

**Recommended Budget for Fiscal Year 2017** 

**Amended Budget for Fiscal Year 2016** 

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

**December 18, 2015** 



### **Table of Contents**

# Recommended FY 2017 Budget

Mission Statement	3
Fiscal Year 2017 Goals	3
Fiscal Year 2017 Budget Assumptions4	4
Fiscal Year 2017 Source of Funds by Jurisdiction	วิ
Fiscal Year 2017 Summary Budget6	5
Fiscal Year 2017 Sources and Uses Statement	7
Amended FY 2016 Budget	
Fiscal Year 2016 Budget Amendments	3
Fiscal Year 2016 Amended Program Budget	1(
Six-year Financial Forecast FY2017-FY2022	
Six-year Financial Forecast Assumptions	12
Six-year Financial Forecast Statement	14
Debt and Financial Management Ratios	15



## Capital Improvement Program FY 2017-FY 2022

Description of CIP Process and Summary Charts	16
CIP Projects by Program	23
CIP Funding Sources	24
CIP Project Sheets	
Rolling Stock Equipment	25
Stations - Parking	32
Stations - Platforms	42
Track and Signal Improvements	60
Yard Improvements	68
Other and Ongoing Projects	74
Appendices & Additional Information	
Local Subsidy Calculation from Oct 2015 Survey	80
Fiscal Year 2017 Program Budget	8



#### **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**

- Achieve at least a 50 percent operating ratio (cost recovery).
- Operate trains on time greater than 90 percent of time.
- Achieve at least 19,100 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



#### **FY 2017 Budget Summary**

The FY 2017 Budget totals \$130 million. The FY 2017 operating budget expenses of \$82.5 million exceed the prior year amount by \$367,000 (less than one-half of one percent), with a combination of revenue increases and cost decreases essentially netting out against contractual and other recommended cost increases. The flat operating budget is the result, in part, of historic low fuel cost projections and a minimal change to the CPI. Major assumptions are as follows:

- Subsidy level of \$17,250,240; a 5% increase from the FY 2016 subsidy
- No increase to fare rates. Fare revenue budgeted at \$38.95M based on a projected average daily ridership of 19,100. This assumes a 32 revenue train operation and an overall 34 train schedule
- State funding for operations is projected at \$9.0M, approximately the same amount received in FY 2016, and 900k more than in the approved FY 2016 budget
- Fuel cost projected at \$4.8M, based on a cost per gallon of \$2.90
- Track access costs at \$16.82M, 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 2016.
- Addition of four (4) FTE employees to Project Implementation, Facilities Maintenance, and Finance and Administration, with partial grant funding for three of the positions for a net cost of \$375k
- Required contractual increases for train operations and maintenance of equipment budgeted at a net increase of \$140k to reflect a CPI increase of 0.17%
- Prior year funding of \$377k for one-time expenditures in FY 2017, for modernization of IT equipment, software and other costs related to the database development project (\$295k) and security costs during construction of the Potomac Shores station (\$82k).
- Operating contingency at 1% of the operating budget
- Federal 5307 (Urbanized Area) and 5337 (State of Good Repair) funding of \$27.05 million, equal to the amount received in FY 2016, and \$900k less than in the approved FY 2016 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 yard projects.
- Contribution to the Capital Reserve of \$3M with \$1M allocated from the Reserve balance for FY 2017 capital projects.



### **Sources of Funds by Jurisdiction**

The FY 2017 budget assumes a 5% subsidy increase. Every October a survey of VRE riders is done to calculate the subsidy allocation by jurisdiction. The projected FY 2017 jurisdictional subsidy, which reflects the most recent October 2015 ridership survey results, is as follows:

	FY 2016	FY 2017		Net	%
Jurisdiction	Subsidy	Subsidy	I	nc/(Dec)	Change
Prince William County	\$ 5,309,674	\$ 5,968,406		658,732	12.4%
Fairfax County	4,847,285	5,160,910		313,625	6.5%
Stafford County	2,855,607	2,647,222		(208,385)	-7.3%
Spotsylvania County	1,303,888	1,382,749		78,861	6.0%
Manassas	766,491	749,371		(17,120)	-2.2%
Manassas Park	576,699	511,777		(64,922)	-11.3%
Fredericksburg	439,366	483,524		44,158	10.1%
Alexandria	133,894	140,589		6,695	5.0%
Arlington	195,897	205,692		9,795	5.0%
Total Subsidy	\$ 16,428,800	\$ 17,250,240	\$	821,440	5.0%



#### **FY17 Summary Proposed Budget**

GL Account	FY16 Operating	FY16 Capital	FY17 Operating	FY17 Capital
Revenue:				
Fare Revenue	38,890,000		38,950,000	
Miscellaneous Revenue	165,000		200,000	
Jurisdictional Subsidy	12,991,760	3,437,040	13,002,382	4,247,858
Other Sources	330,000	1,285,000	377,000	-,2-17,050
Federal/State Subsidy - Operating	28,979,851	1,203,000	29,929,051	
Federal/State Subsidy - Capital	20,373,031	50,092,960	25,525,051	42,780,585
Operating/Capital Reserves	740,000	30,032,300	_	1,000,000
Interest Income	20,000		25,000	1,000,000
Total Revenue	82,116,611	54,815,000	82,483,433	48,028,443
		- 1,0=0,000	,,	10,020,110
Operating/Non-Operating Expenses:				
Insurance/Reserve/Mobilization	5,090,091		4,728,794	
Executive Management	1,095,000		1,139,500	
Chief of Staff/Public Affairs	459,000		535,500	
Marketing	402,200		423,200	
Project Development	1,568,500		780,150	
Operations and Communications	2,047,250		1,910,500	
Budget and Finance	3,116,000		3,504,000	
Communication and Information Technology	1,627,000		2,237,000	
Project Implementation	718,800		809,100	
Facilities Maintenance	4,316,900		4,536,650	
Procurement	459,000		484,000	
Equipment Operations	11,176,500		10,908,500	
Safety & Security	830,500		1,031,500	
PRTC	104,000		104,000	
NVTC	80,000		80,000	
Train Operations	15,060,000		15,463,003	
Amtrak	4,640,000		4,615,000	
Maintenance of Equipment	5,871,000		5,608,166	
Amtrak Access Fees	6,390,000		6,340,000	
Norfolk Southern Access Fees	3,340,000		3,450,000	
CSX Access Fees	6,960,000		7,030,000	
Total Operating/Non-Operating Expenses	75,351,741	-	75,718,564	-
CIP Expenditures		54,815,000		48,028,443
Debt Service/Allowance for Doubtful Accts	6,764,870	3 1,013,000	6,764,870	.5,525,443
Total CIP and Other Expenditures	6,764,870	54,815,000	6,764,870	48,028,443
Grand Total Expenses	82,116,611	54,815,000	82,483,433	48,028,443

					FY17 Source	ces and U	se						
LEVEL OF SERVICE FOR FY17	34 trains	19,100	average daily	riders			Leases Total Access	Fees _	16,820,000 - 16,820,000		Amtrak NS CSX	6,340,000 3,450,000 7,030,000	
											Total	16,820,000	
							sou	RCES OF FUNDS					
								STATE			FEDERAL		
	USES OF FUNDS	FARE INCOME	INTEREST	MISC	LOCAL SUBSIDY	OTHER SOURCES	OTHER SOURCES	STATE OPERATING	STATE CAPITAL	STATE STP	5307/5337	OTHER	TOTAL
Operating Expenses	75,756,564	38,950,000	25,000	200,000	12,615,764	377,000	-	9,000,000	5,718,800	8,410,000	460,000		75,756,564
Non-Operating Expenses:													
	12.000				10.000								40.000
Operating Reserve Debt Svc (Gallery IV) (11 Cabcars)	12,000 1,931,357				12,000 77,254				309,017		1,545,086		12,000 1,931,357
Debt Svc (Gallery IV) (11 Cabcars)  Debt Svc 60 Railcars (Local)	110,442				110,442				309,017		1,343,000		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)	82,483,433	38,950,000	25,000	200,000	13,002,382	377,000	-	9,000,000	6,775,508	8,410,000	5,743,542	-	82,483,433
Capital Projects:	2 222 222				455.000				500.000		2.1.1.000		2 222 222
Facilities Asset Management Program	3,930,000 692,300				157,200 27,692				628,800 110,768		3,144,000 553,840		3,930,000 692,300
Security Cameras Mid-Day Train Storage	8,164,143				306,566	500,000	1		2,605,809		4,751,769		8,164,143
Lifecycle Overhaul Facility (LOU)	12,600,000				504,000	300,000			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	105,000				4,200				16,800		84,000		105,000
Transit Enhancements	105,000				4,200				16,800		84,000		105,000
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
Capital Reserve	3,000,000				3,000,000								3,000,000
Capital Project Summary	35,196,443	-	-	-	4,247,858	1,000,000	-	-	8,638,977	-	21,309,609	-	35,196,443
CMAQ/REF/IPROC													
Rippon Platforms (CMAQ)	2,000,000				_				400,000		-	1,600,000	2,000,000
Lorton Platforms (CMAQ)	500,000				-				100,000		-	400,000	500,000
Quantico Intermodal (IPROC)	4,500,000				-				4,500,000		-	0	4,500,000
Brooke Platforms (REF)	2,916,000				-				2,916,000		-	0	2,916,000
Leeland Road Platforms (REF)	2,916,000				-				2,916,000		-	0	2,916,000
CMAQ/REF/IPROC Summary	12,832,000	-	-	-		-	-	-	10,832,000	-	-	2,000,000	12,832,000
TOTAL	130,511,876	38,950,000	25,000	200,000	17,250,240	1,377,000	-	9,000,000	26,246,485	8,410,000	27,053,151	2,000,000	130,511,876
(*) - VRE will apply for State REF funding for th			FY17 Subsidy		17,250,240	•					- "		
projects. If approved, the amount required fro Capital Reserve will be reduced.	om the VRE		surplus (defici	t)	0			Soft Capital Proje Debt Service 11 (		Program 1,931,357	Funding 5337	Federal Amt	State Amt 309,017
Capital neserve will be reduced.								Access lease fund		1,931,357	SSTP/State	1,545,086 8,410,000	5,718,800
							Local only	Debt Service 60 F	•	110,442	331F/3tate	0,410,000	3,710,800
								Debt Service 60 F		1,947,113	5337	1,557,690	311,538
								Debt Service 60 F		2,725,958	5307	2,180,766	436,153
							.,	Grant & Project I		575,000	5307	460,000	
								Grant & Project I					
								Subtotal	-	24,109,870			6,775,508
								Capital Projects/		48,028,443	_	23,309,609	19,470,977
								Federal Cap Prog	ram	72,138,313		37,463,151	26,246,485

**Amended Fiscal Year 2016 Budget** 



#### **Amended Budget Assumptions for FY 2016**

The FY 2016 budget has been revised to reflect current projections for revenue and expenses, as follows:

#### ☐ Revenue

- Increased state operating funds in the amount of \$1.1M to reflect a higher funding amount provided.
- Revised/reduced fare revenue by \$1.07M due to the delayed start of the new train and updated ridership projection.
- Decrease to Federal & State grant revenue by a total of \$295k related to Amtrak access agreement cost revisions (see below).

