Capital Improvement Plan DRAFT FY2025-2034



HAMPTON ROADS

OCTOBER 2023

Exoress

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Acronyms and Definitions

- ACC Advance Capital Contribution
- ADA Americans with Disabilities Act
- **BEB –** Battery Electric Bus
- CIP Capital Improvement Plan
- CMAQ Congestion Mitigation and Air Quality (grant program)
- DRPT Virginia Department of Rail and Public Transportation
- EDO Extra-Duty Officer
- ERC Elizabeth River Crossing
- FMO Financial Management Oversight
- FY Fiscal Year (HRT and the Commonwealth of Virginia's Fiscal Year is from July to June)
- HRT Hampton Roads Transit
- HRRTF Hampton Roads Regional Transit Fund
- HRTAC Hampton Roads Transportation Accountability Commission
- IIJA Infrastructure Investment and Jobs Act
- **IRA –** Inflation Reduction Act
- **PM –** Preventive Maintenance
- RSTP Regional Surface Transportation Program (grant program)
- RTS Regional Transit System
- SET Senior Executive Team
- SGR State of Good Repair
- TRIP Transit Ridership Incentive Program
- **TSP –** Transit Strategic Plan
- ULB Useful Life Benchmark
- YOE Year of Expenditure



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Executive Summary

The Capital Improvement Plan (CIP) is Hampton Roads Transit's blueprint for future capital investments. It covers a ten-year planning horizon.

The CIP is updated annually through a comprehensive and collaborative approach. Capital needs from departments across the agency are identified. Projects are screened and evaluated based on a mix of metrics (derived from HRT's mission statement, goals, and objectives) to help prioritize and ensure that the 10-year program of capital investments will advance HRT's mission as effectively as possible within fiscal constraints. As the process unfolds, anticipated revenues are assigned to projects based on agency priorities, project scoring, funding needed and projected to be available, and specific eligibility requirements for different types of funding.

Overall, the CIP is a "living document." As needs emerge or external conditions change throughout the year, HRT may adapt capital investment strategies as needed. The annual CIP update captures any new or modified projects and changes to capital funding. Upon adoption by HRT's Board of Commissioners, the CIP forms the basis of HRT's capital budget and applications for state and federal grants in the following fiscal year.

This year's CIP includes 72 funded projects, accounting for \$565 million in planned capital revenues (**Figure 1 and Figure 2**). The CIP funds a variety of needs, allowing the agency to maintain its assets in a state of good repair while also expanding its ability to provide high-quality, safe, and reliable transit service. Importantly, the FY2025-2034 CIP plans for significant investment in bus fleet electrification, including the identification of funds necessary for both vehicle procurement and the related facilities infrastructure.





Figure 1: Allocation of Funds by Project Type (\$1,000s) (YOE)

Figure 2: Projected Capital Revenue by Source and Year of Allocation (\$1,000s)





Key Updates and Observations

The FY2025-FY2034 CIP is focused on the investments required to both maintain and improve upon HRT's existing system and expanded Regional Transit System (RTS) network. These are key updates and observations for this year's CIP:

- The ten-year capital program totals \$565 million distributed across 72 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 ten-year capital plan: 70 percent of the CIP by dollar value is devoted to State of Good Repair.
- The CIP plans for future investments in the electrification of fleet and facilities. This includes purchasing up to 71 battery electric buses (BEBs), and the facilities infrastructure needed to charge and maintain them.
- HRT plans to continue strategically pursuing 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 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. In upcoming CIP cycles, the agency plans to pursue additional competitive funding, including federal Carbon Reduction Program (CRP) and state Transit Ridership Incentive Program (TRIP) grants.
- The CIP includes nine projects that support investments in technology, rolling stock, passenger facilities, bus stop amenities, and operating facilities as part of the RTS program. Between FY2025 and FY2034, HRT is planning \$43 million of HRRTF funding toward these projects.
- Economic and industry factors pose challenges to HRT's capital program. Inflation pressures contribute to higher prices for 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. Seventeen projects are partially or wholly unfunded. The majority of unfunded needs (by dollar value) are associated with the potential future electrification of operating facilities in Hampton (3400 Victoria Boulevard) and Norfolk (18th Street) in 2034 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 based on these conditions.



Project Highlights

A handful of projects represent a large share of the overall CIP:

- Fleet Investments: Bus replacements, repowers, and fleet expansion make up the largest share of HRT's capital plan, representing 50 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, starting with two additional battery electric buses (BEBs) as part of the RTS program.
- 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. In addition, HRT plans to leverage new state discretionary funding to invest in additional bus stop improvements distinct from the RTS program.
- Facilities Electrification: In addition to funding the replacement of the existing Parks Avenue bus storage and maintenance facility with the new Southside Operating Division (Virginia Beach), the CIP includes projects for future electrification operating facilities in Hampton and Norfolk. The CIP contemplates a future in which all three facilities will be equipped to charge and maintain a future BEB fleet.
- Light Rail State of Good Repair: Light rail investments, exclusively focused on maintaining a state of good repair, are the third largest investment category over 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.
- **Evelyn T.** Butts Transfer Center and Robert Hall Transfer Center: These two facilities, in Norfolk and Chesapeake respectively, are slated to be replaced with larger and higherquality transfer centers as part of the RTS program.
- Safety and Security: Ensuring the safety and security of HRT's customers, staff, and assets is integral for ongoing transit service operations. HRT is investing in equipment to improve the safety of operators while operating buses and mechanics when repairing vehicles. The CIP also has several projects to invest in surveillance and real-time monitoring equipment.



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Developing Capital Project Priorities

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Background

The Capital Improvement Plan (CIP) is Hampton Roads Transit's (HRT) blueprint for future capital investments. The Plan outlines how HRT intends to fund the replacement and expansion of agency infrastructure. It covers a ten-year planning horizon and is updated annually.

Each year an updated CIP is developed collaboratively with input from departments across the agency. Capital projects are aligned and prioritized according to strategic goals and objectives, which are reflected in a mix of evaluation criteria. This CIP is fiscally constrained to match capital revenue HRT intends to secure over the next ten years.

The CIP is a "living document." This means that as needs emerge or external conditions change throughout the year, HRT may adapt its capital investment strategies as needed. The plan is updated annually to capture any new or modified projects and changes to capital funding.

Overview of CIP Development Process

HRT's CIP is developed in a systematic way. With consultant support HRT identifies, prioritizes, and develops costs for a full spectrum of capital needs that are programmed for the agency over the ten-year planning horizon.

The CIP approach was developed by agency leadership to be objective and results-driven. Input from HRT's Commission helps establish priorities and guide planning and investment decisions. A set of predetermined metrics also helps guide capital investment decisions, rooted in the agency's mission, goals and objectives. The current CIP was developed following the main steps outlined in **Figure 3**.



Figure 3: Process for Developing the HRT CIP





Identifying Capital Needs

The CIP update process begins by validating key priorities and inventorying capital needs across the agency. Priorities that were identified to help guide this year's CIP update process included:

- Continuing to focus on achieving and maintaining State of Good Repair for all assets.
- Ensuring linkages back to HRT's 10-year Transit Strategic Plan (TSP) and other major initiatives.
- Solidifying and updating plans to cover fleet, passenger amenities, and safety related needs.
- Maximizing the use of discretionary grant funding opportunities where feasible.

The management team and departments across HRT work to complete an updated capital needs inventory. Upon completion, needs are screened and organized into discrete capital projects. Projects are then scored and prioritized (RTS needs are determined as part of the 10-year Transit Strategic Plan). Project scores help guide investment decisions by providing an objective basis for allocating limited capital resources.

COMPILING CAPITAL NEEDS

To aid compilation of all capital needs into a single inventory, agency staff are provided instructions that outline procedures for providing updates to existing projects, submitting new projects, and participating in the overall CIP development. The CIP pulls capital needs from a range of sources, including:

- Project Charters: HRT departments must submit a project charter or project update form for projects included in the CIP (fleet needs are documented through the fleet management plan). The project charter and project update form document the project scope, cost, existing funding sources, projected operating impacts, project stakeholders, and other project details. Each department meets with the CIP development team to scope out the list of projects they submit for CIP programming. In workshop settings, departments review any existing capital needs submitted in past-year CIPs and propose additional capital needs for inclusion in the CIP update.
- **Input from Asset Management Systems/Plans:** The CIP also relies on asset management systems and plans to identify asset replacement needs, for example, based on the age of an asset and its recommended useful life. Fleet replacement needs, for example, are forecasted based on the age, mileage, and condition of the current fleet.
- **Agency Plans:** The CIP relies on existing plans, notably the Transit Strategic Plan (TSP), for capital needs related to service plans. Any projects related to new fixed-guideway service will not be incorporated into the CIP until details such as mode, cost, and timing are established in a primary planning document (for example, an Environmental Impact Statement or EIS).



