



Vision 2040: Roanoke Valley Transportation

Financial Plan

**Approved
March 28, 2019**

NON-DISCRIMINATION

The Roanoke Valley Transportation Planning Organization (RVTPO) strives to comply with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. For more information, or to obtain a Discrimination Complaint Form, see www.rvarc.org or call (540) 343-4417.

The RVTPO will provide reasonable accommodations and services for persons who require special assistance to participate in public involvement opportunities. Contact the Public Involvement and Community Outreach Coordinator at (540) 343-4417 for more information.

ACKNOWLEDGMENTS

This document was prepared in cooperation with the U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Virginia Department of Transportation (VDOT), Virginia Department of Rail and Public Transportation (DRPT), and Greater Roanoke Transit Company (GRTC), and member local governments. The contents of this report reflect the views of the Roanoke Valley Transportation Planning Organization (RVTPO). The RVTPO staff is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the FHWA, FTA, VDOT, DRPT or GRTC or the member local governments. This report does not constitute a standard, specification, or regulation. FHWA, FTA, VDOT, DRPT, GRTC or the member local governments acceptance of this report as evidence of fulfillment of the objectives of this program does not constitute endorsement/approval of the need for any recommended improvements nor does it constitute approval of their location and design or a commitment to fund any such improvements. Additional project level environmental impact assessments and/or studies of alternatives may be necessary.

RVTPO POLICY BOARD

Janet Scheid, Chair	Vinton Town Council
Billy Martin, Sr. Vice Chair	Botetourt County Board of Supervisors
George Assaid, AIA	Roanoke County Board of Supervisors
Bill Bestpitch	Roanoke City Council
Joseph L. Cobb	Roanoke City Council
Steve Clinton	Botetourt County Board of Supervisors
Andy Dooley	Bedford County Board of Supervisors
Steve Fijalkowski	Montgomery County Board of Supervisors
Jane Johnson	Salem City Council
Bill Jones	Salem City Council
Ken King, PE	Virginia Department of Transportation – Salem District
Diana Lewis, AAE	Roanoke-Blacksburg Regional Airport
Keith Liles	Vinton Town Council
Phil North	Roanoke County Board of Supervisors
Kevin Price	Greater Roanoke Transit Company
Dan Sonenklar	Virginia Department of Rail and Public Transportation

Non-Voting Members:

Kevin Jones	Federal Highway Administration
Melissa McGill	Federal Transit Administration
J. Lee E. Osborne	Roanoke Valley-Alleghany Regional Commission
Cody Sexton	Chair, Transportation Technical Committee
Richard Caywood	Roanoke County Chief Administrative Official Designee
Bob Cowell	City of Roanoke Chief Administrative Official
Craig Meadows	Montgomery County Chief Administrative Official
Richard “Pete” Peters	Town of Vinton Chief Administrative Official Designee
Benjamin W. Tripp, AICP	City of Salem Chief Administrative Official Designee

TRANSPORTATION TECHNICAL COMMITTEE

Cody Sexton, Chair	Botetourt County
Benjamin W. Tripp, AICP, Vice Chair	City of Salem
Liz Belcher	Roanoke Valley Greenway Commission
Dan Brugh	Montgomery County
Chris Chittum, AICP	City of Roanoke
Megan Cronise	Roanoke County
Michael Gray	Virginia Department of Transportation
Joey Hiner	Town of Vinton
David Holladay	Roanoke County
Mark Jamison, PE	City of Roanoke
Diana Lewis, AAE	Roanoke-Blacksburg Regional Airport
Anita McMillan	Town of Vinton
Jerod Myers	Botetourt County
Melinda Payne	City of Salem
Ron Parker	Greater Roanoke Transit Company
Nathan Sanford	Unified Human Services Transportation Systems, Inc.
Dan Sonnenklar	Virginia Department of Rail and Public Transportation
Gregg Zody, AICP	Bedford County

Non-Voting Members:

Kevin Jones	Federal Highway Administration
Melissa McGill	Federal Transit Administration



The 28th day of March 2019

RESOLUTION

**Approval of the Constrained Long-Range Multimodal Transportation Plan
Vision 2040: Roanoke Valley Transportation – Financial Plan**

WHEREAS, federal regulations, implemented as a result of the Fixing America's Surface Transportation Act (FAST Act), require urbanized area metropolitan planning organizations to develop and approve a financially constrained long range transportation plan; and

WHEREAS, Vision 2040: Roanoke Valley Transportation, the Roanoke Valley Transportation Planning Organization's Constrained Long-Range Multimodal Transportation Plan 2040, as amended and approved on June 28, 2018, was developed as a result of a continuing, comprehensive, and cooperative (3-C) transportation planning process; and

WHEREAS, a major feature of the Roanoke Valley Transportation Planning Organization Constrained Long-Range Multimodal Transportation Plan 2040 is the Financial Plan which documents the assumptions and forecasts about anticipated transportation revenues and expenditures; and

WHEREAS, the RVTPO Policy Board prioritized projects which can be reasonably implemented within projected funding constraints for the time period between fiscal years 2016 and 2040; and

NOW, THEREFORE BE IT RESOLVED, that the Roanoke Valley Transportation Planning Organization Policy Board approves the Financial Plan for the Vision 2040: Roanoke Valley Transportation Plan.

Janet Scheid
Chair

TPO POLICY BOARD: Cities of Roanoke and Salem; Counties of Bedford, Botetourt, Montgomery and Roanoke;
Town of Vinton; Greater Roanoke Transit Company (*Valley Metro*); Roanoke-Blacksburg Regional Airport;
Virginia Department of Rail & Public Transportation; Virginia Department of Transportation

Roanoke Valley Area Metropolitan Planning Organization

Table of Contents

1.0	Introduction	7
2.0	Vision 2040 – Fiscal Constraint Determination	7
3.0	Virginia Department of Transportation (VDOT) Assumptions	12
3.1	Revenue	12
3.2	Allocation to Districts and to MPOs	12
4.0	Project Prioritization	15
APPENDIX A	17

