HAMPTON ROADS TRANSIT

Transportation District Commission of Hampton Roads
Strategic Work Session
Hampton – 2nd floor Boardroom

September 25, 2025, 12:00 p.m. – 1:00pm

Agenda

1. Call to Order	The Honorable Shannon E. Glover, *Chair*
2. Agenda	William Harrell, *President & CEO*
Focus Topics:	
• Security	Ben Simms, *Chief Transit Operations Officer Transit Operations.*
• *Safety*	Dawn Sciortino*, Chief Safey Officer*
• Technology	Michael A. Price (MAP), *Chief Information Officer/CTO Technology*
3. Wrap Up	William Harrell

HAMPTON ROADS TRANSIT

TDCHR Work Session
September 25, 2025

12:00-1:00pm
2nd floor Boardroom
509 E. 18th Street, Norfolk

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Agenda

- Capital Improvement Plan (CIP)
  - Security
  - Safety
  - Technology
- Wrap Up

HAMPTON ROADS
TRANSIT

Capital Improvement Plan (CIP)

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CIP Work Session Schedule

- **Today** – Safety, Security, Technology
  - Overview of CIP Projects
  - Updates on ongoing capital projects
- October 23 (Norfolk) – Operations (Fleet Plan), Complete Draft FY27-FY36 CIP
- November 13 (Hampton) – TSP Chapter 6
- December 11 (Norfolk) – CIP Adoption vote

CIP Priorities

- Confirm and solidify information and plans for **existing capital investments**
- Achieve and maintain a **state of good repair** on HRT's assets
- Validate **fleet** replacement and expansion
- Ensure alignment with **HRT's strategic initiatives** (SOP, Sustainability study, etc.)

Today's Purpose

- Present on ongoing capital project
  - Share details on progress
  - Highlight key achievements and milestones
- Provide update on upcoming projects included in the CIP

HAMPTON ROADS TRANSIT

Security

FY2027-FY2036 Commission Briefing

gohrt.com

Security

- The safety of HRT's customers and employees drives everything we do. Security assets are essential to:
  - Ensure our vehicles and assets are properly monitored
  - Secure our facilities
  - Allow security officers to better respond to threats
  - Protect the public and employees
- Many of HRT's security needs are technology related.
  - For example, cameras, card readers, software systems
  - Ongoing maintenance and upgrades required for systems to remain in working order and protected from threats

Security Capital Projects by the Numbers

11

Projects

$20.4 million

in capital needs (Year of Expenditure dollars) from FY2027 to FY2036

Constrained List of Security Projects in the CIP

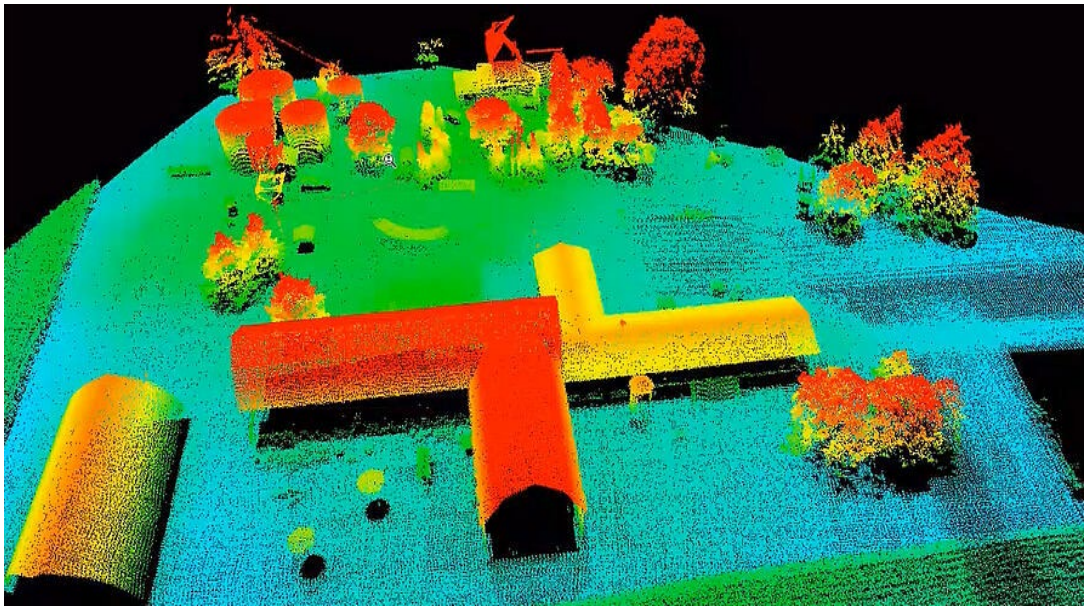
UID	Project Name	Cost ($ thousands)*
SP01	Upgrade the Video Recording Equipment for Buses	$8,673
SP02	Light Rail Video Recording Equipment	$449
SP03	Enterprise Video Surveillance System	$1,464
SP04	Enterprise Access Control System Upgrade	$3,174
SP05	Mobile Telescoping and Surveillance Tower	$2,222
SP07	Emergency Alert Beacons, Sirens, and Strobes	$652
SP08	Intrusion Detection System	$857
SP10	Enterprise Lock and Lever State of Good Repair	$277
SP13	Portable Control Center and Guard Booth Trailers	$687
SP14	Public Safety Equipment Expansion	$1,711
SP15	Non-Revenue Vehicle Video Surveillance	$259
	Total	**$20,425**

