



**FY 2020 – FY 2025**

**RHODE ISLAND PUBLIC TRANSIT AUTHORITY**



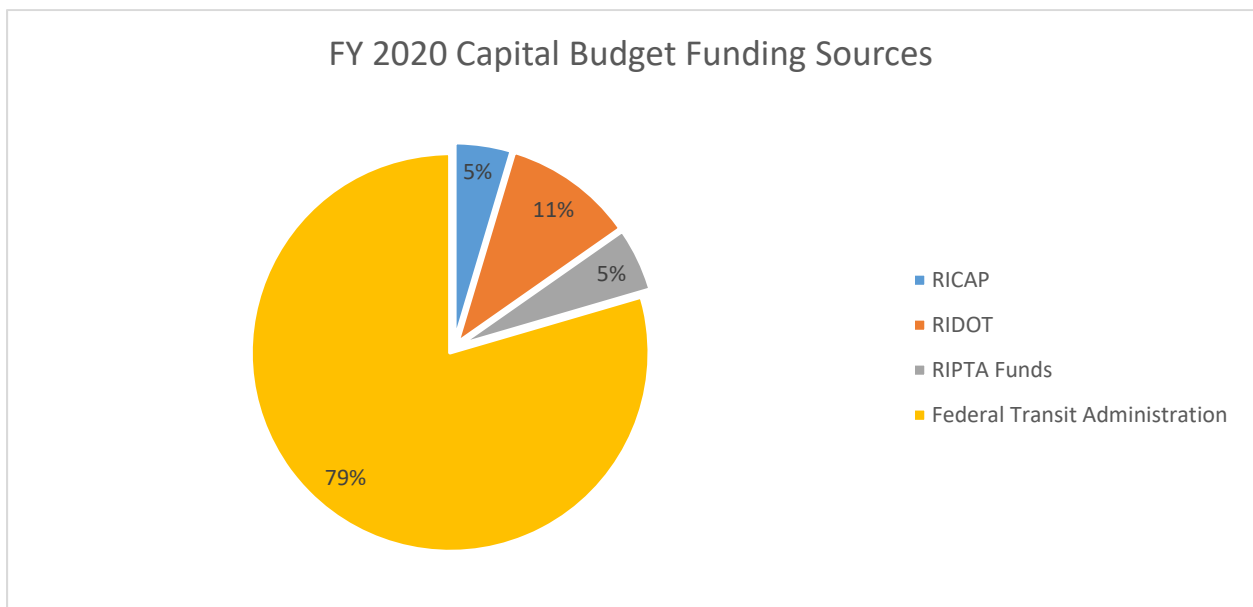
# **CAPITAL BUDGET AND CAPITAL IMPROVEMENT PLAN**

## Overview

Presented is the Rhode Island Public Transit Authority (RIPTA) FY 2020 Capital Budget and FY 2021 – FY 2025 Capital Improvement Plan. Each year RIPTA prepares an updated capital budget and an updated projection of anticipated capital spending for the ensuing five fiscal years. Following approval by the Board of Directors, the capital budget is submitted to the Office of Management and Budget (OMB) for inclusion in the overall state budget, which then goes to the Governor and General Assembly for approval.

If the General Assembly votes to appropriate funds on a level that differs from what was requested by RIPTA, the Finance Department modifies each project accordingly in the next year's submission.

\$57.9 million in capital expenditures are planned for FY 2020. Federal funds make up 79% of this total, about \$45.9 million. Federal Transit Administration (FTA) funds typically cover 80% of a project cost and require a 20% local match. \$12 million in match is required to leverage these federal funds in FY 2020, and comes from various sources. The overall federal portion can differ from 80% due to projects with an atypical federal/local match split such as the Downtown Transit Connector project, which has a federal portion of 76% of the project cost and a 24% local match. The chart below depicts the various funding sources in the FY 2020 Capital Budget.



All projects listed in the capital budget are contingent upon the availability of both match and federal funds. Approval of the capital budget does not signify approval for project commencement. Given the Authority's limited financial resources, some projects may have to be delayed. As a result, all projects included in this plan will follow RIPTA's procurement policy, which sets thresholds for CEO and Board approval. This process ensures that proper funding is in place before a project commences, and takes into consideration any changes in funding, including any change in General Assembly appropriations.

RIPTA is the state's main recipient of FTA funds and as a result receives federal appropriations designated for local municipalities. In these cases, RIPTA may provide project oversight and procurement services for these projects but does not contribute any operating funds. This ensures that the project remains in compliance with all FTA guidelines. Examples of these types of projects are the recently completed repairs to the Newport Gateway Center, and upcoming bulkhead improvements for Quonset Ferry.

#### Match Funding Sources

Capital Revolving Loan Fund (CRLF) - In 1997, RIPTA placed \$2.5 million into an investment account to create a sustainable source of capital match for projects. Any withdrawals from the account to match capital projects must be repaid, with interest, over the life of the asset purchased. RIPTA calculates the interest to be paid by subtracting 1% from the Prime Rate.

Gas Tax – Based on the revised gas tax yield projections from the Department of Revenue Division of Taxation, RIPTA is projected to receive an additional \$1.4 million in FY 2020. In addition, RIPTA received an extra \$1.8 million in FY 2019 from a delinquent gas tax payment. OMB suggests using this extra gas tax revenue as match for the FY 2021 bus purchase.

Local Match – Match provided by local municipalities and organizations to leverage federal funds.

Other – A miscellaneous match category for all other capital match sources and sources that have yet to be identified. For example, the Volkswagen settlement funding (explained below) is categorized as Other.

Paratransit Revolving Loan Fund (PRLF) – The match for Paratransit vehicles is provided using the PRLF. A portion of revenue from each trip provided via the Paratransit program is allocated to vehicle replacement. Formerly this revenue was divided between maintenance of vehicles, training, and vehicle replacement. Declining trip volume and revenue has required a shift towards vehicle replacement to ensure the program is sustainably funded.

Rhode Island Capital Plan Fund (RICAP) – RICAP is a “rainy day fund” created by the State using excess general revenues and is intended to fund capital expenditures for asset protection or to fund debt service. RICAP funds are appropriated by the General Assembly.

Rhode Island Department of Transportation (RIDOT) – RIDOT provides match on transit projects, mostly through the Highway Maintenance Account (HMA): an account created within the state's intermodal surface transportation fund to leverage federal transportation dollars for both RIDOT and RIPTA.

RIPTA Capital Match – Funds that RIPTA receives from operations that are used to leverage federal funds on capital expenditures.

State Bus Match – A placeholder for outer year bus purchases that currently have no identified match funding. RIPTA will continue to seek a long-term funding solution with the State to ensure sustainable fleet development.

State Fleet Revolving Loan Fund (SFRLF) – A separate fund within the State Treasury with the purpose of acquiring motor vehicles and vehicle-related equipment and attachments for State departments and agencies. RIPTA has \$273,304 remaining from this fund that will be used to match upcoming bus orders. However, no new funding amounts from this source have materialized for RIPTA bus purchases. RIPTA is exempt from repaying funds to the SFRLF.

### Funding

RIPTA previously requested, and received, \$220,000 in RICAP funds from the state each year, to support the facility and environmental capital program. Approximately \$70,000 of these funds covered the FTA's 1% security enhancement requirement, and the remaining funds covered the match for various facility improvements. In FY 2017, these funds were used to leverage federal grant dollars for lift replacements at the Newport maintenance facility, new card readers, gates, and cameras at the Newport transportation and maintenance facility, and a back-up generator at the Providence transportation facility. Beginning in FY 2018, the state has only appropriated \$90,000, a 60% decrease in match funding. This means that more of the capital budget will need to be supported with operating funds, increasing the strain on the operating budget. RIPTA recently completed a Transit Asset Management plan to address State of Good Repair needs throughout its facilities. In addition to the \$70,000 in security upgrades, RIPTA identified RICAP match needs of \$300,000 for support facilities (maintenance, garage, administration, etc.), and \$200,000 for passenger facilities (Kennedy Plaza, Newport Gateway, bus stops, etc.) As such, beginning in FY 2019, RIPTA has increased its general RICAP ask to \$600,000.

For projects in which local match or RICAP are not available, RIPTA must use operating funds to support the capital budget. This means that gas tax, passenger revenue, and advertising revenue must be used to support the capital budget. These funds are primarily used to fund operations including salaries, benefits, fuel, and parts. As a result, the timing of when projects commence can change depending on the availability of operating funds.

