VIRGINIA PASSENGER RAIL AUTHORITY

Adopted Fiscal Year 2022 Budget

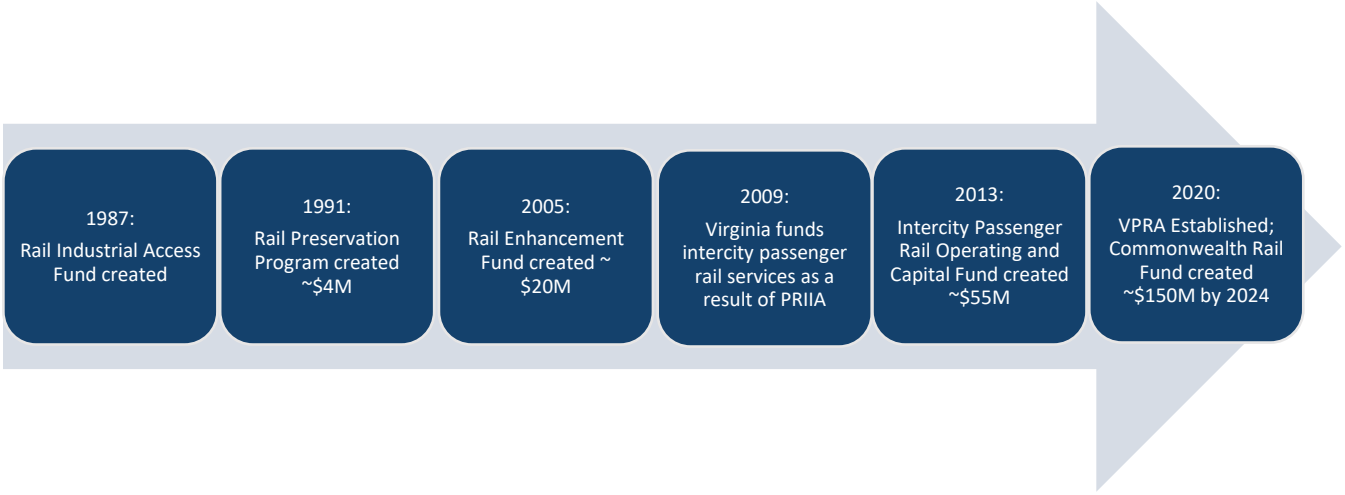
INTRODUCTION

The Commonwealth is ideally located for the expansion of passenger rail service, situated on the southern terminus of Amtrak's Northeast Corridor (NEC). Virginia is also the gateway to the Southeast Rail Corridor (SRC), with existing intercity services coming out of the NEC to Virginia, North Carolina, and points further south via Amtrak Long Distance Trains. Furthermore, Virginia Railway Express commuter service is vital to the Northern Virginia/Washington D.C. region, and freight rail service coming to/from the Port of Virginia is vital to Virginia's economy, providing critical access to national and international markets. Clearly, rail transportation is a vital asset to the Commonwealth of Virginia.

Future growth of passenger and freight service between the NEC and SRC must traverse the congested Richmond to Washington D.C. rail corridor, which includes the Long Bridge – one of the single largest bottlenecks for passenger and freight rail in the country. With the Long Bridge operating at 98% capacity during peak hours, Virginia requires capacity investments in this region to benefit all rail service in the Commonwealth, and ensure rail continues its vital role in our future economic growth.

After decades of investment in the privately owned rail network to address capacity needs, and realizing the increasing demands for additional passenger service, Virginia partnered with CSX Transportation to analyze future service needs and capacity constraints. The resulting Transforming Rail in Virginia (TRV) initiative includes a program of projects with a vision for public ownership of railroad assets to accommodate future passenger needs. The Commonwealth is pursuing innovative ways to manage and finance the construction of the $3.7 billion TRV program of projects and to oversee the associated growth in passenger rail services.

Figure 1: Commonwealth of Virginia Rail Funding Programs, 1987-2020



The TRV initiative represents a paradigm shift of Virginia's role in rail transportation. The Commonwealth will now own active railroad tracks and right of way, and ultimately control passenger rail activities on its corridor from Richmond to DC. In anticipation of the state's new responsibilities, the General Assembly and Governor Northam enabled Chapter 1230 of the 2020 Acts of Assembly, which provides a significant increase in rail funding and a change in the management of intercity passenger rail

in Virginia. Effective July 1, 2020 the Virginia Passenger Rail Authority (VPRA) was inaugurated to manage ownership of rail assets, expand passenger rail services, and implement the TRV program.

BUDGET

The development of this VPRA budget is guided by the core objectives of the VPRA:

- Promote new approaches to economic development through an increase in passenger rail capacity.
- Promote, sustain, and expand the availability of passenger and commuter rail service to increase ridership by connecting population centers.
- Own rail right-of-way and infrastructure assets.
- Oversee passenger rail operations statewide (not an operator).
- Operate independently of some state requirements to provide flexibility in delivering the TRV Program.

The budget for VPRA was developed using an accrual basis of accounting with the cash flows of certain large projects utilizing the existing preliminary cost estimate. While the budget is for Fiscal Year (FY) 2022, a forecast of capital expenditures is made for an additional five years through FY2027.

The fiscal year for VPRA runs from July 1st through June 30th. As seen in Table 1, the budget has three components: operations, capital projects, and capital grants. The FY2022 operating and capital budget for VPRA totals $452.7 million (M) as compared to a pro-forma budget for FY2021 of $348.0M. The increase results from increased Amtrak operating costs, the progression of capital projects within the TRV program, and advancement of projects funded with capital grants. In subsequent sections of this budget document, a more detailed breakdown is provided of these components.

Table 1: Summary of FY2021 and FY2022 Budgets

Budget Component ($ in millions)	FY21	FY22	Variance	
			Amount	%
Operations	$21.7	$51.2	$29.5	136%
Capital Projects	289.8	321.1	31.3	11%
Capital Grants	36.5	80.4	43.9	120%
Total	**$348.0**	**$452.7**	**$104.7**	**30%**

The operating budget includes the general and administrative costs to run the Authority and the operational costs of the state sponsored intercity passenger service. Both of these elements are estimated to increase significantly during FY2022 due to the addition of Amtrak service and mobilization of the VPRA.

One of the core functions of VPRA is providing intercity passenger rail service to the citizens of the Commonwealth. The operating budget includes the costs of the six state sponsored, regional trains at the net required subsidy level which shows a marked increase for FY2022 – $19.4M vs. $46.0M. During FY2021 the pandemic had significant negative impact on ridership and the resulting passenger ticket revenues. This loss of revenue was partially offset by funding provided to Amtrak in the CARES Act. At the time of development of this budget, the impact of the most recently passed pandemic relief package on the costs of state supported service was not known and has not been included.

The administrative costs are anticipated to rise from $2.3M to $5.2M as VPRA brings on staffing resources during FY2022 to execute the passenger rail program. Additionally, the increase reflects several one-time costs (information technology, professional services, and office furniture) that are anticipated to occur in FY2022 during the mobilization of the organization.

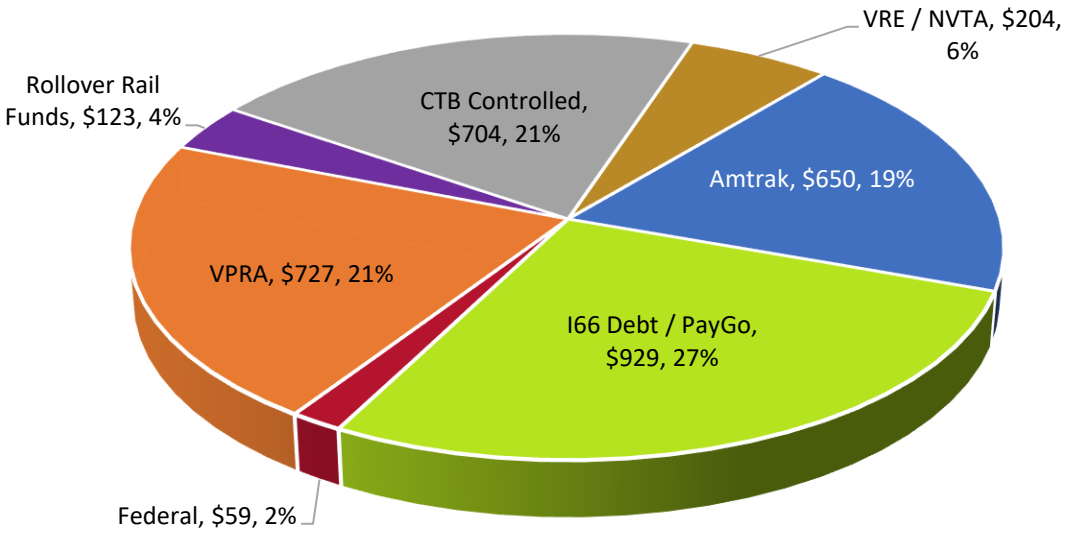
The capital budget for the Authority was broken down into two categories based on the responsibilities for executing the projects. Capital Projects are directly managed by VPRA, and all funding for these projects is subject to the VPRA financial control system. Capital Grants are projects in which VPRA provides capital funding to a third party (such as a Class I Railroad or local government) that executes design and construction utilizing their respective financial control systems. As displayed in Table 2 below, the FY2022 total capital budget for the Authority is $401.5M and the six year capital expenditure forecast totals $3.8 billion.

