

Roanoke Valley Transportation
PLANNING ORGANIZATION

Staffed by the
REGIONAL commission



TRANSPORTATION IMPROVEMENT PROGRAM

for the

ROANOKE VALLEY TRANSPORTATION PLANNING ORGANIZATION

Federal Fiscal Years 2018-2021

APPROVED: April 27, 2017

Amended	Adjusted
March 22, 2018	October 9, 2017
June 28, 2018	October 23, 2017
	November 30, 2017
	March 2, 2018
	May 8, 2018
	July 6, 2018
	October 26, 2018

WWW.RVTPO.ORG



RVTPO FY 2018-21



Transportation Improvement Program

Table of Contents

1.0	Purpose of the TIP	4
2.0	Public and Stakeholder Involvement	6
3.0	Understanding the TIP	7
4.0	Funding the TIP	10
4.1	Funding Sources	10
4.2	Project Allocations vs. Project Obligations	16
4.3	Do Project Obligations Mean the Work is Underway?	17
4.4	Financial Assumptions	18
4.5	Metropolitan Project Selection Overview	18
4.6	FY 2018-2021 Transportation Improvement Plan Timeline	19
5.0	Performance Measures Targets	20
5.1	Highway Safety	21
5.2	Highway Infrastructure Condition	22
5.3	Highway System Performance	22
5.4	Transit Asset Management	22
6.0	Roadway Projects	24
6.1	Bedford County	25
6.2	Botetourt County	26
6.3	Montgomery County	28
6.4	Roanoke County	29
6.5	City of Roanoke	35
6.6	City of Salem	40
6.7	Town of Vinton	42
6.9	Statewide	44
6.0	Transit Projects	45
6.1	Greater Roanoke Transit Company (Valley Metro) Project Details	45
6.2	Unified Human Services Transportation Systems, Inc. (RADAR) Project Details	46
6.2	Lutheran Family Services of Virginia Project Details	47
6.3	Transit Funding Summaries	47
7.0	Other Projects	49
7.1	Roanoke-Blacksburg Regional Airport	49

APPENDIX A - Grouped Projects

APPENDIX B - Ungrouped Projects

APPENDIX C - Resolution Approving Final TIP 2018-2021

APPENDIX D - Self-Certification Statement

APPENDIX E - Amendments and Adjustments

APPENDIX F - A Basic Guide to the Transportation Improvement Program

APPENDIX G - Annual Listing of Transportation Project Obligations

Acknowledgement

This report was prepared by the Roanoke Valley-Alleghany Regional Commission (RVARC) staff in cooperation with and assistance by the: Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Virginia Department of Rail and Public Transportation (DRPT), Virginia Department of Transportation (VDOT), Roanoke Valley Transportation Planning Organization (RVTPO) member localities, Greater Roanoke Transit Company (GRTC/Valley Metro), and RADAR (Roanoke Area Dial A Ride).

Disclaimer

The contents of this report reflect the views of the Roanoke Valley Area Metropolitan Planning Organization. The RVARC 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, Valley Metro, RADAR, or the RVARC. This report does not constitute a standard, specification or regulation. FHWA, FTA, VDOT and DRPT 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.

The data presented in this report is provided by VDOT, DRPT, GRTC and RADAR; and the data is compiled and presented by RVARC staff.

Roanoke Valley Transportation Planning Organization RVTPO Policy Board Membership - as of December 15, 2018

VOTING MEMBERS

Bedford County Representative

The Honorable Andy Dooley

Botetourt County Representatives

The Honorable Steve Clinton

The Honorable Billy Martin, Sr.

Montgomery County Representative

The Honorable Steve Fijalkowski

Roanoke County Representatives

The Honorable George Assaid

The Honorable Phil North

City of Roanoke Representatives

The Honorable Bill Bestpitch

The Honorable John Garland

City of Salem Representatives

The Honorable Jane Johnson

The Honorable Bill Jones

(Alternates:

The Honorable Randy Foley,

The Honorable James Martin)

Town of Vinton Representatives

The Honorable Keith Liles

The Honorable Janet Scheid

Greater Roanoke Transit Company (Valley Metro) Representative

Kevin Price

Roanoke-Blacksburg Regional Airport Representative

Diana Lewis (*Alternate: Tim Bradshaw*)

Virginia Department of Rail and Public Transportation Representative

Dan Sonenklar

Virginia Department of Transportation (Salem District) Representative

Ken King, PE, District Engineer

NON-VOTING MEMBERS

Federal Highway Administration

Kevin Jones

Federal Transit Administration

Melissa McGill

Roanoke Valley-Alleghany Regional Commission

J. Lee E. Osborne

Chair of the RVTPO Transportation Technical Committee (Ex-Officio)

Cody Sexton (Current TTC Chair)

Local Government Chief Administrative Official or Designee (Ex-Officio)

Richard Caywood (Roanoke County Designee)

Pete Peters (Town of Vinton Designee)

Ben Tripp (City of Salem Designee)

RVTPO SECRETARY

Wayne G. Strickland,
RVARC Executive Director

PROJECT STAFF

Bryan W. Hill, AICP, CZA, Regional
Planner III

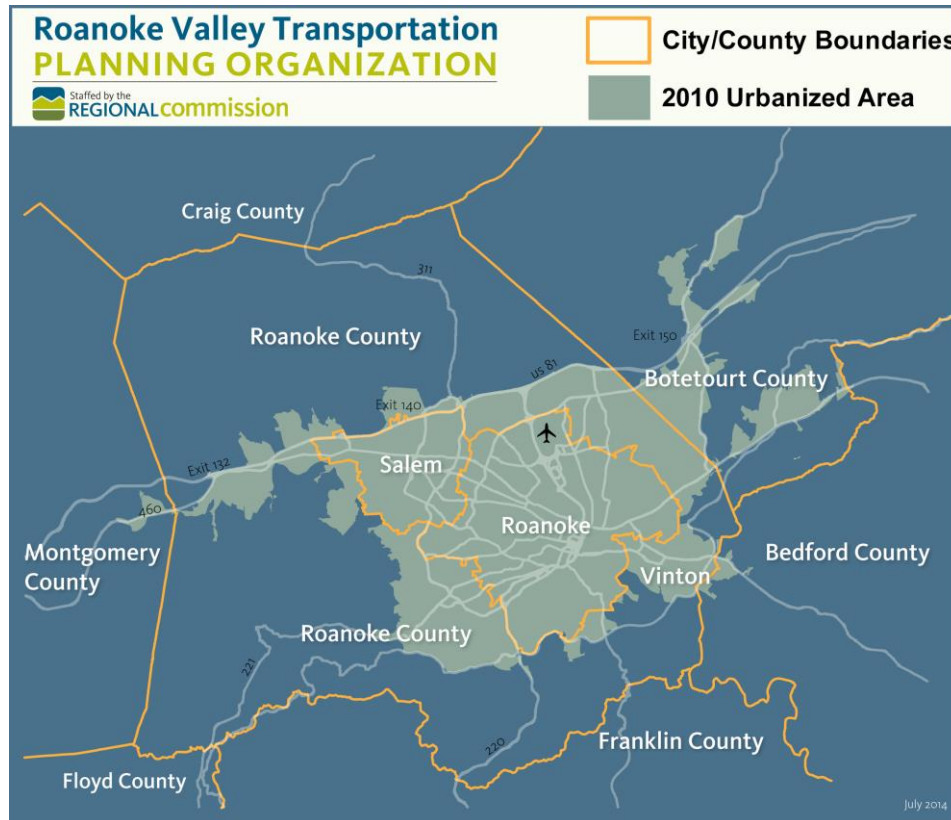
Cristina D. Finch, AICP, LEED AP,
Director of Transportation

Dorian Allen, Transportation Planner I

1.0 Purpose of the TIP

The Federal Register defines the Transportation Improvement Program (TIP): a prioritized listing/program of transportation projects covering a period of four (4) years that is developed and formally adopted by an MPO or MPOs as part of the metropolitan transportation planning process for the MPA (Metropolitan Planning Area), consistent with the Metropolitan Transportation Plan (Vision 2040: Roanoke Valley Transportation), and required for projects to be eligible for funding under title 23 U.S.C. and title 49 U.S.C. chapter 53. Essentially, the TIP is a document that identifies how federal funds will be used for transportation projects in the Roanoke Valley's urbanized area over a four-year timeframe.

The Roanoke Valley Area Metropolitan Planning Organization (MPO) is an organization required to exist by federal law (§23 CFR Part 450, §49 CFR Part 613), which mandates that urbanized areas with a population greater than 50,000 persons establish an MPO to facilitate transportation planning. Following the adoption of the FY2015-18 TIP in 2014, the MPO Policy Board voted to change its name to the Roanoke Valley Transportation Planning Organization (RVTPO). The Roanoke Valley TPO area includes the urbanized portions of Bedford, Botetourt, Montgomery and Roanoke Counties, as well as the Cities of Roanoke and Salem, and the Town of Vinton. Staff at the RVTPO developed this TIP for the MPO area which includes the 2010 Census urbanized area as well as the area projected to be urbanized by 2040 as shown in the following map.



On December 4, 2015, the Fixing America's Surface Transportation Act or FAST Act was signed into law. This is the first legislation in over decade that provides long-term funding for federal transportation projects. As a part of the new legislation, 23 U.S.C. 134(k)(3), the FAST Act clarifies development of a Congestion



Management Process Plan (CMPP) for Transportation Management Area (TMA) MPOs. The RVTPO adopted its first CMPP as a TMA in 2014 and projects in this TIP reflect:

1. CMPP regional goals for reducing peak hour vehicle miles traveled and improvement of transportation connections;
2. Identification of existing services and programs that support access to jobs in the region; and
3. Identification of proposed projects and programs to reduce congestion and increase job access opportunities.

Continuing with previous transportation legislation, the FY18-21 TIP accommodates for facilities that enable for the development and integrated management and operation of transportation systems and facilities (including accessible pedestrian walkways and bicycle transportation facilities) that will function as an intermodal transportation system for the metropolitan planning area. The City of Roanoke and Roanoke County both have adopted Complete Streets policies which address the interconnectivity of modes. Additionally, the Roanoke River Greenway Master Plan, which is currently being updated, will address intermodality.

The RVTPO TIP was developed in cooperation with the Virginia Department of Transportation, the Virginia Department of Rail and Public Transportation, local public transportation operators, and the local governments within the urbanized area. These officials, through the Metropolitan Planning Process, select and schedule projects that they support for endorsement in the TIP. The Transportation Improvement Program may be modified by amendments and adjustments at any time though at a minimum it is typically amended/adjusted in the summer months following the Commonwealth Transportation Board's approval of the Six-Year Improvement Program (SYIP).



2.0 Public and Stakeholder Involvement

In accordance with the TPO's Public Involvement Policy, the public has been afforded several opportunities to comment upon the development of the TIP. Those opportunities are listed below:

1. Electronic access and updates to the Draft FY2018-2021 TIP through the RVTPO website at www.rvarc.org and www.rvtpo.org, and hard copies at the Roanoke Valley-Alleghany Regional Commission offices at 313 Luck Avenue, SW, Roanoke, VA 24016;
2. A 45-day comment period (ending March 24, 2017) where the public can submit comments on the Draft FY 2018-21 TIP via e-mail, online comment form, regular mail, telephone and facsimile; and
3. Newspaper advertisements in the Roanoke Times and Roanoke Tribune, notifying the public of a public hearing on the adoption of the TIP on Thursday, April 27, 2017.



The Comprehensive, Continuing, Cooperative, or “3C” Process of the TPO, provides a natural mechanism by which the TIP can be carefully reviewed and updated annually. Annual development of this program helps to clarify future needs, allow revisions to accommodate changing conditions, and allow developing local and regional plans to be continually incorporated.

The TPO's Transportation Technical Committee (TTC) is made up of representatives from local, state, and federal agencies. The TTC provides the professional expertise necessary to derive a plan and ensure that all local and regional interests are considered. Once the program is developed, the TPO Policy Board reviews and approves the program according to policies adopted by its member organizations. With few exceptions, any proposed transportation project should be included in the TIP to be considered eligible for federal funding. All phases of a project including preliminary engineering, right-of-way acquisitions, and construction should be documented in the TIP.



