

RVTPO FY 2018-21 Transportation Improvement Program Table of Contents

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APPENDIX A - Grouped Projects

APPENDIX B - Ungrouped Projects

APPENDIX C - Resolution Approving Final TIP 2018-2021 and Self-Certification Statement - **To be inserted following adoption**

APPENDIX D - Amendments and Adjustments - **Appended as needed**

APPENDIX E - A Basic Guide to the Transportation Improvement Program - **To be included following TIP adoption**

APPENDIX F - Annual Listing of Transportation Project Obligations - **To be included when approved**

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

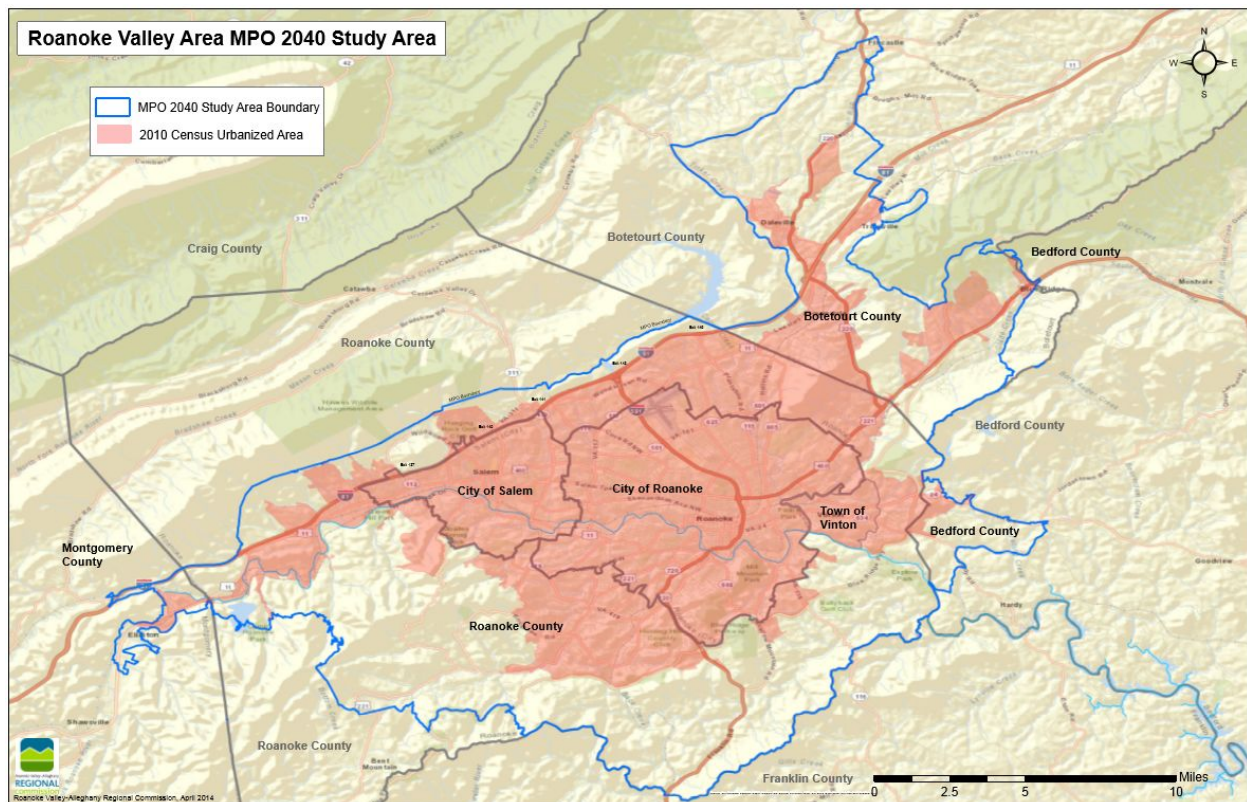
The contents of this report reflect the views of the Roanoke Valley Area Metropolitan Planning Organization. The RVARC staff is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the FHWA, FTA, VDOT, DRPT, 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.

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. These 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 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 _____, 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. Projects may be classified as part of a particular “system” as described below in Table 1.

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 TIP Project Highlights

The following is a detailed listing of specific projects in the FY 2018-2021 TIP. This list highlights new, existing, and regionally significant projects in the TPO area.

5.0 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 2015.

5.1 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 2015-2018. 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.

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 funds 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.

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.

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.

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).

RSTP

Regional Surface Transportation Program (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 Area TPO Policy Board is responsible for scoring and awarding RSTP funds for TPO candidate projects.