With assistance from RIDOT, RIPTA secured funding to replace the 2005 fleet. This order was delayed due to a lack of local match for the fleet replacement program. With a committed match in place, RIPTA will receive 29 buses to replace the 2005 fleet beginning in early FY 2020. **There is still no long-term funding solution for fixed route vehicle purchases.**

As mentioned above, RIPTA is projected to receive additional gas tax revenue. The state suggested the use of this additional revenue as match for the FY 2021 order of 27 buses. **This is a temporary solution for bus match in FY 2021, not a long-term solution for fleet replacement.**

Through a nationwide settlement with Volkswagen, the State of Rhode Island received \$14.4 million in funds from the Volkswagen Mitigation Trust, which must be used for environmental mitigation projects. RIPTA will receive \$10.8 million to procure Zero Emission Vehicles and related infrastructure. An additional 1.1 million will be allocated to RIPTA for administration of the program, which will be reflected in the RIPTA Operating Budget.

## Major Projects

Several key projects will continue in FY 2020 including the fare system upgrade, which will introduce new fare media including smart cards and mobile payment, making it quicker and easier to use the bus system. Work will also continue on the Downtown Transit Connector and a bus hub at the new Pawtucket/Central Falls train station. Both of these projects will result in increased connections, enhanced passenger facilities, and overall better transit service.

## Transit Asset Management – State of Good Repair Program

RIPTA has started the process of implementing FTA’s Transit Asset Management plan program, which requires an asset inventory, condition assessments of inventoried assets, and a prioritized list of investments to improve the condition of capital assets. Transit providers are required to set performance targets for their capital assets based on State of Good Repair measures and report their targets, as well as information related to the condition of their capital assets to the National Transit Database.

The FTA has deemed asset management programs critical to ensuring passenger safety, system reliability, reduced maintenance costs, and overall system performance. A team of RIPTA employees completed a campus-wide facility condition assessment, touring and assigning condition codes to all RIPTA facilities. This initial assessment is the foundation to implementing the asset management plan and has already identified several assets requiring capital improvements. These capital improvements are prioritized in the RIPTA Capital Budget and Capital Improvement Plan, including buses and bus facilities projects. In order to maximize the useful life of buses, bus facilities, and other equipment, RIPTA requires a preventative maintenance plan for all assets. Funding for the preventative maintenance program is included in the RIPTA Operating Budget. As RIPTA fully implements the asset management program, there will likely be an identified need for additional capital funding, both federal and match.

## Rolling Stock (Buses/Vehicles)

Rolling Stock Budget	2020	2021	2022	2023	2024	2025
Fixed Route	\$16,169,269	\$15,806,854	\$15,367,775	\$20,063,397	\$21,687,004	\$17,790,121
Fixed Route-DTC	\$2,230,244					
Fixed Route-ZEV Upgrade			\$7,191,000			
Flex Vehicles			\$1,758,876			
Non-Revenue Vehicles	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000
Paratransit Vehicles	\$4,487,250	\$2,355,806		\$2,597,276	\$2,727,140	\$2,863,497
<b>Grand Total</b>	<b>\$23,106,763</b>	<b>\$18,382,660</b>	<b>\$24,537,651</b>	<b>\$22,880,673</b>	<b>\$24,634,144</b>	<b>\$20,873,618</b>

## Fixed-Route

RIPTA's current fixed-route fleet plan is designed to replace 40-foot vehicles once they reach the end of their 12-year or 500,000-mile useful life. Federal funds are set aside each year in the transit portion of the Transportation Improvement Plan (TIP) to fund the replacement of buses. Match historically has come from the state, formerly through General Obligation bonds and more recently from the State Fleet Replacement Revolving Loan Fund. These sources of funding have expired and a new long-term funding source is required. RIPTA secured \$3.1 million in match for the upcoming purchase of 29 buses with help from RIDOT via the Highway Maintenance Account.

The FY 2020 order is for 29 diesel buses with an expected delivery beginning early FY 2020. The price per vehicle is \$557,561.

The next bus purchase will occur in FY 2021, when 27 buses are purchased to replace a portion of the 2009 fleet. OMB suggested the use of additional gas tax revenue for match on this purchase. **There is currently no source of match beyond these temporary solutions. RIPTA will continue to seek a long-term funding solution to ensure sustainable fleet replacement.**

## Fixed Route – DTC

As part of the Downtown Transit Connector project (outlined below), RIPTA will add 4 vehicles to the current fleet in order to increase service frequency along a heavily travelled downtown Providence corridor. These 4 vehicles will be delivered with the 29 replacement vehicles mentioned above, for a total of 33 fixed-route vehicles arriving in FY 2020.

## Fixed Route – ZEV Upgrade

Zero-emission bus technology is rapidly progressing and has become a viable alternative to diesel-fueled buses. The Authority is working with a consultant to determine the cost-effectiveness of various zero-emission vehicle configurations. The results of this study will help determine the capital funds required to make this transition. With numerous funding sources becoming available for zero-emission vehicles, including Volkswagen settlement funds and No/Low-emission grant awards from FTA, the Authority feels confident in the ability to leverage existing federal and match funds to transition a portion of the fleet to zero-emission vehicles.

Currently, RIPTA is using part of the Volkswagen settlement money to lease three electric buses as part of a pilot program, which is reflected in the RIPTA Operating Budget. The pilot program will result in the collection and analysis of data that will inform the study mentioned above. The purchase of up to 17 electric buses would follow starting in FY 2022, using a combination of Volkswagen Settlement funds and No/Low-emission grant funds.

This transition will not affect the federal and match funds required as the funds set aside for diesel vehicle purchases will be used to cover the base bus cost of a zero-emission vehicle. However, results of the transition study and ongoing data collection may indicate a need for a 2 to 1 replacement moving forward (i.e. for every 1 diesel bus retired, 2 electric buses will come into service), depending on the maximum range of electric vehicles. Over time, the savings from

reduced/eliminated fuel purchases in addition to reduced maintenance costs should allow RIPTA to sustainably transition to a fully zero-emission fleet.

#### Flex Vehicles

Flex is a fixed route service that is operated using vehicles similar to our Paratransit vehicle; the differences being Flex vehicles have destination signs and a farebox. The current vehicle and engine configuration has been discontinued due to failure to comply with EPA standards. Due to higher passenger volume than the Paratransit program, a larger vehicle makes more sense and provides more flexibility for fixed route operations. The Authority is looking to procure a larger vehicle built on a heavy-duty chassis, but with a similar body to existing flex vehicles. The price of the vehicle is projected to be about \$175,000 in FY 2022, but will carry a longer useful life than the current vehicles, and will be better suited for service needs resulting in lower maintenance costs.

The current plan is to procure 10 of these vehicles with an expected delivery in FY 2022. The match on these vehicles is provided by the state, and federal funds are available to cover 80% of the vehicle match cost.

RIPTA recently purchased 11 flex vehicles in FY 2016, which will be retired by FY 2022, the end of their useful life.

#### Non-Revenue Vehicles

This is a line item used to replace the Authority's non-revenue vehicles, which include street supervisor vehicles, pick-up trucks and other maintenance vehicles, and hybrid vehicles for staff to conduct business. Over the past few fiscal years, many of the old vehicles (2001 Ford Explorers) have been retired, but there are still old vehicles in service that need replacement. In addition to replacing older vehicles, there is a need for additional non-revenue vehicles. The annual replacement budget is \$220,000 and allows for the purchase of 5-6 vehicles. Federal funding covers 80% of the purchase cost and the remaining 20% is funded via RIPTA's Capital Revolving Loan Fund.

#### Paratransit Vehicles

Similar to Flex vehicles discussed above, the current engine/chassis configuration for these vehicles has been discontinued. The Paratransit fleet size is approximately 100 vehicles. Twenty-five vehicles were purchased in FY 2016, but the remaining 75 are scheduled for replacement.

The Authority is using this as an opportunity to review Paratransit operations to determine what vehicles make the most sense going forward. Many programs are moving towards diversified fleets made up of smaller and larger vehicles, and in some cases sedans. The fleet plan currently calls for the purchase of smaller vehicles with gasoline engines. Part of this plan includes the purchase of Ford Transits, 25 of which will be delivered in early FY 2020, as well as Dodge

Caravans with wheelchair lifts. Five Caravans were purchased in FY 2019. As the specifications are developed, and depending on the performance of the Ford Transits and Dodge Caravans, there may be more smaller vehicles purchased resulting in a lower fleet replacement cost.

Paratransit vehicles are financed using 80% federal funds. The remaining 20% match comes from the Paratransit Revolving Loan Fund, an investment account where Paratransit operating revenue is deposited to support vehicle replacement.

### Transit Corridors

Transit Corridors Budget	2020	2021	2022
Downtown Transit Connector	\$10,974,234		
East Side Tunnel	\$4,000,000	\$4,000,000	\$1,500,000
<b>Grand Total</b>	<b>\$14,974,234</b>	<b>\$4,000,000</b>	<b>\$1,500,000</b>

#### Downtown Transit Connector

The City of Providence was awarded \$13,000,000 in Tiger VI funding for the Downtown Transit Connector (DTC), an enhanced transit corridor that will provide fast, frequent connections through downtown Providence, between Providence Station and Rhode Island Hospital. Comprised of six stops in each direction, the DTC will be anchored by the Providence Station Hub in the north and the Rhode Island Hospital Hub in the south.