3.0 Understanding the TIP

The Transportation Improvement Program identifies capital and operating projects anticipated to receive federal funding over a four-year period during federal fiscal years 2018 through 2021 (October 1, 2018 to September 30, 2021). Projects that are funded only through state or local sources are not included. Once approved, the TIP is incorporated into the State Transportation Improvement Program (STIP).

Some projects in the TIP are identified as individual projects whereas others are grouped together and shown as a single item. Projects are summarized by locality in Sections 6.0 and 7.0 and listed independently in Appendix A, Grouped Projects and Appendix B, Ungrouped Projects. In Appendix A, the tables entitled “Project Groupings” contains aggregated funding information for projects within a similar funding category such as bridge construction, rail, safety improvements, trails, and operations. The diagram below explains the type of detailed information provided for individually listed projects in Appendix B.

Diagram of Transit Project Information

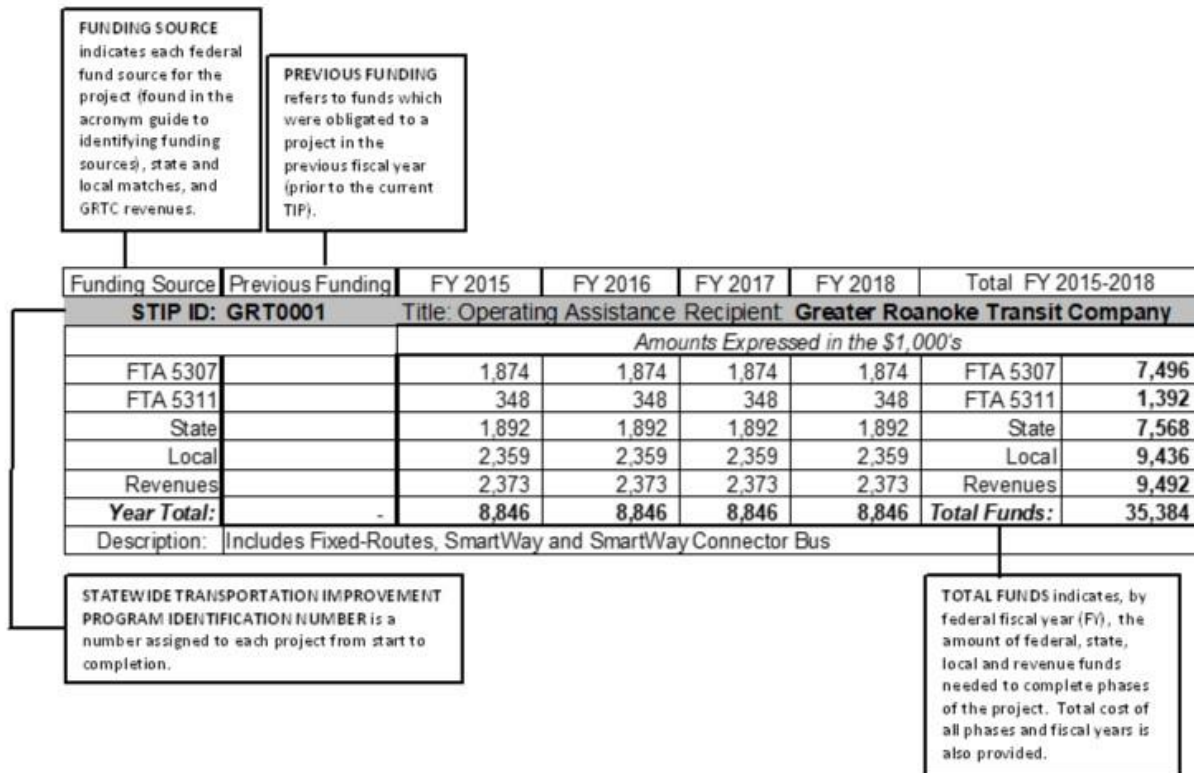


Diagram of Highway Project Information

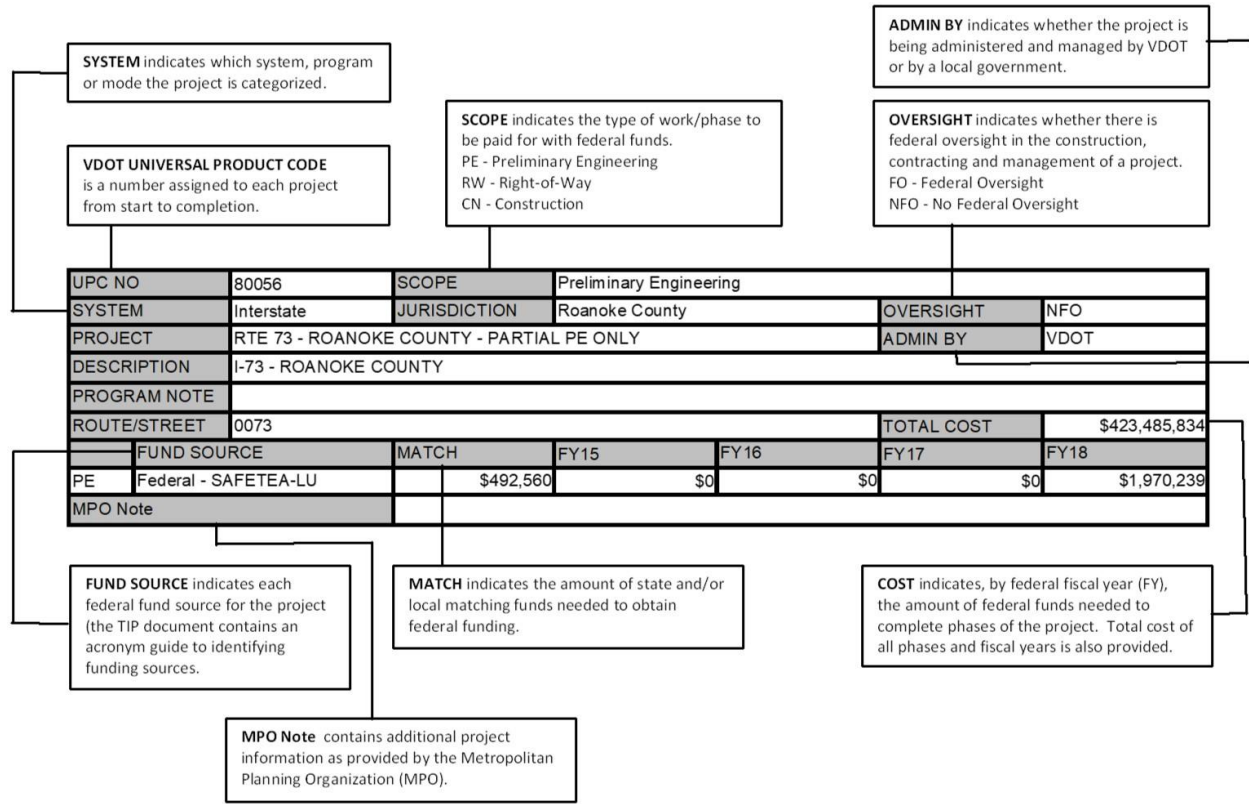


Table 1: Project System

System	Description
Interstate	The Interstate System contains projects identified as being part of the limited-access system of highways that carry route designations such as I-81 and I-64.
Primary Roads	The Primary System contains projects located along major roadways which carry a route designation of less than 600. Projects listed in this category are primarily located within counties and are listed in numerical order by route number without regard to jurisdiction.
Secondary Roads	The Secondary System contains projects located along minor roadways which carry a route designation of 600 or greater. Projects listed in this category are primarily located within counties and are listed in numerical order by route number without regard to jurisdiction.
Urban Roads	The Urban System contains projects located within cities and towns. Projects are organized by jurisdiction and listed by street name.
Miscellaneous	Miscellaneous Projects are regional in nature and are not associated with one of the previous Systems.
Rail Safety	Rail safety projects include those related to safety such as gates, flashing lights, etc. at railroad crossings.
Transportation Enhancement	Transportation enhancement projects include improvements to safety and aesthetics.
Public Transit Projects	The Public Transit section contains the operating and capital funding for Valley Metro and RADAR, the two public transit operators in the TPO area.



4.0 Funding the TIP

§23 CFR 450.324(h) specifies the inclusion of a financial plan in the TIP that shows how the identified projects or project phases can reasonably be expected to be implemented, with the available public and private revenues. TIP projects or project phases are required to be consistent with the LRTP and must be fully funded in the TIP. To the extent that funding is available or shall be reasonably available, priority projects or project phases have been cooperatively selected for inclusion in this TIP. VDOT, DRPT, Valley Metro, RADAR and the TPO developed financial forecasts for the TIP based on the latest official planning assumptions and estimates of revenues and costs. The financial information is given by funding category for the projects listed and expected to be implemented during the four-year period beginning Fiscal Year 2018.

4.1 Funding Sources

The TIP funding summary tables (Table 2) summarize by year and by funding source the revenue amounts estimated and committed for fiscal years 2018-2021. The table includes expenditures and estimated revenues expected for each funding source and show that the program is financially constrained by year. The financial summary tables are based on total funds available, which include annual allocations of funds including any State and local matching dollars. These revenue sources are all reasonably expected to be made available and committed to the project phase during the programmed year of the TIP.



Table 2: RVTPO Federal Funding Categories and Fiscal Constraint by Year – FFY2018-2021

Fund Source	FFY 2018		FFY 2019		FFY 2020		FFY 2021		TOTAL	
	Projected Obligation Authority	Planned Obligation	Projected Obligation Authority	Planned Obligation	Projected Obligation Authority	Planned Obligation	Projected Obligation Authority	Planned Obligation	Projected Obligation Authority	Planned Obligation
Federal										
BR/BROS	\$1,872,457	\$1,872,457	\$0	\$0	\$0	\$0	\$487,340	\$487,340	\$2,359,797	\$2,359,797
NHFP	\$257,530	\$257,530	\$0	\$0	\$0	\$0	\$0	\$0	\$257,530	\$257,530
NHS/NHPP	\$12,974,104	\$12,974,104	\$441,710	\$441,710	\$2,143,415	\$2,143,415	\$0	\$0	\$15,559,229	\$15,559,229
RSTP (2)	\$2,530,374	\$2,530,374	\$0	\$0	\$0	\$0	\$0	\$0	\$2,530,374	\$2,530,374
STP/STBG	\$1,035,901	\$1,035,901	\$150,000	\$150,000	\$850,000	\$850,000	\$4,400,000	\$4,400,000	\$6,435,901	\$6,435,901
TAP	\$1,192,664	\$1,192,664	\$331,310	\$331,310	\$0	\$0	\$0	\$0	\$1,523,974	\$1,523,974
Subtotal -- Federal	\$19,863,030	\$19,863,030	\$923,020	\$923,020	\$2,993,415	\$2,993,415	\$4,887,340	\$4,887,340	\$28,666,805	\$28,666,805
Other										
Non-Federal	\$1,169,376	\$1,169,376	\$0	\$0	\$369,117	\$369,117	\$1,271,503	\$1,271,503	\$2,809,996	\$2,809,996
State Match	\$3,697,129	\$3,697,129	\$188,672	\$188,672	\$381,944	\$381,944	\$610,724	\$610,724	\$4,878,469	\$4,878,469
Subtotal -- Other	\$4,866,505	\$4,866,505	\$188,672	\$188,672	\$751,061	\$751,061	\$1,882,227	\$1,882,227	\$7,688,465	\$7,688,465
Total	\$24,729,535	\$24,729,535	\$1,111,692	\$1,111,692	\$3,744,476	\$3,744,476	\$6,769,567	\$6,769,567	\$36,355,270	\$36,355,270
Federal - ACC (1)										
HSIP	\$0	\$0	\$900,000	\$900,000	\$370,000	\$370,000	\$1,000,000	\$1,000,000	\$2,270,000	\$2,270,000
BR	\$0	\$0	\$1,327,167	\$1,327,167	\$0	\$0	\$0	\$0	\$1,327,167	\$1,327,167
NHS/NHPP	\$582,888	\$582,888	\$2,033,768	\$2,033,768	\$0	\$0	\$2,378,558	\$2,378,558	\$4,995,214	\$4,995,214
Subtotal -- Federal - ACC (1)	\$582,888	\$582,888	\$4,260,935	\$4,260,935	\$370,000	\$370,000	\$3,378,558	\$3,378,558	\$8,592,381	\$8,592,381
Statewide - Federal (4)										
NHFP	\$2,000,000	\$2,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$2,000,000
Subtotal -- Statewide - Federal (4)	\$2,000,000	\$2,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$2,000,000
Maintenance - Federal (5)										
BR/BROS	\$1,753,772	\$1,753,772	\$1,542,166	\$1,542,166	\$1,953,236	\$1,953,236	\$1,961,089	\$1,961,089	\$7,210,263	\$7,210,263
STP/STBG	\$16,242,411	\$16,242,411	\$14,282,643	\$14,282,643	\$18,089,729	\$18,089,729	\$18,162,463	\$18,162,463	\$66,777,246	\$66,777,246
Subtotal -- Maintenance - Federal (5)	\$17,996,183	\$17,996,183	\$15,824,809	\$15,824,809	\$20,042,965	\$20,042,965	\$20,123,552	\$20,123,552	\$73,987,509	\$73,987,509

- (1) ACC -- Advance Construction -- Funding Included in Federal Category based on year of AC Conversion.
- (2) CMAQ/RSTP includes funds for TRANSIT projects.
- (3) Multiple MPO Category - Funding to be obligated in Multiple MPO Regions.
- (4) Statewide Category - Funding to be obligated Statewide for projects as identified.



