VIRGINIA
STATEWIDE RAIL PLAN

CHAPTER 5

VIRGINIA'S RAIL SERVICE AND INVESTMENT PLAN

December 6, 2017

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5 Introduction

Chapter 5 serves as Virginia's Rail Service and Investment Plan (RSIP), as defined by FRA State Rail Plan Guidance. This chapter describes Virginia's transportation vision, and demonstrates how rail improvements can further that vision through the goals and objectives of the Virginia State Rail Plan. It also identifies stakeholders with whom DRPT collaborates for successful implementation. The Passenger and Freight Rail Capital Program, featured in **Chapter 5.8**, lists short-range and long-range projects and how they meet the Commonwealth's transportation goals.

5.1 Virginia DRPT Rail Vision

5.1.1 State Rail Vision

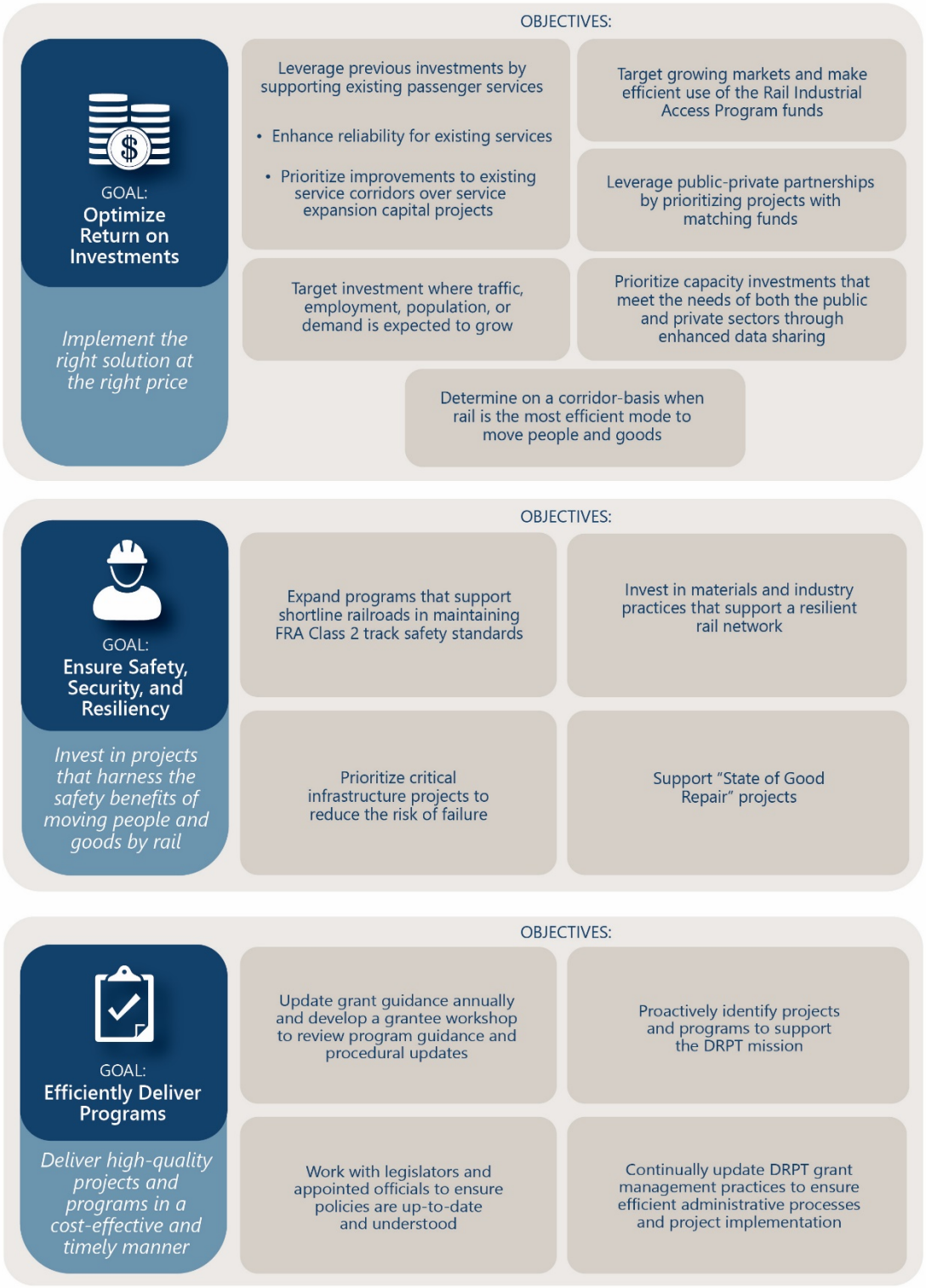
The Virginia Statewide Transportation Plan (VTrans2040) promotes a vision for a multimodal transportation network that is *Good for Business, Good for Communities, and Good to Go*. The Commonwealth recognizes the privately owned rail network as part of a multimodal system with public benefits and growing economic impacts. Since the 2000s, significant state investments have leveraged private and federal funds to improve freight and passenger rail transportation and support the overall transportation system. The Virginia State Rail Plan provides a framework to support a sustainable and reliable transportation system through continued rail investments.

Virginia's rail network is a valuable asset that drives the economy, reduces congestion, improves safety, and saves taxpayer money. Continued investment in rail infrastructure will ensure the mission and vision for the Commonwealth's transportation network is achieved.

5.1.2 Rail Vision Supporting Goals and Objectives

The Virginia State Rail Plan goals are listed in blue and reflect the VTrans2040 Guiding Principles on the left side of **Figure 5-1**. Corresponding objectives for each goal are shown in tan on the right. The objectives show how DRPT can advance freight and passenger rail through planning efforts and funding programs under the DRPT's purview. Together the rail plan goals and objectives are tools to evaluate and prioritize short-term and long-term planning efforts and investments.