Table 2: Summary of Six Year Capital Expenditure Forecast

Capital Budget Category ($ in millions)	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total
Projects	$289.8	$321.1	$329.3	$321.5	$890.6	$840.2	$403.1	$3,395.6
Grants	36.5	80.4	96.3	76.6	61.5	43.2	21.0	415.5
Total	**$326.3**	**$401.5**	**$425.6**	**$398.1**	**$952.1**	**$883.4**	**$424.1**	**$3,811.1**

The primary capital project included in the VPRA budget is the TRV initiative which is estimated to be completed in FY2030 – a ten year project life cycle. A separate financial planning effort has been undertaken to develop a financial plan for the entire ten year period of the TRV project, while only the initial seven years are shown in this capital forecast. The main elements of the TRV initiative are the expansion of the Long Bridge, purchase of right of way within the existing rail corridors in Virginia, and construction of 37 miles of sidings between Richmond and DC. The investments will result in significant increases in passenger service across the Commonwealth including a doubling of service between DC and Richmond.

Figure 2: VPRA Capital Projects Funding by Source ($ in millions)



The $3.4 billion of Capital Projects included in this forecast are funded through several sources as depicted in Figure 2. A large share (~50%) of the funds that includes the I66 toll funds are allocated and approved by the Commonwealth Transportation Board (CTB). The CTB has allocated funds through FY2021 and included planned allocations in its Six Year Improvement Plan. The remaining 25% of the sources of funding are in varying stages of finalizing formal agreement. Ongoing coordination with these funding stakeholders will take place in FY21 and FY22 to fully commit funds for the design, construction and financing of the TRV program.

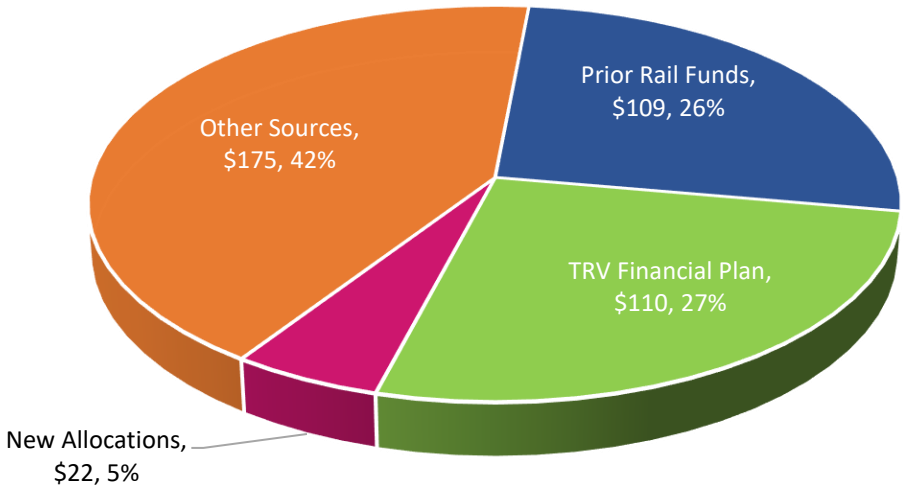
Approximately 25% of the sources of funding for the Capital Projects are under the oversight and approval of VPRA. Table 3 shows the projected revenues of the VPRA 93% share of the Commonwealth Rail Fund for the next six years as well as the projected proceeds from leveraging the gross passenger ticket revenues planned for FY2025. The total revenues are projected to cover the VPRA operating costs, a share of the capital grant commitments, and the amount needed to finance the temporary liquidity needed on the TRV project.

Table 3: Six Year Revenue Forecast

Description ($ in millions)	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total
VPRA Revenues	$91.6	$104.5	$122.2	$137.6	$141.6	$145.6	$146.3	$889.4
Passenger Ticket Financing	-	-	-	-	210.0	-	-	210.0
Total	91.6	104.5	122.2	137.6	351.6	145.6	146.3	1,099.4
Less: Capital Projects Needs	48.8	30.1	74.0	84.3	300.6	94.3	95.1	727.2
Total for Operations/Grants	**$42.8**	**$74.4**	**$48.2**	**$53.3**	**$51.0**	**$51.3**	**$51.2**	**$372.2**

The third component of the budget is the capital grants to outside stakeholders, as shown in Figure 3. A total of $22.0M of the total capital grants budget of $415.5M represent allocations for newly recommended grants for station improvements and display signs as well as positive train control improvements. The remainder of these grants along with the funds allocated in FY2020 and prior came from the rail programs administered by the Department of Rail and Public Transportation (DRPT). The additional costs related to these grants that did not already have rail funds allocated to them are funded by outside sources of funding ($175M) such as SmartScale and Federal RSTP/CMAQ programs and the related state match. Additionally, the track lease payments of Virginia Railway Express (VRE) were included in the TRV financial planning process ($110M).

Figure 3: Capital Grant Funding by Source ($ in millions)



VPRA

OPERATING BUDGET

- One year budget (FY2022); will include an estimate for FY2021 for comparison
- Based on anticipated expenditures using an accrual basis
- Zero based estimate for FY2022; FY2021 was a high level estimate that was based on 5% of revenues
- Two main elements
    1. Amtrak Operations Costs
    2. Administration

VIRGINIA PASSENGER RAIL AUTHORITY
OPERATING BUDGET
(IN MILLIONS)

Project Description	FY21	FY22
Administrative Budget	**$ 2.3**	**$ 5.2**
Roanoke Service - Amtrak Route 46 (1 daily roundtrip)		
Operating Support	3.5	6.0
Capital Equipment Charge	-	-
Subtotal	3.5	6.0
Newport News Service - Amtrak Route 47 (2 daily round trips)		
Operating Support	6.5	12.0
Capital Equipment Charge	1.2	1.2
Subtotal	7.7	13.2
Norfolk Service - Amtrak Route 50 (2 daily roundtrips)		
Operating Support	2.9	7.5
Capital Equipment Charge	2.4	2.4
Subtotal	5.3	9.9
Richmond Service - Amtrak Route 51 (1 daily roundtrip)		
Operating Support	0.8	6.0
Capital Equipment Charge	0.9	1.0
Subtotal	1.7	7.0
Future Roanoke/NRV Operations		
Operating Support	-	6.0
Capital Equipment Charge	-	-
Subtotal	-	6.0
Future Norfolk Train 3 Operations		
Operating Support	-	2.2
Capital Equipment Charge	-	0.5
Subtotal	-	2.7
Bedford Amtrak Thruway Intercity Bus Connector	0.3	0.3
Amtrak Marketing Costs	0.9	0.9
Total Operating Budget	**$ 21.7**	**$ 51.2**

VPRA ADMINISTRATIVE BUDGET

DESCRIPTION:

The FY21 administrative budget consists of the estimated costs of the DRPT employees and related benefits for their time worked on VPRA activities. The time worked is assessed each quarter and billed to VPRA with an overhead rate which includes rent, information technology, attorney's services, and other central agency charges. The administrative budget for FY22 includes salaries and benefits for 28 employees and larger one-time costs for the acquisition of an enterprise resource planning system and various professional support consultants to assist with ongoing establishment of the Authority. The 'Training Travel Other' category includes: employee training and conferences, work travel to oversee projects, employee incentives - bus pass subsidy or tuition reimbursement, organizational memberships, work apparel, and food and dietary costs.

EXPENSE CATEGORY	FY 2021	FY 2022
PAYROLL	$ 1,950,000	$ 3,423,000
TRAINING TRAVEL OTHER	18,000	138,700
OFFICE FUNCTIONS	5,000	12,300
OUTSIDE SUPPORT SERVICES	146,500	531,000
INFORMATION TECHNOLOGY	98,000	904,000
OFFICE BUILDING & RELATED	45,000	157,000
TOTAL	$ 2,262,500	$ 5,166,000

Project Description	FY21 (Millions)	FY22 (Millions)
VPRA Administrative Budget	**$2.3**	**$5.2**

AMTRAK OPERATIONAL SUPPORT

DESCRIPTION:

Under Section 209 of the Passenger Rail Investment and Improvement Act of 2008 ("PRIIA"), Congress required that Amtrak, in consultation with the relevant states, develop and implement a methodology for allocating the operating costs of rail routes of not more than 750 miles outside the of the Northeast Corridor (NEC) between Boston, MA and Washington, DC. This is today known as the PRIIA 209 Methodology.

Per the PRIIA 209 Methodology, the VPRA provides operational funding for four intercity passenger routes, which consist of six daily round-trip trains between Washington, D.C. and points in Virginia (known as Northeast Regional trains) through an annual agreement with Amtrak. Virginia's state sponsored services all continue north of Washington, D.C. on Amtrak's NEC.