#### □ Expenses

- Revised/reduced access fees for Amtrak by \$351K to reflect actual costs of new agreement, with an accompanying decrease in projected grant revenue.
- Operating contingency was increased by a net \$930K for various additions and revisions of current year operating costs and revenue. The major expense changes were:
  - A decrease of \$1.59M to the cost of diesel fuel, changes related to the delayed start of the new train, and an increase of \$455K for the database development project, for which funds had been budgeted in prior years.
  - o Funds are available in the contingency for FY 2017 additional positions to be added prior to year-end.

#### ☐ Capital Program

- Capital project spending was reduced by \$1.13M to reflect a lower than anticipated award of federal formula funding in FY 2016. In addition, grant requests for FY 2014, FY 2015 and FY 2016 were rearranged to accommodate the correct split between 5307 (Urbanized Area) and 5337 (State of Good Repair) FTA funding.
- An additional \$10.7M of CMAQ, IPROC and REF funding for capital projects was recognized.
- Capital Reserve funds of \$500k were added to the funding for midday train storage projects to ensure availability of funding for improvements potentially not available for grant reimbursement.

#### ☐ <u>Use of FY 2015 Surplus</u>

- \$377k used to fund one-time expenditures in FY 2017
- \$3.9M contribution to Capital Reserve



# VRE Fiscal Year 2016 Proposed Amended Budget

Communication and Info Tech Salaries/Fringes Travel/Training/Employee Expenses Computer Equipment/Software Consulting/Communications Total Communication and Info Tech	Budget and Finance Salaries/Fringes Trave/Training/Employee Expenses Audit/Maint Service Agreements/Consulting Retail Sales/TLC Commissions Bank Discounts/Other Total Budget and Finance	Operations and Communications Salaries/Fringes Travel/Training/Employee Expenses Printing/Admin/Other Leases/Events Professional Services Ticket Stock/R&M Fare Collection Total Customer Communications	Program Development Salaries/Fringes Travel/Training/Employee Expenses Professional Services/Consulting/Other Total Program Development	Marketing Salaries/Fringes Travel/Training/Employee Expenses Production/Media/Promotion/Other Special Events/Other Total Marketing	Chief of Staff/Public Affairs Salaries/Fringes Travel/Training/Employee Expenses PR/Special Events/Consulting Total Chief of Staff/Public Affairs	Executive Management Salaries/Fringes Travel/Training/Employee Expenses Board Member Expenses Office Administration Expenses Legal/Aucidt Consulting/Professional/Other Total Executive Management	VRE - Non-Departmental Liability Insurance Operating Reserve/Contingency Capital Reserve Other VRE-Financing-Administration Fees Total VRE - Non-Departmental	Expenditures:	Fare Revenue Miscellaneous Revenue Appropriation from Reserve Jurisdictional Revenue Other Revenue State Operating Grant Federal Grants - Operations and Debt State Grants - Operations and Debt Federal Grants - Capital Program State Grants - Capital Program Interest Income Total Revenue	Revenue: VRE - Non-Departmental
408,000 14,000 210,000 995,000 1,627,000	1,055,000 11,500 201,500 1,495,000 3,3116,000	760,000 38,000 165,000 56,000 143,250 885,000 2,047,250	557,000 12,100 999,400 1,568,500	133,000 13,200 235,000 21,000 402,200	355,000 13,500 90,500 459,000	814,000 24,000 15,000 115,000 75,000 52,000 1,095,000	3,950,000 1,140,091 - - 5,090,091		38,890,000 165,000 740,000 16,428,800 1,615,000 8,100,000 14,148,542 6,731,308 30,162,200 19,930,760 20,000 136,931,611	FY 2016 Budget
408,000 14,000 353,000 1,450,000 2,225,000	1,055,000 11,500 201,500 1,495,000 553,000 3,316,000	760,000 38,000 165,000 56,000 143,250 907,000 2,069,250	557,000 12,100 669,400 1,238,500	133,000 13,200 365,000 21,000 532,200	355,000 13,500 187,500 556,000	814,000 24,000 15,000 115,000 225,000 52,000 1,245,000	3,950,000 2,070,431 - - - - - -		37,820,000 165,000 2,185,000 16,428,800 340,000 13,973,042 7,711,968 32,392,009 27,329,122 20,000 146,464,941	FY 2016 Amended
143,000 455,000 598,000	200,000	22,000 22,000	(330,000) (330,000)	130,000	97,000 97,000	150,000	930,340		(1,070,000) 1,445,000 (1,275,000) (175,500) 980,660 2,229,809 7,398,362 9,533,331	Changes

# VRE Fiscal Year 2016 Proposed Amended Budget

	-	o	
	FY 2016 Budget	FY 2016 Amended	Changes
Engineering and Construction Salantes/Fringes Travel/Training/Employee Expenses Other Professional Services/Other Expenses Total Construction and Construction	498,000 24,000 196,800 718,800	498,000 24,000 196,800 718,800	
Facilities Maintenance Salaries/Fringes Trave/Training/Employee Expenses Office/Other Professional Service Station Electricity/Urtilities/Taxes Repairs and Maintenance Total Facilities Maintenance	159,000 6,400 246,000 655,500 3,250,000 4,316,900	159,000 6,400 646,000 655,500 3,279,000 4,745,900	400,000 29,000 429,000
Procurment and Contract Admin Salaries/Fringes Trave//Training/Employee Expenses Total Procurement and Contract Admin	451,000 8,000 459,000	451,000 8,000 459,000	
Equipment Operations Salaries/Fringes Travel/Training/Employee Expenses Consulting/Admin/Warehouse Management Equipment/Warehouse Leases Utilities Diesel Fuel Repairs and Maintenance Total Equipment Operations	891,000 63,000 92,500 - 1,095,000 5,310,000 3,725,000 11,176,500	891,000 103,000 92,500 - 1,095,000 3,718,000 3,287,000 9,186,500	40,000 - - (1,592,000) (1,590,000)
Safety and Security Salaries/Fringes Travel/Training/Employee Expenses Office/Other Professional Services Yard/Station Security Total Safety and Security	215,000 17,500 183,000 415,000 830,500	215,000 17,500 233,000 415,000 880,500	50,000
PRTC Professional Services Total PRTC	104,000 104,000	104,000 104,000	
NVTC Professional Services Total NVTC	80,000	80,000	
Train Operations Contract Operations and Maintenance Total Train Operations	15,060,000 15,060,000	15,164,668 15,164,668	104,668 104,668
Amtrak Contract Operations and Maintenance Total Amtrak	4,640,000 4,640,000	4,640,000 4,640,000	
Maintenance of Equipment Maintenance of Equipment Total Maintenance of Equipment	5,871,000 5,871,000	5,281,462 5,281,462	(589,538) (589,538)
Amtrak Access Fees Access Fees Total Amtrak Access Fees	6,390,000 6,390,000	6,039,000	(351,000) (351,000)
Norfolk Southern Access Fees Contract Operations and Maintenance Total Norfolk Southern	2,720,000 620,000 3,340,000	2,720,000 620,000 3,340,000	
CSXT Access Fees Contract Operations and Maintenance Total CSXT	6,450,000 510,000 6,960,000	6,450,000 510,000 6,960,000	
CIP Expenditures CIP Expenditures Total CIP Expenditures	54,815,000 54,815,000	64,897,861 64,897,861	10,082,861 10,082,861
CIP VRE - Non-Departmental Allowance for Doubtful Accounts Debt Service Total CIP VRE - Non-Departmental	50,000 6,714,870 6,764,870	50,000 6,714,870 6,764,870	
Total Expenditures	136,931,611	146,464,941	9,533,331

**Six Year Financial Forecast FY2017 - FY2022** 



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

In accordance with the VRE Master Agreement, the FY 2017 budget includes a six-year financial plan, covering FY 2017 thru FY 2022. The six-year financial plan was reviewed with the CAO Budget Task Force. Assumptions are outlined below:

- Operating ratio maintained at 50% or higher
- Projected service level
  - o 34 trains for FY 2017 (including two non-revenue trains)
  - o 32 trains for FY 2018 FY 2022, all revenue trains
- Operating costs
  - o Increase in base costs varies by year, based on annual ridership changes
  - o Train operations and maintenance of equipment, midday services, fuel, track leases and debt service tracked separately
- Fare revenue
  - o No increase in FY 2017, FY 2019 & FY 2021
  - o 3% increase in FY 2018, FY 2020 & FY 2022
- Local subsidy
  - o 5% increase in FY 2017, 3% Increase in FY 2019 & FY 2021
  - o No increase in FY 2018, FY 2020 & FY 2022
- Grant revenue
  - $\circ$  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 2016 to FY 2022
  - State capital grant matched at 16% in FY 2017 FY 2018, with the exception of Midday Train Storage and Yard projects, matched at 34% in FY 2017 – FY 2020
  - o State capital grant matching projected to decrease to 8% in FY2019 FY 2022



FY17 Six Year Financial Forecast

Description	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Comments
Number of Trains	34	34	32	32	32	32	32	
Manassas Line	18	18	16	16	16	16	16	
Fredericksburg Line	16	16	16	16	16	16	16	
Average Daily Ridership	19,300	19,100	20,000	20,400	20,800	21,100	21,400	
Average Fare Price	8.00	8.12	8.37	8.37	8.62	8.62	8.88	3% FY18; FY20; FY22
Potential Operating Ratio	52%	51%	54%	53%	54%	53%	54%	•
Use of Funds for Operations								_
Net Operating Expenses	23,880,741	24,436,394	25,169,486	25,924,571	26,702,308	27,503,377	28,328,478	
Budgeted Operating Reserves	0	12,000	267,604	276,273	285,228	294,479		17% reserve
Insurance	3,950,000	4,000,000	4,300,000	4,400,000	4,450,000	4,500,000	4,550,000	
Amtrak	4,640,000	4,615,000	4,799,600	4,991,584	5,191,247	5,398,897	5,614,853	
Contracted Train Operations	15,060,000	15,463,003	15,926,893	16,404,700	16,896,841	17,403,746	17,925,859	
Maintenance of Equipment	5,871,000	5,608,166	5,776,411	5,949,703	6,128,194	6,312,040	6,501,401	
Fuel	5,310,000	4,814,000	5,006,560	5,206,822	5,415,095	5,631,699	5,856,967	
Track Lease Expense	16,690,000	16,820,000	17,490,000	18,190,000	18,920,000	19,680,000	20,460,000	
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	82,116,611	82,483,433	85,451,424	88,058,524	90,703,784	93,439,108	96,256,463	• •
Sources of Funds For Operations		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Fare Revenue	38,890,000	38,950,000	42,200,000	43,000,000	45,200,000	45,800,000	47,900,000	
Interest Income	20,000	25,000	25,000	25,000	25,000	25,000	25,000	
Other Income	165,000	200,000	200,000	200,000	200,000	200,000	200,000	
Other	1,070,000	377,000						Operating reserve transfer
State Operating Grant	8,100,000	9,000,000	9,000,000	9,000,000	9,000,000	9,000,000	9,000,000	
State Capital Grant	6,731,308	6,775,508	7,003,308	6,149,908	4,690,754	3,677,154	2,574,354	
Federal Grants:								Assumes reduction of State Funding at the end of FY18
Track Access Lease Funding	8,345,000	8,410,000	8,745,000	9,095,000	9,460,000	9,840,000	10,230,000	
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	520,000	460,000	460,000 72,916,851	460,000 73,213,451	460,000 74,319,297	460,000	460,000 75,672,897	-
Total Operating Revenues	69,124,850	69,481,051				74,285,697		•
Surplus/(Deficit) for Operations	(12,991,760)	(13,002,382)	(12,534,573)	(14,845,073)	(16,384,487)	(19,153,412)	(20,583,566)	
Local Subsidy	16,428,800	17,250,240	17,250,240	17,767,747	17,767,747	18,300,780		5% FY17; 3% FY19; FY21
Net subsidy available for capital match	3,437,040	4,247,858	4,715,667	2,922,675	1,383,260	(852,632)	(2,282,786)	•
Use of Funds for Capital Program								-
Capital Cost Base Program	46,315,000	48,028,443	46,442,318	39,892,110	34,974,793	33,154,011	29,637,011	-
Total Capital Program Costs	46,315,000	48,028,443	46,442,318	39,892,110	34,974,793	33,154,011	29,637,011	•
Sources of Funds for Capital Program								
Federal Grants:	80%	80%	80%	80%	80%	80%	80%	
Federal funding (Includes CMAQ)	23,362,200	23,309,609	26,164,809	24,749,608	22,669,608	24,123,209	21,309,609	
Federal funding - Track Access	50%	50%	50%	50%	50%	50%	50%	
Matching Funds								
State Capital Grants - non-federal costs	18,570,760	19,470,977	10,598,576	10,348,817	6,965,643	2,834,361	2,130,961	
Local/Other Funds	945,000	1,000,000						
Net local subsidy available for capital match	3,437,040	4,247,858	4,715,667	2,922,675	1,383,260	(852,632)	(2,282,786)	
Total Sources of Funding for Capital Program	46,315,001	48,028,444	41,479,053	38,021,101	31,018,512	26,104,938	21,157,784	•
Add'I funds required to fund Operations and Capital:								
Additional required for operations/base program	0	0	(4,963,266)	(1,871,010)	(3,956,282)	(7,049,073)	(8,479,228)	<u>.</u>
Cumulative Total to Fully Fund Ops and Cap	0	0	(4,963,266)	(6,834,276)	(10,790,557)	(17,839,631)	(26,318,858)	•
Note: Capital Program excludes debt service								

