## **Virginia Railway Express**



**Recommended Budget for Fiscal Year 2018** 

**Amended Budget for Fiscal Year 2017** 

**Six-Year Financial Forecast and Capital Improvement Program** 

**December 16, 2016** 





# VIRGINIA RAILWAY EXPRESS



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## Recommended FY 2018 Budget

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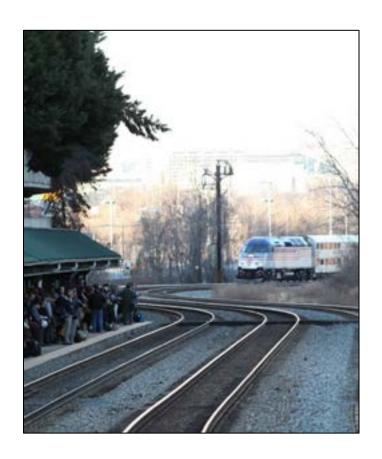


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#### **Introduction**

The Virginia Railway Express (VRE) is the commuter rail service jointly owned and operated by the Northern Virginia Transportation Commission (NVTC) and the Potomac and Rappahannock Transportation Commission (PRTC). NVTC and PRTC are political subdivisions of the Commonwealth of Virginia. VRE was created in 1989 under the terms of a Master Agreement signed by the two Commissions and the local jurisdictions that participate in or contribute to the operation of the commuter rail service.

The VRE Operating and Capital Budget is developed annually in accordance with the VRE Master Agreement and includes estimated operating and capital revenue and expenses for the next fiscal year. In addition, the six-year Capital Improvement Program (CIP) provides projections of capital funding and outlays for future years. The Six-Year Financial Forecast, which is also required by the Master Agreement, combines the impact of future service plans and revenue and expense projections for all activities during the FY 2018 to FY 2023 time period. The preliminary FY 2018 VRE Operating and Capital Budget was initially prepared for review at the September 2016 VRE Operations Board meeting. The proposed budget was reviewed and discussed at subsequent meetings of the VRE Operations Board, the Chief Administrative Officers (CAO) Taskforce, and the Capital Committee of the Operations Board, before its presentation to the Operations Board in December and the Commissions in January.

The VRE budget uses accrual accounting for major revenue and expense items; for example, transactions such as access fees are recorded for the month due, rather than for the month paid and related grant revenue is recorded when earned rather than when received. However, the budget is developed on a cash basis for other items, such as payment of principal on outstanding debt, in order to fully capture annual resource needs. The VRE financial statements use the full accrual basis of accounting.

The FY 2018 VRE Budget has been developed to meet existing operational requirements and in accordance with the VRE Mission Statement of providing safe, cost effective, and reliable commuter-oriented rail passenger service. The VRE Budget and CIP is also developed in accordance with the Financial and Debt Management Principles adopted by the Commissions in November 2013, detailed later in this document.

The Recommended FY 2018 Operating and Capital Budget totals \$133.4 million. The budget includes a 3% fare increase and projected average daily ridership of 18,200 passengers, which results in a total of \$39.8 million in fare revenue. The jurisdictional subsidy of \$17,250,240 is unchanged from the prior fiscal year. Staff have worked diligently to limit or eliminate



operating cost increases wherever possible, and departmental expenses have been reviewed and evaluated to ensure appropriateness while ensuring VRE achieves its safety and operational goals. Contractual increases, such as railway and station access fees, train operations and maintenance of equipment are projected to be low to moderate for FY 2018, and diesel fuel costs are projected to remain lower than average. Non-contractual departmental expenses and a restoration of appropriate contingency amounts are the primary reasons for cost increases in the FY 2018 operating budget.

In FY 2016, VRE completed a long-term Financial Plan that reviewed the revenues and costs associated with various service scenarios over a twenty-five year period. The conclusion of this forecast was that existing sources of revenue are inadequate to meet the system's needs over time, even for the operation of the existing level of service, with further funding needed for service expansion to meet the growth in the region.

The FY 2018 to FY 2023 CIP illustrates these funding challenges for VRE, since currently identified funding falls short of the system's capital needs. The ongoing uncertainty of available levels of future State funding for capital needs has further exacerbated these challenges. Projects included in the CIP are prioritized with an emphasis on regulatory requirements, the maintenance of equipment and facilities to support current service levels, and provisions for passenger safety. Although projects in these categories are shown as fully funded in the CIP, VRE will have significant difficulties in meeting federal grant match requirements at the currently projected level of State assistance.

A primary VRE priority for FY 2018 is to continue to work with our local, state and other partners on securing additional and dedicated funding for the commuter rail system. At the same time, VRE will focus the organization on maximizing ridership, maintaining our critical infrastructure and providing a safe and effective transportation option for the region.









#### **Mission Statement**

The Virginia Railway Express, a joint project of the Northern Virginia Transportation Commission and the Potomac Rappahannock Transportation Commission will provide safe, cost effective, accessible, reliable, convenient, and comfortable commuter-oriented rail passenger service. VRE will contribute to the economic development of its member jurisdictions as an integral part of a balanced, intermodal regional transportation system.

#### **Goals for Fiscal Year 2018**

- Achieve at least a 50 percent operating ratio (cost recovery).
- Operate trains on time greater than 90 percent of time.
- Achieve at least 18,200 average daily ridership
- Strive to attain the following financial ratios over the course of the Six-Year Plan:
  - Debt service as a percent of annual budget not greater than 20%
  - Working capital reserves that are on average not less than 2 months of operating expenditures, with a goal of increasing to 3 months over a 10 year period
  - Percent of pay-as-you-go financing equal to a minimum of 20% of the total funded portion of the capital program over the term of the capital program
  - Risk management reserves equal to amounts imposed by the Commonwealth, currently set at \$10 million



## <u>Financial and Debt Management Principles</u> (Adopted November 7, 2013)

The purpose of this document is to formalize financial and debt management principles for the Virginia Railway Express (VRE), the commuter rail service jointly owned and operated by the Northern Virginia Transportation Commission (NVTC) and the Potomac and Rappahannock Transportation Commission (PRTC), together referred to as the Commissions. In accordance with the Master Agreement that established VRE, any bonds or notes issued to support the commuter rail operation will be issued in the name of NVTC, with the concurrence of both Commissions and all member jurisdictions. This Statement of Financial and Debt Management Principles confirms the commitment of VRE's Operations Board, the Commissions, and the management and staff of VRE to adhere to sound financial and debt management practices in the conduct of VRE's business.

- 1. Any debt or financing arrangement issued in support of VRE projects must be in full compliance with all applicable provisions of the Commonwealth of Virginia statutes, federal laws and the VRE Master Agreement.
- 2. Any long term debt issued in support of VRE projects will be included in VRE's Capital Improvement Program and Six Year Financial Forecast and debt will only be issued for approved capital projects. Prior to issuance, VRE will forecast the long-term impact of such debt on the use of federal formula funds, the impact on VRE's six year plan, the annual contributions required from its member jurisdictions over the term of the debt, and to test compliance with the financial ratios described below.
- 3. VRE strives to attain the following financial ratios over its Six Year Plan:
  - a. A fare box recovery ratio not lower than 50% of operating expenses.
  - b. Debt service as a percent of annual budget not greater than 20%.
  - c. Percent of pay-as-you-go financing equal to a minimum of 20% of the total funded portion of the capital program over the term of the capital program.
  - d. Working capital reserves that are on average not less than 2 months of operating expenditures, with a goal of increasing to 3 months over a 10 year period.
  - e. Risk management reserves equal to amounts imposed by the Commonwealth. Currently the risk management reserve requirement is \$10 million.



- 4. VRE will match one time revenue with one time expenditures to avoid creating structural imbalance in its annual budgets.
- 5. Projects included in VRE's Capital Improvement Program will be prioritized with emphasis on regulatory requirements, the maintenance of equipment and facilities to support current service levels, and provisions for passenger safety.
- 6. The capital reserve will be maintained through the contribution of surplus funds generated from operations and from other sources in order to provide the necessary match funds to take advantage of grant funding opportunities and to complete advantageous capital projects.
- 7. VRE will maintain an asset management plan for all major capital assets which will identify operating, maintenance and renewal costs over the life of the asset. If a reliable source of funding is not expected to be available to meet peak needs when they occur, a sinking fund will be established for this purpose. The annual budget and Capital Improvement Program will include the life-cycle cost impact of each project in the CIP.
- 8. VRE will maintain access to external liquidity sources, such as a line of credit, because of the heavy reliance on funding from other parties. This short term borrowing will only be used with the approval of the Operations Board and when the source of repayment has been identified.
- 9. Debt that supports VRE projects will be amortized for a period not to exceed the useful life of the assets being financed.
- 10. For any publicly sold debt to support VRE projects:
  - a. Debt service funds will be established at the time of issuance and contributions will be made on a monthly basis so that amounts are available to ensure timely payment of principal and interest when due.
  - b. A debt service reserve fund will be established (as needed by the revenue bond structure or for credit purposes) to provide a cushion of funding for the debt obligations. Such funds will be sized to equal maximum annual debt service, subject to limitations imposed by the IRS for funding of such reserves.
  - c. The bond structure will be sufficient to secure a rating in the A category or better.
- 11. The debt service structure that supports VRE projects will be developed and maintained to achieve strong credit ratings while addressing the overall revenue constraints and capacity of VRE. Total principal and interest payments for any borrowing will be structured to create level debt service in aggregate for VRE. Alternatively, VRE may use a more rapid



repayment structure, such as equal annual principal payments. The use of back loaded principal repayment, bullet and balloon maturities will be avoided, except to achieve overall level aggregate debt service or to match anticipated one time revenues.

- 12. As needed, VRE will establish and maintain a separate set of post issuance policies and procedures for managing any required disclosure, tax or other legal requirements.
- 13. The use of variable rate debt is discouraged, except under unusual circumstances. However, should it be found to be in VRE's best interest to use this mechanism, the Operations Board and Commissions will first establish appropriate policies and procedures.





**Virginia Railway Express** 

Fiscal Year 2018 Budget



#### FY 2018 Budget Assumptions & Summary

The FY 2018 Budget totals \$133.4 million. The FY 2018 operating budget expenses of \$84.9 million exceed the prior year amount by \$2.5M, with a combination of revenue increases and low contractual cost increases netting out against increased operational expenses and a more appropriate contingency amount. Major assumptions are as follows:

- Subsidy level of \$17,250,240; no increase from the FY 2017 subsidy
- A 3% fare increase. Fare revenue budgeted at \$39.85M based on a projected average daily ridership of 18,200. This assumes a 32 revenue train operation and an overall 32 train schedule
- State funding for operations is projected at \$10.0M, a slight projected decrease of the amount received in FY 2017, and \$1.0M more than in the approved FY 2017 budget
- Fuel cost projected at \$4.76M, based on a cost per gallon of \$2.85
- Track access costs at \$16.84M, based on estimated or actual contractual amounts. Grant funding from all sources for track access costs at 84%, or \$14.1M; equal to the percentage level provided in FY 2017.
- No staff additions proposed in FY 2018
- Required contractual increases for train operations and maintenance of equipment budgeted at a net increase of \$705k reflecting projected cost revisions and a CPI increase of 1.64%
- Operating contingency at 1.86% of the operating budget, an increase of 0.86% (\$642k) from the percentage in the approved FY 2017 Budget.
- Other operating expense increases include staff salary and fringe benefits (\$352k), Project Development consulting (\$258k), legal fees (\$200k), yard security (\$155k) & non-routine station maintenance (\$110k).
- Prior year funding of \$955k for one-time expenditures in FY 2018, for NTD Update, Benefits Analysis and Transit Development Plan update (\$400k), projected potential legal fees (\$200k), computer/IT equipment (\$150k), painting and one-time non-routine maintenance of VRE stations (\$110k) and for station construction security (\$95k).
- Federal 5307 (Urbanized Area) and 5337 (State of Good Repair) funding of \$29.2M, \$2.19M more than in the approved FY 2017 budget.
- Tiered capital matching funds from the State of the non-federal share for new projects. Most projects budgeted at 16% match; with 34% (tier II) funding requested from the state for the major midday storage and Washington Union Station improvement projects.
- Contribution to the Capital Reserve of \$3M with \$500k allocated from the Reserve balance for FY 2018 capital projects.



### **Subsidy by Jurisdiction**

The FY 2018 budget assumes no change in the total jurisdictional subsidy amount. Every October a survey of VRE riders is done to calculate the subsidy allocation by jurisdiction. The projected FY 2018 jurisdictional subsidy, which reflects the most recent October 2016 ridership survey results, is as follows:

	FY 2017	FY 2018	Change		
Jurisdiction	Subsidy	Subsidy	Net +/-	% Change	
Fairfax County	5,160,910	6,099,300	938,391	18.18%	
Prince William County	5,968,406	5,363,372	(605,034)	-10.14%	
Stafford County	2,647,222	2,344,514	(302,708)	-11.43%	
Spotsylvania County	1,382,749	1,520,191	137,442	9.94%	
Manassas	749,371	684,586	(64,785)	-8.65%	
Manassas Park	511,777	474,718	(37,059)	-7.24%	
Fredericksburg	483,524	417,278	(66,246)	-13.70%	
Arlington	205,692	205,692	0	0.00%	
Alexandria	140,589	140,589	0	0.00%	
	17,250,240	17,250,240	(0)	0.00%	



FY 2018 Summary Proposed Budget									
GI Account	FY2017 Approved GL Account FY2017 Operating FY2017 Capital								
Revenue:	F12017 Operating	F12017 Capital	FY2018 Operating	FY2018 Capital					
Fare Revenue	38,950,000		39,845,400						
Miscellaneous Revenue	200,000		225,000						
Jurisdictional Subsidy	13,002,382	4,247,858	12,874,980	4,375,26					
Other Sources (Use of Prev. Surplus)	377,000	-	955,000	-					
Federal/State Subsidy - Operating	29,929,051		31,005,851						
Federal/State Subsidy - Capital		42,780,585		43,547,331					
Operating/Capital Reserves	-	1,000,000	-	500,000					
Interest Income	25,000		75,000						
Total Revenue	82,483,433	48,028,443	84,981,231	48,422,591					
	32,100,100	10,020,110	- 1,00-,-0-	,,					
Operating/Non-Operating Expenses:									
Non-Departmental Operating (Incld. Insurance & Contingency)	4,728,794		5,395,008						
Executive Management	1,139,500		1,452,300						
Chief of Staff	535,500		1,175,500						
Marketing (Merged into Chief of Staff in FY18)	423,200		1,173,300						
Finance and Human Resources	3,504,000		3,672,500						
Purchasing and Contract Administration	484,000		515,920						
Project Development	780,150		1,069,250						
· ·	•								
Project Implementation	809,100		945,200						
Rail Operations	1,910,500		1,886,000						
Information Technology	2,237,000		2,316,333						
Facilities Maintenance	4,536,650		4,590,950						
Mechanical Operations	10,908,500		10,723,400						
System Safety & Security	1,031,500		1,256,500						
PRTC	104,000		104,000						
NVTC	80,000		90,000						
Train Operations	15,463,003		15,416,000						
Maintenance of Equipment	5,608,166		6,360,500						
Amtrak	4,615,000		4,407,000						
Amtrak Access Fees	6,340,000		6,600,000						
Norfolk Southern Access Fees	3,450,000		2,940,000						
CSX Access Fees	7,030,000		7,300,000						
Total Operating/Non-Operating Expenses	75,718,564	-	78,216,361	-					
CIP Expenditures		48,028,443		48,422,591					
Debt Service/Allowance for Doubtful Accts	6,764,870	,,	6,764,870	, ,					
Total CIP and Other Expenditures	6,764,870	48,028,443	6,764,870	48,422,591					
	0,7 0 7,07 0	.0,020,443	5,7 6-1,67 6	.5,=22,551					
Grand Total Expenses	82,483,433	48,028,443	84,981,231	48,422,591					



#### FY 2018 Sources and Uses Leases 16.840.000 Amtrak 6.600.000 LEVEL OF SERVICE FOR FY18 32 trains 18,200 Average Daily Riders NS 2,940,000 Total Access Fees 16.840.000 CSX 7.300.000 Total 16,840,000 SOURCES OF FUNDS ---STATE ---FEDERAL---USES OF **FUNDS** FARE LOCAL OTHER OTHER STATE STATE STATE INCOME INTEREST MISC SUBSIDY SOURCES **SOURCES OPERATING** CAPITAL 5307/5337 OTHER TOTAL STP **Operating Expenses** 78,230,361 39,845,400 75,000 225,000 12,464,361 955,000 10,000,000 5,725,600 8,420,000 520,000 78,230,361 Non-Operating Expenses: 36,000 36,000 36,000 Operating Reserve Debt Svc (Gallery IV) (11 Cabcars) 1,931,357 77,254 309,017 1,545,086 1,931,357 110,442 Debt Svc 60 Railcars (Local) 110,442 110.442 Debt Svc 60 Railcars (Fed/State/Local) 4,673,071 186,923 747,691 3,738,457 4,673,071 Non-Operating Summary 6,750,870 410,619 1,056,708 5,283,542 6,750,870 Total Expenses (Subtotal) 84,981,231 39,845,400 75,000 225,000 12,874,980 955,000 10,000,000 6,782,308 8,420,000 5,803,542 84,981,231 Capital Projects: Facilities Asset Management Program 2,760,000 110,400 441,600 2,760,000 2,208,000 15,456 386,400 Security Cameras 386,400 61.824 309,120 17,591,257 quipment Storage Projects 17,591,257 703,650 5,981,027 10,906,579 Positive Train Control (PTC) 3,638,833 145,553 582,213 2,911,066 3,638,833 quipment Asset Management Program 4,900,000 196,000 784,000 3,920,000 4,900,000 Security Enhancements 105,000 4,200 16,800 84,000 105,000 Washington Union Station Improvements 200,000 1,700,000 3,100,000 5,000,000 5,000,000 'Enfant Station Improvements 250,000 250,000 250,000 250,000 ourth Track VA to LE 250,000 250,000 3.000.000 Capital Reserve 3,000,000 3,000,000 37,881,490 4,375,260 500,000 9,567,465 23,438,766 37,881,490 Capital Project Summary CMAQ/REF/IPROC Rippon Platforms (CMAQ) 819 164 819 655 Broad Run Parking Imp. (CMAQ) 5,248,282 1,049,656 4,198,626 5,248,282 -Brooke Platforms (REF) 2,646,000 2,646,000 -2,646,000 eeland Road Platforms (REF) 2,646,000 2,646,000 0 2,646,000 6,341,820 4,199,281 ummary 10,541,101 10,541,101 \_ TOTAL 133,403,822 39,845,400 75,000 225,000 17,250,240 1,455,000 10,000,000 22,691,593 8,420,000 29,242,308 4,199,281 133,403,822 Federal Amt Soft Capital Projects Funding Program State Amt Debt Service 11 Cabcars 5337 1,931,357 1,545,086 309,017 Access lease funding (50%/34%) 16,840,000 SSTP/State 8,420,000 5,725,600 Access lease funding (50%/30%) SSTP/State Debt Service 60 Railcars 110,442 Local only Fed/State/Lo Debt Service 60 Railcars 2,725,958 5337 2,180,766 436,153 Fed/State/Lo Debt Service 60 Railcars 1,947,113 5307 1,557,690 311,538 Grant & Project Management 650,000 5307 520,000 Grant & Project Management

