

CIP-in-Brief

Hampton Roads Transit's
FY2026-FY2035
Capital Improvement Plan



DECEMBER 2024



Hampton Roads Transit (HRT) is Virginia's largest public transportation agency outside of Washington Metro, supporting millions of trips annually on bus, ferry, light rail, paratransit, and Transportation Demand Management services.

These services are vital for a growing, inclusive, and prosperous region. And just like roads need paving and bridges need repair, public transportation requires ongoing investment to maintain a State of Good Repair and to expand quality transportation options across 6 of Virginia's 10 largest cities (Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Virginia Beach).

The Capital Improvement Plan (CIP) is a blueprint for \$467 million in capital investments over the next ten years. It's a "living document", updated annually.

For FY2026-2035, HRT is addressing core needs like ongoing bus replacements, safety and security, technology upgrades, and customer amenities, and is also strategically planning for transformational investments in the Electrification of fleet and facilities infrastructure.

Mission

To connect Hampton Roads with transportation solutions that are reliable, safe, and sustainable.

Vision

A progressive mobility agency that promotes prosperity across Hampton Roads through collaboration and teamwork.

CIP Development and Funding

Projects go through a robust screening, scoring, ranking, and prioritization process to be included in the fiscally constrained CIP. A mix of funding sources make the CIP possible.

Federal

Federal formula funds (5307, 5337, 5339 programs) are a core capital funding source. Other sources include federal Congestion Mitigation and Air Quality (CMAQ) and Regional Surface Transportation Program (RSTP) grants. Finally, HRT strategically pursues competitive discretionary grant funds. The 10-year CIP makes assumptions for federal discretionary awards, especially to support the phased Electrification of fleet and facilities.

State

Virginia's "Making Efficient and Responsible Investments in Transit" (MERIT) program is administered through the Virginia Department of Rail and Public Transportation. MERIT provides essential funding for different types of projects: State of Good Repair (up to 68% match), Minor Enhancement (up to 68% match), and Major Expansion (up to 50% match). DRPT also administers technical assistance and other grant funds.

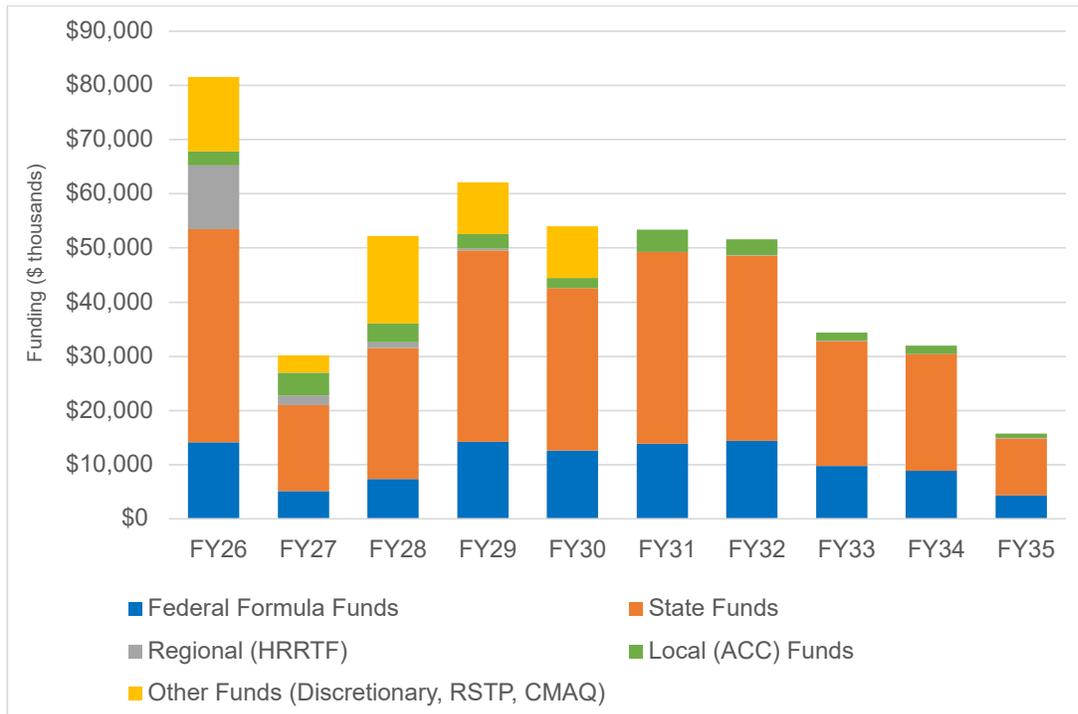
Regional

The Hampton Roads Regional Transit Fund (HRRTF) is administered through the Hampton Roads Transportation Accountability Commission (HRTAC). This funding supports projects for the 757 Express program.

