





# DRAFT RVTPO FY 2021-24

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## 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 (Unified Human Services Transportation Systems, Inc.).

## 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 January 24, 2020

### **VOTING MEMBERS**

#### **Bedford County Representative**

The Honorable Mickey Johnson

#### **Botetourt County Representatives**

The Honorable Steve Clinton

The Honorable Billy Martin, Sr.\*\*

#### **Montgomery County Representative**

The Honorable Steve Fijalkowski

#### **Roanoke County Representatives**

The Honorable Phil North

The Honorable David Radford

#### **City of Roanoke Representatives**

The Honorable Bill Bestpitch

The Honorable Joe Cobb

#### **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**

Vacancy (Alternate: *Tim Bradshaw*)

#### **Virginia Department of Rail and Public Transportation Representative**

*Dan Sonenklar* (Alternate: *Wood Hudson*)

#### **Virginia Department of Transportation (Salem District) Representative**

Kenneth H. King, PE

(Alternate: *Michael Gray*)

### **NON-VOTING MEMBERS**

#### **Federal Highway Administration**

Kevin Jones

#### **Federal Transit Administration**

Vacancy

#### **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)

Bob Cowell (City of Roanoke CAO)

Craig Meadows (Montgomery County CAO)

Pete Peters (Town of Vinton Designee)

Ben Tripp (City of Salem Designee)

#### **RVTPO SECRETARY**

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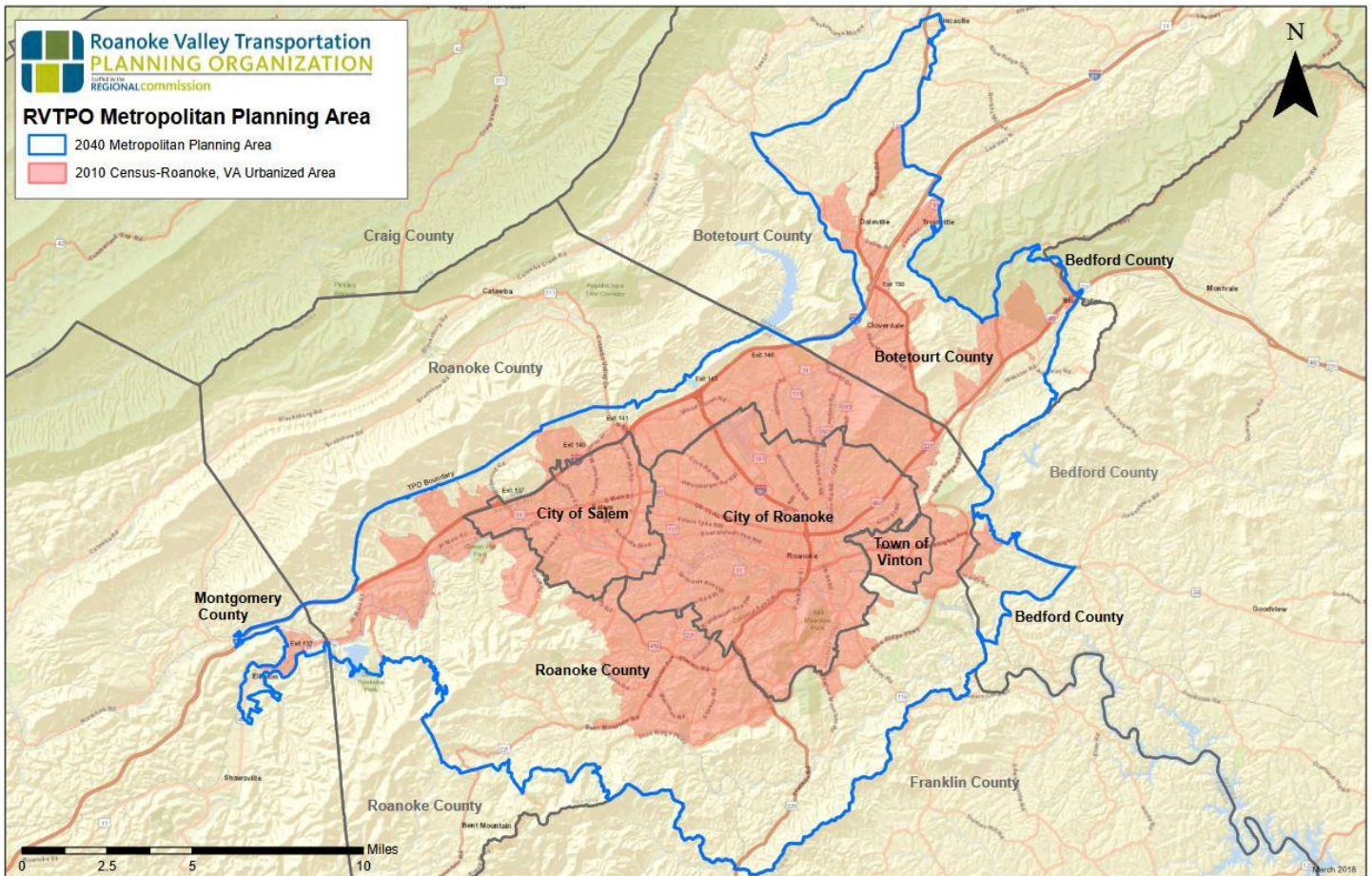
\*Chair

\*\*Vice-Chair

## 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 a Metropolitan Planning Organization (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 (CMP) for Transportation Management Area (TMA) MPOs. The RVTPO adopted its first CMP as a TMA in 2014 and projects in this TIP reflect:

1. CMP 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 FY21-24 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 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 RVTPO'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 FY2021-2024 TIP through the RVTPO website at [www.rvarc.org](http://www.rvarc.org);
2. A 15-day comment period (ending April 16, 2020) where the public can submit comments on the Draft FY 2021-24 TIP via e-mail, online survey, and regular mail; and
3. RVARC website notice and newspaper advertisements in the Roanoke Times and Roanoke Tribune, notifying the public of a public hearing on the adoption of the TIP on \_\_\_\_\_.

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.

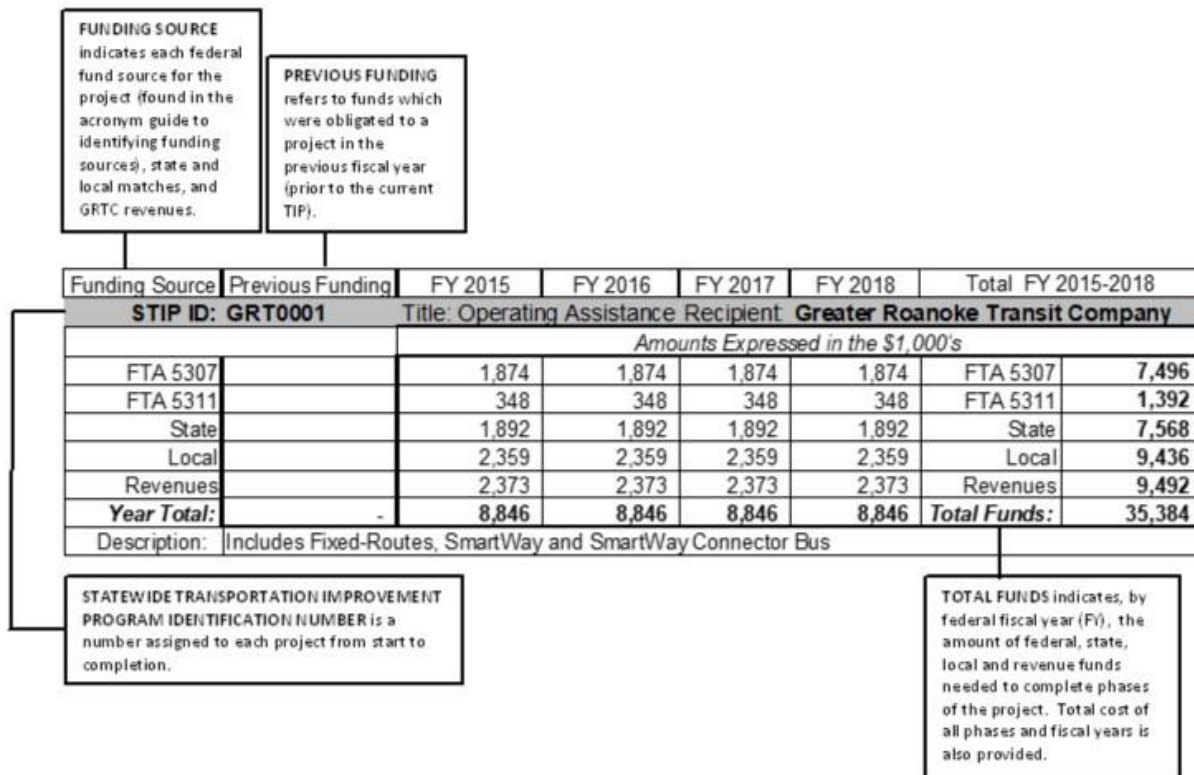
The Comprehensive, Continuing, Cooperative, or "3C" Process of the TPO, provides a natural mechanism by which the TIP can be carefully reviewed and updated annually. Annual development of this program helps to clarify future needs, allow revisions to accommodate changing conditions, and allow developing local and regional plans to be continually incorporated. Changes to the TIP are handled via administrative adjustments for minor changes or amendments for major changes (see section 3.1). Amendments to the TIP also offer the opportunity for public involvement.

### 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 2021 through 2024 (October 1, 2020 to September 30, 2023). Projects that are funded only through state or local sources are not included unless they are considered to be regionally significant. Once approved, the TIP is incorporated into the [Statewide Transportation Improvement Program](#) or 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

**SYSTEM** indicates which system, program or mode the project is categorized.

**VDOT UNIVERSAL PRODUCT CODE** is a number assigned to each project from start to completion.

**SCOPE** indicates the type of work/phase to be paid for with federal funds.  
 PE - Preliminary Engineering  
 RW - Right-of-Way  
 CN - Construction

**ADMIN BY** indicates whether the project is being administered and managed by VDOT or by a local government.

**OVERSIGHT** indicates whether there is federal oversight in the construction, contracting and management of a project.  
 FO - Federal Oversight  
 NFO - No Federal Oversight

UPC NO	80056	SCOPE	Preliminary Engineering			
SYSTEM	Interstate	JURISDICTION	Roanoke County	OVERSIGHT	NFO	
PROJECT	RTE 73 - ROANOKE COUNTY - PARTIAL PE ONLY			ADMIN BY	VDOT	
DESCRIPTION	I-73 - ROANOKE COUNTY					
PROGRAM NOTE						
ROUTE/STREET	0073			TOTAL COST	\$423,485,834	
	FUND SOURCE	MATCH	FY15	FY16	FY17	FY18
PE	Federal - SAFETEA-LU		\$492,560	\$0	\$0	\$0
						\$1,970,239
MPO Note						

**FUND SOURCE** indicates each federal fund source for the project (the TIP document contains an acronym guide to identifying funding sources).

**MATCH** indicates the amount of state and/or local matching funds needed to obtain federal funding.

**COST** indicates, by federal fiscal year (FY), the amount of federal funds needed to complete phases of the project. Total cost of all phases and fiscal years is also provided.

**MPO Note** contains additional project information as provided by the Metropolitan Planning Organization (MPO).



**Table 1: Project System**

<b>System</b>	<b>Description</b>
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 RVTPO area as well as Lutheran Family Services.