The project represents a major augmentation of bus service in the downtown area, with key destinations getting one-seat transit access to far more destinations. Buses will get transit signal priority and dedicated lanes for much of the project length, and stations will have high-quality amenities.

The project began in FY 2017 and new service along the corridor will commence in January 2020. The total project cost is \$17.9 million. Funding is a combination of TIGER funds, and state and local funds. RICAP will be the match for capital expenditures such as shelters, roadway and sidewalk improvements, and RIDOT will provide Highway Maintenance funds to purchase the additional vehicles (4) required for the new service. These 4 vehicles will arrive in FY 2020. Additional funding, via RIDOT, in the amount of \$874,000 will be used for pedestrian and bicycle safety improvements along Exchange Street.

#### East Side Tunnel

The East Side Bus Tunnel is in need of passenger amenity improvements, structural repairs, drainage repairs, and safety improvements. A preliminary needs analysis has been completed, and architectural and engineering work is expected to commence.



The project is currently expected to total \$9.5 million. Federal funds will be used for 80% of the project cost, including \$903,470 in federal discretionary funds for design and engineering. The State has set aside \$1.9 million in RICAP to complete the project beginning in FY 2020.

### Passenger Facilities

Passenger Facilities Budget	2020	2021	2022	2023
Community Partnership Projects	\$150,000			
Kennedy Plaza Improvement/Upgrade		\$750,000	\$250,000	
Transit Hubs: Pawtucket/Central Falls	\$6,795,931			
Transit Hubs: URI Kingston		\$3,750,000	\$3,750,000	\$1,250,000
Transit Hubs: Warwick/CCRI	\$600,000	\$700,000		
<b>Grand Total</b>	<b>\$7,545,931</b>	<b>\$5,200,000</b>	<b>\$4,000,000</b>	<b>\$1,250,000</b>

### Community Partnership Projects

The goal of RIPTA’s TransART program, launched in 2007, is to enhance the experience of those using RIPTA service by providing seating and shelter from the weather while introducing interesting and unique bus shelters to the streetscape environment. The most recent phase of this program is a collaboration with the communities of South Kingstown and East Providence to design and install bus shelters in Riverside and Peacedale, with RIPTA providing federal funds toward these projects and the local communities providing the required match. The bus shelter in East Providence is complete, while the South Kingstown project is in progress.

Additionally, RIPTA will provide federal funding to support a Dexter Street project in Central Falls, awarded through the Main Street Rhode Island Streetscape Improvement Fund. This program awards funds that support improvements to the State’s commercial districts. RIPTA’s federal funds are contributing 80% of the total project costs.

### Kennedy Plaza Improvement/Upgrade

As the central RIPTA hub, Kennedy Plaza is one of the most visible locations in the state. Opened in 2002, years of heavy foot traffic and public use give rise to the need for improvements and upgrades to the Intermodal Transportation Center. The HVAC system servicing the offices and restrooms in Kennedy Plaza is in need of replacement, as are the fixtures in the restrooms themselves. Minor improvements were made recently, though a more extensive upgrade of the entire building is necessary for continued operation. As a central public space in downtown Providence, there are many different stakeholders interested in the future of Kennedy Plaza, creating various barriers to advancing improvements to the existing structure.

Early estimates for this project total \$1 million. Federal funds would cover 80% of the project cost, and RICAP funds would be requested from the state to match the project.

### Transit Hubs: Pawtucket/Central Falls

Downtown Pawtucket is the second busiest bus hub in Rhode Island, with 4,000 passenger movements daily. Passenger facilities are in need of upgrades, but are in a private facility without a long-term lease. Meanwhile, a new commuter rail station is being planned ½-mile to the west. A multi-entity planning effort has identified a new transit vision for Pawtucket/Central Falls that relocates the hub to the station site and creates a downtown transit corridor feeding this future intermodal center.

RIPTA applied for and successfully received \$5.4 million in federal discretionary funds to build a new bus hub in Pawtucket/Central Falls. These funds will be leveraged using match funds from the City of Pawtucket and from State RICAP for a total project cost of \$7 million.

The new hub will be adjacent to the Pawtucket/Central Falls Train Station and will include 6-8 bus berths for passenger loading and bus layoff, shelters, real-time information signage and ticket vending machines (TVMs).

Preliminary design work for this project commenced in late FY 2017 and construction is expected to be complete in FY 2020. Though this project has been transferred to RIDOT as part of the overall Pawtucket/Central Falls Train Station project, RIPTA will have technical oversight of the bus hub design and construction through WSP, an engineering professional services firm.

### Transit Hubs: URI Kingston

The University of Rhode Island wishes to further strengthen its partnership with RIPTA through the establishment of a transit hub on its campus that would act as a nexus for both current and expanded bus services both between the campus, South County and across Rhode Island. The hub is considered to be a major element of the University's Transportation and Parking Master Plan. This project intersects at a unique moment in time as URI has decided to take a series of actions to improve mobility including: 1) a ban on parking for all incoming freshman, 2) active pursuit of expanding RIPTA's UPass product to all undergraduates, faculty, and staff, and 3) the reconstruction of Upper College Road as a Complete Street.

This project will provide a safe passenger facility on the URI campus and attract new riders by providing expanded connections to not just the University's other campus locations but across South County. This hub unlocks a number of operational and service opportunities that will better serve residents in this part of Rhode Island.

RIPTA submitted an application for the most recent FTA Bus & Bus Facilities discretionary program to fund this project. Award announcements are expected in the Fall of 2019. RIPTA is also in discussions with the State and URI to determine a source of match. Planning work is expected to take place through the beginning of summer 2019. Engineering work would be completed by the spring of 2020, and intended construction would commence at the beginning of FY 2021.

### Transit Hubs: CCRI Warwick

The last Comprehensive Operational Analysis (COA) identified the development of a Warwick hub as a key change needed to enhance service. The COA realignment has made Warwick a new transit hub focused on routes serving CCRI’s Knight Campus and routes south.

The Governor’s recommended capital budget includes funds for the Knight Campus Renewal Project, which includes improvements to plumbing, lighting, doors, hardware, roadway, and landscaping. RIPTA is in discussions with CCRI to construct the new bus hub in conjunction with any roadway and landscaping improvements made.

Preliminary estimates are that this project will cost \$1.3 million. Federal funds would cover 80% of the project cost, and RICAP funds have been allocated by the state in the amount of \$260,000 to be used as match.

### Support Facilities

Support Facilities Budget						
	2020	2021	2022	2023	2024	2025
Chafee Maintenance Facility Rehab	\$1,600,000	\$2,500,000				
Driver Facilities: Providence City Line	\$50,000					
EV Charging Station (705 Elmwood)	\$30,953					
Fume Detection Systems (350 Coddington)	\$85,000					
Future Facilities Maintenance (All RIPTA Facilities)	\$45,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Gasoline Fuel Stand	\$600,000					
Gate Install/Upgrade		\$200,000	\$200,000			
Newport Fuel Line Replacement	\$550,000					
Oil Water Separators (All RIPTA Facilities)	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
Security Camera System Upgrade	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Security Enhancements (All RIPTA Facilities)	\$250,000	\$50,000	\$50,000	\$250,000	\$250,000	\$250,000
ZEV Infrastructure		\$1,500,000	\$400,000	\$700,000		
<b>Grand Total</b>	<b>\$3,370,953</b>	<b>\$4,435,000</b>	<b>\$835,000</b>	<b>\$1,135,000</b>	<b>\$435,000</b>	<b>\$435,000</b>

### Chafee Maintenance Facility Rehab

The Authority plans to replace lifts at the Chafee maintenance facility starting in FY 2020. The current lifts are aging and require frequent repairs. Due to the high cost of this project, replacements will take place in phases over several years. The first phase will replace the drive-on wash bay lift and two currently inoperable post lifts. The post lifts will be replaced with scissor lifts, which use less oil, require less maintenance, and lessen the likelihood of environmental impact. This project will continue efforts to ensure all vehicle lifts are in a state of good repair.

The roof at the Chafee maintenance facility is in need of painting, re-flashing, and in certain areas, replacement. In conjunction with the roof repairs, new make-up air units (MAUs) are required at this facility, similar to the ones installed at the 269 Melrose transportation building and at the Newport facility. Due to the high cost of this project, repairs/replacements will take place in phases over several years. The first phase will replace MAUs 1, 3, and 5, as well as a portion of the roof.

RIPTA was awarded \$3.3 million in FTA discretionary funding which will be used for 80% of the project. RICAP funds have been allocated by the state in the amount of \$800,000 (\$300K – FY20, \$500K – FY21) to be used as match.