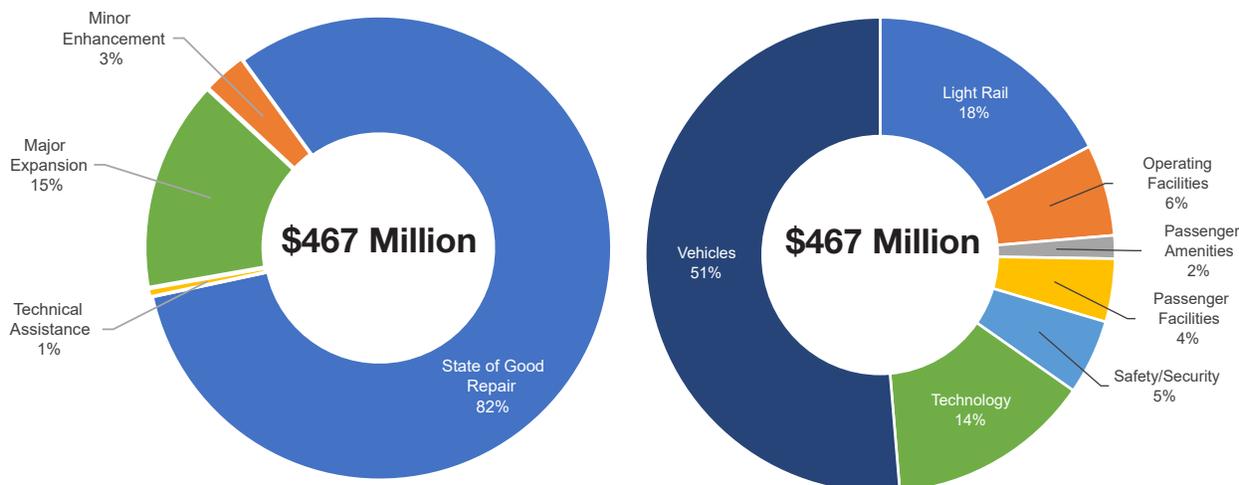
Local Funding

Local funding (Advanced Capital Contributions or "ACC") is modest but important to leverage state and federal grants. HRT receives a total of \$2 million annually in ACC.

Funding by Source and Year



Breakdown of Ten-Year Program by Project Category and Type



CIP Highlights

- The ten-year capital program totals **\$467 million**, distributed across 81 projects.
- **HRT continues to prioritize State of Good Repair (SGR).** Even with a significant funding program to support RTS and electrification, SGR remains the focus of HRT’s 10-year capital plan: 82 percent of the CIP by dollar value is devoted to State of Good Repair.
- **The CIP plans for future investment in the electrification of fleet and facilities.** This includes purchasing up to 33 battery electric buses (BEBs), and the facilities infrastructure needed to charge and maintain them.
- **HRT plans to strategically pursue competitive state and federal funding opportunities.** This year’s CIP includes placeholders for future federal discretionary funding, which is essential to successfully transition from diesel to electric operations. The bipartisan Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA) created significant new funding opportunities, such as the \$25 million federal grant awarded in 2023 for the new Southside Operating Facility.
- **The CIP includes eight projects that support investments in technology, rolling stock, passenger facilities, bus stop amenities, and operating facilities as part of the RTS program.** Between FY2026 and FY2035, HRT is planning on investing \$15 million of HRRTF funding toward these projects.
- **Economic and industry factors pose challenges to HRT’s capital program.** Inflation pressures contribute to higher prices of goods such as new buses, which in turn reduce the agency’s spending capacity when overall funding doesn’t increase. If inflation over the next decade exceeds historical averages, it will further limit the capital budget. Domestic bus manufacturers, meanwhile, continue adjusting to national post-pandemic production needs and face significant demands for electrification and other non-diesel technologies.

- **Some future needs remain unfunded.** Three projects are partially or wholly unfunded. The majority of unfunded needs (by dollar value) are associated with the potential future electrification of the operating facility in Hampton (3400 Victoria Boulevard) in 2031 and later. Major projects of this kind are subject to future planning and engineering work to define needs and complete cost-benefit evaluations to determine what future investments HRT should pursue. Any major projects will also require significant new state and federal discretionary funding support. HRT will adjust the pace and phasing of electrification as needed.
- **Fleet Investments:** Bus replacements, repowers, and fleet expansion make up the largest share of HRT's capital plan, representing 51 percent of the total program. The updated fleet plan provides for ongoing investments and strategically phasing in the expansion of HRT's electric vehicle fleet.
- **Bus Stop Amenities:** HRT is upgrading over 600 stops with new passenger amenities such as shelters, seating, and lighting as part of the RTS program. This ongoing project represents the largest investment in bus stop assets in the agency's history.
- **Light Rail State of Good Repair:** Light rail investments, exclusively focused on maintaining a state of good repair, are the second largest investment category of the next 10 years.
- **Technology State of Good Repair:** HRT has a wide range of technology assets, from software and hardware to complex back-end IT infrastructure. These assets must be replaced on a regular basis to ensure the agency can keep pace with changing technological, user, and security requirements. The CIP has several technology projects that support the routine replacement of these systems.
- **Passenger Facility Investments:** HRT is investing in several of its passenger facilities. In addition to replacing Evelyn T. Butts Transfer Center in Norfolk and Robert Hall Transfer Center in Chesapeake with larger and higher-quality transfer centers as part of the RTS program, HRT is making state of good repair investments at its transit centers in Newport News and Hampton and transfer centers at Wards Corner, Patrick Henry Mall, and Tidewater Community College (Virginia Beach Campus).
- **Safety and Security:** Ensuring the safety and security of HRT's customers, staff, and assets is integral for ongoing transit service operations. The CIP has several projects in surveillance and real-time monitoring equipment. HRT is also beginning to implement equipment that improves the safety of operators while operating buses and mechanics when repairing vehicles.