Note: Capital Program excludes debt service

#### **Debt & Financial Ratios**

The Financial and Debt Management Principles were developed in accordance with the VRE Master Agreement, with the assistance of PFM, VRE's financial advisor and comments solicited from the CAO Task Force, the Commissions and Virginia DRPT. 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. The Commissions approved the VRE debt policies in November 2013.

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	FY17	FY18	FY19	FY 20	FY21	FY22
Operating cost ratio (cost recovery) higher than	50%					
Projected	51%	55%	54%	56%	55%	<b>57</b> %
Debt service limited to 20% of annual operating o	costs:					
g						
Total operating costs	82,483,433	85,451,424	88,058,524	90,703,784	93,439,108	96,256,463
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	8.1%	7.9%	7.6%	7.4%	7.2%	7.0%
Working capital reserves not less than 2 months of	and goal of 3 m	onths by FY 2	023			
Number of months	2.5	2.5	2.4	2.4	2.4	2.3
PAYGO equal to a minimum of 20% of the funded	portion of the	CIP over the 6	-year period:			
Funded portion of CIP	48,028,443	46,442,318	39,892,110	34,974,793	33,154,011	29,637,011
PAYGO %	100%	100%	100%	100%	100%	100%



# **Capital Improvement Program Fiscal Year 2017 to 2022**



**December 18, 2015** 



#### **Introduction**

The FY 2017 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 Six-Year Improvement Program (SYIP); through already allocated funds from other entities, such as NVTA or FAMPO; 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.

#### **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.

**Project Information:** Detailed project information is provided, including a summary of funding sources for each project. FY16 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 (FY17-FY22). 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 the last year, VRE, with the assistance of PFM, has developed 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 alternative 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.



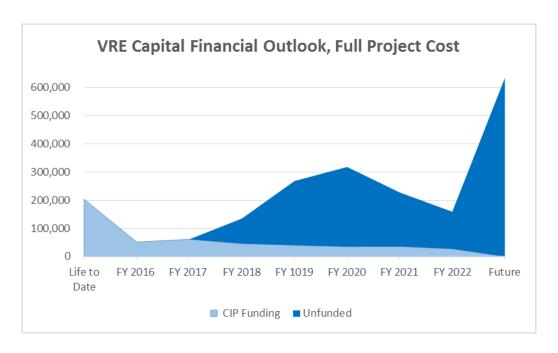
#### **Long-Term Capital Financial Outlook**

The FY 2017 to FY 2022 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 insufficient to advance the project as desired in FY 2018 and FY 2019. The project is a candidate for federal Core Capacity funding or for debt financing; these and other options will be considered once costs for the project have been confirmed. The limitations on the use of our major source of federal funds, the 5337 or State of Good Repair program, further complicates our capital funding picture.

To fully fund the projects in the FY 2017-FY 2022 CIP (including all costs to complete) would require approximately \$2.1 billion. Of this total, \$499 million has been allocated or is anticipated from ongoing formula funding sources. The remaining \$1.6 billion includes a number of projects which are eligible for funding from discretionary funding sources such as HB-2 or NVTA. The Long Bridge (\$700 million) along with several related projects is a candidate for funding through the federal Core Capacity program and from the contributions of other stakeholders. The Gainesville Haymarket Extension (\$286 million) is a candidate for funding through HB-2 and the federal New Starts program.





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

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

- Does this expenditure provide the best value?
- 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: Rolling Stock Equipment (RSE); Stations-Parking (SPA); Stations-Platforms (SPL); Track and Signal (TSI); Yard Improvements (YIM); and Other and Ongoing (OPG and OGP).

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

Asset Management – Improvements or repairs to prolong the useful life of an existing asset; meet mandated requirements or otherwise modernize; or to enhance safety and security.

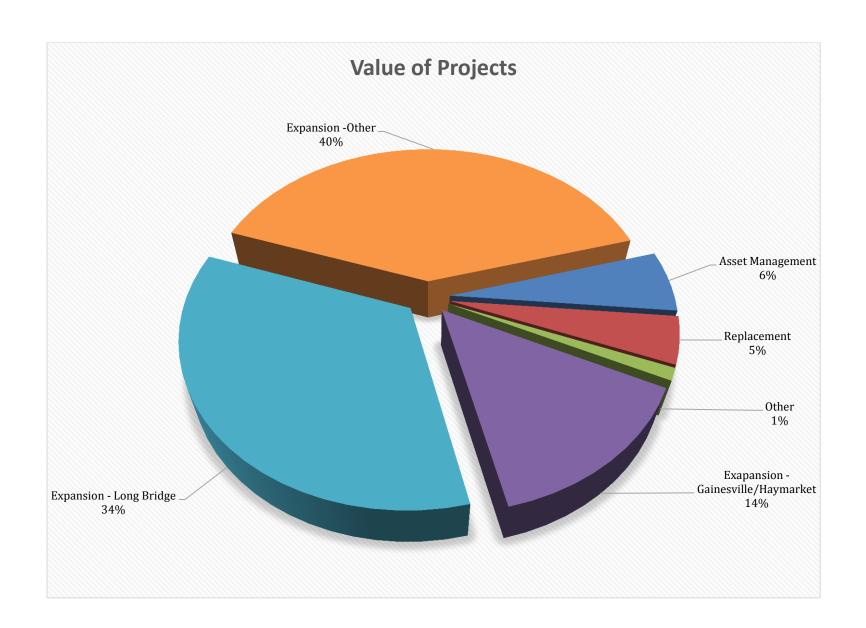
Replacement – replacement of an existing asset

*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 and Signal project (DC2RVA); 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.

Of the total value of the projects in the CIP, 40% is for projects that increase capacity (excluding Gainesville-Haymarket and Long Bridge); 34% is for Long Bridge improvements; 14% is for the Gainesville-Haymarket extension, 6% is for asset management; and the remainder is for replacement and other, as illustrated below.







#### VRE FY17-FY22

# Capital Improvement Program CIP Funding Needs By Program Area

Based on FY 2015 \$s (Amounts in thousands of dollars)