#### [Driver Facilities: Providence City Line](#)

Bus drivers have asked for years for restroom facilities at the Providence end of the R-Line. When drivers do need to use facilities, they walk into the nearby McDonald's which frequently does not allow them to use their toilets. This project would involve the procurement and installation of a prefabricated and self-cleaning bathroom facility on land owned by RIPTA. This land already has utility connections (electricity, sewer, etc.). To minimize operational costs, it is recommended that RIPTA get a self-cleaning toilet to keep operational costs to a minimum.

This facility is expected to cost \$50,000 (80% FTA funding, 20% RIPTA Capital Match).

#### [Electric Vehicle \(EV\) Charging Station \(705 Elmwood\)](#)

RIPTA will pursue the installation of one (1) dual port charging station on its 705 Elmwood Avenue property. One hundred percent of the cost of electrical infrastructure upgrades leading up to the charging stations, and 50% of the equipment costs will be funded by National Grid through an energy saving program. The remaining expenses associated with the purchase and installation of the charging equipment amount to \$9,486 (80% FTA funding, 20% RIPTA Capital Match).

#### [Fume Detection Systems \(350 Coddington\)](#)

Each RIPTA facility must be equipped with fume detection systems to monitor CO/NO<sup>2</sup> fumes emitted by vehicles and equipment. When fume levels rise above allowable thresholds, the detection system sounds alarms, opens doors, and activates exhaust fans to quickly improve air quality. The sensors at the 350 Coddington Highway facility need to be replaced.

To replace the fume detection systems in this building will cost \$85,000 and is eligible for federal reimbursement. RIPTA capital match will provide the required 20% match. CO sensors must be replaced every 2 years, while NO<sup>2</sup> sensors must be replaced every 5 years. This ongoing maintenance is reflected in the operating budget.

#### [Future Facilities Maintenance \(All RIPTA Facilities\)](#)

Each year the Authority sets aside funds for unexpected upgrades or repairs to facilities or equipment that arise over the course of the year. Federal funds are used to cover 80% of the cost with RICAP used as match. Examples of previous expenditures include the rebalancing of the

HVAC system at 705 Elmwood Avenue, repairs to the ramp expansion joint at 705 Elmwood Avenue, and repairs to the oil/water separator system at the Chafee maintenance facility.

#### Gasoline Fuel Stand

RIPTA Paratransit is currently operating an aging fleet of diesel-only vehicles with a need to convert to gasoline vehicles and therefore a need for safe, reliable, on-site gasoline fueling. This need arises from the fact that the paratransit van manufacturing industry is phasing out diesel van production in favor of gasoline vehicles.

Brockton Area Transit (BAT) recently completed a similar diesel to gasoline conversion project on their property, at a cost of \$400,000. RIPTA's project is similar in size and scope with project estimates totaling \$600,000, funded through our federal grant program and the Paratransit Revolving Loan Fund for match.

#### Gate Install/Upgrade

See Security Enhancements line below.

#### Newport Fuel Line Replacement

The underground fuel storage tank (UST) and fuel line at the Newport garage are past their useful life and must be replaced. Instead of replacing the structure in kind, the UST and fuel line are to be abandoned in place, following all environmental requirements, and replaced with an above ground storage tank closer to the fueling station. This project is expected to cost \$550,000 and will be paid with 80% federal funds and 20% RIPTA Capital Match.

#### Oil Water Separators (All RIPTA Facilities)

Oil Water Separators prevent oil and other hazardous liquids from going into the sewer or storm water system. These systems need to be periodically emptied and cleaned and any deterioration in the internal components needs to be quickly rectified. The oil water separators need capital improvements to ensure they function properly. Some of the tanks will be re-lined which is cheaper than replacement and will extend the useful life of the system. Other tanks require new filters and components, which are accounted for in the operating budget and preventative maintenance program. The Authority expects to spend \$60,000 annually for capital improvements to the Oil Water Separator system.

Repairs and replacement of the oil water separators are eligible for federal reimbursement. RIPTA capital match will provide the required match to leverage these federal funds.

#### Security Camera System Upgrade

See Security Enhancements line below.

#### Security Enhancements (All RIPTA Facilities)

The Authority is required to spend 1% of its 5307 funds each year on Security Enhancements. This amounts to \$350,000 per year or about \$280,000 per year in federal funds with the remaining \$70,000 in match coming from RICAP. Recent initiatives have included installing

cameras, gates, and card readers at RIPTA’s Newport transportation and maintenance facility at 350 Coddington Highway, Middletown, RI. Future gate installations and upgrades are programmed in FY 2021 and FY 2022, while security camera upgrades will continue across RIPTA properties on a yearly basis.

### Transit Enhancements

Transit Enhancements Budget				
	2020	2021	2022	2024
Bus on Shoulder			\$450,000	
Fare Technology Upgrade	\$2,800,000			
IVR Upgrade	\$50,000			\$55,000
Real-Time Scheduling/Mobility on Demand		\$400,000		
Transit Signal Prioritization - Implementation	\$1,261,447			
Web-Based Reservation System		\$50,000		
<b>Grand Total</b>	<b>\$4,111,447</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$55,000</b>

#### Bus On Shoulder

Bus On Shoulder is a program where transit buses are allowed to use roadway shoulders during times of heavy traffic. Deployed programs have experienced a drastic increase in ridership and on-time performance. Implementing a bus-on-shoulder program enables RIPTA to increase the attractiveness of its service, reduce bus idling time in traffic, and reduces the environmental footprint. This project will include the final design and construction of roadway improvements to begin a bus-on-shoulder pilot. Roadway improvements may include shoulder widening/reconstruction, signage and control devices.

The project is currently estimated to cost \$450,000. RIPTA will use a portion of its formula funds to cover 80% of project costs, and RIPTA capital match will be used to finance the remaining 20%. This project was expected to start in FY 2018, but regulatory hurdles, construction needs, and limited funding have delayed project implementation.

#### Fare Technology Upgrade

The Authority’s current fare collection system is not capable of securely expanding into smart cards or mobile payments and is in need of upgrades and/or replacement. The new technology will upgrade the current fare system to contain the components necessary to support smart cards and mobile payments.

Init, a supplier of IT solutions for public transport, was awarded a contract in FY18 for \$5.6 million. The upgrade began in February 2019 and completion is expected in FY 2020. Federal funds are available for 80% of the total project cost, and RIPTA’s Capital Revolving Loan Fund will be used to finance the remaining 20%.

### Interactive Voice Response (IVR) Upgrade

RIPTA recently completed implementing an IVR software for the Ride program. However, given the relatively short useful-life of technology, the system currently being used in the fixed-route program will need upgrading or replacing sometime in FY 2020. Keeping the IVR systems up to date with the most recent technology will have a positive impact on customer service.

The upgrade is estimated to cost \$50,000 in FY 2020 and \$55,000 in FY 2024. Federal funds will be used for 80% of the upgrade cost with RIPTA Capital Match funding the remaining 20%.

### Real-Time Scheduling/Mobility on Demand

This project is for the purchase of an additional module that will work with the existing Ride and Flex software to give passengers the ability to schedule trips within Flex zones in real-time. Currently, riders need to make a trip request the day prior to the anticipated travel date. This technology will create a better travel experience for passengers and make RIPTA's service more attractive.

The software is expected to cost \$400,000 with federal funds covering 80% of the project cost and RIPTA Capital Match covering the remaining 20%.

### Transit Signal Prioritization – Implementation

Following the completion of the TSP Expansion Study, RIPTA is now prepared to move this project into full implementation. The project will upgrade the R-Line's current TSP technology to GPS-based transit signal prioritization and introduce the latest technology on five corridors used by some of RIPTA's most important key corridors and regional routes (#1, 20, 27, 28, and 60). All of RIPTA's fixed route fleet (including 33 new buses procured from Gillig and arriving summer 2019) will be fitted with this TSP technology.

Capital costs are estimated at \$1,261,447. Federal funds are available to cover 80% of the project total with RIPTA Capital Match providing the 20% match. There will also be a \$310,725 ongoing yearly maintenance expense reflected in the RIPTA Operating Budget.

### Web-Based Reservation System

The Ride department requests new software to enable a smart phone-based application to accept online reservations. In addition to smart phone reservations, trips can also be reserved on a personal computer. This project ties into the current capital request from planning for a demand responsive software.

The software is expected to cost \$50,000 with federal funds covering 80% of the project cost and RIPTA Capital Match covering the remaining 20%.