1.0 Introduction

A financial plan is a required part of the constrained long-range multimodal transportation plan (CLRMTP) which describes revenue and expenses, where revenue is resources from public and private sources that are reasonably expected to be available, and expenses are the program of projects and strategies identified in the CLRMTP. The purpose of this financial plan is to demonstrate how the adopted transportation plan can be implemented given fiscal constraint. Note, this financial plan reflects some duplicated information previously approved in the Vision 2040: Roanoke Valley Transportation plan. This financial plan reflects the following federally required elements:

- System-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways (as defined by 23 U.S.C. 101(a)(5) and public transportation (as defined by title 49 U.S.C. Chapter 53)
- Cooperatively developed estimates of funds between the Roanoke Valley Transportation Planning Organization (RVTPO), the Greater Roanoke Transit Company (Valley Metro), the Virginia Department of Transportation (VDOT), and the Virginia Department of Rail and Public Transportation (VDRPT) that will be available to support implementation of the Vision 2040: Roanoke Valley Transportation CLRMTP including identification of all necessary financial resources from public and private sources that are reasonably expected to be made available.
- Recommendations on any additional financing strategies to fund projects and programs included in the plan; for new funding sources, strategies for ensuring their availability shall be identified.
- All projects and strategies proposed for funding under title 23 U.S.C., title 49 U.S.C. Chapter 53 or with other Federal funds; State assistance; local sources; and private participation.
- Use of an inflation rate(s) to reflect “year of expenditure dollars” based on reasonable financial principles and information, developed cooperatively by the RVTPO, VDOT, VDRPT, and Valley Metro.

The financial plan also includes the following choice elements:

- The outer years of the plan (beyond the first 10 years) may reflect aggregate cost ranges as long as the future funding source(s) is reasonably expected to be available to support the project cost ranges.
- For illustrative purposes, the financial plan may include additional projects (a vision list of projects) that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available.

2.0 Vision 2040 – Fiscal Constraint Determination

Funding systems have changed since the 2035 long-range transportation plan. There are no longer

financially constrained categories such as “City of Roanoke Urban System”, “Roanoke County Secondary System”, “Interstate System”, “Primary System,” etc. for every locality in the Study Area. The financial constraint is now done on a regional basis reflecting recent statewide prioritization and project selection procedures through Virginia’s “System for the Management and Allocation of Resources for Transportation” which will hereafter be referred to by its acronym SMART SCALE. This is better for regional decision making and should strengthen the role of the RVTPO’s Vision 2040 plan over time. The Vision 2040 plan’s role will also change in response to a combination of SMART SCALE and the fact that the vast majority of anticipated future funding will be used for maintenance rather than new construction. This will likely mean that very few large-scale new terrain transportation projects will be built in the future. Rather, many transportation projects will be smaller incremental improvements.

The new financially constrained categories are as follows along with the total amount constrained from 2016 until 2040; the amounts reflect projections determined by VDOT.

<u>FUNDING PROGRAM</u>	<u>TOTAL FUNDS AVAILABLE</u>
Administrative	\$88,272,296
SMART SCALE District Grant Program	\$91,151,525
SMART SCALE High Priority Projects	\$91,151,525
Maintenance - Localities	\$411,870,834
Maintenance - VDOT	\$1,698,097,653
Other Discretionary Construction	\$196,149,537
Regional Surface Transportation Program (RSTP)	\$79,443,881
RSTP-Match	\$20,960,436
State of Good Repair	\$133,520,967
Transportation Alternatives (TA Set-Aside)	\$6,617,752
FY16 Constrained Long-Range Multimodal Transportation Plan TOTALS	\$2,817,236,406

Funding categories from the preceding table such as administrative, maintenance and state of good repair are not available for adding capacity or new construction. They are included in the Vision 2040

plan because federal surface transportation funds are being used and federal regulations require their disclosure. The funding categories available for additional capacity or new equipment are depicted in the following table. It is especially noteworthy that this total is much smaller than the preceding total that includes both maintenance and state of good repair. In fact, maintenance alone (VDOT and Localities) makes up almost 75% of the financial constraint. This is a clear indication that lifecycle costs of transportation infrastructure are a very important consideration.

Maintaining existing infrastructure before constructing new infrastructure is the first priority. The Roanoke-Blacksburg Regional Airport tunnel over State Route 118/Airport Road NW is a key project for the Roanoke Valley that will require long-term maintenance though a sustainable funding source for its maintenance has not been identified. The airport provides a vital connection to the Roanoke Valley for people and freight and finding a sustainable way to fund tunnel maintenance is essential.

Only 25% of the total funds available are for “new construction”; thus, the number of large-scale transportation projects in RVTPo are limited.

<u>FUNDING SOURCES AVAILABLE FOR NEW CONSTRUCTION</u>	<u>TOTAL FUNDS AVAILABLE</u>
SMART SCALE District Grant Program	\$91,151,525
SMART SCALE High Priority Projects	\$91,151,525
Other Discretionary Construction	\$196,149,537
Regional Surface Transportation Program (RSTP)	\$79,443,881
RSTP-Match	\$20,960,436
Transportation Alternatives (TA Set-Aside)	\$6,617,752
TOTAL	\$485,474,656

The amounts depicted above are sum totals from Fiscal Year 2016 through Fiscal Year 2040. These funding categories already account for inflation on the revenue side because each year that makes up the total is already in future dollars (Year of Expenditure Dollars - YOE) for that year.

A 3% annual inflation rate for project costs has been assumed in consultation with VDOT using their standard assumptions for planning level project cost inflation. The 3% annual inflation for project costs is higher than the growth rate of revenue using state level revenue collection assumptions. This means

that the “purchasing power” will erode over time with respect to new transportation projects. In other words, the money available to the region will buy fewer projects in the out years of this long-range plan solely due to inflation.

The situation is even more striking with regards to public transit. Revenues for the maintenance and operation of existing public transit services is expected to remain flat. Therefore, inflation will take a larger toll on the purchasing power of future year transit dollars than on the transportation construction side. Operating budget projections needed to sustain current services for the Greater Roanoke Transit Company through 2040 are shown below.