Program Name	Project Name	Project ID	Life to Date	FY 2016 Amended	FY 2017 Proposed	FY 2018	FY 1019	FY 2020	FY 2021	FY 2022	Future	Total
		_		Budget	Budget							
ROLLING STOCK AND EQUIPMENT	14 Expansion Railcars	RSE-1	13,125.0	10,773.0	12,852.0							36,750.0
	15 Replacement Railcars Automatic Passenger Counters (PAX)	RSE-2 RSE-3	38,514.7	2,900.0								38,514.7 2,900.0
	Equipment Asset Management Program	RSE-4		1,900.0	4,900.0	4,900.0	3,420.0	4,325.0	3,845.0	2,090.0		25,380.0
	Fleet Expansion Coaches (FY21, 22, 23) Fleet Expansion Locomotives (FY21)	RSE-6 RSE-5							45,600.0 23,250.0	35,745.0	35,745.0	117,090.0 23,250.0
ROLLING STOCK AND EQUIPMENT Total	rieet Expansion Locomotives (F121)	K3E-3	51,639.7	15,573.0	17,752.0	4,900.0	3,420.0	4,325.0	72,695.0	37,835.0	35,745.0	243,884.7
STATIONS - PARKING	Automatic Parking Counters	SPA-1	31,037.7	750.0	17,732.0	4,700.0	3,120.0	4,525.0	72,073.0	37,033.0	33,7 13.0	750.0
	Broad Run Parking Improvements	SPA-2	3,420.0	750.0		5,248.3	15,751.7					24,420.0
	Brooke Parking Improvements	SPA-3 SPA-8							928.1 517.0	759.4 683.0	15,187.5 28,800.0	16,875.0
	Fredericksburg Parking Structure Leeland Road Parking Improvements	SPA-8 SPA-4							517.0	300.0	29,700.0	30,000.0 30,000.0
	Manassas Park Parking Improvements	SPA-5	500.0			2,000.0	17,100.0					19,600.0
	Quantico Station Parking Expansion	SPA-6							1,700.0			1,700.0
	Spotsylvania Parking Improvements (Phase 1)	SPA-7								5,000.0	45,000.0	50,000.0
STATIONS - PARKING Total			3,920.0	750.0		7,248.3	32,851.7		3,145.1	6,742.4	118,687.5	173,345.0
STATIONS - PLATFORMS	Alexandria Pedestrian Tunnel	SPL-1	10,021.9									10,021.9
	Alexandria Station Platform Improvements	SPL-2	400.0			2,000.0						2,400.0
	Backlick Road Platform Extension Brooke Platform Improvements	SPL-3 SPL-4	685.8	2,700.0	2,916.0	8,085.7			2,000.0 262.5			2,000.0 14,650.0
	Crystal City Platform Improvements	SPL-6	400.0	2,700.0	2,710.0	8,030.0	72,270.0		202.3			80,700.0
	EMV Compliance - Fare Collection System	SPL-7		=	1,200.0							1,200.0
	Facilities Asset Management Program	SPL-8	1,446.0	5,420.0	3,930.0	2,760.0	2,495.0	2,570.0	2,390.0	1,430.0		22,441.0
	Franconia-Springfield Platform Improvements	SPL-9	13,000.0									13,000.0
	Leeland Road Platform Improvements L'Enfant Station Improvements	SPL-10 SPL-11	685.8	2,700.0	2,916.0 250.0	7,435.7 3,550.0	18,684.0	5,548.1	262.5 31,950.9	20,317.0		14,000.0 80,300.0
	Lorton Platform Extension	SPL-11	2,500.0		230.0	3,330.0	10,004.0	3,346.1	31,930.9	20,317.0		2,500.0
	Lorton Station Second Platform	SPL-14	13,730.0	1,920.0	500.0	2,629.0						18,779.0
	Quantico Platform & Intermodal Improvements	SPL-15		5,000.0	4,500.0							9,500.0
	Rippon Station Platform Improvements	SPL-16	12,632.7	2,000.0	2,000.0	0.8						16,633.5
	Rolling Road Platform Extension Security Cameras	SPL-18 SPL-19	2,000.0 500.0		692.3	386.4						2,000.0 1,578.7
	Washington Union Station Improvements**	SPL-19 SPL-20	500.0		692.3	380.4		8,701.9	11,398.1			20,100.0
	Woodbridge Platform Improvements	SPL-21					1,200.0	5,400.0	5,400.0			12,000.0
STATIONS - PLATFORMS Total			58,002.2	19,740.0	18,904.3	34,877.6	94,649.0	22,220.0	53,664.0	21,747.0		323,804.1
TRACK AND SIGNAL IMPROVEMENTS	Alexandria Station Track 1 Access/Slater Lane	TSI-1	7,000.0									7,000.0
	Fourth Track RO to AF	TSI-2					39,000.0					39,000.0
	Fourth Track VA to LE	TSI-3			250.0	950.0	1,800.0	18,100.0				21,100.0
	Hamilton to Crossroads Third Track L'Enfant Train Storage Track	TSI-4 TSI-5	32,500.0 4,283.6									32,500.0 4,283.6
	Long Bridge Capacity Improvement	TSI-6		300.0		10,000.0	35,000.0	25,000.0	75,000.0	75,000.0	480,000.0	700,300.0
TRACK AND SIGNAL IMPROVEMENTS	Positive Train Control	TSI-7	10,553.0									10,553.0
Total YARD IMPROVEMENTS	Droad Dun MCE Train Crasses Francisco	VIM 4	54,336.6	300.0	250.0	10,950.0		43,100.0	75,000.0	75,000.0	480,000.0	814,736.6
IARD IMPROVEMENTS	Broad Run MSF Train Storage Expansion Crossroads Maintenance and Storage Facility -	YIM-1					5,400.0	8,000.0	10,000.0	5,750.0		29,150.0
	Land Acquisition and Track Construction	YIM-3	2,950.0									2,950.0
	Crossroads Maintenance and Storage Facility - Storage Expansion.	YIM-4					2,500.0	8,625.0	8,625.0	8,625.0		28,375.0
	LifeCycle Overhaul and Upgrade Facility	YIM-5	22,500.0		12,600.0							35,100.0
	Midday Train Storage**	YIM-2	2,421.6	11,862.3	8,164.1	23,716.9	26,467.1	16,167.9				88,800.0
YARD IMPROVEMENTS Total			27,871.6	11,862.3	20,764.1	23,716.9	34,367.1	32,792.9	18,625.0	14,375.0		184,375.0
ADMINISTRATIVE AND ONGOING	Associated Transit Improvements	AOG-2		100.0	105.0	105.0		105.0	105.0	105.0		730.0
	Capital Reserve Enhancement grant - security	AOG-7 AOG-5	3,000.0	3,000.0 100.0	3,000.0 105.0	3,000.0 105.0	3,000.0 105.0	3,000.0 105.0	3,000.0 105.0	3,000.0 105.0		24,000.0 730.0
ADMINISTRATIVE AND ONGOING Total			3,000.0	3,200.0	3,210.0	3,210.0		3,210.0	3,210.0	3,210.0		25,460.0
	Gainesville-Haymarket Extension	OPG-1	4,735.7	5,200.0	5,210.0	50,000.0		212,257.9	1,000.0			291,724.3
OTHER Total			4,735.7			50,000.0		212,257.9	1,000.0			291,724.3
Grand Total			203.505.8	51.425.3	60.880.4	134,902.8		317,905.8	227.339.1	158,909.4	624 422 5	
Granu 10tai			403,505.8	51,425.3	ou,880.4	134,902.8	268,028.5	317,905.8	447,339.1	158,909.4	634,432.5	2,057,329.7

#### VRE FY17-FY22 Capital Improvement Program CIP Funding Source

Based on FY 2015 \$s (Amounts in thousands of dollars)

Funding Source	Life to Date	FY 2016 Amended Budget	FY 2017 Proposed Budget	FY 2018	FY 1019	FY 2020	FY 2021	FY 2022	Future	Total
Federal - Formula Funds	62,749.1	24,640.8	22,929.2	25,578.7	26,073.7	25,579.8	21,409.6	19,237.6		228,198.4
Federal Funds - Other	8,721.9									8,721.9
Federal - CMAQ/STP/RSTP	24,992.2	3,136.0	2,000.0	4,199.3	3,464.0		4,593.6			42,385.1
Fairfax County	321.0									321.0
NVTA	42,885.7									42,885.7
State - Mass Transit	18,886.2	6,818.2	19,919.4	5,115.7	4,924.3	4,057.0	2,332.2	2,038.2		64,091.2
State - CMAQ/RSTP Match	3,060.5	784.0	500.0	1,049.8	866.0		1,043.4			7,303.8
State - REF/IPROC	16,727.9	10,400.0	10,332.0	5,400.0			105.0			42,964.9
State STP Funds	7,218.8									7,218.8
Other - Private	2,500.0									2,500.0
VRE - CPF	450.0	300.0								750.0
VRE (Capital Reserve)	7,206.9	1,445.0	1,000.0							9,651.9
VRE (Match)	4,785.7	901.3	1,199.9	1,278.9	1,594.1	2,337.9	3,020.2	2,771.2		17,889.3
VRE - Operating Budget	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0		24,000.0
Unfunded (To Be Determined)				89,280.4	228,106.4	282,931.0	191,835.1	131,862.4	634,432.5	1,558,447.8
Grand Total	203,505.8	51,425.3	60,880.4	134,902.8	268,028.5	317,905.8	227,339.1	158,909.4	634,432.5	2,057,329.7

# **Rolling Stock Equipment**



#### 14 Expansion Rail Cars

**Program Name:** Rolling Stock Equipment

Project Type:ExpansionStart DateFY 2014Project ID:RSE-1End DateFY 2020LocationN/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 nine cars will be ordered in FY 2016

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds	3,280,000	6,615,000								9,895,000
State - Mass Transit	1,706,250	3,213,000	12,852,000							17,771,250
VRE (Match)	88,000									88,000
State STP Funds	7,218,750									7,218,750
VRE (Capital Reserve)	832,000	945,000								1,777,000
<b>Total Funding Sources</b>	13,125,000	10,773,000	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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Expansion Coach/Trailer Car (5)	903	305,347	262,500	87,500	12,468,750					13,125,000
Expansion Coach/Trailer Car (9)			472,500	472,500	236,250	22,443,750				23,625,000
<b>Total Spending Plan</b>	903	305,347	735,000	560,000	12,705,000	22,443,750				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 (RSE-4).

#### 15 Replacement Rail Cars

**Program Name:** Rolling Stock Equipment

Project Type:ReplacementStart DateFY 2012Project ID:RSE-2End DateFY 2018

Location N/A

Purchase of 15 Gallery rail cars to complete the replacement of all legacy rolling stock. Eight rail cars were received in FY 2015 and the remaining seven cars will be delivered in FY 2016. Funding amounts reflect revised cost estimates at the time of the order for the seven rail cars.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds	15,905,612									15,905,612
Federal - CMAQ/STP/RSTP	8,240,000									8,240,000
State - Mass Transit	10,220,381									10,220,381
VRE (Match)	1,167,460									1,167,460
VRE (Capital Reserve)	2,981,240									2,981,240
<b>Total Funding Sources</b>	38,514,693									38,514,693

Federal STP funds allocated by the State.

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
8 Replacement Rail Cars	21,414,956	1,084,737	15,000							22,514,693
7 Replacement Rail Cars	313,301	14,637,687	820,000	229,012						16,000,000
<b>Total Spending Plan</b>	21,728,257	15,722,424	835,000	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 (0 & M) Costs (Savings)

Average maintenance cost per rail car is \$53,000 per year or \$795,000 annually once all 15 rail cars are in service. Current maintenance costs for replaced legacy rail cars will reduce the net costs. Major lifecycle repair and overhaul costs begin in year ten and are reflected in the Equipment Asset Management Program (RSE-4).

#### **Automatic Passenger Counters**

**Program Name:** Rolling Stock Equipment

Project Type:Asset ManagementStart DateFY 2016Project ID:RSE-3End DateFY 2018

Location N/A

Currently, passenger counts are performed manually by train conductors each morning and evening to comply with the National T ransit 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 pass enger 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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	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
<b>Total Spending Plan</b>		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 \$150,00 annually.

#### **Equipment Asset Management Program**

Program Name:Rolling Stock EquipmentProject Type:Asset Management

**Project ID:** RSE-4 **Location** N/A

Start Date FY 2016 End Date Ongong

Project provides funding for major lifecycle repair and overhaul costs for VRE's rolling stock to assure that all equipment is maintained in a state of good repair in accordance with VRE's Maintenance Management Plan and Transit Asset Management program.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	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		20,304,000
State - Mass Transit		304,000	784,000	784,000	273,600	346,000	307,600	167,200		2,966,400
VRE (Match)		76,000	196,000	196,000	410,400	519,000	461,400	250,800		2,109,600
<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		25,380,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Equipment		1,900,000	4,900,000	4,900,000	3,420,000	4,325,000	3,845,000	2,090,000		25,380,000
<b>Total Spending Plan</b>		1,900,000	4,900,000	4,900,000	3,420,000	4,325,000	3,845,000	2,090,000		25,380,000

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

#### Fleet Expansion Coaches (FY21, 22, 23)

**Program Name:** Rolling Stock Equipment

Project Type:ExpansionFY 2021Project ID:RSE-5End DateFY 2024LocationN/A

Purchase of 15 cab cars and 30 trailers to support Phase 2 of System Plan, including the Gainesville-Haymarket extension (OPG-1).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Unfunded (To Be Determined)							45,600,000	35,745,000	35,745,000	117,090,000
<b>Total Funding Sources</b>							45,600,000	35,745,000	35,745,000	117,090,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Expansion Cab Cars							1,140,000	1,140,000	43,320,000	45,600,000
Expansion Coach/Trailer Cars								893,625	70,596,375	71,490,000
<b>Total Spending Plan</b>							1,140,000	2,033,625	113,916,375	117,090,000

#### 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-4).

#### Fleet Expansion Locomotives (FY21)

**Program Name:** Rolling Stock Equipment

Project Type:ExpansionFY 2021Project ID:RSE-6End DateFY 2024

Location N/A

Purchase of five additional locomotives to support Phase 2 of System Plan, including Gainesville-Haymarket extension (OPG-1).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Unfunded (To Be Determined)							23,250,000			23,250,000
<b>Total Funding Sources</b>							23,250,000			23,250,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Fleet Expansion Locomotives							465,000	465,000	22,320,000	23,250,000
Total Spending Plan							465,000	465,000	22,320,000	23,250,000

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

# **Stations - Parking**



#### **Automatic Parking Counters**

Program Name:Stations - ParkingProject Type:Asset Management

**Project ID:** SPA-1 **Location** N/A

Start Date FY 2016 End Date FY 2016

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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds		600,000								600,000
State - Mass Transit		120,000								120,000
VRE (Match)		30,000								30,000
<b>Total Funding</b>		750,000								750,000

Match funds provided from prior year surplus.