## Support Systems

Support Systems Budget						
	2020	2021	2022	2023	2024	2025
ATMS Radio Replacement		\$3,000,000	\$1,500,000			
ATMS Upgrade Current Systems	\$500,000					
Compliance Software		\$40,000				
Eligibility Software Suite		\$300,000				
Enterprise Software/Asset Management		\$500,000	\$2,000,000			
Fuel and Fluid Management System	\$1,568,932					
Hastus Upgrade and Expansion	\$1,018,773					
Incident/Accident Management Software		\$250,000				
Mobile Marketing and Communications Technology	\$6,000					
Phone System Replacement/Upgrade			\$100,000			
Power 9 iSeries - Virtual AS400	\$150,000					
Redundancy/Disaster Recovery	\$860,000	\$1,000,000				
Replacement IT Equipment	\$350,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Server Software	\$50,000	\$40,000				
Server/SAN Replacement	\$150,000	\$100,000	\$50,000	\$50,000	\$50,000	
Upgrade Network	\$100,000	\$150,000	\$150,000	\$150,000	\$150,000	
VMWare	\$50,000		\$50,000		\$50,000	
<b>Grand Total</b>	<b>\$4,803,705</b>	<b>\$5,680,000</b>	<b>\$4,150,000</b>	<b>\$500,000</b>	<b>\$550,000</b>	<b>\$300,000</b>

### ATMS Radio Replacement

Radios on the fixed route buses enable data communications for the ATMS system. These radios have a limited useful life, which once surpassed will no longer receive support from the manufacturer. In addition, as of December, 2021, RIPTA will no longer be compatible with the state's contracted communication system, further necessitating the current radio replacement. It is recommended that the radios be replaced starting in FY 2021 to ensure the transition is complete by the December, 2021 deadline. Federal funds will be used for 80% of the project cost with the remaining 20% coming from RIPTA's Capital Revolving Loan Fund. The total replacement cost is estimated to be \$4.5 million.

The last time this radio system was replaced, Emergency Management funds were available to cover 100% of the replacement cost. As the time for replacement comes nearer, similar opportunities will be pursued.

### ATMS Upgrade Current Systems

The ATMS servers, network, and the operating systems that they run are aging, which in turn prevents upgrades to the ATMS front-end software that the dispatchers and supervisors use. This project will facilitate the hardware replacement and software upgrades, as well as the devices used by the supervisors when on the road.



Federal funds will be used for 80% of the project cost with the remaining 20% coming from RIPTA's Capital Revolving Loan Fund.

#### Compliance Software

The Authority is seeking a software solution to assist with compliance issues. The software will track due dates, send out reminders, and provide reports to ensure that RIPTA is in compliance at all times with its numerous state and federal requirements.

In FY 2016, the Authority began testing a software to increase the effectiveness of the facilities preventative maintenance program. Reminders are distributed to proper personnel and reports are uploaded after the task has been completed. This provides a clear record that facilities are being properly maintained.

A more advanced software solution is being pursued which will work in conjunction with an asset management system and other Enterprise systems. This software may be incorporated into the new asset management system, but this determination will be made as the project advances to the next phase.

It is currently estimated that the software will cost \$40,000. Federal funds are available for 80% of the project cost with RIPTA Capital Match providing the remaining 20%.

#### Eligibility Software Suite

The Ride department receives ADA applications daily. There is currently one staff member who manually inputs each application determination into the Reveal system and manually tracks processing timeframe and eligibility durations.

The Ride department would like to procure a software to store and track ADA application information. The software would track applications from the date of submission through application processing and eligibility duration based on eligibility category and timeframe, decreasing process times and more effectively tracking and reporting on ADA eligibility outcomes.

Federal funds will be used for 80% of the project cost with RIPTA Capital Match providing the remaining 20%.

#### Enterprise Software/Asset Management

The Federal Transit Administration has implemented a Transit Asset Management program to guide the optimal prioritization of funding at transit properties in order to keep transit networks in a State of Good Repair. The new program requires an inventory of capital assets, asset condition assessments, and new decision support tools.

RIPTA had been working to implement the One Solution Enterprise Resource Planning system, which was intended to meet the requirements of FTA's asset management program. Due to

significant issues with the vendor in delivering a software solution that would meet the needs of the Authority, RIPTA, with guidance from FTA, cancelled the contract with this vendor.

However, RIPTA conducted an extensive business process review, which documented each department's policies, procedures, and processes, which will assist in the procurement of a new product to upgrade the systems used by finance, procurement, human resources, and maintenance.

The remaining funds from this project have been reallocated to a new Asset Management System and Enterprise Resource Planning System. To meet the FTA's Asset Management requirements, RIPTA will likely pursue an Asset Management System first. Early budget estimates are that the project will cost \$2.5 million. Existing federal funds and additional federal formula funds will be used to cover 80% of the project cost with RIPTA's Capital Revolving Loan Fund covering the remaining 20%.

#### [Fuel & Fluid Management System](#)

The fuel and fluid management system will replace the current obsolete fuel management systems currently in use with a single system that will provide more automated functionalities. Some of the paybacks include minimizing the consumption of costly petroleum based fuels and other fluids; assuring fuel and fluid security and accountability; reducing the cost of fuel used by the fleet and providing safe, convenient fueling access for the fleet and reliable and accurate fleet data information. This system will also provide vehicle health monitoring alerts to maintenance, increasing the effectiveness of the preventative maintenance program. This contract was awarded to CoenCorp in FY 2019 in the amount of \$1,747,305, and is 80% federally funded, and matched using the RIPTA Capital Revolving Loan Fund.

#### [Hastus Upgrade & Expansion](#)

Phase 1 of this project, Hastus Upgrade, was completed in 2018. In addition to the Hastus upgrade, the Authority is also adding additional modules. These new modules would offer increased driver management tools integrated with the scheduling software, including enabling drivers to go through the choose-up options at a computer kiosk instead of the current method of pen and paper. The completion of this project is expected to cost \$1.0 million with 80% of the financing coming from federal funds. The remaining 20% will be funded using the RIPTA Capital Revolving Loan Fund. This project is expected to be completed in FY 2020.

#### [Incident/Accident Management Software](#)

RIPTA is in need of an accident and incident management system to report, track, and manage incidents from initial notification, response, and investigation, through claims and corrective actions. Some of this is currently done in the AS/400 system with non-integrated custom programs that do not allow for easy reporting or trend analysis. The estimated cost for this project is \$75,000. Federal funds are available to cover 80% of the project cost with the remaining

coming from RIPTA Capital Match. This software could potentially be included as part of the ATMS System Upgrade.

#### Mobile Marketing and Communications Technology

Marketing requests the procurement of up to 6 tablets and keyboard attachments. The tablets will be used to increase marketing and communications during key outreach events. For example, the tablets can be used to provide mobile fare product and video demonstrations, translation services and more. Outreach teams will be able to have this technological support on-site. Built-in features and downloadable apps can be used to more effectively take notes during public meetings, create legible sign-in sheets, and more. Federal funds are available to cover 80% of the project cost with the remaining coming from RIPTA Capital Match.

#### Phone System Replacement/Upgrade

Ride operates a 12-person contact center comprised of 1 Manager, 2 Supervisors and 9 outbound/inbound agents. This department currently utilizes Shoretel as the base phone and reporting system. Shoretel reporting does not contain all the reports needed to monitor Automatic Call Distribution (ACD) activities, call center performance, and agents' activities.

The Ride department requests the procurement of a Cloud-based call-monitoring system that has the ability to evaluate quality, calibrate quality scores, monitor agents' audio and/or screen interactions, and integrate performance management tools. Federal funds are available to cover 80% of the project cost with the remaining coming from RIPTA Capital Match.

#### Power 9 iSeries – Virtual AS/400

The physical server, iSeries (aka AS/400), is nearing the end of its useful life. In addition to replacing the physical server, as part of the ongoing disaster recovery plan, the system will be duplicated in the cloud. This will allow for easy backups, redundancy, and system restoration if necessary. Federal funds are available to cover 80% of the project cost with the remaining coming from RIPTA Capital Match.

#### Redundancy / Disaster Recovery

A review of current IT systems and infrastructure has been completed. The resulting report provides recommendations with cost-benefit analyses for improving continuity and recovery of IT systems. IT outages can occur for two reasons: planned maintenance or disaster. During planned maintenance, redundancy or replication of databases can ensure access throughout the process. In case of a major incident, replication can minimize downtime of the IT systems. The Authority needs to improve its disaster recovery and business continuity processes and procedures as well as its infrastructure and systems. This project is expected to cost \$1.86 million. This project is 80% federally funded using several grants and the remaining 20% will be matched using the RIPTA Capital Revolving Loan Fund.

### Replacement IT Equipment

Each year the Authority sets aside \$240,000 in federal formula funds for the replacement and upgrades of IT equipment. RIPTA provides \$60,000 in capital matching funds to create a total annual replacement budget of \$300,000. These funds are used to replace or upgrade desktop computers, monitors, software, and other miscellaneous software or equipment needed to keep RIPTA's IT systems in functional order.

### Server Software

In FY 2021, the Authority's Server Software will need upgrading/replacement. The current cost estimate is \$40,000. Federal funds are available for 80% of the upgrade cost with RIPTA Capital Match providing the remaining 20% match.

### Server/SAN Replacement

In order to keep the Authority's IT systems up to date and operational, regular upgrades and replacements need to be scheduled. The IT department recommends replacing the servers starting in FY 2020. The total cost is estimated to be \$400,000. Federal funds are available for 80% of the replacement cost with RIPTA Capital Match providing the remaining 20%.