Subtotal

Capital Projects/Earmarks

Federal Cap Program

24,204,870

48,422,591

72,627,461



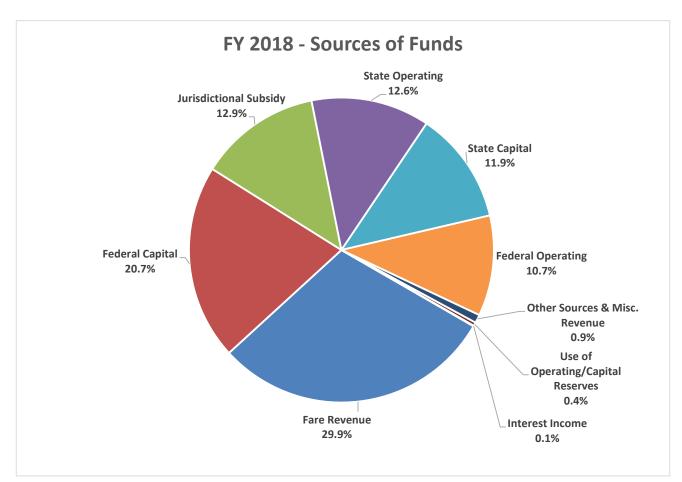
27,638,047

41,861,589

6,782,308

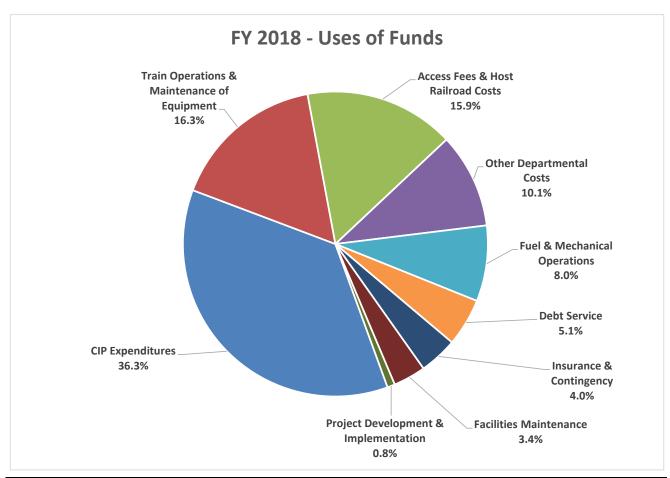
15,909,285

22,691,593



Revenue Source	FY 2018 Amount	% of Total
Fare Revenue	\$ 39,845,400	29.9%
Federal Capital	\$ 27,638,047	20.7%
Jurisdictional Subsidy	\$ 17,250,240	12.9%
State Operating	\$ 16,782,308	12.6%
State Capital	\$ 15,909,285	11.9%
Federal Operating	\$ 14,223,542	10.7%
Other Sources & Misc. Revenue	\$ 1,180,000	0.9%
Use of Operating/Capital Reserves	\$ 500,000	0.4%
Interest Income	\$ 75,000	0.1%
Total Sources of Funds	\$ 133,403,822	100.0%





Type of Use		FY 2018 Amount	% of Total
CIP Expenditures	\$	48,422,591	36.3%
Train Operations & Maintenance of Equipment	\$	21,776,500	16.3%
Access Fees & Host Railroad Costs	\$	21,247,000	15.9%
Other Departmental Costs	\$	13,414,253	10.1%
Fuel & Mechanical Operations	\$	10,723,400	8.0%
Debt Service	\$	6,764,870	5.1%
Insurance & Contingency	\$	5,395,008	4.0%
Facilities Maintenance	\$	4,590,950	3.4%
Project Development & Implementation	\$	1,069,250	0.8%
Total Uses of Fund	s \$	133,403,822	100.0%







## Virginia Railway Express

**Amended Fiscal Year 2017 Budget** 



#### **Amended Budget Assumptions for FY 2017**

The FY 2017 budget has been revised to reflect current projections for revenue and expenses, as follows:

#### ☐ Revenue

- Increased state operating funds in the amount of \$1.55M to reflect a higher funding amount provided.
- No changes to projected fare revenue.
- Increase to federal and state grant revenue by a total of \$11.5M related to additional federal, regional and state grant funding for capital projects.
- Allocation of \$2.0M in capital reserve for the Capital Planning Fund (CPF).
- Elimination of \$500K allocation of capital reserve for midday storage projects.

#### □ Expenses

- Operating contingency was increased by a net \$337K for various additions and revisions of current year operating and capital costs and revenue. The major expense changes were:
  - Revision and additions to Train Operations and Maintenance of Equipment, a net increase of \$616K; an increase of \$239K for work on the database development project, for which funds had been budgeted in prior years; an increase of \$95K for federal relation services, an increase of \$95K for the 25th Anniversary campaign and expanded marketing and media advertising efforts; an increase of \$82K for a VRE system wide project control review; and use of \$155K of contingency as local match for additional capital projects.

#### Capital Program

- Capital project spending was increased by \$13.16M to reflect additional available capital funding:
- An additional \$3.06M of Federal formula funding for capital projects, primarily for midday storage projects.
- An additional \$2.0M in NVTA funding for Manassas Park Parking Improvements.
- An additional \$6.1M in REF and IPROC funding, for Brooke, Leeland Rd. and Quantico Station Improvements.
- Capital Reserve funds of \$2.0M allocated for the Capital Planning Fund (CPF) and \$500K eliminated for midday train storage projects due to other funding availability.

#### ☐ <u>Use of FY 2016 Surplus</u>

- \$955K used to fund one-time expenditures in FY 2018
- \$4.75M contribution to Capital Reserve



	FY 2017 Amended Sources and Use												
LEVEL OF SERVICE FOR FY17	34 trains	Leases 16,820,000 19,100 average daily riders - Total Access Fees 16,820,000				Amtrak NS CSX	6,340,000 3,450,000 7,030,000						
											Total	16,820,000	
					П	1	SOU	RCES OF FUNDS					
	USES OF							STATE			FEDERAL		
	FUNDS	FARE			LOCAL	OTHER	OTHER	STATE	STATE	STATE		OTHER	
		INCOME	INTEREST	MISC	SUBSIDY	SOURCES	SOURCES	OPERATING	CAPITAL	STP	5307/5337	CMAQ/NVTA	TOTAL
Operating Expenses	77,152,278	38,950,000	25,000	200,000	12,460,799	377,000	-	10,550,679	5,718,800	8,410,000	460,000		77,152,278
Non-Operating Expenses:													
, , , , , , , , , , , , , , , , , , ,													
Operating Reserve	12,000				12,000								12,000
Debt Svc (Gallery IV) (11 Cabcars)	1,931,357				77,254				309,017		1,545,086		1,931,357
Debt Svc 60 Railcars (Local)	110,442				110,442								110,442
Debt Svc 60 Railcars (Fed/State/Local)	4,673,071				186,923		-		747,691		3,738,457		4,673,071
Non-Operating Summary	6,726,870	-	-	-	386,619	-	-	-	1,056,708	-	5,283,542	-	6,726,870
Total Expenses (Subtotal)	83,879,147	38,950,000	25,000	200,000	12,847,417	377,000	-	10,550,679	6,775,508	8,410,000	5,743,542	=	83,879,147
Capital Projects:	2 020 000				457.200				620,000		2 4 4 4 0 0 0		2 020 000
Facilities Asset Management Program Security Cameras	3,930,000 692,300				157,200 27,692				628,800 110,768		3,144,000 553,840		3,930,000 692,300
Mid-Day Train Storage	11,330,440				465,729				3,839,838		7,024,873		11,330,440
Lifecycle Overhaul Facility (LOU)	12,600,000				504,000				4,284,000		7,812,000		12,600,000
Equipment Asset Management Program	4,900,000				196,000				784,000		3,920,000		4,900,000
Security Enhancements	105,065				4,203				16,810		84,052		105,065
Transit Enhancements	0				0				0		0		0
Fare Collection EMV Compliance/Upgrade	1,200,000				48,000				192,000		960,000		1,200,000
Fourth Track VA to LE (*)	250,000				0	250,000							250,000
L'Enfant Station Improvements (*)	250,000				0	250,000							250,000
Project Development Capital Planning Fund	2,000,000				0	2,000,000							2,000,000
Capital Reserve	3,000,000				3,000,000								3,000,000
Capital Project Summary	40,257,805	-	_	-	4,402,823	2,500,000	-	-	9,856,216	_	23,498,765	_	40,257,805
CMAQ/REF/IPROC													
Rippon Platforms (CMAQ)	2,000,000				-		1		400,000		-	1,600,000	2,000,000
Lorton Platforms (CMAQ)	500,000				-				100,000		-	400,000	500,000
Manassas Park Parking Improvements (NVTA) Quantico Intermodal (IPROC)	2,000,000 8,622,204				-				8,622,204		-	2,000,000	2,000,000 8,622,204
Brooke Platforms (REF)	3,905,800				-				3,905,800			0	3,905,800
Leeland Road Platforms (REF)	3,905,800				-				3,905,800		_	0	3,905,800
CMAQ/REF/IPROC Summary	20,933,804	-	-	-	-	-	-	-	16,933,804	-	-	4,000,000	20,933,804
TOTAL	145,070,756	38,950,000	25,000	200,000	17,250,240	2,877,000	-	10,550,679	33,565,529	8,410,000	29,242,308	4,000,000	145,070,756
									_	_			
								Soft Capital Proje		Program	Funding	Federal Amt	State Amt
								Debt Service 11 (		1,931,357	5337	1,545,086	309,017
							Local only	Access lease fund Debt Service 60 I		16,820,000	SSTP/State	8,410,000	5,718,800
							Local only	Debt Service 60 I		110,442 1,947,113	5337	1,557,690	311,538
								Debt Service 60 I		2,725,958	5307	2,180,766	436,153
							, cu/state/Lt	Grant & Project I	Management	575,000	5307	460,000	
								Grant & Project I Subtotal	vialiagellielit	24,109,870		•	6,775,508
								Capital Projects/	Farmarks	61,191,609		27,498,765	26,790,020
								Federal Cap Prog		85,301,479		41,652,308	33,565,529
L										,,		,	, ,







Six Year Financial Forecast FY 2018 - FY 2023



#### **Six-Year Financial Forecast**

In accordance with the VRE Master Agreement, the FY 2018 budget includes a six-year financial plan, covering FY 2018 thru FY 2023. Assumptions are outlined below:

- Operating ratio maintained at 50% or higher through FY 2022; falls to 49% in FY 2023
- Projected service level
  - o 32 trains for FY 2018 (two non-revenue trains eliminated) -- 32 trains for FY 2019 FY 2023, all revenue trains
- Operating costs
  - o Increase in base costs varies by year, based on annual ridership changes
  - o Operating cost projections of major capital projects included
  - o Train operations and maintenance of equipment, midday services, fuel, track leases and debt service tracked separately
- Fare revenue
  - o 3% increase in FY 2018, FY 2020 and FY 2022 -- No increase in FY 2019, FY 2021 and FY 2023
- Local subsidy
  - o 3% Increase in FY 2019, FY 2021 and FY2023 -- No increase in FY 2018, FY 2020 and FY 2022
- Grant revenue
  - o Access lease funding equal to 84% of access costs through FY 2018. State access lease funding is projected to drop off from 84% to 50% over 6 years, beginning in FY 2019
  - o State operating grant funding based on current funding amount, no increases or decreases projected
  - o Federal capital program is shown as in six year CIP, with level funding from FY 2019 to FY 2023
  - State capital grant matched at 16% in FY 2018, with the exception of New York Avenue Mid-Day Storage Facility and Washington Union Station Improvements projects, matched at 34% in FY 2018
  - State capital grant matching projected to decrease to 8% in FY 2019 FY 2023
- Tools for addressing potential funding gaps in future years listed at bottom of forecast: reduction or deletion of annual contribution to capital reserve; use of federal funds for preventive maintenance in operating budget; and use of capital or operating reserve funds, as applicable. Some combination of these and other options, such as reducing service, would be considered if funding issues not resolved.



#### FY-2018 to FY-2023 Six Year Financial Forecast

Description	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Comments
Number of Trains	34	32	32	32	32	32	32	Elimination of 2 Deadhead Trains in FY18
Manassas Line	18	16	16	16	16	16	16	
Fredericksburg Line	16	16	16	16	16	16	16	
Average Daily Ridership	19.100	18,200	18.485	18.773	19,030	19,290	19.553	
Average Fare Price	8.10	8.65	8.65	8.91	8.91	9.18	-,	3% FY18; FY20; FY22
Potential Operating Ratio	52%	52%	50%	51%	50%	50%	49%	
Use of Funds for Operations								_
Net Operating Expenses	24,436,394	26,447,361	27,240,782	28,058,006	28,899,746	29,766,738	30,659,740	
Operating Expense of Capital Projects	-	0	0	415,000	892,000	892,000	892,000	
Budgeted Operating Reserves	12,000	36,000	275,835	284,734	293,924	303,416	313,220	17% reserve
Insurance	4,000,000	4,000,000	4,300,000	4,400,000	4,450,000	4,500,000	4,550,000	
Amtrak	4,615,000	4,407,000	4,583,280	4,766,611	4,957,276	5,155,567	5,361,789	
Contracted Train Operations	15,463,003	15,416,000	15,878,480	16,354,834	16,845,479	17,350,844	17,871,369	
Maintenance of Equipment	5,608,166	6,360,500	6,551,315	6,747,854	6,950,290	7,158,799	7,373,563	
Fuel	4,814,000	4,759,500	4,949,880	5,147,875	5,353,790	5,567,942	5,790,659	
Track Lease Expense	16,820,000	16,840,000	17,510,000	18,210,000	18,940,000	19,700,000	20,490,000	
Debt Service	6,714,870	6,714,870	6,714,870	6,714,870	6,714,870	6,714,870	6,714,870	
Total Operating Costs	82,483,433	84,981,231	88,004,442	91,099,784	94,297,375	97,110,175	100,017,210	<del>-</del> -
Sources of Funds For Operations		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	-
Fare Revenue	38,950,000	39,845,400	40,300,000	42,100,000	42,700,000	44,600,000	45,200,000	
Interest Income	25,000	75,000	75,000	75,000	75,000	75,000	75,000	
Other Income	200,000	225,000	225,000	225,000	225,000	225,000	225,000	
Other	377,000	955,000						Operating reserve transfer
State Operating Grant	9,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	
State Capital Grant	6,775,508	6,782,308	7,010,108	5,627,154	4,695,154	3,680,354	2,577,354	Includes debt service and soft capital revenue
Federal Grants:								Assumes reduction of State Funding at the end of FY18
Track Access Lease Funding	8,410,000	8,420,000	8,755,000	9,105,000	9,470,000	9,850,000	10,245,000	
Federal Operating Funds (Debt service & loans)	5,283,542	5,283,542	5,283,542	5,283,542	5,283,542	5,283,542	5,283,542	
Other Federal Revenues	460,000	520,000	520,000	520,000	520,000	520,000	520,000	
Total Operating Revenues	69,481,051	72,106,251	72,168,651	72,935,697	72,968,697	74,233,897	74,125,897	- -
Surplus/(Deficit) for Operations	(13,002,382)	(12,874,980)	(15,835,791)	(18,164,088)	(21,328,678)	(22,876,278)	(25,891,314)	
Local Subsidy	17,250,240	17,250,240	17,767,747	17,767,747	18,300,780	18,300,780		3% in FY19; FY21; FY23
Net subsidy available for capital match	4,247,858	4,375,260	1,931,956	(396,340)	(3,027,899)	(4,575,499)	(7,041,511)	-
Use of Funds for Capital Program								-
Capital Cost Base Program	48,028,443	48,422,591	41,694,661	34,593,135	36,305,495	32,925,245	33,448,184	<u>-</u>
Total Capital Program Costs	48,028,443	48,422,591	41,694,661	34,593,135	36,305,495	32,925,245	33,448,184	_
Sources of Funds for Capital Program								_
Federal Grants:	80%	80%	80%	80%	80%	80%	80%	
Federal funding (Includes CMAQ)	23,309,609	27,638,047	27,035,729	25,274,508	26,644,396	23,940,196	24,358,547	
Federal funding - Track Access	50%	50%	50%	50%	50%	50%	50%	
Matching Funds								
State Capital Grants - non-federal costs	19,470,977	15,909,285	8,143,117	2,802,812	3,145,284	2,469,234	2,573,822	State % Changes From 16% (or 34%) to 8% in FY19
Local/Other Funds	1,000,000	500,000	0	0	0	0	0	
Net local subsidy available for capital match	4,247,858	4,375,260	1,931,956	(396,340)	(3,027,899)	(4,575,499)	(7,041,511)	<u>-</u>
Total Sources of Funding for Capital Program	48,028,444	48,422,592	37,110,803	27,680,980	26,761,782	21,833,932	19,890,859	-
Add'l funds required to fund Operations and Capital:								-
Additional required for operations/base program	0	0	(4,583,859)	(6,912,155)	(9,543,713)	(11,091,313)	(13,557,325)	
Potential Means to Address Future Gap As Needed:								_
Reduction of Annual Capital Reserve Contribution	0	0	(3,000,000)	(3,000,000)	(3,000,000)	(3,000,000)	(3,000,000)	
Use of Federal Formula Funds for Preventive Maint.	0	0	0	0	0	(7,000,000)		80% Federal money, net effect of use
Use of Reserve Funds Remaining Shortfall After Potential Solutions Utilized	0	0	(1,583,859)	(3,912,155)	(6,543,713)	(1,091,313)	(3,557,325)	=
nemaning Shortian Arter Fotential Solutions Offized	U	U	U	(0)	(0)	(0)	(0)	
Note: Capital Program excludes debt service								



#### **Financial and Debt Ratios**

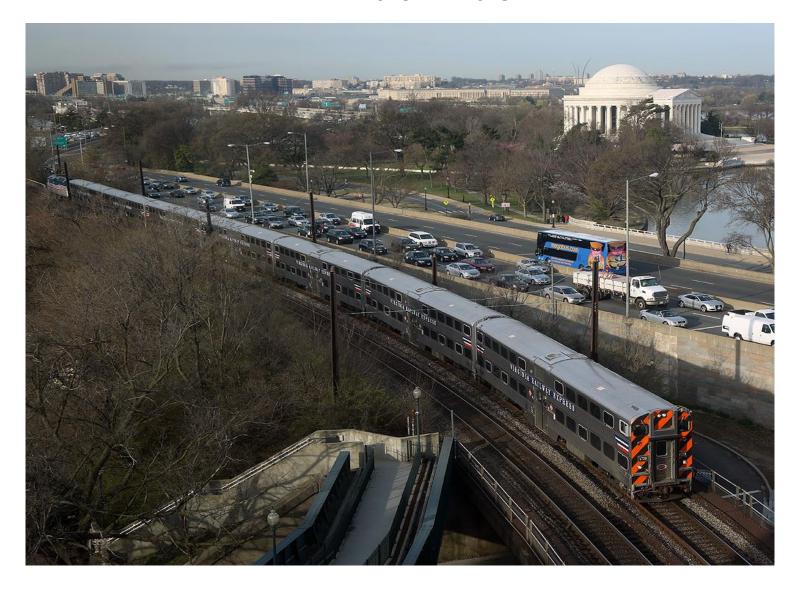
The VRE Financial and Debt Management Principles are detailed earlier in this document. The development and implementation of financial and debt policies is a best practice for financial management, provides a framework for evaluating the long term impact of current decisions, and supports high quality credit ratings.