Emergency Alert Beacons, Sirens, and Strobes

- LED lights, audible sirens, and text-to-speech announcements designed to better inform the workforce of an on-site security or other emergency condition.
- Planned for future integration with crisis communications tools.

Intrusion Detection

- Identify and implement intrusion detection solutions that utilize new technologies.
- Allows for virtual perimeters to be established in sensitive areas where standard surveillance, patrols, or perimeter fencing might not be possible or accessible.



Mobile Telescoping and Surveillance Tower

- Mobile telescoping surveillance units are designed to support transit service areas where HRT power or internet infrastructure is not available.
- Towers can be deployed to areas with safety and security issues, helping to deter crime and ensure HRT can more rapidly respond to events.

Security

The safety and security of Hampton Roads Transit (HRT) customers and employees drives everything we do. Security assets help 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 services cover six cities and 1.3 million residents. Security related systems are essential to allow HRT to rapidly respond to issues as they arise. Many of HRT's 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.

Security Capital Projects by the Numbers

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Security projects (includes technology security projects)

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in capital needs (Year of Expenditure dollars) from FY2027 to FY2036

Fiscally Constrained List of Security Projects included in the CIP (FY2027-FY2036)

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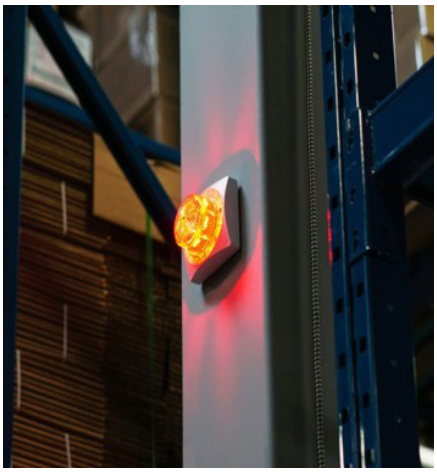
Ongoing Project Highlights

Emergency Alert Beacons, Sirens, and Strobes

To address security challeneges, HRT seeks to procure building emergency alert tools such as LED lights, audible sirens, and text-to-speech announcements that are designed to better inform the workforce of an on-site security or other emergency condition. These tools will be planned for future integration with crisis communications tools to protect employees and assets.

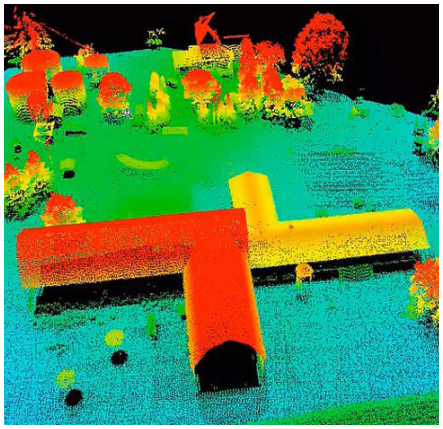


Intrusion Detection:

Through this project, HRT will identify and implement intrusion detection solutions that utilize new technologies and invest in a system that will alert security when an individual is trying to trespass HRT premises. This system would allow for virtual perimeters to be established in sensitive areas where standard surveillance, patrols, or perimeter fencing might not be possible or accessible.