Figure 5-1: State Rail Goals and Objectives



GOAL: Consider Operational Improvements and Demand Management First

Maximize capacity of the transportation network through increased use of technology and operational improvements before investing in major capacity expansions

OBJECTIVES:

- Encourage use of Intelligent Transportation Systems to improve operational efficiency
- Evaluate operations when considering investment in capacity to ensure the investment yields a lasting benefit
- Incorporate program criteria that prioritize low-cost improvements to relieve bottlenecks and provide capacity

GOAL: Ensure Transparency and Accountability, and Promote Performance Management

Work openly with partners and engage stakeholders in project development and implementation, and establish performance targets that consider the needs of all communities

OBJECTIVES:

- Publicize application evaluation metrics and project data for rail funding programs
- Implement passenger rail station stop policy
- Develop program scorecards to measure impact of rail investments
- Market economic impact of rail investment

GOAL: Improve Coordination between Transportation and Land Use

Encourage local governments to plan and manage transportation-efficient land development by providing incentives, technical support, and collaborative initiatives

OBJECTIVES:

- Encourage local governments to support state funding decisions by making compatible investments and zoning
- Educate localities on appropriate land uses around both freight and passenger rail infrastructure
- Encourage local governments to support rail services with multimodal last-mile connections
- Integrate with and expand upon other state, regional, and local planning efforts

GOAL: Ensure Efficient Intermodal Connections

Provide seamless connections between modes of transportation

OBJECTIVES:

- Prioritize rail projects that benefit the highway system and improve mode choice
- Enhance rail service to the Port
- Support " State of Good Repair" and capacity projects with shortlines

GOAL: Support Regional Economic Development

Encourage local and regional economic development through investment in the rail network

OBJECTIVES:

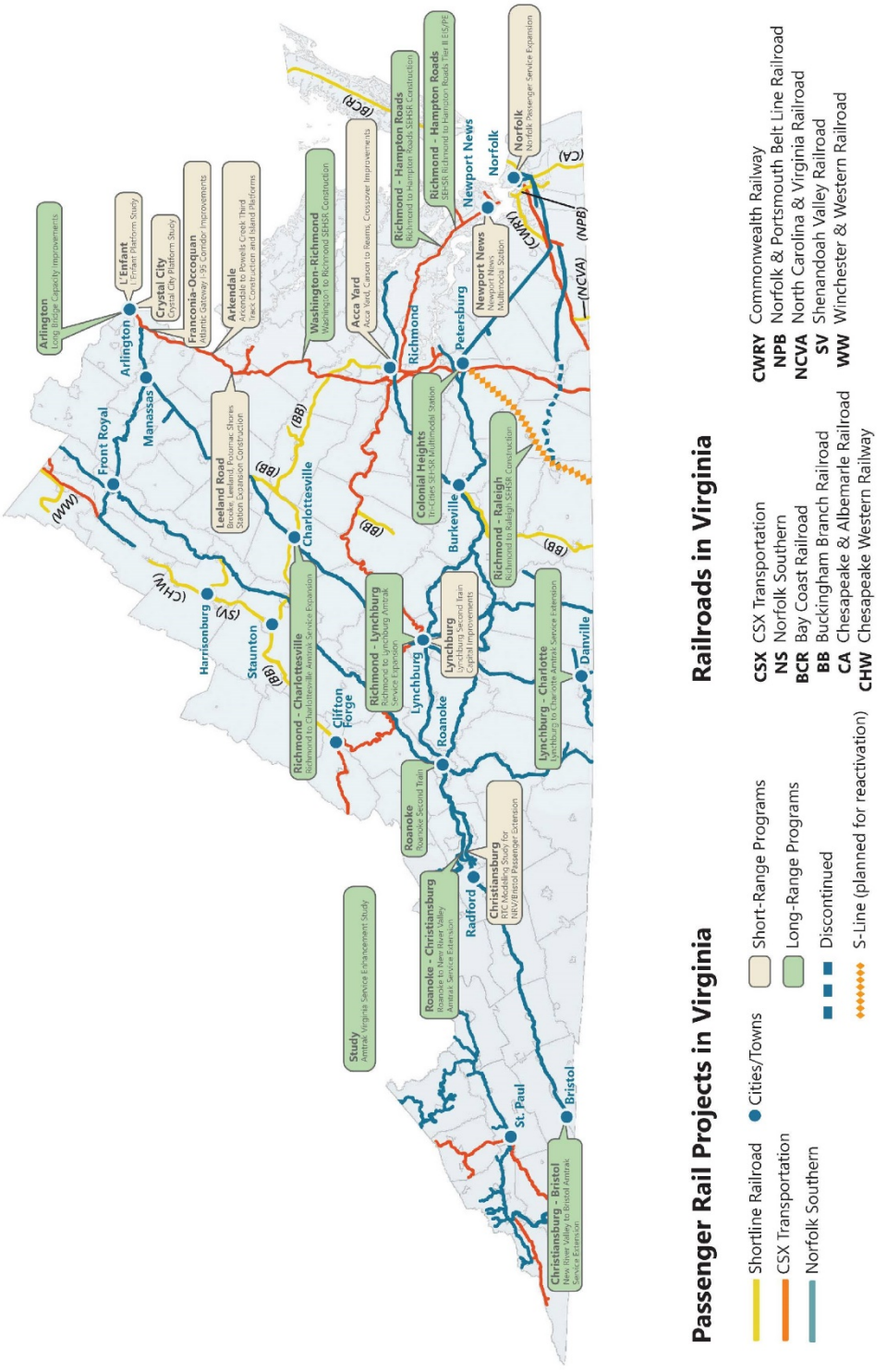
- Work closely with Virginia Economic Development Partnership to attract rail conducive industries in accordance with the Code of Virginia
- Promote the use of the Rail Industrial Access program through education and outreach with local economic development offices
- Include input from local and regional freight railroads in economic development planning and initiatives
- Expand transportation options between regional markets through enhancements to passenger rail service

Using these goals as a guide, DRPT has developed a series of freight and passenger rail projects and initiatives that would, if constructed:

- Improve the capacity, efficiency, and safety of the Commonwealth's rail network,
- Promote railroad access and economic development,
- Improve passenger rail transportation, and
- Bolster connectivity with other transportation modes.

These projects are shown in **Figure 5-2** and **Figure 5-3**. Although the figures differentiate between passenger and freight rail projects, as required by FRA, Virginia's passenger and freight rail services operate on shared routes. As a result, many of the projects shown in the illustrations are identified in the **Chapter 5.8** Passenger and Freight Rail Capital Program.