The following information provides an overview of the most common funding programs utilized in the development of the TIP.

Transit Funding Programs:

Section 5307

Federal Transit Administration formula grants for transit capital and operating assistance in urbanized areas.

Section 5310

Federal Transit Administration funds for private and non-profit organizations providing mass transportation services for the elderly and disabled.

Section 5311

Federal Transit Administration formula grants providing funding for public transit in non-urbanized areas with a population under 50,000.

Section 5314

Federal Transit Administration funds for research and demonstration programs to study, design, and demonstrate transit policies and advanced technologies.

Section 5339

Federal Transit Administration capital funding to replace, rehabilitate and purchase buses, vans and related equipment, and to construct bus-related facilities.

CMAQ

Federal Highway Administration Congestion Management Air Quality (CMAQ) funds provide a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas).

Flexible STP

Federal Highway Administration Surface Transportation Program (STP) funds provide flexible funding that may be used by States and localities for projects on any Federal-aid highway, bridge projects on any public road, transit capital projects, and bus terminals and facilities.

JARC

Federal Transit Administration funds for Job Access and Reverse Commute grants to provide low-income individuals job access transportation (Section 5316).

New Freedom

Federal Transit Administration funds for providing new public transportation services to overcome existing barriers facing Americans with disabilities seeking integration into the workforce and full participation into society.



SMART SCALE

The System Management and Allocation of Resources for Transportation: Safety, Congestion, Accessibility, Land Use Coordination, Environment, Economic Development (SMART SCALE) is a competitive grant program whereby localities, PDCs, MPOs, and transit providers apply for transportation projects which will be fully funded in the Six-Year Improvement Program. Applications are scored based on the six above listed factors.

STBG

Surface Transportation Block Grant Program (STBG, formerly RSTP) the Surface Transportation Program (STP) provides federal funding that may be used by states and localities for a wide range of highway and transit projects. STBG funds are STP funds that are apportioned to specific regions within a state. The Roanoke Valley Area TPO Policy Board is responsible for scoring and awarding STBG funds for RVTPO candidate projects.

Highway Funding Programs:

Advance Construction funds (AC) Advance construction can be used to fund emergency relief efforts and for any project listed in the Statewide TIP, including surface transportation, interstate, bridge, and safety projects. As with any Federal-aid project, to remain eligible for reimbursement, the agency must be able to meet project funding requirements to complete the project and follow all other Federal requirements as the project advances.

AC Conversion refers to the repayment of Advance Construction Funds.

ARRA

American Recovery and Reinvestment Act of 2009 provides federal funds to invest in transportation and other infrastructure projects that will provide long-term economic benefits, preserving and creating jobs and promoting economic recovery.

BR/BROS

Bridge Rehabilitation and Replacement program provides funding for bridge improvements. Eligibility for funding is based on a rating of bridge condition by VDOT as a candidate for upgrading.

DEMO

Federal Demonstration funds are included in federal transportation acts include demonstration, priority, pilot, or special interest projects in various Federal-aid highway and appropriations acts. These projects are generically referred to as "demonstration" or "demo" projects, because Congress initiated this practice of providing special funding for these projects to demonstrate some new or innovative construction, financing, or other techniques on specific projects.

EB/MG

The **Equity Bonus** (formerly known as **Minimum Guarantee**) ensures that each State receives a specific share of the aggregate funding for major highway programs (Interstate Maintenance, National Highway System, Bridge, Surface Transportation Program, Highway Safety Improvement Program, Congestion Mitigation and Air Quality Improvement, Metropolitan Planning, Appalachian Development Highway System,



Recreational Trails, Safe Routes to School, Rail-Highway Grade Crossing, Coordinated Border Infrastructure programs, and Equity Bonus itself, along with High Priority Projects), with every State guaranteed at least a specified percentage of that State's share of contributions to the Highway Account of the Highway Trust Fund.

EN

Transportation Enhancement funds are now known as the **Transportation Alternatives Program** (see below).

HES

Hazard Elimination funds are contingent upon VDOT conducting and maintaining engineering surveys of all public roads to identify hazardous locations, sections, and elements, which may constitute a danger to motorists, bicyclists. VDOT may also develop and implement projects and programs to address the hazards. Federal funds are available for expenditure on: any public road; any public surface transportation facility or any publicly owned bicycle or pedestrian pathway or trail; or any traffic calming measure.

HPD

Highway Priority Demonstration TEA-21 High Priority Funds are federal funds made available to carry out high priority projects as set forth in the Transportation Efficiency Act for the 21st Century (TEA-21) legislation.

HSIP

Highway Safety Improvement Program (HSIP) is a data-driven, strategic approach program for infrastructure improvements for all highway travel modes. Emphasis is placed on strategies and actions with expected performance outcomes as documented in Virginia's Strategic Highway Safety Plan. There are three components to Virginia's HSIP program: 1) Highway Safety Program, 2) Bicycle and Pedestrian Safety Program, and 3) Highway-Rail Grade Crossing Safety Program.

IM

Interstate Maintenance (IM) program provides reconstruction, maintenance, and improvements to the National System of Interstate and Defense Highways. The Commonwealth Transportation Board (CTB) administers these programs.

NHPP

National Highway Performance Program (NHPP) provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in VDOT's asset management plan for the NHS.

NHS

National Highway System (NHS) projects can be funded only if they are on the National Highway System, which is established by Congress.

Non-Federal

Any funding that does not come from federal sources is grouped into the non-federal funding category.



STBG

Surface Transportation Block Grant Program (STBG, formerly RSTP) the Surface Transportation Program (STP) provides federal funding that may be used by states and localities for a wide range of highway and transit projects. RSTP funds are STP funds that are apportioned to specific regions within a state. The Roanoke Valley TPO Policy Board is responsible for scoring and awarding STBG funds for RVTPO candidate projects.

SAFETEA-LU

The Safe Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) is the federal transportation bill that provides federal transportation funding to each state. The SAFETEA-LU funding category refers to funding earmarks that Congress included in the legislation for specific projects. This funding can only be used for the project(s) for which it is earmarked.

SMART SCALE

The System Management and Allocation of Resources for Transportation (Safety, Congestion, Accessibility, Land Use Coordination, Environment, Economic Development) is a competitive grant program whereby localities, PDCs, MPOs, and transit providers apply for transportation projects which will be fully funded in the Six-Year Improvement Program. Applications are scored based on the six above listed factors.

STP

Surface Transportation Program (STP) can be utilized on any project located on a roadway that is classified higher than a minor collector. Projects eligible for funding under this program include construction, reconstruction, and rehabilitation, and bridge projects on any public road. Local STP funds are designated as L-STP.

SRTS

Safe Routes to School is a competitive grant program to enable and encourage children to safely walk and bicycle to school. Funds can be used for infrastructure improvements and educational programs.

TAP

Transportation Alternatives Set-Aside Program funds have been made available for bicycle and pedestrian facilities through MAP-21. The Transportation Alternatives Program redefines the former Transportation Enhancement (TE) Program and consolidates these eligibilities with the Safe Routes to School and Recreational Trails program eligibilities. The program is intended to help local sponsors fund community-based projects that expand travel choices and enhance the transportation experience by improving the cultural, historical and environmental aspects of the transportation infrastructure. The program does not fund traditional roadway projects or provide maintenance for these facilities. Instead it focuses on providing for pedestrian and bicycle facilities, community improvements and mitigating the negative impacts of the highway system. Projects with EN have previous Transportation Enhancement funds attached to them.



The following table lists the acronyms for all potential funding sources.

Table 3: Acronyms for Funding Sources

AC	Advance Construction	ID	Interstate Discretionary
APD	Appalachian Development	IM	Interstate Maintenance
AD	Defense Access	IMG	Interstate Maintenance Grade Crossing
BOND	Bond Issue	IR	Interstate 4R
BR	Bridge Replacement	IX	Interstate Substitution
BROS	Bridge (off federal system)	M	Urbanized
BH	Bridge Rehabilitation	MG	Minimum Guarantee
CM	Congestion Mitigation & Air Quality	MR	Maintenance Replacement
DEMO	Demonstration	NH	National Highway
EB	Equity Bonus	OC	Open Container
EN	Enhancement	RO	Repeat Offender
F	Consolidated Primary	S	State
FR	Federal Reimbursement Grant Repayment	SRTS	Safe Routes to School
FHW A	Federal Highway Administration	STP	Surface Transportation Program
FTA	Federal Transit Administration	TB	Timber Bridge
HES	Hazard Elimination	TFR A	Toll Facilities Revolving Account
HPD	Highway Priority Demonstration	RRP	Rail Highway Protective Devices
HSIP	Highway Safety Improvement Program	RRS	Rail Highway Grade Separation
I	Interstate	VTA	Virginia Transportation Act of 2000

4.2 Project Allocations vs. Project Obligations

Often there is confusion surrounding the different funding states for projects in the TIP. Regarding the highway portion of the TIP, once a project is placed into the VDOT Six-Year Improvement Plan (SYIP) it must have funds allocated to it. Project allocations are the funds available each fiscal year as identified in VDOT's budget and SYIP. Allocation amounts include federal funds, state funds, and local/state matching funds. Funds are allocated for Preliminary Engineering (PE), Right-of-Way Acquisition (ROW) and Construction (CN).



VDOT Virginia Department of Transportation **Six-Year Improvement Program**

Fund Sources	Required Allocations						Required After FY2020
	Preliminary Engineering	FY2015	FY2016	FY2017	FY2018	FY2019	
Bond Match: State Bond Match	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bridge Replacement: Federal	\$37	\$0	\$0	\$0	\$0	\$0	\$0
Bridge Replacement: Federal	\$1,064	\$0	\$0	\$0	\$0	\$0	\$0
Districtwide: Federal	\$94	\$0	\$0	\$0	\$0	\$0	\$0
Soft Match: Federal	\$206	\$0	\$0	\$0	\$0	\$0	\$0
STP: Bridge - Federal	\$0	\$1,446	\$920	\$295	\$3,303	\$0	\$0
STP: Bridge - Soft Match	\$0	\$362	\$230	\$71	\$626	\$0	\$0
Total Funding	\$1,471	\$1,808	\$1,150	\$366	\$4,128	\$0	\$0

An obligation is the Federal government's legal commitment to pay the Federal share of a project's cost. An obligated project is one that has been authorized by the Federal agency and for which funds have been committed. Projects for which funds have been obligated are not necessarily initiated or completed during the program year, and the amount of the obligation will not necessarily equal the total cost of the project.