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Automatic Parking Counter		750,000								750,000
<b>Total Spending Plan</b>		750,000								750,000

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

#### **Broad Run Parking Improvements**

**Program Name:** Stations - Parking

Project Type: Expansion
Project ID: SPA-2

**Location** Prince William County

Start Date FY 2011 End Date FY 2020

Parking at the VRE Broad Run station is currently at capacity. This project funds the design and construction of 900 addition all 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 (OPG-1).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - CMAQ/STP/RSTP	2,736,000			4,198,626	3,464,000					10,398,626
State - CMAQ/RSTP Match	684,000			1,049,656	866,000					2,599,656
Unfunded (To Be Determined)					11,421,718					11,421,718
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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	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
<b>Total Spending Plan</b>	393,120			2,048,880	8,547,000	13,431,000				24,420,000

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

#### **Brooke Parking Improvements**

**Program Name:** Stations - Parking

Project Type: Expansion
Project ID: SPA-3

**Location** Stafford County

Start Date FY 2021 End Date FY 2024

This project will add 450 parking spaces in a garage to increase station parking capacity to  $1,\!175$  spaces.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Unfunded (To Be Determined)							928,125	759,375	15,187,500	16,875,000
Total Funding							928,125	759,375	15,187,500	16,875,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development							168,750			168,750
Property Acquisition										
Final Design							759,375	759,375		1,518,750
Construction									15,187,500	15,187,500
<b>Total Spending Plan</b>							928,125	759,375	15,187,500	16,875,000

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

# **Fredericksburg Parking Structure**

**Program Name:** Stations - Parking

Project Type: Expansion
Project ID: SPA-4

**Location** Fredericksburg

Start Date FY 2021 End Date FY 2027

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.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - CMAQ/STP/RSTP							413,600			413,600
State - CMAQ/RSTP Match							103,400			103,400
Unfunded (To Be Determined)								683,000	28,800,000	29,483,000
Total Funding							517,000	683,000	28,800,000	30,000,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development								1,200,000		1,200,000
Property Acquisition										
Final Design									1,800,000	1,800,000
Construction									27,000,000	27,000,000
<b>Total Spending Plan</b>								1,200,000	28,800,000	30,000,000

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

# **Leeland Road Parking Improvements**

**Program Name:** Stations - Parking

Project Type: Expansion
Project ID: SPA-5

**Location** Stafford County

This project will add 675 parking spaces in a garage to increase station parking capacity to 1,500 spaces.

Start Date FY 2022 End Date FY 2025

Funding Source Life to Date FY 16 FY 17 FY 20 FY 21 FY 22 Total FY 19 **Future** FY 18 300,000 30,000,000 Unfunded (To Be Determined) 29,700,000 29,700,000 30,000,000 **Total Funding** 300,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development								300,000		300,000
Property Acquisition										
Final Design									2,700,000	2,700,000
Construction									27,000,000	27,000,000
<b>Total Spending Plan</b>								300,000	29,700,000	30,000,000

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

# **Manassas Park Parking Improvements**

**Program Name:** Stations - Parking

Project Type: Expansion
Project ID: SPA-6

**Location** City of Manassas Park

Start Date FY 2015 End Date FY 2019

This project would add a parking garage at the Manassas Park station to increase station parking capacity to 1,260 spaces. Property acquisition, if needed, is not included in the cost estimate.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
NVTA	500,000									500,000
Unfunded (To Be Determined)				2,000,000	17,100,000					19,100,000
Total Funding	500,000			2,000,000	17,100,000					19,600,000

An application was submitted for additional NVTA funding in FY 2017 in the amount of \$2,000,000 to advance the project through final design. If this funding is awarded, then the CIP will be amended to begin this work in FY 2017.

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development		100,000	400,000	280,000						780,000
Property Acquisition										
Final Design				1,720,000						1,720,000
Construction					17,100,000					17,100,000
Total Spending Plan		100,000	400,000	2,000,000	17,100,000					19,600,000

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

# **Quantico Station Parking Expansion**

**Program Name:** Stations - Parking

Project Type:ExpansionFY 2020Project ID:SPA-7End DateFY 2020

**Location** Prince William County

This project will add 150 surface parking spaces at Quantico station to increase station parking capacity to 475 spaces.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - CMAQ/STP/RSTP						1,360,000				1,360,000
State - CMAQ/RSTP Match						340,000				340,000
<b>Total Funding</b>						1,700,000				1,700,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development										
Property Acquisition						500,000				500,000
Final Design						100,000				100,000
Construction						1,100,000				1,100,000
<b>Total Spending Plan</b>						1,700,000				1,700,000

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

# Spotsylvania Parking Improvements (Phase 1)

**Program Name:** Stations - Parking

Project Type: Expansion
Project ID: SPA-8

**Location** Spotsylvania County

This project will add 1,500 parking spaces in a garage to increase parking capacity to 3,000.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Unfunded (To Be Determined)								5,000,000	45,000,000	50,000,000
Total Funding								5,000,000	45,000,000	50,000,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development								500,000		500,000
Property Acquisition										
Final Design								2,250,000	2,250,000	4,500,000
Construction									45,000,000	45,000,000
<b>Total Spending Plan</b>								2,750,000	47,250,000	50,000,000

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

N/A

**Start Date** 

**End Date** 

FY 2022

FY 2025

# **Stations - Platforms**



#### Alexandria Pedestrian Tunnel

**Program Name:** Stations - Platforms

Project Type:ReplacementStart DateFY 2012Project ID:SPL-1End DateFY 2017

**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 B oard Resolution 9J-06-2014). This project is built in conjunction with two other projects for the modification of the station platforms (SPL-2) and modification of the Slaters Lane crossover (TSI-1).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal Funds - Other	8,721,865									8,721,865
NVTA	1,300,000									1,300,000
Total Funding	10,021,865									10,021,865

Federal funds for this project come through a VDOT Locally Administered Project (LAP) agreement.

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development	1,014,529									1,014,529
Property Acquisition										
Final Design		2,000,000								2,000,000
Construction		6,317,414	689,922							7,007,336
<b>Total Spending Plan</b>	1,014,529	8,317,414	689,922							10,021,865

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

#### **Alexandria Station Platform Improvements**

**Program Name:** Stations - Platforms

Project Type:ExpansionStart DateProject ID:SPL-2End Date

**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 for the construction of a pedestrian tunnel (SPL-1) and modification of the Slaters Lane crossover (TSI -1).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	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)				2,000,000						2,000,000
Total Funding	400,000			2,000,000						2,400,000

This project is a candidate for future NVTA funding.

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development										
Property Acquisition										
Final Design		40,000		50,000						90,000
Construction			360,000		1,950,000					2,310,000
<b>Total Spending Plan</b>		40,000	360,000	50,000	1,950,000					2,400,000

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

N/A

FY 2014

FY 2019

#### **Backlick Road Platform Extension**

**Program Name:** Stations - Platforms

Project Type:ExpansionFY 2021Project ID:SPL-3End DateFY 2024

**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 250 foot platform extension to accommodate an eight-car train set.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - CMAQ/STP/RSTP							1,600,000			1,600,000
State - CMAQ/RSTP Match							400,000			400,000
Total Funding							2,000,000			2,000,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development							20,000			20,000
Property Acquisition										
Final Design							180,000			180,000
Construction								600,000	1,200,000	1,800,000
<b>Total Spending Plan</b>							200,000	600,000	1,200,000	2,000,000

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

#### **Brooke Platform Improvements**

**Program Name:** Stations - Platforms

Project Type: Expansion
Project ID: SPL-4

**Location** Stafford County

Start Date FY 2015 End Date FY 2021

This project is for the modification of the existing platform to accommodate 8-car trains and construction of a second platform and pedestrian overpass. Final design and construction of the platform extension is not currently funded, although this project is a candidate for HB-2 funding. An REF grant in the combined amount of \$18,003,600 for the construction of second platforms at the Brooke and Leeland Road (SPL-9) 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 9]-06-2014).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - CMAQ/STP/RSTP							210,000			210,000
State - CMAQ/RSTP Match							52,500			52,500
State - REF/IPROC	685,800	2,700,000	2,916,000	2,700,000						9,001,800
Unfunded (To Be Determined)				5,385,700						5,385,700
Total Funding	685,800	2,700,000	2,916,000	8,085,700			262,500			14,650,000

Final design and construction of the platform extension is a candidate for HB-2 funding.

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development		280,000								280,000
Property Acquisition										
Final Design			1,120,000		250,000					1,370,000
Construction				4,290,000	4,290,000	4,030,000	390,000			13,000,000
<b>Total Spending Plan</b>		280,000	1,120,000	4,290,000	4,540,000	4,030,000	390,000			14,650,000

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

#### **Crystal City Platform Improvements**

**Program Name:** Stations - Platforms

Project Type: Expansion
Project ID: SPL-5

**Location** Arlington County

Start Date FY 2016 End Date FY 2021

This project is for short and long term improvements to the Crystal City station. A feasibility study will assess potential s hort-term modifications to the existing station to improve passenger access and safety, as well as the optimal future station configuration and location. This project must be coordinated with the Fredericksburg Line Third Track, Fourth Track -RO to AF (TSI-1) and Long Bridge Capacity Improvements (TSI-6) projects.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
NVTA	400,000									400,000
Unfunded (To Be Determined)				8,030,000	72,270,000					80,300,000
Total Funding	400,000			8,030,000	72,270,000					80,700,000

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

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development		100,000	300,000	2,972,000						3,372,000
Property Acquisition										
Final Design				3,790,000	1,268,000					5,058,000
Construction					30,112,500	36,135,000	6,022,500			72,270,000
<b>Total Spending Plan</b>		100,000	300,000	6,762,000	31,380,500	36,135,000	6,022,500			80,700,000

The spending plan was adjusted to accommodate the currently available funding.