### **3.1 TIP Amendment and Adjustment Process**

Revisions to projects listed in the TIP (plus addition of new projects) occur on an ongoing basis and are classified as either administrative adjustments (or modifications) or as amendments. On a general basis, Virginia updates the Statewide TIP, which includes all Metropolitan Planning Organization TIPs, on a three-year basis. Federal law requires the TIP to be updated at least every four years.

Federal regulations for the TPO's planning and programming process (see [CFR Part 450, Section 104](#)) define amendment and administrative modification (referred to as an adjustment) as follows:

**Amendment** A revision to a long-range statewide or metropolitan plan, Transportation Improvement Program (TIP) or Statewide Transportation Improvement Program (STIP) that involves a major change to a project included in a metropolitan plan, TIP, or STIP, including the addition or deletion of a project or a major change in project cost, project/project phase initiation dates, or a major change in design concept or design scope (e.g., changing project termini or the number of through traffic lanes or changing the number of stations in the case of fixed guideway transit projects). Changes to projects that are included only for illustrative purposes do not require an amendment. An amendment is a revision that requires public review and comment, and a redemonstrations of fiscal constraint.

**Administrative Modification (Adjustment)** A minor revision to a long-range statewide or metropolitan transportation plan, TIP, or STIP that includes minor changes to project/project phase costs, minor changes to funding sources of previously included projects, and minor changes to project/project phase initiation dates. An administrative modification is a revision that does not require public review and comment, or a redemonstration of fiscal constraint.

For purposes of simplification and, in keeping with Federal regulations, amendments and adjustments to the RVTPO TIP **must** include any of the following:

#### **Changes requiring a TIP Amendment**

- Adding a new project or deleting a programmed project.
- Changes in project phasing.
- A significant change in project description or scope.
- Funding changes greater than allowable under the sliding scale (defined on the next page).

#### **Changes which may be handled via a TIP Adjustment**

- Minor changes in project description.
- Moving a project from year to year within the TIP.
- Minor changes within a project phase.
- Funding changes less than the threshold established in the sliding scale.

In order to facilitate determination of limits requiring amendments, the sliding scale shown in Table 2 will be used. The sliding scale is a minimum guideline for determining TIP amendments. RVARC staff may determine that any proposed change to the TIP will be handled as an amendment.

**Table 2: Sliding Scale of TIP Amendment and Adjustment Thresholds**

<b>TIP Project Estimated Cost</b>	<b>Minimum Cost Increase Requiring Amendment</b>
\$2 million or less	100%
>\$2 million to \$10 million	50%
>\$10 million to \$20 million	25%
>\$20 million to \$35 million	15%
>\$35 million	10%

The following briefly describes the RVTPO procedure for administrative modifications (adjustments) and amendments to the TIP.

RVARC staff may initiate adjustments or amendments for any project(s) in the TIP. Additionally, adjustments or amendments may also be requested by:

- Localities for projects within their jurisdiction;
- VDOT for roadway, bicycle or pedestrian projects; and
- DRPT, Valley Metro, RADAR, and/or other service providers for transit projects.

Any request for an adjustment or amendment to the TIP must be submitted in writing to the RVARC Director of Transportation. RVARC staff will review the request and determine if it meets the required definitions and thresholds for an adjustment or an amendment.

**Administrative Modifications (Adjustments) to TIP Projects**

- If RVARC staff determine an adjustment is appropriate, RVARC staff will coordinate with appropriate local and state agencies and, in writing, submit a response on the TIP adjustment request to the initiating agency within ten (10) working days of the request. The TIP will be updated to reflect the proposed adjustment and documentation of the adjustment action will be summarized in an appropriate section of the TIP.
- The updated/adjusted TIP document will be posted on the RVTPO website.

**Amendments to TIP Projects**

- If RVARC staff determine an amendment is warranted, the initiating agency will be notified within five (5) working days that the requested change will be handled as a TIP amendment.
- For amendments to TIP Projects, RVARC staff will initiate the public involvement process per the RVTPO Public Participation Plan.
- Upon the RVTPO Policy Board’s approval of the project amendment, the TIP is updated to reflect the amendment and documentation of the amendment action will be summarized in an appropriate section of the TIP.
- The updated TIP will be posted on the RVTPO website.

### 3.2 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).

The table is titled "Six-Year Improvement Program" and "Required Allocations". It shows funding sources and their allocations from FY2020 to FY2025. The "Required Allocations" header is circled in red. The "Previous Allocations" header is also circled in red. The table data is as follows:

Fund Sources	Previous Allocations	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Required After FY2025
District Grant Program: Federal	\$0	\$0	\$0	\$0	\$790	\$0	\$0	\$0
District Grant Program: State	\$0	\$0	\$72	\$0	\$0	\$800	\$0	\$0
Other Funds: Other	\$54	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialized State and Federal: Federal	\$86	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialized State and Federal: MPO TAP	\$132	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Funding</b>	<b>\$272</b>	<b>\$0</b>	<b>\$72</b>	<b>\$0</b>	<b>\$790</b>	<b>\$800</b>	<b>\$0</b>	<b>\$0</b>

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 21<sup>st</sup> Century Act (MAP-21), a requirement that the organizations responsible for approving the TIP publish an Annual List of Federally Obligated Transportation Funds, available at [rvarc.org/tip](http://rvarc.org/tip).

### 3.3 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/NH	STP	EB/MS	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 (0.3760 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	(\$11,900)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$11,900)
											Remaining: *
7 5910	I-81 - IMPROVEMENTS FOR SAFETY & CONGESTION AT EXIT 150 - 0.15 MILE NORTH ROUTE 1636 (AT NS RR); ROUTE 653 @ 3660 MI)										
	TIP:	\$0	\$628,470	\$0	\$0	\$0	\$0	\$0	\$,788,715	\$0	\$634,191
	Obligated:	\$0	\$5,100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,100,000
											Remaining: \$3,194,191

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.)

### 3.4 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 RVTPO or responsible local government. Maintenance and construction program financial planning assumptions used for the FY 2021-2024 TIP are consistent with assumptions and distribution methodologies used for Vision 2040: Roanoke Valley Transportation.

### 3.5 Metropolitan Project Selection Overview

In Metropolitan Planning Areas (MPA), 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 STIP submitted by the Commonwealth Transportation Board (CTB) to FTA and FHWA must be consistent with all the metropolitan TIPs.

As the Metropolitan Planning Organization (MPO) for the Roanoke Valley MPA, the RVTPO is responsible for project selection and allocation of funds under two federal funding programs – the Surface Transportation Block Grant Program (STBG) and the Transportation Alternatives Set-Aside Block Grant Program (TA)..

## **Surface Transportation Block Grant Program**

The Surface Transportation Block Grant Program: Roanoke Valley Urbanized Area Suballocation Funding (STBG), formerly referred to as the Regional Surface Transportation Program (RSTP) provides federal funding that may be used for a wide range of highway, transit, and other surface transportation projects. STBG funds are apportioned to large urban regions (200,000+ population) within a state. Among its functions, the RVTPO Policy Board is responsible for project selection and allocation of approximately \$5M/year under the 80% federally, 20% state-funded STBG program for the Roanoke Valley Urbanized Area. Since 2013, the RVTPO Policy Board has selected transportation projects funded by STBG. Projects funded through STBG are included in the TIP.

The RVTPO STBG process is governed by the Surface Transportation Block Grant Program: Roanoke Valley Urbanized Area Suballocation Funding Project Development and Selection Procedures. By adopting and updating these Procedures, the RVTPO Policy Board acknowledges the “document serves as a guide to applicants, staff, and stakeholders regarding opportunities to apply for funding, financial adjustments to previous approved projects, policies related to the allocation and use of funds, the scheduling of related activities, and the process for the Policy Board’s selection of projects” and, “...will use the Procedures to guide transportation investment decisions using STBG funds.” ([RVTPO Resolution, April 25, 2019](#))

The RVTPO’s STBG project selection is a cooperative process among its members. Amendments to 23 U.S.C funded projects and, particularly STBG funded projects, must be approved by the RVTPO Policy Board and the Commonwealth Transportation Board. This project selection process is consistent with [23 U.S.C. section 134\(i\)\(3\) and \(5\)\(a\)](#), and [23 CFR 450.330](#).

For more information, visit the [RVTPO STBG Funding Program](#) website at [rvarc.org/stbg](http://rvarc.org/stbg).

## **Transportation Alternatives Set-Aside Block Grant Program**

The Fixing America’s Surface Transportation (FAST) Act converts the long-standing Surface Transportation Program (STP) into the Surface Transportation Block Grant Program (STBG), which includes a set-aside amount called the Transportation Alternatives or “TA Set-Aside” as set forth in 23 U.S.C. 133(h). The set-aside funding includes all activities that were previously eligible under TAP (Transportation Alternatives Program set forth in MAP-21), encompassing a variety of smaller-scale, non-traditional transportation projects. Administered by VDOT, these projects must focus on non-motorized transportation opportunities and enhancements to the transportation experience.

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. TA Set-Aside is part of the Federal-aid Highway program. It is not a grant program and funds are only available on a reimbursement basis. This means the project sponsor must first incur project expenses and then request reimbursement.

The RVTPO was designated a Transportation Management Area (TMA) in 2012 and is involved in the solicitation and allocation of its apportionment of TA Set-Aside funds which is around \$530,000 for each two-year period.

For more information visit the [RVTPO TA Program](http://rvarc.org/ta) website at rvarc.org/ta.

### **Commonwealth Transportation Board's Six Year Program**

Within this regulatory framework of metropolitan cooperation, the Commonwealth Transportation Board (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, transit agencies, and the RVPTO Policy Board have lead responsibility for selecting projects (that are consistent with the RVTPO long-range plan and make progress toward achieving the RVPTO's performance targets) to submit for SMART SCALE or MERIT, the CTB's primary funding mechanisms for transportation projects.

The CTB adopts a Six-Year Program on an annual basis. The Six-Year Program (SYP) includes the VDOT and DRPT Six-Year Improvement Program (SYIP) and VDOT's Secondary Six-Year Program (SSYP) which includes maintenance projects on secondary system streets. These programs are developed by evaluation of existing and future needs based upon statewide and regional plans and projections, of project priorities for implementation of the transportation plan, and of 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 are typically defined by the individual funding program. RVTPO project priorities listed in this TIP have considered:

- Conformance to the RVTPO 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 RVTPO Public Involvement Process

## **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 Constrained Long-Range Multimodal Transportation Plan (CLRMTTP) 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 RVTPO 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 2021.