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.

Highway Funding Programs:

AC

Advance Construction Funds 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

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

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

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.

NH

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

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.

RSTP

Regional Surface Transportation Program (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 RSTP funds for TPO 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.

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.

Non-Federal

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

SRS

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 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
FHWA	Federal Highway Administration	STP	Surface Transportation Program
FTA	Federal Transit Administration	TB	Timber Bridge
HES	Hazard Elimination	TFRA	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

5.2 *Project Allocations vs. Project Obligations*

Often there is confusion surrounding the different funding states for projects in the TIP. With regard to 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).

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 actually 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.

5.3 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

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)

5.4 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.

5.5 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 the accessibility and mobility of people and for 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, people and freight
 - Promote efficient system management and operation
 - Emphasize the preservation of the existing transportation system;
- Provision of funding for previously programmed projects in need of additional funds; and
- Comments received as part of the TPO Public Involvement Process

5.6 *FY 2018-2021 Transportation Improvement Plan Timeline*

The diagram above illustrates the STIP and TIP development process. **Diagram to be inserted at a later date.** More specifically, 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.
- February 2017 - The TTC deadline for submission of comments for draft TIP by February 9.
- March 9, 2017 - The TTC performs a final review and recommendation on the draft TIP.
- April 2017 – The RVTPO Policy Board reviews the draft TIP and adopts it on April 27, 2017.

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

	Previous Funding	FY 2018	FY 2019	FY 2020	FY 2021	Total FY 2018-2021
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	354	354	354	FTA 5311 1,416
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	8,418	8,418	8,418	Total Funds: 33,672
Description:						
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:						
Description:						
STIP ID:	GRT0003	Title: Replace/Rehabilitate Buses		Recipient: Greater Roanoke Transit Company		
FTA 5339		144		288		FTA 5339 432
FTA 5307						FTA 5307 -
RSTP	1,796	1,955	1,955	1,955	1,955	RSTP 7,820
State		29		58		State 87
Local		7		14		Local 21
Year Total:	1,796	2,135	1,955	2,315	1,955	Total Funds: 8,360
Description: Paratransit replacement vehicles to be purchased with 5339 funds. RSTP funds support ongoing bus replacement, rehabilitation, and rebuild program.						
STIP ID:	GRT0004	Title: Support Vehicles		Recipient: Greater Roanoke Transit Company		
FTA 5339		56	48			FTA 5339 104
State		11	10			State 21
Local		3	2			Local 5
Year Total:	-	70	60	-	-	Total Funds: 130
Description:						
STIP ID:	GRT0005	Title: Purchase Bus Shelters		Recipient: Greater Roanoke Transit Company		
FTA 5339		80	80			FTA 5339 160
State		16	16			State 32
Local		4	4			Local 8
Year Total:	-	100	100	-	-	Total Funds: 200
Description:						

STIP ID:		GRT0006		Title: Rehab/Renovation of Admin/Maint Building		Recipient: Greater Roanoke Transit Company	
FTA 5339	226	160				FTA5339	160
State	45	32				State	32
Local	11	8				Local	8
Year Total:	282	200	-	-	-	Total Funds :	200
Description:							
STIP ID:		GRT0007		Title: Shop Equipment		Recipient: Greater Roanoke Transit Company	
FTA 5339		16	16	16		FTA5339	48
State		3	3	3		State	9
Local		1	1	1		Local	3
Year Total:	-	20	20	20	-	Total Funds :	60
Description:							

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

STIP ID:		RAD0001		Title: New Freedom Operating Assistance		Recipient: RADAR - UHSTS, Inc. Roanoke County	
FTA 5310		85	87	89	93	FTA5310	354
State		66	70	71	74	State	283
Local		17	17	18	19	Local	71
Revenues		9	11	12	14	Revenues	46
Year Total:	-	179	185	190	200	Total Funds :	754
Description: STAR (Valley Metro paratransit), CORTRAN (Roanoke County) operating assistance and Local Office on Aging taxi vouchers.							
STIP ID:		RAD0002		Title: Paratransit Vehicles		Recipient: RADAR - UHSTS, Inc. Roanoke County	
FTA 5310		104	104	120	128	FTA5310	456
State						State	-
Local		26	26	30	32	Local	114
Year Total:	-	130	130	150	160	Total Funds :	570
Description: Replacement vehicles (2) per year.							