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

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

Program Name:Stations - PlatformsProject Type:Asset Management

**Project ID:** SPL-6

**Location** System-wide

Start Date FY 2017 End Date FY 2017

This project is for the update of the Scheidt and Bachmann Fare Collections System to be EMV (Europay Mastercard Visa) compliant. Compliance is required in the United States in 2016. 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 current touchscreens as the current screens are obsolete, and will add ADA required audio jacks for passenger use.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
EMV Compliance - Fare Collection S	ystem		1,200,000							1,200,000
<b>Total Spending Plan</b>			1,200,000							1,200,000

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

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

Program Name:Stations - PlatformsProject Type:Asset Management

**Project ID:** SPL-7

**Location** System-wide

Start Date FY 2015 End Date Ongoing

As the VRE facilities age, there is an increasing need for repairs and improvements to maintain these assets in a State of Go od 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 2017 include: rehabilitation of the Woodbridge east elevators and upgrades to the Manass as and Burke Centre elevators (\$1.2M); upgrade of the lighting and electrical systems at L'Enfant, Burke, Rolling Road, Manassas Park, Crossroads and Broad Run (\$1.36M); track and tie replacement at Broad Run (\$400k); canopy replacement at Rolling Road and Backlick stations (\$240k); and other system repairs (\$700k).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds	1,156,800	4,336,000	3,144,000	2,208,000	1,996,000	2,056,000	1,912,000	1,144,000		17,952,800
State - Mass Transit	206,360	867,200	628,800	441,600	399,200	411,200	382,400	228,800		3,565,560
VRE (Match)	82,840	216,800	157,200	110,400	99,800	102,800	95,600	57,200		922,640
VRE (Capital Reserve)	500,000									500,000
Total Funding	1,946,000	5,420,000	3,930,000	2,760,000	2,495,000	2,570,000	2,390,000	1,430,000		22,941,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Facilities Asset Management Prog.		6,866,000	3,930,000	2,760,000	2,495,000	2,570,000	2,390,000	1,430,000		22,441,000
VRE Office Renovations	8,577	491,423								500,000
Total Spending Plan	8,577	7,357,423	3,930,000	2,760,000	2,495,000	2,570,000	2,390,000	1,430,000		22,941,000

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

# Franconia-Springfield Platform Improvements

**Program Name:** Stations - Platforms

Project Type: Expansion
Project ID: SPL-8

**Location** Fairfax County

Start Date FY 2015 End Date FY 2019

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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development		260,000								260,000
Property Acquisition										
Final Design			1,040,000							1,040,000
Construction			3,900,000	3,900,000	3,900,000					11,700,000
<b>Total Spending Plan</b>		260,000	4,940,000	3,900,000	3,900,000					13,000,000

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

#### **Leeland Road Platform Improvements**

**Program Name:** Stations - Platforms

Project Type: Expansion
Project ID: SPL-9

**Location** Stafford County

Start Date FY 2015 End Date FY 2021

This project is for the modification of the existing platform to accommodate 8-car trains and construction of a second platform and pedestrian overpass. Final design and construction of the platform extension is not currently funded, although this project is a candidate for HB-2 funding. An REF grant in the combined amount of \$18,003,600 for the construction of second platforms at the Brooke (SPL-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 Re solution 9J-06-2014).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - CMAQ/STP/RSTP							210,000			210,000
State - CMAQ/RSTP Match							52,500			52,500
State - REF/IPROC	685,800	2,700,000	2,916,000	2,700,000						9,001,800
Unfunded (To Be Determined)				4,735,700						4,735,700
Total Funding	685,800	2,700,000	2,916,000	7,435,700			262,500			14,000,000

Final design and construction of the platform extension is a candidate for HB-2 funding.

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development		280,000								280,000
Property Acquisition										
Final Design			1,120,000		250,000					1,370,000
Construction				4,112,500	4,112,500	3,862,500	262,500			12,350,000
<b>Total Spending Plan</b>		280,000	1,120,000	4,112,500	4,362,500	3,862,500	262,500			14,000,000

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

#### L'Enfant Station Improvements

**Program Name:** Stations - Platforms

Project Type: Expansion
Project ID: SPL-10

**Location** District of Columbia

Start Date FY 2017 End Date FY 2021

This 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 co ordinated with the Fourth Track - VA to LE (TSI-3), L'Enfant Train Storage Track (TS1-5) and Long Bridge Capacity Improvements (TSI-6) projects. For coordination purposes, this project should have begun in FY 2016.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds							7,135,101	16,253,609		23,388,710
State - Mass Transit							713,510	1,625,361		2,338,871
VRE (Match)							1,070,265	2,438,041		3,508,306
VRE (Capital Reserve)			250,000							250,000
Unfunded (To Be Determined)				3,550,000	18,684,000	5,548,102	23,032,011			50,814,113
Total Funding			250,000	3,550,000	18,684,000	5,548,102	31,950,887	20,317,011		80,300,000

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

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development			250,000							250,000
Property Acquisition										
Final Design				3,550,000	4,230,000					7,780,000
Construction					14,454,000	43,362,000	14,454,000			72,270,000
Total Spending Plan			250,000	3,550,000	18,684,000	43,362,000	14,454,000			80,300,000

Funding is not available in the years needed.

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

#### **Lorton Platform Extension**

**Program Name:** Stations - Platforms

Project Type: Expansion
Project ID: SPL-11

**Location** Fairfax County

Start Date FY 2011 End Date FY 2016

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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development	275,000									275,000
Property Acquisition										
Final Design	100,000									100,000
Construction	50,000	2,075,000								2,125,000
Total Spending Plan	425,000	2,075,000								2,500,000

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

#### **Lorton Station Second Platform**

**Program Name:** Stations - Platforms

Project Type: Expansion
Project ID: SPL-12

**Location** Fairfax County

Start Date FY 2015 End Date FY 2019

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 equipment and cameras related to new platform and pedestrian overpass.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - CMAQ/STP/RSTP	4,554,800	1,536,000	400,000							6,490,800
State - CMAQ/RSTP Match	1,136,200	384,000	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
Unfunded (To Be Determined)				2,629,000						2,629,000
<b>Total Funding</b>	13,730,000	1,920,000	500,000	2,629,000						18,779,000

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

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development	139,000	372,800								511,800
Property Acquisition										
Final Design			1,491,200							1,491,200
Construction				9,786,000	6,990,000					16,776,000
<b>Total Spending Plan</b>	139,000	372,800	1,491,200	9,786,000	6,990,000					18,779,000

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

# **Quantico Platform & Intermodal Improvements**

**Program Name:** Stations - Platforms

Project Type: Expansion
Project ID: SPL-13

**Location:** Prince William County

Start Date FY 2016 End Date FY 2017

This funding provides for improvements at the Quantico VRE station, including design and construction of an island platform, pedestrian bridge, and bus facilities; 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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
State - REF/IPROC		5,000,000	4,500,000							9,500,000
Unfunded (To Be Determined)										
Total Funding		5,000,000	4,500,000							9,500,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development										
Property Acquisition										
Final Design		500,000								500,000
Construction		4,500,000	4,500,000							9,000,000
<b>Total Spending Plan</b>		5,000,000	4,500,000							9,500,000

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

#### **Rippon Station Platform Improvements**

**Program Name:** Stations - Platforms

Project Type:ExpansionStart DateFY 2014Project ID:SPL-14End DateFY 2019

**Location** Prince William County

This project is for the design and construction of a platform extension and second platform with pedestrian overpass to expan d 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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - CMAQ/STP/RSTP	2,106,172	1,600,000	1,600,000	655						5,306,827
State - CMAQ/RSTP Match	526,544	400,000	400,000	164						1,326,708
NVTA	10,000,000									10,000,000
Total Funding	12,632,716	2,000,000	2,000,000	819						16,633,535

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development		332,680								332,680
Property Acquisition										
Final Design		776,253	544,467							1,320,720
Construction				11,976,480	3,003,655					14,980,135
<b>Total Spending Plan</b>		1,108,933	544,467	11,976,480	3,003,655					16,633,535

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

#### **Rolling Road Platform Extension**

**Program Name:** Stations - Platforms

Project Type:ExpansionStart DateFY 2012Project ID:SPL-15End DateFY 2019

**Location** Fairfax County

The Rippon 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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - CMAQ/STP/RSTP	1,600,000									1,600,000
State - CMAQ/RSTP Match	400,000									400,000
Total Funding	2,000,000									2,000,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development		40,000								40,000
Property Acquisition										
Final Design			160,000							160,000
Construction				950,000	850,000					1,800,000
<b>Total Spending Plan</b>		40,000	160,000	950,000	850,000					2,000,000

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

# **Security Cameras**

Program Name:Stations - PlatformsProject Type:Asset Management

Project ID: SPL-16
Location System-wide

Start Date FY 2015 End Date Ongoing

Security cameras are scheduled to be installed at all stations and rail yards. Future years provide for both the installation of additional cameras and for the planned replacement and upgrades to current cameras and infrastructure. (The cost of cameras associated with construction projects are included in the budgets for those projects.) In FY 2017, 25 cameras will be added at new locations and 18 existing older cameras will be replaced.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development										
Property Acquisition										
Final Design										
Construction		500,000	692,300	386,400						1,578,700
Total Spending Plan		500,000	692,300	386,400						1,578,700

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

# **Washington Union Station Improvements**

Program Name:Stations - PlatformsProject Type:Asset Management

**Project ID:** SPL-17

**Location** District of Columbia

Start Date FY 2018 End Date FY 2020

This project will fund track, signal, platform, and passenger facility upgrades and realignments at Amtrak's Washington Union Station, in accordance with the WUT Master Plan.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds						6,961,492	9,118,508			16,080,000
State - Mass Transit						696,149	911,851			1,608,000
VRE (Match)						1,044,224	1,367,776			2,412,000
Total Funding						8,701,865	11,398,135			20,100,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development										
Property Acquisition										
Final Design										
Construction				2,010,000	12,006,000	6,084,000				20,100,000
Total Spending Plan				2,010,000	12,006,000	6,084,000				20,100,000

This project has a \$14 million funding lag in FY 2018 and FY 2019.

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

# **Woodbridge Platform Improvements**

**Program Name:** Stations - Platforms

Project Type:ExpansionFY 2019Project ID:SPL-18End DateFY 2021

**Location** Prince William County

This project will extend the east platform to accommodate eight-car trains and widen the platform for the future third track.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Unfunded (To Be Determined)					1,200,000	5,400,000	5,400,000			12,000,000
Total Funding					1,200,000	5,400,000	5,400,000			12,000,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development					120,000					120,000
Property Acquisition										
Final Design					540,000	540,000				1,080,000
Construction						5,400,000	5,400,000			10,800,000
<b>Total Spending Plan</b>					660,000	5,940,000	5,400,000			12,000,000

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

**Track and Signal Improvements** 



#### **Alexandria Station Track 1 Access**

**Program Name:** Track and Signal Improvements

Project Type:ExpansionFY 2015Project ID:TSI-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 Stat ion (VRE Ops Board Resolution 9J-06-2014). This project is built in conjunction with projects at the Alexandria station for a pedestrian tunnel (SPL-1) and modification of the station platforms (SPL-2).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
NVTA	7,000,000									7,000,000
Total Funding	7,000,000									7,000,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development		140,000								140,000
Property Acquisition										
Final Design		560,000								560,000
Construction		1,050,000	5,250,000							6,300,000
Total Spending Plan		1,750,000	5,250,000							7,000,000

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

#### Fourth Track RO to AF

**Program Name:** Track and Signal Improvements

Project Type: Expansion
Project ID: TSI-2

**Location** Arlington County and City of Alexandria

Start Date FY 2019 End Date FY 2022

This project is for an additional main track between RO (Roslyn) and AF (Alexandria) Interlockings in Virginia. DPRT is conducting preliminary engineering and NEPA as part of the DC2RVARail third track project. A design-build project delivery method is assumed. The project must be coordinated with reconstruction of the Crystal City platform (SPL- 5) and the Long Bridge (TSI-6) projects.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Unfunded (To Be Determined					39,000,000					39,000,000
Total Funding					39,000,000					39,000,000

This project is a candidate for future funding through the Federal Core Capacity program.