Ticket revenues offset operating costs. Pre-COVID, revenues from Virginia state sponsored routes covered a significant portion of operating expenses, and even accumulated a credit during peak travel seasons (holidays, summer months, spring break, and special events). However, the COVID-19 Pandemic eroded ridership and revenues beginning in March 2020. In response to the COVID-19 Pandemic, Congress has passed several COVID relief bills which included funding to offset the loss of ridership and revenue on Amtrak State-supported routes. The CARES Act provided $236M in relief funding, which lasted through January 2021. The second round of federal stimulus funding has allocated $174.9M to states for operating payment assistance. While the cost allocation methodology for new stimulus funding is not yet worked out, Virginia is expected to receive an operating credit to offset the loss of revenues due to the prolonged COVID pandemic in FY21.

Route Number	Frequency
46 Roanoke	One daily round-trip
47 Newport News	Two daily round-trips
50 Norfolk	Two daily round-trips
51 Richmond	One daily round-trip

Project Benefit: The benefits of moving passengers on the rail system include less congestion on highways, more efficient fuel consumption, lowered greenhouse gas emissions, and reduced accidents. The cost avoidance associated with the shift from car to passenger rail is about 46 cents per passenger-mile of rail use, or about $190M annually in Virginia.

Project Description	FY21 (Millions)	FY22 (Millions)
Amtrak Operational Support	**$13.7**	**$39.7**

AMTRAK CAPITAL EQUIPMENT

DESCRIPTION:

Under the operating agreement between Amtrak and Virginia for state sponsored service Amtrak provides capital equipment/rolling stock for Virginia's intercity passenger rail service. Under the PRIIA 209 Methodology, capital equipment usage fees are charged to the Commonwealth. The capital equipment usage fees include forecasted expenses to maintain a state of good repair on the Amtrak rolling stock fleet.

The locomotives, passenger cars, dining cars, and baggage cars leased to Virginia for state sponsored service make up a train consist, and can vary according to each route. Virginia pays a capital equipment advance payment to Amtrak based on a units used forecast for the planned consist, and any maintenance efforts. Amtrak reports fleet maintenance activities quarterly. If estimated payments exceed or fall below actual charges, Amtrak will work with states with an option to apply a credit or additional charges in the following year's capital equipment usage fees.

Currently, Virginia's capital equipment fees are fixed at a 4% escalation of FY20 charges totaling $4.5M for FY21.

Project Benefit: The benefits of moving passengers on the rail system include less congestion on highways, more efficient fuel consumption, lowered greenhouse gas emissions, and reduced accidents. The cost avoidance associated with the shift from car to passenger rail is about 46 cents per passenger-mile of rail use, or about $190M annually in Virginia.

Project Description	FY21 (Millions)	FY22 (Millions)
Amtrak Capital Equipment	$4.5	$5.1

BEDFORD AMTRAK THRUWAY INTERCITY BUS CONNECTOR

DESCRIPTION:

VPRA will sponsor an Amtrak Thruway intercity bus connecting riders to and from Bedford, VA with the Kemper Street Station in Lynchburg, VA.

The Bedford thruway bus service was initially set to begin in the summer of 2020 with an FY20 allocation of $0.325M. However, due to the COVID-19 pandemic, the start of service has been postponed to a date to be determined. DRPT staff have been working with Amtrak and stakeholders in Bedford to establish a new start date. A second year of funding is allocated for FY22.

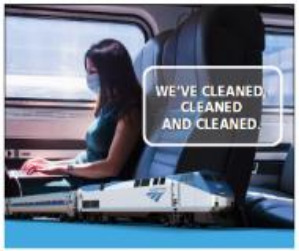
Project Benefits: The Bedford Thruway Connector service offers residents of Greater Bedford a one-ticket direct connection to Virginia sponsored Amtrak service via Kemper Street Station in Lynchburg, VA.

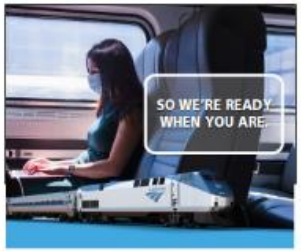
Project Description	FY21 (Millions)	FY22 (Millions)
Bedford Amtrak Thruway Intercity Bus Connector	$0.3	$0.3

AMTRAK MARKETING

DESCRIPTION:

As part of the annual operating agreement with Amtrak, the VPRA will develop and implement a joint regional marketing and advertising plan to target specific demographics and market ticket discounts. VPRA staff and consultants meet with Amtrak marketing staff quarterly to discuss planned national and regional marketing and advertising efforts and expenditures made by Amtrak for the purpose of promoting travel on Virginia's state sponsored trains (also known as Northeast Regional trains). Marketing funds are used to identify and execute comprehensive and diverse marketing and public relations strategies to increase ridership on Virginia's Amtrak services, including but not limited to: social media, special events, studying ridership trends, and other activities as needed.





Project Benefit: VPRA's Amtrak Marketing program notifies the public of an alternative transportation mode available between Virginia destinations and the Northeast. Additionally, coordinating marketing efforts with Amtrak allows for regional marketing strategies to maximize revenue and ridership.

Project Description	FY21 (Millions)	FY22 (Millions)
Amtrak Marketing	$0.9	$0.9

VPRA

CAPITAL BUDGET

- Six years plus the current year (FY2021 – FY2027)
- Based on cash flows as they approximate accrual based expenditures
- Includes existing projects and planned future efforts
- Two sections
  1. Capital projects section
  2. Capital grants section

CAPITAL PROJECTS

- **Capital Projects** are VPRA sponsored projects, where VPRA has the primary oversight and funding responsibility
- **Total Budget** includes the budget of the entire project even if a portion of the project construction is in the future past the forecast period
- **Total FY21-FY27** amount is the total forecasted expenditures by VPRA on the listed project during the seven year forecast period of FY2021 through FY2027

VIRGINIA PASSENGER RAIL AUTHORITY
CAPITAL PROJECTS
(IN MILLIONS)

Project Description	Total Budget	Expenses June 30, 2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21 - FY27
New Long Bridge for Passenger Rail	**$1,979.3**	**$2.6**	**$15.8**	**$7.5**	**$4.0**	**$60.7**	**$665.1**	**$742.8**	**$380.7**	**$1,876.6**
Alexandria 4th Track	**163.8**	10.4	22.2	38.4	27.6	28.4	29.3	7.5	-	**153.4**
Franconia to Lorton 3rd Mainline	**161.7**	1.3	2.2	5.4	90.6	62.2	-	-	-	**160.4**
Franconia-Springfield Bypass	**342.2**	3.2	5.6	23.1	35.5	90.4	121.7	62.7	-	**339.0**
Richmond to DC Sidings - Phase 1	**233.1**	-	8.4	25.1	46.5	79.1	74.0	-	-	**233.1**
Richmond to DC Sidings - Phase 2	**236.4**	-	-	-	-	-	-	3.8	15.1	**18.9**
TRV Right of Way Acquisition	**525.0**	-	200.0	200.0	125.0	-	-	-	-	**525.0**
TRV Other Infrastructure	**116.6**	-	35.6	19.8	0.1	0.7	0.5	23.4	7.3	**87.4**
Total TRV	**3,758.1**	17.5	289.8	319.3	329.3	321.5	890.6	840.2	403.1	**3,393.8**
Purchase of St. Julian's Yard: Amtrak Train Service Facility	**1.8**	-	-	1.8	-	-	-	-	-	**1.8**
Total	**$3,759.9**	**$17.5**	**$289.8**	**$321.1**	**$329.3**	**$321.5**	**$890.6**	**$840.2**	**$403.1**	**$3,395.6**

NEW LONG BRIDGE FOR PASSENGER RAIL

PROJECT DESCRIPTION:

The Long Bridge is a CSX owned two-track 100 year old railroad bridge spanning the Potomac River and connecting Virginia and Washington, D.C. The planned capacity expansion of the Long Bridge involves construction of a publicly owned new two-track bridge adjacent to the existing bridge. The new Long Bridge for passenger rail will construct 1.4 miles of proposed improvements including eight rail bridges and two pedestrian structures over the Potomac River and DC roadways. Annually, up to 1.3 million Amtrak passengers and 4.5 million VRE commuters traverse the Long Bridge, which operates at 98% capacity during peak hours.