Mobile Telescoping and Surveillance Tower:

To ensure adequate surveillance and deterrence capabilities, HRT seeks to procure mobile telescoping surveillance units. These units are designed to support transit service areas where HRT power or internet infrastrucutre is not available, thereby making other surviellance equipment ineffective. These mobile telescoping surveillance units modify unwanted behavior at HRT facilities and provide evidentiary record.



HAMPTON ROADS TRANSIT

Safety

FY2027-FY2036 Commission Briefing

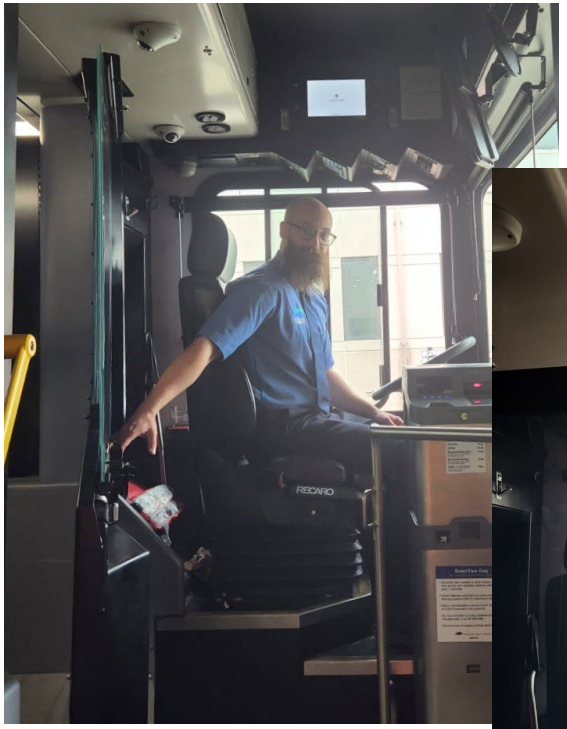
gohrt.com

Safety

- Safety projects are designed to safeguard HRT employees, passengers, and assets. These initiatives are grounded in regulatory requirements and informed by data-driven analysis of identified needs.
- Status of Safety Projects funded in the CIP
- Safety Support for multiple CIP IT Projects

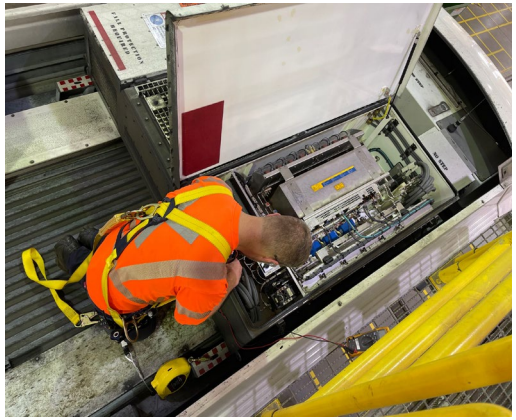
Operator Safety Barrier Installation

- Procured and installed/retrofitted 145 operator barriers on HRT Buses
- The barriers reduce the risk of assault on bus operators while performing their job duties
- Project fully funded through TRIP grant award and was completed on July 16, 2025



Fall Protection Systems (Northside and Southside Bus Garages and NTF)

- This project is for procurement and installation of fall protection systems at HRT's maintenance facilities
- These systems reduce risk of occupational injuries for HRT's maintenance staff and contractors and mitigate the dangers of performing maintenance from elevated positions in the shop and on vehicles
- Project is ongoing



Safety-Technology Coordination

- Safety partners with Technology on multiple projects reflected in the CIP

SF01 Safety Management System

IT32 Technology Enabled Safety Improvement

IT47 Enterprise Data Integration

IT49 Real Time Safety Driver Solution

Safety

The safety of Hampton Roads Transit (HRT) customers and employees drives everything we do. Safety assets ensure that HRT staff, including operators and mechanics, can perform the duties of their job without fear of harm or injury.

Safety related systems are essential to allow HRT to rapidly respond to issues as they arise. Many of HRT's safety needs are technology related, such as software systems to track safety incidents. Like any technology asset, these systems need ongoing maintenance and upgrades to remain in working order.