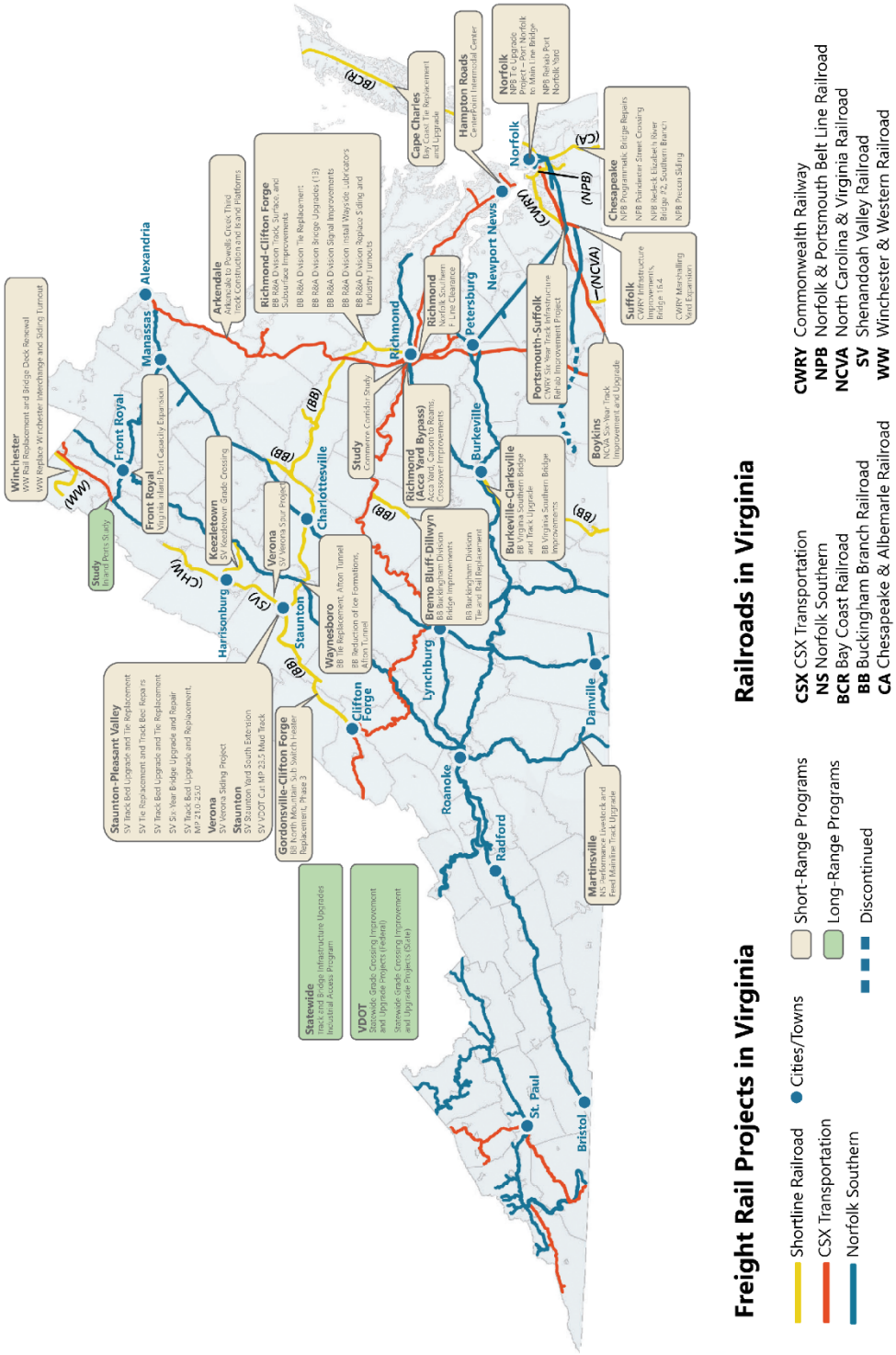
Figure 5-2: Proposed Passenger Rail Projects in Virginia (Short-Range and Long-Range)



Note: Short-range projects include those with allocations between FY18 and FY23, as indicated in the SYIP.

Source: DRPT

Figure 5-3: Proposed Freight Rail Projects in Virginia (Short-Range and Long-Range)



Note: Short-range projects include those with allocations between FY18 and FY23, as indicated in the SYIP.

Source: DRPT

5.2 Program Coordination

This chapter describes how the Virginia State Rail Plan integrates with other transportation planning efforts within Virginia and at the regional and national levels.

5.2.1 Integration with Other State Planning Efforts

VTrans2040 provides direction for all transportation planning and investments in the Commonwealth. VTrans2040 includes the State Multimodal Plan, Freight Plan, and Surface Transportation Plan and is developed by the OIPI Multimodal Working Group. The Multimodal Working Group consists of the lead planners for each mode of transportation and the policy advisors of every agency within the Secretariat, including the VDOT, DMV, MVDB, DOA, VPA, DRPT, and the Commercial Space Flight Authority. This group informs the plans and projects OIPI undertakes, and ensures a truly multimodal transportation system is achieved and maintained in Virginia. The State Rail Plan is intended to integrate with VTrans2040 and expand upon other Virginia transportation plans developed and discussed by the Multimodal Working Group[1]:

5.2.2 National and Regional Rail Planning Integration

Recognizing the integrated nature of the rail network with national and regional markets within and outside of Virginia, DRPT regularly coordinates with outside agencies, including:

- VDOT
- CTB
- Virginia General Assembly
- Office of the Virginia Secretary of Transportation
- MPOs
- VRE
- Virginia localities
- FRA
- Amtrak
- Washington, D.C. Department of Transportation
- North Carolina Department of Transportation
- Southeast Rail Coalition
- States for Passenger Rail Coalition
- American Association of State Highway and Transportation Officials Standing Committee on Rail

[1] http://www.vtrans.org/vtrans2040.asp

- Other states and regional rail agencies

Passenger Rail Investment and Improvement Act of 2008 Compliance

PRIIA directed FRA to develop a Preliminary National Rail Plan to address the rail needs of the U.S. The preliminary Plan, published in October 2009, provided objectives for rail as a means of improving the performance of the nation's transportation system, which included:

- Increased passenger and freight rail performance,
- Integration of all transportation modes to form a more complementary transportation system,
- Identification of projects of national significance, and
- Providing for increased public awareness.