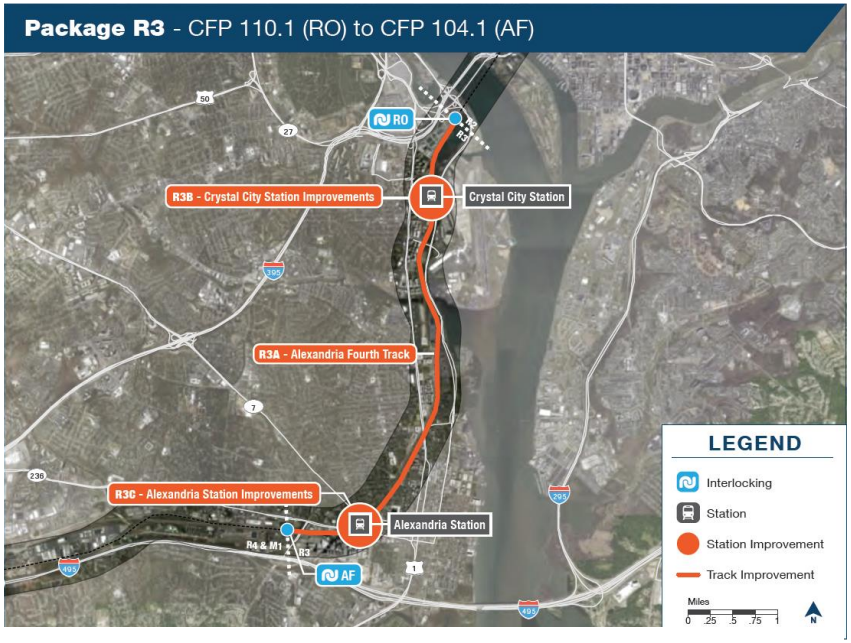
Project Benefit: The project will remove a key rail bottleneck on the East Coast and enable the addition of more rail service. The new two track Long Bridge capacity will accommodate annual benefits of 18,000 new freight and passenger train crossings, or up to 1 million trucks and 5 million cars diverted from highways, as well as reduced roadway accidents.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
New Long Bridge for Passenger Rail	$1,979.3	$2.6	15.8	7.5	4.0	60.7	665.1	742.8	380.7	**$1,876.6**

ALEXANDRIA 4TH TRACK

PROJECT DESCRIPTION:

The Alexandria 4th Track project will design and construct 6.0 miles of fourth track between the AF (Alexandria) and RO (Rosslyn) Interlockings. At the AF Interlocking three tracks from the VRE Fredericksburg Line and two tracks from the VRE Manassas line converge into three tracks, causing a bottleneck. The new track will be coordinated with the Crystal City Station and Alexandria Station Improvements performed by Virginia Railway Express. This project received a $45M FASTLANE grant from US DOT in 2016. Once completed, CSX will convey an existing track on the west to Virginia, giving two tracks on the west side to Virginia, and two tracks on the east side to CSX.



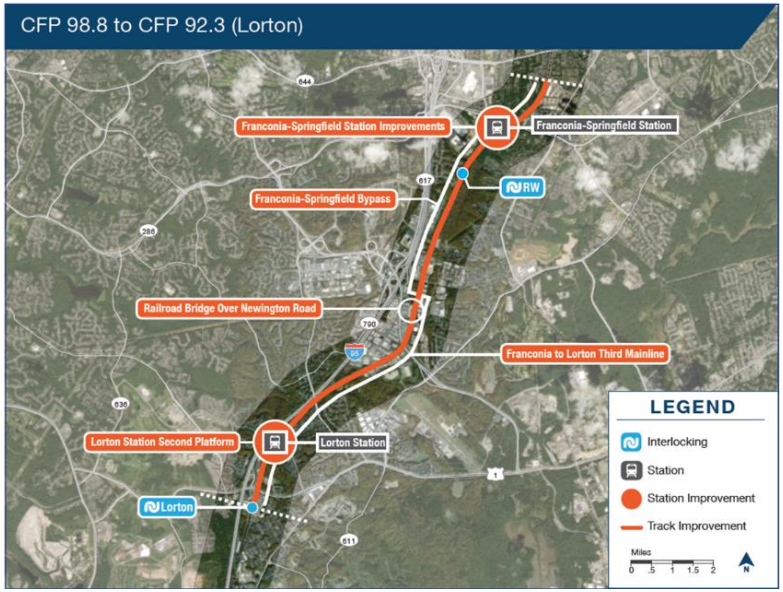
Project Benefit: The construction of the 4th Track Project will improve the efficiency and reliability of rail operations to support the planned growth of freight, passenger and commuter rail traffic in Northern Virginia and the southeastern states. The Project establishes an initial 2-track corridor for both freight and passenger which, when integrated with the planned Long Bridge construction and 4-track corridor through Washington, D.C., creates the opportunity to separate freight and passenger rail service.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Alexandria 4th Track	$163.8	$10.4	22.2	38.4	27.6	28.4	29.3	7.5	-	**$153.4**

FRANCONIA TO LORTON 3RD MAINLINE

PROJECT DESCRIPTION:

The Franconia to Lorton 3rd Mainline project is an approximately 6 mile segment that will extend the existing 3rd track between Alexandria and Franconia down to Lorton Interlocking. This segment involves new railroad bridges over Pohick Creek and Accotink Creek without impacts to existing bridge structures.



Project Benefit: The Franconia to Lorton 3rd Mainline will alleviate a major bottleneck in the Commonwealth and will remove up to 26 conflicts per day between passenger and freight trains crossing tracks as they enter or exit the Long Bridge Corridor that leads from Franconia through Fairfax County, Alexandria, and Arlington to the District of Columbia. The Project will add capacity and further improve the reliability of both freight and passenger rail.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Franconia to Lorton 3rd Mainline	$161.7	$1.3	2.2	5.4	90.6	62.2	-	-	-	**$160.4**

FRANCONIA-SPRINGFIELD BYPASS

PROJECT DESCRIPTION:

The Franconia-Springfield Bypass project, just south of Franconia-Springfield Station, will allow passenger trains to crossover to serve stations on the west side of the railroad corridor when traveling north of Franconia, and on the east side of the rail corridor when traveling south of Franconia Station. Project construction involves a single track on the bypass bridge with accommodations for a future second track. There will also be at-grade track improvements to accommodate the bypass bridge.

Project Benefit: The Bypass Project will allow passenger trains to reduce conflict with freight trains when passenger trains cross the corridor to serve VRE stations on the west side (north of Franconia) and on the east side (south of Franconia).

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Franconia-Springfield Bypass	$342.2	$3.2	5.6	23.1	35.5	90.4	121.7	62.7	-	**$339.0**

RICHMOND TO D.C. SIDINGS – PHASE 1 (SIDINGS A, B, AND C)

PROJECT DESCRIPTION:

Sidings are the beginnings of what will eventually become a dedicated 3rd track in future Phases 3 & 4 from Alexandria to Spotsylvania. In Phase I, sidings are strategically located to allow freight and passenger trains to utilize the sidings and fluidly move traffic through the corridor between Washington, D.C. and Richmond.

- Siding A is located at Potomac Creek near Leeland Station.
- Siding B is located at Milford in Caroline County.
- Siding C is located in Hanover County north of Ashland.

Each siding is approximately 3-4 miles in length.

Project Benefit: These improvements will increase network fluidity and reduce delays due to passenger and freight train interference.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Richmond to DC Sidings - Phase 1	$233.1	-	8.4	25.1	46.5	79.1	74.0	-	-	**$233.1**

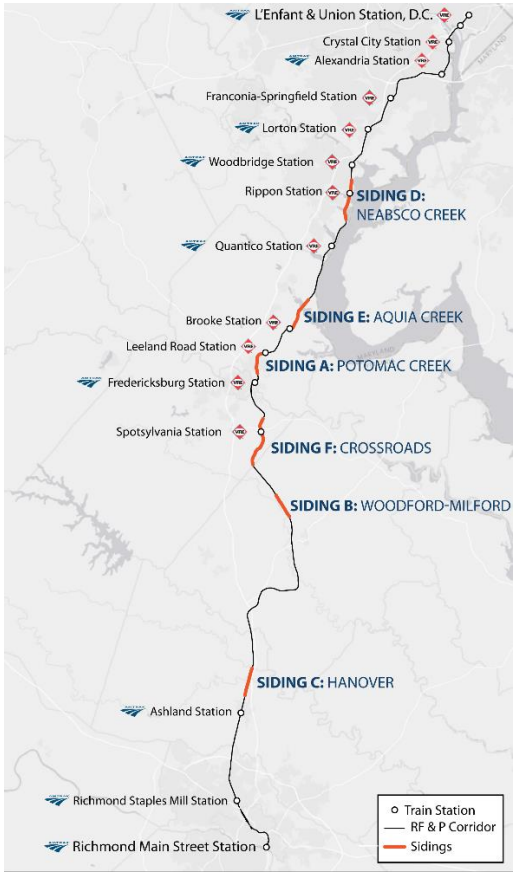
RICHMOND TO D.C. SIDINGS – PHASE 2 (SIDINGS D, E, AND F)

PROJECT DESCRIPTION:

Sidings are the beginnings of what will eventually become a dedicated 3rd track in future Phases 3 & 4 from Alexandria to Spotsylvania. In Phase I, sidings are strategically located to allow freight and passenger trains to utilize the sidings and fluidly move traffic through the corridor between Washington, D.C. and Richmond.

- Siding D is located at Neabsco Creek south of Rippon.
- Siding E is located at Aquia Creek north of Brook Station.
- Siding F is located at Crossroads south of Spotsylvania Station.

Each siding is approximately 3-4 miles in length.



Project Benefit: These improvements will Increase network fluidity and reduce delays due to passenger and freight train interference.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Richmond to DC Sidings - Phase 2	$236.4	-	-	-	-	-	-	3.8	15.1	**$18.9**

TRANSFORMING RAIL IN VIRGINIA OTHER INFRASTRUCTURE

PROJECT DESCRIPTION:

FAIRFAX COUNTY BRIDGES

- Construct two new two-track railroad bridges to accommodate the modified roadway configuration of Route 1 proposed in the Fairfax Comprehensive Plan.
- Construct two new two-track railroad bridges to accommodate the modified roadway configuration of Newington Road proposed in Fairfax County Comprehensive Plan. Construct 0.9 miles of third track.