Each year as part of our budgetary process we measure and report upon whether the six-year financial forecast and CIP have been developed in accordance with, and meet the criteria of, our Financial and Debt Management Principles.

Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Operating cost ratio (cost recovery) higher than	n 50%					
Projected	52%	50%	51%	50%	50%	49%
Debt service limited to 20% of annual operating	g costs:					
Total operating costs	84,981,231	88,004,442	91,099,784	94,297,375	97,110,175	100,017,210
Existing annual debt service cost	6,714,870	6,714,870	6,714,870	6,714,870	6,714,870	6,714,870
Existing debt service as a % of operating costs	7.9%	7.6%	7.4%	7.1%	6.9%	6.7%
Working capital reserves not less than 2 month	s and goal of 3 r	months by FY 202	23			
Number of months	2.7	2.7	2.6	2.6	2.5	2.5
PAYGO equal to a minimum of 20% of the fund	ed portion of th	e CIP over the 6-	year period:			
Funded portion of CIP	48,422,591	41,694,661	34,593,135	36,305,495	32,925,245	33,448,184
PAYGO %	100%	100%	100%	100%	100%	100%



# Capital Improvement Program VRE FY 2018 - FY 2023



**December 18, 2016** 



#### **Introduction**

The FY 2018 Virginia Railway Express Capital Improvement Program (CIP) is an integrated set of projects and programs that will improve passenger safety and operational efficiency, maintain the system in a state of good repair, and expand capacity. The multi-year CIP includes both funded and unfunded projects.

- **Funded** projects are those that are funded through federal formula grants received annually by VRE; through state funding in accordance with the Commonwealth's Six-Year Improvement Program (SYIP); through already allocated funds from other entities, such as NVTA, FAMPO or a VRE jurisdiction; or through other expected sources.
- **Unfunded** (or partially funded) projects are those that are pending a discretionary allocation by a funding authority or for which a funding source has not yet been identified. Because discretionary funding relies on the actions of other entities, funds may not be available when needed.

VRE has established the following mechanisms to support the capital program:

- The **Capital Reserve** was created in order to complete projects, take advantage of grant opportunities that require substantial local match or to fund initial costs to support major grant proposals or evaluate alternatives. Funding is provided from prior year surplus, the sale of assets, and, beginning in FY 2015, from a \$3 million contribution included in the annual budget.
- The **Capital Planning Fund (CPF)** was established to provide immediate, generally small-scale funding for studies required to advance system investments or support future federal or state applications or to meet other immediate capital program needs. The CPF was established in FY 2015 from unallocated Capital Reserve funds in the amount of \$1.58M. A replenishment of \$2M is included in the FY 2017 Amended Budget.



#### **Description of CIP**

The VRE Capital Improvement Program is designed to maintain VRE passenger equipment and facilities in a state of good repair and to accommodate growth within adopted service and safety standards. Items listed in the CIP fall into one of the following categories:

- The acquisition of land for a public purpose.
- The construction or purchase of an asset of significant size, including rolling stock and other equipment, facilities, railroad infrastructure and automated systems.
- Rehabilitation or major repair to all or part of a major facility, piece of equipment, or other asset, beyond the level considered as routine annual maintenance.
- Any specific planning, engineering, design work or grant and project management costs related to an individual project falling within the first three categories.
- Any long-term grant funded projects for which inclusion in the CIP is considered appropriate.

**Priorities:** Projects included in the CIP are prioritized with an emphasis on passenger safety, regulatory requirements, and maintaining current equipment and facilities in a state of good repair. In addition, expansion projects are selected in accordance with VRE's System Plan 2040.

**Board/Commission Approval:** Once the CIP has been developed, it is forwarded as part of the budget to the Operations Board. With their approval, the package goes to the Commissions for final authorization. The VRE budget process begins in the summer, with approval by the Operations Board in December and Commissions in January. Grant applications for the next fiscal year are prepared based on the approved CIP. The Operations Board and Commissions formally approve the current year of the CIP and amendments to the prior year.

**Project Information:** Detailed project information is provided, including a summary of funding sources for each project. FY 2017 funding reflects the amended budget for that year. In order to provide a complete picture of each project, funding and cost information is provided from the inception of the project through to its conclusion.

**Prior Year Projects:** Projects fully funded in prior years are reported in the CIP until all work on the project is completed.



The Capital Improvement Program (CIP) is a comprehensive inventory of VRE's capital needs, and the capital funding sources that have been identified for the six years of this plan (FY 2018 to FY 2023). The primary purpose of the CIP is to provide a realistic picture of the funding outlook and the challenges VRE faces in securing adequate funding to pay for needed capital improvements. While VRE has some funding that is already programmed, allocated, or identified, the CIP shows that there is a significant shortfall between projected need and available funds. Additional funding at the federal, state, and local level will be needed to fully fund VRE's long term capital program.

In FY 2016, VRE developed, with the assistance of PFM a financial forecast that compares the capital and operating needs associated with various service profiles (including implementation of System Plan 2040) to available funding sources and quantified the need for additional funding. The next step in the development of the Financial Plan is the identification and evaluation of various alternatives for meeting future system needs, including debt financing as appropriate.

The capital improvement projects are designed to maintain and enhance VRE's service by renovating and strengthening the core system; improving the system's security and reliability; and modernizing and expanding the system to accommodate increasing ridership demand. This CIP is a snapshot of the current outlook, and is updated periodically as projects are further developed and the funding picture evolves.





#### **Capital Financial Outlook**

The FY 2018 to FY 2023 CIP illustrates the funding challenges for VRE in the coming years, since currently identified funding falls short of the system's capital needs. The shortfall makes it difficult for VRE to adequately reinvest to maintain the system's reliability and safety, while also making enhancements, adding capacity to serve new ridership demands and adhering to commitments to participate in the expansion of the railroad infrastructure.

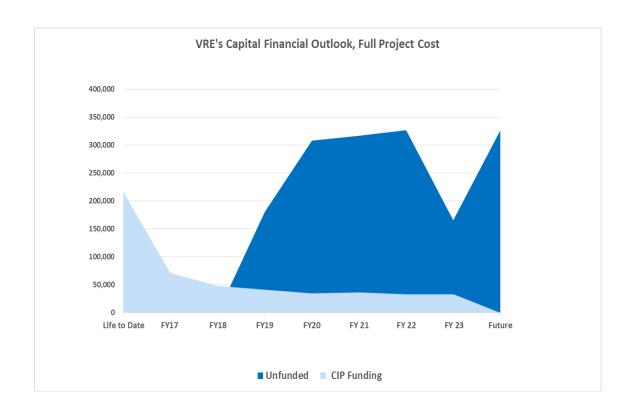
A key challenge is the misalignment between the timing of need and availability of funding for several crucial projects, most notably the replacement of VRE's midday train storage facility. The current CIP relies on multi-year state capital funding of 34% to allow us to leverage our available federal formula funds. However, this funding is currently under review with a potential decrease to the allocation percentage. The impact of this may be to make it more difficult to advance the project as desired beyond FY 2018. The project is a candidate for federal Core Capacity funding or for debt financing; these and other options will be pursued over the next year. The limitations on our use of our major source of federal formula funds, the Section 5337 or State of Good Repair program, further complicates our capital funding picture.

To fully fund the projects in the FY 2018-FY 2023 CIP (including all costs to complete) would require approximately \$2.1 billion. Of this total, \$515 million is anticipated from ongoing formula funding sources or allocated discretionary funds. The remaining \$1.6 billion includes a number of projects which are eligible for additional funding from discretionary funding sources such as Smart Scale, federal Core Capacity or New Starts grants, or through NVTA. The table below segregates certain special projects (Long Bridge Expansion, Gainesville-Haymarket Extension and the contributions to the Capital Reserve) because they rely primarily on the contributions of other stakeholders or otherwise distort the comparison of funded to unfunded projects.

Description	Total	Funded	Unfunded	Funded %
CIP General Projects	1.0B	482M	553M	46.5%
CIP Special Projects (Other)	1.1B	33M	1.07M	3.0%
_				
Grand Total	2.1B	515M	1.62B	24.1%



The graph below represents VRE's funded and unfunded project costs for the entire \$2.1 billion of projects included in the CIP.



#### **Capital Sources and Uses**

Capital expenditures often rely on funds obtained in prior years, unlike operating budget expenses. Most grants are awarded on a reimbursement basis, and grant allocations can be obtained for specific projects and programs over multiple years during which they can "accumulate" and be committed to a contract when the balance is sufficient for that phase of the project to proceed. Consequently, the six year CIP is a cash flow snapshot driven by expenditures, since the construction phase of a capital project cannot be started unless the cash or underlying funding commitment is in place.



In order to address funding challenges, VRE's CIP centers on the fundamental need to prioritize the most vital initiatives and investments necessary to achieve key safety, reliability, capacity, and sustainability goals. The FY 2018 capital budget is driven primarily by the need to meet established programmatic commitments and maintain the necessary financial capacity to address the most acute emerging and longstanding needs required to maintain the safety and reliability of essential capital assets. As a result, the majority of VRE's FY 2018 planned capital investment is in asset management and ensuring that assets are in a state of good repair.

#### **Capital Environment**

Capital funds come from a wide variety of federal, state, regional, and local sources. With the exception of the FTA Section 5307 and 5337 formula allocations and the State Mass Transit funds, capital funding sources are one time competitive grants. Given the magnitude of VRE's capital needs over the next six years and beyond, a very aggressive approach to securing discretionary grants will be necessary. Advocacy for project grant funding must be continuous at the local, regional, state, and federal levels from the moment a project is initiated. This process is labor intensive and requires persistent effort on the part of VRE staff and elected officials. The charts and graphs at the end of this section show the magnitude of the various funding sources on which VRE relies.

#### **Decision-Making Factors**

VRE considers a number of factors when determining which capital projects are allocated the limited funding that is available, including:

- ➤ Does the expenditure maintain the system in a state of good repair?
- > Does this expenditure help VRE manage risk?
- Does this expenditure address VRE's biggest identified sources of risk?
- Does this expenditure close an identified need (i.e., a gap between target and actual service levels)?
- Does this expenditure minimize life-cycle cost?
- > Does this expenditure yield ongoing operational cost savings either through efficiency or reduced risk?
- ➤ Project continuity: Is this project already underway and does it need ongoing funding to continue implementation from a prior year?
- Project interdependence: Are other projects dependent on this project? Is this project dependent on others?



#### **CIP Project Sheets**

The CIP includes 48 separate projects. For ease of understanding, these individual projects have been grouped into **categories** with identifying Project ID's:

<u>Asset Management/State of Good Repair (AM)</u> – refers to projects that ensure that assets perform at their highest level throughout their service life, and to the formal effort to consistently address, evaluate, analyze and prioritize the condition of VRE's rolling stock and facilities.

<u>Passenger Station Facilities (ST)</u> – includes projects that lengthen or widen existing station platforms, construct new platforms at current stations or add new stations to the system.

<u>Rolling Stock Equipment (RS)</u> – refers to the purchase of replacement or expansion locomotives and coaches; coaches may be either cab cars or trailers.

<u>Station Parking (PK)</u> – includes projects that modify or expand parking at specific VRE station locations. Parking may be provided in surface lots or as structured parking. Parking at a station can exclusively serve VRE riders but may also serve other users such as bus transit riders at multi-modal stations.

<u>Track and Signal Infrastructure</u> (TS) – refers to the installation of rail, ties, rail fastenings, hardware and roadbed over which trains operate; the electrical or mechanical signal devices used to control train movements; and other railroad infrastructure such as interlockings, crossovers, switches, or turnouts.

<u>Train Maintenance and Storage Facilities</u> (MS) - includes midday or overnight storage tracks and related switches, signals, or power sources; buildings, structures or equipment used to inspect, repair or maintain rolling stock; warehouse facilities; crew buildings; and other facilities or equipment such as employee parking or exterior fencing or lighting.

<u>Other</u> (OT) – projects that are unique because they span multiple categories; will be primarily funded by other stakeholders; or represent reserve contributions. Their inclusion with other categories could lead to a distorted understanding of funding needs.



In addition, projects were classified by project **type**, as follows:

<u>Asset Management</u> – improvements or repairs to prolong the useful life of an existing asset; meet mandated requirements or otherwise modernize the asset or system; or to enhance safety and security.

**Replacement and Rehabilitation** - replacement or major rehabilitation of an existing asset.

**Expansion** – improvements implemented primarily for the purpose of increasing capacity.

Several projects are in process that will benefit VRE, but are being undertaken by others: the construction of the Potomac Shores VRE station; DRPT's Fredericksburg Line Third Track project and the Fourth Track between RO (Roslyn) to AF (Alexandria); and potential parking additions at Lorton and Rolling Road stations in Fairfax County. Although these projects are integral to the operation of the VRE system, they are not included in the CIP. More information on these projects is provided in the Appendices section of this document.

Of the total value of the projects in the CIP, both funded and unfunded, 37% is for projects that increase capacity (excluding Gainesville-Haymarket and Long Bridge); 33% is for Long Bridge and related improvements; 18% is for the Gainesville-Haymarket extension, 11% is for asset management and replacement and 1% is for other, as illustrated on page 37.

The table on page 38 lists the individual projects within each project category, including the identifying Project ID, and shows the funding needs by year for the total program. The table on page 39 summarizes the funding sources for the FY 2018 to FY 2023 CIP and indicates the amount unfunded by year. (No unfunded amounts are reflected through FY 2018 since project work cannot be authorized unless funding is available. Any delays this may have caused to the desired project schedule is noted on the individual project sheet.)

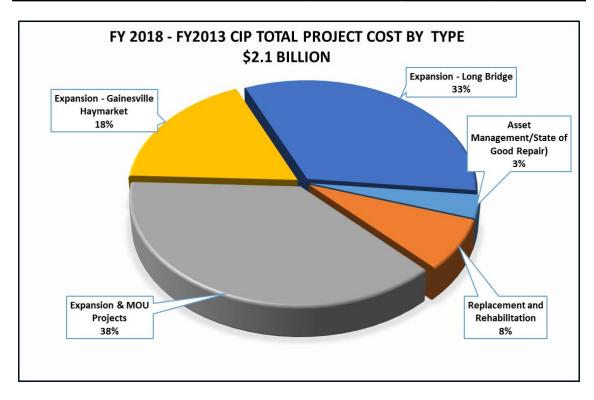
The Appendices includes a one page summary of the funding status of each project along with the identification of potential sources to meet unfunded needs.