Technology

Technology drives the modern transit industry. A customer interacts with HRT technology even before they start their trip. Mobile schedule and arrival information is made possible by a bevy of systems, from onboard Automatic Vehicle Locators (AVLs) that pinpoint where our buses are in real-time, to the network hardware and software that ensures that information makes it to the phones of our customers. Once aboard an HRT vehicle, a suite of technology supports operations, such as fare collection equipment that allows riders to pay for their trip, and various hardware and software systems that allow dispatch to monitor operations. Just as important, are the technology systems that support back-end operations. Systems help automate several critical administrative functions, from asset management and maintenance to payroll and HR.

Investing in HRT’s technology allows the agency to be more responsive to our customers and more efficient in our operations. Much of our technology capital budget is focused on maintaining the systems we currently rely on; most of our hardware and software systems need to be regularly updated and replaced at least every five to ten years. Outdated systems reduce our overall efficiency as an agency and expose HRT to security and safety vulnerabilities. In addition to state of good repair, HRT is constantly investing in new systems to keep up with our changing needs. Many of the critical systems we rely on today, did not exist 10 or 15 years ago. Trends like the widespread adoption of mobile ticketing and trip planning tools, the transition toward battery-electric buses, and emergence of autonomous vehicles and AI, will only accelerate the pace of technological change at HRT.

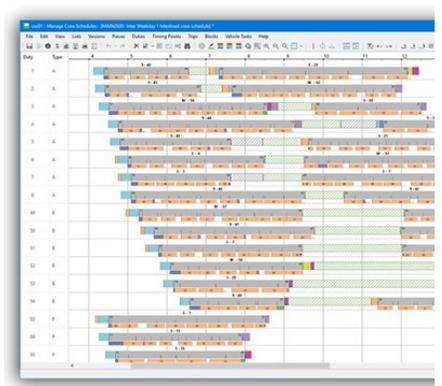
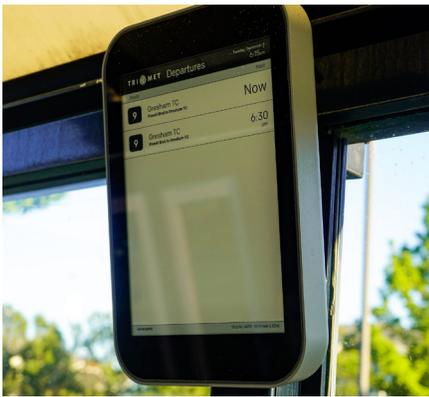
Technology Capital Projects by the Numbers

20 projects

Technology Projects (excludes safety technology projects)

\$75 million

in capital needs (year of expenditure dollars) from FY2026 to FY2035



Project List

UID	Project Name	Cost (\$ thousands)
IT01	HASTUS	\$2,319
IT03	Large Technology Infrastructure	\$8,808
IT05	Client Technology Systems State of Good Repair	\$4,008
IT06	Bus Facility Passenger Information Displays SGR	\$928
IT07*	Passenger Information Displays - Light Rail*	\$9,549
IT12	Onboard Network Infrastructure State of Good Repair	\$1,072
IT16	Financial Software System (FSS) Implementation	\$6,152
IT17	HRMS Replacement	\$5,242
IT18	Fixed Side CAD/AVL System	\$2,073
IT22	EAM System State-of-Good-Repair	\$9,366
IT32	Technology Enhanced Safety Solutions	\$2,114
IT36	Internal Digital Signage System	\$500
IT37	ICS Cyber Security	\$3,537
IT42	IT Security Systems Upgrade	\$1,906
IT43	Contract and Vendor Management Software Replacement	\$507
IT45	Replace the Onboard Passenger Information System	\$1,791
IT46	Yard Management System	\$7,063
IT47	Enterprise Data Integration	\$394
IT48	Farebox Replacement Project	\$773
IT49	Real Time Safety Driver Solution	\$6,872
	Total	\$74,974

*Project is unfunded in the constrained CIP

Projects (Year of Funding in Green)

HASTUS (FY30)

HASTUS, the planning, scheduling, and daily operations system must be updated in five-year intervals. The upgrade shall replace the application including server and kiosk infrastructure, interfaces to CAD-AVL, Financials, EAM, and other ancillary systems.

Large Technology Infrastructure (FY30, FY34-FY35)

Achieve state of good repair in line with FTA recommendations for Technology Infrastructure Systems that have reached the end of their useful life, including servers and storage, networking, wireless, firewalls, uninterruptible power supply (UPS) and power delivery systems, and backup solutions through replacement of the individual hardware component groups and entire systems.