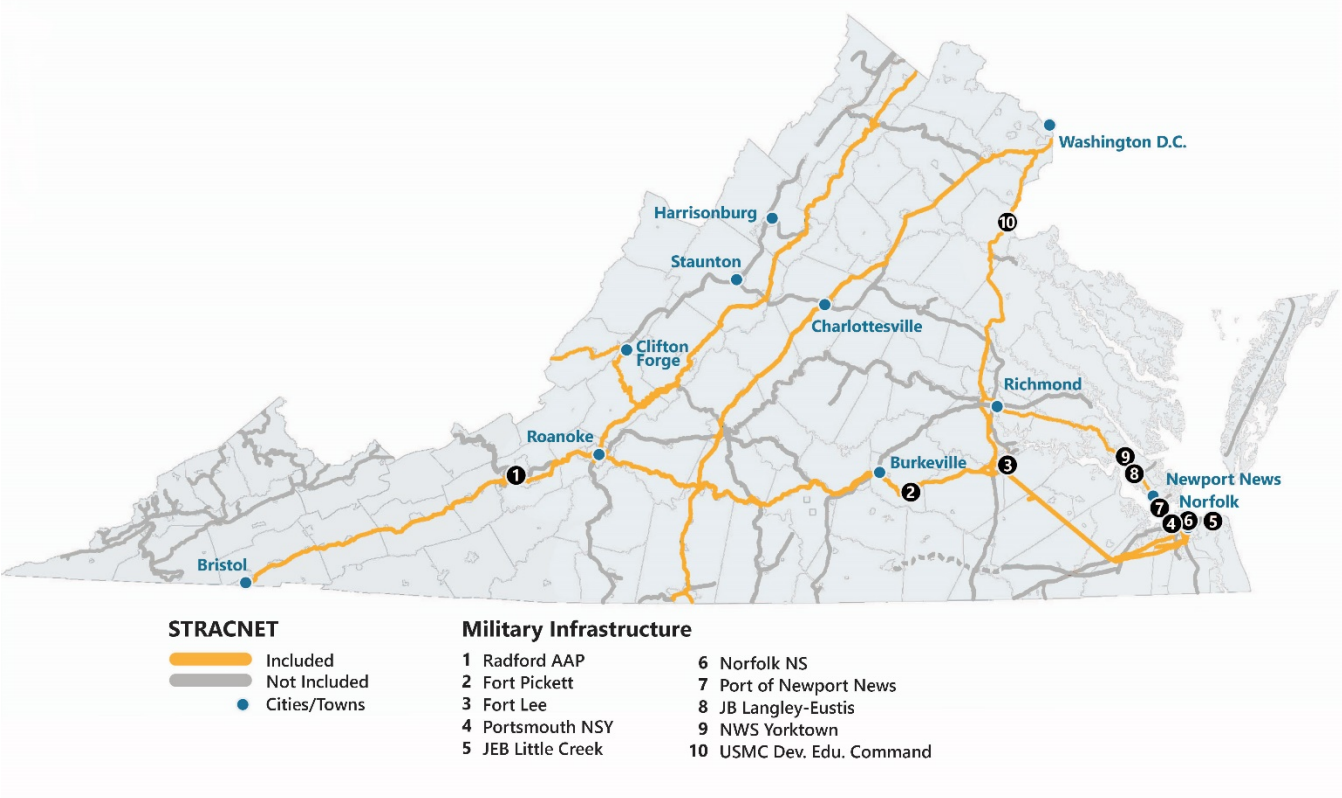
Since 2009, the concept of developing a National Rail Plan has evolved, and FRA has focused efforts toward the issues and priorities addressed in state rail plans. An outgrowth of this process is the development of regional rail plans and multi-state corridor plans inclusive of solutions for freight and passenger service issues on a regional rather than state-by-state basis. DRPT will continue to work with FRA and other states in the region directly and through the Southeast Rail Coalition to ensure that the rail perspectives and issues of the Commonwealth and region are adequately addressed within the national rail planning process.

National Strategic Rail Corridor Network

The U.S. Military Surface Deployment and Distribution Command's Transportation Engineering Agency oversees the federal National Strategic Rail Corridor Network (STRACNET).[2] STRACNET is an interconnected and continuous rail line network consisting of more than 36,000 miles of track serving more than 120 defense installations. The STRACNET network is shown in **Figure 5-4**. STRACNET was established as part of the federal Railroads for National Defense Program, which ensures the readiness capability of the national railroad network to support defense deployment and peacetime needs. The Transportation Engineering Agency works in conjunction with FRA, STB, state transportation departments, individual railroads, and two industry organizations, AAR and AREMA, to ensure that rail needs for the Department of Defense are identified and coordinated with the appropriate transportation authorities.

[2] https://www.sddc.army.mil/sites/TEA/Functions/SpecialAssistant/Pages/RailroadsNationalDefense.aspx

Figure 5-4: STRACNET Railroad Network



5.3 Rail Agencies

DRPT is the lead agency for rail planning and investments within Virginia. This State Rail Plan does not recommend any changes to the DRPT, nor does it recommend the creation or abolition of any other agencies or authorities. DRPT reports to the Office of the Secretary of Transportation, and the DRPT Director is a member of the CTB, which sets policy and allocates funding surface transportation modes in Virginia. DRPT rail staff work with the CTB to address policy issues and legislative issues on an on-going basis.

5.4 Program Effects

Virginia's rail network is part of a larger rail system within the eastern United States; it connects the Port of Virginia, businesses, and communities to other major population centers, customers, and manufacturing regions throughout the nation and the world. Transportation corridors within the Commonwealth have unique characteristics that provide viable transportation options and diverse public benefits to the economy. Many of Virginia's freight corridors also carry passenger trains. All of the rail corridors are privately-owned and serve the Port of Virginia in Hampton Roads in some capacity.

Passenger trips to, from, and within Virginia are growing, and highways in Virginia are increasingly congested. Passenger rail service provides an alternative to congested highways, and the Commonwealth therefore invests in Amtrak intercity passenger routes and VRE's service areas to add network capacity. Projects and plans underway in CSX's RF&P subdivision and the Long Bridge across the Potomac to Washington, D.C. will alleviate existing rail bottlenecks to better connect the entire Southeast region with Amtrak's Northeast Corridor. Trends for passenger and freight rail growth and demand are described in detail in **Chapters 2.2.2 and 2.2.3**.