For projects under the auspices of the FTA, obligation occurs when the FTA grant is awarded. For projects under the auspices of the FHWA, obligation occurs when a project agreement is executed and the State/grantee requests that the funds be obligated.

A good way to think of obligations is setting up a checking account for a specific purpose and then making an initial deposit. In order to begin work on any phase of a transportation project, federal funds must be obligated. This means that the money is set aside for that particular piece of work, and then can be used to pay bills. The project expenses may be bills from a design consultant, a construction contractor, or payroll costs for Virginia Department of Transportation (VDOT) employees working on the project.

An obligation removed from a project, or released, is usually the result of a decrease in the cost estimate, a project awarded for a lesser amount than originally authorized at advertisement, or an FHWA Financial Integrity Review and Evaluation (FIRE) project level review.

Project schedules often change as a result of personnel or consultant availability for design activities, or changes in budget resource availability. Thus, the TIP does not always yield an up-to-date picture of actual project expenditures. To ensure that the public will have an accurate understanding of how federal funds are being spent on transportation projects, Congress included in the 2012 Moving Ahead for Progress in the 21st Century Act (MAP-21), a requirement that the organizations responsible for approving the TIP publish an Annual Listing of Transportation Project Obligations.

4.3 Do Project Obligations Mean the Work is Underway?

This is not always the case. Project accounts are set up, particularly for the initial phases of a project, to enable the work. It may take a while, for example, to select and hire a design consultant and then actually begin work.

Some projects listed in the TIP may show \$0 for planned obligations. There are several reasons this may occur and include:

- The project is complete and awaiting closeout
- Subsequent project phases are beyond the four-year TIP cycle
- Informational purposes only, funding being pursued
- The project is to be funded from [category] group funding

Roanoke MPO Study Area Federal Obligated Funds: 10/01/2012 - 9/30/2013											
Funding Source / Amount											
UPC	Project Description	NHPP	M/IN	STP	EB/MG	CMAQ	BROS	DEMO	SAFE	ARRA	TOTAL
Botetourt County											
Interstate											
5 6188	I-81 - WIDEN NBL & SBL BRIDGE - 0.44 MILE SOUTH OF EXIT 162; EXIT 162 (0.2700 MI)										
	TIP:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Obligated:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Released:	\$0	(\$11,962)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$11,962)
	Remaining:										-
7 5810	I-81 - IMPROVEMENTS FOR SAFETY & CONGESTION AT EXIT 150 - 0.15 MILE NORTH ROUTE										
	1636 (AT NS RR); ROUTE 653 @ 6666 MI)										
	TIP:	\$0	\$88,476	\$0	\$0	\$0	\$0	\$0	\$6,788,795	\$0	\$8,877,771
	Obligated:	\$0	\$3,780,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,780,000
	Remaining:										\$5,097,771



In addition to construction projects, financial projections have also been made to show revenues for maintaining and operating the region’s highway and transit systems during the same 4-year period. Funded TIP actions typically include, but are not limited to:

- Transportation studies
- Ground transportation system improvement projects (fixed-guide, highway, bicycle, pedestrian, commuter lots, etc)
- Public transit systems and services, including the components of coordinated human service mobility plans
- System maintenance (monitoring, repair and/or replacement of system facilities and support sites; snow removal; mowing; painting; rest area or weigh station sites; etc)
- System operations (ITS-TSM applications; traffic operations such as signalization, signal coordination, ramp meters, or message signs; roadside assistance; incident management; for the urbanized TMAs, their Congestion Management Process activities; VDOT traffic management centers; bridge-tunnel management; toll road or congestion pricing management; etc)

4.4 Financial Assumptions

The TIP financial plan is federally required to include only committed and/or reasonably available transportation funding sources. The estimates on funding sources and costs are based on reasonable financial principles and recent information. The financial estimates for both revenues and costs are given in year of expenditure dollars and reflect growth and inflation factors. VDOT costs estimates are from the VDOT Project Cost Estimating System. For projects not administered by the state, cost estimates are developed cooperatively through the TPO or responsible local government. Maintenance and construction program financial planning assumptions used for the FY 2018 – FY 2021 TIP are consistent with assumptions and distribution methodologies used for Vision 2040: Roanoke Valley Transportation.

4.5 Metropolitan Project Selection Overview

In metropolitan planning areas, transportation projects selected for federal funding in the TIP must be consistent with the approved Metropolitan Transportation Plan (Vision 2040: Roanoke Valley Transportation). All projects which are regionally significant (serving regional transportation needs), must be contained within the MTP. In addition, the State Transportation Improvement Program (STIP) submitted by the Commonwealth Transportation Board (CTB) to FTA and FHWA must be consistent with all the metropolitan TIPs.

Within this regulatory framework of metropolitan cooperation, the CTB has lead responsibility for selecting and programming federally funded Interstate Maintenance, Bridge, National Highway System, Statewide (non-metropolitan) STP, Safety, Enhancement, and certain FTA Section 5310 projects. Local governments have lead responsibility for selecting projects within the urban and secondary roadway systems. The CTB adopts the Six-Year Program on an annual basis. The Six-Year Program (SYP) includes the Six-Year Improvement Program (SYIP) and the Secondary Six-Year Program (SSYP). These programs are developed by evaluation of existing and future needs based upon statewide and regional plans and projections, priorities for implementation of the transportation plan, and public comment on transportation priorities. Projects listed in the Six-Year Program are updated to reflect the latest revenue estimates, project costs, changes in priorities, and federal and state laws. Criteria used in selecting proposed projects and in developing project priorities include:



- Conformance to the TPO adopted transportation plan and study area local governments/agencies plans and programs;
- MAP-21 planning factors:
 - Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
 - Increase the safety of the transportation system for motorized and non-motorized users;
 - Increase the security of the transportation system for motorized and non-motorized users;
 - Increase accessibility and mobility of people and freight;
 - Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
 - Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
 - Promote efficient system management and operation;
 - Emphasize the preservation of the existing transportation system;
 - Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
 - Enhance travel and tourism.
- Provision of funding for previously programmed projects in need of additional funds; and
- Comments received as part of the TPO Public Involvement Process

4.6 FY 2018-2021 Transportation Improvement Plan Timeline

The following are action items resulting in the adoption of the RVTPO TIP:

- Fall 2016 - Public meetings began in all nine VDOT Construction Districts and local administrators, legislators and citizens provided comments on the upcoming Six-Year Improvement Plan (of which TIP projects must be included).
- Fall 2016/Winter 2017 - Localities (staffs and governing bodies), transit providers, VDOT and VDRPT staffs discuss project priorities for potential inclusion in the TIP.
- January 2017 - The RVTPO Transportation Technical Committee (TTC) has a first review and comment of the draft TIP on January 11.
- April 13, 2017 - The TTC performs a final review and recommendation on the draft TIP.
- April 27, 2017 – The RVTPO Policy Board reviews the draft TIP and adopts it at its April 2017 meeting.



5.0 Performance Measures Targets

Beginning in 2018, and pursuant to 23 CFR §450.306(d)(2), each MPO shall establish performance targets that address the performance measures or standards established under 23 CFR part 490 to use in tracking progress toward attainment of critical outcomes for the MPO region.

Beginning in the fall of 2017, the RVTPO has coordinated with VDOT, DRPT, the Federal Highway Administration and the Federal Transit Administration to set and adopt performance measure targets. The target establishment dates vary based on the effective date of the federal Final Rule, the establishment of state targets by VDOT (no later than one year following effective date of Final Rule), and the development or acceptance of VDOT targets by the MPO (no later than 180 days after VDOT target is set).

The table below shows the timeline of target rollout.

Table 4: Performance Measure

Rule and Effective Date(s)	Performance Measures
Highway Safety Final Rule published 1/15/16. Effective date 1/14/16. RVTPO adopted PM targets 1/25/18.	1. Number of fatalities 2. Fatality rate (per 100 million VMT) 3. Number of serious injuries 4. Serious injury rate (per 100 million VMT) 5. Number of non-motorized fatalities and serious injuries.
Highway Infrastructure Condition Final Rule published 1/18/17. Effective date 5/20/17. RVTPO adopted PM targets 10/25/18.	1. % of pavements on the Interstate system in good condition 2. % of pavements on the Interstate system in poor condition 3. % of pavements on the non-Interstate NHS in good condition 4. % of pavements on the non-Interstate NHS in poor condition 5. % of NHS bridges classified as in good condition 6. % of NHS bridges classified as in poor condition
Highway System Performance Final Rule published 1/18/17. Effective date 5/20/17. RVTPO adopted PM targets 10/25/18.	1. % of person miles traveled on the Interstate system that are reliable 2. % of person miles traveled on the non-Interstate NHS that are reliable 3. % of Interstate system mileage providing for reliable truck travel times (Truck Travel Time Reliability)
Transit Asset Management Final Rule published 7/26/16. Effective date 10/1/16. RVTPO adopted PM targets 10/25/18.	1. % of revenue vehicles that have met or exceeded their useful life benchmark 2. % of non-revenue vehicles that have met or exceeded their useful life benchmark 3. Percentage of track segments with performance restrictions 4. Percentage of facilities rated in poor condition

Regarding the new performance measures targets and their relationship to the TIP, and pursuant to 23 CFR §450.326(c) and (d):

(c) The TIP shall be designed such that once implemented, it makes progress toward achieving the performance targets established under §450.306(d).



(d) The TIP shall include, to the maximum extent practicable, a description of the anticipated effect of the TIP toward achieving the performance targets identified in the metropolitan transportation plan, linking investment priorities to those performance targets.

The Highway Safety Performance Measures and Targets were adopted on June 28, 2018 in Amendment #2 to the FY18-21 TIP. Future amendments to the TIP will be made according to the established federal timelines. Concurrent amendments to the 2040 Constrained Long-Range Multimodal Transportation Plan (CLRMTMP) have and will be made to describe, in detail, performance measures and targets and to provide a system performance report current to the time of most recent CLRMTMP adoption.

5.1 Highway Safety

The Virginia 2017-2021 Strategic Highway Safety Plan (SHSP) provides a comprehensive framework for Virginia stakeholders to address transportation-related crashes. The vision for the plan is for every road user, whether driving, walking, bicycling, or taking transit, to “Arrive Alive” at their destination. The Virginia Department of Transportation and other state safety stakeholders will accomplish this by addressing the most pressing safety issues, through a combination of safety programs and projects. Within the CLRMTMP and other short- and long-range transportation planning and programming activities, the RVTPO can apply information from the SHSP and the results of regional crash analysis to support investments that render regional and local travel safer and ultimately contribute to the “Arrive Alive” vision.

The Virginia SHSP is a data-driven plan which establishes a framework of emphasis areas, strategies, and actions to guide stakeholders toward the implementation of effective programs and projects. Key factors contributing to crashes are impaired driving, speed, occupant protection, roadway departures, intersections, young drivers, bicycles, and pedestrians. Each of these emphasis areas is supported by a range of multi-disciplinary (engineering, enforcement, education, and emergency response) strategies and actions to characterize effective solutions.

Federal legislation in 23 CFR §450.306(d)(2) requires the RVTPO to adopt or define five evidence-based safety performance measures and accompanying targets. The purpose of the targets is to help VDOT, and regional planning agencies, including the RVTPO, prioritize programs and projects that will reduce transportation-related fatalities and serious injuries. On January 25, 2018, the RVTPO adopted VDOT’s five-year performance targets for the following five performance measures:

Performance Measure	2011-2015 Performance	Target Reduction	2013-2017 Target
Number of fatalities, 5-year rolling average	16	2% reduction	15
Rate of fatalities, 5-year rolling average	0.84	1.25% reduction	0.79
Number of serious injuries, 5-year rolling average	215	5% reduction	144
Rate of serious injuries, 5-year rolling average	11.17	11.5% reduction	7.47
Number of non-motorized fatalities and non-motorized serious injuries, 5-year rolling average	18	4% reduction	16

Strategies to meet safety performance measure targets are built into funding programs that utilize federal funds. Such programs include the Highway Safety Improvement Program (HSIP), System Management and Allocation of Resources for Transportation Safety Congestion Accessibility Land Use Economic



Development Environment (SMART SCALE), and the Regional Surface Transportation Program (RSTP). The RVTPO and its member localities coordinate with the VDOT Salem District to identify improvements eligible for funding through HSIP. This includes corridor-specific and district-wide investments to deploy roadway departure countermeasures (signs, flashers, lighting, rumble strips) and traffic signal upgrades.