### Upgrade Network

In order to keep the Authority's IT systems up to date and operational, regular upgrades and replacements need to be scheduled. The IT department recommends upgrading the network. The total cost over the span of the capital budget is estimated to be \$700,000. Federal funds would be used for 80% of the replacement cost with RIPTA Capital Match providing the remaining 20%.

### VMware

In order to keep the Authority's IT systems up to date and operational, regular upgrades and replacements need to be scheduled. The IT department recommends upgrading the VMware. The total cost of the upgrade is estimated to be \$150,000 through FY 2024. Federal funds will be used for 80% of the replacement cost with RIPTA Capital Match providing the remaining 20%.

**Rhode Island Public Transit Authority  
Capital Budget & Capital Improvement Plan  
Fiscal Years 2020 - 2025**

<b>Program/Project</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Grand Total</b>
<b>Rolling Stock</b>							
Fixed Route	\$16,169,269	\$15,806,854	\$15,367,775	\$20,063,397	\$21,687,004	\$17,790,121	\$106,884,420
Fixed Route-DTC	\$2,230,244						\$2,230,244
Fixed Route-ZEV Upgrade			\$7,191,000				\$7,191,000
Flex Vehicles			\$1,758,876				\$1,758,876
Non-Revenue Vehicles	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$1,320,000
Paratransit Vehicles	\$4,487,250	\$2,355,806		\$2,597,276	\$2,727,140	\$2,863,497	\$15,030,969
<b>Rolling Stock Total</b>	<b>\$23,106,763</b>	<b>\$18,382,660</b>	<b>\$24,537,651</b>	<b>\$22,880,673</b>	<b>\$24,634,144</b>	<b>\$20,873,618</b>	<b>\$134,415,509</b>
<b>Transit Corridors</b>							
Downtown Transit Connector	\$10,974,234						\$10,974,234
East Side Tunnel	\$4,000,000	\$4,000,000	\$1,500,000				\$9,500,000
<b>Transit Corridors Total</b>	<b>\$14,974,234</b>	<b>\$4,000,000</b>	<b>\$1,500,000</b>				<b>\$20,474,234</b>
<b>Passenger Facilities</b>							
Community Partnership Projects	\$150,000						\$150,000
Kennedy Plaza Improvement/Upgrade		\$750,000	\$250,000				\$1,000,000
Transit Hubs: Pawtucket/Central Falls	\$6,795,931						\$6,795,931
Transit Hubs: URI Kingston		\$3,750,000	\$3,750,000	\$1,250,000			\$8,750,000
Transit Hubs: Warwick/CCRI	\$600,000	\$700,000					\$1,300,000
<b>Passenger Facilities Total</b>	<b>\$7,545,931</b>	<b>\$5,200,000</b>	<b>\$4,000,000</b>	<b>\$1,250,000</b>			<b>\$17,995,931</b>
<b>Support Facilities</b>							
Chafee Maintenance Facility Rehab	\$1,600,000	\$2,500,000					\$4,100,000
Driver Facilities: Providence City Line	\$50,000						\$50,000
EV Charging Station (705 Elmwood)	\$30,953						\$30,953
Fume Detection Systems (350 Coddington)	\$85,000						\$85,000
Future Facilities Maintenance (All RIPTA Facilities)	\$45,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$170,000
Gasoline Fuel Stand	\$600,000						\$600,000
Gate Install/Upgrade		\$200,000	\$200,000				\$400,000
Newport Fuel Line Replacement	\$550,000						\$550,000
Oil Water Separators (All RIPTA Facilities)	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$360,000
Security Camera System Upgrade	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
Security Enhancements (All RIPTA Facilities)	\$250,000	\$50,000	\$50,000	\$250,000	\$250,000	\$250,000	\$1,100,000
ZEV Infrastructure		\$1,500,000	\$400,000	\$700,000			\$2,600,000
<b>Support Facilities Total</b>	<b>\$3,370,953</b>	<b>\$4,435,000</b>	<b>\$835,000</b>	<b>\$1,135,000</b>	<b>\$435,000</b>	<b>\$435,000</b>	<b>\$10,645,953</b>
<b>Transit Enhancements</b>							
Bus on Shoulder			\$450,000				\$450,000
Fare Technology Upgrade	\$2,800,000						\$2,800,000

**Rhode Island Public Transit Authority  
Capital Budget & Capital Improvement Plan  
Fiscal Years 2020 - 2025**

<b>Program/Project</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Grand Total</b>
IVR Upgrade	\$50,000				\$55,000		\$105,000
Real-Time Scheduling/Mobility on Demand		\$400,000					\$400,000
Transit Signal Prioritization - Implementation	\$1,261,447						\$1,261,447
Web-Based Reservation System		\$50,000					\$50,000
<b>Transit Enhancements Total</b>	<b>\$4,111,447</b>	<b>\$450,000</b>	<b>\$450,000</b>		<b>\$55,000</b>		<b>\$5,066,447</b>
<b>Support Systems</b>							
ATMS Radio Replacement		\$3,000,000	\$1,500,000				\$4,500,000
ATMS Upgrade Current Systems	\$500,000						\$500,000
Compliance Software		\$40,000					\$40,000
Eligibility Software Suite		\$300,000					\$300,000
Enterprise Software/Asset Management		\$500,000	\$2,000,000				\$2,500,000
Fuel and Fluid Management System	\$1,568,932						\$1,568,932
Hastus Upgrade and Expansion	\$1,018,773						\$1,018,773
Incident/Accident Management Software		\$250,000					\$250,000
Mobile Marketing and Communications Technology	\$6,000						\$6,000
Phone System Replacement/Upgrade			\$100,000				\$100,000
Power 9 iSeries - Virtual AS400	\$150,000						\$150,000
Redundancy/Disaster Recovery	\$860,000	\$1,000,000					\$1,860,000
Replacement IT Equipment	\$350,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,850,000
Server Software	\$50,000	\$40,000					\$90,000
Server/SAN Replacement	\$150,000	\$100,000	\$50,000	\$50,000	\$50,000		\$400,000
Upgrade Network	\$100,000	\$150,000	\$150,000	\$150,000	\$150,000		\$700,000
VMWare	\$50,000		\$50,000		\$50,000		\$150,000
<b>Support Systems Total</b>	<b>\$4,803,705</b>	<b>\$5,680,000</b>	<b>\$4,150,000</b>	<b>\$500,000</b>	<b>\$550,000</b>	<b>\$300,000</b>	<b>\$15,983,705</b>
<b>Grand Total</b>	<b>\$57,913,033</b>	<b>\$38,147,660</b>	<b>\$35,472,651</b>	<b>\$25,765,673</b>	<b>\$25,674,144</b>	<b>\$21,608,618</b>	<b>\$204,581,779</b>

Rhode Island Public Transit Authority  
Capital Budget  
FY 2020

Program	Project	Match Source	Project Funding		
			Total	FTA	Match
Rolling Stock	Fixed Route	RIDOT	\$15,350,474	\$12,280,379	\$3,070,095
		SFRLF	\$818,795	\$655,036	\$163,759
	Fixed Route-DTC	RIDOT	\$2,230,244	\$1,705,481	\$524,763
	Non-Revenue Vehicles	CRLF	\$220,000	\$176,000	\$44,000
	Paratransit Vehicles	PRLF	\$4,487,250	\$3,589,800	\$897,450
<b>Rolling Stock Total</b>			<b>\$23,106,763</b>	<b>\$18,406,696</b>	<b>\$4,700,067</b>
Transit Corridors	Downtown Transit Connector	RIDOT	\$10,974,234	\$8,422,908	\$2,551,326
	East Side Tunnel	RICAP	\$4,000,000	\$3,200,000	\$800,000
<b>Transit Corridors Total</b>			<b>\$14,974,234</b>	<b>\$11,622,908</b>	<b>\$3,351,326</b>
Passenger Facilities	Community Partnership Projects	Local	\$150,000	\$120,000	\$30,000
	Transit Hubs: Warwick/CCRI	RICAP	\$600,000	\$480,000	\$120,000
	Transit Hubs: Pawtucket/Central Falls	RICAP	\$6,795,931	\$5,436,745	\$1,359,186
<b>Passenger Facilities Total</b>			<b>\$7,545,931</b>	<b>\$6,036,745</b>	<b>\$1,509,186</b>
Support Facilities	Fume Detection Systems (350 Coddington)	RIPTA Capital Match	\$85,000	\$68,000	\$17,000
	Future Facilities Maintenance (All RIPTA Facilities)	RICAP	\$45,000	\$36,000	\$9,000
	Gasoline Fuel Stand	PRLF	\$600,000	\$480,000	\$120,000
	Newport Fuel Line Replacement	RIPTA Capital Match	\$550,000	\$440,000	\$110,000
	Oil Water Separators (All RIPTA Facilities)	RIPTA Capital Match	\$60,000	\$48,000	\$12,000
	Security Enhancements (All RIPTA Facilities)	RICAP	\$250,000	\$200,000	\$50,000
	Chafee Maintenance Facility Rehab	RICAP	\$1,500,000	\$1,200,000	\$300,000
		RIPTA Capital Match	\$100,000	\$80,000	\$20,000
	Driver Facilities: Providence City Line	RICAP	\$50,000	\$40,000	\$10,000
	EV Charging Station (705 Elmwood)	Local	\$21,467		\$21,467
		RIPTA Capital Match	\$9,486	\$7,589	\$1,897
Security Camera System Upgrade	RICAP	\$100,000	\$80,000	\$20,000	
<b>Support Facilities Total</b>			<b>\$3,370,953</b>	<b>\$2,679,589</b>	<b>\$691,364</b>
Transit Enhancements	Fare Technology Upgrade	CRLF	\$2,800,000	\$2,240,000	\$560,000
	IVR Upgrade	RIPTA Capital Match	\$50,000	\$40,000	\$10,000
	Transit Signal Prioritization - Implementation	RIPTA Capital Match	\$1,261,447	\$1,009,158	\$252,289