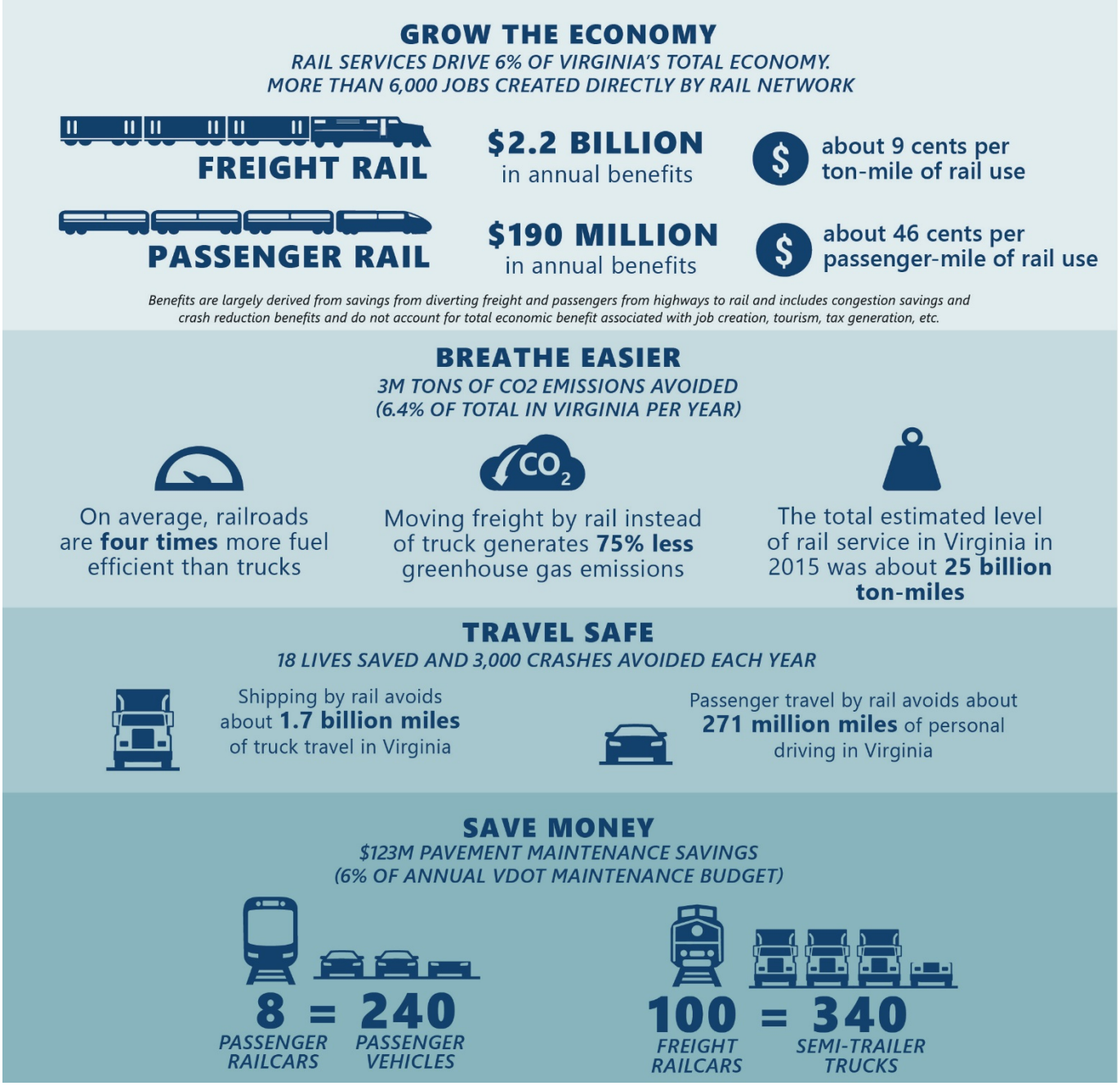
Since the 2013 Virginia State Rail Plan, the Commonwealth has provided dedicated funding to support and expand intercity passenger rail operations across the state. Virginia's busiest passenger rail routes parallel the heavily traveled I-95 corridor, where a growing number of Virginia Regional Amtrak trains serve Richmond, Newport News, and Norfolk. Additional Virginia Regional Amtrak services extend southwest from Washington, D.C. to Lynchburg and Roanoke. Virginia also supports commuter rail operations provided by Virginia Railway Express, which serves the heavily congested I-95 Corridor from Fredericksburg to Washington, D.C., as well as the I-66 Corridor between Manassas and Washington, D.C. A detailed description of the rail bottlenecks for both passenger and freight rail are in **Chapter 2.2.5**.

As the economy grows, so do the freight demands on Virginia's highways. The Commonwealth recognizes the public benefits and economic impact of investments in a multimodal freight transportation system. The freight rail network has a unique role supporting the Port of Virginia's target markets in the Midwest. Both CSX and NS intermodal corridors connect Virginia to the nation, and cost-effectively brings needed raw materials and products to our ports, manufacturers, and consumers, and carries Virginia-made products and materials to destinations throughout the nation. Each year, the rail network in Virginia carries over 800,000 carloads of coal, 534,000 carloads of mixed goods, 120,000 carloads of chemical products, 103,000 carloads of food products, and 85,000 carloads of pulp and paper products in Virginia, keeping over 5.5 million trucks off the highways. Savings in pavement maintenance costs alone are over $123 million (2016 dollars), almost 6% of VDOT's annual maintenance budget. The economic impacts and socio-environmental benefits of passenger and freight rail programs and projects in Virginia are detailed in **Chapter 2.1.7**.

Virginia's passenger and freight rail networks are affected by many external factors that drive demand for services. Freight rail corridors serving the Port of Virginia and the main north-south freight routes are experiencing growth in intermodal traffic, while changes in domestic energy production and use are reflected in a decrease in coal traffic through Virginia. Population growth, an aging population, and increasing highway congestion along the urban crescent in particular, is helping drive demand for environmentally friendly and safe alternatives to automobile travel. The Commonwealth invests in the rail network as part of a multimodal approach to meet the growing demand for freight and passenger

transportation service, and to support the economic changes and travel preferences of Virginians. As a result, Virginians benefit in the following ways shown in **Figure 5-5**.

Figure 5-5: Public and Private Economic Benefits of Passenger and Freight Rail



5.5 Passenger Elements

This chapter describes capital and operating financing plans for Virginia's passenger rail programs.

5.5.1 Passenger Rail - Capital Financing Plan

Virginia's funding mechanisms for passenger rail were identified in **Chapter 1** and **Chapter 2** of the State Rail Plan. All of Virginia's passenger rail services operate over the infrastructure of private freight rail carriers, allowing the state to combine funding from both public and private sources to deliver projects with joint passenger and freight rail benefits. Virginia uses the following funding sources for rail capital projects:

- IPROC
- REF
- Private railroad funds
- Other local or regional match
- Federally-administered rail funding

For the short-range horizon funding has been allocated for passenger rail improvements through DRPT's SYIP.

5.5.2 Passenger Rail - Operating Financing Plan

Amtrak has sole fiscal responsibility for long-distance routes through Virginia; however, the Commonwealth is financially responsible for the capital and operating costs associated with regional intercity passenger rail service originating in Virginia. Virginia's state-sponsored rail operations are funded through the IPROC Fund. Virginia's commuter rail service, VRE, is funded through other federal and state transportation funds, in addition to matching local funds.

For the long-range horizon (20 years), some funding has already been allocated for improvements that support passenger rail improvements in years 5 and 6 through DRPT's Fiscal Year 2018 SYIP. This is done through State-sponsored funding (IPROC and REF funds), along with other federal and local matching funds. The IPROC fund, established in 2011, helped to create a dedicated state revenue source for intercity passenger rail needs.

Additionally, passenger fares and other revenues are used to defray a portion of passenger rail operating costs. However, as with other transportation modes, both commuter and intercity rail require a subsidy to support capital and ongoing operating costs. The subsidy required ranges based on the type of service desired.

5.5.3 Passenger Rail - Benefits

Public and private economic benefits of passenger rail are identified in **Chapter 2.1.7**.

5.6 Freight Elements

5.6.1 Freight Rail - Capital Financing Plan

Class I railroad companies in Virginia use private financing to cover the cost of routine maintenance. However, the REF program is available to help fund the Class I rail network improvement projects; providing there is a proven benefit to the Commonwealth.

Shortline railroads typically rely upon private funding, public funding, or some combination of these sources to cover the capital cost of equipment acquisition and general infrastructure improvements. Rail Industrial Access funds, the REF program, and the Shortline Railway Preservation and Development program are available to shortline freight railroads to fund state-of-good-repair projects and rail network improvement projects.