Client Technology Systems State of Good Repair (FY28-FY30, FY33-FY35)

Achieve of good repair in line with FTA five-year lifecycle recommendations for Client Technology Systems that have reached the end of their useful life including laptops, desktops, workstations, printers, scanners, collaboration and conference systems, and telephony through the replacement of the individual hardware component groups and entire systems.

Bus Facility Passenger Information Displays SGR (FY29, FY34)

Replace passenger information displays being installed as part of the RTS implementation at the end of their useful life.

Passenger Information Displays - Light Rail*

Purchase and install digital signs that will display light rail arrival information and system alerts. HRT plans for a total of 22 displays to be located at all existing Tide stations.

*Project is unfunded in the constrained CIP

Onboard Network Infrastructure State of Good Repair (FY29-FY35)

Maintain state of good repair for HRT revenue fleet onboard network equipment through timely replacement at the end of the equipment's useful life.

Financial Software System (FSS) Implementation (FY26-FY35)

Enhance Microsoft Dynamics 365 Finance and Operations, allowing continued automation of manual processes and adding reporting functionality to analyze data to determine where opportunities exist for additional improvements in customer experience and service delivery.

HRMS Replacement (FY27, FY30-FY35)

Upgrade the Human Resource Management System at the necessary interval to maintain software functionality. This project is critical for a range of human resource functions at HRT.

Fixed Side CAD/AVL System (FY30)

Upgrade HRT's fixed-side CAD/AVL systems five years after initial implementation to maintain a state of good repair.

EAM System State-of-Good-Repair (FY28, FY33)

Upgrades the Enterprise Asset Management (EAM) System within five years of the system's initial implementation to ensure the system continues to be supported.

Technology Enabled Safety Improvements (FY28-FY29)

Research, scope, develop, and pilot new technologies to improve public safety through automated monitoring and threat detection.

Internal Digital Signage System (FY29, FY33)

Replace and expand existing employee facing Digital Signage System to communicate to HRT employees effectively and consistently.

ICS Cyber Security (FY28-FY33)

Fund ongoing investments in HRT's cyber security, including security assessments, implementation of new tools and software, and system testing. The agency's digital assets are critical for business continuity and this project would help address vulnerabilities as they arise.

IT Security Systems Upgrade (FY28-FY29)

Acquire and implement next generation process modification, application, and platform and data protection security upgrades to address new and emerging threats, mitigating risk from future unknown cyber threats.

Contract and Vendor Management Software Replacement (FY28-FY30)

Upgrade Contract and Vendor Management Software on a regular five-year cycle.

Onboard Passenger Information System (FY30)

Replace the existing onboard audio-visual Passenger Information System and accompanying management software on the Light Rail Vehicles.

Yard Management System (FY27, FY31)

Implement a yard management system to locate buses in yard for pull-out assignments.

Enterprise Data Integration (FY29)

Identify, consolidate, clean, and integrate data from various manual entries and systems of record (HASTUS, Trapeze, APC, etc.) to develop reporting capability to meet FTA and National Transit Database compliance requirements.

Farebox Replacement Project (FY26)

Replace discontinued Genfare Odyssey fareboxes to ensure ongoing fare operations.

Real Time Safety Driver Solution (FY27, FY32)

The Advanced Driver Assistive System collision avoidance warning system shall include, but not be limited to, hardware, software, licenses, installation, integrations, construction activities, professional services, and any ancillary items for the fixed-side, onboard, and field deployment.

Safety & Security

The safety of HRT’s customers and employees drives everything we do. Safety and security assets help to ensure vehicles are being properly monitored, secure facilities from trespassers, allow security officers to better respond to threats, and protect the public and employees from harm and injury.

One of the security challenges facing HRT is simply the sheer scale of operations. HRT’s service area covers six cities and 1.3 million residents. Safety and security related systems are essential to allow HRT to rapidly respond to issues as they arise. Many of HRT’s safety and security needs are technology related, such as cameras, card readers, and software systems. Like any technology asset, these systems need ongoing maintenance and upgrades to remain in working order and protected from cyber-security threats.

Safety and Security Capital Projects by the Numbers

13 projects

Safety and Security projects

\$26 million

in capital needs (year of expenditure dollars) from FY2026 to FY2035

Project List

UID	Project Name	Cost (\$ thousands)
SF01	Safety Management System	\$1,040
SP01	Upgrade the Video Recording Equipment for Buses	\$7,230
SP02	Light Rail Video Recording Equipment	\$353
SP03	Enterprise Video Surveillance System Upgrade	\$1,897
SP04	Enterprise Access Control System Upgrade	\$3,990
SP05	Mobile Telescoping Surveillance Units	\$4,062
SP06	Rail System Surveillance Enhancement	\$206
SP07	Emergency Alert Beacons, Sirens, and Strobes	\$1,359
SP08	Intrusion Detection Systems	\$865
SP09*	Blast Resistant Trash Receptacle and Bollard Project*	\$1,975
SP10	Enterprise Lock and Lever State of Good Repair	\$360
SP13	Portable Control Center and Guard Booth Trailers	\$484
SP14	Public Safety Equipment Expansion	\$2,044
	Total	\$25,865

*Project is unfunded in the constrained CIP

Projects (Year of Funding in Green)

Safety Management System (FY29)

Upgrade FTA-mandated safety management system to better track a range of safety related data in one centralized system.