Virginia's SMART SCALE prioritization program awards points to projects for estimated reductions in fatality and serious injury crashes. When allocating RSTP funds, the RVTPO awards points to projects that increase safety and security of the transportation system. In addition, the VDOT Construction Districts also have the flexibility to address safety considerations, such as rumble strips or striping in coordination with resurfacing projects.

5.2 Highway Infrastructure Condition

5.3 Highway System Performance

5.4 Transit Asset Management

The two most recent federal transportation laws, MAP-21 and FAST Act, establish performance measure requirements to ensure states and metropolitan planning organizations (MPOs) are investing transportation funds in projects that collectively will contribute towards the achievement of national goals. The USDOT recently published new rules for states and MPOs to collect data and establish performance targets that will support performance and outcome-based investment decisions.

The new federal performance measurement requirement for transit agencies focuses on one area: transit asset management (TAM). The measures look specifically at the percentage of revenue vehicles that have exceeded their Useful Life Benchmark (ULB), the percentage of non-revenue and service vehicles that have exceeded their ULB, and percentage of facilities with a condition below 3.0 on the Federal Transit Administrator's Transit Economic Requirements Model (TERM) Scale. All transit agencies receiving grants from the FTA are required to complete a TAM plan. The FTA has established two tiers of agencies based on size parameters.

- A Tier I agency operates rail OR has 101 vehicles or more in all fixed route modes OR has 101 vehicles or more in one non-fixed route mode.
- A Tier II agency is a subrecipient of FTA 5311 funds, OR is an American Indian Tribe, OR has 100 or less vehicles across all fixed route modes OR has 100 vehicles or less in one non-fixed route mode.

The first completed TAM plan must be sent to the National Transit Database (NTD) by October 1, 2018. Other required deadlines are found in the following table.



Reporting Activity	Reporting Deadline
Complete compliant TAM Plan	October 2018
Report FY18 asset data to NTD Submit FY19 targets to NTD	October 2018
Report FY19 asset data to NTD Submit FY20 targets to NTD Submit narrative report to NTD	October 2019
Report FY20 asset data to NTD Submit FY21 targets to NTD Submit narrative report to NTD	October 2020
Complete updated TAM Plan	October 2022

The Department of Rail and Public Transportation (DRPT) has opted to sponsor a group TAM plan for Tier II providers. Tier I providers are not eligible for group plans.

For Tier II providers under the DRPT Group Plan, any Transportation Improvement Program (TIP) document or Metropolitan Transportation Plan (MTP) adopted after October 1, 2018 will comply with the TAM Plans developed by DRPT and adopted by the Tier II transit providers within the MPO as well as the regional performance measures adopted by the MPO as a whole. The performance measurements and the targets can be found in the DRPT *Group Transit Asset Management Plan*.

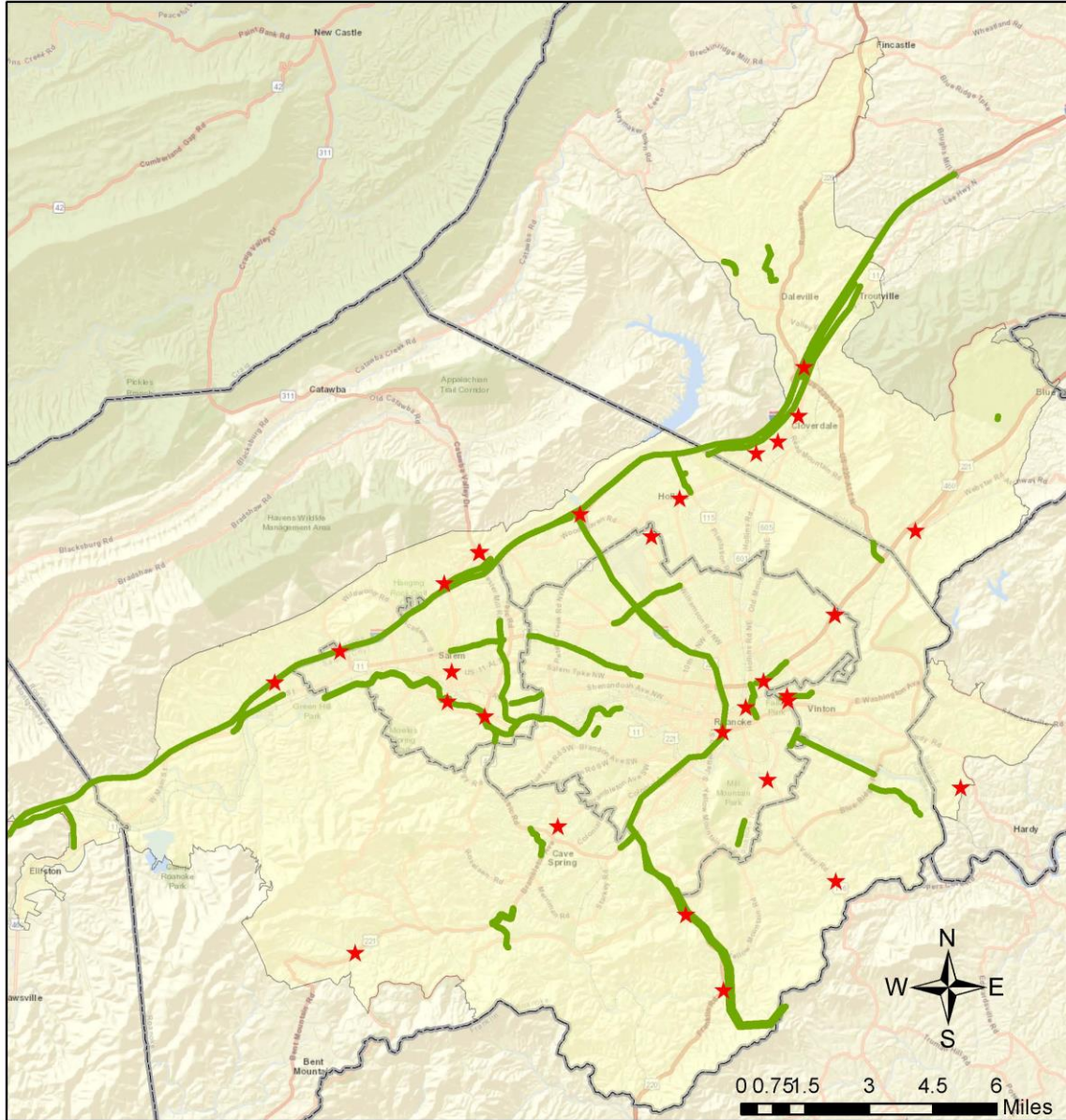
Asset Category - Performance Measure	Asset Class	2018 Target	2019 Target
Revenue Vehicles			
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	AB - Articulated Bus	20%	15%
	BU - Bus	10%	10%
	CU - Cutaway	10%	10%
	MB - Minibus	25%	20%
	BR - Over-the-Road Bus	20%	15%
	TB - Trolley Bus	10%	10%
	VN - Van	25%	25%
Equipment			
Age - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Non Revenue/Service Automobile	25%	25%
	Trucks and other Rubber Tire Vehicles	25%	25%
Facilities			
Condition - % of facilities with a condition rating below 3.0 on the FTA TERM Scale	Administrative and Maintenance Facility	10%	10%
	Administrative Office	10%	10%
	Maintenance Facility	10%	10%
	Passenger Facilities	10%	10%

The RVTPO's planning process will integrate, either directly or by reference, the goals, objectives, performance measures, and targets described in the applicable Tier II group plan.



6.0 Roadway Projects

This section summarizes the TIP roadway projects. An overall map of the TIP projects is shown below. More detailed project information is provided in Appendices A and B.



FY 2018-2021 Transportation Improvement Program

Legend

- ★ TIP 2018-2021 Projects
- TIP 2018-2021 Projects
- 2040 RVTPO Study Area



The tables below list the TIP projects by locality. Note the following explanations for the project groupings:

Grouped (BR/R/R) = (Bridge Rehabilitation/Replacement/Reconstruction)

Grouped (S/ITS/OI) = (Safety/Intelligent Transportation Systems/Operational Improvements)

Grouped (TE/B/Non-T) = (Transportation Enhancement/Byway/Non-Traditional)

Grouped (Maint. & Syst. Pres.) = (Preventive Maintenance and System Preservation)

Grouped (Maint. Bridges) = (Preventive Maintenance for Bridges)

Grouped (Maint. Traf. & Safety Op) = (Maintenance of Traffic and Safety Operations)

6.1 Bedford County

Construction: BR/R/R

System	UPC	Project Name	Description	Street/Route	Estimate
Secondary	62650	Rte. 634 over Roanoke River Bridge Replacement	From 0.19 mi. West of Franklin Co. line to 0.12 mi. East of Bedford Co. line (0.300 mi.)	Route 634	\$11,970,041

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate
Primary	107053	Rte. 24 – Bedford Co. Safety Improvements	From Rte. 886 to 0.26 mi. east of Rte. 635 (1.50 mi.)	VA Route 24	\$1,600,000
Primary	107063	Rt. 221 Bedford Co. - Bike & Ped Safety Improvements	FROM: 0.09 miles North of Route 1049 TO: 0.06 miles South of Route 621	U.S. 221	\$2,550,000
Primary	109582	Route 460 Safety Improvements	FROM: 0.49 miles East of Route 741 TO: 0.64 miles East of Route 689	U.S. 460	\$4,510,000



6.2 Botetourt County

System	UPC	Project Name	Description	Street/Route	Estimate
Interstate	75910	U.S. 11, 220, 220A Access Management Project at I-81 Exit 150	From 0.30 mi. south of U.S. 220 to 0.74 mi. north of U.S. 220 (1.0410 mi.)	I-81	\$50,185,950

Construction: BR/R/R

System	UPC	Project Name	Description	Street/Route	Estimate
Primary	77300	Rte. 11 over Tinker Creek Bridge Replacement (Str. 03166)	From 0.04 mi. north of Rte. 1039 to 0.13 mi. north of Rte. 1039 (0.09 mi.)	U.S. 11	\$5,120,000
Primary	77302	Rte. 11 over Tinker Creek Bridge Replacement (Str. 3167)	From Rte. 838 to 0.09 mi. north of Rte. 838 (0.09 mi.)	U.S. 11	\$3,992,000
Secondary	52803	Rte. 779 Intersection Improvements & Bridge over Amsterdam Creek	From 0.169 mi. east Rte. 672 east to 0.236 mi. west Rte. 672 east (0.4213 mi.)	Rte. 779	\$7,857,623
Primary	82226	Rte. 11 over Beckner Branch (STR. 03160) – Bridge Replacement	From: 0.076 mi. north of I-81 To: 0.300 mi. south of Rte. 641	U.S. 11	\$5,629,000
Secondary	90086	Rte. 738 over Glade Creek (Str. 03516 and 03517) – Bridge Replacement	From Int. of U.S. 460 to 0.339 mi. east of Int. 460 (0.1600 mi.)	Rte. 738	\$4,949,536



Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate
Interstate	104048	FY13-14 VMS Installation: I-81	From NB to MM 147.5 to SB at MM 172.0	I-81	\$608,647
Interstate	106737	#SGR FY17 SGR I-81 NB Botetourt Co. Concrete Undersealing	From MM 149.5 S. End RR Overpass to S. End of Rte. 779 Overpass (2.1 mi.)	I-81	\$4,600,000
Primary	103210	U.S. 220 Corridor – Replace 2 Narrow Structures	From 0.239 mi. N. of Rte. 43 to 0.63 mi. S. of Rte. 694 (0.931 mi.)	U.S. 220	\$8,581,000