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development										
Property Acquisition										
Final Design					1,950,000	1,950,000				3,900,000
Construction					6,882,353	13,764,706	11,764,706	2,688,235		35,100,000
Total Spending Plan					8,832,353	15,714,706	11,764,706	2,688,235		39,000,000

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

#### **Fourth Track - VA to LE**

**Program Name:** Track and Signal Improvements

Project Type: Expansion
Project ID: TSI-3

**Location** District of Columbia

Start Date FY 2017 End Date FY 2020

This project would provide an additional main track between the Virginia (VA) and L'Enfant (LE) Interlockings 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 (SPL-10), L'Enfant Train Storage Track (TSI-5) and Long Bridge Capacity Improvements (TSI-6).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
VRE (Capital Reserve)			250,000							250,000
Unfunded (To Be Determined)				950,000	1,800,000	18,100,000				20,850,000
Total Funding			250,000	950,000	1,800,000	18,100,000				21,100,000

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

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development			250,000							250,000
Property Acquisition										
Final Design				900,000	1,850,000					2,750,000
Construction					6,850,000	11,250,000				18,100,000
Total Spending Plan			250,000	900,000	8,700,000	11,250,000				21,100,000

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

#### **Hamilton to Crossroads Third Track**

**Program Name:** Track and Signal Improvements

Project Type:ExpansionFY 2012Project ID:TSI-4End DateFY 2016

**Location** Spotsylvania County

This project is for track and signal improvements from Fredericksburg to Crossroads. It includes track and signal work by CSX along the entire project, including a new interlocking at Crossroads that added a new third track and reconfigured the VRE lead track to accommodate the new VRE Spotsylvania station. The project also includes one mile of new third track built by VRE's contractor north of the new interlocking. The project was required in order to allow the opening of a new station in S potsylvania.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds	7,920,000									7,920,000
Federal - CMAQ/STP/RSTP	4,500,000									4,500,000
State - REF/IPROC	13,856,292									13,856,292
Other - Private	2,500,000									2,500,000
VRE (Match)	830,000									830,000
VRE (Capital Reserve)	2,893,708									2,893,708
<b>Total Funding</b>	32,500,000									32,500,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development										
Property Acquisition										
Final Design	1,413,666									1,413,666
Construction	21,287,002	9,799,332								31,086,334
Total Spending Plan	22,700,668	9,799,332								32,500,000

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

# L'Enfant Train Storage Track

**Program Name:** Track and Signal Improvements

Project Type:ExpansionStart DateFY 2015Project ID:TSI-5End DateFY 2016

**Location** District of Columbia

This project completes the conversion of an exisiting siding 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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development										
Property Acquisition										
Final Design	602,571									602,571
Construction		3,681,047								3,681,047
<b>Total Spending Plan</b>	602,571	3,681,047								4,283,618

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

#### **Long Bridge Capacity Improvements**

**Program Name:** Track and Signal Improvements

Project Type: Expansion
Project ID: TSI-6

**Location** District of Columbia and Arlington County

Start Date FY 2015 End Date FY 2025

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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
VRE - CPF	300,000									300,000
Unfunded (To Be Determined)				10,000,000	35,000,000	25,000,000	75,000,000	75,000,000	480,000,000	700,000,000
Total Funding	300,000			10,000,000	35,000,000	25,000,000	75,000,000	75,000,000	480,000,000	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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development		300,000								300,000
Property Acquisition				10,000,000						10,000,000
Final Design					35,000,000	25,000,000				60,000,000
Construction							75,000,000	150,000,000	405,000,000	630,000,000
<b>Total Spending Plan</b>		300,000		10,000,000	35,000,000	25,000,000	75,000,000	150,000,000	405,000,000	700,300,000

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

#### **Positive Train Control**

**Program Name:** Track and Signal Improvements

Project Type:Asset ManagementStart DateFY 2014Project ID:TSI-7End DateFY 2017

Project ID: TSI-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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds	8,442,400									8,442,400
State - Mass Transit	1,236,850									1,236,850
VRE (Match)	873,750									873,750
Total Funding	10,553,000									10,553,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
On-Board Equipment and										
Installation (015-008)		7,274,027								7,274,027
Field (STV)	302,580	249,649	132,450							684,679
Office (STV)		99,775	42,100							141,875
Communications System		203,060	94,850							297,910
Procedures and Documents (STV)		105,945	21,540							127,485
Contingency and Testing			2,027,024							2,027,024
<b>Total Spending Plan</b>	302,580	7,932,456	2,317,964							10,553,000

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

Annual amount for software license fees and operating costs estimated at \$1.23M.

# **Yard Improvements**



### **Broad Run Maintenance and Storage Facility - Train Storage Expansion**

**Program Name:** Yard Improvements

Project Type: Expansion
Project ID: YIM-1

**Location** Prince William County

Start Date FY 2019 End Date FY 2022

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 (OPG-1).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - CMAQ/STP/RSTP										
State - CMAQ/RSTP Match										
Unfunded (To Be Determined)					5,400,000	8,000,000	10,000,000	5,750,000		29,150,000
Total Funding					5,400,000	8,000,000	10,000,000	5,750,000		29,150,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development					5,000,000					5,000,000
Property Acquisition					400,000					400,000
Final Design						4,000,000				4,000,000
Construction						4,000,000	10,000,000	5,750,000		19,750,000
<b>Total Spending Plan</b>					5,400,000	8,000,000	10,000,000	5,750,000		29,150,000

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

#### Crossroads Maintenance and Storage Facility - Land Acquisition and Track Construction

**Program Name:** Yard Improvements

Project Type: Expansion
Project ID: YIM-2

**Location** Spotsylvania County

Start Date FY 2015 End Date FY 2016

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 for the construction of two replacement storage tracks, a storm water retention basin, and a new access road. The property, net the land needed for the two tracks, will be large enough to accommodate additional tracks needed for System Plan 2040 expansion. This project is built in conjunction with Crossroads Maintenance and Storage Expansion (YIM-3).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds	2,360,000									2,360,000
State - Mass Transit	472,000									472,000
VRE (Match)	118,000									118,000
Total Funding	2,950,000									2,950,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development										
Property Acquisition		1,000,000								1,000,000
Final Design										
Construction		1,950,000								1,950,000
Total Spending Plan		2,950,000								2,950,000

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

# **Crossroads Maintenance and Storage Facility - Storage Expansion.**

Program Name: Yard Improvements

Project Type:ExpansionFY 2019Project ID:YIM-3End DateFY 2022LocationSpotsylvania

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

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Unfunded (To Be Determined)					\$2,500,000	\$8,625,000	\$8,625,000	\$8,625,000		28,375,000
Total Funding					2,500,000	8,625,000	8,625,000	8,625,000		28,375,000

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development										
Property Acquisition										
Final Design					2,500,000					2,500,000
Construction						8,625,000	8,625,000	8,625,000		25,875,000
Total Spending Plan					2,500,000	8,625,000	8,625,000	8,625,000		28,375,000

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

# Life-Cycle Overhaul and Upgrade Facility

Program Name: Yard Improvements
Project Type: Asset Management

**Project ID:** YIM-4

**Location** Spotsylvania County

Start Date FY 2014 End Date FY 2017

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 also undercut existing yard tracks and upgrade yard electrical systems. This project is built in conjunction with Crossroads Maintenance and Storage Facility - Land Acquisition and Track Construction (YIM-2).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds	18,000,040		7,812,000							25,812,040
State - Mass Transit	3,600,000		4,284,000							7,884,000
VRE (Match)	899,960		504,000							1,403,960
Total Funding	22,500,000		12,600,000							35,100,000

Funding from the State capital program in FY 2017 will be requested at 34% for this project.

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development	180,409	269,591								450,000
Property Acquisition										
Final Design		1,800,000								1,800,000
Construction		10,125,000	22,725,000							32,850,000
<b>Total Spending Plan</b>	180,409	12,194,591	22,725,000							35,100,000

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

#### Midday Train Storage

**Program Name:** Yard Improvements

**Project Type:** Replacement and Expansion

**Project ID:** YIM-5

**Location** District of Columbia

Start Date FY 2015 End Date FY 2020

This project funds the construction of a midday storage facility in Washington D.C., adjacent to the current storage yard own ed by Amtrak at Ivy City. The new facility will replace the 83 units of storage in the Amtrak facility and provide for expanded storage of up to an additional 72 units. Federal formula funds include both the 5307 (Urbanized Area) and 5337 (State of Good Repair) programs. 5307 funds are required for the expansion portion of the project. Funds are also provided to explore alternative opportunities to meet storage needs.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds	1,937,303	9,089,822	6,131,314	18,973,534	21,173,688	12,934,338				70,240,000
State - Mass Transit	387,461	1,817,964	1,226,263	3,794,707	4,234,738	2,586,868				14,048,000
VRE (Match)	96,865	454,491	306,566	948,677	1,058,684	646,717				3,512,000
VRE (Capital Reserve)		500,000	500,000							1,000,000
Total Funding	2,421,629	11,862,278	8,164,143	23,716,918	26,467,110	16,167,922				88,800,000

Project is a candidate for federal discretionary funds under the Core Capacity program. Funding from the State capital program will be requested st 34% for this project beginning in FY 2017. \$194K of match funds in FY 2016 provided from prior year surplus.

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development	154,735	648,598	4,000,000							4,803,333
Property Acquisition		1,379,867	11,800,000	10,120,133						23,300,000
Final Design			230,000	1,666,667						1,896,667
Construction			4,000,000	18,266,667	33,533,333	3,000,000				58,800,000
<b>Total Spending Plan</b>	154,735	2,028,465	20,030,000	30,053,467	33,533,333	3,000,000				88,800,000

Available funding is not sufficient to meet the desired funding plan schedule.

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

**Other and Ongoing Projects** 



#### **Gainesville-Haymarket Extension**

**Program Name:** Other Projects (Combination of Stations, Track and Signal, and Yard Improvements)

Project Type: Expansion
Project ID: OPG-1

**Location** Prince William County

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 future three track railroad, up to three stations and relocation of the Broad Run station. 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 (RSE - 5 and RSE-6).

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - CMAQ/STP/RSTP							800,000			800,000
State - CMAQ/RSTP Match							200,000			200,000
NVTA	2,785,714									2,785,714
State - REF/IPROC	1,500,000									1,500,000
VRE - CPF	450,000									450,000
Unfunded (To Be Determined)				50,000,000	23,730,700	212,257,886				285,988,586
<b>Total Funding</b>	4,735,714			50,000,000	23,730,700	212,257,886	1,000,000			291,724,300

This project is a candidate for HB-2 and federal discretionary funds under the New Starts program.