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	354	354	354	FTA 5311 1,416
FTA 5314	-	-	-	-	-	FTA 5314 -
FTA 5337	-	-	-	-	-	FTA 5337 -
FTA 5339	226	456	144	304	-	FTA 5339 904
FTA ADTAP	-	-	-	-	-	FTA ADTAP -
FTA DPF	-	-	-	-	-	FTA DPF -
FTA TIGER	-	-	-	-	-	FTA TIGER -
FBD	-	-	-	-	-	FBD -
Flexible STP	-	-	-	-	-	Flexible STP -
CMAQ	-	-	-	-	-	CMAQ -
RSTP	1,796	1,955	1,955	1,955	1,955	RSTP 7,820
FHWA TAP	-	-	-	-	-	FHWA TAP -
TIFIA	-	-	-	-	-	TIFIA -
Other Federal	-	-	-	-	-	Other Federal -
State	2,214	2,260	2,198	2,230	2,169	State 8,857
Local	1,577	1,756	1,740	1,748	1,733	Local 6,977
Revenues	2,314	2,314	2,314	2,314	2,314	Revenues 9,256
Totals	10,903	11,782	11,392	11,592	11,212	45,978

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	-	189	191	209	221	FTA 5310 810
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	-	68	70	71	74	State 283
Local	-	43	43	48	51	Local 185
Revenues	-	9	11	12	14	Revenues 46
Totals	-	309	315	340	360	1,324

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	-	189	191	209	221	FTA 5310 810
FTA 5311	354	354	354	354	354	FTA 5311 1,416
FTA 5314	-	-	-	-	-	FTA 5314 -
FTA 5337	-	-	-	-	-	FTA 5337 -
FTA 5339	226	456	144	304	-	FTA 5339 904
FTA ADTAP	-	-	-	-	-	FTA ADTAP -
FTA DPF	-	-	-	-	-	FTA DPF -
FTA TIGER	-	-	-	-	-	FTA TIGER -
FBD	-	-	-	-	-	FBD -
Flexible STP	-	-	-	-	-	Flexible STP -
CMAQ	-	-	-	-	-	CMAQ -
RSTP	1,796	1,955	1,955	1,955	1,955	RSTP 7,820
FHWA TAP	-	-	-	-	-	FHWA TAP -
TIFIA	-	-	-	-	-	TIFIA -
Other Federal	-	-	-	-	-	Other Federal -
State	2,214	2,326	2,268	2,301	2,243	State 9,140
Local	1,577	1,799	1,783	1,796	1,784	Local 7,162
Revenues	2,314	2,323	2,325	2,326	2,328	Revenues 9,302
Totals	10,903	12,091	11,707	11,932	11,572	47,302

7.0 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.

Map of TIP projects to be inserted here.

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)

7.1 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	U.S. 221 Bedford Co. – Bike & Ped Safety Improvements	From 0.09 mi. north of Rte. 1049 to 0.06 miles south of Rte. 621	U.S. 221	\$2,550,000
Primary	109582	U.S. 460 Safety Improvements	From 0.49 mi. east of Rte. 741 to 0.64 mi. east of Rte. 689 (4.0 mi.)	U.S. 460	\$4,510,000

7.2 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	\$4,376,365
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	\$3,758,054
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
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	\$8,573,155

Construction: TE/B/Non-T

System	UPC	Project Name	Description	Street/Route	Estimate
Enhancement	107521	Daleville Greenway - TAP			\$595,438

7.3 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

7.4 Roanoke County

System	UPC	Project Name	Description	Street/Route	Estimate
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	\$6,437,612
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	\$17,825,199
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

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	\$3,665,725
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
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	\$491,227



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		\$1,000,000
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

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.)		\$8,032,031



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

7.5 City of Roanoke

System	UPC	Project Name	Description	Street/Route	Estimate
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	\$16,000
Primary	109567	Flashing Yellow Arrow Upgrade – Jefferson St. & Elm Ave.	From Elm Ave. to Jefferson St.	Elm Avenue	\$24,000
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

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

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

7.6 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 (Thomas 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
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

7.7 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

Construction: TE/B/Non-T

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

7.8 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	107099	District-Wide Buckle Up Signing Safety Improvement-Salem	Various		\$292,727
Interstate	108991	Systematic Roadway Departure Treatments	Various		\$1,810,000
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		\$897,700
Secondary	105736	Roadway Departure Safety Countermeasures	Various		\$166,101

7.9 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

8.0 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.

8.1 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

Estimates currently reflect FY15-18 dollars and will be updated by Diana Lewis.

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