Fiscally Constrained List of Safety Projects in the CIP (FY2027-FY2036)

UID	Project Name	Cost ($ thousands)*
SF01	Safety Management System	$1,152
	Total	**$1,152**

Safety Capital Projects by the Numbers

1

Safety projects

$1.15 million*

in capital needs (Year of Expenditure dollars) from FY2027 to FY2036

Ongoing Project Highlights

Operator Safety Barrier Installation:

Through this project, HRT will procure and install 155 hardened operator safety barriers on buses. The installation of safety barriers in transit buses reduces the risk of assault on bus operators. The Fedeal Transit Administration requires that transit agencies that receive federal funding track employee assaults for National Transit Database reporting and determine mitigations to reduce those assaults. Mitigations must be agreed upon with the Joint Health and Safety Committee and based on risk-based data driven decision making. This project was fully funded through a mid-year TRIP Grant award in FY2025 and is nearing completion.

Fall Protection System for Northside and Southside Bus Garages and the Norfolk Tide Facility:

To improve the safety of HRT's maintenance staff and contractors and reduce the risk of occupational injuries, HRT is procuring and installing additional fall protection engineering controls at the Northside and Southside bus garages and at the Norfolk Tide facility. This project mitigates the dangers of performing maintenance from elevated positions in the shop and on vehicles. This project was fully funded through a mid-year TRIP Grant award in FY2025.

HAMPTON ROADS TRANSIT

Technology

FY2027-FY2036 Commission Briefing

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Introduction

- **Transit is increasingly a technology-driven industry**
  - Technology is essential to HRT's customer-facing and back-end operations.
  - Technology investments allow the agency to be more responsive to our customers and more efficient in our operations.
  - Outdated systems reduce efficiency and cause security and safety vulnerabilities
- **Technology assets need frequent updates and replacement.**
- **HRT is constantly investing in new systems to keep up with changing needs. Many of HRT's critical systems did not exist 10 or 15 years ago.**
- **New investment allows HRT to keep up with technology change:**
  - Widespread adoption of mobile ticketing and trip planning tools
  - Transition toward battery-electric buses
  - Emergence of autonomous vehicles

Technology Capital Projects by the Numbers

20

technology projects (excludes safety, security, and LR technology projects)

$64.4 million

in capital needs (Year of Expenditure dollars) from FY2027 to FY2036

Constrained List of Technology Projects in the CIP

UID	Project Name	Cost ($ thousands)*
IT01	HASTUS	$2,975
IT03	Large Technology Infrastructure	$6,294
IT05	Client Technology Systems State of Good Repair	$4,015
IT06	Bus Facility Passenger Information Displays SGR	$835
IT07	Passenger Information Displays - Light Rail	$6,355
IT12	Onboard Network Infrastructure State of Good Repair	$989
IT16	Financial Software System (FSS) Implementation	$539
IT17	HRMS Replacement	$5,378
IT18	Fixed Side CAD/AVL System	$2,379
IT22	EAM System State-of-Good-Repair	$11,074
IT29	Light Rail APC System Fixed Side Hardware Software	$537
IT32	Technology Enabled Safety Improvements	$2,076
IT36	Internal Digital Signage System	$330
IT37	ICS Cyber Security	$3,528
IT42	IT Security Systems Upgrade	$2,076
IT43	Contract and Vendor Management Software Replacement	$562
IT45	Onboard Passenger Information System	$1,773
IT46	Yard Management System	$3,530
IT47	Enterprise Data Integration	$1,052
IT49	Real Time Safety Driver Solution	$8,141
	Total	**$64,439**

Draft; capital project information subject to change.

Client Technology Systems State of Good Repair

- HRT manages millions of dollars worth of IT equipment such as laptops, desktops, printers, scanners, and telephones.
- Ongoing maintenance and upgrades is necessary to maintain operations.

Enterprise Data Integration

- HRT tracks data from numerous systems (HASTUS, Trapeze, APC, etc.) and must report this data to FTA annually.
- Consolidating, cleaning, and managing this data in one system will allow HRT to report data more efficiently and accurately.

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Wrap Up

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Next Steps

- Work sessions and Updates: October and November
- Board vote on CIP updates: December

Technology

Technology drives the modern transit industry. A customer interacts with Hampton Roads Transit (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 human resources.

Investing in technology allows HRT 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; 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 invests 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 artificial intelligence, will only accelerate the pace of technological change at HRT.