### ***4.1 Funding Sources***

The TIP funding summary tables (Table 3) summarize by year and by funding source the revenue amounts estimated and committed for fiscal years 2021-2024. 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 3: RVTPO Federal Funding Categories and Fiscal Constraint by Year: Roadway, Bicycle and Pedestrian Projects, Federal Fiscal Years 2021-2024**

Fund Source	FFY 2021		FFY 2022		FFY 2023		FFY 2024		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
<b>Federal</b>										
BR	\$75,000	\$75,000	\$1,198,091	\$1,198,091	\$0	\$0	\$0	\$0	\$1,273,091	\$1,273,091
HSIP	\$1,570,411	\$1,570,411	\$4,913,295	\$4,913,295	\$486,993	\$486,993	\$808,000	\$808,000	\$7,778,699	\$7,778,699
NHS/NHPP	\$3,186,600	\$3,186,600	\$0	\$0	\$150,000	\$150,000	\$1,551,807	\$1,551,807	\$4,888,407	\$4,888,407
RSTP (2)	\$4,938,986	\$4,938,986	\$2,591,666	\$2,591,666	\$6,256,729	\$6,256,729	\$566,913	\$566,913	\$14,354,294	\$14,354,294
STP/STBG	\$5,215,143	\$5,215,143	\$87,364	\$87,364	\$546,000	\$546,000	\$1,125,142	\$1,125,142	\$6,973,649	\$6,973,649
TAP	\$877,927	\$877,927	\$693,120	\$693,120	\$0	\$0	\$0	\$0	\$1,571,047	\$1,571,047
<b>Subtotal -- Federal</b>	<b>\$15,864,067</b>	<b>\$15,864,067</b>	<b>\$9,483,536</b>	<b>\$9,483,536</b>	<b>\$7,439,722</b>	<b>\$7,439,722</b>	<b>\$4,051,862</b>	<b>\$4,051,862</b>	<b>\$36,839,187</b>	<b>\$36,839,187</b>
<b>Other</b>										
State Match	\$3,350,064	\$3,350,064	\$1,710,008	\$1,710,008	\$1,837,431	\$1,837,431	\$862,965	\$862,965	\$7,760,468	\$7,760,468
<b>Subtotal -- Other</b>	<b>\$3,350,064</b>	<b>\$3,350,064</b>	<b>\$1,710,008</b>	<b>\$1,710,008</b>	<b>\$1,837,431</b>	<b>\$1,837,431</b>	<b>\$862,965</b>	<b>\$862,965</b>	<b>\$7,760,468</b>	<b>\$7,760,468</b>
<b>Total</b>	<b>\$19,214,131</b>	<b>\$19,214,131</b>	<b>\$11,193,544</b>	<b>\$11,193,544</b>	<b>\$9,277,153</b>	<b>\$9,277,153</b>	<b>\$4,914,827</b>	<b>\$4,914,827</b>	<b>\$44,599,655</b>	<b>\$44,599,655</b>
<b>Federal - ACC (1)</b>										
HSIP	\$1,136,537	\$1,136,537	\$3,022,167	\$3,022,167	\$1,314,034	\$1,314,034	\$599,183	\$599,183	\$6,071,921	\$6,071,921
NHFP	\$0	\$0	\$0	\$0	\$1,381,181	\$1,381,181	\$0	\$0	\$1,381,181	\$1,381,181
NHS/NHPP	\$147,694	\$147,694	\$2,279,931	\$2,279,931	\$2,212,099	\$2,212,099	\$2,573,701	\$2,573,701	\$7,213,425	\$7,213,425
RSTP (2)	\$98,966	\$98,966	\$0	\$0	\$0	\$0	\$633,087	\$633,087	\$732,053	\$732,053
STP/STBG	\$0	\$0	\$1,987,090	\$1,987,090	\$0	\$0	\$0	\$0	\$1,987,090	\$1,987,090
<b>Subtotal -- Federal - ACC (1)</b>	<b>\$1,383,197</b>	<b>\$1,383,197</b>	<b>\$7,289,188</b>	<b>\$7,289,188</b>	<b>\$4,907,314</b>	<b>\$4,907,314</b>	<b>\$3,805,971</b>	<b>\$3,805,971</b>	<b>\$17,385,670</b>	<b>\$17,385,670</b>
<b>Maintenance - Federal (4)</b>										
BR	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$4,000,000	\$4,000,000
NHFP	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$0	\$0	\$0	\$0	\$5,000,000	\$5,000,000
NHS/NHPP	\$7,113,312	\$7,113,312	\$5,399,286	\$5,399,286	\$5,399,286	\$5,399,286	\$5,399,286	\$5,399,286	\$23,311,170	\$23,311,170
STP/STBG	\$27,244,307	\$27,244,307	\$26,068,877	\$26,068,877	\$30,021,568	\$30,021,568	\$31,070,795	\$31,070,795	\$114,405,547	\$114,405,547
<b>Subtotal -- Maintenance - Federal (4)</b>	<b>\$37,857,619</b>	<b>\$37,857,619</b>	<b>\$34,968,163</b>	<b>\$34,968,163</b>	<b>\$36,420,854</b>	<b>\$36,420,854</b>	<b>\$37,470,081</b>	<b>\$37,470,081</b>	<b>\$146,716,717</b>	<b>\$146,716,717</b>

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

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

### **Roadway, Bicycle and Pedestrian 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**

The **Equity Bonus** 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.

### **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 21<sup>st</sup> 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) 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 Transportation Management Area MPOs within a state. As a TMA MPO, the Roanoke Valley TPO Policy Board is responsible for awarding STBG funds for RVTPO candidate projects according to the RVTPO's STBG Project Development and Selection Procedures.

## **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 capacity expansion transportation projects which will be fully funded in the Six-Year Improvement Program. Candidate projects are scored based on the six above listed factors and awarded by the Commonwealth Transportation Board.

## **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** was a competitive grant program to enable and encourage children to safely walk and bicycle to school that via the FAST Act was incorporated under TAP. SRTS funds are 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.

## **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.

### **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.

## 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.

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

**Table 4: Acronyms for Funding Sources**

<b>Abbreviation</b>	<b>Funding Source</b>
AC	<i>Advance Construction funds</i>
ARRA	<i>American Recovery and Reinvestment Act of 2009</i>
BR/BROS	<i>Bridge Rehabilitation and Replacement Program</i>
DEMO	<i>Federal Demonstration funds</i>
EB	Equity Bonus
HES	Hazard Elimination Funds
HPD	Highway Priority Demonstration
HSIP	Highway Safety Improvement Program
IM	Interstate Maintenance Program
NF	Non Federal funding
NHPP	National Highway Performance Program
NHS	National Highway System
STBG	Surface Transportation Block Grant Program
SAFETEA-LU	The Safe Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SMART SCALE	System Management and Allocation of Resources for Transportation (Safety, Congestion, Accessibility, Land Use Coordination, Environment, Economic Development)
STP	Surface Transportation Program
SRTS	Safe Routes to School
TAP	Transportation Alternatives Set-Aside Block Grant Program
5307	Federal Transit Administration Section 5307 Funding
5310	Federal Transit Administration Section 5310 Funding
5311	Federal Transit Administration Section 5311 Funding
5314	Federal Transit Administration Section 5314 Funding
5339	Federal Transit Administration Section 5339 Funding

#### **4.2 FY 2021-2024 Transportation Improvement Plan Timeline**

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

- Fall 2019 - 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/Winter 2019 - Localities (staffs and governing bodies), transit providers, VDOT and VDRPT staffs discuss project priorities for potential inclusion in the TIP.
- Spring 2020 - Transportation Technical Committee members review and provide advice on the draft TIP.
- Spring 2020 – The RVTPO Policy Board reviews the draft TIP and adopts it at its \_\_\_\_\_ 2020 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, Valley Metro, RADAR, 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 5: Performance Measures and Target Deadlines**

Rule and Effective Date(s)	Performance Measures
<b>Safety</b> 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.
<b>Pavement and Bridge</b> 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
<b>Highway System Performance</b> 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)
<b>Transit Asset Management</b> 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.*

Concurrent amendments to the 2040 Constrained Long-Range Multimodal Transportation Plan (CLRMTP) 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 CLRMTP adoption.

Metropolitan Planning Organizations have the option to create their own Performance Targets or adopt those developed by VDOT. The RVTPO has adopted the VDOT and VDRPT targets for the required performance measures applicable to the RVTPO study area.

### 5.1 Safety Performance Measures

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 CLRMTF 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.

To follow-up on the Virginia SHSP, in August 2019, the RVTPO conducted a Roanoke Valley Regional Safety Study with crash locations and potential countermeasures. The Study identifies regional safety needs to guide improvements.

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 STBG funds, the projects that are perceived to increase safety and security of the transportation system are ranked higher than others for that scoring criteria. 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 Pavement and Bridge Performance Measures

In accordance with the requirements of MAP-21 and the FAST Act, Virginia has established pavement and bridge condition performance targets as reported in Virginia’s Baseline Performance Period Report for 2018-2021<sup>1</sup>. This report, submitted to FHWA in October 2018, satisfies the federal requirement that State DOTs submit a Baseline Performance Period Report to FHWA by October 1st of the first year in a performance period. Performance measures for pavement condition are required for the National Highway System (NHS), while bridge condition requirements relate to structures identified as part of the National Bridge Inventory on the NHS. The pavement condition measures and established performance targets for the 2018-2021 performance period are indicated in Table 1 below.

**Table 6: Pavement Condition Measures and Performance Targets**

<b>Interstate Pavement Condition Measures<sup>2</sup></b>	<b>CY 2018-2019 Two-Year Target</b>	<b>CY 2018-2021 Four-Year Target</b>
Percentage of Pavements in Good Condition	N/A <sup>3</sup>	45.0%
Percentage of Pavements in Poor Condition	N/A <sup>3</sup>	3.0%
<b>Non-Interstate NHS Pavement Condition Measures<sup>4</sup></b>	<b>2018-2019 Two-Year Target</b>	<b>2018-2021 Four-Year Target</b>
Percentage of Non-Interstate Pavements in Good Condition	25.0%	25.0%
Percentage of Non-Interstate Pavements in Poor Condition	5.0%	5.0%

Bridge condition measures and established performance targets for the 2018-2021 performance period are indicated in Table 2 below.

<sup>1</sup> Virginia’s Baseline Performance Period Report data is through December 2017.

<sup>2</sup> Interstate condition measures are based on four distresses: International Roughness Index (IRI), cracking, rutting, and faulting.

<sup>3</sup> During this first performance period, States are not required to establish 2-year targets for interstate pavements; however, Virginia has chosen to establish performance targets and are 45.0% and 3.0% for percentage of pavements in good and poor condition, respectively.

<sup>4</sup> During this first performance period, Federal requirements for Non-Interstate NHS pavement condition and performance targets are based on a single distress, IRI. However, Federal guidance outlined in a September 27, 2018 Memorandum on State DOT Targets for Non-Interstate NHS Pavement Measures allows for the use of full distress data when reporting Non-Interstate NHS performance targets. Given the availability of full distress data, Virginia has chosen this approach and reported performance targets for Non-Interstate NHS pavements based on all four distresses. This allows for consistency in assessing the condition and setting performance targets for both Interstate and Non-Interstate NHS pavements.

**Table 7: NHS Bridge Condition Measures and Performance Targets**

<b>NHS Bridge Condition Measures</b>	<b>CY 2018-2019 Two-Year Target</b>	<b>CY 2018-2021 Four-Year Target</b>
Percentage of Deck Area of NBI Bridges on the NHS in Good Condition	33.5%	33.0%
Percentage of Deck Area of NBI Bridges on the NHS in Poor Condition	3.5%	3.0%

**Table 8: Pavement Condition Measures, Four-Year Targets, and RVTP0 2019 Data**

<b>Interstate Pavement Condition Measures</b>	<b>CY 2018-2021 Four-Year Target</b>	<b>RVTP0 2019 Data</b>
Percentage of Pavements in Good Condition	45.0%	39.0%
Percentage of Pavements in Poor Condition	3.0%	0.10%
<b>Non-Interstate NHS Pavement Condition Measures</b>	<b>2018-2021 Four-Year Target</b>	<b>RVTP0 2019 Data</b>
Percentage of Non-Interstate Pavements in Good Condition	25.0%	42.8%
Percentage of Non-Interstate Pavements in Poor Condition	5.0%	0.30%

**Table 9: Bridge Condition Measures, Four-Year Targets, and RVTP0 2019 Data**

<b>NHS Bridge Condition Measures</b>	<b>CY 2018-2021 Four-Year Target</b>	<b>RVTP0 2019 Data</b>
Percentage of Deck Area of NBI Bridges on the NHS in Good Condition	33.0%	10.7%
Percentage of Deck Area of NBI Bridges on the NHS in Poor Condition	3.0%	6.7%

### **5.3 Highway System Performance Performance Measures**

In accordance with the requirements of MAP-21 and the FAST Act, Virginia has established performance targets for three reliability performance measures to assess the Highway System Performance. All three measures are included in Virginia’s Baseline Performance Period Report for 2018-2021 which was submitted to FHWA in October 2018. This report satisfies the federal requirement that State DOTs submit a Baseline Performance Period Report to FHWA by October 1st of the first year in a performance period and establishes baseline performance as of December 31, 2017.