# **CIP Funding Needs By Project Type**

(Amounts in thousands)

Project Type	Project Cost	Funded	Unfunded
Capital Reserve	27,000	27,000	-
Asset Management/State of Good Repair)	72,556	72,556	-
Replacement and Rehabilitation	162,643	146,173	16,470
Expansion & MOU Projects	799,327	262,804	536,523
Expansion - Gainesville Haymarket	376,825	5,736	371,089
Expansion - Long Bridge	700,300	300	700,000
Grand Total	2,138,651	514,569	1,624,082





## **CIP Funding Needs By Program Area**

(Amounts in thousands)

Equipment Asset Management Program   AMS   31   6,787   4,000   3,420   3,425   3,435   3,409   1,009   1,090   23,400													
Project Category					FY17	FY18							
Marian   M	Project Category	Project Name	Project	Life To	Amended	Proposed	EV19	EV20	EV21	EV22	EV23	Future	Total
Automatic Parking Counters   AM-1	Troject category	r roject ivame	ID	Date			1113	1120	1121	1122	1123	ruture	Total
Automatic Passenger Counters (PAM)  ENV Compilines - Farc Collection System Chancement grant security Chancement grant sec	Accept Management (Chate of Coard Boursia)	Automotic Pauline Counters	484.4			buaget			 		 		750
EMY Compliance - Fare Collection System   AM-3	Asset Management/ State of Good Repair)					1 667	762						
Comparison   Com		-				1,007	702						
Sealties Asset Management Program   AM6   528   9,288   2,700   2,490   2,700   2,800   1,400   3,140   3,140   1,240   2,14						105	105	105	105	105	105		1,155
Positive Train Control   AM-7   S. 5.77   3.876   3.639   3.		Equipment Asset Management Program	AM-5	13	6,787	4,900	3,420	4,325	3,845	2,090	1,980		27,360
Security Camers   AMS   1,102   386							2,495	2,570	2,390	1,430	1,319		23,420
				6,677		,							
		Security Cameras	AM-8	7.040			6 700	7.000		2.525	2 404		
Alexandris Station Improvements   57-2		Alexandria Redestrian Tunnel	CT 1								3,404		
Backlick Road Scaton Improvements   ST-4	Passenger Station Facilities			2,101	1,400					,			
Backlick Road Station Improvements   ST-4		·				40	1,001	1,011	1,011	1,011	450	12.050	
Burke Centre Second Platform   SF-6									275	2,277			2,552
City of Manassas Park Second Pilatform   S1-7			ST-5		190	190	1,170	10,019	9,766				21,335
Crystal City Station Improvements   Final   Final City Station Improvements   Final   Final Station Improvements   Fina													12,500
Franconia-Springfield Station Improvements   ST-9   310   1,090   3,323   3,325   3,952   1,095   1,300   1,300   1,096   1,		-										12,050	12,500
Leland Road Station Improvements   ST-10   190   190   1,70   6,368   6,418   1,438						4.000				8,600	4,310		,
L'Enfant Station Improvements   51-14   250   250   3,40   1,330   5,080   16,780   16,210   3,910   47,250						,							,
Lorton Platform Extension   ST-12   333   2,167										16.780	16.210	3.910	
Quantico Station Improvements   ST-14   1,025   850   6,717   4,675   4,860   18,127   16,128   16,1				333			-,	_,	-,	,			2,500
Rippon Station Improvements   ST-15     1,109   544   10,145   4,836     4,836     450   12,050   12		Lorton Station Second Platform	ST-13	139	373	1,430	7,700	6,508					16,150
Rolling Road Second Platform   ST-16     2   3   79   98     450   12,050   12,500		Quantico Station Improvements							4,860				18,127
Rolling Road Station Improvements   ST-17     230   790   980     0,000   10,000					1,109	544	10,145	4,836					16,634
Mashington Union Station Improvements   ST-18					222	700	000				450	12,050	
ST-19					230			E 000	10.000	10.000	10.000		
Sessenger Station Facilities Total   1   1   1   1   1   1   1   1   1						5,000			-,	10,000	10,000		
14 Expansion Railcars   R5-1   313   13.284   473   12,705   9,975	Passenger Station Facilities Total	woodshage Station improvements	31 13	2.573	7.710	10.849				44.945	32,320	52.110	
15 Replacement Railcars	Rolling Stock	14 Expansion Railcars	RS-1							,	0_,0_0		36,750
Fleet Expansion Locomotives (FY20)   RS-4   36,906   14,977   702   62,830   77,803   67,828   54,037   315,038   315,038   315,038   36,906   34,977   702   62,830   77,803   67,828   54,037   315,038		15 Replacement Railcars	RS-2	36,593	1,693	229							38,515
Soling Stock Total   Soling							50,125						184,781
Record   Broad Run Parking Improvements   PK-1   393   2,049   8,547   13,431   517   29,488   30,005   30,00		Fleet Expansion Locomotives (FY20)	RS-4										
Fredericksburg Parking Structure		T			14,977				67,828	54,037			
Leeland Road Parking Improvements   PK-3	Station Parking			393		2,049	8,547	13,431	F17			20.400	
Manassas Park Parking Improvements   PK-4   500   2,000   17,713     420   1,650   2,070   2									517	846	2 619		
Quantico Station Parking Improvements   PK-5					500	2.000	17.713			0.0	2,015	27,500	20,213
Alexandria Station Track 1 Access/Slater La   TS-1   1,750   5,250   250   975   9,990   9,885   21,350   21,350   21,350   22,350   250		Quantico Station Parking Improvements	PK-5			,	·		420	1,650			2,070
Fourth Track VA to LE   TS-2   250   250   975   9,990   9,885   21,350   23,350   250   975   9,990   9,885   28,350	Station Parking Total			393	500	4,049	26,260	13,431	937	2,496	2,619	57,054	107,738
1,750   5,500   250   975   9,990   9,885   28,350   29,150   29	Track and Signal Infrastructure			1,750									7,000
Section   Projects   Broad Run MSF Train Storage Expansion   MS-1   Section   Sectio		Fourth Track VA to LE	TS-2										
Crossroads MSF - track Construction   MS-2   66   2,884		Broad Dun MCC Train Character Survey	NAC 1	1,750	5,500	250				F 750			
Crossroads MSF - Storage Expansion.   MS-3	train iviaintenance and Storage Facilities			66	2 904		5,400	8,000	10,000	5,/50			
L'Enfant Train Storage Track - North MS-4 1,346 2,938				00	2,004		2,362	8,838	8.838	8.838			
L'Enfant Train Storage Track - South   MS-5   119   3,846     3,965   3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965   3,965   3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965   3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965   3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965     3,965   3,965     3,965     3,965     3,965     3,965     3,965     3,96				1,346	2,938		_,502	2,000	2,000	2,000			4,284
New York Avenue Midday Storage Facility   MS-7   1,328   7,420   26,140   27,330   27,170   89,388     Train Maintenance and Storage Facilities Total   3,598   19,772   23,727   41,948   44,168   46,008   14,588   193,808     Train Maintenance and Storage Facilities Total   5,000   3		L'Enfant Train Storage Track - South		,									3,965
Arigin Maintenance and Storage Facilities Total         3,598         19,772         23,727         41,948         44,168         46,008         14,588         193,808           Other Projects         Capital Reserve         OT-1         6,000         3,00				2,068									35,196
Other Projects         Capital Reserve         OT-1         6,000         3,00		New York Avenue Midday Storage Facility	MS-7										89,388
Gainesville-Haymarket Extension         OT-2         1,790         2,946         49,211         103,870         108,825         110,185         S         376,825           Long Bridge Capacity Improvement         OT-3         300         10,300         35,300         111,075         161,075         221,175         700,300	_	la mas											
Long Bridge Capacity Improvement         OT-3         300         10,300         35,300         111,075         161,075         161,075         221,175         700,300	Other Projects	·				3,000				,	3,000		
				1,790							161 075	221 175	
Other Projects Total 7,790 6,246 3,000 62,511 142,170 222,900 274,260 164,075 221,175 1,104,125	Other Projects Total	Long bridge capacity improvement	01-3	7 790		3 000							
	Grand Total												

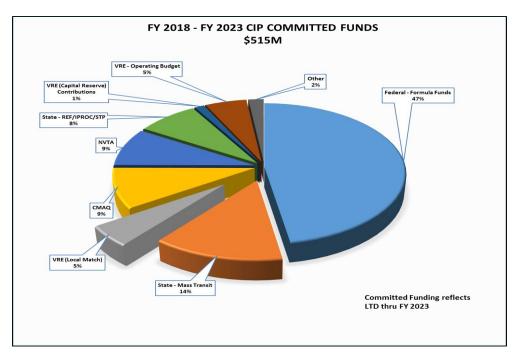
Note: The Long Bridge Capacity Improvement project is shown at the total estimated cost; it does not reflect the VRE share.



## **CIP Funding Sources**

(Amounts in thousands)

			(miounto)	ii uiousaiius)							
Funding Type	Funding Source	Life To Date	FY17 Amended Budget	FY18 Proposed Budget	FY19	FY20	FY21	FY22	FY23	Future	Total
Federal - Formula Funds W/Match	Federal - Formula Funds	79,451	23,499	23,439	23,439	23,439	23,439	23,439	23,439		243,583
	State - Mass Transit	25,649	22,708	9,567	2,344	2,344	2,344	2,344	2,344		69,644
	VRE (Match)	4,907	1,403	1,375	3,516	3,516	3,516	3,516	3,516		25,264
Federal - Formula Funds W/Match Total		110,008	47,610	34,381	29,298	29,298	29,298	29,298	29,298		338,492
Discretionary Funds & Other VRE Contributions	CMAQ	27,473	2,500	5,249	4,496	2,295	4,007	627	1,150		47,796
	Fairfax County	42									42
	Federal Funds - Other	8,722									8,722
	NVTA	42,886	2,000								44,886
	Other Funds	8,248									8,248
	State - REF/IPROC	6,500	16,434	5,292	4,900						33,126
	VRE - Operating Budget	6,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000		27,000
	VRE (Capital Reserve)	5,258	500	500							6,258
Discretionary Funds & Other VRE Contributions Total		105,128	24,434	14,041	12,396	5,295	7,007	3,627	4,150		176,078
TBD	Unfunded (To be determined)				180,762	308,021	316,682	326,695	165,494	326,429	1,624,082
TBD Total					180,762	308,021	316,682	326,695	165,494	326,429	1,624,082
rand Total		215,136	72,044	48,423	222,457	342,614	352,987	359,620	198,942	326,429	2,138,651





# **Asset Management & State of Good Repair**





# Virginia Railway Express Automatic Parking Counters

**Program Name:** Asset Management/State of Good Repair

Project Type:Asset ManagementStart DateFY 2016Project ID:AM-1End DateFY 2017

Location N/A

Currently, passenger vehicle counts are performed manually to determine parking lot utilization. This project will allow for automatic parking/traffic counters at selected stations which will allow staff to obtain more accurate, real-time information as well as gather additional information on parking movements for use in ridership and operations analyses.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	600,000									600,000
State - Mass Transit	120,000									120,000
VRE (Match)	30,000									30,000
Total Funding	750,000									750,000

Match funds provided from prior year surplus.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Automatic Parking Counter		750,000								750,000
<b>Total Spending Plan</b>		750,000								750,000

## Operations & Maintenance (0 & M) Costs (Savings)



# Virginia Railway Express Automatic Passenger Counters

Program Name: Asset Management/State of Good Repair

**Project Type:** Asset Management

Project ID: AM-2 Location N/A

Currently, passenger counts are performed manually by train conductors each morning and evening to comply with the National Transit Database (NTD) and internal VRE reporting needs. This project will allow for automatic passenger counters as the riders board and detrain at each station. Installation of the passenger counters will also allow gathering of additional passenger information for use in planning and operational analyses. Current assumption is that a portion of the new rail cars will have the equipment installed during the construction process.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	2,320,000									2,320,000
State - Mass Transit	464,000									464,000
VRE (Match)	116,000									116,000
<b>Total Funding Sources</b>	2,900,000									2,900,000

Match funds are provided from prior year surplus.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Purchase/Install on 11 Cars		280,830								280,830
Purchase/Install on 60 Cars			1,542,550							1,542,550
Purchase/Install on 23 Cars				709,573						709,573
Project Management/Oversight		189,700	124,590	52,757						367,047
Total Spending Plan		470,530	1,667,140	762,330						2,900,000

#### Operations & Maintenance (0 & M) Costs (Savings)

Software license and maintenance costs estimated at \$1,500 per rail car or \$15,000 annually.



FY 2016

FY 2019

**Start Date** 

**End Date** 

### **EMV Compliance - Fare Collection System**

**Program Name:** Asset Management/State of Good Repair)

Project Type:Asset ManagementStart DateFY 2017Project ID:AM-3End DateFY 2017

**Location** System-wide

This project is for the update of the Scheidt and Bachmann Fare Collections System to be EMV (Europay Mastercard Visa) compliant. This project will enable the system to accept EMV enabled cards which include chip and pin technology for greater data security. The project will also upgrade the touchscreens as the current screens are obsolete, and will add ADA required audio jacks for passenger use.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds		960,000								960,000
State - Mass Transit		192,000								192,000
VRE (Match)		48,000								48,000
Total Funding		1,200,000								1,200,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
EMV Compliance - Fare Collection System	<u>l</u>	1,200,000								1,200,000
<b>Total Spending Plan</b>		1,200,000								1,200,000

#### Operations & Maintenance (0 & M) Costs (Savings)



# Virginia Railway Express Enhancement Grant - Security

**Program Name:** Asset Management/State of Good Repair)

**Project Type:** Asset Management

Project ID: AM-4 Location N/A

Security Enhancements – grantees receiving federal 5307 funds must certify that at least 1% of funding received each fiscal year is being used for transit security projects. Projects include improvements to station lighting and security, systems safety consulting, and security drills with first responders. *Annual allocation is \$105,000*.

Funding Source	LTD Actuals	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	336,209	84,052	84,000	84,000	84,000	84,000	84,000	84,000		924,261
State - Mass Transit	16,000	16,810	16,800	8,400	8,400	8,400	8,400	8,400		91,610
VRE (Match)	68,052	4,203	4,200	12,600	12,600	12,600	12,600	12,600		139,455
<b>Total Funding Sources</b>	420,261	105,065	105,000	105,000	105,000	105,000	105,000	105,000		1,155,326

Spending Plan By Phase	LTD Actuals	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Enhancement grant - security		525,326	105,000	105,000	105,000	105,000	105,000	105,000		1,155,326
<b>Total Spending Plan</b>		525,326	105,000	105,000	105,000	105,000	105,000	105,000		1,155,326

### Operations & Maintenance (O & M) Costs (Savings)

N/A



**Start Date** 

**End Date** 

Ongoing

Ongoing

### **Equipment Asset Management Program**

**Program Name:** Asset Management/State of Good Repair

**Project Type:** Asset Management

Project ID: AM-5 Location N/A

Project provides funding for major lifecycle overhaul costs for VRE's rolling stock to assure all equipment is maintained in a state of good repair in accordance with VRE's Maintenance Management Plan and Transit Asset Management program. The major projects scheduled for FY 2018 are overhaul of truck assemblies for 71 gallery cars (\$1.9M); replacement of anti-slip flooring on 71 gallery cars (\$200K); HVAC overhauls on 71 gallery cars (\$1.6M); HVAC overhauls on 20 locomotives (\$700K) and replacement of fuel injectors on 20 locomotives (\$500K).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	1,520,000	3,920,000	3,920,000	2,736,000	3,460,000	3,076,000	1,672,000	1,584,294		21,888,294
State - Mass Transit	304,000	784,000	784,000	273,600	346,000	307,600	167,200	158,429		3,124,829
VRE (Match)	76,000	196,000	196,000	410,400	519,000	461,400	250,800	237,644		2,347,244
<b>Total Funding Sources</b>	1,900,000	4,900,000	4,900,000	3,420,000	4,325,000	3,845,000	2,090,000	1,980,368		27,360,368

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	237,644	Future	Total
Equipment Asset Management Program	13,340	6,786,660	4,900,000	3,420,000	4,325,000	3,845,000	2,090,000	1,980,368		27,360,368
Total Spending Plan	13,340	6,786,660	4,900,000	3,420,000	4,325,000	3,845,000	2,090,000	1,980,368		27,360,368

#### Operations & Maintenance (0 & M) Costs (Savings)

N/A



FY 2016

Ongoing

**Start Date** 

**End Date** 

#### **Facilities Asset Management Program**

Program Name: Asset Management/State of Good Repair

**Project Type:** Asset Management

Project ID: AM-6
Location System-wide

As the VRE facilities age, there is an increasing need for repairs and improvements to maintain these assets in a State of Good Repair (SGR). An independent evaluation of all station, maintenance and storage facilities was conducted, in accordance with VRE's Transit Asset Management program, in order to establish maintenance, rehabilitation and replacement cycles and priorities. Major projects currently anticipated in FY 2018 include: rehabilitation of the Woodbridge east elevator and upgrades to the Manassas and Burke Centre elevators(FFX CO maintains these) (\$1.2M); upgrade of the lighting and electrical systems at L'Enfant, Burke, Rolling Road, Manassas Park, Woodbridge (west platform) Crossroads and Broad Run (\$1.36M); track and tie replacement at Broad Run (\$400k); canopy replacement at Rolling Road and Backlick stations (\$240k); tactile strip replacement at various stations (\$400k).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	5,220,900	3,144,000	2,208,000	1,996,000	2,056,000	1,912,000	1,144,000	1,055,200		18,736,100
State - Mass Transit	1,019,180	628,800	441,600	199,600	205,600	191,200	114,400	105,520		2,905,900
VRE (Match)	286,045	157,200	110,400	299,400	308,400	286,800	171,600	158,280		1,778,125
<b>Total Funding</b>	6,526,125	3,930,000	2,760,000	2,495,000	2,570,000	2,390,000	1,430,000	1,319,000		23,420,125

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Facilities Asset Management Program	528,345	9,427,780	2,760,000	2,495,000	2,570,000	2,390,000	1,430,000	1,319,000		22,920,125
VRE Office Renovations		500,000								500,000
Total Spending Plan	528,345	9,927,780	2,760,000	2,495,000	2,570,000	2,390,000	1,430,000	1,319,000		23,420,125

#### Operations & Maintenance (0 & M) Costs (Savings)

N/A



FY 2015

Ongoing

**Start Date** 

**End Date** 

## Virginia Railway Express Positive Train Control

**Program Name:** Asset Management/State of Good Repair

**Project Type:** Asset Management

Project ID: AM-7
Location N/A

The implementation of Positive Train Control (PTC) is mandated by the Rail Safety Improvement Act of 2008. The regulation mandates installation of a collision avoidance system which will overlay existing safety systems to monitor and control train movements to provide increased safety for passenger rail. VRE's project was developed in conjunction with the implementation plans of the host railroads.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	8,442,400		2,911,066							11,353,466
State - Mass Transit	1,236,850		582,213							1,819,063
VRE (Match)	873,750		145,553							1,019,303
Total Funding	10,553,000		3,638,833							14,191,833

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Positive Train Control	6,676,766	3,876,234	3,638,833							14,191,833
Total Spending Plan	6,676,766	3,876,234	3,638,833							14,191,833

### Operations & Maintenance (0 & M) Costs (Savings)

Annual amount for software license fees and operating costs estimated at \$450,000.