Fiscal Year	Amount
2017	\$8,825,180.00*
2018	\$9,089,935
2019	\$9,362,633
2020	\$9,643,512
2021	\$9,932,818
2022	\$10,230,802
2023	\$10,537,726
2024	\$10,853,858
2025	\$11,179,474
2026	\$11,514,858
2027	\$11,860,304
2028	\$12,216,113
2029	\$12,582,596
2030	\$12,960,074
2031	\$13,348,877
2032	\$13,749,343
2033	\$14,161,823
2034	\$14,586,678
2035	\$15,024,278
2036	\$15,475,007
2037	\$15,939,257
2038	\$16,417,434
2039	\$16,909,957
2040	\$17,417,256

* This number comes from the Virginia Commonwealth Transportation Board FY17 Rail and Public Transportation Improvement Program

A one-year snapshot (FY 2016) of public transit specific funding for the Roanoke Valley is shown in the following table; estimated revenue projections were provided by the Virginia Department of Rail and Public Transportation.

FISCAL CONSTRAINT DEMONSTRATION – RVTPO REGION

	FY 2016 ²			
	Estimated Federal Revenue	Non-Federal Revenue		Total Estimated Revenue
		Estimated State Revenue	Estimated local Revenue	
Section 5303 ³	\$ 125,542	\$ 15,693	\$ 15,693	\$ 156,928
Section 5307 ⁴	\$ 2,449,772	\$ 306,222	\$ 306,222	\$ 3,062,215
Section 5311 ⁵	\$ 694,958	\$ -	\$ 334,958	\$ 1,029,916
Section 5339 ⁴	\$ 268,621	\$ 53,724	\$ 13,431	\$ 335,776
Section 5310	\$ 221,013	\$ -	\$ 55,253	\$ 276,266
TOTAL	\$ 3,759,906	\$ 375,639	\$ 725,557	\$ 4,861,102

¹ Calculations in this spreadsheet are based on FTA apportionments only and do not include CMAQ or STP funds that have been flexed into 5307. We have opted for a conservative approach and are showing FY2016-19 allocations at the level of FY2016 funding, without an inflation factor.

² Designates State fiscal year. Includes FTA apportionments from the Federal Register dated August 27, 2015.

³ Section 5303 for FY 2016 based on approved FY 2016 Six Year Improvement Plan, FY2017-19 based on FTA apportionments from the Federal Register dated August 27, 2015.

⁴ State and local match ratios depend on DRPT's current year match rate.

⁵ Section 5311 capital allocations are discretionary, therefore this forecast only includes 5311 operating assistance based on the approved 2016 Six Year Improvement Plan.

Summing up the fiscal years from FY 2016 through FY 2040 (25 years) gives us the following aggregate financial constraint for public transit specific funding sources (Note: due to rounding cents to the dollar, the totals below may be slightly different than a simple calculation of FY 2016 * 25.).

FISCAL CONSTRAINT DEMONSTRATION – RVTPO REGION

	Total from FY 2016 through FY 2040			
	Estimated Federal Revenue	Non-Federal Revenue		Total Estimated Revenue
		Estimated State Revenue	Estimated local Revenue	
Section 5303 ³	\$ 3,138,550	\$ 392,325	\$ 392,325	\$ 3,923,200
Section 5307 ⁴	\$ 61,244,300	\$ 7,655,538	\$ 7,655,538	\$ 76,555,375
Section 5311 ⁵	\$ 17,373,950	\$ -	\$ 8,373,950	\$ 25,747,900
Section 5339 ⁴	\$ 6,715,525	\$ 1,343,105	\$ 335,776	\$ 8,394,406
Section 5310	\$ 5,525,325	\$ -	\$ 1,381,331	\$ 6,906,656
TOTAL	\$ 93,997,650	\$ 9,390,968	\$ 18,138,920	\$ 121,527,538

Many projects associated with public transit such as service expansion buses, bus replacement, bus stop improvements, accessibility improvements, transfer centers and multimodal centers can be funded through the SMART SCALE District Grant Program or High Priority Program, RSTP, TA Set-Aside and/or

other construction and new project related funding sources. The FTA 5303,07,10,11, and 39 family of funding can be reserved for service maintenance and provision purposes. Other non 53** funding can and should be used for public transit supportive projects.

3.0 Virginia Department of Transportation (VDOT) Assumptions

To calculate the projections used for Table 1, the VDOT Financial Planning Division prepared the financial projections and assumptions in November 2013 for the whole state including the RVTPO, based on the FY2014-2019 Six-Year Financial Plan and Six-Year Improvement Program adopted by the Commonwealth Transportation Board in June 2013. After calculating statewide revenue projections, VDOT then examined allocation to districts and MPOs to determine projects revenues for RVTPO. The information was intended to be used for long-range planning efforts between FY2014-2045. The RVTPO's long-range plan, Vision 2040: Roanoke Valley Transportation, covers the years FY2016-2040, well within the intended timeframe.

3.1 Revenue

To project revenue to 2040, VDOT makes assumptions regarding state and federal revenues. The total value of the constrained long-range plan for all of Virginia is \$219 billion.

State Revenue

- The average state revenue growth for FY2014-2019 is 5%.
- For years 2020 and beyond, growth rates have been determined for each revenue source with recent consultation with the Department of Taxation and average 2.1%.

Federal Revenue

- Based on the current federal program. Does not consider potential reduction due to lack of funding or potential increased program.
- There is no growth estimated for federal revenues. The status of the funding provided by the federal Highway Trust Fund (HTF) is not set beyond federal fiscal year 2014 and current funding levels are unsustainable without funding assistance. In recent years, Congress has avoided shortfalls by transferring funds from the general fund of the Treasury to the HTF. Lawmakers may choose to continue to make additional transfers or address the revenue dedicated to the Highway Trust Fund. This uncertainty does not allow for projecting a growing source of funding.

3.2 Allocation to Districts and to MPOs

After determining statewide revenue projections, VDOT projects district and MPO allocations to calculate anticipated RVTPO revenue.

Other Administrative Programs includes the following:

- 699 – Administrative and Support Services
- 514 – Environmental Monitoring and Evaluation
- 60315 – Construction Management
- 602 – Ground Transportation Planning and Research

Maintenance allocations include Highway System Maintenance and Operations for VDOT-maintained roads and Financial Assistance for City and County Road Maintenance. These funds are divided amongst the districts based on the district's six-year average share (2007-2013). Once districts amounts for Maintenance are obtained, population percentages are applied to determine MPO amounts.