5.6.2 Freight Rail - Benefits

5.6.2.1 Proposed Short-Range Freight Projects

The freight projects included in the Short-Range Program include projects that build on Virginia's past rail investments and prioritize congested corridors. These projects include those in the Commonwealth's SYIP.

5.6.2.2 Proposed Long-Range Freight Projects

The freight projects included in the Long-Range Program are more diversified, larger in scale and cost than most short-range projects, and have strategic importance to long-term economic success of the Commonwealth. Thus, the expected benefits from these projects are typically larger and have greater overall impacts. The range of projects involve mainline capacity expansion, accommodating new and expanded passenger services by removing freight rail bottlenecks and adding track capacity; track, signal, and bridge infrastructure upgrades; industrial access and port connectivity; and grade crossing improvements and upgrades.

Public and private economic benefits of freight rail are discussed in **Chapter 2.1.7**.

5.7 Rail Studies and Reports

Coordination with stakeholders, elected officials, the CTB, and comments from the general public have resulted in the Rail Plan's recommendations for policies and studies to guide short-term and long-term investments. **Chapter 5.8** describes the rail studies, reports, and policies that will guide future projects.

One policy of note is the Intercity Passenger Rail Station Policy. DRPT developed an Intercity Passenger Rail Station Policy as part of the Rail Plan effort to assist localities and other public entities when they prepare a proposal for:

- Adding a new station to an existing intercity passenger rail route;
- Modifying an existing station along an existing intercity passenger rail route; and,
- Adding a new station where service does not yet exist.

DRPT gathered input and best practices from multiple rail owners and operators, other states with similar policies, and federal regulators. The Policy lays out a methodology for DRPT and the CTB to evaluate proposals for stops, and provides guidance on the roles and responsibilities of a locality to fund and maintain a successful station. It also outlines necessary coordination efforts required with rail service partners like Amtrak, FRA, and the host railroads. The Intercity Passenger Rail Station Policy developed as part of the State Rail Plan is in **Appendix O**.

5.8 Passenger and Freight Rail Capital Program

Virginia's capital program invests in short-range and long-range programs and studies to meet the goals and initiatives of the State's rail program. A summary of the rail program expenditures over FY 2018 through FY 2023 is included in **Table 5-1** to illustrate Virginia's commitment to providing a robust multimodal transportation network. These projects reflect the list of short-term projects in **Table 5-2** and the SYIP.

Table 5-1: Rail Program Allocations, FY 2018 through FY 2023[a]

Fund	Category	Previous Allocations	FY18	FY19	FY20	FY21	FY22	FY23
RPF	Total State Share - Allocated Projects	$40,585,605	$10,548,094	$6,069,392	$4,266,024	$3,468,243	$1,008,904	$532,317
	Total State RPF Funds Available		$13,393,248	$6,734,104	$4,553,662	$4,176,588	$4,597,295	$7,477,341
	Total State RPF Funds Unobligated		$2,845,154	$664,712	$287,638	$708,345	$3,588,391	$6,945,024
REF	Total State Share - Allocated Projects	$111,559,973	$58,434,494	$22,905,775	$16,023,889	$5,227,178	-	-
	Total State REF Funds Available		$67,469,094	$29,154,850	$27,141,325	$31,967,436	$47,578,258	$68,422,258
	Total State REF Funds Unobligated		$9,034,600	$6,249,075	$11,117,436	$26,734,258	$47,578,258	$68,422,258
IPROC	Total State Share - Allocated Projects	$159,733,583	$86,740,150	$51,323,750	$52,368,750	$53,352,000	$56,677,000	$57,760,000
	Total State IPROC Funds Available		$86,740,150	$51,323,750	$52,368,750	$53,352,000	$56,677,000	$57,760,000
	Total State IPROC Funds Unobligated	-	-	-	-	-	-	

Source: DRPT

a In 2016 dollars

Table 5-2 and **Table 5-3** identify DRPT's short-range and long-range projects and studies consistent with PRIIA requirements. The tables highlight the Virginia State Rail Plan goals furthered by each project, which reflects the project's benefits and effects to the transportation system. The short-range projects and studies include those identified in the DRPT SYIP, including those current projects with previous allocations and those funded between FY 2018 through FY 2023. The long-range projects and studies are those between FY 2024 and FY 2042; these include a financially unconstrained list of potential initiatives identified by DRPT and our planning partners.