**Start Date** 

**End Date** 

FY 2014

FY 2018

## Virginia Railway Express Security Cameras

**Program Name:** Asset Management/State of Good Repair)

Project Type:Asset ManagementStart DateFY 2016Project ID:AM-8End DateOngoing

**Location** System-wide

The system of security cameras and infrastructure at VRE stations and yards is scheduled to be modernized and expanded. (This project covers cameras at VRE's existing facilities; the cost of the initial installation of cameras associated with construction projects is included in the budgets for these projects.) Funding is currently provided for 130 cameras and associated hardware at 22 locations.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds		553,840	309,120							862,960
State - Mass Transit		110,768	61,824							172,592
VRE (Match)		27,692	15,456							43,148
VRE (Capital Reserve)	500,000									500,000
Total Funding	500,000	692,300	386,400							1,578,700

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Security Cameras		1,192,300	386,400							1,578,700
Total Spending Plan		1,192,300	386,400							1,578,700

#### Operations & Maintenance (0 & M) Costs (Savings)



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# **Passenger Station Facilities**





## Virginia Railway Express Alexandria Pedestrian Tunnel

Program Name:Passenger Station FacilitiesProject Type:Replacement and Rehabilitation

Project ID: ST-1

**Location** City of Alexandria

The project will construct a pedestrian tunnel between the VRE/Amtrak station in Alexandria and the King Street Metro station. The Alexandria pedestrian tunnel is addressed in Addendum B to the Corridor Improvement Project MOU between VRE, DRPT, and CSXT for the Addition of the Potomac Shores Station (VRE Ops Board Resolution 9J-06-2014). This project will be built in conjunction with two other projects, Alexandria Station Improvements (ST-2) and Alexandria Station Track 1 Access/Slaters Lane (TS-1).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal Funds - Other	8,721,865									8,721,865
NVTA	1,300,000									1,300,000
Unfunded (To Be Determined)				16,470,165						16,470,165
Total Funding	10,021,865			16,470,165						26,492,030

Federal funds for this project come through a VDOT Locally Administered Project (LAP) agreement. Project is also a candidate for IPROC funds and a Smart Scale funding application was submitted.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development	1,259,871									1,259,871
Project Management			75,000	75,000	75,000	75,000				300,000
Property Acquisition		100,000	100,000							200,000
Final Design	841,416	1,365,887	300,000							2,507,303
Construction Management				766,600	766,600	766,600	766,600			3,066,400
Construction				4,666,000	4,666,000	4,666,000	4,660,456			18,658,456
Commissioning						250,000	250,000			500,000
<b>Total Spending Plan</b>	2,101,287	1,465,887	475,000	5,507,600	5,507,600	5,757,600	5,677,056			26,492,030

Spending delayed by one year to align with available funding.

Operations & Maintenance (O & M) Costs (Savings)

N/A



**Start Date** 

**End Date** 

FY 2012

FY 2022

# Virginia Railway Express Alexandria Station Improvements

**Program Name:** Passenger Station Facilities

Project Type: Expansion
Project ID: ST-2

**Location** City of Alexandria

This project is to extend the east platform at the Alexandria station to accommodate eight-car trains and to elevate the west platform (the platform next to the station). The west platform project is funded with federal formula funds. This project is built in conjunction with two other projects, Alexandria Pedestrian Tunnel (ST-1) and Alexandria Station Track 1 Access/Slaters Lane (TS-1).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	320,000									320,000
State - Mass Transit	64,000									64,000
VRE (Match)	16,000									16,000
Unfunded (To Be Determined)				6,135,392						6,135,392
<b>Total Funding</b>	400,000			6,135,392						6,535,392

This project is a candidate for future NVTA funding.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development										
Project Management										
Property Acquisition										
Final Design			40,000	50,000						90,000
Construction Management				180,375	180,375	180,375	180,375			721,500
Construction				1,430,973	1,430,973	1,430,973	1,430,973			5,723,892
Commissioning										
<b>Total Spending Plan</b>			40,000	1,661,348	1,611,348	1,611,348	1,611,348			6,535,392

Spending delayed by one year to align with available funding.

Operations & Maintenance (O & M) Costs (Savings)

N/A



**Start Date** 

**End Date** 

FY 2014

FY 2022

# Virginia Railway Express Backlick Road Second Platform

**Program Name:** Passenger Station Facilities

Project Type:ExpansionStart DateFY 2023Project ID:ST-3End DateFY 2027

**Location** Fairfax County

Design and construction of a second platform and pedestrian overpass at the VRE Backlick Road station to expand capacity and operational flexibility. Project includes equipment and cameras related to new platform and pedestrian overpass.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Unfunded (To be determined)								450,000	12,050,000	12,500,000
Total Funding								450,000	12,050,000	12,500,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development								450,000		450,000
Project Management									150,000	150,000
Property Acquisition										
Final Design									1,000,000	1,000,000
Construction Management									880,000	880,000
Construction									10,000,000	10,000,000
Commissioning									20,000	20,000
Total Spending Plan								450,000	12,050,000	12,500,000

Operations & Maintenance (O & M) Costs (Savings)



# Virginia Railway Express Backlick Road Station Improvements

**Program Name:** Passenger Station Facilities

Project Type:ExpansionStart DateFY 2021Project ID:ST-4End DateFY 2022

**Location** Fairfax County

The Backlick VRE station currently has a platform which will accommodate a five-car train set for boarding and detraining. This project provides for a 300 foot platform extension to accommodate an eight-car train set.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - CMAQ/STP/RSTP						1,600,000				1,600,000
State - CMAQ/RSTP Match						400,000				400,000
Unfunded (To Be Determined)							552,000			552,000
<b>Total Funding</b>						2,000,000	552,000			2,552,000

This project is a candidate for additional CMAQ funding.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development						62,000				62,000
Project Management										
Property Acquisition										
Final Design						213,000				213,000
Construction Management							111,000			111,000
Construction							1,985,000			1,985,000
Commissioning							181,000			181,000
Total Spending Plan						275,000	2,277,000			2,552,000

Operations & Maintenance (0 & M) Costs (Savings)



## Virginia Railway Express Brooke Station Improvements

**Program Name:** Passenger Station Facilities

Project Type:ExpansionStart DateFY 2017Project ID:ST-5End DateFY 2021

**Location** Stafford County

This project is for the modification of the existing platform to accommodate 8-car trains and construction of a second platform and pedestrian overpass. Construction of the platform extension is not currently funded. An REF grant in the combined amount of \$18,003,600 for the construction of second platforms at the Brooke and Leeland Road (ST-6) VRE stations is matched in-kind by costs related to the construction of the Potomac Shores station. Funding of the preferred alternative for platform configuration will be coordinated with DRPT. The second platform is addressed in Addendum B to the Corridor Improvement Project MOU between VRE, DRPT, and CSXT for the Addition of the Potomac Shores Station (VRE Ops Board Resolution 9J-06-2014).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - CMAQ/STP/RSTP					210,000	196,016	250,714	459,890		1,116,620
State - CMAQ/RSTP Match					52,500	49,003	62,680	114,973		279,156
State - REF/IPROC		3,905,800	2,646,000	2,450,000						9,001,800
Unfunded (To Be Determined)					10,936,930					10,936,930
<b>Total Funding</b>		3,905,800	2,646,000	2,450,000	11,199,430	245,019	313,394	574,863		21,334,506

This project is a candidate for Smart Scale funding.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		140,000	140,000							280,000
Project Management		50,000	50,000	50,000	50,000	50,000				250,000
Property Acquisition										
Final Design				1,120,000						1,120,000
Construction Management					418,905	418,905				837,810
Construction					8,630,786	8,378,100				17,008,886
CSX					418,905	418,905				837,810
Commissioning					500,000	500,000				1,000,000
Total Spending Plan		190,000	190,000	1,170,000	10,018,596	9,765,910				21,334,506

Spending delayed by one year to align with available funding.

Operations & Maintenance (0 & M) Costs (Savings)



## Virginia Railway Express Burke Centre Second Platform

**Program Name:** Passenger Station Facilities

Project Type:ExpansionStart DateFY 2023Project ID:ST-6End DateFY 2027

**Location** Fairfax County

Design and construction of a second platform and pedestrian overpass at the VRE Burke Centre station to expand capacity and operational flexibility. Project includes equipment and cameras related to new platform and pedestrian overpass.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Unfunded (To be determined)								450,000	12,050,000	12,500,000
Total Funding								450,000	12,050,000	12,500,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development								450,000		450,000
Project Management									150,000	150,000
Property Acquisition										
Final Design									1,000,000	1,000,000
Construction Management									880,000	880,000
Construction									10,000,000	10,000,000
Commissioning									20,000	20,000
<b>Total Spending Plan</b>								450,000	12,050,000	12,500,000

Operations & Maintenance (0 & M) Costs (Savings)



### City of Manassas Park Second Platform

**Program Name:** Passenger Station Facilities

Project Type:ExpansionStart DateFY 2023Project ID:ST-7End DateFY 2027

**Location** City of Manassas Park

Design and construction of a second platform and pedestrian overpass at the VRE Manassas Park Station to expand capacity and operational flexibility. Project includes equipment and cameras related to new platform and pedestrian overpass.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Unfunded (To be determined)								450,000	12,050,000	12,500,000
Total Funding								450,000	12,050,000	12,500,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development								450,000		450,000
Project Management									150,000	150,000
Property Acquisition										
Final Design									1,000,000	1,000,000
Construction Management									880,000	880,000
Construction									10,000,000	10,000,000
Commissioning									20,000	20,000
Total Spending Plan								450,000	12,050,000	12,500,000

Operations & Maintenance (0 & M) Costs (Savings)



#### **Crystal City Station Improvements**

**Program Name:** Passenger Station Facilities

Project Type:ExpansionStart DateFY 2016Project ID:ST-8End DateFY 2023

**Location** Arlington County

This project is for short and long term improvements to the Crystal City station. Short-term modifications will be constructed at the existing station to improve passenger access and safety. A feasibility study will assess options for future station configuration and location. This project must be coordinated with DRPT's Fredericksburg Line, Fourth Track – RO to AF and Long Bridge Capacity Improvements (TS-3).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
NVTA	400,000									400,000
Unfunded (To Be Determined)				1,940,000	1,390,000	17,430,000				20,760,000
Total Funding	400,000			1,940,000	1,390,000	17,430,000				21,160,000

This project is a candidate for future NVTA and Federal Core Capacity program funding.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		360,000		520,000	160,000					1,040,000
Project Management		40,000		20,000	20,000	20,000	20,000	20,000		140,000
Property Acquisition				1,190,000	790,000					1,980,000
Final Design				210,000	420,000	210,000				840,000
Construction Management						200,000	400,000	200,000		800,000
Construction						4,090,000	8,180,000	4,090,000		16,360,000
Commissioning										
Total Spending Plan		400,000		1,940,000	1,390,000	4,520,000	8,600,000	4,310,000		21,160,000

Spending delayed by one year to align with available funding.

Operations & Maintenance (0 & M) Costs (Savings)



### Franconia-Springfield Station Improvements

**Program Name:** Passenger Station Facilities

Project Type:ExpansionStart DateFY 2015Project ID:ST-9End DateFY 2021

**Location** Fairfax County

This project includes design and construction to extend the existing north (Metro station side) platform at the Franconia-Springfield station by up to 550 feet to allow the north platform at the station to be usable by VRE trains on a regular basis. It also includes design and construction of modifications to the south platform at the station to allow it to service trains from either side of the platform once a future third main track is constructed at the station.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
NVTA	13,000,000									13,000,000
Total Funding	13,000,000									13,000,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		260,000								260,000
Project Management		50,000	50,000	50,000	50,000	50,000				250,000
Property Acquisition										
Final Design			1,040,000							1,040,000
Construction Management				150,000	150,000	196,250				496,250
Construction				2,997,750	3,000,000	3,975,000				9,972,750
CSX				125,000	125,000	147,000				397,000
Commissioning						584,000				584,000
Total Spending Plan		310,000	1,090,000	3,322,750	3,325,000	4,952,250				13,000,000

Operations & Maintenance (0 & M) Costs (Savings)



# Virginia Railway Express Leeland Road Station Improvements

**Program Name:** Passenger Station Facilities

Project Type: Expansion
Project ID: ST-10

**Location** Stafford County

This project is for the modification of the existing platform to accommodate 8-car trains and construction of a second platform and pedestrian overpass. Construction of the platform extension is not currently funded. An REF grant in the combined amount of \$18,003,600 for the construction of second platforms at the Brooke (ST-4) and Leeland Road stations is matched in-kind by costs related to the construction of the Potomac Shores station. The second platform is addressed in Addendum B to the Corridor Improvement Project MOU between VRE, DRPT, and CSXT for the Addition of the Potomac Shores Station (VRE Ops Board Resolution 9]-06-2014).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - CMAQ/STP/RSTP					210,000	196,016	250,714	459,890		1,116,620
State - CMAQ/RSTP Match					52,500	49,003	62,680	114,973		279,156
State - REF/IPROC		3,905,800	2,646,000	2,450,000						9,001,800
Unfunded (To Be Determined)					3,938,580					3,938,580
<b>Total Funding</b>		3,905,800	2,646,000	2,450,000	4,201,080	245,019	313,394	574,863		14,336,156

This project is a candidate for Smart Scale funding.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		140,000	140,000							280,000
Project Management		50,000	50,000	50,000	50,000	50,000				250,000
Property Acquisition										
Final Design				1,120,000						1,120,000
Construction Management					274,030	274,030				548,060
Construction					5,495,018	5,545,018				11,040,036
CSX					274,030	274,030				548,060
Commissioning					275,000	275,000				550,000
Total Spending Plan		190,000	190,000	1,170,000	6,368,078	6,418,078				14,336,156

Spending delayed by one year to align with available funding.

Operations & Maintenance (0 & M) Costs (Savings)

N/A



FY 2017

FY 2021

**Start Date** 

**End Date** 

## Virginia Railway Express L'Enfant Station Improvements

**Program Name:** Passenger Station Facilities

Project Type: Expansion
Project ID: ST-11

**Location** District of Columbia

This project includes the planning, design, permitting, and construction for an expanded / relocated Station / Platform for the L'Enfant Station. The work will create an island platform and allow for simultaneous boarding of two tracks. The project would extend and widen the platform to accommodate eight-car trains and a future fourth track at L'Enfant, VRE's busiest station. The current platform is only six-cars long and serviced by one track, resulting in a serious operational bottleneck that reduces service reliability. The project must be coordinated with the Fourth Track - VA to LE (TS-2), L'Enfant Train Storage Track - North (MS-4) and Long Bridge Capacity Improvements (TS-3) projects. For coordination purposes, this project should have begun in FY 2016.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds							10,849,305	12,715,271		23,564,576
State - Mass Transit							1,084,930	1,271,527		2,356,458
VRE (Match)							1,627,396	1,907,291		3,534,686
VRE (Capital Reserve)		250,000	250,000							500,000
Unfunded (To Be Determined)				3,440,000	1,330,000	12,524,280				17,294,280
<b>Total Funding</b>		250,000	250,000	3,440,000	1,330,000	12,524,280	13,561,631	15,894,089		47,250,000

The initial development work is a candidate for funding through the REF program, and the project is also a candidate for future funding through the Federal Core Capacity program.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		250,000	250,000	1,980,000						2,480,000
Project Management										
Property Acquisition				750,000						750,000
Final Design				710,000	1,330,000	600,000				2,640,000
Construction Management						570,000	1,140,000	570,000		2,280,000
Construction						3,910,000	15,640,000	15,640,000	3,910,000	39,100,000
Commissioning										
Total Spending Plan		250,000	250,000	3,440,000	1,330,000	5,080,000	16,780,000	16,210,000	3,910,000	47,250,000

Spending delayed by one year to align with available funding.

Operations & Maintenance (0 & M) Costs (Savings)

N/A



FY 2017

FY 2024

**Start Date** 

**End Date** 

## Virginia Railway Express Lorton Platform Extension

**Program Name:** Passenger Station Facilities

Project Type:ExpansionStart DateFY 2011Project ID:ST-12End DateFY 2017

**Location** Fairfax County

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

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - CMAQ/STP/RSTP	1,255,200									1,255,200
State - CMAQ/RSTP Match	313,800									313,800
State - Mass Transit	651,700									651,700
Fairfax County	279,300									279,300
Total Funding	2,500,000									2,500,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development	275,000									275,000
Property Acquisition										
Final Design	58,085									58,085
Construction		2,166,915								2,166,915
<b>Total Spending Plan</b>	333,085	2,166,915								2,500,000

Operations & Maintenance (0 & M) Costs (Savings)



# Virginia Railway Express Lorton Station Second Platform

**Program Name:** Passenger Station Facilities

Project Type:ExpansionStart DateFY 2015Project ID:ST-13End DateFY 2020

**Location** Fairfax County

Design and construction of a second platform and pedestrian overpass at the VRE Lorton station to expand capacity and operational flexibility. The second platform improvements are addressed in Addendum B to the Corridor Improvement Project MOU between VRE, DRPT, and CSXT for the Addition of the Potomac Shores Station (VRE Ops Board Resolution 9J-06-2014). Project includes

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - CMAQ/STP/RSTP	6,090,800	400,000								6,490,800
State - CMAQ/RSTP Match	1,520,200	100,000								1,620,200
State - Mass Transit	97,300									97,300
NVTA	7,900,000									7,900,000
Fairfax County	41,700									41,700
<b>Total Funding</b>	15,650,000	500,000								16,150,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development	139,000	372,800								511,800
Project Management			50,000	50,000	50,000					150,000
Property Acquisition										
Final Design			1,280,000							1,280,000
Construction Management				300,000	315,000					615,000
Construction				7,150,000	5,319,000					12,469,000
CSX			100,000	200,000	192,000					492,000
Commissioning					632,200					632,200
<b>Total Spending Plan</b>	139,000	372,800	1,430,000	7,700,000	6,508,200					16,150,000

### Operations & Maintenance (0 & M) Costs (Savings)



# Virginia Railway Express Quantico Station Improvements

**Program Name:** Passenger Station Facilities

Project Type: Expansion
Project ID: ST-14

**Location:** Prince William County

This funding provides for improvements at the Quantico VRE station, including design and construction of an island platform, and pedestrian bridges; extension of the existing platform; and track modification. Improvements will be coordinated with the Arkendale to Powell's Creek third track project being implemented by the Commonwealth and CSX. The State has provided a multi-year funding agreement for this project for FY 2016 and FY 2017 under the IPROC program.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
State - REF/IPROC	5,000,000	8,622,204								13,622,204
Unfunded (To Be Determined)				4,505,017						4,505,017
Total Funding	5,000,000	8,622,204		4,505,017						18,127,221