Upgrade the Video Recording Equipment for Buses (FY27-FY35)

Replace video recording equipment on HRT's buses as they reach the end of their recommended useful life.

Light Rail Video Recording Equipment (FY30, FY35)

Replace video recording equipment on HRT's light rail trains as they reach the end of their recommended useful life.

Enterprise Video Surveillance System Upgrade (FY29-FY30, FY34-FY35)

Maintain state of good repair through timely replacements of the components comprising the fixed camera video surveillance system. Addresses known gaps in video surveillance monitoring through fixed camera replacement and additions at HRT facilities.

Enterprise Access Control System Upgrade (FY26, FY30-FY31, FY35)

Address state of good repair for enterprise access control platform, components, software, and supporting processes.

Mobile Telescoping and Surveillance Tower (FY26-FY27, FY29, FY31-FY32, FY34)

Procure trailer-mounted mobile telescoping surveillance towers. These can be deployed to address increased security, risk, or safety concerns.

Rail System Surveillance Enhancement (FY26)

This project includes the procurement, installation, and support of an enhanced video surveillance posture for the Tide Light Rail System and supporting infrastructure.

Emergency Alert Beacons, Sirens, and Strobes (FY26, FY31)

Design, procure, deploy, and test building emergency alert tools such as alert beacons, sirens, and strobes.

Intrusion Detection System (FY26, FY28-FY29, FY31-FY32, FY34-FY35)

Procure a system that will alert security when an individual is trying to invade the premises after work hours.

Blast Resistant Trash Receptacle and Bollard Project*

Procure, install, and maintain 12 blast-resistant trash receptacles and 36 bollards.

Enterprise Lock and Lever State of Good Repair (FY26-FY27)

Replace worn, failed, or failing door lock hardware (lever sets, cores, internal components, etc.) across the HRT enterprise.

Portable Control Center and Guard Booth Trailers (FY26)

Project to procure and place into service two mobile control center trailers designed to provide alternate continuity resources for the operations control activities.

Public Safety Equipment Expansion (FY26, FY31)

Project to expand the vital inventory of proprietary public safety equipment for use by an expanded transit security forces unity.

*Project is unfunded in the constrained CIP

Engineering and Facilities

Facilities investments play an important role in the public-facing and behind-the-scenes operations at HRT. Our facilities are often the first point of contact customers have with our systems. Bus stop infrastructure, including shelters, benches, and lighting, enhance the passenger experience by providing protection from harsh weather and a safe place to wait for the bus. Transit center relocations and upgrades both enhance passenger experience and improve operating efficiency by supporting service expansion and improving the transfer experience. Investing in HRT facilities allows the agency to maintain a state of good repair while upgrading existing facilities to ensure that riders, operators, and agency employees are comfortable and safe while taking transit or at work.

Investing in HRT’s facilities is a critical step toward achieving our goal of transitioning fully to a zero-emissions fleet. By investing in the electrification of HRT’s operating facilities, we will have the infrastructure and capacity to charge electric buses. In addition to reducing HRT’s carbon footprint, zero-emission buses will improve local air quality and can reduce the rate of respiratory illnesses. Electric buses will also provide a quieter and more comfortable ride than diesel buses. By investing in electrification, HRT is delivering environmental benefits for the community and improving the overall experience for riders.

Facilities Capital Projects by the Numbers

27 projects

Facilities projects

\$225 million

in capital needs (Year of Expenditure dollars) from FY2026 to FY2035



Project List

UID	Project Name	Cost (\$ thousands)
EF01	3400 Victoria Boulevard Renovation: Phase 2	\$4,756
EF02	New Southside Operating and Maintenance Division	\$18,341
EF03	RTS Bus Stop Amenity Program	\$5,313
EF05	Newport News Transit Center Interior Renovations	\$2,457
EF06	Hampton Transit Center Interior Renovations	\$2,316
EF07	Wards Corner Restroom and Paving Renovation	\$412
EF10	Evelyn T Butts Transfer Center Replacement	\$2,060
EF11	Silverleaf Transfer Center Upgrades	\$1,594
EF13	Robert Hall Transfer Center Replacement	\$7,468
EF20*	Hampton Facility Electrification*	\$169,414
EF21	18th Street Facility Electrification	\$985
EF26	Parks Avenue Re-Use	\$170
EF27	Concrete Repair Program	\$175
EF30	Bus Stop Amenity Program	\$2,039
EF31	HRT Facilities Signage	\$704
EF32	HRT Systemwide Signage	\$594
EF40	18th Street Facility Plumbing Redesign and Construction	\$212
EF42	Newtown Road Bus Transfer ADA Improvements	\$428
EF46	3400 Victoria Boulevard Parking Lot Safety Improvements	\$1,078
EF50	ADA Access Enhancements at HRT Facilities	\$258
EF51	GFI Vault Replacement at Fuel Island Norfolk	\$773
EF52	HRT/WATA - Joint Study for Transfer Center at Lee Hall	\$103
EF53	Patrick Henry Mall Transfer Center Pavement Repair	\$927
EF55	Veeder Root Upgrade Project	\$257
EF56	Study of Air Conditioning at HRT Maintenance Shops	\$103
EF57	Tidewater Community College Virginia Beach Transfer Area	\$1,700
EF58	Operator Lounge Furniture Rehab at the Norfolk and Hampton HRT Facilities	\$103
	Total	\$224,740