Technology Capital Projects by the Numbers

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Technology Projects (excludes safety and security technology projects)

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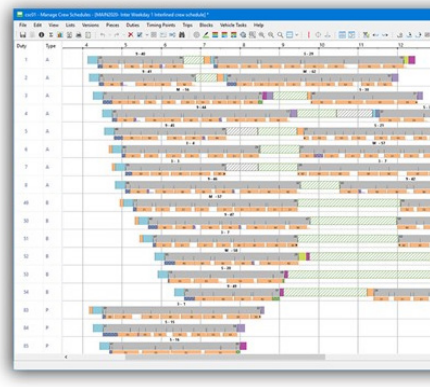

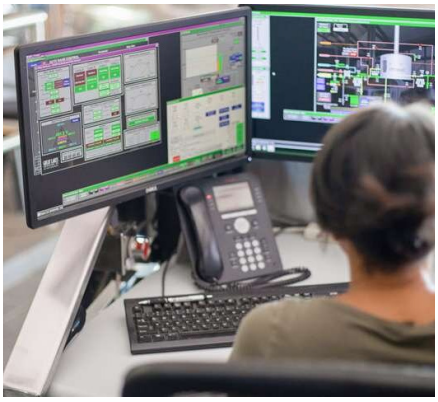

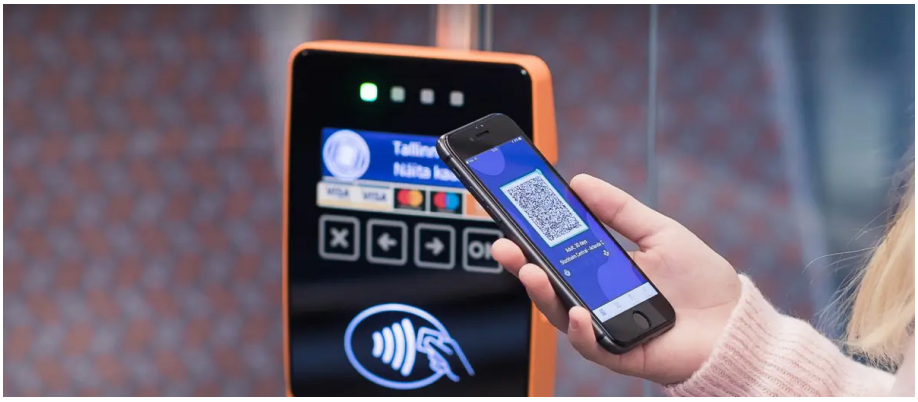

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Ongoing Project Highlights

Enterprise Data Integration

As a vital component of HRT's data management system, the Enterprise Data Integration project will identify, consolidate, clean, and integrate data from various manual entries and systems of record (HASTUS, Trapeze, APC, etc.) to develop reporting capability to meet the Federal Transit Administration and National Transit Database compliance requirements.

The application will pull data collected from enterprise software, manually developed data and transform data into tools that will be used for analytics to produce high-quality reporting. Using reports and accompanying graphic features inherent in the tool, the users of the system will have greater analysis and visualization capability. With these features, HRT will be able to identify trends and implement changes that remediate a variety of issues.

Client Technology Systems State of Good Repair

This project aims to support a state of good repair for client technology systems that have reached the end of their useful life, including laptops, desktops, workstations, printers, multifunction displays, Scanners, Collaboration and Conference Systems, and telephones through the replacement of individual hardware component groups and entire systems. This project aligns HRT with FTA five-year lifecycle recommendations for technology assets.