**Rhode Island Public Transit Authority  
Capital Budget  
FY 2020**

Program	Project	Match Source	Project Funding		
			Total	FTA	Match
<b>Transit Enhancements Total</b>			<b>\$4,111,447</b>	<b>\$3,289,158</b>	<b>\$822,289</b>
<b>Support Systems</b>	<b>ATMS Upgrade Current Systems</b>	CRLF	\$500,000	\$400,000	\$100,000
	<b>Fuel and Fluid Management System</b>	CRLF	\$1,568,932	\$1,255,146	\$313,786
	<b>Hastus Upgrade and Expansion</b>	CRLF	\$1,018,773	\$815,018	\$203,755
	<b>Mobile Marketing and Communications Technology</b>	RIPTA Capital Match	\$6,000	\$4,800	\$1,200
	<b>Power 9 iSeries - Virtual AS400</b>	RIPTA Capital Match	\$150,000	\$120,000	\$30,000
	<b>Redundancy/Disaster Recovery</b>	RIPTA Capital Match	\$860,000	\$688,000	\$172,000
	<b>Replacement IT Equipment</b>	RIPTA Capital Match	\$350,000	\$280,000	\$70,000
	<b>Server Software</b>	RIPTA Capital Match	\$50,000	\$40,000	\$10,000
	<b>Server/SAN Replacement</b>	RIPTA Capital Match	\$150,000	\$120,000	\$30,000
	<b>Upgrade Network</b>	RIPTA Capital Match	\$100,000	\$80,000	\$20,000
	<b>VMWare</b>	RIPTA Capital Match	\$50,000	\$40,000	\$10,000
<b>Support Systems Total</b>			<b>\$4,803,705</b>	<b>\$3,842,964</b>	<b>\$960,741</b>
<b>Grand Total</b>			<b>\$57,913,033</b>	<b>\$45,878,060</b>	<b>\$12,034,973</b>



**Rhode Island Public Transit Authority  
Capital Improvement Plan  
FY 2021**

Program	Project	Match Source	Project Funding			
			Total	FTA	Match	
Rolling Stock	Fixed Route	Gas Tax	\$15,259,129	\$12,207,303	\$3,051,826	
		SFRLF	\$547,725	\$438,180	\$109,545	
	Non-Revenue Vehicles	CRLF	\$220,000	\$176,000	\$44,000	
	Paratransit Vehicles	PRLF	\$2,355,806	\$1,884,645	\$471,161	
<b>Rolling Stock Total</b>			<b>\$18,382,660</b>	<b>\$14,706,128</b>	<b>\$3,676,532</b>	
Transit Corridors	East Side Tunnel	RICAP	\$4,000,000	\$3,200,000	\$800,000	
<b>Transit Corridors Total</b>			<b>\$4,000,000</b>	<b>\$3,200,000</b>	<b>\$800,000</b>	
Passenger Facilities	Transit Hubs: Warwick/CCRI	RICAP	\$700,000	\$560,000	\$140,000	
	Kennedy Plaza Improvement/Upgrade	RIPTA Capital Match	\$750,000	\$600,000	\$150,000	
	Transit Hubs: URI Kingston	Other	\$3,750,000	\$3,000,000	\$750,000	
<b>Passenger Facilities Total</b>			<b>\$5,200,000</b>	<b>\$4,160,000</b>	<b>\$1,040,000</b>	
Support Facilities	Future Facilities Maintenance (All RIPTA Facilities)	RICAP	\$25,000	\$20,000	\$5,000	
	Gate Install/Upgrade	RICAP	\$200,000	\$160,000	\$40,000	
	Oil Water Separators (All RIPTA Facilities)	RIPTA Capital Match	\$60,000	\$48,000	\$12,000	
	Security Enhancements (All RIPTA Facilities)	RICAP	\$50,000	\$40,000	\$10,000	
	ZEV Infrastructure	Other		\$1,000,000		\$1,000,000
		RIPTA Capital Match		\$500,000	\$400,000	\$100,000
	Chafee Maintenance Facility Rehab	RICAP	\$2,500,000	\$2,000,000	\$500,000	
	Security Camera System Upgrade	RICAP	\$100,000	\$80,000	\$20,000	
<b>Support Facilities Total</b>			<b>\$4,435,000</b>	<b>\$2,748,000</b>	<b>\$1,687,000</b>	
Transit Enhancements	Real-Time Scheduling/Mobility on Demand	RIPTA Capital Match	\$400,000	\$320,000	\$80,000	
	Web-Based Reservation System	RIPTA Capital Match	\$50,000	\$40,000	\$10,000	
<b>Transit Enhancements Total</b>			<b>\$450,000</b>	<b>\$360,000</b>	<b>\$90,000</b>	
Support Systems	ATMS Radio Replacement	CRLF	\$3,000,000	\$2,400,000	\$600,000	
	Compliance Software	RIPTA Capital Match	\$40,000	\$32,000	\$8,000	
	Eligibility Software Suite	RIPTA Capital Match	\$300,000	\$240,000	\$60,000	
	Enterprise Software/Asset Management	CRLF	\$500,000	\$400,000	\$100,000	
	Incident/Accident Management Software	RIPTA Capital Match	\$250,000	\$200,000	\$50,000	
	Redundancy/Disaster Recovery	RIPTA Capital Match	\$1,000,000	\$800,000	\$200,000	

**Rhode Island Public Transit Authority  
Capital Improvement Plan  
FY 2021**

Program	Project	Match Source	Project Funding		
			Total	FTA	Match
Support Systems	Replacement IT Equipment	RIPTA Capital Match	\$300,000	\$240,000	\$60,000
	Server Software	RIPTA Capital Match	\$40,000	\$32,000	\$8,000
	Server/SAN Replacement	RIPTA Capital Match	\$100,000	\$80,000	\$20,000
	Upgrade Network	RIPTA Capital Match	\$150,000	\$120,000	\$30,000
<b>Support Systems Total</b>			<b>\$5,680,000</b>	<b>\$4,544,000</b>	<b>\$1,136,000</b>
<b>Grand Total</b>			<b>\$38,147,660</b>	<b>\$29,718,128</b>	<b>\$8,429,532</b>

**Rhode Island Public Transit Authority  
Capital Improvement Plan  
FY 2022**

Program	Project	Match Source	Project Funding		
			Total	FTA	Match
Rolling Stock	Fixed Route	State Bus Match	\$15,367,775	\$12,294,220	\$3,073,555
		Other	\$6,147,000		\$6,147,000
	Fixed Route-ZEV Upgrade	State Bus Match	\$1,044,000	\$835,200	\$208,800
		State Bus Match	\$1,758,876	\$1,407,101	\$351,775
		CRLF	\$220,000	\$176,000	\$44,000
<b>Rolling Stock Total</b>		<b>\$24,537,651</b>	<b>\$14,712,521</b>	<b>\$9,825,130</b>	
Transit Corridors	East Side Tunnel	RICAP	\$1,500,000	\$1,200,000	\$300,000
<b>Transit Corridors Total</b>			<b>\$1,500,000</b>	<b>\$1,200,000</b>	<b>\$300,000</b>
Passenger Facilities	Kennedy Plaza Improvement/Upgrade	RIPTA Capital Match	\$250,000	\$200,000	\$50,000
	Transit Hubs: URI Kingston	Other	\$3,750,000	\$3,000,000	\$750,000
<b>Passenger Facilities Total</b>			<b>\$4,000,000</b>	<b>\$3,200,000</b>	<b>\$800,000</b>
Support Facilities	Future Facilities Maintenance (All RIPTA Facilities)	RICAP	\$25,000	\$20,000	\$5,000
		RICAP	\$200,000	\$160,000	\$40,000
		RIPTA Capital Match	\$60,000	\$48,000	\$12,000
		RICAP	\$50,000	\$40,000	\$10,000
		RIPTA Capital Match	\$400,000	\$320,000	\$80,000
		RICAP	\$100,000	\$80,000	\$20,000
<b>Support Facilities Total</b>			<b>\$835,000</b>	<b>\$668,000</b>	<b>\$167,000</b>
Transit Enhancements	Bus on Shoulder	RIPTA Capital Match	\$450,000	\$360,000	\$90,000
<b>Transit Enhancements Total</b>			<b>\$450,000</b>	<b>\$360,000</b>	<b>\$90,000</b>
Support Systems	ATMS Radio Replacement	CRLF	\$1,500,000	\$1,200,000	\$300,000
		CRLF	\$2,000,000	\$1,600,000	\$400,000
		CRLF	\$100,000	\$80,000	\$20,000
		RIPTA Capital Match	\$300,000	\$240,000	\$60,000
		RIPTA Capital Match	\$50,000	\$40,000	\$10,000
		RIPTA Capital Match	\$150,000	\$120,000	\$30,000
		RIPTA Capital Match	\$50,000	\$40,000	\$10,000
<b>Support Systems Total</b>			<b>\$4,150,000</b>	<b>\$3,320,000</b>	<b>\$830,000</b>
<b>Grand Total</b>			<b>\$35,472,651</b>	<b>\$23,460,521</b>	<b>\$12,012,130</b>