TRAIN EQUIPMENT FOR NEW SERVICES

- As new services begin, Virginia will need Amtrak to refurbish new trainsets to deliver new services.

L'ENFANT CAPITAL IMPROVEMENTS

- This project includes the planning, design, permitting, and construction for an expanded VRE L'Enfant station and an additional mainline track between the Virginia (VA) and L'Enfant (LE) Interlockings in Washington, dc. The expanded station will support simultaneous boarding of two full-length trains. The project must be coordinated with the L'Enfant train storage track -south (ms-5) and long bridge capacity improvements projects.

Project Benefit: These infrastructure investments are necessary to realize the full benefit of Long Bridge, 4th Track, and 3rd Track projects in order to accommodate future service growth in the corridor.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
TRV Other Infrastructure	$116.6	-	35.6	19.8	0.1	0.7	0.5	23.4	7.3	**$87.4**

PURCHASE OF ST. JULIAN'S YARD: AMTRAK TRAIN SERVICE FACILITY

PROJECT DESCRIPTION:

St. Julian's Yard in Norfolk, Virginia is the site on which Amtrak services its passenger trains that terminate and originate from Norfolk Station. The land and some rail assets are currently owned by Canonie Atlantic, a private company owned by the Accomack-Northampton Transportation District Commission. Purchase of Amtrak train service facility in Norfolk, VA from Canonie Atlantic will secure the site for current and future Amtrak service to Norfolk.

Project Benefit: Purchase of this property by Virginia will secure a service facility for Norfolk Amtrak services, with enough room to accommodate the three daily round trips planned as part of the Transforming Rail in Virginia initiative.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Purchase of St. Julian's Yard: Amtrak Train Service Facility	$1.8	-	-	1.8	-	-	-	-	-	**$1.8**

CAPITAL GRANTS

- **Capital Grants** are awarded to rail projects led by other entities. VPRA is a stakeholder that provides funding and may have limited oversight over such projects
- **Total Budget** – All funding for a project including funds that do not pass through the VPRA financial system of controls
- **Total FY21-FY27** – Funding that flows through the VPRA financial system of controls for a grant, expected to be spent in the FY2021 – FY2027 forecast period.

VIRGINIA PASSENGER RAIL AUTHORITY
CAPITAL GRANTS
(IN MILLIONS)

Project Description	Grantee	Total Project Budget	Expenses June 30, 2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Crystal City Platform Study	VRE	$ 1.0	-	-	$ 0.7	-	-	-	-	-	$ 0.7
L'Enfant Platform Study	VRE	3.2	-	-	1.1	1.1	-	-	-	-	2.2
Alexandria Station Pedestrian Tunnel	VRE	30.9	-	-	8.6	8.6	2.3	-	-	-	19.5
Brooke/Leeland Road/Potomac Shores Station Improvements: Design & Construction	VRE	52.7	-	-	9.7	10.9	3.8	3.8	7.6	-	35.8
Broad Run Station & 3rd Track Improvements	VRE	164.4	2.3	0.5	0.4	6.8	19.3	25.7	12.9	-	65.6
Manassas Station Platform Extension	VRE	9.2	-	-	2.3	4.6	2.3	-	-	-	9.2
Real Time Multimodal Information	VRE	3.5	-	-	-	-	-	1.7	1.8	-	3.5
Manassas Park Parking Garage and Bridge	VRE	30.4	-	-	3.9	3.9	3.9	3.9	3.9	4.0	23.5
Quantico Station Improvements	VRE	25.7	0.6	1.8	7.4	13.0	1.5	-	-	-	23.7
Rolling Road Platform Extensions	VRE	5.0	0.1	0.3	-	-	-	-	-	-	0.3
Track Lease Payment-Amtrak	VRE	52.5	-	5.8	6.4	6.4	6.4	6.4	6.4	6.4	44.2
Track Lease Payment-CSX	VRE	44.4	-	7.1	5.0	5.0	5.0	5.0	5.0	5.0	37.1
Track Lease Payment-Norfolk Southern	VRE	25.7	-	2.8	3.1	3.1	3.1	3.1	3.1	3.1	21.4
Newport News Station, Platform, and Service Facility	Newport News	43.9	-	5.1	5.1	5.1	5.2	-	-	-	20.5
Ettrick Station Improvements – State-of-Good-Repair	Chesterfield County	4.6	-	-	0.5	1.0	-	-	-	-	1.5
Amtrak Passenger Information Display System: Ashland and Richmond Main Street Stations	Amtrak/DRPT	1.2	-	0.4	0.4	0.4	-	-	-	-	1.2
Amtrak Station ADA/State-of-Good-Repair Needs	Amtrak	16.1	-	-	3.3	3.4	3.4	3.0	1.5	1.5	16.1
Positive Train Control	Amtrak	7.0	0.2	-	1.8	1.0	1.0	1.0	1.0	1.0	6.8
Capital Maintenance Reserve	Amtrak	5.0	-	5.0	-	-	-	-	-	-	5.0
Arkendale to Powell's Creek Third Track Construction and Island Platforms	CSX	101.4	77.3	5.7	5.3	6.6	6.5	-	-	-	24.1
Improvements Lynchburg to Roanoke	Norfolk Southern	102.1	80.1	2.0	7.5	7.5	5.0	-	-	-	22.0
Route 29 Rail Corridor Improvements	Norfolk Southern	31.6	-	-	7.9	7.9	7.9	7.9	-	-	31.6
Total		$ 761.5	$ 160.6	$ 36.5	$ 80.4	$ 96.3	$ 76.6	$ 61.5	$ 43.2	$ 21.0	$ 415.5

NOTE: THE TOTAL PROJECT BUDGET INCLUDES FUNDS PROVIDED BY THE GRANTEE. THE EXPENSES AND ESTIMATES FOR FY21 - FY27 ARE ONLY VPRA CONTROLLED FUNDS

CRYSTAL CITY PLATFORM STUDY

PROJECT DESCRIPTION:

This project includes the planning, design, permitting, and construction for an expanded and relocated station and platform for the VRE Crystal City Station and related track modifications in Arlington County, VA. The project will construct an island platform to enable simultaneous boarding of two trains and accommodate full-length trains and the planned fourth track at the station. This project is related to and must be coordinated with the fourth track project between AF and RO interlockings, part of the DC2RVA project, the planned CC2DCA pedestrian bridge connection to Ronald Reagan National Airport, and Long Bridge Capacity Improvements.

The VPRA funding supports the $1.0M planning and design effort. The construction phase of this project is currently estimated at $50.1M.

Photo courtesy of VRE

Project Benefits: This project will aim to improve station access and customer convenience by doubling the number of platforms serving passenger trains, which will also improve service reliability.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Crystal City Platform Study	$1.0	-	-	0.7	-	-	-	-	-	$0.7

L'ENFANT PLATFORM STUDY

PROJECT DESCRIPTION:

This project includes the planning, design, permitting, and construction for an expanded and relocated station/platform for the VRE L'Enfant Station and for an additional main track between the Virginia (VA) and L'Enfant (LE) interlockings in Washington, DC. The project will construct an island platform to enable simultaneous boarding of two trains and accommodate full-length trains and the planned fourth track at L'Enfant, VRE's busiest station. The current platform is only six cars long and serviced by one track, resulting in an operational bottleneck that reduces service reliability. The project must be coordinated with the L'Enfant Train Storage Track -South and Long Bridge Capacity Improvements projects.

The VPRA funding supports the $3.2M planning and design effort. The construction phase of this project is currently estimated at $84.6M.

Photo courtesy of VRE

Project Benefits: This project will aim to improve station access and customer convenience by doubling the number of platforms serving passenger trains, which will also improve service reliability.

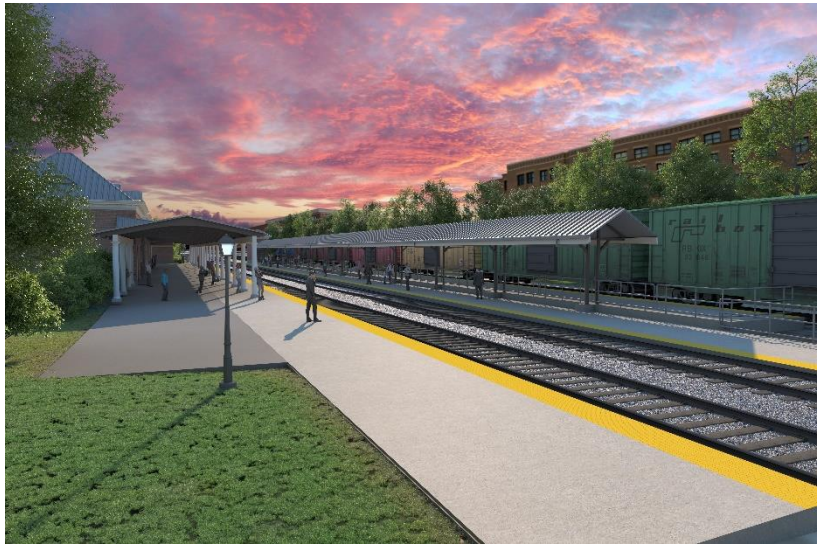
Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
L'Enfant Platform Study	$3.2	-	-	1.1	1.1	-	-	-	-	$2.2

ALEXANDRIA STATION PEDESTRIAN TUNNEL

PROJECT DESCRIPTION:

The project will provide an ADA-compliant, grade-separated pedestrian tunnel and elevator access between the two platforms at the VRE/Amtrak station in Alexandria and modify and extend the east platform at the station to accommodate eight-car trains and enable the platform to service two trains simultaneously, from a track on each side of the platform. The west platform adjacent to the station building will also be modified to raise its height relative to the top of rail as part of the project. Project funding sources include state SmartScale and Federal funds (through VDOT) to eliminate railroad grade crossings. Currently the project schedule is slightly ahead of the final year of funding allocation, which must be addressed with VRE's funding partners through either reprogramming of funds or short-term borrowing.