Performance of the NHS is measured by the level of travel time reliability. The travel time reliability performance measures and performance targets for the 2018-2021 performance period are indicated in Table 1 below.

**Table 10: National Highway System Travel Time Reliability Performance Measures and Targets**

<b>NHS Travel Time Reliability Performance</b>	<b>CY 2018-2019 Two-Year Target</b>	<b>CY 2018-2021 Four-Year Target</b>
Percent of Person Miles Traveled on the Interstate that are Reliable	82.2%	82.0%
Percent of Person Miles Traveled on the Non-Interstate NHS that are Reliable	N/A <sup>1</sup>	82.5%

The assessment for freight reliability is based on the truck travel time reliability index. The truck travel time reliability performance measure and performance targets for the 2018-2021 performance period are indicated in Table 2 below.

**Table 11: Freight Reliability Performance Measure and Targets**

<b>Truck Travel Time Reliability Performance</b>	<b>CY 2018-2019 Two-Year Target</b>	<b>CY 2018-2021 Four-Year Target</b>
Truck Travel Time Reliability Index	1.53	1.56

<sup>1</sup> During this first performance period, States are not required to establish 2-year targets for the Non-Interstate NHS reliability measure.

#### **5.4 Transit Asset Management Performance Measures**

The National Transit Asset Management System Final Rule (49 U.S.C 625) specifies four performance measures, which apply to four TAM asset categories: equipment, rolling stock, infrastructure, and facilities. Figure 2 describes each of these measures.

**Table 12: TAM Performance Measures by Asset Category**

<b>Asset Category</b>	<b>Relevant Assets</b>	<b>Measure</b>	<b>Measure Type</b>	<b>Desired Direction</b>
Equipment	Service support, maintenance, and other non-revenue vehicles	Percentage of vehicles that have met or exceeded their ULB	Age-based	Minimize percentage
Rolling Stock	Buses, vans, and sedans; light and heavy rail cars; commuter rail cars and locomotives; ferry boats	Percentage of revenue vehicles that have met or exceeded their ULB	Age-based	Minimize percentage
Infrastructure	Fixed guideway track	Percentage of track segments with performance (speed) restrictions, by mode	Performance-based	Minimize percentage
Facilities	Passenger stations, parking facilities, administration and maintenance facilities	Percentage of assets with condition rating lower than 3.0 on FTA TERM Scale	Condition-based	Minimize percentage

FTA = Federal Transit Administration. TAM = Transit Asset Management. TERM = Transit Economic Requirements Model. ULB = Useful Life Benchmark.

Two definitions apply to these performance measures:

- **Useful Life Benchmark (ULB)**—“The expected lifecycle of a capital asset for a particular transit provider’s operating environment, or the acceptable period of use in service for a particular transit provider’s operating environment.” For example, FTA’s default ULB of a bus is 14 years.
- **FTA Transit Economic Requirements Model (TERM) Scale**—A rating system used in FTA’s TERM to describe asset condition. The scale values are 1 (poor), 2 (marginal), 3 (adequate), 4 (good), and 5 (excellent).

The National Transit Asset Management System Final Rule (49 U.S.C. 625) requires that all transit agencies that receive federal financial assistance under 49 U.S.C. Chapter 53 and own, operate, or manage capital assets used in the provision of public transportation create a TAM plan. Agencies are required to fulfill this requirement through an individual or group plan. The TAM rule provides two tiers of requirements for transit agencies based on size and operating characteristics:

- A Tier I agency operates rail OR has 101 vehicles or more 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 Department of Rail and Public Transportation (DRPT) is the sponsor for the Statewide Tier II Group Plan. The Roanoke Valley Transportation Planning Organization programs federal transportation funds for the Greater Roanoke Transit Company (Valley Metro), Unified Human Services Transportation Systems, Inc. (RADAR), and Lutheran Family Services of Virginia. Greater Roanoke Transit Company/Valley Metro is a Tier II agency participating in the DRPT sponsored group TAM Plan. The RVTPO has integrated the goals measures and targets described in the [Federal Fiscal Year 2018 Group Transit Asset Management Plan and 2020 plan Addendum](#) into the RVTPO’s planning and programming process; specific targets for the Tier II Group TAM Plan are included in the table below.

**Table 13: TAM Targets for rolling stock and facilities: Percentage of Revenue Vehicles that have met or exceeded their ULB by Asset Type**

<b>Asset Category - Performance Measure</b>	<b>Asset Class</b>	<b>2020 Target*</b>
<b>Revenue Vehicles</b>		
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	AB - Articulated Bus	15%
	BU - Bus	10%
	CU - Cutaway	10%
	MB - Minibus	20%
	BR - Over-the-Road Bus	15%
	TB - Trolley Bus	10%
	VN - Van	25%
<b>Equipment</b>		
Age - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Non-Revenue/Service Automobile	25%
	Trucks and other Rubber Tire Vehicles	25%
<b>Facilities</b>		
Condition - % of facilities with a condition rating below 3.0 on the FTA TERM Scale	Administrative and Maintenance Facility	10%
	Administrative Office	10%
	Maintenance Facility	10%
	Passenger Facilities	10%

*\*2020 TAM Plan performance measure targets are pending RVTPO approval.*

## **6.0 Roadway, Bicycle, and Pedestrian Projects**

This section summarizes the TIP roadway, bicycle, and pedestrian projects. Although some projects listed here may have already been constructed, the financials are not complete which is why they are still included in the TIP. The *Project Status* column is current as of March 20, 2020, wherein a project is in one of five phases: Not Started, Preliminary Engineering, Right-of-Way Acquisition, Construction, or Completed. More detailed project information is provided in Appendices A and B.

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

### **6.1 Bedford County**

Construction: BR/R/R

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Secondary	62650	Rte. 634 over Roanoke River Bridge Replacement	From 0.19 mi. W. of Franklin Co. line to 0.12 mi. E. of Bedford Co. line (0.300 mi.)	Route 634	\$12,982,098	Completed

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Primary	107053	Rte. 24 – Bedford Co. Safety Improvements	From: 0.152 mi. W. of Rte. 886 To: 0.156 mi. W. of Rte. 635 South (Spradlin Rd.)	VA Route 24	\$1,681,569	Completed
Primary	107063	Rt. 221 Bedford Co. - Bike & Ped Safety Improvements	From: 0.17 mi. W. along Rte. 663 from Int. w/ Rte. 221 To: Int. of Rte. 221 and Rte.1425	U.S. 221	\$2,550,000	Preliminary Engineering
Primary	109582	US 460 Safety Improvements: HSIP	From: Rte. 741 (Beale Trail Rd. / Little Patriot Dr.) To: Rte. 689 (Johnson School Rd.)	U.S. 460	\$4,510,000	Construction

**6.2 Botetourt County**

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Interstate	75910	U.S. 11, 220, 220A Access Management Project at I-81 Exit 150	From 0.30 mi. S. of U.S. 220 to 0.74 mi. N. of U.S. 220 (1.0410 mi.)	I-81	\$50,321,303	Completed

Construction: BR/R/R

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Primary	77300	Rte. 11 over Tinker Creek Bridge Replacement (Str. 03166)	From 0.02 mi. N. of Rte. 1039 to 0.13 mi. N. of Rte. 1039 (0.09 mi.)	U.S. 11	\$5,018,555	Completed
Primary	77302	Rte. 11 over Tinker Creek Bridge Replacement (Str. 3167)	From Rte. 838 to 0.09 mi. N. of Rte. 838 (0.09 mi.)	U.S. 11	\$3,803,513	Completed
Secondary	52803	Rte. 779 Intersection Improvements & Bridge over Amsterdam Creek	From 0.169 mi. E. Rte. 672 E. to 0.236 mi. W. Rte. 672 East (0.4213 mi.)	Rte. 779	\$7,857,623	Completed

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
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Primary	115457	Rte. 220 at International Pkwy. Intersection	From: 0.25 mi. N International Pkwy. To: 0.25 mi N International Pkwy. (2020 SMART SCALE project)	Roanoke Rd.	\$4,551,000	Not Started
Primary	TBD	Route 220 Superstreet and Access Management	Reconstruct six crossovers bet. Rte. 1044 (Commons Pkwy.) & Rte. 779 (Catawba Rd.) to RCUTs & construct two signals in front of Lord Botetourt H.S.	U.S. 220 bet. Rte. 1044 & Rte. 779	\$924,000	Not Started

Construction: TE/B/Non-T

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Enhancement	107521	Daleville Greenway - TAP	From Glebe Rd. (Rte. 675) to Orchard Lake Dr. (Rte. 1035)	Greenway	\$595,438	Preliminary Engineering

### 6.3 Montgomery County

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Interstate	92558	Rte. 603 – Ironto / Elliston Connector	From I-81 Exit 128 to Int. of U.S.11/460 (2.011 mi.)	Route 603	\$15,831,822	Completed

### 6.4 Roanoke County

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
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Interstate	111373	I-81 SB Auxiliary Lane from Exit 143 to 141	Add one lane on I-81 SB - From: 0.009 Mi. E. of Int. N. Electric Rd. To: 0.026 Mi. W. of Int. SBL I-81 Entrance Ramp (2018 SMART SCALE project)	I-81	\$32,168,111	Not Started
Primary	17698	Rte. 11/460 – Widen to 4-lane w/ curb, gutter and raised median	From 0.055 mi. E. of WCL Salem to 0.10 mi. W. Rte. 830 (2.1880 mi.)	West Main St. / U.S. 11	\$46,124,165	Completed
Primary	98220	Rte. 115, Plantation Road Corridor Improvements	From Williamson Rd (Rte. 11) to Gander Way/Friendship Ln. (0.720 mi.)	Plantation Road/115	\$1,513,910	Completed
Primary	108905	Lila Dr / Rte. 115 Intersection Safety Improvements	From: Lila Drive To: Rte. 115 (Plantation Rd.) (0.1000 mi.) (2017 HB2/SMART SCALE project)	Plantation Rd. /115	\$1,269,396	Construction
Primary	113947	Pedestrian Improvements on Rte. 11 (Williamson Rd)	From: Clubhouse Drive To: 0.2 mi. S. of Greenway Drive	Williamson Rd. / U.S. 11	\$750,000	Not Started
Miscellaneous	113567	Roanoke River Greenway - Blue Ridge Pkwy. to Explore Park	Construction of greenway From Blue Ridge Pkwy. to Explore Park	Explore Park	\$3,020,308	Preliminary Engineering

Construction: BR/R/R

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Primary	77305	Rte. 116 over Back Creek (Str. 14928) – Bridge Replacement	From 0.293 mi. S. Rte. 945 to 0.564 mi. S. Rte. 945	Rte. 116	\$7,171,589	Completed
Primary	82193	U.S. 220 over Back Creek (Str. 14935) – Bridge Replacement	From 0.199 mi. S. of Rte. 657 to 0.311 mi. N. of Rte. 657	U.S. 220	\$18,885,090	Construction