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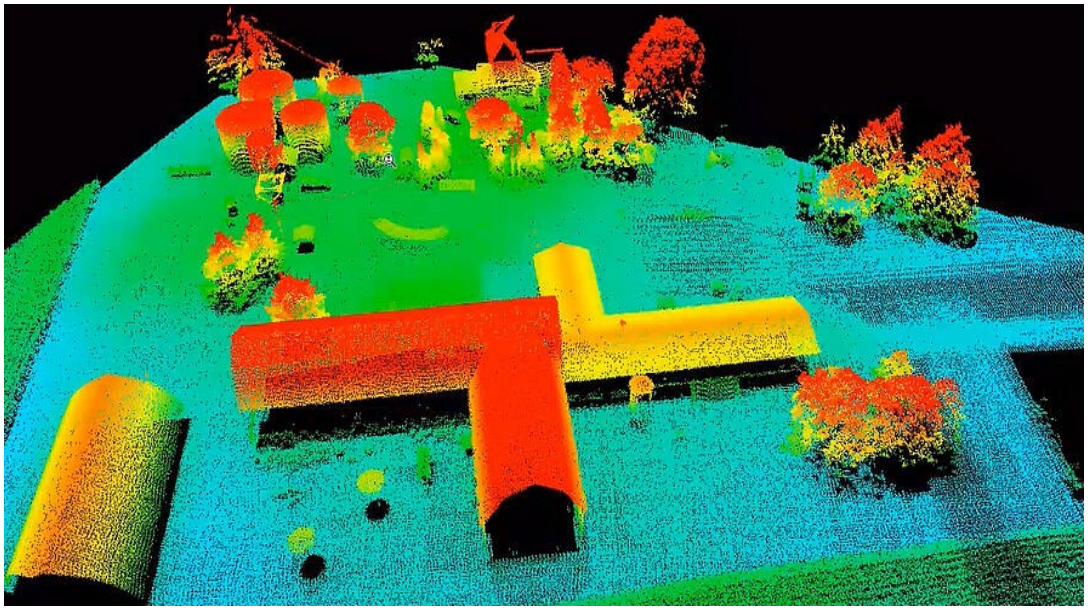

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Security Capital Projects by the Numbers

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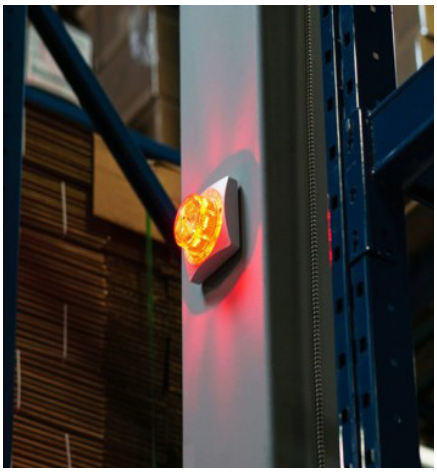

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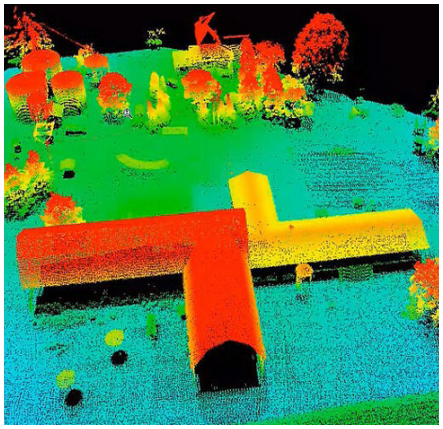

HAMPTON ROADS TRANSIT

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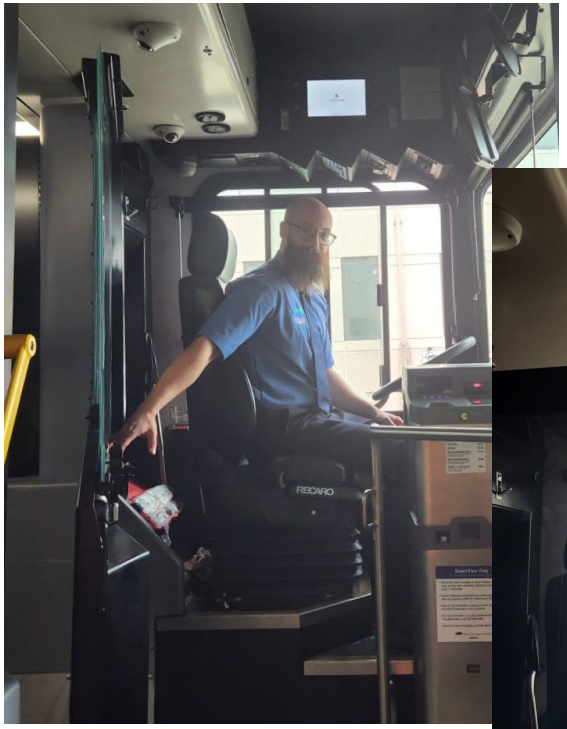