This project is a candidate for additional IPROC funding.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		100,000								100,000
Project Management										
Property Acquisition		250,000								250,000
Final Design		675,000								675,000
Construction Management			250,000	250,000	125,000					625,000
Construction				5,867,221	4,250,000	4,860,000				14,977,221
CSX			200,000	200,000	100,000					500,000
Commissioning			400,000	400,000	200,000					1,000,000
Total Spending Plan		1,025,000	850,000	6,717,221	4,675,000	4,860,000				18,127,221

IPROC does not pay for project management costs estimated at \$200K

Operations & Maintenance (0 & M) Costs (Savings)

N/A



**Start Date** 

**End Date** 

FY 2016

FY 2021

# Virginia Railway Express Rippon Station Improvements

**Program Name:** Passenger Station Facilities

Project Type: Expansion
Project ID: ST-15

**Location** Prince William County

This project is for the design and construction of a platform extension and second platform with pedestrian overpass to expand capacity and operational flexibility. The second platform improvements are addressed in Addendum B to the Corridor Improvement Project MOU between VRE, DRPT, and CSXT for the Addition of the Potomac Shores Station (VRE Ops Board Resolution 9J-06-2014). Project includes cost of equipment and cameras related to expanded and new platform and pedestrian overpass.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - CMAQ/STP/RSTP	3,706,172	1,600,000	655							5,306,827
State - CMAQ/RSTP Match	926,544	400,000	164							1,326,708
NVTA	10,000,000									10,000,000
<b>Total Funding</b>	14,632,716	2,000,000	819							16,633,535

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		332,680								332,680
Project Management										
Property Acquisition										
Final Design		776,253	544,467							1,320,720
Construction Management				400,000	233,390					633,390
Construction				9,444,553	3,603,277					13,047,830
CSX				300,000	206,712					506,712
Commissioning					792,203					792,203
Total Spending Plan		1,108,933	544,467	10,144,553	4,835,582					16,633,535

Operations & Maintenance (0 & M) Costs (Savings)

N/A



FY 2014

FY 2020

**Start Date** 

**End Date** 

# Virginia Railway Express Rolling Road Second Platform

**Program Name:** Passenger Station Facilities

Project Type:ExpansionStart DateFY 2023Project ID:ST-16End DateFY 2027

**Location** Fairfax Counry

Design and construction of a second platform and pedestrian overpass at the VRE Rolling Road station to expand capacity and operational flexibility. Project includes equipment and cameras related to new platform and pedestrian overpass.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Unfunded (To be determined)								450,000	12,050,000	12,500,000
Total Funding								450,000	12,050,000	12,500,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development								450,000		450,000
Project Management									150,000	150,000
Property Acquisition										
Final Design									1,000,000	1,000,000
Construction Management									880,000	880,000
Construction									10,000,000	10,000,000
Commissioning									20,000	20,000
<b>Total Spending Plan</b>								450,000	12,050,000	12,500,000

Operations & Maintenance (0 & M) Costs (Savings)



# Virginia Railway Express Rolling Road Station Improvements

**Program Name:** Passenger Station Facilities

Project Type:ExpansionStart DateFY 2016Project ID:ST-17End DateFY 2019LocationFairfax County

The Rolling Road VRE station currently has a platform which will accommodate a five-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.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - CMAQ/STP/RSTP	1,600,000									1,600,000
State - CMAQ/RSTP Match	400,000									400,000
<b>Total Funding</b>	2,000,000									2,000,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		55,000								55,000
Project Management										
Property Acquisition										
Final Design		175,000								175,000
Construction Management			65,000	65,000						130,000
Construction			725,000	715,000						1,440,000
Commissioning				200,000						200,000
Total Spending Plan		230,000	790,000	980,000						2,000,000

Operations & Maintenance (O & M) Costs (Savings)



#### **Washington Union Station Improvements**

**Program Name:** Passenger Station Facilities

**Project Type:** Expansion **Project ID:** ST-18

**Start Date** FY 2018 **End Date** Ongoing District of Columbia Location

This project will fund track, signal, platform and passenger facility upgrades and re-alignments at Amtrak's Washington Union Terminal, in accordance with the Northeast Corridor Capital Investment Plan. Costs for the project will be allocated to the users of the terminal in accordance with the Northeast Corridor Commuter and Intercity Rail Cost Allocation Policy, which is still under discussion for capital improvements. VRE's allocated share of the project has not been determined. Some priority projects may be carried out under an interim agreement with Amtrak.

5,000,000

**Funding Source** Life to Date **FY 17 FY 18** FY 19 FY 20 FY 21 **FY 22** FY 23 **Future Total** Federal - Formula Funds 3.100.000 4.000.000 4.000.000 8.000.000 8.000.000 8.000.000 35.100.000 State - Mass Transit 1.700.000 400.000 400.000 800.000 800,000 800.000 4,900,000 VRE (Match) 200,000 600,000 600,000 1,200,000 1,200,000 1,200,000 5,000,000

5,000,000

5,000,000

10,000,000

**Spending Plan By Phase** Life to Date **FY 17 FY 18** FY 19 FY 20 **FY 21 FY 22** FY 23 **Future Total** 5.000.000 5.000.000 45.000.000 Amtrak Agreement 5.000.000 10.000.000 10.000.000 10.000.000 **Total Spending Plan** 5,000,000 5,000,000 5,000,000 10,000,000 10,000,000 10,000,000 45,000,000

Operations & Maintenance (0 & M) Costs (Savings)

N/A

**Total Funding** 



45,000,000

10,000,000

10,000,000

# Virginia Railway Express Woodbridge Station Improvements

**Program Name:** Passenger Station Facilities

Project Type: Expansion
Project ID: ST-19

**Location** Prince William County

This project will extend the east platform to accommodate eight-car trains, widen the platform for the future third track, and construct pedestrian access to the new island platform.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Unfunded (To Be Determined)				930,000	12,990,000					13,920,000
Total Funding				930,000	12,990,000					13,920,000

Project is a candidate for NVTA funding.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development				330,000						330,000
Project management				50,000	50,000	50,000				150,000
Property Acquisition										
Final Design				550,000	500,000					1,050,000
Construction Management					285,000	300,000				585,000
Construction					5,050,000	6,290,000				11,340,000
Commissioning						465,000				465,000
<b>Total Spending Plan</b>				930,000	5,885,000	7,105,000				13,920,000

Operations & Maintenance (0 & M) Costs (Savings)

N/A



FY 2019

FY 2021

**Start Date** 

**End Date** 

# **Rolling Stock Equipment**



# Virginia Railway Express 14 Expansion Rail Cars

Program Name:Rolling StockProject Type:Expansion

Project ID: RS-1 Location N/A

Purchase of 14 Gallery rail cars for the short-term expansion of service by providing rail cars for an additional Fredericksburg line train and for lengthening of other train consists. Five cars were ordered in FY 2015 and are scheduled to be delivered during FY 2017. An additional nine cars were ordered in FY 2016.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	9,895,000									9,895,000
State - Mass Transit	4,919,250	12,852,000								17,771,250
VRE (Match)	88,000									88,000
State STP Funds	7,218,750									7,218,750
VRE (Capital Reserve)	1,777,000									1,777,000
<b>Total Funding Sources</b>	23,898,000	12,852,000								36,750,000

DRPT provided a multi-year funding agreement for FY 2016 and FY 2017 for the nine car purchase.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Expansion Coach/Trailer Car (5)	313,402	12,818,750								13,132,152
Expansion Coach/Trailer Car (9)		465,348	472,500	12,705,000	9,975,000					23,617,848
<b>Total Spending Plan</b>	313,402	13,284,098	472,500	12,705,000	9,975,000					36,750,000

#### Operations & Maintenance (0 & M) Costs (Savings)

Average maintenance cost per rail car is \$53,000 per year or \$742,000 annually once all 14 rail cars are in service.

Major lifecycle repair and overhaul costs begin in year ten and are reflected in the Equipment Asset Management Program (AM-5).



**Start Date** 

**End Date** 

FY 2014

FY 2020

# Virginia Railway Express 15 Replacement Rail Cars

**Program Name:** Rolling Stock Equipment

Project Type:Replacement and RehabilitationStart DateFY 2012Project ID:RS-2End DateFY 2018

Project ID: RS-2 Location N/A

Purchase of 15 Gallery rail cars to complete the replacement of all legacy rolling stock. Eight rail cars were received in FY15 and seven were delivered in FY16. Funding amounts reflect revised cost estimates at the time of the order for the seven rail cars.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	15,905,612									15,905,612
State - Mass Transit	10,220,381									10,220,381
VRE (Match)	1,167,460									1,167,460
Federal - CMAQ/STP/RSTP	8,240,000									8,240,000
VRE (Capital Reserve)	2,981,240									2,981,240
Total Funding Sources	38,514,693									38,514,693

Federal STP funds allocated by the State.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
8 Replacement Rail Cars	21,641,854	15,000								21,656,854
7 Replacement Rail Cars	14,950,988	1,677,839	229,012							16,857,839
Total Spending Plan	36,592,842	1,692,839	229,012							38,514,693

Costs in FY 2017 and FY 2018 are for construction retainage and oversight during the warranty period after the rail cars are received.

### Operations & Maintenance (O & M) Costs (Savings)

Average maintenance cost per rail car is \$53,000 per year or \$795,000 annually.

Major lifecycle repair and overhaul costs begin in year ten and are reflected in the Equipment Asset Management Program (AM-6).



# Virginia Railway Express Fleet Expansion Coaches (FY19-21)

Program Name:Rolling StockProject Type:Expansion

Project ID: RS-3 Location N/A Start Date FY 2019 End Date FY 2021

Purchase of 8 cab cars and 44 trailers to support Phase 2 of System Plan, including the Gainesville-Haymarket extension (OT-2). Quantity and cost source is AECOM/GHX estimate 9/28/16.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Unfunded (To Be Determined)				50,125,289	67,327,822	67,327,822				184,780,933
Total Funding Sources				50,125,289	67,327,822	67,327,822				184,780,933

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Expansion Cab Cars					17,202,533	17,202,533				34,405,066
Expansion Coach/Trailer Cars				50,125,289	50,125,289	50,125,289				150,375,867
Total Spending Plan				50,125,289	67,327,822	67,327,822				184,780,933

#### Operations & Maintenance (0 & M) Costs (Savings)

Average maintenance cost per rail car is currently \$53,000 per year. Major repair and overhaul costs begin in year ten and would be reflected in the Equipment Asset Management Program (RS-6).



## Fleet Expansion Locomotives (FY20)

Program Name:Rolling StockProject Type:Expansion

Project ID: RS-4 Location N/A Start Date FY 2020 End Date FY 2022

Purchase of eight additional locomotives to support Phase 2 of System Plan, including Gainesville-Haymarket extension (OT-2). Quantity and cost source is AECOM/GHX estimate 1/28/16.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Unfunded (To Be Determined)					500,000	500,000	54,037,067			55,037,067
Total Funding Sources					500,000	500,000	54,037,067			55,037,067

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Fleet Expansion Locomotives					500,000	500,000	54,037,067			55,037,067
Total Spending Plan					500,000	500,000	54,037,067			55,037,067

Operations & Maintenance (O & M) Costs (Savings)



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# **Station Parking**





# Virginia Railway Express Broad Run Parking Improvements

Program Name:Station ParkingProject Type:Expansion

Project ID: PK-1

**Location** Prince William County

Parking at the VRE Broad Run station is currently at capacity. This project funds the design and construction of 900 additional spaces in a surface lot and parking garage at the Broad Run VRE station. Final design is on hold until completion of the Gainesville-Haymarket study (OT-2).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - CMAQ/STP/RSTP	2,736,000		4,198,626	3,596,963						10,531,589
State - CMAQ/RSTP Match	684,000		1,049,656	899,241						2,632,897
Unfunded (To Be Determined)				11,255,514						11,255,514
Total Funding	3,420,000		5,248,282	15,751,718						24,420,000

This project is a candidate for future NVTA or CMAQ funding.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development	393,120		95,280							488,400
Property Acquisition										
Final Design			1,953,600							1,953,600
Construction				8,547,000	13,431,000					21,978,000
Total Spending Plan	393,120		2,048,880	8,547,000	13,431,000					24,420,000

Operations & Maintenance (0 & M) Costs (Savings)

N/A



FY 2011

FY 2020

**Start Date** 

**End Date** 

# Virginia Railway Express Fredericksburg Parking Structure

Program Name:Station ParkingProject Type:Expansion

Project ID: PK-2

**Location** Fredericksburg

Parking utilization at the Fredericksburg station is consistently near or over the capacity of the available 600 paved parking spaces, along with an unpaved 200-space overflow lot. Although utilization has been impacted by the opening of the Spotsylvania station, future service expansion will result in the need for a total of 1,100 parking spaces. Project assumes the construction of a parking structure at one of the VRE or Fredericksburg-owned lots and paving of the existing gravel lot. The elimination of all leased spaces and consolidation within the new parking facilities are assumed. The project also includes additional access roadway connection to Blue-Grey Parkway.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - CMAQ/STP/RSTP						413,600				413,600
State - CMAQ/RSTP Match						103,400				103,400
Unfunded (To Be Determined)									29,488,300	29,488,300
Total Funding						517,000			29,488,300	30,005,300

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development						467,000			263,800	730,800
Project management						50,000			820,000	870,000
Property Acquisition										
Final Design									2,314,000	2,314,000
Construction Management									1,300,000	1,300,000
Construction									24,660,000	24,660,000
Commissioning									130,500	130,500
Total Spending Plan						517,000			29,488,300	30,005,300

Operations & Maintenance (O & M) Costs (Savings)

N/A



**Start Date** 

**End Date** 

FY 2021

FY 2027

# Virginia Railway Express Leeland Road Parking Improvements

Program Name:Station ParkingProject Type:Expansion

Project ID: PK-3

**Location** Stafford County

This project will add 675 parking spaces in a garage to increase station parking capacity to 1,500 spaces and is dependent on confirmation of parking demand in the travel model results.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Unfunded (To Be Determined)							846,000	2,619,000	27,565,500	31,030,500
Total Funding							846,000	2,619,000	27,565,500	31,030,500

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development							771,000			771,000
Project management							75,000	75,000	75,000	225,000
Property Acquisition										
Final Design								2,544,000		2,544,000
Construction Management									1,350,000	1,350,000
Construction									26,010,000	26,010,000
Commissioning									130,500	130,500
Total Spending Plan							846,000	2,619,000	27,565,500	31,030,500

Operations & Maintenance (O & M) Costs (Savings)

N/A



FY 2022

FY 2025

**Start Date** 

**End Date** 

# Virginia Railway Express Manassas Park Parking Improvements

Program Name: Station Parking

Project Type: Expansion
Project ID: PK-4

**Location** City of Manassas Park

This project would add a parking facility 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. Property acquisition, if needed, is not included in the cost estimate.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
NVTA	500,000	2,000,000								2,500,000
Unfunded (To Be Determined)				17,713,000						17,713,000
Total Funding	500,000	2,000,000		17,713,000						20,213,000

This project is candidate for future formula funds.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		485,000	270,000							755,000
Project Management		15,000	50,000	50,000						115,000
Property Acquisition										
Final Design			1,680,000							1,680,000
Construction Management				855,000						855,000
Construction				16,708,000						16,708,000
Commissioning				100,000						100,000
Total Spending Plan		500,000	2,000,000	17,713,000						20,213,000

Operations & Maintenance (0 & M) Costs (Savings)

N/A



FY 2016

FY 2019

**Start Date** 

**End Date** 

## **Quantico Station Parking Improvements**

**Program Name:** Station Parking

Project Type:ExpansionStart DateFY 2020Project ID:PK-5End DateFY 2022

**Location** Prince William County

This project will provide parking improvements at Quantico station and is dependent on confirmation of parking demand in the travel model results.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - CMAQ/STP/RSTP					1,415,742					1,415,742
State - CMAQ/RSTP Match					353,936					353,936
Unfunded (To Be Determined)					300,000					300,000
Total Funding					2,069,678					2,069,678

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development						100,000				100,000
Project management										
Property Acquisition										
Final Design						320,000				320,000
Construction Management							75,000			75,000
Construction							1,404,678			1,404,678
Commissioning							170,000			170,000
Total Spending Plan						420,000	1,649,678			2,069,678

Operations & Maintenance (0 & M) Costs (Savings)



# **Track and Signal Infrastructure**





# Virginia Railway Express Alexandria Station Track 1 Access

**Program Name:** Track and Signal Infrastructure

Project Type:ExpansionStart DateFY 2015Project ID:TS-1End DateFY 2017

**Location** City of Alexandria

This project will modify the Slaters Lane railroad crossover to enhance capacity and improve operating flexibility and for other operational enhancements. The Slaters Lane crossover is addressed in Addendum B to the Corridor Improvement Project MOU between VRE, DRPT, and CSXT for the Addition of the Potomac Shores Station (VRE Ops Board Resolution 9J-06-2014). This project is built in conjunction with projects at the Alexandria station for a pedestrian tunnel (ST-1) and Alexandria Station Improvements (ST-2).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Total
NVTA	7,000,000									7,000,000
Total Funding	7,000,000									7,000,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development	120,960									120,960
Project Management	50,000	50,000								100,000
Property Acquisition										
Final Design	483,840									483,840
Construction Management	188,000	336,000								524,000
Construction	907,200	4,864,000								5,771,200
Commissioning										
Total Spending Plan	1,750,000	5,250,000								7,000,000

Operations & Maintenance (0 & M) Costs (Savings)



# Virginia Railway Express Fourth Track - VA to LE

**Program Name:** Track and Signal Infrastructure

Project Type: Expansion
Project ID: TS-2

**Location** District of Columbia

This project would provide an additional main track between the Virginia (VA) and L'Enfant (LE) Interlocking in Washington, DC. L'Enfant is VRE's busiest station; the current platform is only six-cars long and serviced by one track, resulting in a serious operational bottleneck that reduces service reliability. The project must be coordinated with the reconstruction of the L'Enfant Station (ST-11), L'Enfant Train Storage Track - North (MS-4) and Long Bridge Capacity Improvements (TS-3).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
VRE (Capital Reserve)		250,000	250,000						500,000
Unfunded (To Be Determined)				975,000	19,875,000				20,850,000
<b>Total Funding</b>		250,000	250,000	975,000	19,875,000				21,350,000

The initial development work is a candidate for funding through the REF program, and the project is also a candidate for future funding through the Federal Core Capacity program.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		250,000	250,000							500,000
Project Management				75,000	75,000	75,000				225,000
Property Acquisition										
Construction Management					520,000	520,000				1,040,000
Final Design				900,000	1,850,000					2,750,000
Construction					7,225,000	8,970,000				16,195,000
Commissioning					320,000	320,000				640,000
Total Spending Plan		250,000	250,000	975,000	9,990,000	9,885,000				21,350,000

Spending delayed by one year to align with available funding.