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Various	Operating Costs for Virginia Regional Intercity Passenger Rail Service	$88.38 m	✓	✓	✓				✓	✓
Various	Capital Equipment Contributions for Virginia Regional Intercity Passenger Rail Service	$31.34 m	✓	✓	✓				✓	
Various	DRPT Passenger Rail Station Policy	TBD	✓	✓	✓	✓	✓	✓	✓	
Richmond, Northern Virginia, Fredericksburg	I-95 Corridor Improvements – Atlantic Gateway	$535.32 m	✓	✓	✓	✓	✓	✓	✓	✓
Northern Virginia, Fredericksburg, Richmond	Long Bridge NEPA Project Planning	$4.10 m	✓	✓	✓	✓	✓	✓	✓	✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Northern Virginia, Fredericksburg, Richmond	I-95 Corridor MAS 90 Tier II EIS/PE (DC2RVA)	$55.39 m	✓	✓	✓	✓	✓	✓	✓	✓
Northern Virginia, Fredericksburg, Richmond	Planning for the RF&P Corridor	$3.50 m	✓	✓		✓		✓	✓	✓
Northern Virginia	Crystal City Platform Study	$1.01 m	✓	✓		✓			✓	✓
Northern Virginia	L'Enfant Platform Study	$3.18 m	✓	✓		✓			✓	✓
Fredericksburg, Northern Virginia	Brooke, Leeland, Potomac Shores Station Expansion Study and Design	$4.03 m	✓	✓		✓			✓	✓
Fredericksburg, Northern Virginia	Brooke, Leeland, Potomac Shores Station Expansion Construction	$30.89 m	✓	✓		✓			✓	✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Northern Virginia	Quantico Station and Track Work	$13.60 m	✓	✓		✓			✓	✓
Fredericksburg, Northern Virginia	Arkendale to Powells Creek Third Track Construction and Island Platforms	$26.56 m	✓	✓	✓				✓	✓
Richmond	Acca Yard, Carson to Reams, Crossover Improvements	$132.0 m	✓	✓	✓				✓	✓
Richmond	Staples Mill Parking Lot Expansion	$8.34 m	✓	✓					✓	✓
Hampton Roads	Bland Boulevard, Newport News Station Platform, Terminal Track, Turning, and Storage Facility	$20.0 m	✓		✓	✓			✓	✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Hampton Roads	Branchville Siding Extension	$8.60 m	✓	✓		✓			✓	✓
Hampton Roads, Richmond	Norfolk Passenger Train Capital Costs	$3.29 m	✓		✓	✓			✓	✓
Lynchburg, Salem	Improvements Lynchburg to Roanoke for Extension of Service	$102.12 m	✓	✓		✓		✓	✓	✓
Lynchburg, Culpeper, Northern Virginia	Lynchburg Second Passenger Train Capital Improvements	$53.64 m	✓		✓	✓			✓	✓
Lynchburg, Culpeper, Northern Virginia	Lynchburg to Alexandria Speed Improvements	$9.19 m	✓		✓				✓	✓
Salem, Bristol, Staunton	Montgomery Tunnel	$5.10 m	✓	✓		✓				✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Salem, Bristol, Staunton	Clark Siding	$7.80 m	✓	✓		✓			✓	✓
Salem, Bristol, Staunton	Glade Spring Siding	$6.60 m	✓	✓		✓			✓	✓
Salem	Land Acquisition for Roanoke Train Station	$0.47 m	✓						✓	✓
Lynchburg, Northern Virginia	Rail Traffic Control Model Study – Lynchburg Second Train	$0.33 m	✓		✓	✓				✓
Salem, Bristol	Rail Traffic Control and Modeling Study for NRV/Bristol Passenger Extension	$0.35 m	✓		✓	✓				✓
Hampton Roads	NIT Central Rail Yard Expansion	$12.05 m	✓	✓		✓			✓	✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Richmond	Port of Richmond Rail Improvements	$3.24 m	✓	✓					✓	✓
Hampton Roads	Commonwealth Railway Marshalling Yard Expansion	$24.35 m	✓	✓		✓			✓	✓
Hampton Roads	Rehabilitation of SunRay-Portlock and Bridge 6.8	$2.03 m	✓	✓						✓
Staunton	Virginia Inland Port Capacity Expansion – Front Royal	$5.70 m	✓			✓				✓
Hampton Roads	Center Point Intermodal Center	$8.80 m	✓			✓			✓	✓
Staunton	Chesapeake and Western Span Upgrade	$0.30 m	✓	✓						✓
Piedmont	Performance Feed Mainline Track Upgrade	$0.56 m	✓	✓						✓
Fredericksburg, Richmond	Norfolk Southern F-Line Clearance	$2.50 m	✓	✓	✓				✓	✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Hampton Roads	BCR Tie Replacement and Upgrade	$0.88 m		✓						✓
Culpeper and Staunton	BB Richmond and Alleghany Division Tie Replacement – 116,000 Wood Mainline/Switch Associated Ballast/Tamping/ Surfacing 116 miles	$13.20 m		✓						✓
Richmond, Culpeper, Staunton	BB Richmond and Alleghany Division Track, Surface, and Subsurface Improvements	$5.40 m	✓	✓						✓
Lynchburg	BB Dillwyn - Buckingham Division Rail Replacement and Tie Replacement Ballast, and Surfacing Public Crossings Rehab, Dillwyn Tie	$ 3.70 m		✓						✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	Project	Total Programmed, Current through FY23*	Optimize Investments	Ensure Safety	Program Efficiency	Prioritize Operations/Demand	Ensure Accountability	Coordinate Transportation/Land Use	Ensure Efficient Intermodal Connections	Support Regional Development
	Replacement									
Lynchburg	BB Virginia Southern Division Bridge and Track Upgrade	$11.09 m	✓	✓						✓
Culpeper	BB Piedmont Subdivision Rail Upgrade	$2.50 m		✓						✓
Lynchburg	BB Buckingham Division Bridge Upgrade MP 9.6	$0.08 m		✓						✓
Lynchburg	BB Buckingham Division Bridge Improvements	$0.40 m		✓						✓
Culpeper	BB Charlottesville Yard Upgrade	$2.05 m		✓						✓
Culpeper and Staunton	BB North Mountain Division Switch Heater Replacement – Phase II	$0.50 m		✓						✓
Richmond, Culpeper, Staunton	BB Richmond and Alleghany Division Tie Replacement	$10.00 m	✓	✓		✓				✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Lynchburg	BB Buckingham Division Tie and Rail Replacement	$2.00 m		✓						✓
Richmond, Culpeper, Staunton	BB Richmond and Alleghany Division Bridge Upgrades (13)	$1.80 m	✓	✓						✓
Culpeper, Staunton	BB North Mountain Division Tie Replacement, Afton Tunnel	$1.30 m		✓						✓
Culpeper, Staunton	BB North Mountain Division Switch Heater Replacement – Phase III	$0.70 m		✓						✓
Culpeper, Staunton	BB North Mountain Division Reduction of Ice Formation, Afton Tunnel	$0.35 m		✓						✓
Lynchburg	BB Richmond and Alleghany Division Signal System	$0.48 m		✓		✓				✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
	Improvements									
Richmond, Culpeper, Staunton	BB Richmond and Alleghany Division Install Wayside Lubricators	$0.50 m		✓		✓				✓
Lynchburg	BB Virginia Southern Division Bridge Improvements	$0.99 m		✓						✓
Richmond, Culpeper, Staunton	BB Richmond and Alleghany Division Replace Siding and Industry Turnouts	$1.62 m	✓	✓						✓
Hampton Roads	CWRY Tie and Rail Replacement	$1.97 m		✓						✓
Hampton Roads	CWRY Track Infrastructure Rehab Improvement, Bridge 16.4	$0.60 m		✓						✓
Hampton Roads	CWRY Six-Year Track Infrastructure Rehab	$3.71 m	✓	✓						✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
	Improvement									
Hampton Roads	NPB Yard Improvements	$3.28 m		✓						✓
Hampton Roads	NPB Programmatic Bridge Repairs	$0.20 m		✓						✓
Hampton Roads	NPB Virginia Yard Expansion	$3.20 m		✓						✓
Hampton Roads	NPB Poindexter Street Crossing	$0.15 m		✓						✓
Hampton Roads	NPB Tie Upgrade Project – Port Norfolk to Mainline Bridge	$0.40 m		✓						✓
Hampton Roads	NPB Tie Upgrade Project – South Berkley Yard to End of Elizabeth River Mainline	$0.50 m		✓						✓
Hampton Roads	NPB Rehab Port Norfolk Yard	$1.10 m		✓						✓
Hampton Roads	NPB Precon Siding Project	$0.63 m		✓						✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Hampton Roads	NPB Redeck Elizabeth River Bridge #2 Southern Branch	$0.32 m		✓						✓
Hampton Roads	NCVA Six-Year Track Improvement and Upgrade	$1.43 m		✓						✓
Staunton	SV Tie Replacement and Upgrade	$0.88 m		✓						✓
Staunton	SV Track Bed Upgrade and Tie Replacement	$0.99 m		✓						✓
Staunton	SV Bridge 129 Repairs	$0.63 m		✓						✓
Staunton	SV Tie Replacement and Track Bed Repairs	$0.20 m		✓						✓
Staunton	SV Track Bed Upgrade and Tie Replacement	$0.55 m		✓						✓
Staunton	SV Staunton Yard South Extension	$0.35 m		✓						✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Staunton	SV Staunton Yard Interchange Capacity Improvements	$0.24 m		✓		✓				✓
Staunton	SV Six-Year Bridge Upgrade and Repair	$0.89 m		✓						✓
Staunton	SV NS Interchange at Scholars Road	$0.38 m		✓						✓
Staunton	SV VDOT Grade Crossing	$0.12 m		✓						✓
Staunton	SV VDOT Cut MP 23.5 Mud Track	$0.21 m		✓						✓
Staunton	SV Mt. Crawford Siding Rail Upgrade	$0.08 m		✓						✓
Staunton	SV Verona Siding Project	$0.34 m		✓						✓
Staunton	SV Track Bed Upgrade and Replacement, MP 21.0-25.0	$0.36 m		✓						✓
Staunton	SV Keezletown Grade Crossing	$0.17 m		✓						✓
Staunton	WW Tie/Rail Replacement,	$4.44 m		✓						✓