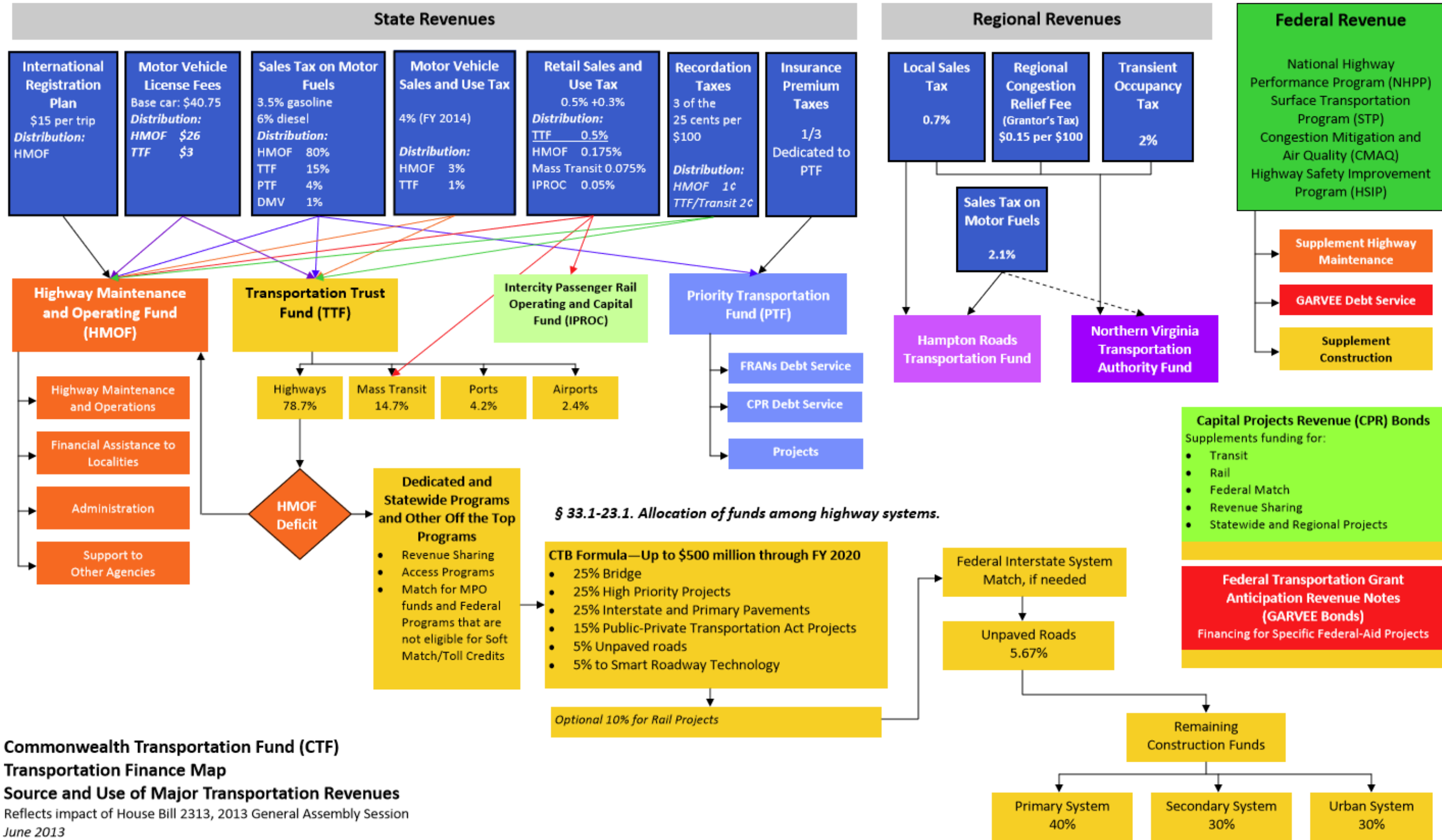
Construction allocations are distributed according to the Six-Year Financial Plan (SYFP) for FY2014-2019 after that funds are allocated thusly:

- Bridge needs of the districts were provided by Structure & Bridge Division
- Interstate needs of the districts provided by Transportation and Mobility Planning Division
- Interstate and Primary needs with the allocation distribution from the end of the six-year improvement program were used to determine the distribution of the federal discretionary funding to the MPOs through the life of the CLRP. No determination is applied as to what highway system to which the funds should be allocated.

VDOT specific programs were held as statewide amounts and not distributed to the MPOs. Construction Formula Allocations – represents the total distribution to the highway systems:

- Primary – The estimated amounts to the urbanized areas of these program funds are developed utilizing the share of the urbanized area's population of the respective construction districts where these areas reside.
- Secondary – Secondary system construction allocations are, as per the code of Virginia, developed to the county level. These county amounts include construction, unpaved road funds and telecommunication fees. The estimated amounts of these funds to the urbanized areas are based on the urbanized area's share of the respective county population that lies within the specific area.
- Urban – The Urban system construction allocations are, as per the code of Virginia, allocated to the municipalities based on populations. The estimated amounts to the urbanized areas are the allocations to the cities and towns that are within the respective urbanized area boundaries.

The following Transportation Finance Map shows the relationships between major transportation revenue sources and their use for the Commonwealth of Virginia. As explained in this section and illustrated on the Finance Map, the financial projections and allocations were developed prior to the initiation of SMART SCALE.



Commonwealth Transportation Fund (CTF)
Transportation Finance Map
Source and Use of Major Transportation Revenues
 Reflects impact of House Bill 2313, 2013 General Assembly Session
 June 2013
 Applicable to Fiscal Year 2014

4.0 Project Prioritization

Once the anticipated revenue was determined, the Vision 2040: Roanoke Valley Transportation plan used the following project prioritization methodology to determine the projects that would be pursued to implement the long-range plan within the financial constraints of the anticipated revenue.

- a. Projects listed in the FY17-22 Six-Year Improvement Program.
- b. Projects that have been submitted for funding (via pending grant processes).
- c. Projects under development to be submitted for funding within two years.
- d. Desired projects (identified by TTC members) that are anticipated to be submitted for funding beyond 2018.