PROJECT SCREENING

Proposed capital needs go through an initial screening process to evaluate validity and determine projects to proceed in the prioritization process. To be included in the CIP, a project must meet the following criteria:

- 1. Projects that already have fully allocated funding are not considered for the CIP; allocated funding refers to grant funding that has been awarded to a project, regardless of whether that money is already being spent down.
- 2. A project must be a capital improvement. It should represent a discrete investment that results in a tangible product, be it a system, physical asset, or plan. Ongoing incremental maintenance is considered an operating expense and is not funded through the CIP process.
- 3. The project must include a clearly defined scope to allow assessment under the prioritization criteria. A project must include a cost estimate to be evaluated in the CIP, though a rough estimate is generally acceptable for projects slated for later years of the plan.
- 4. For projects proposed for the upcoming fiscal year, the submitter must provide a higher degree of information to allow sufficient evaluation as well as to meet the requirements of federal and state grant applications.
- 5. Only projects valued at over \$100,000 are programmed into the CIP. Projects below this threshold are typically too small to warrant their own stand-alone grants. While lower-cost needs may be retained in the capital inventory and ranked as part of the project prioritization, they are most likely to be funded through means outside the CIP.

Before finalizing the draft list of capital needs, agency leadership provides additional review and any additional input needed. Project sponsors can also provide additional comments on their submitted capital needs and confirm details to support the ongoing CIP development. The CIP team makes any adjustments needed to obtain a list of projects that can be appropriately prioritized and programmed. This year, of 100 capital needs submitted, 84 were included in the final inventory and 72 were ultimately programmed in the draft FY2025-FY2034 CIP.



Prioritization of Projects

REGIONAL TRANSIT SYSTEM

Regional Transit System (RTS) projects are identified and prioritized by HRT's 10-year Transit Strategic Plan. HRT has completed a comprehensive review and regional transit planning effort to improve the design and performance of HRT services, resulting in a 10-year Transit Strategic Plan (TSP) that is updated annually. The TSP establishes service classifications and regional standards. **As required by law, the TSP also documents the Hampton Roads Regional Transit Program (Chapter 6) that is largely funded through the Hampton Roads Regional Transit Fund (HRRTF).**¹ The goal of the Program "is to provide a modern, safe, and efficient core network of transit services across the Hampton Roads region." The Program's centerpiece is a core bus network, the 757 Express, that plans for higher-frequency bus service connecting cities across Hampton Roads.

The CIP includes \$89 million for nine capital projects that support the regional Program approved in the TSP. HRRTF funds, which account for \$43 million of the \$89 million needed, are programmed to leverage \$18 million of Federal and \$28 million of State funding. HRRTF funds are disbursed to HRT through the Hampton Roads Transportation Accountability Commission (HRTAC).

OTHER CAPITAL NEEDS

All other capital needs (those not part of the RTS Program) largely deal with maintaining or replacing existing assets for existing services. These projects go through the screening, scoring, ranking, and prioritization process as shown in **Figure 4.**

¹ See Virginia Code § 33.2-2600.1. Hampton Roads Regional Transit Program and Fund.

Figure 4: Overview of Project Selection, Evaluation, and Prioritization Process





Each project is scored across a range of criteria grouped into four themes that align with agency goals: Passenger Experience, Agency Efficiency and Effectiveness, State of Good Repair, and Risk Reduction. After the initial scoring process, raw scores are normalized based on the project cost in order to compare projects of varying size, cost, and scope more fairly. Normalized scores are then translated into a rating of one to five for each project, with five representing the highest scoring projects (roughly 20 percent of the projects are assigned each score of one through five). Projects that were unchanged from last year keep their prior score.

Prioritization helps guide the development of a constrained capital plan. Results do not dictate final programming, however. For example, certain projects may not achieve a high score but are still necessary to meet regulatory requirements or unique priority identified by agency leadership. In other instances, a lower ranked project may be partially or fully funded through a specific grant or eligible funding source and, therefore, included in the final constrained program of investments.

HRT's Senior Executive Team reviews priority rankings and arrives at consensus on what projects to include in the CIP. This decision is informed by agency goals and objectives adopted by HRT's Board and the priorities discussed above in the **"Overview of CIP Development Process"** section. The process and results of prioritization for the FY2025-FY2034 CIP are discussed in more detail below.

PROJECT SCORING

Each project under consideration for funding was evaluated using the rubric in **Table 1**. Projects received points based on the criteria they meet in each of the 10 measures. These measures are grouped within four themes, and points in these themes are weighted and scaled to reflect HRT's priorities for the CIP. This evaluation process described in detail below led to the prioritization results that follow in **Table 2**.

Themes

Capital projects were evaluated according to four themes, based on HRT's strategic goals and objectives:

- 1. Customer Experience and Service Delivery
- 2. Efficiency and Effectiveness
- 3. State of Good Repair (double weighting)
- 4. Risk Reduction

Measures

Within each theme, between two and five measures are used to evaluate the degree to which a project advances the themes. For instance, under Theme Four: Risk Reduction, projects are evaluated on two measures: 4.1 "Meets agency mandate, requirement, or audit finding" and 4.2 "Addresses safety, security, or other risk."



Criteria

A project receives points based on the criteria it meets for each measure. In many cases, projects with quantified benefits receive an additional point compared to projects with only qualitative justifications. For instance, a project whose sponsor estimated the actual reduction in operating costs that would be achieved as a result of the project would receive an additional point in measure 2.1, "Reduces Operating Costs," relative to a project whose sponsor only stated that a reduction in operating costs would be likely. In addition, a project that increases the agency's operating costs would receive negative one point in measure 2.1.

Weighting by Theme

To produce a project score, points in each theme are weighted to account for the different number of measures in each theme to weigh each theme equally. This means that a project that received a perfect score on the three measures in Theme Four would be ranked the same as a project with a perfect score on the five measures in Theme Two, all else being equal. After this weighting, the sum of a project's points across all themes become the project's "raw" score.

Scaling by Cost

The raw score for each project was divided by the logarithm² of each project's cost (in current year dollars) to produce a cost-scaled score that is comparable across projects of different size. Without this re-scaling, a multi-million-dollar project would likely have a higher score than a project that costs a few hundred-thousand-dollars, due to the larger impact of the costlier project. However, on a dollar-by-dollar basis, the lower cost project may represent a relatively better return on investment. Because the distribution of project costs is many times greater than distribution of project scores, a log-based normalization is used in HRT's prioritization process. This has the effect of condensing the range of project costs to be comparable to the range of raw scores.

² A logarithm is the inverse of an exponent. It can be used to scale and visualize data that span a wide range of values. For this Plan, project costs vary from \$100,000 to over \$150 million. A logarithm is used to ensure the range of costs are comparable to the range of prioritization scores.

Theme	Measure	Criteria
	1.1 Project improves customer sat- isfaction	2 points: Directly addresses a documented complaint 1 point: Indirectly addresses customer demand
Theme One: Customer Experience	1.2 Supports expansion of service	2 points: Directly supports expansion of service 1 point: Indirectly supports expansion of service
	1.3 Makes it easier to use HRT	2 points: Improves accessibility by making the system easier to use and/or addressing mobility barriers 1 point: Indirect benefit to accessibility
	2.1 Reduces operating costs	2 points: Quantified decrease in costs 1 point: Expected decrease in costs but no analysis conducted to quantify -1 points: Increase in costs
Theme Two: Efficiency and Effec- tiveness	2.2 Improves operational efficiency	2 points: Quantified increase in efficiency 1 point: Expected increase in efficiency but no analysis conduct- ed to quantify -1 points: Decrease in efficiency
	2.3 Represents the best alternative	2 points: Project has been subject to an existing assessment or documented in an agency plan. Examples includes a cost benefit analysis (CBA), the TSP, or Asset Management Plans. 1 point: Project likely represents only viable alternative -1 points: Proposed project is documented as worse than possi- ble alternatives
	3.1 Replaces or rehabilitates an ex- isting asset	0 points: Does not replace/rehabilitate an existing asset 1-5 points: Replaces/rehabilitates existing asset (assigned in 3.2 based on asset class)
Theme Three: State of Good Repair	3.2 Asset class	 point: Support vehicles points: Amenities and administrative/maintenance facilities points: Transit centers and stations; equipment and technology; safety points: Guideway; rail systems; ITS and communications points: Revenue vehicles
	4.1 Meets agency mandate, require- ment, or audit finding	2 points: Project meets mandate, audit finding or compliance re- quirement. Full 2 points only award if failure to implement project could lead to loss of state or federal funding.
Theme Four: Risk Reduction	4.2 Addresses safety, security, or other risk	 3 points: Project reduces risk of loss of life or serious injury on HRT service 2 points: Project addresses security or safety risk to HRT customers and employees; project closes security vulnerability at agency 1 point: Addresses any other security impacts

Table 1: Evaluation Criteria and Scoring Rubric

PRIORITIZATION RESULTS

Once the scores are scaled by cost, each project is assigned a rating from 1 to 5, based on the quintile within which the project score falls. For example, projects that scored at the top 20th percentile or better received a rating of 5, projects within the 21st to 40th percentiles a rating of 4, and so forth. Projects that carried over from last year's CIP retain their previous score. **Table 2** shows the final priority score for all projects (non-RTS). The prioritization is meant to capture the relative criticality of an investment; however, even projects ranking a one out of five are still important to the agency. Projects ranking from three to five are exclusively SGR investments.