Table 5-2: Short-Range Program of Passenger and Freight Projects, Current through FY23

			Goals							
District	**Project**	**Total Programmed, Current through FY23***	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
	Surfacing, Crossing									
Staunton	WW Capacity Upgrade/Yard Improvements	$4.38 m		✓						✓
Staunton	WW Rail Replacement and Bridge Deck Renewal	$3.68 m		✓						✓
Staunton	WW Replace Winchester Interchange and Siding Turnout	$0.36 m		✓						✓

** Total Programmed = Previous Allocations plus FY18 through FY23*
Source: DRPT

Table 5-3: Long-Range Potential Passenger and Freight Projects, FY 2024 through FY 2042

			Goals							
District	**Project**	**Planning Level Cost Estimate (where available)**	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Northern Virginia	Long Bridge Capacity Improvements	TBD	✓	✓	✓	✓	✓	✓	✓	✓
Richmond, Northern Virginia, Fredericksburg	Washington to Richmond SEHSR Construction	TBD	✓	✓	✓	✓	✓	✓	✓	✓
Richmond	Richmond to Raleigh SEHSR Construction	TBD	✓	✓	✓	✓	✓	✓	✓	✓
Hampton Roads, Richmond	Richmond to Hampton Roads SEHSR Tier II Study, Goals, and Construction	TBD	✓	✓	✓	✓	✓	✓	✓	✓
Richmond	Tri-Cities SEHSR Multimodal Station Construction	TBD	✓		✓	✓		✓	✓	✓
Salem	Roanoke Second Amtrak Train	TBD	✓		✓	✓			✓	✓
Salem	Roanoke to New River Valley Amtrak Service Extension	TBD	✓		✓	✓			✓	✓
Salem, Bristol	New River Valley to Bristol Passenger Service Extension	TBD	✓		✓	✓			✓	✓

Table 5-3: Long-Range Potential Passenger and Freight Projects, FY 2024 through FY 2042

			Goals							
District	**Project**	**Planning Level Cost Estimate (where available)**	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Richmond, Culpeper	Richmond to Charlottesville Passenger Service Expansion	TBD	✓		✓	✓			✓	✓
Richmond, Lynchburg	Richmond to Lynchburg Passenger Service Expansion	TBD	✓		✓	✓			✓	✓
Lynchburg	Lynchburg to Charlotte Passenger Service Extension	TBD	✓	✓	✓	✓			✓	✓
Various	Amtrak Operating Costs and Capital Equipment Contribution Costs for Virginia Regional Intercity Passenger Rail Service	TBD	✓	✓	✓				✓	
Various	DRPT Passenger Rail Station Management Policy	TBD	✓		✓	✓	✓	✓	✓	
Various	DRPT Passenger Rail Station Facility and Connectivity Policy	TBD	✓		✓	✓	✓	✓	✓	✓

Table 5-3: Long-Range Potential Passenger and Freight Projects, FY 2024 through FY 2042

			Goals							
District	**Project**	**Planning Level Cost Estimate (where available)**	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Various	Amtrak Virginia Service Enhancement Study	TBD	✓	✓	✓	✓	✓		✓	
Various	Track and Bridge Infrastructure Upgrades	TBD	✓	✓						✓
Various	Inland Ports Study	TBD	✓	✓				✓		✓
Statewide	Statewide Grade Crossing Improvement and Upgrade Projects (Federal)	$80 m		✓						
Statewide	Statewide Grade Crossing Improvement and Upgrade Projects (State)	$80 m		✓						
Northern Virginia	VRE Widen Long Bridge for Additional Rail Capacity	$700.30 m	✓	✓	✓	✓	✓	✓	✓	✓

Table 5-3: Long-Range Potential Passenger and Freight Projects, FY 2024 through FY 2042

			Goals							
District	**Project**	**Planning Level Cost Estimate (where available)**	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Fredericksburg	VRE Fredericksburg Line Rail Capacity Improvements	$862.70 m	✓	✓	✓	✓	✓	✓	✓	✓
Northern Virginia, Fredericksburg	VRE Fredericksburg and Manassas Line Off-Peak Service	TBD	✓	✓	✓	✓	✓	✓	✓	✓
Northern Virginia, Fredericksburg	VRE Implement integrated regional VRE/MARC run-through rail service	TBD	✓	✓	✓	✓	✓	✓	✓	
Northern Virginia	VRE Alexandria-D.C. Rail Capacity Improvements	$294.23 m	✓	✓	✓	✓	✓	✓	✓	✓
Northern Virginia	VRE Alexandria Passenger Station Improvements	$33.03 m	✓	✓	✓	✓	✓	✓	✓	✓
Northern Virginia	VRE Manassas Line Rail Capacity Enhancements	$498.65 m	✓	✓	✓	✓	✓	✓	✓	✓

Table 5-3: Long-Range Potential Passenger and Freight Projects, FY 2024 through FY 2042

			Goals							
District	**Project**	**Planning Level Cost Estimate (where available)**	**Optimize Investments**	**Ensure Safety**	**Program Efficiency**	**Prioritize Operations/Demand**	**Ensure Accountability**	**Coordinate Transportation/Land Use**	**Ensure Efficient Intermodal Connections**	**Support Regional Development**
Fredericksburg	VRE Fredericksburg Line Service Expansion	$161.55 m	✓	✓	✓	✓	✓	✓	✓	✓
Northern Virginia, Fredericksburg	VRE Fredericksburg Line Peak Period Service Expansion	$216.15 m	✓	✓	✓	✓	✓	✓	✓	✓
Northern Virginia	VRE Manassas Line Peak Period Service Expansion	$126.75 m	✓	✓	✓	✓	✓	✓	✓	✓
Richmond	Ashland Station Passenger Information Display System	$0.4 m		✓					✓	

Source: DRPT