Construction: TE/B/Non-T

System	UPC	Project Name	Description	Street/Route	Estimate
Enhancement	107521	Daleville Greenway - TAP			\$595,438
Enhancement	T21491	U.S. 220 / International Parkway Intersection Study and Design		U.S. 220 and International Parkway	\$300,000



6.3 *Montgomery County*

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate
Interstate	92558	Rte. 603 – Ironto/Elliston Connector	From I-81 Exit 128 to Int. of U.S.11/460 (2.011 mi.)	Route 603	\$17,770,264
Primary	110624	#SGR - Route 11 over NSRR (STR. 12118) - Deck Replace	From: 1.5 mi. W. Roanoke Co. line To: 1.7 mi. W. Roanoke Co. line	U.S. 11	\$2,625,000



6.4 Roanoke County

System	UPC	Project Name	Description	Street/Route	Estimate
Interstate	110395	#HB2.FY17 I-81 Aux Ln Fr Exit 141 -143 Garvee Debt Service	I-81 NB from Exit 141 to 143	I-81	\$38,409,000
Interstate	111983	#Smart18 - 81 Sb Aux Ln Frm Exit 143-141 Garvee Debt Service	I-81 SB from Exit 143 to 141	I-81	\$39,444,000
Interstate	111373	#SMART18 – I-81 SB Auxiliary Lane from Exit 143 to 141	From: Exit 143 SB To: Exit 141 SB	I-81	\$32,168,000
Interstate	T21502	I-581 Exit 2 Interchange Study	Preliminary Engineering	I-581	\$150,000
Primary	17698	Rte. 11/460 – Widen to 4-lane w/ curb, gutter and raised median	From 0.055 mi. east of WCL Salem to 0.10 mi. west Rte. 830 (2.1880 mi.)	West Main St./U.S. 11	\$47,139,261
Primary	98220	Rte. 115, Plantation Road Corridor Improvements	From Williamson Rd (Rte. 11) to Gander Way/Friendship Ln (0.720 mi.)	Plantation Road/115	\$1,566,835
Primary	108905	#HB2.FY17 Lila Dr / Rte 115 Intersection Safety Improvements	FROM: Lila Drive TO: Route 115 (Plantation Road) (0.1000 MI)	Plantation Road/115	\$1,269,396
Primary	95812	ARRA - Roanoke 221 Reconstruct to 4 Lanes (CN Phase only)	FROM: 0.035 Km. S. Rte. 688 TO: 1.478 Km. N. Rte. 688 (1.5120 KM)	U.S. 221	\$25,332,937



Primary	96139	ARRA-C Roanoke 221 Reconstruct to 4 Lanes (CN Phase Only)	FROM: 0.035 km. S. Rte. 688 TO: 1.478 km N. Rte. 688 (1.5120 KM)	U.S. 221	\$105,024
Primary	108904	#HB2.FY17 Route 311 / Route 419 Int. Safety & Congestion Imp	FROM: Intersection of Rte 311 & Rte 419 TO: Intersection of Rte 311 & Rte 419 (0.1000 MI)	Catawba Valley Dr./Rte. 311	\$1,957,006

Construction: BR/R/R

System	UPC	Project Name	Description	Street/Route	Estimate
Primary	77305	Rte. 116 over Back Creek (Str. 14928) – Bridge Replacement	From 0.285 mi. S. Rte. 945 to 0.584 mi. S. Rte. 945	Rte. 116	\$7,213,000
Primary	82193	U.S. 220 over Back Creek (Str. 14935) – Bridge Replacement	From 0.199 mi. S. of Rte. 657 to 0.33 mi. N. of Rte. 657 (0.531 mi.)	U.S. 220	\$18,885,000
Primary	94726	U.S. 221 over Martins Creek (Str. 14945) – Bridge Replacement	From 0.01 mi. S. of Int. of Rte. 696 to 0.01 mi. N. Int. Rte. 696	U.S. 221	\$3,648,210
Secondary	110620	Rte. 760 over Roanoke River (STR. 15105) – Super Replacement	Rehab w/o added capacity. From: 0.15 mi. S. Salem City Line To: 0.00 mi. Int. Rte. 639	Route 760	\$2,281,000



Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate
Interstate	99542	I-81 Exit 140 Park and Ride Facility Expansion	From Int. Rte. 1128 and Rte. 1150 to 0.17 mi. W. of Int. Rte. 1128 and 1150 (0.17 mi.)	I-81	\$3,353,000
Interstate	108418	I-81 Install Signs with Flashers	From MM 137.72 to MM 138.18 (0.46 mi.)	I-81	\$28,280
Interstate	108906	#HB2.FY17 I-81 NB Auxiliary Lane from Exit 141 to 143	From Exit 141 NB to MM 143 NB (2.0 mi.)	I-81	\$29,830,716
Interstate	T21583	I-81 Exit 137 SB Safety Improvements	From: Beginning of I-81 Exit 137 SB Off-Ramp To: End of I-81 Exit 137 SB Off-Ramp	I-81	\$1,500,000
Primary	107054	Rte. 311 -Roanoke County Pedestrian Safety Improvements	From NCL Salem to 0.02 mi. N. of I-81 SB ramp (0.09 mi.)	Rte. 311	\$615,000
Primary	107061	#HB2 FY17 Rte. 419 Safety Improvements at Tanglewood	From Rte. 419 to Rte. 867 (0.60 mi.)	Rte. 419	\$5,853,432
Primary	107055	U.S. 11 and Rte. 117 – Roanoke County Bike & Ped Safety Improvements	From Rte. 117 to U.S. 11	Rte. 117 and U.S. 11	\$1,000,000



Primary	108882	#SMART18 – West Main Street Sidewalk Installation	From: West Salem City Limit To: 0.018 Mi. W. Int. Rte 830 (Technology Drive)	U.S. 11	\$1,037,000
Primary	111066	Pedestrian Bridge over Rte. 311	From: Route 864 To: 0.2 miles North of Route 864	Route 311	\$2,880,000
Secondary	113144	Starkey Road/Buck Mountain Road Intersection Improvements	Reconstruction w/added capacity, FROM: Starkey Road TO: Buck Mountain Road	Starkey Rd. & Buck Mountain Rd.	\$2,098,000
Interstate	113173	I-81 Exit 137 SB Safety Improvements	FROM: Beginning of I-81 Exit 137 SB Off-Ramp TO: End of I-81 Exit 137 SB Off-Ramp	I-81	\$1,500,000
Primary	111407	#SMART18 – Rte. 419 & Rte. 221 Adaptive Traffic Control	Installation of adaptive traffic control devices from U.S. 221 (Brambleton Ave.) to Rte. 419 (Electric Rd.)	Route 419	\$663,000
Primary	T21464	Pedestrian Improvements on Route 11	From: Clubhouse Drive To: 0.2 mi. South of Greenway Drive	U.S. 11	\$750,000
Primary	T21497	Route 419/U.S. 220 Diverging Diamond Interchange Study/PE	Preliminary Engineering	VA 419/U.S. 220	\$750,000



Secondary	15190	Rte. 688 - Reconstruction	From 0.056 mi. S. U.S. 221 to 0.105 mi. S. Rte. 934 (0.6566 mi.)	Rte. 688 / Cotton Hill Road	\$6,532,659
Secondary	15187	Rte. 1662 – Reconstruction and Replace Bridge over Mud Lick Creek	From Int. of Rte. 1663 to Int. of Rte. 419 (0.468 mi)	Rte. 1662 / McVitty Rd.	\$14,590,943
Secondary	15188	Rte. 1663 – Reconstruct Drainage Structure Mud Lick Creek	From S. Int. U.S. 221 to Int. of Rte. 1662 (0.283 mi.)	Rte. 1663 / Old Cave Spring Lane	\$4,714,799
Secondary	T21499	Starkey Rd./Buck Mountain Rd. Intersection Improvements	Reconstruction w/o added capacity. From: Starkey Rd. To: Buck Mountain Road	Intersection of Routes 604 & 679	\$2,098,000

Construction: TE/B/Non-T

System	UPC	Project Name	Description	Street/Route	Estimate
Enhancement	91191	Roanoke River Greenway – City of Roanoke to Blue Ridge Parkway			\$6,857,566
Enhancement	97171	#HB2.FY17 Roanoke County, RRG, Green Hill Park to Riverside Park	From Green Hill Park to Riverside Park (1.7330 mi.)		\$8,931,000
Enhancement	103607	Roanoke County – Plantation Road Streetscape Improvements	From Williamson Rd. (U.S. 11) to Gander Way/Friendship Lane (0.72 mi.)	Rte. 115 / Plantation Road	\$5,297,128



Enhancement	103495	Low Water Bridge for HRB Trail near Int. of Routes 419 & 311			\$368,630
Urban	111366	#SMART18 – Plantation Rd. Bike/Ped/Streets cape Phase II	From: Walrond Drive To: Gander Way	Route 115	\$1,752,000
Enhancement	113356	Roanoke River Greenway Parkway Crossing	Construction of greenway from 3204 Highland Rd. to 3404 Rutrough Rd.		\$492,000
Enhancement	T21498	Roanoke River Greenway through Explore Park	Construction of greenway through Explore Park	Explore Park	\$3,020,000



6.5 City of Roanoke

System	UPC	Project Name	Description	Street/Route	Estimate
Urban	688	13th Street and Hollins Road	Reconstruction w/added capacity, FROM: Jamison Ave TO: .08 Mi. N. INT. Orange Ave.	Intersection of 13th St. & Hollins Rd.	\$23,961,000
Interstate	16595	Rte. 581 – Valley View Interchange Phase II	From 0.30 mi. south Rte. 101 (Hershberger Rd.) to 1.560 mi. south Rte 101	I-581	\$60,409,490

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate
Interstate	94089	ARRA I-581 at Elm Ave. (Design-Build)	From exit ramps accessing Elm Avenue to 0.016 mi. W. Williamson Rd. - 0.045 mi E. 4 th Street SE on Elm Avenue (0.224 mi.)	I-581	\$22,907,827
Interstate	97231	ARRA-C I-581 at Elm Avenue (Design-Build)	From exit ramps accessing Elm Avenue to 0.016 mi. W. Williamson Rd. - 0.045 mi. E. 4 th Street SE on Elm Avenue (0.224 mi.)	I-581	\$911,783
Primary	109558	Flashing Yellow Arrow Upgrade – Williamson Rd. & Airport Rd.	From Williamson Rd. to Airport Rd.	U.S. 11 / Williamson Rd.	\$16,000
Primary	109562	Flashing Yellow Arrow Upgrade – Valley View	From Valley View Blvd. NW to Valley View Ave. NW	Valley View Blvd. NW	\$23,000



Primary	109567	Flashing Yellow Arrow Upgrade – Jefferson St. & Elm Ave.	From Elm Ave. to Jefferson St.	Elm Avenue	\$24,000
Primary	109570	Orange Ave./Hollins Rd. Signal Upgrade	Int. of U.S. 460 and Route 115	U.S. 460 & Rte. 115	\$545,000
Primary	108908	#HB2.FY17 – U.S. 220 Adaptive Communications and System Project	From Valley Avenue/Southern Hills Dr. SW to Clearbrook Village Ln. (2.0 mi.)	U.S. 220 / Franklin Rd.	\$422,500
Primary	109566	Orange Ave./Blue Hills Signal Upgrade – City of Roanoke	From Orange Ave. to Blue Hills	U.S. 460 / Orange Ave.	\$16,000
Primary	109570	Orange Ave./Hollins Rd. Signal Upgrade – City of Roanoke	From U.S. 460 to Rte. 115	Orange Ave. NE	\$265,000
Secondary	109569	Flashing Yellow Arrow Upgrade – Brandon Ave. & Colonial Ave.	From Brandon Ave. to Colonial Ave.	Brandon Ave. (8029)	\$16,000
Urban	111135	Flashing Yellow Arrow - Various Locations - Roanoke City	Various	N/A	\$277,000
Urban	111137	Rectangular Rapid Flashing Beacons - Roanoke City	Various	N/A	\$108,000
Urban	111360	Franklin Road Sidewalk Improvements- Rt. 220 B- Roanoke City	bike/ped improvements, FROM: 3100 Block TO: 3700 Block	U.S. 220 Bus./Franklin Rd.	\$1,495,000