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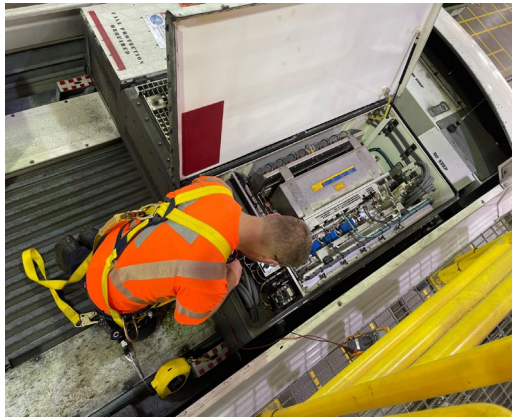

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Safety projects

$1.15 million*

in capital needs (Year of Expenditure dollars) from FY2027 to FY2036

Ongoing Project Highlights

Operator Safety Barrier Installation:

Through this project, HRT will procure and install 155 hardened operator safety barriers on buses. The installation of safety barriers in transit buses reduces the risk of assault on bus operators. The Fedeal Transit Administration requires that transit agencies that receive federal funding track employee assaults for National Transit Database reporting and determine mitigations to reduce those assaults. Mitigations must be agreed upon with the Joint Health and Safety Committee and based on risk-based data driven decision making. This project was fully funded through a mid-year TRIP Grant award in FY2025 and is nearing completion.

Fall Protection System for Northside and Southside Bus Garages and the Norfolk Tide Facility:

To improve the safety of HRT's maintenance staff and contractors and reduce the risk of occupational injuries, HRT is procuring and installing additional fall protection engineering controls at the Northside and Southside bus garages and at the Norfolk Tide facility. This project mitigates the dangers of performing maintenance from elevated positions in the shop and on vehicles. This project was fully funded through a mid-year TRIP Grant award in FY2025.

HAMPTON ROADS TRANSIT

Technology

FY2027-FY2036 Commission Briefing

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Introduction

- **Transit is increasingly a technology-driven industry**
  - Technology is essential to HRT's customer-facing and back-end operations.
  - Technology investments allow the agency to be more responsive to our customers and more efficient in our operations.
  - Outdated systems reduce efficiency and cause security and safety vulnerabilities
- **Technology assets need frequent updates and replacement.**
- **HRT is constantly investing in new systems to keep up with changing needs. Many of HRT's critical systems did not exist 10 or 15 years ago.**
- **New investment allows HRT to keep up with technology change:**
  - Widespread adoption of mobile ticketing and trip planning tools
  - Transition toward battery-electric buses
  - Emergence of autonomous vehicles

Technology Capital Projects by the Numbers

20

technology projects (excludes safety, security, and LR technology projects)

$64.4 million

in capital needs (Year of Expenditure dollars) from FY2027 to FY2036

Constrained List of Technology Projects in the CIP

UID	Project Name	Cost ($ thousands)*
IT01	HASTUS	$2,975
IT03	Large Technology Infrastructure	$6,294
IT05	Client Technology Systems State of Good Repair	$4,015
IT06	Bus Facility Passenger Information Displays SGR	$835
IT07	Passenger Information Displays - Light Rail	$6,355
IT12	Onboard Network Infrastructure State of Good Repair	$989
IT16	Financial Software System (FSS) Implementation	$539
IT17	HRMS Replacement	$5,378
IT18	Fixed Side CAD/AVL System	$2,379
IT22	EAM System State-of-Good-Repair	$11,074
IT29	Light Rail APC System Fixed Side Hardware Software	$537
IT32	Technology Enabled Safety Improvements	$2,076
IT36	Internal Digital Signage System	$330
IT37	ICS Cyber Security	$3,528
IT42	IT Security Systems Upgrade	$2,076
IT43	Contract and Vendor Management Software Replacement	$562
IT45	Onboard Passenger Information System	$1,773
IT46	Yard Management System	$3,530
IT47	Enterprise Data Integration	$1,052
IT49	Real Time Safety Driver Solution	$8,141
	Total	**$64,439**

Draft; capital project information subject to change.

Client Technology Systems State of Good Repair

- HRT manages millions of dollars worth of IT equipment such as laptops, desktops, printers, scanners, and telephones.
- Ongoing maintenance and upgrades is necessary to maintain operations.