Primary	94726	U.S. 221 over Martins Creek (Str. 14945) – Bridge Replacement	From 0.03 mi. S. of Int. of Rte. 696 to 0.07 mi. N. Int. Rte. 696	U.S. 221	\$3,647,913	Right-of-Way Acquisition
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Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Interstate	99542	I-81 Exit 140 Park & Ride Expansion & Construct New Sidewalk	From Int. Rte. 1128 and Rte. 1150 to 0.17 mi. W. of Int. Rte. 1128 and 1150 (0.17 mi.)	I-81	\$3,353,309	Completed
Interstate	108906	I-81 NB Auxiliary Lane from Exit 141 to 143	Add one lane on I-81 NB - From: 0.026 Mi. West of Int. SBL I-81 Entrance Ramp To: I-81 (2017 HB2/SMART SCALE project)	I-81	\$29,830,716	Construction
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	\$1,720,000	Not Started
Interstate	115937	#I-81 CIP -- MM139 to MM141 adding lane in each direction	From: Red Ln. Overpass To: 0.3 Mi North of Electric Rd.	I-81	\$78,460,688	Preliminary Engineering
Interstate	116201	#I-81 CIP - MM 144 to Exit 150 adding NB and SB lanes	From: I-81 MM 144 To: I-81 MM 151	I-81	\$44,250,256	Preliminary Engineering
Interstate	116203	#I-81 - MM136 to MM139 adding lane in each direction	From: I-81 Exit 137 Interchange To: Red Ln. Overpass	I-81	\$61,569,556	Preliminary Engineering

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	\$607,000	Completed
Primary	107061	Rte. 419 Safety Improvements at Tanglewood	From: 0.45 Mile South of Int. of Route 11 & Route 117 To: Int. of Route 11 & Route 117 (2017 HB2/SMART SCALE project)	Rte. 419	\$6,473,624	Construction
Primary	107055	Route 11 & 117 Roanoke Co. - Pedestrian Safety Improvements	From Rte. 117 to U.S. 11	Rte. 117 and U.S. 11	\$1,220,000	Preliminary Engineering
Primary	111407	Rte. 419 & Rte. 221 Adaptive Traffic Control	From: Rte. 221 To: Rte. 419 (2018 SMART SCALE project)	Rte. 419	\$663,000	Completed
Primary	115460	Rte. 419 & Rte. 220 Diverging Diamond Interchange	From: 0.13 Mi. W. Rte. 220 To: 0.23 Mi. E. Rte. 220 (2020 SMART SCALE project)	Rte. 419	\$17,505,001	Not Started
Secondary	15187	Rte. 1662 - Reconstruction & Replace Bridge over Mud Lick Creek	From: Int. of Rte. 1663 To: Int. of Rte. 419	McVitty Rd.	\$4,474,000	Right-of-Way Acquisition
Secondary	15188	Rte. 1663 - Reconstruct; Drainage Struct/Branch Mud Lick Creek	South Int. Rte. 221	Int. of Rte. 1662	\$687,170	Right-of-Way Acquisition
Secondary	15190	Rte. 688 - Reconstruction	0.056 Mi. S Rte. 221	0.105 Mi. S Rte. 934	\$5,895,794	Completed

Primary	TBD	Route 419 Streetscape Improvements, Phase 2	Extend roadway, and bike/ped improvements between Ogden Rd. & U.S. 220	Route 419 bet. Ogden Rd. and U.S. 220	\$1,505,438	Not Started
Urban	TBD	Ogden Road Multimodal Improvements Scoping	Develop conceptual alternatives for bike/ped/bus stop improvements on Ogden Rd. between Rte. 419 & Colonial Ave.	Ogden Rd.	\$80,000	Not Started
Urban	TBD	Oak Grove Streetscape Improvements - Scoping	Develop conceptual alternatives for pedestrian Improvements along Rte. 419, Carriage Ln. & Grandin Rd. connecting to pedestrian signals/crosswalks	Rte. 419, Carriage Rd., Grandin Rd.	\$80,000	Not Started
Urban	TBD	Valleypointe Parkway Realignment	Widen to 4-lanes & align road with Wood Haven Rd. & Green Ridge Recreation Center entrance; construct right-hand turn lane; and pedestrian improvements	Valleypointe Pkwy. From Concourse Dr. to Int. of Wood Haven Rd.	\$5,352,108	Not Started
Urban	TBD	Old Cave Spring Road Intersection Improvements	Widening of travel-way to 22 ft., shoulder reconstruction, lengthen turn lanes at Intersection w/ Rte. 221, reconfigure traffic signal, and add additional left turn lane on Colonial Ave. at Rte. 221.	Int. of Old Cave Spring Rd. & Brambleton Ave. (U.S. 221)	\$394,000	Not Started
Urban	TBD	Old Cave Spring Road Intersection Improvements	Widening of travel-way to 22 ft., shoulder reconstruction, lengthen turn lanes at Int. w/ Rte. 221, reconfigure traffic signal, and add additional left turn lane on Colonial Ave. at Rte. 221.	Int. of Old Cave Spring Rd. & Brambleton Ave. (U.S. 221)	\$394,000	Not Started

Construction: TE/B/Non-T

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Urban	111366	Plantation Rd. Bike/ Ped/ Streetscape Phase II	From: Walrond Dr. To: Gander Way (2020 SMART SCALE project)	Route 115	\$1,752,213	Right-of-Way Acquisition
Enhancement	91191	Roanoke River Greenway – City of Roanoke to Route 618	From: City of Roanoke To: Rte. 618 (Highland Rd.)		\$6,857,566	Right-of-Way Acquisition
Enhancement	97171	Roanoke County, RRG, Green Hill Park to Riverside Park	From Green Hill Park to Riverside Park (1.7330 mi.) (2017 HB2/SMART SCALE project)		\$8,014,409	Construction
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	\$2,898,266	Completed
Enhancement	111317	Williamson Rd. Sidewalk Improvements	From: Peters Creek Rd. To: Plantation Rd (2020 SMART SCALE project).	U.S. 11/ Williamson Rd.	\$1,934,000	Preliminary Engineering
Enhancement	113356	Roanoke River Greenway Parkway Crossing	Construction of greenway from 3204 Highland Rd. to 3404 Rutrough Rd.		\$491,606	Preliminary Engineering
Miscellaneous	TBD	Orange Market Park and Ride/Parking Lot Improvements	Various lot improvements to Orange Market Park & Ride Lot; construct ADA ramps and Continental crosswalks to cross Rte. 311; add landscaping, bicycle racks,		\$343,573	Not Started

**6.5 City of Roanoke**

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Urban	688	13th St. and Hollins Rd.	Reconstruction w/added capacity, From: Jamison Ave To: .08 Mi. N. Int. Orange Ave.	Intersection of 13th St. & Hollins Rd.	\$23,960,970	Right-of-Way Acquisition
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	Completed

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Interstate	113570	I-581 Exit 2 Interchange Study	From: I-581 To: Peters Creek Rd.	I-581	\$150,000	Preliminary Engineering
Primary	109566	Orange Ave./Blue Hills Signal Upgrade – City of Roanoke	From Orange Ave. to Blue Hills	U.S. 460 / Orange Ave.	\$11,000	Completed
Primary	109570	Orange Ave./Hollins Rd. Signal Upgrade	Int. of U.S. 460 & Rte. 115	U.S. 460 & Rte. 115	\$562,297	Construction
Urban	111135	Flashing Yellow Arrow - Various Locations - Roanoke City	Various	N/A	\$277,460	Preliminary Engineering
Urban	111137	Rectangular Rapid Flashing Beacons - Roanoke City	Various	N/A	\$108,000	Preliminary Engineering
Urban	111360	Franklin Road Sidewalk Improvements- Rte. 220 B- Roanoke City	bike/ped improvements, From: 3100 Block To: 3700 Block	U.S. 220 Bus./Franklin Rd.	\$1,704,013	Preliminary Engineering

Urban	111370	Hollins Rd. & Orange Ave. Intersection Improvements	Reconstruction w/added capacity From: Orange Ave To: Hollins Rd. (2018 SMART SCALE project)	Intersection of Hollins Rd. & Orange Ave.	\$3,552,247	Construction
Urban	113324	Installation of Pedestrian Countdown Signal - Roanoke	From: Gainsboro Rd. To: Burrell St.	From Gainsboro Rd. to Burrell St.	\$101,984	Not Started
Urban	115454	Orange Ave. (U.S. 460) Improvements	Safety improvements – what exactly? (2020 SMART SCALE project)	From King St. to Blue Hills/Mexico Way	\$2,818,704	Not Started
Urban	TBD	Aviation Drive/Valley View Blvd. Pedestrian Improvements	Construct 5' wide sidewalk on W. side of road (1.25 mi.), ped. signals, ADA ramps, & drainage improvements.	Valley View Blvd. from Roanoke-Blacksburg Reg. Airport to 4800 Blk. Of Valley View Blvd.	\$2,513,437	Not Started

Construction: TE/B/Non-T

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Enhancement	105439	Roanoke River Greenway (Bridge St. to Aerial Way Dr.) - RSTP	From Bridge St. to Aerial Way Dr.	Roanoke River Greenway	\$9,000,000	Completed
Enhancement	106265	Garden City Blvd. Bike/Ped - TAP	From Davenport Ave./Ivywood St. to Riverland Rd.	Garden City Blvd.	\$1,680,336	Completed

Miscellaneous	110101	Tinker Creek Trail Extension	From: Wise Ave. To: Masons Mill Park	N/A	\$7,251,474	Right-of-Way Acquisition
Urban	108896	Colonial Avenue Improvements	Bike/ped facilities. From: 300 ft. beyond Winding Way Rd. SW To: Clearfield Rd. SW	Colonial Ave.	\$7,000,000	Completed
Urban	113568	Roanoke River Greenway Bridge Across Barnhardt Creek	From: 200 ft E of Barnhardt Creek To: 150 ft W of Barnhardt Creek	Roanoke River Greenway	\$897,770	Preliminary Engineering
Urban	72180	City of Roanoke - Roanoke River Greenway	From: within the City of Roanoke Limits		\$1,949,924	Completed
Miscellaneous	TBD	Roanoke River Greenway - East	PE & ROW acquisition connecting RR Greenway @ Bennington Trail head to greenway on Underhill Rd.	RR Greenway from Bennington trail head to existing greenway on Underhill Rd.	\$835,000	Not Started
Miscellaneous	TBD	Greenway Connection - Riverland Road	Construct greenway along Riverland Rd.	Riverland Rd. from Mill Mtn. parking to existing Garden & RR Greenways	\$1,198,410	Not Started



## 6.6 City of Salem

### Construction: BR/R/R

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Urban	110574	Apperson Drive Bridge Replacement	From: E. Riverside Dr. To: Route 419 - Electric Rd.	U.S. 11	\$3,328,203	Preliminary Engineering

### Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Urban	8753	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.) (2017 SMART SCALE project)	East Main St. / U.S. 460	\$15,925,395	Construction
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	Completed

### Construction: TE/B/Non-T

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Primary	111367	Mason Creek Greenway Ph3 - 419 Multimodal Improvements.	Bike/Ped facilities, From: Mason Creek Greenway To: Hanging Rock Battlefield Trail (2018 SMART SCALE project)	Mason Creek Greenway	\$2,610,310	Not Started
Urban	111371	Downtown Salem Int. & Streetscape Improvements	From: West Main St To: East Main St (2018 SMART SCALE project)	East & West Main St.	\$3,629,869	Preliminary Engineering