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Table 2: Prioritization Results

ID	PROJECT NAME	PRIORITY SCORE
FY24-IT05	Client Technology Systems State of Good Repair	5
FY24-IT37	ICS Cyber Security	5
FY24-LR02	Light Rail Vehicle State of Good Repair	5
FY24-0P01	Transit Bus Replacement	5
FY24-0P02	Transit Bus Mid-Life Repower Project	5
FY24-0P11	Paratransit Fleet Replacement	5
FY24-SS01	Upgrade the Video Recording Equipment for Buses	5
FY24-SS02	Light Rail Video Recording Equipment	5
FY24-SS15	Enterprise Video Surveillance System Upgrade	5
FY24-IT01	HASTUS	4
FY24-IT03	Large Technology Infrastructure	4
FY24-IT22	EAM System State-of-Good-Repair	4
FY24-IT29	INIT Light Rail APC System Fixed Side Hardware Software	4
FY24-IT42	IT Security Systems Upgrade	4
FY24-IT48	Farebox Replacement Project	4
FY24-LR01	Light Rail Right-of-Way State of Good Repair	4
FY24-LR05	Light Rail Cab Signaling Study	4
FY24-LR06	Tide Supervisory Control and Data Acquisition (SCADA) System Upgrade	4
FY24-LR48	Light Rail Facilities State of Good Repair	4
FY24-LR50	Light Rail Aerial Structures	4
FY24-0P30	Ferry Boat State-of-Good-Repair	4
FY24-EF01	3400 Victoria Boulevard Renovation: Phase 2	3
FY24-EF27	HRT Concrete Repair Work	3
FY24-EF31	HRT Facilities Signage	3
FY24-EF32	HRT Systemwide Signage	3
FY24-EF42	Newtown Road Bus Transfer ADA Improvements	3
FY24-EF46	3400 Victoria Boulevard Parking Lot Safety Improvements	3
FY24-EF05	Newport News Transit Center Interior Renovations	3
FY24-EF06	Hampton Transit Center Interior Renovations	3
FY24-IT17	HRMS Replacement	3
FY24-IT18	Fixed Side CAD/AVL System	3
FY24-IT43	Contract and Vendor Management Software Replacement	3
FY24-IT47	Enterprise Data Integration	3
FY24-LR04	Light Rail Station Upgrades	3
FY24-LR52	Passenger Facility and Grade Crossing Lighting Improvement	3
FY24-LR53	NSU Platform and Stairs Rehabilitation	3
FY24-LR56	Light Rail Fare Collection State of Good Repair	3
FY24-NR01	Non-Revenue Fleet Replacement	3
FY24-SS16	Enterprise Access Control System Upgrade	3
FY24-SS34	Enterprise Lock and Lever State of Good Repair	3
FY24-SS35	Hardening Perimeter Security of NTF Generator	3

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ID	PROJECT NAME	PRIORITY SCORE
FY24-EF11	Silverleaf Transfer Center Upgrades	2
FY24-EF20	Hampton Facility Electrification	2
FY24-EF21	18th Street Facility Electrification	2
FY24-EF22	Hampton Facility Non-Revenue Electric Charging Pilot	2
FY24-EF24	DNTC Restrooms and Operator Lounge Spaces	2
FY24-EF30	Bus Stop Amenity Program	2
FY24-EF38	Transit Stop Support Equipment	2
FY24-EF39	18th Street Facility Parking Structure Repair	2
FY24-EF40	18th Street Facility Plumbing Redesign and Construction	2
FY24-EF44	Ferry Dock Passenger Amenities	2
FY24-EF45	18th Street Bus Wash Rehabilitation	2
FY24-EF07	Wards Corner Restroom and Paving Renovation	2
FY24-IT12	Onboard Network Infrastructure State of Good Repair	2
FY24-IT45	Onboard Passenger Information System	2
FY24-SS22	Emergency Alert Beacons, Sirens, and Strobes	2
FY24-SS24	Operator Safety Barrier Installation	2
FY24-SS25	Fall Protection System for Southside and Northside Bus Garages	2
FY24-EF26	Parks Avenue Re-Use	1
FY24-IT07	Passenger Information Displays - Light Rail	1
FY24-IT16	Financial Software System (FSS) Implementation	1
FY24-IT32	Technology Enabled Security Solutions	1
FY24-IT36	Internal Digital Signage System	1
FY24-IT46	Yard Management System	1
FY24-LR54	Light Rail Crossing Repair/Replacement Design	1
FY24-LR55	LRT Conduit Signal Upgrades	1
FY24-LR58	Tide Light Rail Resilience Study	1
FY24-LR59	Military Highway Park and Ride Pedestrian Access	1
FY24-NR05	Security Fleet Expansion	1
FY24-0P31	Paratransit Fleet Expansion	1
FY24-SS17	Safety Management System	1
FY24-SS19	Mobile Telescoping and Surveillance Tower	1
FY24-SS21	Rail System Surveillance Enhancement	1
FY24-SS27	Intrusion Detection Systems	1
FY24-SS31	Blast Resistant Trash Receptacle and Bollard Project	1



Projects Included in the FY2025-FY2034 CIP

The final capital inventory for FY2025-FY2034 includes 84 capital projects (**Table 3**). Nine of these projects are associated with the RTS program and, overall, 72 projects are allocated funding in the fiscally constrained plan.

Each project is assigned a unique ID (UID). The first part of the UID records the CIP year the project was documented; in this year's CIP all projects start with "FY24." The following two letters categorize the type of project (e.g., facility, technology). The final two digits are unique to each capital need.

UID	Name	Description	RTS
FY24- EF01	3400 Victoria Boulevard Renovation: Phase 2	Complete renovations at 3400 Victoria Boulevard, including renovations to administra- tive and bus operations buildings.	No
FY24- EF02	New Southside Operating Division	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.	Yes
F24- EF03	RTS Bus Stop Amenity Program	Upgrade over 600 bus stops across the RTS network, including funding for new shel- ters, benches, trash cans, and lighting.	Yes
FY24- EF05	Newport News Transit Center Interior Renovations	Renovate interior spaces of the transit center. The transit center is a high traffic loca- tion. The renovation would remodel the interior, renovate the bathrooms, and replace storefront doors.	No
FY24- EF06	Hampton Transit Center Interior Renovations	Renovate interior spaces of the transit center. The transit center is a high traffic loca- tion. The renovation would remodel the interior, renovate the bathrooms, and replace storefront doors.	No
FY24- EF07	Wards Corner Restroom and Paving Renovation	Complete state-of-good-repair maintenance for the Wards Corner Transfer Center, including renovation of the operator restroom and repairing damaged paved surfaces.	No
FY24- EF10	Evelyn T. Butts Transfer Center Replacement	Replace the existing Evelyn T. Butts transfer center with a new off-street facility that can meet the needs of an expanded RTS network.	Yes
FY24- EF11	Silverleaf Transfer Center Upgrades	Renovate HRT-owned assets at the Park and Ride to maintain the facility in a state of good repair.	No
FY24- EF13	Robert Hall Transfer Center Replacement	Replace the existing Robert Hall transfer center with a new off-street facility in the City of Chesapeake.	Yes
FY24- EF20	Hampton Facility Electrifi- cation	Provide the infrastructure necessary to support a fully-electrified revenue bus fleet at the Victoria Boulevard Facility in Hampton.	No
FY24- EF21	18th Street Facility Electri- fication	Provide the infrastructure necessary to support a fully-electrified revenue bus fleet at the 18th Street Facility in Norfolk.	No
FY24- EF22	Hampton Facility Non-Reve- nue Electric Charging Pilot	Pilot installation of electric vehicle chargers at HRT's Hampton Operating Facility to support non-revenue EV fleet and possibly public EV charging.	No
FY24- EF24	DNTC Restrooms and Opera- tor Lounge Spaces	Study and potentially reconfigure interior space in DNTC to create a new operator restroom area.	No
FY24- EF26	Parks Avenue Re-Use	Plan for the redevelopment of the Parks Avenue Maintenance Area.	No
FY24- EF27	HRT Concrete Repair Work	Provide funding for annual state-of-good-repair maintenance activities for HRT con- crete pavement and structures.	No