The following table provides the total amount of funding anticipated for the fiscally constrained list of projects and how those funds are split among fiscal year timeframes. Although more funding was anticipated for the RVTPO region in the FY16-21 timeframe, the projects that have actually received funding as of the Commonwealth Transportation Board’s FY2019 Six-Year Improvement Program reflects a smaller amount.

CONSTRAINED LIST OF PROJECTS BY FUNDING TIMEFRAME AS OF JUNE 28, 2018

	<u>TOTAL</u>	<u>FY16-21 SIX YEAR IMPROVEMENT PROGRAM</u>	<u>FY 2022-2027 SHORT TIMEFRAME</u>	<u>FY 2028-2033 MEDIUM TIMEFRAME</u>	<u>FY 2034-2039 LONG TIMEFRAME</u>	<u>FY 2040 LONGER TIMEFRAME</u>
Anticipated Funding	\$485,474,655	\$210,715,282	\$90,879,498	\$85,615,632	\$84,323,264	\$13,640,680
Project Costs	\$436,155,802	\$166,954,478	\$90,879,498	\$84,560,015	\$80,147,672	\$13,614,140
Difference	\$49,318,853	\$43,760,804	\$0	\$1,355,917	\$4,175,592	\$26,540

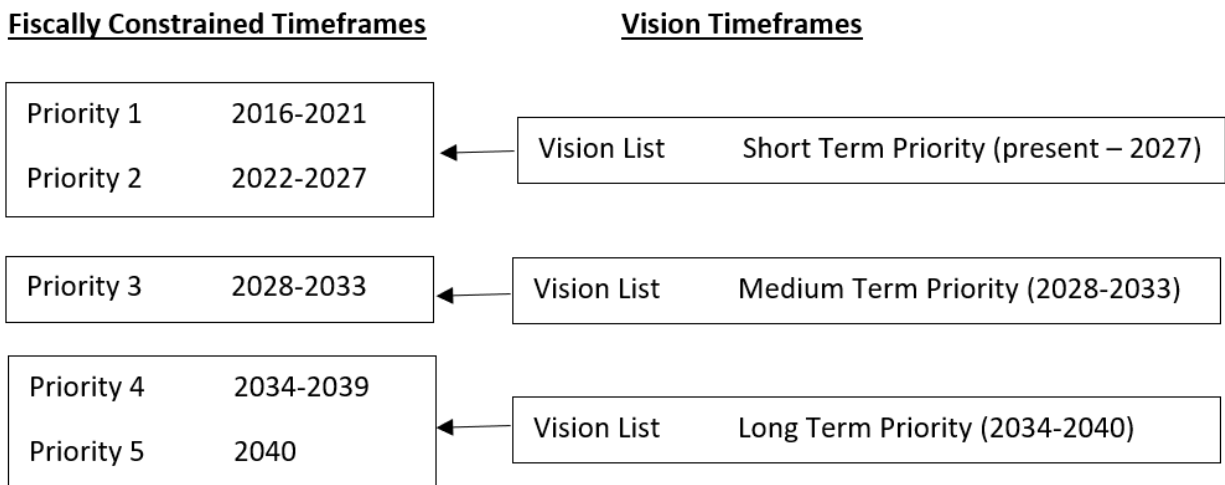
All projects included would have some federal contribution. The programming of projects incorporated an inflation rate of 3% to reflect “year of expenditure dollars” beyond the FY2016 project cost estimate to the first year of the timeframe for which funding was to be expended. Timeframe determinations were made as follows:

- RVTPO Staff/TTC opinion sought on project timing – average timeframe assigned.
- Projects in FY17-22 SYIP were included in the first timeframe (Priority 1) with remaining balances to be completed in the second timeframe.
- Less expensive projects were funded and completed sooner.
- More expensive projects were funded across FY22-39.

- Funding for Other I-81 Auxiliary Lane Projects is listed in each timeframe of the constrained list as well as the vision list due to excess cost. This was the only undefined bucket of funding included in the constrained list; the use of the funds was not specified for segments of I-81.

The full list of projects by timeframe included in the Vision 2040: Roanoke Valley Transportation plan Amendment #1 approved on June 28, 2018 by the RVTPO Policy Board is included in Appendix A.

In addition, the RVTPO Policy Board elected to include an illustrative, vision list of projects in the CLRMTP that would be included in the adopted constrained list of the Vision 2040: Roanoke Valley Transportation plan if additional resources beyond those identified in the financial plan were to become available. The relationship between the fiscally constrained timeframes and the vision timeframes is shown below.



The vision list of projects was not fiscally constrained and amounts to more than \$824,249,927. Some projects included in the vision list did not include a project cost. Some projects were not assigned a cost or a timeframe.

VISION LIST OF PROJECT COSTS BY TIMEFRAME

<u>TIMEFRAME</u>	<u>COST OF VISION PROJECTS</u>	<u>NUMBER OF VISION PROJECTS</u>
S and S to M	\$194,020,927	15
M	\$143,400,000	20
M to L and L	\$462,129,000	16
ANY and blank	\$24,700,000	4

S=Short
 S to M=Short to Medium
 M=Medium
 M to L = Medium to Long
 L = Long
 ANY = anytime

Projects in the Vision 2040: Roanoke Valley Transportation plan constitute a total cost of more than \$1,260,405,729 (\$436,155,802 constrained projects + vision projects of identified \$824,249,927 costs).