Operations & Maintenance (0 & M) Costs (Savings)

N/A



FY 2017

FY 2021

**Start Date** 

**End Date** 

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# **Train Maintenance & Storage Facilities**





#### **Broad Run MSF - Train Storage Expansion**

**Program Name:** Train Maintenance and Storage Facilities

Project Type:ExpansionStart DateFY 2019Project ID:MS-1End DateFY 2022

**Location** Prince William County

This project adds expansion capacity for overnight train storage adjacent to the Broad Run Maintenance and Storage Facility. Project will be coordinated with the Gainesville-Haymarket Expansion project (OT-2).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Unfunded (To Be Determined)				5,400,000	23,750,000					29,150,000
Total Funding				5,400,000	23,750,000					29,150,000

This project is a candidate for future formula funds.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development				5,000,000						5,000,000
Project Management										
Property Acquisition				400,000						400,000
Final Design					3,627,354					3,627,354
Construction Management					526,667	526,667	526,667			1,580,001
Construction					3,845,979	9,473,333	5,223,333			18,542,645
Commissioning										
<b>Total Spending Plan</b>				5,400,000	8,000,000	10,000,000	5,750,000			29,150,000

Operations & Maintenance (O & M) Costs (Savings)



#### **Crossroads MSF - Land Acquisition**

**Program Name:** Train Maintenance and Storage Facilities

Project Type:ExpansionStart DateFY 2016Project ID:MS-2End DateFY 2017

**Location** Spotsylvania County

This project provides for the acquisition of approximately 16.5 acres of land to the east of the current VRE Crossroads facility to increase the storage capacity at the yard and to accommodate the construction of the Life-Cycle Overhaul and Upgrade Facility, which requires relocation of two existing storage tracks. The property, net of the land needed for the two tracks, will be large enough to accommodate additional storage needed for System Plan 2040 expansion. This project is part of the Crossroads Maintenance and Storage Facility - Storage Expansion (MS-3).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	2,360,000									2,360,000
State - Mass Transit	472,000									472,000
VRE (Match)	118,000									118,000
<b>Total Funding</b>	2,950,000									2,950,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development										
Project Management										
Property Acquisition	65,682	2,884,318								2,950,000
Final Design										
Construction										
Total Spending Plan	65,682	2,884,318								2,950,000

Operations & Maintenance (0 & M) Costs (Savings)



## **Crossroads MSF - Storage Expansion.**

**Program Name:** Train Maintenance and Storage Facilities

Project Type:ExpansionStart DateFY 2019Project ID:MS-3End DateFY 2022LocationSpotsylvania

This project constructs tracks for overnight train storage at the Crossroads Maintenance and Storage Facility needed to accommodate System Plan 2040 expansion.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Unfunded (To Be Determined)				2,362,188	26,513,436					28,875,624
Total Funding				2,362,188	26,513,436					28,875,624

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development										
Project Management				75,000	75,000	75,000	75,000			300,000
Property Acquisition										
Final Design				2,287,188						2,287,188
Construction Management					690,000	690,000	690,000			2,070,000
Construction					8,072,812	8,072,812	8,072,812			24,218,436
Commissioning										
Total Spending Plan				2,362,188	8,837,812	8,837,812	8,837,812			28,875,624

Operations & Maintenance (0 & M) Costs (Savings)



## L'Enfant Train Storage Track - North

**Program Name:** Train Maintenance and Storage Facilities

Project Type:Replacement and RehabilitationStart DateFY 2015Project ID:MS-4End DateFY 2017

**Location** District of Columbia

This project completes the conversion of an existing storage track to an eight unit midday storage track near the L'Enfant station. The construction includes creating a second ingress/egress point and providing electronic signal control.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	3,426,895									3,426,895
State - Mass Transit	243,899									243,899
VRE (Match)	612,824									612,824
Total Funding	4,283,618									4,283,618

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development										
Project Management										
Property Acquisition										
Final Design	602,571									602,571
Construction Management	36,000	18,900								54,900
Construction	707,294	2,918,853								3,626,147
Commissioning										
Total Spending Plan	1,345,865	2,937,753								4,283,618

Operations & Maintenance (0 & M) Costs (Savings)



#### L'Enfant Train Storage Track - South

**Program Name:** Train Maintenance and Storage Facilities

Project Type:Replacement and RehabilitationStart DateFY 2016Project ID:MS-5End DateFY 2017

**Location** District of Columbia

This project is to design and construct the conversion of an existing temporary track immediately south of L'Enfant station and provide the wayside power connection for train sets during layover. Pepco service is required for this project.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	3,172,000									3,172,000
State - Mass Transit	634,400									634,400
VRE (Match)	158,600									158,600
<b>Total Funding</b>	3,965,000									3,965,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development										
Project Management										
Final Design	119,077	180,923								300,000
Construction Management		75,000								75,000
Construction		3,590,000								3,590,000
Commissioning										
Total Spending Plan	119,077	3,845,923								3,965,000

Operations & Maintenance (0 & M) Costs (Savings)



#### Life-Cycle Overhaul and Upgrade Facility

**Program Name:** Train Maintenance and Storage Facilities

Project Type:ExpansionStart DateFY 2014Project ID:MS-6End DateFY 2019

**Location** Spotsylvania County

This project funds the design and construction of a rolling stock equipment maintenance facility in order to carry out those components of a life-cycle maintenance program that can be most efficiently accomplished at the VRE yards. New shop facilities will include overhead cranes, a wheel and axle drop table and wheel truing machine. The project will build two tracks on adjacent property to accommodate the new facility and will be built in conjunction with Crossroads Maintenance and Storage Facility - Land Acquisition (MS-2).

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	18,077,058	7,812,000								25,889,058
State - Mass Transit	3,615,412	4,284,000								7,899,412
VRE (Match)	903,853	504,000								1,407,853
<b>Total Funding</b>	22,596,323	12,600,000								35,196,323

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development	644,409									644,409
Project Management										
Property Acquisition										
Final Design	1,423,197	731,203	276,000							2,430,400
Construction Management		657,123	1,314,000	657,123						2,628,246
Construction		7,388,223	14,716,823	7,388,222						29,493,268
Commissioning										
Total Spending Plan	2,067,606	8,776,549	16,306,823	8,045,345						35,196,323

#### Operations & Maintenance (0 & M) Costs (Savings)



#### New York Avenue Midday Storage Facility

**Program Name:** Train Maintenance and Storage Facilities

**Project Type:** Replacement and Rehabilitation **Start Date** FY 2015 **End Date** FY 2021

**Project ID:** MS-7

Location District of Columbia

This project includes the design, permitting, property acquisition and construction for a midday storage facility to replace current storage at Amtrak's Ivy City Coach Yard. The Ivy City facility will not be available to VRE because it is needed by Amtrak for its own use. The new facility will replace the current coach yard and also add some space for future expansion.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - Formula Funds	7,855,126	7,024,873	10,906,579	14,622,766	13,838,766	10,366,766	1,689,461			66,304,336
State - Mass Transit	1,571,025	3,839,838	5,981,027	1,462,277	1,383,877	1,036,677	168,946			15,443,666
VRE (Match)	392,756	465,730	703,650	2,193,415	2,075,815	1,555,015	253,419			7,639,800
<b>Total Funding</b>	9,818,907	11,330,441	17,591,257	18,278,457	17,298,457	12,958,457	2,111,826			89,387,802

Project is a candidate for federal discretionary funds under the Core Capacity program. Funding from the State capital program in FY 2017 was at 34% and this level of funding will also be requested in FY 2018. State funding in future years is estimated at 8% of project costs. \$194K of match funds in FY 2016 provided from prior year surplus.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		1,327,802	2,150,000	1,140,000	130,000	130,000				4,877,802
Project Management										
Property Acquisition			3,990,000	9,320,000						13,310,000
Final Design			1,280,000	1,920,000						3,200,000
Construction Management				800,000	1,280,000	1,120,000				3,200,000
Construction				12,960,000	25,920,000	25,920,000				64,800,000
Commissioning										
Total Spending Plan		1,327,802	7,420,000	26,140,000	27,330,000	27,170,000				89,387,802

Available funding may not be sufficient to meet the spending plan schedule.

Operations & Maintenance (0 & M) Costs (Savings)



# **Other Projects**





# Virginia Railway Express Capital Reserve

Program Name: Other Projects
Project Type: Multiple

Project ID: OT-1 Location N/A Start Date Ongoing End Date Ongoing

Commitment of additional funds to the capital reserve, to be used to complete projects, provide local match in order to take advantage of grant opportunities and to fund initial costs to support major grant proposals.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
VRE - Operating Budget	6,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000		27,000,000
Total Funding	6,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	2,111,826	3,000,000		27,000,000

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Capital reserve	6,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000		27,000,000
Total Spending Plan	6,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000		27,000,000

#### Operations & Maintenance (O & M) Costs (Savings)



# Virginia Railway Express **Gainesville-Haymarket Extension**

**Program Name:** Other Projects **Project Type:** Expansion

Location **Prince William County** 

**Start Date** FY 2016 Project ID: OT-2 **End Date** FY 2022

This project is an 11-mile extension of the VRE system from Manassas to Haymarket along the Norfolk Southern B-Line. The cost estimate assumes a two track railroad (with acquisition of land for a future third track), up to three stations and relocation of the Broad Run equipment storage and maintenance facility. Land acquisition for stations and additional railroad ROW is also included in the cost estimate. The cost of additional rolling stock associated with a service expansion is included in other CIP projects (RS- 3 and RS-4). Cost estimate source is AECOM/GHX estimate 9/28/16.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Federal - CMAQ/STP/RSTP						800,000				800,000
State - CMAQ/RSTP Match						200,000				200,000
NVTA	1,500,000									1,500,000
State - REF/IPROC	2,785,714									2,785,714
VRE - CPF	450,000									450,000
Unfunded (To Be Determined)				49,210,500	103,869,500	107,824,500	110,184,500			371,089,000
<b>Total Funding</b>	4,735,714			49,210,500	103,869,500	108,824,500	110,184,500			376,824,714

This project is a candidate for Smart Scale funding and federal discretionary funds under the New Starts program.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development	1,790,042	2,945,672		1,000,000						5,735,714
Project Management				100,000	260,000	500,000	500,000			1,360,000
Property Acquisition				9,418,000	37,672,000					47,090,000
Final Design				38,692,500	11,557,500					50,250,000
Construction Management					4,380,000	8,760,000	8,760,000			21,900,000
Construction					50,000,000	99,564,500	99,564,500			249,129,000
Commissioning							1,360,000			1,360,000
Total Spending Plan	1,790,042	2,945,672		49,210,500	103,869,500	108,824,500	110,184,500			376,824,714

Spending delayed by one year to align with available funding.

Operations & Maintenance (0 & M) Costs (Savings)



# Virginia Railway Express Long Bridge Capacity Improvements

Program Name: Other Projects

 Project Type:
 Expansion
 Start Date
 FY 2016

 Project ID:
 OT-3
 End Date
 FY 2025

**Location** District of Columbia and Arlington County

This project adds capacity for CSXT, VRE and Amtrak trains crossing the Potomac River through construction of a new bridge, possible rehabilitation of the existing bridge, and associated track and signal improvements. The first phase of the project (PE/NEPA) will be administered by DDOT (D.C. Department of Transportation) with a TIGER grant from the U.S. DOT and contributions from VRE, the State of Virginia and D.C. government. VRE's contribution of \$300,000 is shown below.

Funding Source	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
VRE - CPF	300,000									300,000
Unfunded (To Be Determined)				10,300,000	35,300,000	111,075,000	161,075,000	161,075,000	221,175,000	700,000,000
<b>Total Funding</b>	300,000			10,300,000	35,300,000	111,075,000	161,075,000	161,075,000	221,175,000	700,300,000

This project is a candidate for future funding through the Federal Core Capacity program, along with funding from other stakeholders.

Spending Plan By Phase	Life to Date	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	Future	Total
Development		300,000								300,000
Project Management				300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
Property Acquisition				10,000,000						10,000,000
Final Design					35,000,000	25,000,000				60,000,000
Construction Management						5,600,000	5,600,000	5,600,000	19,400,000	36,200,000
Construction						80,175,000	155,175,000	155,175,000	201,475,000	592,000,000
Total Spending Plan		300,000		10,300,000	35,300,000	111,075,000	161,075,000	161,075,000	221,175,000	700,300,000

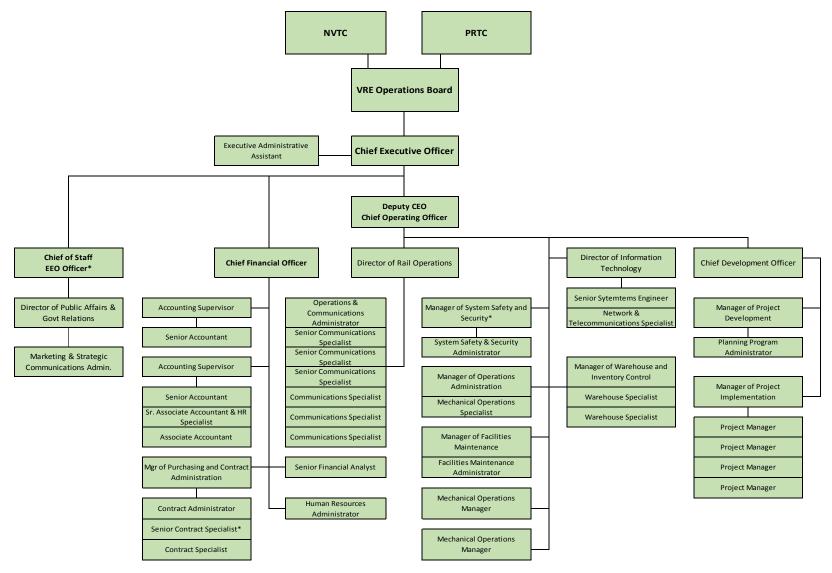
Operations & Maintenance (0 & M) Costs (Savings)



# **Appendices & Additional Information**



#### Virginia Railway Express Organizational Chart October 1, 2016



Manager of Safety and Security reports to the CEO in matters related to safety and security Senior Contract Specialist reports to the CEO in matters related to their duties as DBE liason Chief of Staff reports to the CEO in matters related to EEO



Virginia Railway Express Allocation Data October 5, 2016 Survey - Proposed FY 2018 Budget 3% Fare Increase

11 14 16 S&U

# **Final**

<u>Jurisdictions</u>	[Col 1]	[Col 2]	[Col 3]	[Col 4]	[Col 5]	[Col 6]	[Col 6a
	Population 2015 Update	Population %	Contributors' Potential Share of Net Costs %	Contributors' Potential Share of Net Costs \$	Contributors' Maximum Share of Net Costs		
Contributors:	======	======	======	======	======	======	
Alexandria Arlington	159,571 234,678	6.8767% 10.1134%	0.6877% 1.0113%	\$371,061 \$545,713		\$140,589 \$205,692	#DIV/0 #DIV/0
Contributors' Total	394,249	16.9901%					
	[Col 7]	[Col 8]	[Col 9]	[Col 10]	[Col 11]	[Col 12]	
			Participants'	October Survey	100 Weight- Participants'	Participants'	
Participants:	Population 2015 Update ======	Population %	Normalized % Population ======	Participants' AM Ridership	Ridership %	Aggregate % of Costs ======	
Fairfax County	1,129,330	48.67%	58.63%	2,777	28.69%	28.69%	
Fredericksburg	26,969	1.16%	1.40%	337	3.48%	3.48%	
Manassas	41,577	1.79%	2.16%	418	4.31%	4.31%	
Manassas Park Prince William County	15,700 443,463	0.68% 19.11%	0.82% 23.02%	294 3,061	3.04% 31.62%	3.04% 31.62%	
Stafford County	140,176	6.04%	7.28%	1,610	16.63%	16.63%	
Spotsylvania	128,998	5.56%	6.70%	1,183	12.22%	12.22%	
Participants' Total	1,926,213	83.01%	100.00%	9,680	100.00%	100.00%	
Population Total	2,320,462	100.00%					
<u>Costs</u>	[Col 12]	[Col 13]	[Col 14]	[Col 15]	[Col 16]	[Col 17]	[Col 18]
	(repeated)		State Aid			Contributors'	Participants
	Participants'		Interest &	"System"	Net	Payments	Net
	Aggregate	Gross Costs	Misc Income	Fare Revenue	Costs	Lesser of	Costs
	% ======	\$	\$ ======	\$	\$	Col 6 or 4	
Alexandria Arlington						\$140,589 \$205,692	
Fairfax County	28.69%	\$38,117,566	\$21,736,051	\$899,857			\$15,382,305
Fredericksburg	3.48%	\$4,628,974	\$2,639,613	\$109,278			\$1,868,018
Manassas	4.31%	\$5,732,523	\$3,268,897	\$135,330			\$2,313,354
Manassas Park	3.04%	\$4,032,533	\$2,299,500	\$95,198			\$1,627,324
Prince William County	31.62%	\$42,007,851	\$23,954,436	\$991,697			\$16,952,225
Stafford County Spotsylvania	16.63% 12.22%	\$22,093,930 \$16,240,445	\$12,598,779 \$9,260,904	\$521,581 \$383,395			\$8,915,983 \$6,553,815
Total	100.00%	\$132,853,822	\$75,758,181	\$3,136,335	\$53,959,306	\$346,281	\$53,613,024
Total	100.00%	\$132,633,622	\$13,730,101	φ3,130,333	ф <i>33,737</i> ,300	\$340,261	\$33,013,024
<u>Subsidy</u> <u>Calculation</u>	[Col 19]	[Col 20]	[Col 18] (repeated)	[Col 21]	[Col 22]	[Col 23]	[Col 24]
	Oct Survey		Participants'	Proposed			
	Particpants'	Participants'	Net	FY 2018	Actual		
	Fare Revenue %	Fare Revenue \$	Costs \$	Budget Based on 10/5/16 Survey	FY2016 Subsidy	Net Change \$	Net Change
Alexandria Arlington	======		=======	======= \$140,589 \$205,692	\$140,589 \$205,692	\$0 \$0	0.00% 0.00%
Fairfax County	25.288%	\$9,283,004	\$15,382,305	\$6,099,301	\$5,160,910	\$938,391	18.18%
Fredericksburg	3.952%	\$1,450,740	\$1,868,018	\$417,278	\$483,524	(\$66,246)	-13.70%
Manassas	4.437%	\$1,628,768	\$2,313,354	\$684,586	\$749,371	(\$64,785)	-8.65%
Manassas Park	3.140%	\$1,152,606	\$1,627,324	\$474,718	\$511,777	(\$37,059)	-7.24%
Prince William County Stafford County	31.569% 17.901%	\$11,588,854 \$6,571,469	\$16,952,225 \$8,915,983	\$5,363,372 \$2,344,514	\$5,968,406 \$2,647,222	(\$605,034) (\$302,708)	-10.14% -11.43%
Spotsylvania	13.712%	\$5,033,624	\$6,553,815	\$1,520,191	\$1,382,749	\$137,442	9.94%
Total	100.0000%	\$36,709,065	\$53,613,024	\$17,250,240	\$17,250,240	\$0	0.00%
	[Col 25]						
Participants Residents' "System-wide"	36,709,064.92 3,136,335.08						
2018 \$	39,845,400.00		\$132,853,821.00				