Table 3: Projects Included in the Fiscally Unconstrained FY2025-FY2034 CIP



UID	Name	Description	RTS
FY24- EF30	Bus Stop Amenity Program	Plan, design, and install up to 100 passenger amenities and ADA improvements that are not located along RTS routes.	No
FY24- EF31	HRT Facilities Signage	Replace signs at approximately ten HRT facilities that are outdated and are in poor condition.	No
FY24- EF32	HRT Systemwide Signage	Replace approximately 100 transit signs at HRT light rail platforms and transfer centers, in addition to enforcement signage required aboard revenue vehicles and brick and mortar sites, stops and stations, docks, and other patron-facing areas.	No
FY24- EF36	Orcutt Transfer Center	Reconstruct and extend bus pad, improve passenger amenities, and implement ADA upgrades at transfer center.	Yes
FY24- EF38	Transit Stop Support Equip- ment	Purchase an aerial work platform vehicle to enable HRT to better maintain its transit signs.	No
FY24- EF39	18th Street Facility Parking Structure Repair	Make structural maintenance repairs to the 18th Street parking structure to extend the useful life of the structure by 10 years.	No
FY24- EF40	18th Street Facility Plumbing Redesign and Construction	Redesign and reconstruct the plumbing infrastructure in the facility to bring it to a state of good repair and prevent future structural damage.	No
FY24- EF42	Newtown Road Bus Transfer ADA Improvements	Update ADA amenities including the braille elements, curb cuts and ramps, and tactile warning surfaces, and address tripping hazards and pavement at Newtown Station Road.	No
FY24- EF44	Ferry Dock Passenger Amenities	Install two shelters at each of the ferry docks in Norfolk, VA and Portsmouth, VA.	No
FY24- EF45	18th Street Bus Wash Reha- bilitation	Rehabilitate the 18th Street Bus Wash facility to bring it to a good state of repair and extend the useful life of the structure.	No
FY24- EF46	3400 Victoria Boulevard Parking Lot Safety Improve- ments	Repave the existing parking surface lots at 3400 Victoria Boulevard, install additional ADA amenities, and replace the lighting and safety infrastructure.	No
FY24- IT01	HASTUS	HASTUS, the planning, scheduling, and daily operations system will be upgraded from version 2011 to the latest available version implemented to conform with the labor agreement in effect at the agency. The upgrade shall replace the application including server and kiosk infrastructure, interfaces to CAD-AVL, Financials, EAM, and other ancillary systems.	
FY24- IT03	Large Technology Infrastruc- ture	Achieve State of Good Repair in line with FTA recommendations for Technology Infrastructure Systems that reached the end of their useful life, including servers and storage, networking, wireless, firewalls, uninteruptible power supply (UPS) and power delivery systems, and backup solutions through replacement of the individual hardware component groups and entire systems.	No
FY24- IT05	Client Technology Systems State of Good Repair	Achieve state of good repair in line with FTA 5-year lifecycle recommendations for Cli- ent Technology Systems that have reached the end of their useful life including laptops, desktops, workstations, printers, scanners, Collaboration & Conference Systems, and telephony through the replacement of the individual hardware component groups and entire systems.	No
FY24- IT06	Bus Facility Passenger Infor- mation Displays SGR	Replace passenger information displays being installed as part of the RTS implementa- tion at the end of their useful life.	Yes
FY24- IT07	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.	No
FY24- IT12	Onboard Network Infrastruc- ture State of Good Repair	Maintain state of good repair for HRT revenue fleet onboard network equipment through timely replacement at the end of the equipment's useful life.	No
FY24- IT16	Financial Software System (FSS) Implementation	Enhance Microsoft Dynamics 365 Finance and Operations, allowing continued auto- mation of manual processes and adding reporting functionality to analyze data to deter- mine where opportunities exist for additional improvements in customer experience and service delivery.	No
FY24- IT17	HRMS Replacement	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.	No
FY24- IT18	Fixed Side CAD/AVL System	Upgrades HRT's fixed-side CAD/AVL systems five years after initial implementation to maintain a state of good repair.	No



UID	Name	Description	RTS
FY24- IT22	EAM System State-of-Good- Repair	Upgrades the Enterprise Asset Management (EAM) System within five years of the system's initial implementation to ensure the system continues to be supported.	No
FY24- IT29	Light Rail APC System Fixed Side Hardware Software	Upgrade HRT's fixed-side APC systems for Light Rail every five years, per the equip- ment's useful life.	No
FY24- IT32	Technology Enabled Safety Improvements	Research, scope, develop, and pilot new technologies to improve public safety through automated monitoring and threat detection.	No
FY24- IT36	Internal Digital Signage System	Replace and expand existing employee facing Digital Signage System to communicate to HRT employees effectively and consistently.	No
FY24- IT37	ICS Cyber Security	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.	No
FY24- IT42	IT Security Systems Upgrade	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.	No
FY24- IT43	Contract and Vendor Management Software Replacement	Upgrade Contract and Vendor Management Software on a regular five-year cycle.	No
FY24- IT45	Onboard Passenger Informa- tion System	Replace the existing onboard audio-visual Passenger Information System and accom- panying management software on the Light Rail Vehicles.	No
FY24- IT46	Yard Management System	Implement a yard management system to locate buses in yard for pull-out assign- ments.	No
FY24- IT47	Enterprise Data Integration	Identify, consolidate, clean, and integrate data from various manual entries and sys- tems of record (HASTUS, Trapeze, APC, etc.) to develop reporting capability to meet FTA and National Transit Database compliance requirements.	No
FY24- IT48	Farebox Replacement Project	Replace discontinued Genfare Odyssey fareboxes to ensure ongoing fare operations.	No
FY24- LR01	Light Rail Right-of-Way State of Good Repair	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.	No
FY24- LR02	Light Rail Vehicle State of Good Repair	Maintains Light Rail Vehicles by rehabilitating suspension components, conducting body work and repainting of train sets, replacing brakes and powertrain components, conducting upkeep of train interiors, and other maintenance. This includes LRV mid-life overhauls spread out over nine years.	No
FY24- LR04	Light Rail Station Upgrades	Rehabilitate light rail stations, including replacing and renovating station assets at the end of their useful life.	No
FY24- LR05	Light Rail Cab Signaling Study	Study of cab signaling for the light rail system.	No
FY24- LR06	Tide Supervisory Control and Data Acquisition (SCADA) System Upgrade	Regularly upgrade the Tide's Supervisory Control and Data Acquisition (SCADA) System used to monitor and manage light rail operations.	No
FY24- LR48	Light Rail Facilities State of Good Repair	Complete state of good repair investments at the Norfolk Tide Facility, including future foundation remediation.	No
FY24- LR50	Light Rail Aerial Structures	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.	No
FY24- LR52	Passenger Facility and Grade Crossing Lighting Improve- ment	Implement lighting upgrades to improve staff and customer safety at selected passen- ger light rail facilities and critical grade crossings. This project will complete photomet- ric surveys, phasing plans, and design. Construction will be completed separately.	No
FY24- LR53	NSU Platform and Stairs Rehabilitation	Complete concrete repairs to the platform and west side stair tower for the elevated Norfolk State University (NSU) light rail station.	No
FY24- LR54	Light Rail Crossing Repair/ Replacement Design	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.	No
FY24- LR55	LRT Conduit Signal Upgrades	Install tracer wire into the existing fiber infrastructure that supports HRT's light rail system.	No



UID	Name	Description	RTS
FY24- LR56	Light Rail Fare Collection State of Good Repair	Upgrade Light Rail fare collection technology, including ticket vending machines and validators at recommended intervals.	No
FY24- LR58	Tide Light Rail Resilience Study	Conduct a climate change focused study of the Tide Light Rail System to determine the I mitigation efforts needed to maintain operations during extreme weather.	
FY24- LR59	Military Highway Park and Ride Pedestrian Access	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.	No
FY24- NR01	Non-Revenue Fleet Replace- ment	Replace non-revenue support vehicles at the end of their useful life.	No
FY24- NR02	RTS Non-Revenue Fleet Expansion and State of Good Repair	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.	Yes
FY24- NR05	Security Fleet Expansion	Purchase two patrol vehicles for Extra Duty Officers to utilize while working for HRT.	No
FY24- 0P01	Transit Bus Replacement	Replace transit buses at the end of the vehicle's 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.	No
FY24- 0P02	Transit Bus Mid-Life Re- power Project	Conduct a repower of HRT's transit passenger buses at roughly half of their useful life to maintain the vehicles' reliability.	No
FY24- 0P03	RTS Transit Bus	Expand and replace buses that are part of HRT's dedicated RTS fleet, and conduct a mid-life repower/overhaul on the RTS dedicated fleet.	Yes
FY24- 0P11	Paratransit Fleet Replace- ment	Replace HRT-owned paratransit vehicles at the end of their useful life.	No
FY24- 0P12	RTS Paratransit	Expand and replace paratransit vehicles dedicated to HRT's RTS fleet.	
FY24- 0P30	Ferry Boat State-of-Good- Repair	Conduct routine state-of-good-repair investments on HRT's ferry fleet.	
FY24- 0P31	Paratransit Fleet Expansion	Expand paratransit fleet to meet growing demand.	No
FY24- SS01	Upgrade the Video Recording Equipment for Buses	Replace video recording equipment on HRT's buses as they reach the end of their recommended useful life.	No
FY24- SS02	Light Rail Video Recording Equipment	Replace video recording equipment on HRT's light rail trains as they reach the end of their recommended useful life.	No
FY24- SS15	Enterprise Video Surveillance System Upgrade	Maintain state of good repair through timely replacements of the components compris- ing fixed camera video surveillance system. Addresses known gaps in video surveil- lance monitoring through fixed camera replacement and additions at HRT facilities.	No
FY24- SS16	Enterprise Access Control System Upgrade	Address state of good repair for enterprise access control platform, components, soft- ware, and supporting processes.	No
FY24- SS17	Safety Management System	Upgrade FTA-mandated safety management system on recommended five-year intervals.	No
FY24- SS19	Mobile Telescoping and Surveillance Tower	y and Procure trailer-mounted mobile video surveillance systems that can be deployed to areas where increased security, risk, or safety concerns would be mitigated by highly visible and intermodal surveillance support equipment.	
FY24- SS21	Rail System Surveillance Enhancement	This project includes the procurement, installation, and support of an enhanced video surveillance posture for The Tide Light Rail System and supporting infrastructure.	No
FY24- SS22	Emergency Alert Beacons, Sirens, and Strobes	Design, procure, deploy, and test building emergency alert tools such as alert beacons, sirens, and strobes.	No
FY24- SS24	Operator Safety Barrier Installation	Procure and install 155 hardened operator barriers.	No
FY24- SS25	Fall Protection System for Southside and Northside Bus Garages	Procure and install Fall Protection Systems at all bus garages.	No
FY24- SS27	Intrusion Detection Systems	Procure a system that will alert security when an individual is trying to invade the premises after work hours.	No



UID	Name	Description	RTS
FY24- SS31	Blast Resistant Trash Recep- tacle and Bollard Project	Procure, install, and maintain 12 blast-resistant trash receptacles and 36 bollards.	No
FY24-	Enterprise Lock and Lever	Replace worn, failed, or failing door lock hardware (leversets, cores, internal compo-	No
SS34	State of Good Repair	nents, etc.) across the HRT enterprise.	
FY24-	Hardening Perimeter Securi-	Modify fencing design/build extra layer of protection to protect transformer and genera-	No
SS35	ty of NTF Generator	tor at NTF from access and impact.	