The VPRA funding of $19.5M supports the total estimated $30.9M budget.



Rendering courtesy of VRE

Project Benefits: Removing the at-grade pedestrian crossing will improve the interface between the track and platform in order to eliminate step boxes and improve boarding capabilities.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Alexandria Station Pedestrian Tunnel	$30.9	-	-	8.6	8.6	2.3	-	-	-	$19.5

BROOKE/LEELAND ROAD/POTOMAC SHORES STATION IMPROVEMENTS: DESIGN & CONSTRUCTION

PROJECT DESCRIPTION:

The project includes design and construction funding for station and track improvements at multiple stations along the VRE Fredericksburg Line.

Planned improvements include:

- BROOKE: platform extension to better accommodate up to 8-car train consists. All doors will be able to open onto the platform for more efficient boarding. Total estimated cost for this project is $8.8M and completion is anticipated by 2030.
- LEELAND: platform extension to better accommodate up to 8-car train consists. All doors will be able to open onto the platform for more efficient boarding. Total estimated cost for this project is $6.3M and completion is anticipated by 2026.
- POTOMAC SHORES: final design of a new station at the Potomac Shores master-planned community in Prince William County.

Project Benefit: Improvements at Brooke and Leeland stations will improve operational efficiency and accommodate eight-cart trainsets. The new Potomac Shores VRE station is part of an upcoming transit oriented development in Prince William County.

VRE Brooke Station *Photos courtesy of VRE*

VRE Leeland Station

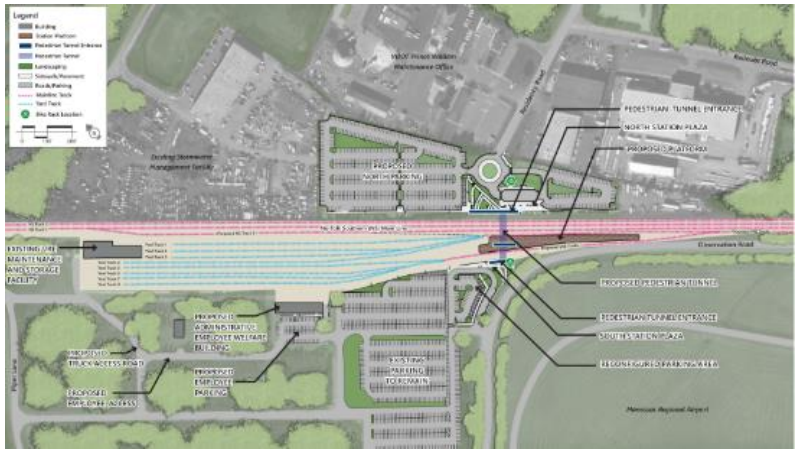
Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Brooke/Leland Road/Potomac Shores Station Improvements: Design & Construction	$52.7	-	-	9.7	10.9	3.8	3.8	7.6	-	$35.8

BROAD RUN STATION & 3RD TRACK IMPROVEMENTS

PROJECT DESCRIPTION:

This project includes expansion of the Broad Run Maintenance and Storage Facility (MSF) and Station to support expanded Manassas Line service. Improvements include: expansion of the MSF site and construction of storage tracks for additional trains and equipment, construction of additional parking spaces to accommodate short-term (2030) demand, and platform modifications to provide access to expanded parking, and construction of about 2.75 miles of third track within the NSR right-of-way. The estimated cost also includes real estate acquisition to expand the station footprint and accommodate the third track.

The VPRA funding of $65.6M supports the total estimated $164.4M budget.



Rendering courtesy of VRE

Project Benefits: The Broad Run Expansion Project provides expanded facilities to accommodate growth in passenger boardings, parking demand associated with future service, and equipment storage needs as identified in the VRE System Plan 2040. The project also provides a third main track along the existing Norfolk Southern Railway tracks to improve operational efficiency into the MSF and Station and increase rail capacity in the corridor.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Broad Run Station & 3rd Track Improvements	$164.4	$2.3	0.5	0.4	6.8	19.3	25.7	12.9	-	$65.6

MANASSAS STATION PLATFORM EXTENSIONS

PROJECT DESCRIPTION:

This project includes the development, design, permitting and construction of an extension to the south side (railroad east) platform at the Manassas Station. The platform will be extended approximately 400 feet to the east (railroad north) and will include a pedestrian connection to the Prince William St. parking lot. Extension of the track will require relocation of an existing switch (Moore) on the Norfolk Southern main line.

The VPRA funding supports the total estimated $9.2M budget.

Photo courtesy of VRE

Project Benefits: The project expands the VRE Manassas Station platform to serve full length trains and better serve future forecasted demand at the station.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Manassas Station Platform Extensions	$9.2	-	-	2.3	4.6	2.3	-	-	-	$9.2

REAL TIME MULTIMODAL INFORMATION

PROJECT DESCRIPTION:

VRE has a system-wide program to implement automatic passenger counters in all rail cars and automatic parking counters at all VRE parking facilities. While train location information is currently provided on the internet and on screens at the stations, there are plans to provide real-time train arrival information in the future. Software upgrades will be required to provide these real-time data feeds that can then be integrated with VRE Mobile and other third-party apps and websites, as well as on display screens at VRE stations and other locations along the I-66 corridor. Separate funding has been committed for implementing automatic passenger counters and automatic parking counters at existing VRE facilities.

The VPRA funding supports the total estimated $3.5M budget.

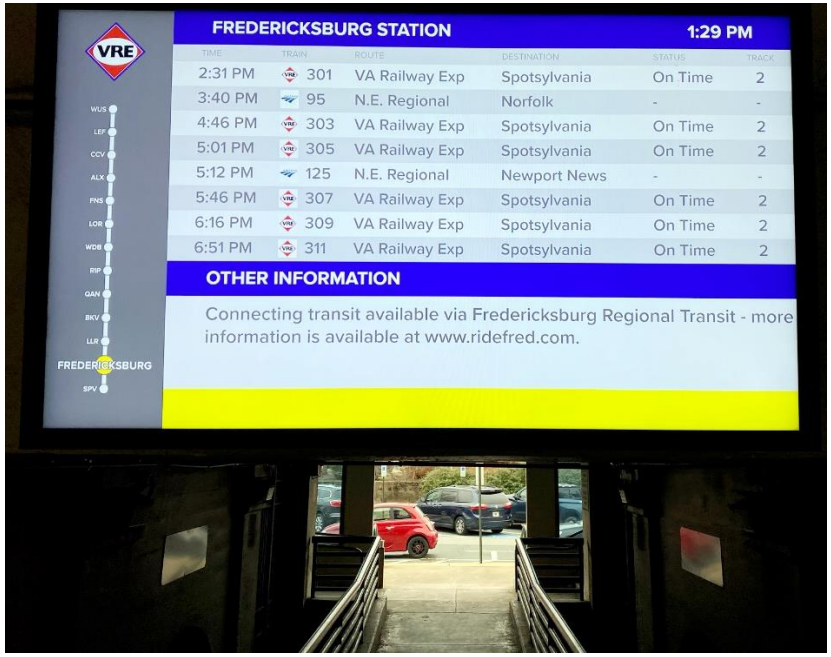


Photo courtesy of VRE

Project Benefit: Real time train arrival information for enhanced passenger experience.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Real Time Multimodal Information	$3.5	-	-	-	-	-	1.7	1.8	-	$3.5

MANASSAS PARK PARKING GARAGE AND BRIDGE

PROJECT DESCRIPTION:

This project will add a parking facility (approximately 560 spaces) at the Manassas Park station to increase station parking capacity for VRE riders to 1,100 spaces. The facility has the potential to be shared with other private or public uses in the vicinity.

The VPRA funding supports $23.5M of the total estimated $30.4M budget.

Photo courtesy of VRE

Project Benefit: This project will provide enhanced parking capacity at the Manassas Park station.