Urban	111370	#Smart18 - Hollins Rd. & Orange Ave. Intersection Improvements	Reconstruction w/added capacity FROM: Orange Ave TO: Hollins Rd	Intersection of Hollins Rd. & Orange Ave.	\$3,552,000
Urban	113324	Installation of Pedestrian Countdown Signal - Roanoke	FROM: Gainsboro Road TO: Burrell Street	From Gainsboro Rd. to Burrell St.	\$102,000

Construction: TE/B/Non-T

System	UPC	Project Name	Description	Street/Route	Estimate
Enhancement	105439	Roanoke River Greenway (Bridge St. to Aerial Way Dr.) - RSTP	From Bridge St. to Aerial Way Dr. (1.8 mi.)	Roanoke River Greenway	\$7,605,000
Enhancement	103345	RR Greenway – Bike/Ped between Vic Thomas & Ghent Hill Parks	From Vic Thomas Park to Ghent Hill Park (0.25 mi.)	Memorial Ave.	\$248,316
Enhancement	103592	Virginia Railway Station Restoration Phase 2	Virginia Railway Station		\$1,014,930
Enhancement	106265	Garden City Blvd. Bike/Ped - TAP	From Davenport Ave./Ivywood St. to Riverland Rd.	Garden City Blvd.	\$1,000,000
Enhancement	106266	ADA Bus Facilities - TAP	From Barnett Rd. (WCL) to Salem Turnpike (2.80 mi.)	Melrose Ave.	\$205,980
Miscellaneous	102856	City of Roanoke – SRTS Garden City ES- Sidewalks, etc.	From Yellow Mtn. Rd. to Ivywood St. (0.74 mi.)	Garden City Blvd.	\$507,793



Miscellaneous	105015	Downtown Roanoke Multimodal Transportation Study		Roanoke City	\$300,000
Miscellaneous	110101	Tinker Creek Trail Extension	FROM: Wise Avenue TO: Masons Mill Park	N/A	\$7,251,000
Miscellaneous	T20130	Tinker Creek Greenway Connectivity Study	Preliminary Engineering, from Roanoke City to Botetourt Co.		\$100,000
Urban	108896	#HB2.FY17 Colonial Avenue Improvements	Bike/ped facilities. From: 300 ft. beyond Winding Way Rd. SW To: Clearfield Rd. SW	Colonial Avenue	\$7,000,000
Urban	T21494	Roanoke River Greenway Bridge Across Barnhardt Creek	Bike/ped facilities, FROM: City of Roanoke TO: City of Salem	Roanoke River Greenway	\$978,000
Urban	T21496	Tinker Creek Greenway Trail Bridges	Bike/ped facilities, FROM: 13th St & Mason Mill Rd TO: 20th St & Mason Mill Rd	Tinker Creek Greenway	\$484,000
Primary	78217	Rehabilitation of Virginia Railway Station		Williamson Rd.	\$489,999
Public Transportation	T14242	Bus Replacement for SmartWay Commuter Service	From Roanoke to Blacksburg	Roanoke City	\$560,000



Urban	109288	#HB2.FY17 Transit Accessibility Improvements on Edgewood St.	From Windsor Ave. to Memorial Ave.	Edgewood St.	\$350,811
Urban	72180	City of Roanoke RR Greenway within the City of Roanoke Limits			\$2,550,285



6.6 City of Salem

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate
Urban	8753	#HB2.FY17 U.S. 460-Widen to 3 Lanes with Bike Lane, Curb, Sidewalk	From 0.028 mi. W. of Rte. 311 (Thompson Memorial Blvd.) to 0.006 mi. W. of Brand Ave. (0.5473 mi.)	East Main Street / U.S. 460	\$15,223,263
Urban	100656	Construct Sidewalk on West Side of 419 and Connect to RRG	From existing RRG in Rotary Park to city limits (0.67 mi.)	Route 419	\$594,720

Construction: TE/B/Non-T

System	UPC	Project Name	Description	Street/Route	Estimate
Enhancement	105206	Apperson Dr./Route 11 Bridge – Sidewalk Expansion (PH4 RRG)	From E. Riverside Dr. to Electric Rd./Rte. 419 (0.06 mi.)	Apperson Dr.	\$1,230,845
Enhancement	101838	Bridge on Phase 3A-City of Salem RR Greenway	From approx. 1200 feet E. Mill Ln. to Eddy St.	Roanoke River Greenway	\$744,028
Enhancement	106268	Hanging Rock Battlefield Trail - TAP	From existing Hanging Rock Battlefield Trail to E. Main St.	Hanging Rock Battlefield Trail	\$1,333,117
Enhancement	109612	Downtown Streetscape and Intersection Improvements			\$613,000



Primary	111367	#Smart18 - Mason Creek Greenway Ph3 - 419 Multimodal Impr.	Bike/Ped facilities, FROM: Mason Creek Greenway TO: Hanging Rock Battlefield Trail	Mason Creek Greenway	\$2,610,000
Urban	111371	#Smart18 - Downtown Salem Int. & Streetscape Improvements	FROM: West Main St TO: East Main St	East and West Main Street	\$3,630,000
Urban	108899	#HB2.FY17 Multimodal Improvements Along Boulevard	From McDivitt Rd. to Salem city limit (0.75 mi.)	Boulevard	\$884,880
Urban	56409	City of Salem – Construction of 7-Mile Bicycle/Pedestrian	From western limits of Green Hill Park, Roanoke County to ECL City of Salem (7.0 mi.)		\$2,004,098
Urban	T21500	Elizabeth Greenway	Bike/ped facilities		\$1,012,000



6.7 Town of Vinton

Construction: BR/R/R

System	UPC	Project Name	Description	Street/Route	Estimate
Urban	76677	Replace Bridge and Approaches over Glade Creek	From 0.098 west of 5 th St. to 0.052 mi. east of 5 th St. (0.15 mi.)	Walnut Ave.	\$3,309,865

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate
Urban	105213	Rte. U000-Walnut Ave. Phase I- Southwest Stripe, Crosswalks and Landscape	From 5 th St. to W. Lee Ave.	Walnut Ave.	\$88,000
Miscellaneous	111649	Walnut Ave Bike/Ped Accommodations (5th St to town Limit)	Bike/Ped facilities, FROM: 5th Street TO: Town Limits	Walnut Avenue	\$1,446,000
Urban	113322	Hardy Road/Dillon Woods Crosswalk	Bike/Ped facilities, FROM: Bypass Road TO: McDonald Street	Hardy Road	\$183,000
Urban	T21501	Walnut Avenue Bicycle and Pedestrian Accommodations	Bike/Ped facilities, FROM: W. Lee Avenue TO: 1st Street	Walnut Avenue	\$545,000

Construction: TE/B/Non-T

System	UPC	Project Name	Description	Street/Route	Estimate
Enhancement	109611	Glade Creek Greenway Phase 2			\$531,210



6.8 Salem District-wide

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate
Interstate	103828	I-81 Pavement Rehabilitation	Various		\$9,322,269
Interstate	104046	I-77 & I-81 FY14-15 Replace Signs	From I-77 to I-81		\$873,291
Interstate	106428	I-81 and I-77 Marking Retrace Phase 1-Salem District	Various		\$121,647
Interstate	T21476	Interstate & Primary Cable Guardrail Install-Districtwide	Various locations district-wide	Various	\$500,000
Interstate	107099	District-Wide Buckle Up Signing Safety Improvement-Salem	Various		\$292,727
Interstate	108991	Systematic Roadway Departure Treatments	Various		\$2,810,000
Primary	106485	Various Routes - Install Reflective Back Plates	Various locations district-wide	Various	\$845,000
Primary	T21463	Districtwide Systemic Roadway Departure Countermeasures	Various locations district-wide	Various	\$3,028,000
Primary	T21479	Districtwide Rumble Strip Installation-Primary Routes	Various locations district-wide	Various	\$500,000
Miscellaneous	106552	Committed Safety Projects - Salem	Various		\$745,961
Miscellaneous	108517	ADA Compliance in Salem District	Various		\$100,000



Primary	108069	Safety Improvements – Yearly HSIP Open Container Funds	Various		\$2,000,000
Primary	108538	Adaptive Capable Signal Controllers - SWRO	Various		\$1,316,000
Secondary	105736	Roadway Departure Safety Countermeasures	Various		\$166,101

6.9 Statewide

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate
Interstate	107802	Incident Management Emergency Evacuation & Detour Plans	Various		\$500,000
Miscellaneous	93174	Safety Analyst Project	Various		\$1,104,740
Miscellaneous	105481	Improvement iPEMS (Iteris Performance Measurement System)	Various		\$1,400,000



6.0 Transit Projects

Funding for the Greater Roanoke Transit Company (GRTC/Valley Metro), RADAR (Unified Human Services Transportation Systems, Inc.), and the Southern Area Agency on Aging from federal and other sources for FY 2018-2021 is presented in the program of projects below.

6.1 Greater Roanoke Transit Company (Valley Metro) Project Details

ROANOKE VALLEY AREA METROPOLITAN PLANNING ORGANIZATION									
STIP ID:	GRT0001			Title: Operating Assistance			Recipient: Greater Roanoke Transit Company		
FTA 5307	2,422	2,015	2,015	2,015	2,015	FTA 5307	8,060		
FTA 5311	354	354	513	354	354	FTA 5311	1,575		
State	2,169	2,169	2,169	2,169	2,169	State	8,676		
Local	1,566	1,566	1,566	1,566	1,566	Local	6,264		
Revenues	2,314	2,314	2,314	2,314	2,314	Revenues	9,256		
Year Total:	8,825	8,418	8,577	8,418	8,418	Total Funds:	33,831		
Description:	Adjustment #4: increase FTA 5311 funding in FY19 by \$159K to \$513K.								
STIP ID:	GRT0002			Title: Preventative Maintenance			Recipient: Greater Roanoke Transit Company		
FTA 5307		672	672	672	672	FTA 5307	2,688		
State						State	-		
Local		167	167	167	167	Local	668		
Year Total:	-	839	839	839	839	Total Funds:	3,356		
Description:									
	Previous Funding	FY 2018	FY 2019	FY 2020	FY 2021	Total FY 2018-2021			
ROANOKE VALLEY AREA METROPOLITAN PLANNING ORGANIZATION									
STIP ID:	GRT0003			Title: Replace/Rehabilitate Buses			Recipient: Greater Roanoke Transit Company		
FTA 5307						FTA 5307	-		
FTA 5339		277			288	FTA 5339	565		
RSTP		2,949	1,579	1,602	1,564	RSTP	7,694		
State		4,381	395	459	391	State	5,626		
Local		225			14	Local	239		
Year Total:	-	7,832	1,974	2,363	1,955	Total Funds:	14,124		
Description:	Adjustment #1: In total, increase funding by \$3,797K. Increase previous funding by \$3,814K (decrease RSTP by 344K, increase state by 3,947K, increase local by \$211K) and move previous funding of \$1452K RSTP, \$3,947K state, and \$211K local to FY18, decrease FY18 by 84K (decrease RSTP by 67K, decrease state by \$17K), increase FY19 by 19K (increase RSTP by 15K, increase state by \$4K), increase FY20 by \$48K (increase RSTP by 38K, increase state by 10K). Modification needed to align actual RSTP funding allocated by VDOT under UPC T18675 and approved SYIP; also, to include state bond funds allocated in previous years.								
	Adjustment #2: in total, increase funding by \$171K. Increase FTA funding by 133K, increase state by \$31K, and local by \$7K.								
STIP ID:	GRT0004			Title: Support Vehicles			Recipient: Greater Roanoke Transit Company		
FTA 5339						FTA 5339	-		
Flexible STP						Flexible STP	-		
State						State	-		
Local						Local	-		
Year Total:	-	-	-	-	-	Total Funds:	-		
Description:	Adjustment #2: In total, decrease funding by 130K in FY19 and FY20. In FY19, decrease FTA 5339 by 56K, state by 11K and local by 3K. In FY20, decrease FTA 5339 by 48K, state by 10K and local by 2K.								
STIP ID:	GRT0005			Title: Purchase Bus Shelters			Recipient: Greater Roanoke Transit Company		
FTA 5339						FTA 5339	-		
State						State	-		
Local						Local	-		
Year Total:	-	-	-	-	-	Total Funds:	-		
Description:	Adjustment #2: In total, decrease funding by 200K in FY19 and FY20. In FY19, decrease FTA 5339 by 80K, state by 16K and local by 4K. In FY20, decrease FTA 5339 by 80K, state by 16K and local by 4K.								



