in place to build the tunnel.

STAFF SPOTLIGHT

Tunneling Teamwork:

The People Powering Progress Beneath the Harbor

Delivering a massive infrastructure project such as the HRBT Expansion takes more than cutting-edge technology. It takes people. Behind the new tunnels between Hampton and Norfolk are hundreds of skilled professionals whose work represents the best of engineering, collaboration, and commitment to public service.

At the center of this effort is a powerful partnership between VDOT and Hampton Roads Connector Partners (HRCP), whose seamless collaboration blends public oversight with private-sector innovation. Together, they've assembled a world-class team made up of engineers, operators, mechanics, carpenters, electricians, skilled craftspeople, inspectors, and support crews.

Many of these professionals bring decades of experience in heavy civil and underground construction, paired with a deep commitment to safety, precision and progress. Working side by side, VDOT and HRCP leadership make real-time decisions that prioritize safety, emphasize quality, and promote environmental stewardship.

Ultimately, it's not just about building tunnels. It's about leaving a proud, lasting legacy as this team advances a once-in-a-generation project. Their unity, endurance, and shared mission are laying the foundation not just for traffic relief and resiliency, but for what teamwork in infrastructure should look like.

@HRBTExpansion: Your Source for Project News Updates

Stay up to date on the latest news and insights on the HRBT Expansion Project with the most recent progress and milestones across the project corridor.

Hrbtexpansion.org

The HRBT Expansion Project website houses the latest updates on the project, from weekly traffic alerts to videos and podcasts that provide you with a behind-the-scenes look at the people, equipment and processes used on the project.

From project tours to equipment highlights, the HRBT Expansion Project offers dozens of videos to provide the community with a glimpse at the progress of the project.

Here are some of the latest videos:

Follow Us on Social Media

Our social media accounts are another way we stay connected to those interested in hearing more about our progress. We have more than 27,000 followers, and counting, across all platforms.

JOIN THE CONVERSATION

Follow us on any social media platform to see project photos and updates. Search: HRBT Expansion Project.

Check out Project Updates in our Monthly Newsletters

Sign up for our monthly newsletter to get the latest updates delivered right to your inbox. Stay up to date on the cutting-edge technology and progress of the HRBT Expansion Project.

Tune In to Our Podcasts

Dive deeper into industry topics and listen to our podcasts for in-depth interviews with project experts, thought-provoking discussions about HRBT expansion work, a commitment to environmentally friendly practices and learn how the expansion project is reaching future, aspiring engineers.

Recent topics include the following:

- Summer Camp at the HRBT Welcome Center
- Five-Year Success Story: Bird Monitoring at HRBT Expansion Project
- Invisible Measurements of Construction Monitoring

By following us on social media and tuning in to our podcasts, you'll be the first to know about the latest developments and trends. Join the HRBT community today and stay informed!

Hampton Roads Express Lanes:

A Year of Delivering a Faster, More Reliable Commute

On March 17, 2024, the Virginia Department of Transportation (VDOT) launched full-time, 24/7 tolling operations on the I-64 Hampton Roads Express Lanes (HREL) in Chesapeake and Norfolk, marking a new chapter on how the region manages traffic. One full year of operations later, with more than 10 million trips taken, the HREL continues to show positive progress toward alleviating congestion and providing more reliable travel options for all motorists along the I-64 corridor.

Drivers have steadily embraced these new travel choices. Total monthly trips across the network surged from 793,725 in April 2024 to over one million by March 2025. In Chesapeake, westbound commuters in particular took advantage, with daily usage rising nearly 40% over the first year.

The Express Lanes' carpooling incentive has also shifted driver behavior in measurable ways. With an E-ZPass Flex transponder, vehicles with two or more occupants (HOV-2) travel toll-free, freeing up capacity in the general purpose lanes and reducing overall congestion. This option boosted the share of HOV-2 trips from 16% in both segments to 23% in Chesapeake and 20% in Norfolk in the first year.

The Express Lanes are also delivering a faster, more dependable journey. In the first year, average speeds increased and travel times improved in the general purpose lanes compared to the previous year, averaging nearly 8 mph faster in Chesapeake and over 15 mph faster during Norfolk's evening rush. Inside the Express Lanes, speeds have remained constant and reliable, offering a predictable trip even during the busiest travel periods. In Chesapeake, the advantage of choosing the Express Lanes has only grown, with the evening speed gap doubling in the first year from 4 to 8.1 mph faster than the general purpose lane speeds.

The success of these segments thus far provides the foundation for a continuous 45-mile Express Lanes network that will eventually stretch from Chesapeake to Newport News. Powered by dynamic tolling that keeps traffic moving, the HREL network is a key part of a long-term strategy to manage regional traffic demand. Furthermore, toll revenues stay local to fund operations and interstate improvements, ensuring a smoother commute for years to come.

YOUR DRIVE. CHOICE.

BY THE NUMBERS...

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HRBT EXPANSION PROJECT – MARY'S JOURNEY

HRBT EXPANSION

VDOT

HRTAC
Hampton Roads Transportation Accountability Commission

For more project details visit: HRBTEXPANSION.ORG | #HRBTEXPANSION | HRBTinfo@VDOT.Virginia.gov