PROJECT COSTS

The CIP identified **\$565 million in capital needs that are programmed to be funded** over the next ten years. These costs represent the anticipated costs in the year of expenditure (YOE).

MAJOR EXPANSION PROJECTS

At this time, the CIP does not include any projects associated with major network expansion projects beyond those associated with the RTS. The agency has several transit corridor studies underway. These include planning for an extension of The Tide light rail to the Military Circle redevelopment site, potential Bus Rapid Transit (BRT) in Hampton and Newport News, and a corridor study that began in 2023, examining high-capacity transit options for connecting Greenbrier (in Chesapeake) to other points in the region. Future system expansion projects will be added to the CIP once they clear an initial planning phase and have specific modes, alignments, and cost estimates.



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Funding for Capital Improvements

Funding Available for Capital Projects

To develop a fiscally constrained plan, HRT must estimate how much capital funding will be available to the agency between FY2025 and FY2034. HRT utilizes the financial model devised for the TSP to forecast future revenue. Based on this, the CIP plans for \$565 million in capital funding to be available to complete the proposed 10-year program of investment. Projections are updated annually to reflect any changes to expected funding, revenue trends, and other factors.

HRT relies primarily on five sources of funding for capital projects for the CIP:

- Local Funding: Local funding in the form of Advanced Capital Contributions (ACC) is used to meet local match requirements of project costs. ACC funds provide a modest but important funding stream necessary to leverage state and federal grants. The agency receives a total of \$2 million annually in ACC from its six member cities.
- Hampton Roads Regional Transit Fund (HRRTF): This source is administered through HRTAC for HRT to develop and implement the Hampton Roads Regional Transit Program (TSP Chapter 6), or "Regional Transit System", consisting of a core network of bus routes and related infrastructure, rolling stock, and support facilities. HRRTF funds can be combined with other funds (e.g., state and federal grants) and qualify to be used as a project's local match requirement.
- **State Funding:** Under its statewide funding program titled MERIT (Making Efficient and Responsible Investments in Transit), the Commonwealth prioritizes projects and allocates limited resources to projects and investments identified as the most critical. Projects are classified, scored, and prioritized separately in the following categories:
 - State of Good Repair (SGR) Refers to projects to replace or rehabilitate an existing asset (excluding major construction projects with a total cost over \$3 million). Project assessed by "condition" of asset based on age and mileage (if applicable) and an impact score determined solely based on the type of asset (predefined by the Commonwealth). (State match = up to 68 percent)
 - Minor Enhancement Refers to projects that add capacity or include the purchase of new assets meeting the following criteria: total project cost of less than \$3 million, or for expansion vehicles, an increase of 5 vehicles or less or 5 percent or less of the fleet size, whichever is greater, or all projects for engineering and design. (State match = up to 68 percent)
 - Major Expansion Refers to projects to add, expand, or improve service or facilities, with a total cost exceeding \$3 million, or for expansion vehicles, an increase of greater than 5 vehicles or 5 percent of fleet size, whichever is greater, or all projects that include the replacement of an entire existing facility. (State match = up to 50 percent)



- Technical Assistance Refers to funding for studies, design, and engineering. For many construction-related capital needs, HRT will pursue technical assistance funds to support planning and design, which must be completed before the agency can pursue other state funds for construction. (State match = up to 50 percent)
- Federal Formula Funds: Formula funds are the most vital component of federal capital funding and provide ongoing amounts of capital funds each year. These funds have several spending restrictions based on the program to which they belong. Federal formula funds in some cases can be utilized to fund certain expenses such as preventive maintenance and Americans with Disabilities Act (ADA) programs. Formula funds require a minimum 20 percent match to be funded by non-federal sources.
- **Other Grants:** HRT benefits from other funding sources, notably discretionary grants. The agency receives grants that are assigned to specific projects and cannot be reallocated to another project without prior permission.
 - The HRTPO administers several federal grant programs that are allocated to the Hampton Roads region, including the Congestion Mitigation and Air Quality (CMAQ) grants, Regional Surface Transportation Program (RSTP) grants and Carbon Reduction Program (CRP) grants. CMAQ and RSTP funds are primarily used by HRT to support fleet investments. CRP is a new grant program established by IIJA which HRT plans to pursue for the electric support vehicle project on the Peninsula.
 - There are several federal discretionary grant programs which HRT pursues. In 2023 HRT received a \$25 million grant from FTA's Buses and Bus Facilities program for the new Southside operating division. The agency also seeks federal earmarks and will continue to seek funding through federal competitive programs to support large-scale initiatives such as the construction of BEB infrastructure, vehicles, and other major projects.
 - HRT receives funding through an agreement with Elizabeth River Crossings (ERC OpCo, LLC) to fund specific transit services, including leases for buses operating those services.
 - Finally, HRT plans to pursue state discretionary grant opportunities for projects in the CIP, including several projects targeting TRIP grant funds.

Figure 5, Figure 6, and **Table 5** show HRT's projected capital revenue, by source, from FY2025 to FY2034.





Figure 5: Projected Capital Revenue by Source and Year of Allocation (\$1,000s)







Table 4 provides a summary of HRT's federal formula funding apportionment in Federal Fiscal Year (FFY) 2024 and certain spending restrictions. Not all of the federal allocation is ultimately used in the capital budget as these funds support other eligible needs such as preventive maintenance.

Formula Funding Program	Description	Limitations	HRT Federal Fiscal Year 2024 Apportionment
5307 – Urbanized Area Formula Funds	This is the largest and most flexible source of federal formula funds. 5307 funds can be used for any capital expense. 5307 funds can be used for operating expenses such as preventive maintenance and some ADA programs.	Any capital expense is eligible.	\$21,778,000
5337 – State of Good Repair	This funding source is for maintaining the assets of fixed guideway and "high intensity" bus systems that operate in high-occupancy vehicle (HOV) lanes.	At HRT, funds can only be used for projects that help to maintain light rail, ferry, and certain bus assets in a state of good repair.	\$5,758,000
5339 – Bus and Bus Facilities	This funding program is for replacing and expanding bus fleets and bus facilities.	Funds may be only used on bus-related capital projects.	\$1,902,000

Table 4: Federal Formula Funding Programs

Table 5 depicts the sources of revenue that HRT utilizes from federal, state, local and other sources to fund projects identified in the constrained CIP by year of allocation.

Source	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
Federal 5307	\$10,041	\$8,562	\$433	\$7,947	\$9,504	\$5,370	\$3,412	\$11,046	\$6,406	\$6,821
Federal 5337	\$2,125	\$2,639	\$3,584	\$2,579	\$1,417	\$2,726	\$3,525	\$1,288	\$2,941	\$512
Federal 5339	\$1,902	\$1,616	\$1,629	\$2,731	\$2,085	\$2,082	\$2,234	\$2,233	\$1,739	\$2,884
ACC	\$1,579	\$2,031	\$1,480	\$4,627	\$3,224	\$1,128	\$1,588	\$3,997	\$2,202	\$1,460
State Grants	\$26,118	\$24,032	\$15,142	\$38,308	\$34,740	\$24,323	\$25,949	\$39,490	\$28,207	\$24,812
RSTP	\$12,229	\$3,520	\$5,191	\$14,077	\$9,543	-	-	-	-	-
CMAQ	-	-	-	\$2,000	-	-	-	-	-	-
ERC Funding	-	-	-	-	-	-	-	-	-	-
HRRTF	\$30,294	\$10,432	\$1,790	\$143	\$118	-	\$25	\$19	\$139	-
Federal Discretionary	\$1,000	\$1,957	-	-	-	-	\$3,383	\$30,000	\$5,573	\$6,000
State Discretionary	\$5,324	\$3,480	-	-	-	-	-	-	-	-
Total	\$90,612	\$58,268	\$29,249	\$72,411	\$60,633	\$35,629	\$40,115	\$88,073	\$47,208	\$42,489

Table 5: Capital Funding by Source, Year of Allocation (in \$1,000s)



Capital Funding Challenges and Opportunities

As with every CIP, most of the planned revenues that are programmed have yet to be awarded to HRT and there are inherent uncertainties associated with any funding projections. The CIP is a "living document". Programming of funds will evolve based on strategic agency needs and actual funding conditions. Several challenges and opportunities will impact the shape of HRT's capital program over the next decade:

OPERATING BUDGET NEEDS

HRT's capital and operating budgets are linked. The federal 5307 program, the largest federal capital funding program for transit, allows agencies to allocate portions of funding to support eligible preventive maintenance or expenses related to Americans with Disabilities Act compliance. This offsets expenses that would otherwise be covered with operating revenue sources, and any federal funding used to cover such expenses in turn reduces the amount of this funding available for capital projects. As one-time funding from federal COVID aid is fully spent, the share of formula 5307 funds used for operating can be expected to increase.