	Previous Funding	FY 2018	FY 2019	FY 2020	FY 2021	Total FY 2018-2021
ROANOKE VALLEY AREA METROPOLITAN PLANNING ORGANIZATION						
STIP ID:	GRT0006	Title: Rehab/Renovation of Admin/Maint Building			Recipient: Greater Roanoke Transit Company	
FTA 5339		226				FTA 5339 226
State		45				State 45
Local		11				Local 11
Year Total:	-	282	-	-	-	Total Funds: 282
Description:	Adjustment #2: In total, increase funding by 116K. Increase FTA 5339 funding by \$66K in FY18, increase state by \$13K, and local by \$3K.					
STIP ID:	GRT0007	Title: Shop Equipment			Recipient: Greater Roanoke Transit Company	
FTA 5339		160		16		FTA 5339 176
State		32		3		State 35
Local		8		1		Local 9
Year Total:	-	200	-	20	-	Total Funds: 220
Description:	Adjustment #2: Increase FTA 5339 funding by \$144K in FY18, increase state by \$28K, and increase local by \$10K. Remove all FTA, state, and local funding in FY19.					
STIP ID:	GRT0008	Title: ADP Software			Recipient: Greater Roanoke Transit Company	
FTA 5339		3				FTA 5339 3
State		1				State 1
Local		1				Local 1
Year Total:	-	5	-	-	-	Total Funds: 5
Description:	Amendment #1: This is a new project in the FY18-21 TIP.					
STIP ID:	GRT0009	Title: ADP Hardware			Recipient: Greater Roanoke Transit Company	
FTA 5339			20			FTA 5339 20
State			3			State 3
Local			2			Local 2
Year Total:	-	-	25	-	-	Total Funds: 25
Description:	Amendment #1: This is a new project in the FY18-21 TIP.					
STIP ID:	GRT0010	Title: Security			Recipient: Greater Roanoke Transit Company	
FTA 5339			43			FTA 5339 43
State			7			State 7
Local			4			Local 4
Year Total:	-	-	54	-	-	Total Funds: 54
Description:	Amendment #1: This is a new project in the FY18-21 TIP.					

6.2 Unified Human Services Transportation Systems, Inc. (RADAR) Project Details

ROANOKE VALLEY AREA METROPOLITAN PLANNING ORGANIZATION						
STIP ID:	RAD0001	Title: New Freedom Operating Assistance			Recipient: RADAR - UHSTS, Inc. Roanoke County	
FTA 5310		108	62	89	93	FTA 5310 352
State		86	49	71	74	State 280
Local		22	12	18	19	Local 71
Revenues		10	12	12	14	Revenues 48
Year Total:	-	226	135	190	200	Total Funds: 751
Description:	Adjustment #3: Decrease FY19 total funding \$50K (decrease FTA 5310 \$25K, decrease state \$21K, decrease local \$5K, increase revenues \$1K) in accordance with FY19 SYIP.					
STIP ID:	RAD0002	Title: Paratransit Vehicles			Recipient: RADAR - UHSTS, Inc. Roanoke County	
FTA 5310		152	136	120	128	FTA 5310 536
State						State -
Local		38	34	30	32	Local 134
Year Total:	-	190	170	150	160	Total Funds: 670
Description:	Adjustment #3: Increase FY19 total funding \$40K (increase FTA 5310 \$32K, increase local \$8K) in accordance with FY19 SYIP.					



6.2 Lutheran Family Services of Virginia Project Details

ROANOKE VALLEY AREA METROPOLITAN PLANNING ORGANIZATION							
STIP ID:	LFS0001			Title: Paratransit Vehicles	Recipient: Lutheran Family Services of Virginia		
FTA 5310			64			FTA 5310	64
State						State	-
Local			16			Local	16
Year Total:	-	-	80	-	-	Total Funds:	80
Description:	Amendment #2: Add new project and total of \$80K in funding for FY19. Add \$64K in FTA 5310 and \$16K in Local funds.						

6.3 Transit Funding Summaries

Greater Roanoke Transit Company	Previous Funding	FY 2018	FY 2019	FY 2020	FY 2021	Total FY 2018-2021
FTA 5307	2,422	2,687	2,687	2,687	2,687	FTA 5307 10,748
FTA 5309	-	-	-	-	-	FTA 5309 -
FTA 5310	-	-	-	-	-	FTA 5310 -
FTA 5311	354	354	513	354	354	FTA 5311 1,575
FTA 5314	-	-	-	-	-	FTA 5314 -
FTA 5337	-	-	-	-	-	FTA 5337 -
FTA 5339	-	666	63	304	-	FTA 5339 1,033
FTA ADTAP	-	-	-	-	-	FTA ADTAP -
FTA DPF	-	-	-	-	-	FTA DPF -
FTA TIGER	-	-	-	-	-	FTA TIGER -
FBD	-	-	-	-	-	FBD -
Flexible STP	-	-	-	-	-	Flexible STP -
CMAQ	-	-	-	-	-	CMAQ -
RSTP	-	2,949	1,579	1,602	1,564	RSTP 7,694
FHWA TAP	-	-	-	-	-	FHWA TAP -
TIFIA	-	-	-	-	-	TIFIA -
Other Federal	-	-	-	-	-	Other Federal -
State	2,169	6,628	2,574	2,631	2,560	State 14,393
Local	1,566	1,978	1,739	1,748	1,733	Local 7,198
Revenues	2,314	2,314	2,314	2,314	2,314	Revenues 9,256
Totals	8,825	17,576	11,469	11,640	11,212	51,897

Lutheran Family Services of Virginia	Previous Funding	FY 2018	FY 2019	FY 2020	FY 2021	Total FY 2018-2021
FTA 5307	-	-	-	-	-	FTA 5307 -
FTA 5309	-	-	-	-	-	FTA 5309 -
FTA 5310	-	-	64	-	-	FTA 5310 64
FTA 5311	-	-	-	-	-	FTA 5311 -
FTA 5314	-	-	-	-	-	FTA 5314 -
FTA 5337	-	-	-	-	-	FTA 5337 -
FTA 5339	-	-	-	-	-	FTA 5339 -
FTA ADTAP	-	-	-	-	-	FTA ADTAP -
FTA DPF	-	-	-	-	-	FTA DPF -
FTA TIGER	-	-	-	-	-	FTA TIGER -
FBD	-	-	-	-	-	FBD -
Flexible STP	-	-	-	-	-	Flexible STP -
CMAQ	-	-	-	-	-	CMAQ -
RSTP	-	-	-	-	-	RSTP -
FHWA TAP	-	-	-	-	-	FHWA TAP -
TIFIA	-	-	-	-	-	TIFIA -
Other Federal	-	-	-	-	-	Other Federal -
State	-	-	-	-	-	State -
Local	-	-	16	-	-	Local 16
Revenues	-	-	-	-	-	Revenues -
Totals	-	-	80	-	-	80



RADAR - UHSTS, Inc. Roanoke County	Previous Funding	FY 2018	FY 2019	FY 2020	FY 2021	Total FY 2018-2021
FTA 5307	-	-	-	-	-	FTA 5307 -
FTA 5309	-	-	-	-	-	FTA 5309 -
FTA 5310	-	260	198	209	221	FTA 5310 888
FTA 5311	-	-	-	-	-	FTA 5311 -
FTA 5314	-	-	-	-	-	FTA 5314 -
FTA 5337	-	-	-	-	-	FTA 5337 -
FTA 5339	-	-	-	-	-	FTA 5339 -
FTA ADTAP	-	-	-	-	-	FTA ADTAP -
FTA DPF	-	-	-	-	-	FTA DPF -
FTA TIGER	-	-	-	-	-	FTA TIGER -
FBD	-	-	-	-	-	FBD -
Flexible STP	-	-	-	-	-	Flexible STP -
CMAQ	-	-	-	-	-	CMAQ -
RSTP	-	-	-	-	-	RSTP -
FHWA TAP	-	-	-	-	-	FHWA TAP -
TIFIA	-	-	-	-	-	TIFIA -
Other Federal	-	-	-	-	-	Other Federal -
State	-	86	49	71	74	State 280
Local	-	60	46	48	51	Local 205
Revenues	-	10	12	12	14	Revenues 48
<i>Totals</i>	-	416	305	340	360	1,421

Roanoke Valley MPO	Previous Funding	FY 2018	FY 2019	FY 2020	FY 2021	Total FY 2018-2021
FTA 5307	2,422	2,687	2,687	2,687	2,687	FTA 5307 10,748
FTA 5309	-	-	-	-	-	FTA 5309 -
FTA 5310	-	260	262	209	221	FTA 5310 952
FTA 5311	354	354	513	354	354	FTA 5311 1,575
FTA 5314	-	-	-	-	-	FTA 5314 -
FTA 5337	-	-	-	-	-	FTA 5337 -
FTA 5339	-	666	63	304	-	FTA 5339 1,033
FTA ADTAP	-	-	-	-	-	FTA ADTAP -
FTA DPF	-	-	-	-	-	FTA DPF -
FTA TIGER	-	-	-	-	-	FTA TIGER -
FBD	-	-	-	-	-	FBD -
Flexible STP	-	-	-	-	-	Flexible STP -
CMAQ	-	-	-	-	-	CMAQ -
RSTP	-	2,949	1,579	1,602	1,564	RSTP 7,694
FHWA TAP	-	-	-	-	-	FHWA TAP -
TIFIA	-	-	-	-	-	TIFIA -
Other Federal	-	-	-	-	-	Other Federal -
State	2,169	6,714	2,623	2,702	2,634	State 14,673
Local	1,566	2,038	1,801	1,796	1,784	Local 7,419
Revenues	2,314	2,324	2,326	2,326	2,328	Revenues 9,304
<i>Totals</i>	8,825	17,992	11,854	11,980	11,572	53,398



7.0 Other Projects

This section summarizes other transportation projects, of regional interest, and as requested by the project sponsor, that fall into categories different from Transit and Highway, and which may or may not receive Federal funding.

7.1 Roanoke-Blacksburg Regional Airport

Funding for the Roanoke-Blacksburg Regional Airport from federal and/or other sources for FY 2018-2021 is presented in the projects listed below.

Project Name: SR 118 Tunnel Rehabilitation
Project Cost: \$900,000

Cost Estimates for FY 2018-2021

PHASE	FY 2018	FY 2019	FY 2020	FY 2021	Total FY 2018-2021
Preliminary Engineering					
Design/Bid Construction Admin.	\$100,000	\$50,000	\$0	\$50,000	\$200,000
Construction	\$400,000	\$150,000	\$0	\$150,000	\$700,000
TOTAL	\$500,000	\$200,000	\$0	\$200,000	\$900,000

Funding Source	Previous Funding	FY 2018	FY 2019	FY 2020	FY 2021	Total FY18-21
VA Dept. of Aviation	\$0	\$400,000 (80% Entitlements)	\$160,000 (80% Entitlements)	\$0	\$160,000 (80% Entitlements)	\$720,000
Unfunded	\$0	\$100,000 (20%)	\$40,000 (20%)	\$0	\$40,000	\$180,000
Year Total	\$0	\$500,000	\$200,000	\$0	\$200,000	\$900,000