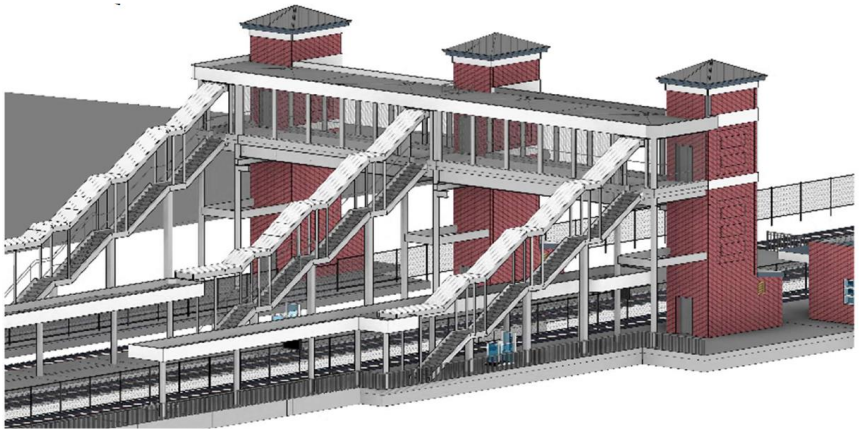
Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Manassas Park Parking Garage and Bridge	$30.4	-	-	3.9	3.9	3.9	3.9	3.9	4.0	$23.5

QUANTICO STATION IMPROVEMENTS

PROJECT DESCRIPTION:

The Quantico Station improvement project will replace the Track 3 side platform with a new island platform between the existing Track 3 and the new third track constructed as part of the Arkendale to Powell's Creek Third Track project. The Quantico Station improvements will also extend and improve the existing platform on Track 2, provide a grade-separated pedestrian crossing, and other safety improvements.

VRE is designing and constructing the station improvements and will coordinate efforts with the ongoing Arkendale to Powell's Creek third track project constructed by CSX. Both the Quantico Station improvements and the Arkendale to Powell's Creek Third track project were part of a grant from the Federal Railroad Administration, and include state Commonwealth Rail Fund and SmartScale funding.



Rendering courtesy of VRE

Project Benefit: Extends existing platform lengths to allow for boarding options along the entire train consist (both VRE and Amtrak trains). A new island platform will allow passenger trains to serve the station on any track that traverses station limits.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Quantico Station Improvements	$25.7	$0.6	1.8	7.4	13.0	1.5	-	-	-	$23.7

ROLLING ROAD PLATFORM EXTENSIONS

PROJECT DESCRIPTION:

The Rolling Road station currently has a platform which will accommodate a six-car train set for boarding and detraining. This project provides for a 250-foot platform extension to accommodate an eight-car train set. Project includes funds for equipment and cameras related to the extension.

The VPRA funding supports the total estimated $5M budget.

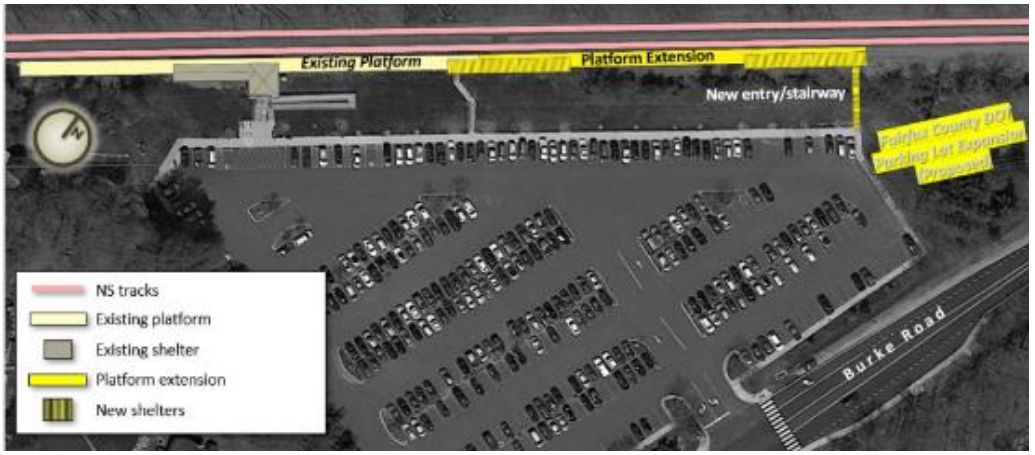


Photo courtesy of VRE

Project Benefit: Extends existing platform lengths to eliminate passenger movement within cars and decrease loading and unloading time at station. Other station improvements will help enhance customer experience at the station.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Rolling Road Platform Extensions	$5.0	$0.1	0.3	-	-	-	-	-	-	$0.3

VRE TRACK LEASE PAYMENTS TO CSX, NORFOLK SOUTHERN, AND AMTRAK

DESCRIPTION:

VRE pays access fees to operate on host railroad (CSX, Norfolk Southern, and Amtrak) lines and access host railroad owned stations. Historically, track access fees were paid through a combination of state transit capital and state discretionary Federal Surface Transportation Program (STP) grants that equaled 84% of the total track access fees. The remaining 16% of track access fees comes from a VRE local match. Starting in FY21, the state portion for VRE access fees to host railroads will come from the VPRA paid out of the Commonwealth Rail Fund due to the revenue realignment of the Commonwealth Transportation Trust Fund.

Photo courtesy of VRE

Project Benefit: Track lease payments secure the right of VRE to operate commuter rail service over host railroad lines.

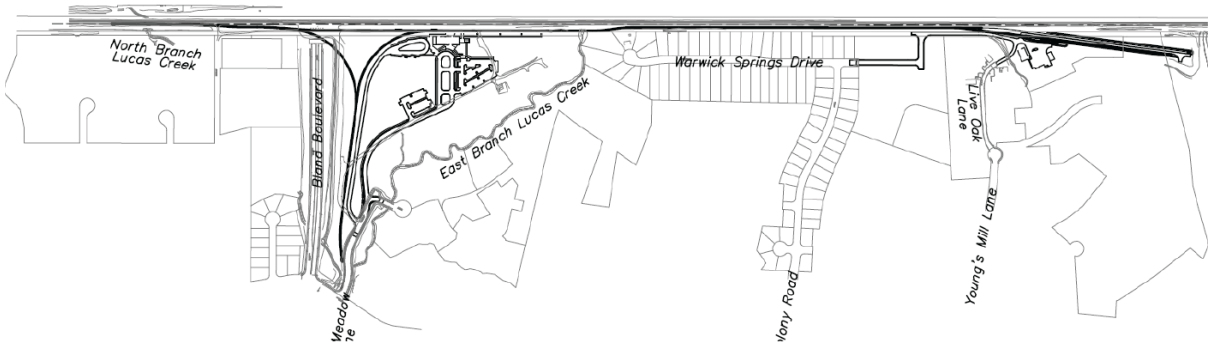
Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Amtrak	$52.5	-	5.8	6.4	6.4	6.4	6.4	6.4	6.4	$44.2
CSX	$44.4	-	7.1	5.0	5.0	5.0	5.0	5.0	5.0	$37.1
Norfolk Southern	$25.7	-	2.8	3.1	3.1	3.1	3.1	3.1	3.1	$21.4

NEWPORT NEWS STATION, PLATFORM, AND TRAIN SERVICE FACILITY

PROJECT DESCRIPTION:

Newport News has designed a new Amtrak station, with plans for future multi-modal connectivity for the peninsula. Construction of the new facility has begun, and will include a level boarding platform (the second in Virginia after Roanoke Station). The project will also construct storage for future Amtrak Service frequencies, remove the conflict with existing CSX coal yard facilities, and address current Amtrak station deficiencies.

The site will also serve as an HRT Bus Transfer Facility.



Project Benefit: The new station and associated improvements will provide storage for future Amtrak Service frequencies, remove the conflict with existing CSX coal yard facilities, and address current Amtrak station deficiencies.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Newport News Station, Platform, and Service Facility	$43.9	-	5.1	5.1	5.1	5.2	-	-	-	$20.5

ETTRICK STATION IMPROVEMENTS – STATE-OF-GOOD REPAIR

PROJECT DESCRIPTION:

As part of the 2019 Station Needs Assessment conducted by the Department of Rail and Public Transportation (DRPT), Ettrick Station was identified as an Amtrak station with the greatest need for state of good repair improvements. DRPT staff have worked with Chesterfield County and Amtrak to leverage local, state, and federal funding to address ADA deficiencies and state of good repair issues at Ettrick Station. VPRA is partnering with Chesterfield County specifically on parking lot state of good repair improvements: re-grading, re-striping, addressing storm water drainage issues, and lighting of parking lot at Ettrick station. Amtrak is addressing ADA issues, including a platform rehabilitation project, with Amtrak funding.

Project Benefit: Virginia's investment in Ettrick Station leverages federal and local funds to address State of Good Repair deficiencies and Americans with Disability Act access at the station and access to trains serving Ettrick Station. This project will provide an improved customer experience as service at the station grows with the additional frequencies between Washington, D.C. and Norfolk, Virginia.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Ettrick Station Improvements	$4.6	-	-	0.5	1.0	-	-	-	-	$1.5

AMTRAK "PASSENGER INFORMATION DISPLAY SYSTEM" INSTALLATION: ASHLAND, RICHMOND MAIN STREET STATIONS

PROJECT DESCRIPTION:

In order to improve the customer experience at Ashland and Main Street – and pilot projects for similar improvements at other Virginia stations – the Department of Rail and Public Transportation initiated planning with Amtrak for installation of a Passenger Information Display Systems (PIDS) at these two stations, to meet Americans with Disabilities Act requirements with audio and visual information regarding train schedules.