POTENTIAL CHANGES TO MATCHING FUNDS AND DISCRETIONARY GRANT PROGRAMS

HRT's CIP relies on assumptions of state matching funds, federal discretionary grants (such as CMAQ, RSTP, and competitive programs), and federal formula funds for the majority of funding. Recent federal legislation provides some stability in authorized federal funding for federal formula and discretionary grant programs through FFY2026, however these programs are still subject to annual authorizations and Congressional spending capacity. Any future changes to these programs would impact HRT's ability to fund its capital needs, whether to meet core SGR, to expand, or to achieve phased electrification. Finally, as the Commonwealth funds approximately half of HRT's programmed capital budget, any changes to the Commonwealth's funding capacity or matching rates would also impact the agency.

FUTURE REVENUES TIED TO HRRTF

HRRTF funds are tied to revenue sources that are subject to economic conditions within the Commonwealth and the Hampton Roads region. The CIP relies on revenue projections supplied by the Virginia Department of Taxation. However, economic conditions could result in actual revenue receipts over- or under-performing these projections. The CIP is updated annually as new information becomes available, including actual deposits into the HRRTF.



INFLATION AND BUS INDUSTRY PRESSURES

The recent increases in inflation have impacted costs that influence HRT's capital budget. Today, for example, HRT expects the unit cost of a new diesel bus to be over \$125,000 higher than what the agency paid prior to the COVID-19 pandemic. Higher costs are compounded by inflation assumptions over the planning horizon of the CIP. If higher than normal inflation persists, projects to be undertaken five or ten years down the line can be expected to be considerably more expensive due to higher base costs of goods. Meanwhile, there are two major domestic bus manufacturers today, down from ten a decade ago. These manufacturers face a mix of challenges to meet demand nationwide, including the need to effectively scale the transformation from diesel to electric bus production to match an increasing volume of bus purchase orders as agencies like HRT fully emerge and stabilize from pandemic-related impacts.

NEW DISCRETIONARY GRANT OPPORTUNITIES

Unlike other capital funding sources, discretionary grants are particularly hard to forecast as these programs are highly competitive. That being said, new federal and state programs have increased discretionary grant opportunities over the last few years and HRT has historically done very well winning such awards. HRT will continue pursuing such funding to leverage other resources. This includes seeking funding through the new federal Carbon Reduction Plan funds, DRPT's TRIP program, and participating in upcoming rounds of federal Bus and Bus Facilities and Low- or No-Emission Vehicle programs and other grant opportunities.



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Capital Program

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Programming of Projects

HRT is planning to meet up to \$565 million in capital needs over the period from FY2025

to FY2034. Assuming the agency receives state and federal funding needed for projects as included in the CIP, funds will be spent on the most critical capital needs, namely the replacement and mid-life upkeep of HRT's bus fleet, light rail SGR investments, replacement and improvement of critical technology software and hardware, and replacement of the agency's outdated Virginia Beach operating base (Parks Avenue), which is HRT's priority major project. The capital program includes \$89 million in investments as part of the RTS program.

The agency's constrained capital program is built around the following strategies:

- Meet the agency's highest priorities first HRT's capital project prioritization process helps the agency identify and rank its most critical needs. With a focus on investments essential to daily operations in the agency's fleet, maintenance facilities, and major technology systems, HRT is pragmatic in developing its constrained capital plan.
- 2. Maximize federal and state funding HRT is intent on leveraging funding sources to their full potential. The agency has worked to prioritize projects with the highest potential state matches. HRT has optimized its allocation of federal funds to projects to ensure each available dollar is effectively leveraged.
- 3. Meet HRT's funding requirements Meet existing funding obligations and fulfilling funding requirements to ensure the agency is in full compliance with federal, state, and local requirements.



Figure 7 shows the breakdown of projects by type and year. **Figure 8** summarizes the distribution of funding over the 10-year period by asset categories. Fleet investments represent the largest share of capital investments. **Figure 9** summarizes the capital project by DRPT's investment categories. Some highlights of the constrained FY2025-FY2034 CIP are:

- A fleet replacement program that will result in HRT replacing 176 buses over the next 10 years. These investments will lower HRT's average fleet age below the industry benchmark of 7.5 years by 2025.
- Construction of the new Southside operating division in Virginia Beach, designed from the ground up with the capacity to strategically expand the use of battery electric buses.
- Significant progress toward electrifying HRT's bus fleet through the procurement of 71 electric buses.
- Support the RTS program through investments in new passenger amenities and buses to support service expansion.
- Ongoing investment in light rail SGR, including station renovations, maintenance of tracks and structures, and scheduled mid-life overhaul for all light rail trains.
- Modernization and maintenance of SGR for technology systems, including a range of software, hardware, and IT infrastructure.
- Continued investment in agency safety and security, including new cameras, an upgraded access control system, and cyber-security investments.





Figure 7: Allocation of Funds by Project Type (\$1,000s) (YOE)

Figure 8: Breakdown of Ten-Year Program by Summary Project Type

Figure 9: Funding by Project Category





Program Highlights for the FY2025-FY2034 CIP

Bus Fleet Investments

Bus vehicle replacement, rehabilitation, and expansion make up the largest share of HRT's FY2025- FY2034 CIP. Maintaining investments in the bus fleet helps ensure that vehicles remain in a state of good repair. Bus SGR helps reduce maintenance costs and minimizes service disruptions for customers.

Replacement and rehabilitation needs are identified using useful life benchmarks for vehicle miles and age. **Figure 10** shows the projected average bus fleet age over the next ten years. Note that fleet age projections are based on a 24-month lead time assumption between the allocation of funding and the delivery of buses from the manufacturer to HRT. Actual delivery times will impact fleet age.



Figure 10: Projected Average Bus Fleet Age (FY25-FY34)

Electrification

The transit industry is evolving to provide all-electric alternatives to diesel-fueled buses. Among other benefits, electric fleets reduce operating and maintenance costs and eliminate harmful tailpipe emissions.

In keeping with its vision as a progressive mobility agency that promotes prosperity across Hampton Roads, HRT has identified a phased approach to strategically transition to an all-electric fleet over the coming decades.

Table 6: Electrification Projects

UID	Project Name	Total (thousands)*
EF02	New Southside Operating Division Relocation and Replacement	\$50,393
EF20	Hampton Facility Electrification	\$179,414
EF21	18th Street Facility Electrification	\$92,394
EF22	Hampton Facility Non-Revenue Electric Charging Pilot	\$1,000
NR01	Non-Revenue Fleet Replacement	\$500
OP01	Transit Bus Replacement (Diesel to BEB Replacement)	\$119,738
OP03	RTS Paratransit Bus	\$2,963
Total		\$446,402

*EF20 and EF21 are not fully funded in the constrained CIP and will rely on significant state and federal support for completion.

Figure 11 visualizes the electrification timeline represented in the constrained CIP. The CIP programs funding to procure 71 BEBs by 2034, build out EV charging infrastructure at the New Southside and existing Northside facilities, and initiate design for electrification of the 18th Street facility. **Table 6** lists the specific CIP projects that fund electrification. HRT has yet to identify funding for all assumed electrification capital needs, including the build out of full charging capacity at all operating facilities. The agency will continue to pursue state and federal opportunities to fill the funding gap.

Figure 11: HRT Electrification Timeline (2024-2034)





FLEET ELECTRIFICATION

The purchase of 71 battery-electric buses (BEBs) is included in the CIP, for a planned total investment of \$122.7 million. An initial procurement of just two BEBs is planned for FY2025 as part of the RTS program.

Support vehicles are another electrification opportunity. HRT is planning to seek new Carbon Reduction Program (CRP) funding for an electric vehicle pilot project at 3400 Victoria Boulevard in Hampton.

> Figure 12: Multimodal Connection at Newtown Road Light Rail Station





NEW SOUTHSIDE BUS OPERATING DIVISION, FY24-EF02

The new **Southside Bus Operating Division** (Figure 13). is currently HRT's priority major project. It will address SGR requirements and expansion needs that support the "757 Express" program, as well as enhance operational efficiency by significantly reducing unproductive deadhead miles.

The new facility will accommodate year-round operations and be large enough to support the storage, maintenance, and operation of new RTS service in addition to trolley operations.

The new facility also plays a crucial role in HRT's transition to zero-emission vehicles. Battery electric buses (BEBs) reduce emissions, fossil fuel dependency, and operating costs while delivering clean, quiet transportation for our community. When it first opens, the new Southside division will incorporate 16 trolleys and electric bus charging for 40 BEBs, with capacity to expand service up to 100 buses. The building is anticipated to be net zero energy ready – potentially the first such transit property in the United States. Once the new Southside facility is operational, HRT will repurpose the old Parks Avenue site.