Urban	113566	Elizabeth Greenway	From: Mason Creek Greenway To: E. Main St. Greenway	Elizabeth Greenway	\$1,104,400	Preliminary Engineering
Enhancement	101838	Bridge on Phase 3A-City of Salem RR Greenway	From approx. 1200 feet E. Mill Ln. to Eddy St.	Roanoke River Greenway	\$751,969	Completed
Enhancement	106268	Hanging Rock Battlefield Trail - TAP	From existing Hanging Rock Battlefield Trail to E. Main St.	Hanging Rock Battlefield Trail	\$1,333,117	Right-of-Way Acquisition
Enhancement	109612	Downtown Streetscape Improvements	From: West side of Broad St. To: East side of White Oak Alley	E. Main St.	\$988,418	Construction

### 6.7 Town of Vinton

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Urban	113565	Walnut Avenue Bicycle and Pedestrian Accommodations	Bike/Ped facilities, From: W. Lee Ave. To: 1st St.	Walnut Ave.	\$545,250	Preliminary Engineering

Construction: BR/R/R

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Urban	76677	Replace Bridge and Approaches over Glade Creek	From 0.098 W. of 5th St. to 0.052 mi. E. of 5th St. (0.15 mi.)	Walnut Ave.	\$3,147,896	Completed

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Miscellaneous	111649	Walnut Ave Bike/Ped Accommodations (5th St to town Limit)	Bike/Ped facilities, From: 5th St. To: Town Limits	Walnut Avenue	\$1,446,282	Preliminary Engineering
Urban	113322	Hardy Road/Dillon Woods Crosswalk	Bike/Ped facilities, From: Bypass Rd. To: McDonald St.	Hardy Road	\$182,693	Not Started
Urban	TBD	Gus Nicks Boulevard Pedestrian/Bicycle Crossing	Mid-block ped. crossing on Gus Nicks Blvd. connecting to Glade Creek Greenway	Gus Nicks Blvd.	\$169,650	Not Started

Construction: TE/B/Non-T

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Enhancement	109611	Glade Creek Greenway Phase 2	From: Int. of 5th St & Walnut Ave. To: Gus Nicks Blvd.		\$662,789	Construction
Miscellaneous	TBD	Glade Creek Greenway Phase 3 Engineering Study and Design Plans	Preliminary Engineering for Glade Creek Greenway Ph. 3	Glade Creek Greenway	\$144,443	Not Started

**6.8 Salem District-wide**

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Primary	T23167	Systemic HSIP Curve Delineation-PE Only	Various locations district-wide	Various	\$4,511,961	Preliminary Engineering

Primary	T23168	FY 21 Pedestrian Crossing Improvements	Various locations district-wide	Various	\$1,021,751	Preliminary Engineering
Primary	T23169	FY 21 Unsignalized Intersections	Various locations district-wide	Various	\$463,889	Not Started

Construction: BR/R/R

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Miscellaneous	T19000	Bridge Rehabilitation / Replacement	Various locations district-wide	Various	\$65,829,909	Not Started

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Interstate	108991	Systematic Roadway Departure Treatments	Various	Various	\$2,810,000	Preliminary Engineering
Interstate	109556	Safety Pre-scoping - Salem	Various locations district-wide	Various	\$843,824	Completed
Interstate	T21476	Interstate & Primary Cable Guardrail Install-Districtwide	Various locations district-wide	Various	\$500,000	Not Started
Primary	107069	Safety Improvements – Yearly HSIP Open Container Funds	Various	Various	\$2,000,000	Not Started
Primary	114331	Install Advanced Signal Control Technology and Communication	Various	Various	\$407,136	Completed

Primary	114335	Various Routes - Install Reflective Back Plates	Various locations district-wide	Various	\$208,189	Completed
Primary	T21463	Districtwide Systemic Roadway Departure Countermeasures	Various locations district-wide	Various	\$2,562,984	Not Started
Primary	T21479	Districtwide Rumble Strip Installation- Primary Routes	Various locations district-wide	Various	\$500,000	Not Started

*Maint. Traf. & Safety Op*

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Miscellaneous	T14720	Salem: Traffic and Safety Operations	Funding identified to be obligated districtwide as projects are identified		\$15,382,423	N/A

*Maint. Bridges*

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Miscellaneous	T14721	Salem: Preventive Maint. for Bridges	Funding identified to be obligated districtwide as projects are identified		\$45,370,193	N/A

*Maint. & Syst. Pres.*

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Miscellaneous	T14722	Salem: Preventive Maint. and System Preservation	Funding identified to be obligated districtwide as projects are identified.		\$85,964,101	N/A

Construction : Transportation Enhancement/Byway/Non-Traditional

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Miscellaneous	T18992	Construction: Transportation Enhancement/ Byway/ Other Non-Traditional	Funding identified to be obligated districtwide as projects are identified		\$52,973,533	N/A

Construction: Rail

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Miscellaneous	T18998	Construction: Rail Projects	Funding identified to be obligated districtwide as projects are identified		\$1,500,000	N/A

Construction: Federal Lands Highway

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Miscellaneous	T19001	Federal Lands Highway	Funding identified to be obligated districtwide as projects are identified		\$1,733,750	N/A

Transit: Amenities

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Miscellaneous	T19021	Construction: Transit Amenities	Funding identified to be obligated districtwide as projects are identified		\$1,904,000	N/A

**6.9 Statewide**

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Interstate	115852	ITTF FY20 Micro Transit	From: Various To: Various		\$500,000	N/A

Construction: SITS/OI

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Interstate	107802	Incident Management Emergency Evacuation & Detour Plans	Various	Various	\$918,907	Completed
Interstate	110551	Traffic Video Expansion - Statewide	Various	Various	\$362,560	N/A
Interstate	110912	Statewide Truck Parking Management System - Phase 1	Various	Various	\$813,019	N/A
Interstate	111613	Statewide Truck Parking Management System - Phase 2	Various	Various	\$1,807,000	N/A
Interstate	111892	ATMS - Phase 1, 2, 3, 4	Various	Various	\$10,900,000	N/A
Interstate	114400	Drone Technology Project	Various	Various	\$300,000	N/A
Interstate	115854	ITTF FY20 Arterial Operations Program Dashboard	N/A	N/A	\$1,250,000	N/A

Interstate	115855	ITTF FY20 High Speed Communications	Various	Various	\$4,700,000	N/A
Interstate	116039	I-81 DMS Installation	Various	Various	\$12,500,000	N/A
Miscellaneous	105481	Improvement iPEMS (Iteris Performance Measurement System)	Various	Various	\$1,400,000	Completed
Miscellaneous	114193	Pedestrian Improvements at Priority Corridor Statewide	Various	Various	\$284,945	N/A

Construction: Rail

System	UPC	Project Name	Description	Street/Route	Estimate	Project Status
Miscellaneous	112018	Highway-Rail Safety Inventory Section 130 - PE Only	Statewide	Statewide	\$700,000	Preliminary Engineering
Miscellaneous	112213	Highway-Rail Section 130 Pre Scoping - PE Only	For Highway / Rail Safety Projects Without PE Numbers	Statewide	\$300,000	Preliminary Engineering
Miscellaneous	112497	Environmental EQ429 Form Processing Charges – PE Only	Various	Assigned	\$500,000	N/A



## 7.0 Transit Projects

Funding for the Greater Roanoke Transit Company (GRTC/Valley Metro), Unified Human Services Transportation System, Inc. (RADAR), and Lutheran Family Services of Virginia from federal and other sources for FY 2021-2024 is presented in the program of projects below.

### 7.1 Greater Roanoke Transit Company (Valley Metro) Project Details

		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024	
<b>STIP ID:</b>	<b>GRT0001</b>	<b>Title: Operating Assistance</b>			<b>Recipient: Greater Roanoke Transit Company</b>		
FTA 5307		2,147,090	2,147,090	2,147,090	2,147,090	FTA 5307	<b>8,588,360</b>
FTA 5311		354,000	354,000	354,000	354,000	FTA 5311	<b>1,416,000</b>
State		2,407,236	2,407,236	2,407,236	2,407,236	State	<b>9,628,944</b>
Local		1,566,000	1,566,000	1,566,000	1,566,000	Local	<b>6,264,000</b>
Revenues		2,314,000	2,314,000	2,314,000	2,314,000	Revenues	<b>9,256,000</b>
<b>Year Total:</b>		<b>8,788,326</b>	<b>8,788,326</b>	<b>8,788,326</b>	<b>8,788,326</b>	<b>Total Funds:</b>	<b>35,153,304</b>
Description:							
<b>STIP ID:</b>	<b>GRT0002</b>	<b>Title: Preventative Maintenance</b>			<b>Recipient: Greater Roanoke Transit Company</b>		
FTA 5307		715,697	715,697	715,697	715,697	FTA 5307	<b>2,862,788</b>
State		-	-	-	-	State	-
Local		178,924	178,924	178,924	178,924	Local	<b>715,696</b>
<b>Year Total:</b>	-	<b>894,621</b>	<b>894,621</b>	<b>894,621</b>	<b>894,621</b>	<b>Total Funds:</b>	<b>3,578,484</b>
Description:							
<b>STIP ID:</b>	<b>GRT0003</b>	<b>Title: Transit Enhancements</b>			<b>Recipient: Greater Roanoke Transit Company</b>		
FTA 5307						FTA 5307	-
State						State	-
Local						Local	-
<b>Year Total:</b>	-	-	-	-	-	<b>Total Funds:</b>	-
Description:							
<b>STIP ID:</b>	<b>GRT0004</b>	<b>Title: Replacement Bus</b>			<b>Recipient: Greater Roanoke Transit Company</b>		
FTA 5339				97,200		FTA 5339	<b>97,200</b>
FTA 5307						FTA 5307	-
STBG		1,564,351	1,564,351	1,639,419		STBG	<b>4,768,122</b>
State		391,088	391,088	658,255		State	<b>1,440,431</b>
Local				14,400		Local	<b>14,400</b>
<b>Year Total:</b>	-	<b>1,955,439</b>	<b>1,955,439</b>	<b>2,409,274</b>	-	<b>Total Funds:</b>	<b>6,320,152</b>
Description:							
<b>STIP ID:</b>	<b>GRT0005</b>	<b>Title: Expansion Bus</b>			<b>Recipient: Greater Roanoke Transit Company</b>		
FTA 5339						FTA 5339	-
State			800,000	900,000		State	<b>1,700,000</b>
Local						Local	-
<b>Year Total:</b>	-	-	<b>800,000</b>	<b>900,000</b>	-	<b>Total Funds:</b>	<b>1,700,000</b>
Description:							
<b>STIP ID:</b>	<b>GRT0006</b>	<b>Title: Support Vehicles</b>			<b>Recipient: Greater Roanoke Transit Company</b>		
FTA 5339			72,000	80,000	48,000	FTA 5339	<b>200,000</b>
Flexible STP						Flexible STP	-
State			9,000	10,000	6,000	State	<b>25,000</b>
Local			9,000	10,000	6,000	Local	<b>25,000</b>
<b>Year Total:</b>	-	-	<b>90,000</b>	<b>100,000</b>	<b>60,000</b>	<b>Total Funds:</b>	<b>250,000</b>
Description:							
<b>STIP ID:</b>	<b>GRT0007</b>	<b>Title: Bus Stop Enhancements</b>			<b>Recipient: Greater Roanoke Transit Company</b>		
FTA 5339			40,500	40,500	40,500	FTA 5339	<b>121,500</b>
State			103,500	103,500	103,500	State	<b>310,500</b>
Local			6,000	6,000	6,000	Local	<b>18,000</b>
<b>Year Total:</b>	-	-	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>Total Funds:</b>	<b>450,000</b>
Description: e.g. Bus shelters/benches							