**Rhode Island Public Transit Authority  
Capital Improvement Plan  
FY 2023**

Program	Project	Match Source	Project Funding		
			Total	FTA	Match
Rolling Stock	Fixed Route	State Bus Match	\$20,063,397	\$16,050,718	\$4,012,679
	Non-Revenue Vehicles	CRLF	\$220,000	\$176,000	\$44,000
	Paratransit Vehicles	PRLF	\$2,597,276	\$2,077,821	\$519,455
<b>Rolling Stock Total</b>			<b>\$22,880,673</b>	<b>\$18,304,539</b>	<b>\$4,576,134</b>
Passenger Facilities	Transit Hubs: URI Kingston	Other	\$1,250,000	\$1,000,000	\$250,000
<b>Passenger Facilities Total</b>			<b>\$1,250,000</b>	<b>\$1,000,000</b>	<b>\$250,000</b>
Support Facilities	Future Facilities Maintenance (All RIPTA Facilities)	RICAP	\$25,000	\$20,000	\$5,000
	Oil Water Separators (All RIPTA Facilities)	RIPTA Capital Match	\$60,000	\$48,000	\$12,000
	Security Enhancements (All RIPTA Facilities)	RICAP	\$250,000	\$200,000	\$50,000
	ZEV Infrastructure	Other	\$700,000		\$700,000
	Security Camera System Upgrade	RICAP	\$100,000	\$80,000	\$20,000
<b>Support Facilities Total</b>			<b>\$1,135,000</b>	<b>\$348,000</b>	<b>\$787,000</b>
Support Systems	Replacement IT Equipment	RIPTA Capital Match	\$300,000	\$240,000	\$60,000
	Server/SAN Replacement	RIPTA Capital Match	\$50,000	\$40,000	\$10,000
	Upgrade Network	RIPTA Capital Match	\$150,000	\$120,000	\$30,000
<b>Support Systems Total</b>			<b>\$500,000</b>	<b>\$400,000</b>	<b>\$100,000</b>
<b>Grand Total</b>			<b>\$25,765,673</b>	<b>\$20,052,539</b>	<b>\$5,713,134</b>

**Rhode Island Public Transit Authority  
Capital Improvement Plan  
FY 2024**

Program	Project	Match Source	Project Funding		
			Total	FTA	Match
Rolling Stock	Fixed Route	State Bus Match	\$21,687,004	\$17,349,603	\$4,337,401
	Non-Revenue Vehicles	CRLF	\$220,000	\$176,000	\$44,000
	Paratransit Vehicles	PRLF	\$2,727,140	\$2,181,712	\$545,428
<b>Rolling Stock Total</b>			<b>\$24,634,144</b>	<b>\$19,707,315</b>	<b>\$4,926,829</b>
Support Facilities	Future Facilities Maintenance (All RIPTA Facilities)	RICAP	\$25,000	\$20,000	\$5,000
	Oil Water Separators (All RIPTA Facilities)	RIPTA Capital Match	\$60,000	\$48,000	\$12,000
	Security Enhancements (All RIPTA Facilities)	RICAP	\$250,000	\$200,000	\$50,000
	Security Camera System Upgrade	RICAP	\$100,000	\$80,000	\$20,000
<b>Support Facilities Total</b>			<b>\$435,000</b>	<b>\$348,000</b>	<b>\$87,000</b>
Transit Enhancements	IVR Upgrade	RIPTA Capital Match	\$55,000	\$44,000	\$11,000
<b>Transit Enhancements Total</b>			<b>\$55,000</b>	<b>\$44,000</b>	<b>\$11,000</b>
Support Systems	Replacement IT Equipment	RIPTA Capital Match	\$300,000	\$240,000	\$60,000
	Server/SAN Replacement	RIPTA Capital Match	\$50,000	\$40,000	\$10,000
	Upgrade Network	RIPTA Capital Match	\$150,000	\$120,000	\$30,000
	VMWare	RIPTA Capital Match	\$50,000	\$40,000	\$10,000
<b>Support Systems Total</b>			<b>\$550,000</b>	<b>\$440,000</b>	<b>\$110,000</b>
<b>Grand Total</b>			<b>\$25,674,144</b>	<b>\$20,539,315</b>	<b>\$5,134,829</b>

**Rhode Island Public Transit Authority  
Capital Improvement Plan  
FY 2025**

Program	Project	Match Source	Project Funding		
			Total	FTA	Match
Rolling Stock	Fixed Route	State Bus Match	\$17,790,121	\$14,232,097	\$3,558,024
	Non-Revenue Vehicles	CRLF	\$220,000	\$176,000	\$44,000
	Paratransit Vehicles	PRLF	\$2,863,497	\$2,290,798	\$572,699
<b>Rolling Stock Total</b>			<b>\$20,873,618</b>	<b>\$16,698,895</b>	<b>\$4,174,723</b>
Support Facilities	Future Facilities Maintenance (All RIPTA Facilities)	RICAP	\$25,000	\$20,000	\$5,000
	Oil Water Separators (All RIPTA Facilities)	RIPTA Capital Match	\$60,000	\$48,000	\$12,000
	Security Enhancements (All RIPTA Facilities)	RICAP	\$250,000	\$200,000	\$50,000
	Security Camera System Upgrade	RICAP	\$100,000	\$80,000	\$20,000
<b>Support Facilities Total</b>			<b>\$435,000</b>	<b>\$348,000</b>	<b>\$87,000</b>
Support Systems	Replacement IT Equipment	RIPTA Capital Match	\$300,000	\$240,000	\$60,000
<b>Support Systems Total</b>			<b>\$300,000</b>	<b>\$240,000</b>	<b>\$60,000</b>
<b>Grand Total</b>			<b>\$21,608,618</b>	<b>\$17,286,895</b>	<b>\$4,321,723</b>

**Rhode Island Public Transit Authority  
Capital Budget & Capital Improvement Plan  
Funding Sources by Fiscal Year (FY 2020 - FY 2025)**

<b>Local Match Source</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Grand Total</b>
CRLF	\$1,221,541	\$744,000	\$764,000	\$44,000	\$44,000	\$44,000	\$2,861,541
Gas Tax		\$3,051,826					\$3,051,826
Local	\$51,467						\$51,467
Other		\$1,750,000	\$6,897,000	\$950,000			\$9,597,000
PRLF	\$1,017,450	\$471,161		\$519,455	\$545,428	\$572,699	\$3,126,193
RICAP	\$2,668,186	\$1,515,000	\$375,000	\$75,000	\$75,000	\$75,000	\$4,783,186
RIDOT	\$6,146,184						\$6,146,184
RIPTA Capital Match	\$766,386	\$788,000	\$342,000	\$112,000	\$133,000	\$72,000	\$2,213,386
SFRLF	\$163,759	\$109,545					\$273,304
State Bus Match			\$3,634,130	\$4,012,679	\$4,337,401	\$3,558,024	\$15,542,234
<b>Grand Total</b>	<b>\$12,034,973</b>	<b>\$8,429,532</b>	<b>\$12,012,130</b>	<b>\$5,713,134</b>	<b>\$5,134,829</b>	<b>\$4,321,723</b>	<b>\$47,646,321</b>

**Federal Portion of Projects**

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Grand Total</b>
<b>FTA Grants</b>	<b>\$45,878,060</b>	<b>\$29,718,128</b>	<b>\$23,460,521</b>	<b>\$20,052,539</b>	<b>\$20,539,315</b>	<b>\$17,286,895</b>	<b>\$156,935,458</b>