A project of this magnitude requires sufficient state and federal funding support. This year, FTA awarded HRT \$25 million toward the construction of the facility from the highly competitive Buses and Bus Facilities program. Virginia's Commonwealth Transportation Board subsequently approved \$5.6 million in matching state funds. Combined with other regional, state and federal sources, the new Southside facility project is expected to be fully funded through FY2026.

Funding Program for New Southside Operation Division

Fiscal Year	Funds
FY 2024 and Prior Awarded	\$80.8 million
FY 2025 Programmed	\$32.0 million
FY 2026 Programmed	\$18.4 million
Total	\$131.2 million



HAMPTON FACILITY ELECTRIFICATION (FY24-EF20) AND 18TH STREET FACILITY ELECTRIFICATION (FY24-EF21)

In future years, HRT intends to begin exploring the phased electrification of facilities in Hampton (3400 Victoria Boulevard) and Norfolk (18th Street). The CIP allocates funding for planning and engineering for the Hampton facility in FY2030, followed by funding for construction as early as FY2031. Future planning and engineering work will define needs and complete cost-benefit evaluations to determine what investments HRT should ultimately pursue. It is currently contemplated that these facilities could accommodate 256 BEBs at full build-out.

Evelyn T. Butts Transfer Center (FY24-EF10) and Robert Hall Transfer Center (FY24-EF13)

The existing Evelyn T. Butts and Robert Hall transfer centers consist of on-street bus bays, pull-offs, and minimal passenger amenities like shelters, lights, and trashcans. Each transfer center can only accommodate up to 8 buses at a time and do not meet operational and customer needs. The new Evelyn T. Butts facility will bring bus operations off-street, increase the bus capacity, enhance safety and operational efficiencies, and provide upgraded passenger amenities and facilities for bus operators. Similarly, a new facility to replace the current Robert Hall would take bus boardings and alightings out of moving traffic, with bus pull offs and upgraded amenities. These important upgrades will elevate these transfer centers to the standard of other HRT facilities to better serve our communities.



HAMPTON ROADS TRANSIT



Light Rail Capital Needs

Light rail investments make up 14 percent of the CIP's programmed capital projects over the next ten years. This makes it the third largest investment category. **Appendix A** outlines specifically what investments are grouped into each light rail project. Major investments planned over the next ten years include:

- Mid-life overhaul of the entire LRT Fleet
- Renovations to the LRT right-of-way, notably replacement of track infrastructure and systems
- Maintenance and repair of LRT aerial structures
- State of good repair renovations to station structures
- Upgrades to the LRT SCADA system
- Maintenance and repair to the building envelop and foundation at the Norfolk Tide Facility
- End-of-life replacement of fare collection systems
- Pedestrian access improvements to Military Highway station



DRAFT

Client Technology Systems State of Good Repair (FY24-IT04)

Continued upkeep of technology assets, including laptops, desktops, workstations, printers, scanners, and telephony, is essential for workforce productivity. These items are used by HRT staff on a day-to-day basis, representing an important investment to ensure that HRT runs efficiently and effectively. Several technology assets have reached the end of their recommended useful life, which increases the likelihood of disruptions to service delivery for HRT customers. In addition, replacing obsolete assets improves HRT's cyber security position and mitigates risks associated with the presence of legacy technology on HRT's network.



Figure 17: Bus Stop Amenities

Upgrades to new bus stops will include amenities like shelters, benches, trash receptacles, and solar lighting.



Figure 16: Client Technology State of Good Repair

Replacing technology assets improves cyber security and effective business operations.

Bus Stop Projects (FY24-EF03/EF30)

The CIP includes two projects focused on bus stop amenity improvements. One is part of the RTS program (EF03). An essential customer-facing component of the RTS program is bus stop amenities. Improvements are actively underway to upgrade amenities at over 600 bus stops across the RTS network, including new shelters, benches, trash receptacles, and solar lighting. Informational and wayfinding signage is also included.

HRT has developed a separate bus stop amenity project (EF30) for locations not included in the RTS program. This project will support similar amenity improvements at up to 100 locations across the HRT system.



Table 7: 10-Year Capital Investment Schedule

(Proposed, \$1,000s, Year of Expenditure)

Project Name	Programmed Funds (\$thousands)												
		FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY 34	Total		
EF01 3400 Victoria Boulevard Renovation: Phase 2	\$4,250	\$1,506	\$3,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,007		
EF02 Parks Avenue Operating Division Relocation and Replacement	\$32,052	\$18,341	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,393		
EF03 RTS Bus Stop Amenity Program	\$2,753	\$3,523	\$1,790	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,066		
EF05 Newport News Transit Center Interior Renovations	\$735	\$385	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,120		
EF06 Hampton Transit Center Interior Renovations	\$639	\$248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$888		
EF07 Wards Corner Restroom and Paving Renovation	\$149	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$149		
EF10 Evelyn T Butts Transfer Center Replacement	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000		
EF13 Robert Hall Transfer Center Replacement	\$500	\$7,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,750		
EF20 Hampton Facility Electrification	\$0	\$0	\$0	\$0	\$0	\$1,124	\$7,353	\$19,064	\$20,647	\$0	\$48,189		
EF21 18th Street Facility Electrification	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$985	\$0	\$985		
EF22 Hampton Facility Non-Revenue Electric Charging Pilot	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000		
EF24 DNTC Restrooms and Operator Lounge Spaces	\$103	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$103		
EF26 Parks Avenue Re-Use	\$0	\$169	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$169		
EF27 HRT Concrete Repair Work	\$164	\$175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$339		
EF30 Bus Stop Amenity Program	\$1,848	\$1,904	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,753		
EF31 HRT Facilities Signage	\$0	\$503	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$503		
EF32 HRT Sytemwide Signage	\$0	\$376	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$376		
EF36 Orcutt Transfer Center	\$515	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$515		
EF38 Transit Stop Support Equipment	\$154	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$154		
EF39 18th Street Facility Parking Structure Repair	\$2,188	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,188		
EF40 18th Street Facility Plumbing Redesign and Construction	\$180	\$212	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$392		
EF42 Newtown Road Bus Transfer ADA Improvements	\$0	\$265	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$265		
EF44 Ferry Dock Passenger Amenities	\$0	\$652	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$652		
EF45 18th Street Bus Wash Rehabilitation	\$927	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$927		
EF46 3400 Victoria Boulevard Parking Lot Safety Improvements	\$0	\$546	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$546		
IT01 HASTUS	\$0	\$0	\$2,000	\$0	\$0	\$0	\$0	\$2,500	\$0	\$0	\$4,500		
IT03 Large Technology Infrastructure	\$422	\$7	\$591	\$1,364	\$3,961	\$489	\$8	\$1,171	\$929	\$4,592	\$13,537		
IT05 Client Technology Systems State of Good Repair	\$483	\$129	\$175	\$454	\$281	\$560	\$151	\$390	\$320	\$325	\$3,272		