		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024
<b>STIP ID:</b>	<b>GRT0008</b>	<b>Title: Rehab/Renovation of Admin/Maint Building</b>			<b>Recipient: Greater Roanoke Transit Company</b>	
FTA 5339		54,810			270,000	FTA 5339 324,810
State		140,070			690,000	State 830,070
Local		8,120			40,000	Local 48,120
<b>Year Total:</b>	-	<b>203,000</b>	-	-	<b>1,000,000</b>	<b>Total Funds: 1,203,000</b>
Description:						
<b>STIP ID:</b>	<b>GRT0009</b>	<b>Title: Shop Equipment</b>			<b>Recipient: Greater Roanoke Transit Company</b>	
FTA 5339			5,400	5,400	5,400	FTA 5339 16,200
State			13,800	13,800	13,800	State 41,400
Local			800	800	800	Local 2,400
<b>Year Total:</b>	-	-	<b>20,000</b>	<b>20,000</b>	<b>20,000</b>	<b>Total Funds: 60,000</b>
Description:						
<b>STIP ID:</b>	<b>GRT0010</b>	<b>Title: ADP Software</b>			<b>Recipient: Greater Roanoke Transit Company</b>	
FTA 5339		4,131	6,075	2,700		FTA 5339 12,906
State		10,557	15,525	6,900		State 32,982
Local		612	900	400		Local 1,912
<b>Year Total:</b>	-	<b>15,300</b>	<b>22,500</b>	<b>10,000</b>	-	<b>Total Funds: 47,800</b>
Description:						
<b>STIP ID:</b>	<b>GRT0011</b>	<b>Title: ADP Hardware</b>			<b>Recipient: Greater Roanoke Transit Company</b>	
FTA 5339		24,214	20,250			FTA 5339 44,464
State		61,880	51,750			State 113,630
Local		3,587	3,000			Local 6,587
<b>Year Total:</b>	-	<b>89,681</b>	<b>75,000</b>	-	-	<b>Total Funds: 164,681</b>
Description:						
<b>STIP ID:</b>	<b>GRT0012</b>	<b>Title: Security</b>			<b>Recipient: Greater Roanoke Transit Company</b>	
FTA 5339						FTA 5339 -
State						State -
Local						Local -
<b>Year Total:</b>	-	-	-	-	-	<b>Total Funds: -</b>
Description:						
<b>STIP ID:</b>	<b>GRT0013</b>	<b>Title: New Downtown Roanoke Multitmodal Facility - Engineering, Construction, Equipment</b>			<b>Recipient: Greater Roanoke Transit Company</b>	
FTA 5307		9,200,000				FTA 5307 9,200,000
STBG		400,000				STBG
State		2,300,000				State 2,300,000
Local						Local -
<b>Year Total:</b>	-	<b>11,900,000</b>	-	-	-	<b>Total Funds: 11,500,000</b>
Description:						
<b>STIP ID:</b>	<b>GRT0014</b>	<b>Title: Rehabilitate/Rebuild Buses</b>			<b>Recipient: Greater Roanoke Transit Company</b>	
FTA 5311						FTA 5311 -
State						State -
Local						Local -
<b>Year Total:</b>	-	-	-	-	-	<b>Total Funds: -</b>
Description:						
<b>STIP ID:</b>	<b>GRT0015</b>	<b>Title: Fare Collection Equipment</b>			<b>Recipient: Greater Roanoke Transit Company</b>	
FTA 5339		77,169				FTA 5339 77,169
State		197,209				State 197,209
Local		11,432				Local 11,432
<b>Year Total:</b>	-	<b>285,000</b>	-	-	-	<b>Total Funds: 285,810</b>
Description:						

		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024
<b>STIP ID:</b>	<b>GRT0016</b>	<b>Title: Automatic Vehicle Locator</b>			<b>Recipient: Greater Roanoke Transit Company</b>	
FTA 5339						FTA 5339 -
State		1,700,000				State 1,700,000
Local						Local -
<b>Year Total:</b>	-	<b>1,700,000</b>	-	-	-	<b>Total Funds: 1,700,000</b>
Description:						
<b>STIP ID:</b>	<b>GRT0017</b>	<b>Title: Miscellaneous Office</b>			<b>Recipient: Greater Roanoke Transit Company</b>	
FTA 5339			10,800			FTA 5339 10,800
State			27,600			State 27,600
Local			1,600			Local 1,600
<b>Year Total:</b>	-	-	<b>40,000</b>	-	-	<b>Total Funds: 40,000</b>
Description:						
<b>STIP ID:</b>	<b>GRT0018</b>	<b>Title: Radio Communication System</b>			<b>Recipient: Greater Roanoke Transit Company</b>	
Flexible STP		400,000				Flexible STP 400,000
State		80,000				State 80,000
Local		20,000				Local 20,000
<b>Year Total:</b>	-	<b>500,000</b>	-	-	-	<b>Total Funds: 500,000</b>
Description:						

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

		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024
<b>STIP ID:</b>	<b>RAD0001</b>	<b>Title: New Freedom Operating Assistance</b>			<b>Recipient: RADAR - UHSTS, Inc. Roanoke County</b>	
FTA 5310		115,316	115,316	115,316	115,316	FTA 5310 461,262
State		92,252	92,252	92,252	92,252	State 369,010
Local		11,063	11,063	11,063	11,063	Local 44,252
Revenues		12,000	12,000	12,000	12,000	Revenues 48,000
<b>Year Total:</b>	-	<b>230,631</b>	<b>230,631</b>	<b>230,631</b>	<b>230,631</b>	<b>Total Funds: 922,524</b>
Description:	To support CORTRAN and Local Office on Aging Vital Transportation Service Program.					
<b>STIP ID:</b>	<b>RAD0002</b>	<b>Title: Paratransit Vehicles</b>			<b>Recipient: RADAR - UHSTS, Inc. Roanoke County</b>	
FTA 5310		128,000	128,000	128,000	128,000	FTA 5310 512,000
State						State -
Local		32,000	32,000	32,000	32,000	Local 128,000
<b>Year Total:</b>	-	<b>160,000</b>	<b>160,000</b>	<b>160,000</b>	<b>160,000</b>	<b>Total Funds: 640,000</b>
Description:	Approx. 2 vehicles/year					

### 7.3 Lutheran Family Services of Virginia Project Details

		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024
<b>STIP ID:</b>	<b>LFS0001</b>	<b>Title: Paratransit Vehicles</b>			<b>Recipient: Lutheran Family Services</b>	
FTA 5310		36,000				FTA 5310 36,000
State						State -
Local		9,000				Local 9,000
<b>Year Total:</b>	-	<b>45,000</b>	-	-	-	<b>Total Funds: 45,000</b>

## 7.4 Transit Funding Summaries

Greater Roanoke Transit Company		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024	
FTA 5307	-	12,062,787	2,862,787	2,862,787	2,862,787	FTA 5307	20,651,148
FTA 5309	-	-	-	-	-	FTA 5309	-
FTA 5310	-	-	-	-	-	FTA 5310	-
FTA 5311	-	354,000	354,000	354,000	354,000	FTA 5311	1,416,000
FTA 5314	-	-	-	-	-	FTA 5314	-
FTA 5337	-	-	-	-	-	FTA 5337	-
FTA 5339	-	160,324	159,025	227,800	363,900	FTA 5339	911,049
FTA ADTAP	-	-	-	-	-	FTA ADTAP	-
FTA DPF	-	-	-	-	-	FTA DPF	-
FTA TIGER	-	-	-	-	-	FTA TIGER	-
FBD	-	-	-	-	-	FBD	-
Flexible STP	-	400,000	-	-	-	Flexible STP	400,000
	-	-	-	-	-	-	-
STBG	-	1,964,351	1,564,351	1,639,419	-	STBG	4,768,122
FHWA TAP	-	-	-	-	-	FHWA TAP	-
	-	-	-	-	-	-	-
Other Federal	-	-	-	-	-	Other Federal	-
State	-	7,288,040	3,820,299	4,100,091	3,220,536	State	18,428,966
Local	-	1,788,675	1,766,424	1,776,624	1,797,724	Local	7,129,447
Revenues	-	2,314,000	2,314,000	2,314,000	2,314,000	Revenues	9,256,000
<b>Totals</b>	-	<b>26,332,177</b>	<b>12,840,886</b>	<b>13,274,721</b>	<b>10,912,947</b>		<b>62,960,731</b>

RADAR - UHSTS, Inc. Roanoke County		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024	
FTA 5307	-	-	-	-	-	FTA 5307	-
FTA 5309	-	-	-	-	-	FTA 5309	-
FTA 5310	-	243,316	243,316	243,316	243,316	FTA 5310	973,262
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	-
	-	-	-	-	-	-	-
STBG	-	-	-	-	-	STBG	-
FHWA TAP	-	-	-	-	-	FHWA TAP	-
	-	-	-	-	-	-	-
Other Federal	-	-	-	-	-	Other Federal	-
State	-	92,252	92,252	92,252	92,252	State	369,010
Local	-	43,063	43,063	43,063	43,063	Local	172,252
Revenues	-	12,000	12,000	12,000	12,000	Revenues	48,000
<b>Totals</b>	-	<b>390,631</b>	<b>390,631</b>	<b>390,631</b>	<b>390,631</b>		<b>1,562,524</b>

Lutheran Family Services of Virginia		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024	
FTA 5307	-	-	-	-	-	FTA 5307	-
FTA 5309	-	-	-	-	-	FTA 5309	-
FTA 5310	-	36,000	-	-	-	FTA 5310	36,000
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	-
	-	-	-	-	-		-
STBG	-	-	-	-	-	STBG	-
FHWA TAP	-	-	-	-	-	FHWA TAP	-
	-	-	-	-	-		-
Other Federal	-	-	-	-	-	Other Federal	-
State	-	-	-	-	-	State	-
Local	-	9,000	-	-	-	Local	9,000
Revenues	-	-	-	-	-	Revenues	-
Totals	-	45,000	-	-	-		45,000

Roanoke Valley TPO		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024	
FTA 5307	-	12,062,787	2,862,787	2,862,787	2,862,787	FTA 5307	20,651,148
FTA 5309	-	-	-	-	-	FTA 5309	-
FTA 5310	-	243,316	243,316	243,316	243,316	FTA 5310	973,262
FTA 5311	-	354,000	354,000	354,000	354,000	FTA 5311	1,416,000
FTA 5314	-	-	-	-	-	FTA 5314	-
FTA 5337	-	-	-	-	-	FTA 5337	-
FTA 5339	-	160,324	159,025	227,800	363,900	FTA 5339	911,049
FTA ADTAP	-	-	-	-	-	FTA ADTAP	-
FTA DPF	-	-	-	-	-	FTA DPF	-
FTA TIGER	-	-	-	-	-	FTA TIGER	-
FBD	-	-	-	-	-	FBD	-
Flexible STP	-	400,000	-	-	-	Flexible STP	400,000
	-	-	-	-	-		-
STBG	-	1,964,351	1,564,351	1,639,419	-	STBG	5,168,122
FHWA TAP	-	-	-	-	-	FHWA TAP	-
	-	-	-	-	-		-
Other Federal	-	-	-	-	-	Other Federal	-
State	-	7,380,292	3,912,551	4,192,343	3,312,788	State	18,797,975
Local	-	1,831,738	1,809,487	1,819,687	1,840,787	Local	7,301,699
Revenues	-	2,326,000	2,326,000	2,326,000	2,326,000	Revenues	9,304,000
Totals	-	26,722,808	13,231,517	13,665,352	11,303,578		64,923,255

## **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 the Roadway, Bicycle, Pedestrian, and Transit section and which may or may not receive Federal funding.