Spending Plan By Phase	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Development		1,500,000	3,235,714							4,735,714
Property Acquisition				8,200,000	12,300,000	4,000,000				24,500,000
Final Design				20,000,000	20,000,000	9,230,700				49,230,700
Construction						50,000,000	80,000,000	83,257,886		213,257,886
<b>Total Spending Plan</b>		1,500,000	3,235,714	28,200,000	32,300,000	63,230,700	80,000,000	83,257,886		291,724,300

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

N/A

**Start Date** 

**End Date** 

FY 2015

FY 2022

# **Associated Transit Improvements**

Program Name:Ongoing ProjectsProject Type:Asset Management

**Project ID:** OGP-1 **Location** N/A

Start Date N/A End Date N/A

Grantees receiving federal 5307 funds must certify that at least 1% of funding received each fiscal year is being used for as sociated transit improvement projects. VRE's primary use of this funding is for pedestrian improvements, electronic customer communications and station and equipment signage. Focus for prior years and FY 2017 will be signage.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds		80,000	84,000	84,000	84,000	84,000	84,000	84,000		584,000
State - Mass Transit		16,000	16,800	16,800	8,400	8,400	8,400	8,400		83,200
VRE (Match)		4,000	4,200	4,200	12,600	12,600	12,600	12,600		62,800
Total Funding Sources		100,000	105,000	105,000	105,000	105,000	105,000	105,000		730,000

Spending Plan By Phase	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Associated Transit Improvements	100,000	105,000	105,000	105,000	105,000	105,000	105,000		\$730,000
Total Spending Plan	100,000	105,000	105,000	105,000	105,000	105,000	105,000		730,000

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

# **Capital Reserve**

**Program Name:** Ongoing Projects

Project Type:N/AStart DateN/AProject ID:OGP-2End DateN/ALocationN/A

Commitment of additional funds annually 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 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
VRE - Operating Budget	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000		\$24,000,000
Total Funding Sources	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000		24,000,000

Spending Plan By Phase	LTD Actuals	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Capital Reserve	3,000,000	3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000		\$24,000,000
Total Spending Plan	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000		24,000,000

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

# **Enhancement Grant - Security**

Program Name:Ongoing ProjectsProject Type:Asset Management

**Project ID:** OGP-3 **Location** N/A

Start Date N/A End Date N/A

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. Focus for prior years and FY 2017 will be lighting.

Funding Source	Life to Date	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Federal - Formula Funds		80,000	84,000	84,000	84,000	84,000	84,000	84,000		584,000
State - Mass Transit		16,000	16,800	16,800	8,400	8,400	8,400	8,400		83,200
VRE (Match)		4,000	4,200	4,200	12,600	12,600	12,600	12,600		62,800
Total Funding Sources		\$100,000	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000		\$730,000

Spending Plan By Phase	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Future	Total
Enhancement Grant - Security	100,000	105,000	105,000	105,000	105,000	105,000	105,000		\$730,000
<b>Total Spending Plan</b>	\$100,000	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000		\$730,000

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

# **Appendices & Additional Information**



\$130,511,876.00

# VRE Fiscal Year 2017 Proposed Program Budget

Communication and Info Tech Salaries/Fringes Travel/frahing/Employee Expenses Toravel/frahing/Employee Expenses Consulting/Communications Total Communication and Info Tech	Budget and Finance Salaries/Fringes Travel/Training/Employee Expenses Audit/Maint Service Agreements/Consulting Retail Sales/TLC Commissions Bank Discounts/Other Total Budget and Finance	Operations and Communications Salaries/Fire(Salaries/Fire(Salaries/Fire(Salaries/Fire(Salaries/Fire(Salaries/Fire(Salaries/Fire(Salaries/Fire(Salaries)))))) Franciscopy (Salaries) Frofessional Services Ticket Stock/R&M Fare Collection Total Customer Communications	Office of Development Salaries/Fired Training/Employee Expenses Professional Services/Consulting/Other Total Office of Development	Marketing Salaries/Fringes Salaries/Fringes Travel/Training/Employee Expenses Production/Media/Promotion/Other Special Events/Other Total Marketing	Chief of Staff/Public Affairs Salaries/Fired Travel/Training/Employee Expenses PR/Special Events/Consulting Total Chief of Staff/Public Affairs	Passenger Support Services Salaries/Fringes Travel/Training/Employee Expenses Administration Office Professional Expenses Total Passenger Support Services	Executive Management Salaries/Fringes Salaries/Fringes Board Member Expenses Board Member Expenses Office Administration Expenses Legal/Audit Consulting/Professional/Other Total Executive Management	VRE - Non-Departmental Liability Insurance Operating Reserve/Contingency Capital Reserve Other VRE-Financing-Administration Fees Total VRE - Non-Departmental	Expenditures:	VRE - Non-Departmental Fare Revenue Miscellaneous Revenue Appropriation from Reserve Jurisdictional Revenue State Operating Grant Federal Grants - Operations and Debt Federal Grants - Operations and Debt State Grants - Operations and Debt Federal Grants - Capital Program State Grants - Capital Program Interest Income Total Revenue	Revenue:
246,000 18,500 175,000 720,000 1,159,500	950,000 9,500 157,500 1,440,000 280,500 2,837,500	469,750 18,500 15,000 78,000 7115,000 885,000 1,581,250	402,000 6,900 541,225 950,125	153,000 13,500 324,000 64,500 555,000	372,000 13,500 275,500 661,000	277,000 15,600 79,000 73,500 445,100	506,000 24,000 3,000 118,000 75,000 52,000 778,000	4,200,000 1,029,083 2,000,000 7,229,083		36,662,000 165,000 2,629,000 15,428,800 8,700,000 13,489,542 6,403,188 25,876,000 13,538,200 13,538,200 13,538,200	FY 2015 Amended
278,602 5,775 240,262 763,831 1,288,470	931,751 13,641 154,466 1,418,051 546,164 3,064,073	484,900 20,005 78,684 46,888 87,186 661,880 1,379,543	498,277 10,133 150,171 658,581	123,466 4,489 282,623 18,059 428,637	347,629 7,473 135,129 490,231	308,317 1,501 44,786 35,695 390,299	530,409 23,606 1,850 159,173 273,187 15,492 1,003,717	3,895,600 398,983 69,073 2,500 4,366,156		36,700,190 249,200 16,428,800 14,401,957 13,688,723 17,056,623 14,820,940 34,396 114,488,899	FY 2015 Actual
408,000 14,000 210,000 995,000 1,627,000	1,055,000 11,500 201,500 1,495,000 353,000 3,116,000	760,000 38,000 165,000 56,000 143,250 885,000 2,047,250	557,000 12,100 999,400 1,568,500	133,000 13,200 235,000 21,000 402,200	355,000 13,500 90,500 459,000		814,000 24,000 15,000 115,000 75,000 52,000 1,095,000	3,950,000 1,140,091 - - - 5,090,091		38,890,000 165,000 740,000 16,428,800 1,615,000 8,100,000 14,148,542 6,731,308 30,162,200 19,930,700 20,000	FY 2016 Budget
483,000 13,000 736,000 1,005,000 2,237,000	1,220,000 13,000 197,500 1,520,000 553,500 3,504,000	787,000 38,000 16,000 160,500 890,000 1,910,500	603,000 13,750 163,400 780,150	133,000 14,200 250,000 26,000 423,200	365,000 15,000 155,500 535,500		844,000 23,500 15,000 125,000 80,000 52,000 1,139,500	4,000,000 728,794 - - - 4,728,794		38,950,000 1,000,000 17,250,240 377,000 9,000,000 14,153,542 6,775,508 23,309,609 19,470,977 25,000 130,511,876	FY 2017 Proposed

E FISCAL Year 2017 Proposed Program Budget

		(			
Engineering and Construction	FY 2015 Amended	FY 2015 Actual	FY 2016 Budget	FY 2017 Proposed	
Salaries/Fringes Salaries/Fringes Travel/Training/Employee Expenses Other Professional Services/Other Expenses Total Construction and Construction	670,000 23,500 151,000 844,500	415,563 20,315 192,113 627,991	498,000 24,000 196,800 718,800	774,000 30,200 4,900 809,100	
Facilities Maintenance Salaries/Fringes Trawel/Training/Employee Expenses Office/Other Professional Service Station Electricity/Utilities/Taxes Repairs and Maintenance Total Facilities Maintenance	151,000 667,000 633,000 2,900,000 4,351,000	154,580 3,433 185,510 744,825 2,977,520 4,065,868	159,000 6,400 246,000 655,500 3,250,000 4,316,900	273,000 6,400 307,250 700,000 3,250,000 4,536,650	
Procurment and Contract Admin Salaries/Fringes Travel/Training/Employee Expenses Total Procurement and Contract Admin	377,000 5,500 382,500	366,037 10,467 376,504	451,000 8,000 459,000	477,000 7,000 484,000	
Equipment Operations Salaries/Fringes Travel/Training/Employee Expenses Consulting/Admin/Warehouse Management Equipment/Warehouse Leases Utilities Diesel Fuel Repairs and Maintenance Total Equipment Operations	873,000 99,000 95,000 1,091,000 5,821,000 2,925,000 10,904,000	796,727 8,147 32,949 1,093,553 4,422,065 2,861,176 9,214,617	891,000 63,000 92,500 1,095,000 5,310,000 3,725,000 11,176,500	798,000 48,000 57,500 1,135,000 4,814,000 4,056,000 10,908,500	
Safety and Security Salaries/Fringes Trave/Training/Employee Expenses Office/Other Professional Services Yard/Station Security Total Safety and Security	149,000 11,300 185,000 412,000 757,300	141,005 11,250 59,047 499,592 710,894	215,000 17,500 183,000 415,000 830,500	289,000 42,500 185,000 515,000 1,031,500	
PRTC Professional Services Total PRTC	104,000 104,000	83,153 83,153	104,000 104,000	104,000 104,000	
NVTC Professional Services Total NVTC	80,000	80,000	80,000	000,08	
Train Operations Contract Operations and Maintenance Total Train Operations	15,251,638 15,251,638	14,280,042 14,280,042	15,060,000 15,060,000	15,463,003 15,463,003	
Amtrak Contract Operations and Maintenance Total Amtrak	4,582,942 4,582,942	4,247,908 4,247,908	4,640,000 4,640,000	4,615,000 4,615,000	
Maintenance of Equipment Maintenance of Equipment Total Maintenance of Equipment	4,777,724 4,777,724	4,329,222 4,329,222	5,871,000 5,871,000	5,608,166 5,608,166	
Amtrak Access Fees Access Fees Total Amtrak Access Fees	5,928,000 5,928,000	5,592,085 5,592,085	6,390,000 6,390,000	6,340,000 6,340,000	
Norfolk Southern Access Fees Contract Operations and Maintenance Total Norfolk Southern	2,590,000 620,000 3,210,000	2,545,636 601,584 3,147,220	2,720,000 620,000 3,340,000	2,780,000 670,000 3,450,000	
CSXT Access Fees Contract Operations and Maintenance Total CSXT	5,734,000 500,000 6,234,000	5,402,935 520,628 5,923,563	6,450,000 510,000 6,960,000	6,500,000 530,000 7,030,000	
CIP Expenditures CIP Expenditures Total CIP Expenditures	46,418,000 46,418,000		54,815,000 54,815,000	48,028,443 48,028,443	
CIP VRE - Non-Departmental Allowance for Doubtful Accounts Debt Service Total CIP VRE - Non-Departmental	50,000 6,714,868 6,764,868	6,511,299 6,511,299	50,000 6,714,870 6,764,870	50,000 6,714,870 6,764,870	
Total Expenditures	126,787,030	72,260,073	136,931,611	130,511,876	