*Project is only partially funded in the constrained CIP

Projects (Year of Funding in Green)

3400 Victoria Boulevard Renovation: Phase 2 (FY26-FY27)

Complete renovations at 3400 Victoria Boulevard, including renovations to administrative and bus operating buildings.

New Southside Operating Division (FY26)

Relocate and replace Virginia Beach's Parks Avenue operating base with new state-of-art facility that can serve the Southside. This project is critical to meet both existing operating and Regional Transit System (RTS) needs. The facility would be designed from the onset to accommodate battery electric buses.

RTS Bus Stop Amenity Program (FY26-FY27)

Upgrade over 600 bus stops across the RTS network, including funding for new shelters, benches, trash cans, and lighting.

Newport News Transit Center Interior Renovations (FY26)

Renovate interior spaces of the transit center. The transit center is a high traffic location. The renovation would remodel the interior, renovate the bathrooms, and replace storefront doors.

Hampton Transit Center Interior Renovations (FY26)

Renovate interior spaces of the transit center. The transit center is a high traffic location. The renovation would remodel the interior, renovate the bathrooms, and replace storefront doors.

Wards Corner Restroom and Paving Renovation (FY26)

Complete state-of-good-repair maintenance for the Wards Corner Transfer Center, including renovation of the operator restroom and repairing damaged paved surfaces.

Evelyn T. Butts Transfer Center Replacement (FY26)

Replace the existing Evelyn T. Butts transfer center with a new off-street facility that can meet the needs of an expanded RTS network.

Silverleaf Transfer Center Upgrades (FY26-FY28)

Renovate HRT-owned assets at the Park and Ride to maintain the facility in a state of good repair.

Robert Hall Transfer Center Replacement (FY26)

Replace the existing Robert Hall transfer center with a new off-street facility in the City of Chesapeake.

Hampton Facility Electrification* (FY30)

Provide the infrastructure necessary to support the fully-electrified revenue bus fleets at the Victoria Boulevard Facility in Hampton.

18th Street Facility Electrification (FY33)

Provide initial planning and design for the infrastructure necessary to support a fully-electrified revenue bus fleet at the 18th Street Facility in Norfolk.

Parks Avenue Re-Use (FY26)

Plan for the redevelopment of the Parks Avenue Maintenance Area.

HRT Concrete Repair Work (FY26)

Provide funding for annual state-of-good-repair maintenance activities for HRT concrete pavement and structures.

Bus Stop Amenity Program (FY26)

Plan, design, and install up to 100 passenger amenities and ADA improvements that are not located along RTS routes.

HRT Facilities Signage (FY26)

Replace signs at approximately ten HRT facilities that are outdated and are in poor condition.

HRT Systemwide Signage (FY26)

Replace approximately 100 transit signs at HRT light rail platforms and transfer centers, in addition to enforcement signage required abroad revenue vehicles and brick and mortar sites, stops and stations, docks, and other patron-facing areas.

18th Street Facility Plumbing Redesign and Construction (FY26)

Redesign and reconstruct the plumbing infrastructure in the facility to bring it to a state of good repair and prevent future structural damage.

Newtown Road Bus Transfer ADA Improvements (FY26)

Update ADA amenities including braille elements, curb cuts and ramps, and tactile warning surfaces, and address tripping hazards and pavement at Newtown Road.

3400 Victoria Boulevard Parking Lot Safety Improvements (FY26)

Repave the existing parking surface lots at 3400 Victoria Boulevard, install additional ADA amenities, and replace the existing and safety infrastructure.

ADA Access Enhancements at HRT Facilities (FY26)

Install door openers and ADA push buttons along with associated items such as power supply and signage.

GFI Vault Replacement at Fuel Island Norfolk (FY26)

Replace existing GFI mobile revenue vaults at the 18th Street HRT facility and seek to maintain a state of good repair. In their current location in the fuel lane, the vaults can be sprayed with chemicals from the bus wash, which reduces the useful life of the equipment.

HRT/WATA - Joint Study for Transfer Center Pavement Repair (FY26)

Feasibility study of a new, joint-use transfer center at Lee Hall for HRT/WATA. Planning activities include at least two design charettes and an open house meeting.

*Project is only partially funded in the constrained CIP

Patrick Henry Mall Transfer Center Pavement Report (FY26)

This project will install a new parkway curb (without gutter) and replace concrete pavement.