APPENDIX A

VISION 2040: ROANOKE VALLEY TRANSPORTATION PLAN AMENDMENT #1 PROJECTS BY TIMEFRAME

Project #	UPC	Jurisdiction	Facility Route # and Name	Projected Cost	Previous Funding	Estimated Cost in YOE	SYIP	Short	Medium	Long	Longer
							FY 2016-2021 Timeframe Cost Estimate	FY 2022-2027 Timeframe Cost Estimate	FY 2028-2033 Timeframe Cost Estimate	FY 2034-2039 Timeframe Cost Estimate	FY 2040 Timeframe Cost Estimate
1	107053	Bedford Co.	Rte. 24 Bedford County - Safety Improvements (RVTPO portion is 0.4 mi. of 1.5 mi.)	\$432,000	\$0	\$432,000	\$432,000	\$0	\$0	\$0	\$0
2	75910	Botetourt Co.	Exit 150 Improvement Project: Rte. 11,220,220A Access Management Project at I-81 Exit 150	\$50,186,000	\$32,148,000	\$18,038,000	\$18,038,000	\$0	\$0	\$0	\$0
3	107521	Botetourt Co.	Daleville Greenway	\$595,000	\$0	\$595,000	\$595,000	\$0	\$0	\$0	\$0
4	N/A	Botetourt Co.	Exit 150 Park and Ride	\$7,731,930	\$0	\$9,232,329	\$0	\$9,232,329	\$0	\$0	\$0
A1-1	T21491	Botetourt Co.	U.S. 220/International Parkway Intersection Study and Design	\$300,000	\$0	\$300,000	\$300,000	\$0	\$0	\$0	\$0
A1-8	82226	Botetourt Co.	Rte. 11 over Beckner Branch (STR. 03160) – Bridge Replacement	\$5,629,000	\$ 2,265,000	\$3,364,000	\$3,364,000	\$0	\$0	\$0	\$0
5	709	City of Roanoke	Tenth Street Improvements	\$22,477,000	\$19,018,000	\$3,459,000	\$3,459,000	\$0	\$0	\$0	\$0
6	11908	City of Roanoke	HB2 FY17 10TH Street - 2 Lane, Bike Lane, Curb & Gutter, Sidewalk	\$17,451,245	\$5,000,000	\$12,451,245	\$12,451,245	\$0	\$0	\$0	\$0
7	105439	City of Roanoke	Roanoke River Greenway (Aerial Way Dr. to Roanoke Ave. SW Extended)	\$5,075,000	\$7,534,000	\$750,000	\$750,000	\$0	\$0	\$0	\$0
8	106265	City of Roanoke	Garden City Blvd. Bike/Ped - Transportation Alternatives	\$1,000,000	\$754,000	\$246,000	\$246,000	\$0	\$0	\$0	\$0
9	108896	City of Roanoke	HB2 FY17 Colonial Avenue Improvements	\$7,000,000	\$4,455,000	\$2,545,000	\$2,545,000	\$0	\$0	\$0	\$0
10	108908	City of Roanoke	HB2 FY17 U.S. 220 Communications and Adaptive System Project	\$422,500	\$0	\$422,500	\$422,500	\$0	\$0	\$0	\$0

VISION 2040: ROANOKE VALLEY TRANSPORTATION PLAN AMENDMENT #1 PROJECTS BY TIMEFRAME

Project #	UPC	Jurisdiction	Facility Route # and Name	Projected Cost	Previous Funding	Estimated Cost in YOE	SYIP	Short	Medium	Long	Longer
							FY 2016-2021 Timeframe Cost Estimate	FY 2022-2027 Timeframe Cost Estimate	FY 2028-2033 Timeframe Cost Estimate	FY 2034-2039 Timeframe Cost Estimate	FY 2040 Timeframe Cost Estimate
11	109288	City of Roanoke	HB2 FY17 Transit Accessibility Improvements on Edgewood Street	\$350,811	\$0	\$350,811	\$350,811	\$0	\$0	\$0	\$0
12	110101	City of Roanoke	Tinker Creek Trail Extension	\$3,112,826	\$0	\$3,112,826	\$3,112,826	\$0	\$0	\$0	\$0
13	111360	City of Roanoke	Franklin Road sidewalk	\$1,100,000	\$0	\$1,313,458	\$0	\$1,313,458	\$0	\$0	\$0
14	N/A	City of Roanoke	220 Expressway/Route 419 Interchange Improvement	\$2,020,090	\$0	\$2,413,699	\$750,000	\$758,277	\$905,422	\$0	\$0
15	N/A	City of Roanoke	Valley View Boulevard Extension from I-581 to Cove Road	\$48,000,000	\$0	\$76,605,500	\$0	\$6,735,379	\$11,561,966	\$58,308,155	\$0
16	T19580	City of Roanoke	Hollins Rd. and Orange Ave. Intersection Improvements	\$3,552,000	\$0	\$3,552,000	\$500,000	\$3,052,000	\$0	\$0	\$0
A1-2	N/A	City of Roanoke	Roanoke River Greenway Bridge across Barnhardt Creek	\$897,770	\$0	\$897,770	\$897,770	\$0	\$0	\$0	\$0
A1-9	111135	City of Roanoke	Flashing Yellow Arrow	\$277,000	\$0	\$277,000	\$277,000	\$0	\$0	\$0	\$0
A1-10	111137	City of Roanoke	Rectangular Rapid Flashing Beacons	\$108,000	\$0	\$108,000	\$108,000	\$0	\$0	\$0	\$0
A1-11	T21455	City of Roanoke	Installation of Pedestrian Countdown Signal on Orange Avenue	\$102,000	\$0	\$102,000	\$102,000	\$0	\$0	\$0	\$0
17	8753	City of Salem	HB2 FY17 U.S. 460 - Widen TO 3 Lanes w/ Bike Lane, Curb, Sidewalk	\$15,223,263	\$12,310,279	\$2,912,984	\$2,912,984	\$0	\$0	\$0	\$0
18	108853	City of Salem	East Main Street / College Avenue - Pedestrian Improvements	\$1,001,000	\$0	\$1,001,000	\$1,001,000	\$0	\$0	\$0	\$0
19	108899	City of Salem	HB2 FY17 Multimodal Improvements along Boulevard	\$884,881	\$0	\$884,881	\$884,881	\$0	\$0	\$0	\$0
20	111371	City of Salem	Downtown Streetscape and Intersection Improvements	\$3,629,869	\$0	\$3,629,869	\$3,629,869	\$0	\$0	\$0	\$0
21	N/A	City of Salem	East Main Street Phase II – Brand Ave. to Kessler Mill	\$13,000,000	\$0	\$17,028,786	\$0	\$7,761,340	\$9,267,446	\$0	\$0