## VRE Fiscal Year 2018 Proposed Program Budget

	FY 2016 Amended	FY 2016 Actual	FY 2017 Budget	FY 2018 Proposed
Revenue:	<u> </u>			
VRE - Non-Departmental				
Fare Revenue	37,820,000	37,696,913	38,950,000	39,845,400
Miscellaneous Revenue	165,000	240,052	200,000	225,000
Appropriation from Operating Reserve	740,000	-	-	-
Appropriation from Capital Reserve	1,785,000		1,000,000	500,000
Jurisdictional Revenue	16,428,800	16,428,800	17,250,240	17,250,240
Other Revenue		851,660	377,000	955,000
State Operating Grant	9,200,000	15,564,259	9,000,000	10,000,000
Federal Grants - Operations and Debt	13,973,042	13,917,534	14,153,542	14,223,542
State Grants - Operations and Debt	6,611,968	-	6,775,508	6,782,308
Federal Grants - Capital Program	32,210,771	21,206,413	23,309,609	27,638,047
State Grants - Capital Program	27,510,360	9,826,429	19,470,977	15,909,285
Interest Income Total Revenue	20,000 146,464,941	163,318 115,895,378	25,000 130,511,876	75,000 133,403,822
iotai Revenue	146,464,941	115,695,576	130,511,876	133,403,822
Expenditures:				
Non-Departmental Operating				
Liability Insurance	3,950,000	3,980,027	4,000,000	4,000,000
Operating Reserve/Contingency	2,000,121	45,310	728,794	1,395,008
Capital Reserve	-	-	-	-
Other VRE-Financing-Administration Fees	45,310	(173,324)	-	-
Total VRE - Non-Departmental	5,995,431	3,852,013	4,728,794	5,395,008
Executive Management				
Salaries/Fringes	814,000	811,608	844,000	945,000
Travel/Training/Employee Expenses	24,000	23,624	23,500	31,500
Board Member Expenses	15,000	1,900	15,000	16,800
Office Administration Expenses	115,000	130,871	125,000	125,000
Legal/Audit	225,000	376,982	80,000	280,000
Consulting/Professional/Other	52,000	18,366	52,000	54,000
Total Executive Management	1,245,000	1,363,351	1,139,500	1,452,300
Chief of Staff				
Salaries/Fringes	355,000	338,868	365,000	498,000
Travel/Training/Employee Expenses	13,500	7,677	15,000	21,000
Marketing/PR/Special Events/Consulting	212,500	129,444	155,500	656,500
Total Chief of Staff/Public Affairs	581,000	475,989	535,500	1,175,500
Marketing (Merged Into Chief of Staff FY2018)				
Salaries/Fringes	133,000	121,302	133,000	-
Travel/Training/Employee Expenses	13,200	15,994	14,200	-
Production/Media/Promotion/Other	265,000	258,154	250,000	-
Special Events/Other	121,000	20,822	26,000	-
Total Marketing	532,200	416,272	423,200	-
Project Development				
Salaries/Fringes	557,000	559,664	603,000	626,000
Travel/Training/Employee Expenses	12,100	13,219	13,750	18,850
Professional Services/Consulting/Other	669,400	56,578	163,400	424,400
Total Office of Development	1,238,500	629,461	780,150	1,069,250
Rail Operations				
Salaries/Fringes	760,000	848,090	787,000	824,000
Travel/Training/Employee Expenses	38,000	24,133	38,000	35,500
Printing/Admin/Other	165,000	31,124	16,000	13,000
Leases/Events	56,000	51,800	19,000	23,500
Professional Services	143,250	107,420	160,500	60,000
Ticket Stock/R&M Fare Collection	907,000	837,548	890,000	930,000
Total Customer Communications	2,069,250	1,900,115	1,910,500	1,886,000
Finance and Human Resources				
Salaries/Fringes	1,055,000	1,068,593	1,220,000	1,232,000
Travel/Training/Employee Expenses	11,500	20,186	13,000	19,500
Audit/Maint Service Agreements/Consulting	201,500	169,932	197,500	222,500
Retail Sales/TLC Commissions	1,495,000	1,530,168	1,520,000	1,620,000
Bank Discounts/Other	553,000	564,280	553,500	578,500
Total Budget and Finance	3,316,000	3,353,159	3,504,000	3,672,500
Information Technology	400.000	440.004	402.000	102.055
Salaries/Fringes	408,000	440,081	483,000	492,000
Travel/Training/Employee Expenses	14,000	12,457	13,000	16,000
Computer Equipment/Software	353,000	239,026	736,000	820,095
Consulting/Communications Total Communication and Info Toch	1,450,000	789,597	1,005,000	988,238
Total Communication and Info Tech	2,225,000	1,481,161	2,237,000	2,316,333



## VRE Fiscal Year 2018 Proposed Program Budget

	FY 2016 Amended	FY 2016 Actual	FY 2017 Budget	FY 2018 Proposed
Project Implementation				
Salaries/Fringes	498,000	492,750	774,000	891,000
Travel/Training/Employee Expenses	24,000	22,499	30,200	45,500
Other Professional Services/Other Expenses	196,800	191,533	4,900	8,700
Total Construction and Construction	718,800	706,782	809,100	945,200
Facilities Maintenance				
Salaries/Fringes	159,000	178,018	273,000	309,000
Travel/Training/Employee Expenses	6,400	7,678	6,400	12,700
Office/Other Professional Service Station Electricity/Utilities/Taxes	646,000 655,500	187,257 829,532	307,250 700,000	309,250 750,000
Repairs and Maintenance	3,279,000	2,796,111	3,250,000	3,210,000
Total Facilities Maintenance	4,745,900	3,998,596	4,536,650	4,590,950
Purchasing and Contract Administration				
Salaries/Fringes	451,000	407,533	477,000	499,600
Travel/Training/Employee Expenses	8,000	7,391	7,000	16,320
Total Procurement and Contract Admin	459,000	414,924	484,000	515,920
Mechanical Operations				
Salaries/Fringes	891,000	786,844	798,000	837,000
Travel/Training/Employee Expenses	103,000	12,812	48,000	33,000
Consulting/Admin/Warehouse Management	92,500	33,493	57,500	40,000
Equipment/Warehouse Leases Utilities	4 005 000	- 076 400	4 425 000	1 125 000
Diesel Fuel	1,095,000 3,718,000	976,488 3,105,984	1,135,000 4,814,000	1,135,000 4,759,500
Repairs and Maintenance	3,287,000	2,907,315	4,056,000	3,918,900
Total Equipment Operations	9,186,500	7,822,936	10,908,500	10,723,400
	3,100,300	7,022,330	10,500,500	10,723,100
System Safety & Security				
Salaries/Fringes	215,000	288,744	289,000	294,000
Travel/Training/Employee Expenses Office/Other Professional Services	17,500 233,000	30,715 130,562	42,500 185,000	62,500 195,000
Yard/Station Security	415,000	500,520	515,000	705,000
Total Safety and Security	880,500	950,541	1,031,500	1,256,500
PRTC				
Professional Services	104,000	85,788	104,000	104,000
Total PRTC	104,000	85,788	104,000	104,000
NVTC				
Professional Services	80,000	80,000	80,000	90,000
Total NVTC	80,000	80,000	80,000	90,000
Train Operations				
Contract Operations and Maintenance	15,164,668	15,095,413	15,463,003	15,416,000
Total Train Operations	15,164,668	15,095,413	15,463,003	15,416,000
Amtrak				
Contract Operations and Maintenance	4,640,000	4,331,541	4,615,000	4,407,000
Total Amtrak	4,640,000	4,331,541	4,615,000	4,407,000
Maintenance of Equipment				
Maintenance of Equipment	5,281,462	4,732,450	5,608,166	6,360,500
Total Maintenance of Equipment	5,281,462	4,732,450	5,608,166	6,360,500
Amtrak Access Fees	5 000 000	5 000 505	6 240 000	5 500 000
Access Fees	6,039,000	5,830,636	6,340,000	6,600,000
Total Amtrak Access Fees	6,039,000	5,830,636	6,340,000	6,600,000
Norfolk Southern	2 720 000	2 620 775	2 700 000	2 240 000
Access Fees Contract Operations and Maintenance	2,720,000	2,639,775	2,780,000	2,310,000
Total Norfolk Southern	<u>620,000</u> 3,340,000	649,759 3,289,534	670,000 3,450,000	2,940,000
CSXT				
Access Fees	6,450,000	5,934,614	6,500,000	6,700,000
Contract Operations and Maintenance	510,000	520,970	530,000	600,000
Total CSXT	6,960,000	6,455,584	7,030,000	7,300,000
CIP Expenditures				
CIP Expenditures	64,897,861	-	48,028,443	48,422,591
Total CIP Expenditures	64,897,861	-	48,028,443	48,422,591
CIP VRE - Non-Departmental				
Allowance for Doubtful Accounts	50,000	-	50,000	50,000
Debt Service	6,714,869	6,720,838	6,714,870	6,714,870
Total CIP VRE - Non-Departmental	6,764,869	6,720,838	6,764,870	6,764,870
Total Expenditures	146,464,941	73,987,084	130,511,876	133,403,822



# **Projects Administered by Other Entities**

The projects listed below are integral to the VRE commuter rail service, but are not listed in the Capital Improvements Program because they are funded and administered by other shareholders.

# Track Projects

- Fredericksburg Line Third Track and Signals This work will be coordinated by DRPT as part of the Washington DC to Richmond Segment (DC2RVA) of the FRA Southeast High Speed Rail Corridor project.
- Fourth Track between RO (Roslyn) to AF (Alexandria) This work will be coordinated by DRPT as part of the Washington DC to Richmond Segment (DC2RVA) of the FRA Southeast High Speed Rail Corridor project.

# Station Platform and Parking Projects

- Lorton Parking Improvements Fairfax County is reviewing the addition of 200 surface parking spaces to increase station parking capacity to 734.
- Potomac Shores VRE Station The Potomac Shores VRE station will be constructed by the developer as part of an agreement with Prince William County. Station costs will be used as an in-kind match to a state REF grant for the construction of second platforms at the Brooke and Leeland Road VRE stations.
- Rolling Road Parking Garage Fairfax County is reviewing the construction of a 300 space parking garage at the Rolling Road VRE station.



# VIRGINIA RAILWAY EXPRESS FY 2018 - FY 2023 PROPOSED CIP

# **Project Summary By Category**

(Amount in thousands)

Project Category	Project Name	Project ID	Project Cost	Funded	Unfunded	Comment
Asset Management/State of Good	Automatic Parking Counters	AM-1	750,000	750,000		
Repair)	Automatic Passenger Counters (PAX)	AM-2	2,900,000	2,900,000		
	EMV Compliance - Fare Collection System	AM-3	1,200,000	1,200,000		
	Enhancement grant - security	AM-4	1,155,326	1,155,326		
	Equipment Asset Management Program	AM-5	27,360,368	27,360,368		
	Facilities Asset Management Program	AM-6	23,420,125	23,420,125		
	Positive Train Control Security Cameras	AM-7 AM-8	14,191,833 1,578,700	14,191,833 1,578,700		
Asset Management/State of	Security Carrieras	AIVI-0	72,556,352	72,556,352		
Good Repair) Total			,,	,		
Passenger Station Facilities	Alexandria Pedestrian Tunnel *	ST-1	26,492,030	10,021,865	16,470,165	Federal funds for this project come through a VDOT Locally Administered Project (LAP) agreement. Project is also a candidate for IPROC funds and a Smart Scale funding anolication was submitted.
	Alexandria Station Improvements	ST-2	6,535,392	400,000	6,135,392	Project is a candidate for future NVTA funding.
	Backlick Road Second Platform	ST-3	12,500,000		12,500,000	Project is a candidate for additional CMAQ funding.
	Backlick Road Station Improvements	ST-4	2,552,000	2,000,000		Project is a candidate for future CMAQ funding
	Brooke Station Improvements *	ST-5	21,334,506	10,397,576		Project is a candidate for Smart Scale funding.
	Burke Centre Second Platform	ST-6	12,500,000			Project is a candidate for future CMAQ funding
	City of Manassas Park Second Platform Crystal City Station Improvements	ST-7 ST-8	12,500,000 21,160,000	400,000		Project is a candidate for future CMAQ funding Project is a candidate for future NVTA and Federal Core
	crystal city station improvements	31-0	21,100,000	400,000	20,760,000	Capacity program funding.
	Franconia-Springfield Station Improvements	ST-9	13,000,000	13,000,000		Capacity program randing.
	Leeland Road Station Improvements *	ST-10	14,336,156	10,397,576	3,938,580	Project is a candidate for Smart Scale funding.
	L'Enfant Station Improvements	ST-11	47,250,000	29,955,720		The initial development work is a candidate for funding through the REF program and also a candidate for future funding through the Federal Core Capacity
	Lorton Platform Extension	ST-12	2.500.000	2.500.000		program.
	Lorton Station Second Platform *	ST-12	16,150,000	16,150,000		
	Quantico Station Improvements	ST-14	18,127,221	13,622,204	4,505,017	Project is a candidate for future IPROC funding
	Rippon Station Improvements *	ST-15	16,633,535	16,633,535	.,,	
	Rolling Road Second Platform	ST-16	12,500,000		12,500,000	Project is a candidate for future CMAQ funding
	Rolling Road Station Improvements	ST-17	2,000,000	2,000,000		
	Washington Union Station Improvements	ST-18	45,000,000	45,000,000		
	Woodbridge Station Improvements	ST-19	13,920,000			Project is a candidate for NVTA funding.
Passenger Station Facilities Total			316,990,840	172,478,476	144,512,364	
Rolling Stock	14 Expansion Railcars	RS-1	36,750,000	36,750,000		
	15 Replacement Railcars	RS-2	38,514,693	38,514,693		
	Fleet Expansion Coaches (FY19-FY21)	RS-3	184,780,933		184,780,933	
Dell's a Charle Tabel	Fleet Expansion Locomotives (FY20)	RS-4	55,037,067	75 264 602	55,037,067	TBD
Rolling Stock Total Station Parking	Broad Run Parking Improvements	PK-1	<b>315,082,693</b> 24,420,000	<b>75,264,693</b> 13,164,486	<b>239,818,000</b> 11,255,514	Project is a candidate for future NVTA or CMAQ
	Fredericksburg Parking Structure	PK-2	30,005,300	517,000	29,488,300	funding.
	Leeland Road Parking Improvements	PK-3	31,030,500	317,000	31,030,500	
	Manassas Park Parking Improvements	PK-4	20,213,000	2,500,000	17,713,000	Project is a candidate for future NVTA or CMAQ funding.
	Quantico Station Parking Improvements	PK-5	2,069,678	1,769,678	300,000	
Station Parking Total			107,738,478	17,951,164	89,787,314	
Track and Signal Infrastructure	Alexandria Station Track 1 Access/Slater Lane *	TS-1	7,000,000	7,000,000		
	Fourth Track VA to LE	TS-2	21,350,000	500,000	20,850,000	The initial development work is a candidate for funding through the REF program and also a candidate for future funding through the Federal Core Capacity program.
Track and Signal Infrastructure			28,350,000	7,500,000	20,850,000	
Total Train Maintenance and Storage	Broad Run MSF Train Storage Expansion	MS-1	29,150,000		29,150,000	Project is a candidate for future formula funds.
Facilities	Crossroads MSF - Land Acquisition and Track	MS-2	2,950,000	2,950,000		
	Construction Crossroads MSF - Storage Expansion.	MS-3	28,875,624		28 822 624	Project is a candidate for future formula funds.
	L'Enfant Train Storage Track - North	MS-4	4,283,618	4,283,618	20,073,024	r reject is a canadate for facule formula funds.
	L'Enfant Train Storage Track - South	MS-5	3,965,000	3,965,000		
	LifeCycle Overhaul and Upgrade Facility	MS-6	35,196,323	35,196,323		
	New York Avenue Midday Storage Facility	MS-7	89,387,802	89,387,802		
Train Maintenance and Storage Facilities Total			193,808,367	135,782,743	58,025,624	
Other Projects	Capital Reserve Gainesville-Haymarket Extension	OT-1 OT-2	27,000,000 376,824,714	27,000,000 5,735,714	371,089,000	Project is a candidate for Smart Scale funding and
	Long Bridge Capacity Improvements **	OT-3	700,300,000	300,000	700,000,000	federal discretionary funds under the New Starts orogram. Project is a candidate for future funding through the Federal Core Capacity program, along with funding from
					,	other stakeholders.
Other Projects Total			1,104,124,714	33,035,714	1,071,089,000	
Grand Total			2,138,651,444	514,569,142	1,624,082,302	

<sup>\*</sup> Potomac Shores MOU Projects
\*\* Total estimated cost, does not reflect VRE's share.

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