Veeder Root Upgrade Project (FY26)

Upgrade the fluid management system at HRT facilities. This project will provide upgrades at the following HRT Facilities: 18th Street fueling location, 18th Street lube room, Parks Avenue fueling location, Hampton fueling location, Hampton lube room.

Study of Air Conditioning at HRT Maintenance Shops (FY26)

This study will determine the feasibility of providing targeted air conditioning in HRT maintenance shops.

Tidewater Community College Virginia Beach Transfer Area (FY26)

Identify possible expansion opportunities on the existing site or relocation alternatives and complete preliminary design and conceptual drawings for stakeholders.

Operator Lounge Furniture Rehab at the Norfolk and Hampton HRT Facilities (FY26)

Replace existing furniture in the operator lounges at the Hampton and Norfolk HRT facilities.



Light Rail

The Tide Light Rail is HRT's second-most ridden mode, behind only bus. The Tide system is composed of a wide range of capital assets, including many which are invisible to the customer. HRT maintains and manages over 7 miles of rail guideway, including tracks, aerial structures, and catenary, and 11 stations. The agency has a fleet of nine LRT trains that while expected to last over 30 years, need continuous investments to keep them in good condition. Behind the scenes, the agency maintains complex signaling and systems monitoring systems (i.e. SCADA) which ensure regular safe and reliable operations. The Tide system also has its own maintenance facility where trains are stored and repaired.

To ensure HRT is properly investing in its light rail assets, the agency developed a 30-year light rail state of good repair (SGR) plan that outlines the expected investment needs by asset type and year. While actual capital expenses may differ over time based on differing rates of wear-and-tear, the plan provides HRT a guide to future SGR needs. HRT's CIP builds off of the plan, by funding capital repair and maintenance needs it identifies over the ten-year timeframe. As the system enters its second decade of operations, trains will need to begin mid-life overhauls, stations will need cosmetic updates, and guideway systems will require additional maintenance and repair.

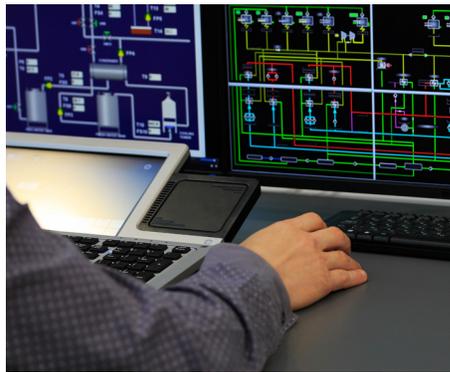
Light Rail Capital Projects by the Numbers

13 projects

Light Rail projects

\$82 million

in capital needs (Year of Expenditure dollars) from FY2026 to FY2035



Project List

UID	Project Name	Cost (\$ thousands)
IT29	Light Rail APC System Fixed-Side Hardware/Software	\$456
LR01	Light Rail Right-of-Way State of Good Repair	\$27,813
LR02	Light Rail Vehicle State of Good Repair	\$20,457
LR04	Light Rail Station Upgrades	\$5,874
LR06	Tide Supervisory Control and Data Acquisition (SCADA)	\$7,375
LR48	Light Rail Facilities State of Good Repair	\$1,748
LR50	Light Rail Aerial Structures	\$8,873
LR52	Passenger Facility and Grade Crossing Lighting Improvements	\$267
LR53	NSU Platform and Stairs Rehabilitation	\$1,152
LR54	Light Rail Crossing Repair/Replacement Design	\$1,399
LR55	Conduit Signal Upgrades	\$127
LR56	Light Rail Fare Collection State of Good Repair	\$5,247
LR59	Military Highway Park and Ride Pedestrian Access Improvements	\$796
	Total	\$81,584

Projects (Year of Funding in Green)

Light Rail APC System Fixed Side Hardware Software (FY28, FY33)

Upgrade HRT’s fixed-side APC systems for Light Rail every five years, per the equipment’s useful life.

Light Rail Right-of-Way State of Good Repair (FY26-FY35)

Complete state-of-good repair investments along HRT’s right-of-way such as track structures and overhead power systems. The project scope is based on HRT’s 30-year state-of-good repair plan for light rail.

Light Rail Vehicle State of Good Repair (FY26-FY35)

Maintains Light Rail Vehicles by rehabilitating suspension components, conducting body work and repainting of train sets, replacing brakes and power train components, conducting upkeep of train interiors, and other maintenance. This includes LRV mid-life overhauls spread out over nine years. The project scope is based on HRT’s 30-year state-of-good repair plan for light rail.

Note: HRT has obtained updated budgetary estimates for LRV mid-life overhauls since programming. These estimates will be incorporated in the 2025-2026 CIP update cycle, and next comprehensive LRT 30-year Needs Assessment, last dated July 2024.

Light Rail Station Upgrades (FY26-FY28, FY30-FY34)

Rehabilitate light rail stations, including replacing and renovating station assets at the end of their useful life. The project scope is based on HRT’s 30-year state-of-good repair plan for light rail.