Project Name		Programmed Funds (\$thousands)										
	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY 34	Total	
IT06 Passenger Information Displays - Bus Facilities	\$0	\$0	\$0	\$0	\$341	\$0	\$0	\$0	\$0	\$0	\$341	
IT16 Financial Software System (FSS) Implementation	\$521	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$521	
IT17 HRMS Replacement	\$0	\$0	\$0	\$2,913	\$0	\$0	\$0	\$0	\$0	\$0	\$2,913	
IT18 Fixed Side CAD/AVL System	\$1,868	\$0	\$0	\$0	\$0	\$2,073	\$0	\$0	\$0	\$0	\$3,941	
IT22 EAM System State-of-Good-Repair	\$0	\$0	\$0	\$4,439	\$0	\$0	\$0	\$0	\$0	\$0	\$4,439	
IT29 INIT Light Rail APC System Fixed Side Hardware Software	\$0	\$0	\$0	\$108	\$0	\$0	\$0	\$0	\$120	\$0	\$229	
IT37 ICS Cyber Security	\$0	\$0	\$0	\$1,498	\$0	\$0	\$0	\$0	\$0	\$0	\$1,498	
IT42 IT Security Systems Upgrade	\$0	\$0	\$0	\$943	\$963	\$0	\$0	\$0	\$0	\$0	\$1,906	
IT45 Onboard Passenger Information System	\$1,545	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,545	
IT48 Farebox Replacement Project	\$1,634	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,634	
LR01 Light Rail Right-of-Way State of Good Repair	\$2,279	\$1,011	\$1,728	\$3,172	\$1,495	\$4,354	\$4,693	\$3,496	\$4,374	\$952	\$27,557	
LR02 Light Rail Vehicle State of Good Repair	\$2,235	\$2,318	\$2,478	\$2,439	\$3,377	\$5,155	\$3,363	\$705	\$189	\$194	\$22,457	
LR04 Light Rail Station Upgrades	\$118	\$904	\$773	\$776	\$10	\$108	\$1,233	\$355	\$1,436	\$264	\$5,980	
LR05 Light Rail Cab Signaling Study	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100	
LR06 Tide Supervisory Control and Data Acquisition (SCADA) System Upgrade	\$0	\$1,981	\$0	\$340	\$0	\$0	\$2,302	\$0	\$394	\$0	\$5,018	
LR48 Light Rail Facilities State of Good Repair	\$31	\$99	\$271	\$698	\$0	\$118	\$0	\$0	\$517	\$0	\$1,736	
LR50 Light Rail Aerial Structures	\$640	\$0	\$6,803	\$350	\$0	\$0	\$895	\$0	\$406	\$418	\$9,514	
LR52 Passenger Facility and Grade Crossing Lighting Improvement	\$154	\$159	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$313	
LR53 NSU Platform and Stairs Rehabilitation	\$0	\$1,007	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,007	
LR54 Light Rail Crossing Repair/Replacement Design	\$231	\$742	\$655	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,630	
LR55 LRT Conduit Signal Upgrades	\$0	\$127	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$127	
LR56 Light Rail Fare Collection State of Good Repair	\$0	\$34	\$88	\$1,324	\$38	\$0	\$99	\$41	\$3,063	\$0	\$4,691	
LR58 Tide Light Rail Resilience Study	\$0	\$795	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$795	
LR59 Military Park and Ride Pedestrian Access	\$154	\$795	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$950	
NR01 Non-Revenue Fleet Replacement	\$267	\$392	\$262	\$357	\$252	\$47	\$49	\$1,167	\$247	\$4,325	\$7,371	
NR02 RTS Non-Revenue Fleet	\$103	\$0	\$0	\$0	\$0	\$0	\$0	\$153	\$1,774	\$0	\$2,030	
NR05 Security Fleet Expansion	\$103	\$0	\$0	\$0	\$0	\$0	\$0	\$153	\$0	\$0	\$256	
OP01 Transit Bus Replacement	\$10,045	\$2,013	\$4,714	\$43,057	\$32,459	\$7,435	\$12,381	\$51,967	\$6,210	\$24,466	\$194,752	
OPO2 Transit Bus Mid-Life Repower Project	\$0	\$3,050	\$1,229	\$1,406	\$5,796	\$3,432	\$2,920	\$3,483	\$326	\$0	\$21,646	
OP03 RTS Transit Buses	\$4,395	\$2,950	\$0	\$2,673	\$2,608	\$0	\$614	\$316	\$652	\$0	\$14,211	
OP11 Paratransit Fleet Replacement	\$6,813	\$1,861	\$147	\$2,279	\$0	\$7,898	\$2,183	\$171	\$2,642	\$0	\$23,997	
OP12 RTS Paratransit	\$0	\$0	\$0	\$911	\$0	\$0	\$0	\$0	\$1,056	\$0	\$1,968	
OP30 Ferry Boat State-of-Good-Repair	\$576	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$576	
OP31 Paratransit Fleet Expansion	\$0	\$859	\$1,770	\$0	\$5,164	\$0	\$996	\$2,052	\$0	\$5,987	\$16,829	
SS01 Upgrade the Video Recording Equipment for Buses	\$0	\$0	\$0	\$742	\$2,411	\$1,265	\$811	\$836	\$861	\$886	\$7,815	

Project Name		Programmed Funds (\$thousands)												
		FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	Total			
SS02 Light Rail Video Recording Equipment	\$0	\$0	\$0	\$0	\$141	\$0	\$0	\$0	\$0	\$0	\$141			
SS15 Enterprise Video Surveillance System Upgrade	\$447	\$47	\$39	\$45	\$66	\$518	\$55	\$45	\$52	\$76	\$1,393			
SS16 Enterprise Access Control System Upgrade	\$0	\$0	\$0	\$0	\$1,263	\$0	\$0	\$0	\$0	\$0	\$1,263			
SS21 Rail System Surveillance Enhancement	\$2,175	\$0	\$0	\$0	\$0	\$866	\$0	\$0	\$0	\$0	\$3,042			
SS24 Operator Safety Barrier Installation	\$296	\$917	\$315	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,529			
SS25 Fall Protection System for Southside and Northside Bus Garages	\$545	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$545			
SS27 Intrusion Detection Systems	\$103	\$0	\$0	\$0	\$0	\$179	\$0	\$0	\$0	\$0	\$282			
SS34 Enterprise Lock and Lever State of Good Repair	\$0	\$0	\$163	\$112	\$0	\$0	\$0	\$0	\$0	\$0	\$276			
SS35 Hardening Perimeter Security of NTF Generator	\$154	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$154			
Total	\$90,611	\$58,268	\$29,248	\$72,411	\$60,632	\$35,628	\$40,115	\$88,072	\$47,207	\$42,488	\$564,686			



Unfunded Needs

The needs inventory in this year's CIP update identified more capital needs than HRT anticipates can be funded.

Twelve projects in the CIP went unfunded and an additional five projects are only partially funded. The combined unfunded amounts total \$255 million over the ten-year period.

The vast majority of this amount – \$223 million – is associated with future electrification projects that are contemplated for operating facilities in Hampton and Norfolk. While portions of both of these projects are funded, the fiscally constrained plan only supports potential construction of up to 20 bus electric chargers at the current Hampton facility and preliminary design for electrification in Norfolk. HRT is only at the earliest, preliminary stages for planning future electrification at these locations. Future work will better define needs, and cost-benefit evaluations will inform what investments in non-diesel technologies HRT should pursue.

HRT's remaining unfunded needs are distributed across a range of smaller projects in different years. Eight of the projects relate to unfunded future technology upgrades, innovations, or maintenance needs that are at least five years into the future. While these needs are mostly forecasted based on recommended technology upgrade intervals, the actual timing and costs may shift based on changing internal needs and software/hardware obsolescence. Remaining unfunded needs are tied to projects that purchase new capital assets for the agency. HRT intends to actively pursue alternative funding strategies for these projects.

See Table 8 for a schedule of unfunded needs by project and fiscal year.

Table 8: Needs Not Included in Constrained Plan (by Project and Fiscal Year)

	Droject Nome	Unfunded Need (\$ thousands)										
עוט			FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	
FY24-EF11	Silverleaf Transfer Center Upgrades	-	\$152	\$470	\$972	-	-	-	-	-	-	
FY24-EF20*	Hampton Facility Electrification	-	-	-	-	-	-	-	-	-	\$131,224	
FY24-EF21*	18th Street Electrification	-	-	-	-	-	-	-	-	-	\$91,409	
EF24-IT07	Passenger Information Displays – Light Rail	-	-	\$4,724	-	-	-	-	\$4,824	-	-	
FY24-IT12	Onboard Network Infrastructure State of Good Repair	-	-	-	\$82	\$673	\$132	\$75	\$75	\$82	\$600	
FY24-IT17*	HRMS Replacement	-	-	-	-	-	-	-	-	\$3,233	-	
FY24-IT22*	EAM System State of Good Repair	-	-	-	-	-	-	-	-	\$4,927	-	
FY24-IT32	Technology Enabled Safety Improvements	-	-	-	\$943	\$963	-	-	-	-	-	
FY24-IT36	Internal Digital Signage System	-	-	-	-	\$131	-	-	-	-	-	
FY24-IT43	Contract and Vendor Management Software Replacement	-	-	-	-	-	\$660	-	-	-	-	
FY24-IT46	Yard Management System	-	\$1,500	-	-	-	-	\$1,500	-	-	-	
FY24-IT47	Enterprise Data Integration	-	-	-	-	\$350	-	-	-	-	-	
FY24-SS16*	Enterprise Access Control System Upgrade	-	-	-	-	-	-	-	-	-	\$1,465	
FY24-SS17	Safety Management System	-	-	-	-	\$924	-	-	-	-	-	
FY24-SS19	Mobile Telescoping and Surveillance Tower	-	-	-	-	\$340	-	-	-	-	\$340	
FY24-SS22	Emergency Alert Beacons, Sirens, and Strobes	-	\$532	-	-	-	-	-	-	-	-	
FY24-SS31	Blast Resistant Trash Receptacle and Bollard Project	-	\$970	-	-	-	\$999	-	-	-	-	

*Project is partially funded in constrained plan.





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Future Updates

As previously emphasized, this CIP is a living document that evolves over time. As with the agency's Transit Strategic Plan, HRT updates the CIP on an annual basis to ensure it meets current priorities, changes in funding, and other environmental conditions. As HRT completes evaluations of new technologies and plans for expanded service, these needs will also be incorporated in the updated CIP.

Between annual CIP updates, new needs may arise and others will change. HRT's Senior Executive Team collectively evaluates any changes needed to the CIP over the course of the year. When assessing whether a project should receive funding outside of an annual CIP update, the following factors are examined:

- Severity: Is the project necessary to make the system safe and secure?
- Urgency: Does the project need to be completed as soon as possible?
- **Completeness:** Is the suggested investment a complete solution to a need, or will additional funds required to address the need?
- Funding Alternatives: Can the project be completed with present funding allocations?
- Service Delivery: Is the project critical for service delivery?

Developing the Annual Capital Budget

The capital plan identified in this plan is the basis for HRT's FY2025 capital budget and applications for various grant funding. For example, in January 2024 the CIP will be submitted to DRPT as required for participating in the statewide MERIT transit capital program. Shortly following, HRT will also prepare grant applications for the FY2025 MERIT funding cycle, as well as participate in federal formula and discretionary grant programs.







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APPENDIX A Light Rail Tables

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APPENDIX B **Project Sheets**

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