VISION 2040: ROANOKE VALLEY TRANSPORTATION PLAN AMENDMENT #1 PROJECTS BY TIMEFRAME

Project #	UPC	Jurisdiction	Facility Route # and Name	Projected Cost	Previous Funding	Estimated Cost in YOE	SYIP	Short	Medium	Long	Longer
							FY 2016-2021 Timeframe Cost Estimate	FY 2022-2027 Timeframe Cost Estimate	FY 2028-2033 Timeframe Cost Estimate	FY 2034-2039 Timeframe Cost Estimate	FY 2040 Timeframe Cost Estimate
22	N/A	City of Salem	East Main Street/Downtown Salem Streetscape	\$3,500,000	\$0	\$4,769,805	\$0	\$1,135,559	\$3,634,246	\$0	\$0
A1-15	N/A	City of Salem	Downtown Salem - College Ave. Improvements	\$3,500,000	\$0	\$3,500,000	\$0	\$3,500,000	\$0	\$0	\$0
23	N/A	City of Salem	Mason Creek Greenway from Route 460 to Roanoke River Greenway	\$2,610,000	\$0	\$2,610,000	\$0	\$2,610,000	\$0	\$0	\$0
24	N/A	City of Salem	Roanoke River Greenway from Rotary Park to Roanoke City Corporate Limit	\$3,000,000	\$0	\$3,929,720	\$0	\$1,791,078	\$2,138,641	\$0	\$0
A1-4	N/A	City of Salem	Elizabeth Greenway	\$1,104,400	\$0	\$1,104,400	\$1,104,400	\$0	\$0	\$0	\$0
25	N/A	Multi-Jurisdictional	Ongoing Bus Replacement and Rebuild Program	\$27,200,000	\$0	\$44,298,755	\$0	\$5,223,015	\$22,452,710	\$6,843,015	\$9,780,015
26	111882	Multi-Jurisdictional	Real Time Information System (short-term)	\$1,904,000	\$0	\$1,904,000	\$900,000	\$1,004,000	\$0	\$0	\$0
27	N/A	Multi-Jurisdictional	Six (6) Additional Vehicles (short-term)	\$2,800,000	\$0	\$3,667,738	\$0	\$1,671,673	\$1,996,065	\$0	\$0
28	N/A	Multi-Jurisdictional	Tinker Creek Greenway Connectivity Study	\$400,000	\$0	\$400,000	\$400,000	\$0	\$0	\$0	\$0
29	N/A	Multi-Jurisdictional	Tinker Creek Pedestrian Bridge	\$1,459,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30	N/A	Multi-Jurisdictional	Valley Metro Expanded Maintenance Facility	\$2,200,000	\$0	\$2,626,915	\$0	\$2,626,915	\$0	\$0	\$0
31	T18675	Multi-Jurisdictional	Valley Metro Transit Vehicle Replacements	\$13,622,784	\$0	\$13,622,784	\$9,618,071	\$4,004,713	\$0	\$0	\$0
32	111879	Multi-Jurisdictional	Smart Way Vehicle Expansion Project	\$618,000	\$0	\$618,000	\$618,000	\$0	\$0	\$0	\$0
33	111880	Multi-Jurisdictional	Valley Metro 91/92 Vehicle Expansion	\$1,700,000	\$0	\$1,700,000	\$0	\$1,700,000	\$0	\$0	\$0

VISION 2040: ROANOKE VALLEY TRANSPORTATION PLAN AMENDMENT #1 PROJECTS BY TIMEFRAME

Project #	UPC	Jurisdiction	Facility Route # and Name	Projected Cost	Previous Funding	Estimated Cost in YOE	SYIP	Short	Medium	Long	Longer
							FY 2016-2021 Timeframe Cost Estimate	FY 2022-2027 Timeframe Cost Estimate	FY 2028-2033 Timeframe Cost Estimate	FY 2034-2039 Timeframe Cost Estimate	FY 2040 Timeframe Cost Estimate
34	77305	Roanoke Co.	Rte. 116/Jae Valley Rd. over Back Creek - Bridge Replacement	\$6,438,000	\$4,317,000	\$3,630,000	\$3,630,000	\$0	\$0	\$0	\$0
35	82193	Roanoke Co.	Rt. 220 Bridge Replacement	\$19,208,000	\$7,429,000	\$10,396,000	\$10,396,000	\$0	\$0	\$0	\$0
36	91191	Roanoke Co.	Roanoke River Greenway - City of Roanoke to Blue Ridge Parkway	\$6,858,000	\$5,250,000	\$1,608,000	\$1,608,000	\$0	\$0	\$0	\$0
37	94726	Roanoke Co.	Rt. 221 Bridge Replacement	\$3,648,000	\$0	\$3,648,000	\$3,648,000	\$0	\$0	\$0	\$0
38	97171	Roanoke Co.	HB2 FY17 Roanoke River Greenway, Green Hill Park to Riverside Park	\$8,032,031	\$3,489,926	\$4,542,105	\$4,542,105	\$0	\$0	\$0	\$0
39	99542	Roanoke Co.	Exit 140 Park and Ride Reconstruction	\$3,511,000	\$2,176,000	\$1,502,079	\$474,000	\$1,028,079	\$0	\$0	\$0
40	107054	Roanoke Co.	Rte. 311 (under I-81) Bike & Ped Safety Improvements	\$805,000	\$105,000	\$700,000	\$700,000	\$0	\$0	\$0	\$0
41	107055	Roanoke Co.	U.S. 11/Williamson Rd. & Rte. 117/Peters Creek Rd. (from Peters Creek Rd. to Bike & Pedestrian Safety Improvements	\$1,000,000		\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0
42	107061	Roanoke Co.	HB2 FY17 Rte. 419 Safety Improvements at Tanglewood	\$5,853,432	\$0	\$5,853,432	\$5,853,432	\$0	\$0	\$0	\$0
43	108882	Roanoke Co.	West Main Street Sidewalk Installation	\$1,037,000	\$0	\$1,037,000	\$134,000	\$903,000	\$0	\$0	\$0
44	108904	Roanoke Co.	HB2 FY17 Rte. 311 / Rte. 419 Int. Safety & Congestion Improvements	\$1,957,006	\$0	\$1,957,006	\$1,957,006	\$0	\$0	\$0	\$0
45	108905	Roanoke Co.	HB2 FY17 Lila Dr. / Rte. 115 Intersection Safety Improvements	\$1,269,396	\$0	\$1,269,396	\$1,269,396	\$0	\$0	\$0	\$0