Ashland Station is a two track station without an Amtrak attendant or adequate announcement system. Main Street Station in downtown Richmond is a one-track station, but also lacks an adequate announcement system for arrival and departure of Amtrak trains.

Project Benefit: PIDS system will improve customer experience by displaying train status and schedule information on screens at stations. This system will also bring both stations in compliance with ADA requirements.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Amtrak PIDS: Ashland, and Richmond Main Street	$1.2	-	0.4	0.4	0.4	-	-	-	-	$1.2

AMTRAK STATION ADA/ STATE-OF-GOOD-REPAIR NEEDS

PROJECT DESCRIPTION:

In 2019 the Virginia Department of Rail and Public Transportation (DRPT) conducted a Station Needs Analysis of Amtrak stations in Virginia. The study sought to identify State of Good Repair and Capacity needs at each station in the Commonwealth. DRPT has begun partnering with localities and Amtrak to address state of good repair and Americans with Disabilities Act (ADA) needs. VPRA will take over many stations, and continue to partner with DRPT, localities, and Amtrak to ensure a safe, clean, and welcoming environment for passenger rail riders by leveraging state funds with local and federal funding opportunities.

Project Benefit: State of Good Repair funds will allow Virginia to improve the customer experience for passenger rail service and overcome deferred maintenance issues. Allocating funds into future years will allow Virginia to leverage federal and local funds as the state's passenger rail planning efforts lead the way for an improved customer experience upon arrival at the station.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Amtrak Station State of Good Repair	$16.1	-	-	3.3	3.4	3.4	3.0	1.5	1.5	$16.1

POSITIVE TRAIN CONTROL PAYMENT TO AMTRAK AND OTHER AMTRAK SERVICE IMPROVEMENTS

PROJECT DESCRIPTION:

In 2008 the federal government mandated Positive Train Control (PTC) on rail lines with certain freight shipments, or passenger services by 2018, with PTC in operation by 2020. PTC systems are technology to prevent train-to-train collisions, derailments due to speed, incursions into established work zone limits, and movements of trains through switches in the wrong position.

In Virginia, PTC is installed and in operation on lines where it was required, which includes VRE and Amtrak passenger routes. Amtrak and host railroads (CSX and NS) have existing agreements for service, which obligates Amtrak to pay its proportional share of costs related to federally mandated improvements. VRE has similar agreements which obligate them to share in the cost of PTC installation on host railroads where they operate. Amtrak – through the PRIIA 209 Methodology – will pass on a proportional cost of PTC installation costs to Virginia for the share of costs associated with state sponsored service. VPRA has begun budgeting for some of the anticipated costs as it works with Amtrak to verify host railroad expenditures.

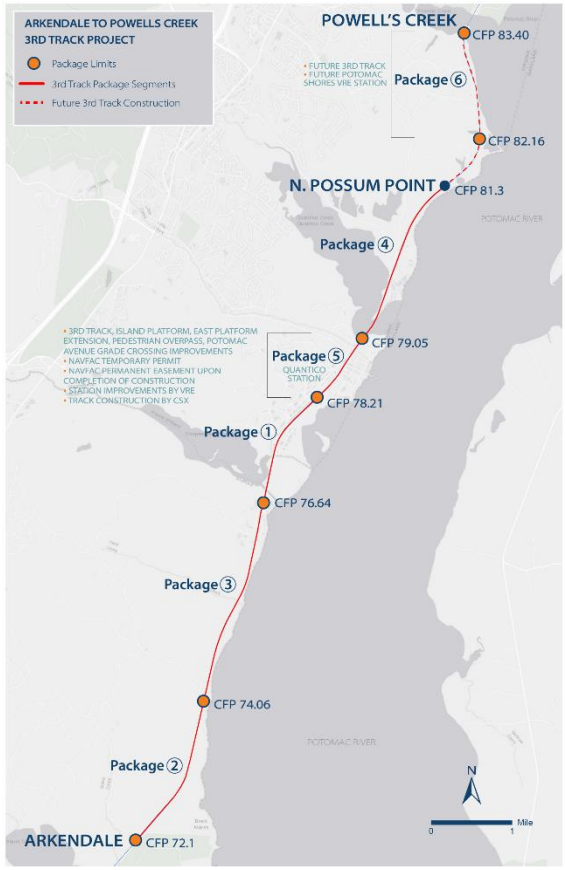
Project Benefit: Positive Train Control payments to host railroads are Virginia's share of safety improvements through technology investments mandated by the federal government to improve safety for freight and passenger rail services across the United States.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Positive Train Control	$7.0	$0.2	-	1.8	1.0	1.0	1.0	1.0	1.0	$6.8

ARKENDALE TO POWELL'S CREEK THIRD TRACK CONSTRUCTION AND ISLAND PLATFORMS

PROJECT DESCRIPTION:

Arkendale to Powell's Creek is a third mainline track construction project in Stafford and Prince William Counties, which includes third track construction through the Quantico Station limits. Track construction runs 9.2 miles from CP Arkendale to CP North Possum Point, with design planned for a future third track to continue north through the proposed new Potomac Shores VRE station. This project is currently under construction. CSX has contracted with Virginia DRPT to construct all track work. The associated station improvements for a pedestrian overpass and island platform are funded under the Quantico Station project, which will be constructed by Virginia Railway Express.



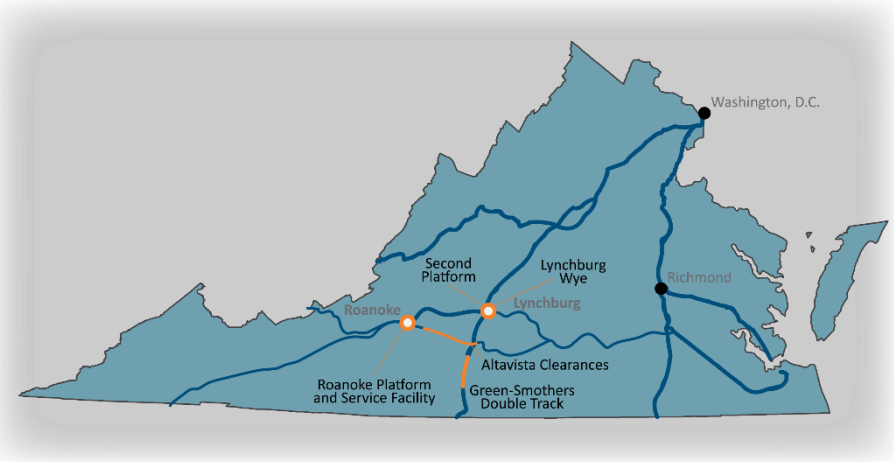
Project Benefit: The Arkendale to Powell's Creek third track capacity will allow faster passenger trains to overtake and pass freight trains on the congested RF&P corridor, improving overall network fluidity between Washington, D.C. and Richmond, VA.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Arkendale to Powell's Creek Third Track Construction and Island Platforms	$101.4	$77.3	5.7	5.3	6.6	6.5	-	-	-	$24.1

IMPROVEMENTS LYNCHBURG TO ROANOKE

PROJECT DESCRIPTION:

Norfolk Southern and Virginia partnered in 2014 to improve the Norfolk Southern network to accommodate the extension of Amtrak state sponsored service between Lynchburg and Washington D.C. to Roanoke, Virginia. Service to Roanoke began in 2017 upon completion of the platform and service facilities in downtown Roanoke. NS network improvements added capacity, improved signals, and allowed NS to shift freight services to other lines through a series of tunnel and bridge improvements, and ensure freight capacities were not harmed at the expense of additional passenger rail service.



Project Benefit: Expanded Amtrak service to Roanoke, Virginia, with a one-seat ride to Washington, D.C. and destinations on the Northeast Corridor. The project reestablished passenger rail service to the Roanoke Valley after 40+ years, while preserving freight capacity on the NS network.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Improvements Lynchburg to Roanoke	$102.1	$80.1	2.0	7.5	7.5	5.0	-	-	-	$22.0

ROUTE 29 RAIL CORRIDOR IMPROVEMENTS

PROJECT DESCRIPTION:

US Route 29 corridor funds were allocated towards any necessary improvements for additional passenger rail service in the US29/I-81 Corridor between Lynchburg and Washington, D.C. Additional service includes plans to extend beyond Roanoke, Virginia to the New River Valley.

Proposed Extension of Virginia Sponsored Amtrak Service to New River Valley

Project Benefit: Public investment in passenger rail capacity aims to preserve freight capacity while expanding for passenger rail service. Faster more frequent passenger rail trains with set schedules require freight operators to plan accordingly. These funds are part of the planning efforts to improve the NS network for additional passenger rail service in the Route 29/I-81 corridor.

Project Description ($ in millions)	Total Budget	Expenses as of 6/30/2020	FY21	FY22	FY23	FY24	FY25	FY26	FY27	Total FY21-FY27
Route 29 Rail Corridor Improvements	$31.6	-	-	7.9	7.9	7.9	7.9	-	-	$31.6