Enterprise Data Integration

- HRT tracks data from numerous systems (HASTUS, Trapeze, APC, etc.) and must report this data to FTA annually.
- Consolidating, cleaning, and managing this data in one system will allow HRT to report data more efficiently and accurately.

Technology

Technology drives the modern transit industry. A customer interacts with Hampton Roads Transit (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 human resources.

Investing in technology allows HRT 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; 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 invests 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 artificial intelligence, will only accelerate the pace of technological change at HRT.

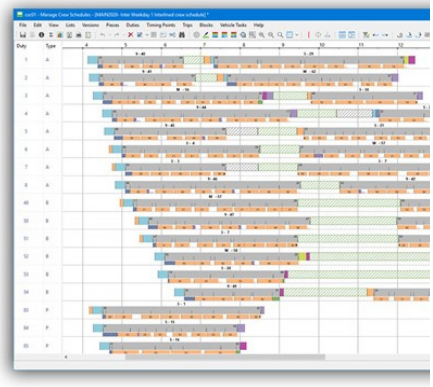
Technology Capital Projects by the Numbers

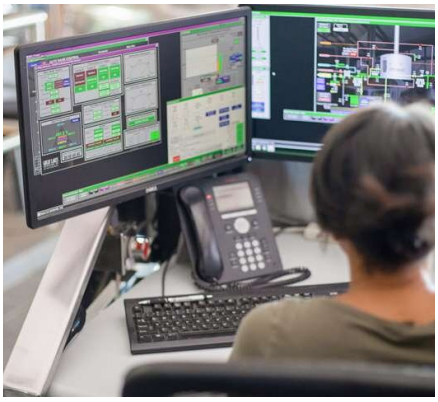
20

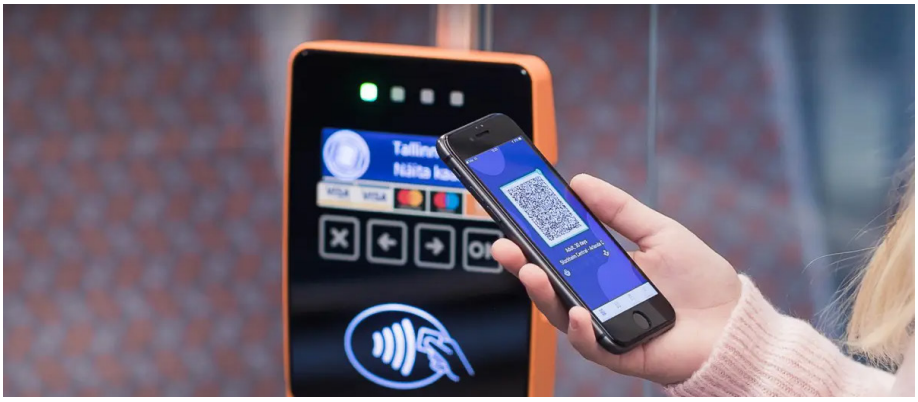
Technology Projects (excludes safety and security technology projects)

$64.4 million*

in capital needs (Year of Expenditure dollars) from FY2027 to FY2036







Fiscally Constrained List of Technology Projects in the CIP (FY2027-FY2036)

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Ongoing Project Highlights

Enterprise Data Integration

As a vital component of HRT's data management system, the Enterprise Data Integration project will identify, consolidate, clean, and integrate data from various manual entries and systems of record (HASTUS, Trapeze, APC, etc.) to develop reporting capability to meet the Federal Transit Administration and National Transit Database compliance requirements.

The application will pull data collected from enterprise software, manually developed data and transform data into tools that will be used for analytics to produce high-quality reporting. Using reports and accompanying graphic features inherent in the tool, the users of the system will have greater analysis and visualization capability. With these features, HRT will be able to identify trends and implement changes that remediate a variety of issues.

Client Technology Systems State of Good Repair

This project aims to support a state of good repair for client technology systems that have reached the end of their useful life, including laptops, desktops, workstations, printers, multifunction displays, Scanners, Collaboration and Conference Systems, and telephones through the replacement of individual hardware component groups and entire systems. This project aligns HRT with FTA five-year lifecycle recommendations for technology assets.

Next Steps

- Work sessions and Updates: October and November
- Board vote on CIP updates: December

HAMPTON ROADS
TRANSIT

Wrap Up

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