VISION 2040: ROANOKE VALLEY TRANSPORTATION PLAN AMENDMENT #1 PROJECTS BY TIMEFRAME

Project #	UPC	Jurisdiction	Facility Route # and Name	Projected Cost	Previous Funding	Estimated Cost in YOE	SYIP	Short	Medium	Long	Longer
							FY 2016-2021 Timeframe Cost Estimate	FY 2022-2027 Timeframe Cost Estimate	FY 2028-2033 Timeframe Cost Estimate	FY 2034-2039 Timeframe Cost Estimate	FY 2040 Timeframe Cost Estimate
46	108906	Roanoke Co.	HB2 FY17 I-81 NB Auxiliary Lane from Exit 141 to 143	\$29,830,716	\$0	\$29,830,716	\$29,830,716	\$0	\$0	\$0	\$0
47	110155	Roanoke Co.	Roanoke River Greenway from Blue Ridge Parkway to Explore Park	\$1,700,000	\$0	\$1,733,750	\$1,733,750	\$0	\$0	\$0	\$0
48	110620	Roanoke Co.	Diuguids Lane (Route 760) Bridge Replacement	\$2,281,000	\$0	\$2,281,000	\$400,000	\$1,881,000	\$0	\$0	\$0
49	111066	Roanoke Co.	Route 311 Pedestrian Bridge	\$2,880,000	\$0	\$2,880,000	\$600,000	\$2,280,000	\$0	\$0	\$0
50	111317	Roanoke Co.	Williamson Road Pedestrian Improvements	\$1,441,000	\$0	\$1,441,000	\$272,000	\$1,169,000	\$0	\$0	\$0
51	111373	Roanoke Co.	I-81 Southbound Auxiliary Lane between Exit 143 and 141	\$32,168,111	\$0	\$32,168,111	\$21,980,000	\$10,188,111	\$0	\$0	\$0
52	103607 / 98220	Roanoke Co.	Plantation Road Streetscape Improvements	\$3,395,000	\$5,297,000	\$611,495	\$611,495	\$0	\$0	\$0	\$0
53	111407	Roanoke Co.	Adaptive Traffic Control Improvements: U.S. 221/Brambleton Ave. (Colonial Ave. to Ranchcrest Dr.) and Rte. 419/Electric Rd. (Springwood Park Dr. to McVitty Rd.; Carriage Ln. to Valley Dr.)	\$663,457	\$0	\$663,457	\$663,457	\$0	\$0	\$0	\$0
54	N/A	Roanoke Co.	Other I-81 Auxiliary Lane Projects	\$30,786,930	\$0	\$29,091,632	\$0	\$432,817	\$24,824,690	\$0	\$3,834,125
55	111366	Roanoke Co.	Plantation Road Improvements Phase II Walrond Drive to Gander Way	\$1,752,000	\$0	\$1,752,000	\$125,000	\$1,627,000	\$0	\$0	\$0
56	N/A	Roanoke Co.	Roanoke River Greenway Extension through Explore Park to Rutrough Rd.	\$3,020,308	\$0	\$3,020,308	\$1,602,749	\$1,417,559	\$0	\$0	\$0
57	15187 / 15188	Roanoke Co.	Rte. 1662/McVitty Rd. & Rte. 1663/Old Cave Spring Rd. Improvements	\$20,093,192	\$0	\$29,473,906	\$0	\$8,303,683	\$6,173,722	\$14,996,502	\$0

VISION 2040: ROANOKE VALLEY TRANSPORTATION PLAN AMENDMENT #1 PROJECTS BY TIMEFRAME

Project #	UPC	Jurisdiction	Facility Route # and Name	Projected Cost	Previous Funding	Estimated Cost in YOE	SYIP	Short	Medium	Long	Longer
							FY 2016-2021 Timeframe Cost Estimate	FY 2022-2027 Timeframe Cost Estimate	FY 2028-2033 Timeframe Cost Estimate	FY 2034-2039 Timeframe Cost Estimate	FY 2040 Timeframe Cost Estimate
A1-3	113144	Roanoke Co.	Starkey Road/Buck Mountain Road Intersection Improvements	\$2,098,115	\$0	\$2,098,115	\$951,667	\$1,146,448	\$0	\$0	\$0
A1-5	T21502	Roanoke Co.	I-581 Exit 2 Interchange Study	\$150,000	\$0	\$150,000	\$150,000	\$0	\$0	\$0	\$0
A1-7	T21366	Roanoke Co.	Roanoke River Greenway - Blue Ridge Parkway Crossing along Highland Road	\$366,606	\$0	\$366,606	\$366,606	\$0	\$0	\$0	\$0
A1-13	T21464	Roanoke Co.	Pedestrian Improvements on Route 11 (Williamson Road)	\$750,000	\$0	\$750,000	\$0	\$750,000	\$0	\$0	\$0
A1-14	T21583	Roanoke County	I-81 Exit 137 SB Safety Improvements	\$1,500,000	\$0	\$1,500,000	\$0	\$1,500,000	\$0	\$0	\$0
58	93160	Town of Vinton	Rte. U000 - Walnut Ave. Int. Improvement at 8th Street	\$2,423,000	\$105,000	\$2,767,813	\$0	\$2,767,813	\$0	\$0	\$0
59	109611	Town of Vinton	Glade Creek Greenway, Phase II	\$531,210	\$0	\$531,210	\$531,210	\$0	\$0	\$0	\$0
60	N/A	Town of Vinton	Walnut Avenue Improvements Project	\$2,796,829	\$0	\$3,494,608	\$545,250	\$1,344,252	\$1,605,107	\$0	\$0
A1-6	111649	Town of Vinton	Walnut Avenue Bicycle and Pedestrian Accommodations (5th Street to City/Town limit)	\$1,446,282	\$0	\$1,446,282	\$1,446,282	\$0	\$0	\$0	\$0
A1-12	T21460	Town of Vinton	Hardy Road/Dillon Woods Crosswalk	\$183,000	\$0	\$183,000	\$162,000	\$21,000	\$0	\$0	\$0
Project Costs:						\$436,155,802	\$166,954,478	\$90,879,498	\$84,560,015	\$80,147,672	\$13,614,140