Tide Supervisory Control and Data Acquisition (SCADA) System Upgrade (FY30)

Regularly upgrade the Tide’s Supervisory Control and Data Acquisition (SCADA) System used to monitor and manage light rail operations.

Light Rail Facilities State of Good Repair (FY26-FY28, FY30, FY33, FY35)

Complete state of good repair investments at the Norfolk Tide Facility, including future foundation remediation.

Light Rail Aerial Structures (FY26-FY28, FY31, FY33-FY34)

State of good repair maintenance of bridges/aerial structures along the Tide Light Rail. The project scope is based on HRT’s 30-year Light Rail state-of-good repair plan.

Passenger Facility and Grade Crossing Lighting Improvements (FY26)

Implement lighting upgrades to improve staff and customer safety at selected passenger light rail facilities and critical grade crossings. This project will complete photometric surveys, phasing plans, and design. Construction will be

NSU Platform and Stairs Rehabilitation (FY26-FY27)

Complete concrete repairs to the platform and west side stair tower for the elevated Norfolk State University (NSU) light rail station.

Light Rail Crossing Repair/Replacement Design (FY26-FY27)

Replace grade crossing panels at critical light rail crossings in Norfolk, VA. This project will prepare a phasing plan and replace up to 15 intersections with freight train type grade crossings.

LRT Conduit Signal Upgrades (FY26)

Install tracer wire into the existing fiber infrastructure that supports HRT's light rail system.

Light Rail Fare Collection State of Good Repair (FY28, FY33, FY35)

Upgrade Light Rail fare collection technology, including ticket vending machines and validators at recommended intervals.

Military Highway Park and Ride Pedestrian Access (FY26)

Construct a ramp and stairway to improve pedestrian access to the Military Highway Park and Ride facility and the Military Highway light rail station from Military Highway access road.



Operations (Fleet)

Between its transit buses, paratransit vehicles, support vehicles, and ferries, HRT's non-light rail operations rely on hundreds of vehicles. Transit and paratransit vehicles travel thousands of miles every year, delivering high-quality transit service to HRT's riders. HRT's support fleet allows the agency to perform needed maintenance and to supervise operations on all parts of its system. Regular vehicle maintenance and replacement minimizes breakdowns, allowing HRT to provide high-quality transit service while responding quickly to issues as they arise. CIP funding allows HRT to keep its entire fleet in a state of good repair.

The CIP's ten Operations (fleet) projects account for more than \$240 million in funding, over 50 percent of all programmed CIP funds. This year's CIP includes over \$50 million for the purchase of 33 Battery Electric Buses (BEBs).

Operations (Fleet) Capital Projects by the Numbers

10 projects

operations (fleet) projects

\$240 million

in capital needs (year of expenditure dollars) from FY2026 to FY2035



Project List

UID	Project Name	Cost (\$ thousands)
OP01	Transit Bus Replacement	\$168,161
OP02	Transit Bus Mid-Life Repower Project	\$21,422
OP03	RTS Transit Bus Investments	\$6,178
OP11	Paratransit Fleet Replacement	\$22,585
OP12	RTS Paratransit Replacement	\$1,959
OP30	Ferry Boat State-of-Good-Repair	\$392
OP31	Paratransit Fleet Expansion	\$13,387
NR01	Non-Revenue Fleet Replacement	\$3,325
NR02	RTS Non-Revenue Fleet	\$1,750
NR05	Security Fleet Expansion	\$705
	Total	\$239,864

Projects (Year of Funding in Green)

Transit Bus Replacement (FY26, FY28-FY35)

Replace transit buses at the end of the vehicles' useful life and program to purchase Battery Electric Buses (BEBs) to replace diesel buses as part of HRT's transition to a fully electrified fleet.

Transit Bus Mid-Life Repower Project (FY27-FY33, FY35)

Conduct a repower of HRT's transit passenger buses at roughly half of their useful life to maintain the vehicles' reliability.

RTS Transit Bus (FY28-FY29, FY31-FY32)

Expand and replace buses that are part of HRT's dedicated RTS fleet, and conduct mid-life repower/overhaul on the RTS dedicated fleet.

Paratransit Fleet Replacement (FY26-FY34)

Replace HRT-owned paratransit vehicles at the end of their useful life.

RTS Paratransit (FY28-FY29, FY33-34)

Expand and replace paratransit vehicles dedicated to HRT's RTS fleet.

Ferry Boat State of Good Repair (FY26)

Conduct routine state-of-good-repair investments on HRT's ferry fleet.

Paratransit Fleet Expansion (FY26-FY27, FY31-FY32, FY34)

Expand paratransit fleet to meet growing demand.

Non-Revenue Fleet Replacement (FY26-FY33)

Replace non-revenue support vehicles at the end of their useful life.

RTS Non-Revenue Fleet Expansion and State of Good Repair (FY33, FY35)

Non-revenue fleet investments associated with the RTS network. Project includes purchasing two additional patrol vehicles and future end-of-life replacement of RTS funded non-revenue fleet.

Security Fleet Expansion (FY26-FY29, FY31, FY33)

Purchase patrol vehicles for Extra Duty Officers to utilize while working for HRT.



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