### **8.1 SMART SCALE Projects**

The SMART SCALE project prioritization process was developed by the Office of the Virginia Secretary of Transportation and enacted by the General Assembly in 2014. The following projects were successful in the SMART SCALE process but only state funds (no federal funds) were awarded to fulfill the request.

<b>Locality</b>	<b>System</b>	<b>UPC</b>	<b>Project Name</b>	<b>Description</b>	<b>Street/Route</b>	<b>Estimate</b>
Roanoke County	Primary	108904	Route 311 / Route 419 Int. Safety & Congestion Imp	From: Intersection of Rte. 311 & Rte. 419 To: Int. of Rte. 311 & Rte. 419 (0.1000 MI) (2017 HB2/SMART SCALE project)	Catawba Valley Dr./Rte. 311	\$1,957,006
Roanoke County	Primary	108882	West Main Street Sidewalk Installation	From: West Salem City Limit To: 0.018 Mi. W. Int. Rte. 830 (Technology Drive) (2018 SMART SCALE project)	U.S. 11	\$1,037,000
Salem	Urban	108899	Multimodal Improvements Along Boulevard	From McDivitt Rd. to Salem city limit (0.75 mi.) (2017 HB2/SMART SCALE project)	Boulevard	\$884,881

## **APPENDIX A - Grouped Projects**

## Roanoke MPO Project Groupings

GROUPING		Construction : Bridge Rehabilitation/Replacement/Reconstruction					
ROUTE/STREET						TOTAL COST	\$65,829,909
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24	
RW	Federal - BR	\$18,750	\$75,000	\$0	\$0	\$0	
CN	Federal - BR	\$299,523	\$0	\$1,198,091	\$0	\$0	
	Federal - STP/STBG	\$3,091	\$0	\$12,364	\$0	\$0	
	Federal - TAP/F	\$83,129	\$0	\$332,514	\$0	\$0	
CN TOTAL		\$385,742	\$0	\$1,542,969	\$0	\$0	
CN AC	Federal - AC	\$0	\$0	\$4,775	\$0	\$0	

GROUPING		Construction : Federal Lands Highway					
ROUTE/STREET						TOTAL COST	\$1,733,750
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24	
		\$0	\$0	\$0	\$0	\$0	

GROUPING		Construction : Rail					
ROUTE/STREET						TOTAL COST	\$1,500,000
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24	
		\$0	\$0	\$0	\$0	\$0	

GROUPING		Construction : Safety/ITS/Operational Improvements					
ROUTE/STREET						TOTAL COST	\$827,704,242
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24	
PE	Federal - AC CONVERSION	\$381,222	\$1,000,000	\$1,000,000	\$0	\$636,000	
	Federal - HSIP	\$127,175	\$25,700	\$275,000	\$0	\$208,000	
	Federal - NHS/NHPP	\$43,127	\$0	\$0	\$0	\$172,506	
	Federal - RSTP	\$60,000	\$0	\$0	\$240,000	\$0	
PE TOTAL		\$611,524	\$1,025,700	\$1,275,000	\$240,000	\$1,016,506	
PE AC	Federal - AC	\$234,000	\$0	\$300,000	\$636,000	\$0	
RW	Federal - AC CONVERSION	\$158,272	\$0	\$478,405	\$0	\$633,087	
	Federal - HSIP	\$81,250	\$0	\$0	\$325,000	\$0	
	Federal - RSTP	\$741,502	\$0	\$319,095	\$2,646,913	\$0	
RW TOTAL		\$981,024	\$0	\$797,500	\$2,971,913	\$633,087	
RW AC	Federal - AC	\$158,272	\$0	\$0	\$633,087	\$0	
CN	Federal - AC CONVERSION	\$1,114,839	\$147,694	\$3,028,292	\$2,381,181	\$383,000	
	Federal - HSIP	\$667,654	\$1,358,600	\$4,488,295	\$161,993	\$0	
	Federal - RSTP	\$481,578	\$0	\$0	\$1,359,397	\$566,913	
	Federal - STP/STBG	\$31,250	\$0	\$0	\$0	\$125,000	
CN TOTAL		\$2,295,321	\$1,506,294	\$7,516,587	\$3,902,571	\$1,074,913	
CN AC	Federal - AC	\$4,447,162	\$1,887,860	\$979,984	\$919,715	\$14,001,087	



GROUPING		Construction : Transportation Enhancement/Byway/Non-Traditional					
ROUTE/STREET						TOTAL COST	\$52,973,533
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24	
PE	Federal - AC CONVERSION	\$55,992	\$98,966	\$0	\$125,000	\$0	\$0
	Federal - STP/STBG	\$24,642	\$23,567	\$75,000	\$0	\$0	\$0
PE TOTAL		\$80,633	\$122,533	\$75,000	\$125,000	\$0	\$0
PE AC	Federal - AC	\$31,250	\$0	\$125,000	\$0	\$0	\$0
RW	Federal - NHS/NHPP	\$37,500	\$0	\$0	\$150,000	\$0	\$0
	Federal - RSTP	\$250	\$1,000	\$0	\$0	\$0	\$0
	Federal - STP/STBG	\$175,381	\$155,523	\$0	\$546,000	\$0	\$0
RW TOTAL		\$213,131	\$156,523	\$0	\$696,000	\$0	\$0
CN	Federal - AC CONVERSION	\$96,913	\$0	\$365,981	\$21,672	\$0	\$0
	Federal - NHS/NHPP	\$760,748	\$1,663,690	\$0	\$0	\$1,379,301	\$0
	Federal - RSTP	\$500,338	\$1,302,731	\$698,620	\$0	\$0	\$0
	Federal - STP/STBG	\$836,530	\$2,345,977	\$0	\$0	\$1,000,142	\$0
	Federal - TAP/F	\$309,633	\$877,927	\$360,606	\$0	\$0	\$0
CN TOTAL		\$2,504,162	\$6,190,325	\$1,425,207	\$21,672	\$2,379,443	\$0
CN AC	Federal - AC	\$1,505,662	\$5,823,277	\$842,384	\$0	\$996,867	\$0

GROUPING		Maintenance : Preventive Maintenance and System Preservation					
PROGRAM NOTE		Funding identified to be obligated districtwide as projects are identified.					
ROUTE/STREET						TOTAL COST	\$85,964,101
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24	
CN	Federal - NHFP	\$0	\$2,500,000	\$2,500,000	\$0	\$0	\$0
	Federal - NHS/NHPP	\$0	\$4,399,286	\$4,399,286	\$4,399,286	\$4,399,286	\$4,399,286
	Federal - STP/STBG	\$0	\$10,437,163	\$12,855,974	\$17,362,178	\$22,711,642	\$0
CN TOTAL		\$0	\$17,336,449	\$19,755,260	\$21,761,464	\$27,110,928	\$0

GROUPING		Maintenance : Preventive Maintenance for Bridges					
PROGRAM NOTE		Funding identified to be obligated districtwide as projects are identified.					
ROUTE/STREET						TOTAL COST	\$45,370,193
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24	
CN	Federal - BR	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
	Federal - NHS/NHPP	\$0	\$2,714,026	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
	Federal - STP/STBG	\$0	\$13,711,369	\$8,692,278	\$7,776,634	\$5,475,886	\$0
CN TOTAL		\$0	\$17,425,395	\$10,692,278	\$9,776,634	\$7,475,886	\$0

GROUPING		Maintenance : Traffic and Safety Operations					
PROGRAM NOTE		Funding identified to be obligated districtwide as projects are identified.					
ROUTE/STREET						TOTAL COST	\$15,382,423
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24	
CN	Federal - STP/STBG	\$0	\$3,095,775	\$4,520,625	\$4,882,756	\$2,883,267	\$0

GROUPING		Transit : Amenities					
ROUTE/STREET						TOTAL COST	\$1,904,000
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24	
		\$0	\$0	\$0	\$0	\$0	\$0

GROUPING		Transit : Vehicles				
ROUTE/STREET					TOTAL COST	\$5,960,149
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - RSTP	\$1,192,030	\$1,564,351	\$1,564,351	\$1,639,419	\$0

## Appendix A Projects by Grouping

### Roanoke MPO

#### Construction : Bridge Rehabilitation/Replacement/Reconstruction

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T19000	Salem District-wide BRIDGE REHABILITATION/REPLACEMENT	0000	\$0
Primary	77300	Botetourt County RTE. 11 OVER TINKER CREEK (STR 03166) - BRIDGE REPLACEMENT FROM: 0.02 Mile North of Route 1039 TO: 0.13 Mile North of Route 1039 (0.1100 MI)	0011	\$5,018,555
Primary	77302	Botetourt County RTE. 11 OVER TINKER CREEK (STR. 3167) - BRIDGE REPLACEMENT FROM: Route 838 TO: 0.09 Mile North of Route 838 (0.0900 MI)	0011	\$3,803,513
Primary	77305	Roanoke County RTE. 116 OVER BACK CREEK (STR. 14928) - BRIDGE REPLACEMENT FROM: 0.293 MILE SOUTH ROUTE 945 TO: 0.564 MILE SOUTH ROUTE 945 (0.3100 MI)	0116	\$7,171,589
Primary	82193	Roanoke County RTE. 220 OVER BACK CREEK (STR. 14935) - BRIDGE REPLACEMENT FROM: 0.199 MI SOUTH OF ROUTE 657 TO: 0.311 MI NORTH OF ROUTE 657 (0.5310 MI)	0220	\$18,885,090
Primary	94726	Roanoke County RTE. 221 OVER MARTINS CREEK (STR. 14945) - BRIDGE REPLACEMENT FROM: 0.03 mi S. Int Rte 696 TO: 0.07 mi N. Int. Rte 696	0221	\$3,635,790
Secondary	62650	Bedford County #SGR RTE. 634 OVER ROANOKE RIVER (STR. 02718) - BRIDGE REPLACEMENT FROM: 0.19 Mi. West of Franklin County Line TO: 0.12 Mi. East of Bedford County Line (0.3100 MI)	HARDY FORD BRIDGE (0634)	\$12,982,098
Secondary	52803	Botetourt County RTE 779 - INT IMPROVEMENTS & BRIDGE OVER AMSTERDAM CREEK FROM: 0.169 MILE EAST ROUTE 672 EAST TO: 0.236 MILE WEST ROUTE 672 EAST (0.4213 MI)	CATAWBA RD (0779)	\$7,857,623
Urban	110574	Salem #SGR - Apperson Drive Bridge Replacement FROM: East Riverside Drive TO: Route 419 - Electric Road (0.0900 MI)	APPERSON DRIVE (0011)	\$3,328,203
Urban	76677	Vinton replace bridge and approaches over Glade Creek FROM: 0.098 Miles West of 5th St. TO: 0.052 Miles East of 5th St. (0.1500 MI)	WALNUT AVENUE (U000)	\$3,147,448
<b>Construction : Bridge Rehabilitation/Replacement/Reconstruction Total</b>				<b>\$65,829,909</b>

#### Construction : Federal Lands Highway

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Enhancement	110155	Roanoke County Roanoke River Greenway - Blue Ridge Pkwy to Explore Park FROM: Blue Ridge Parkway TO: Explore Park	FL16	\$1,733,750
Miscellaneous	T19001	Salem District-wide FEDERAL LANDS HIGHWAY	0000	\$0
<b>Construction : Federal Lands Highway Total</b>				<b>\$1,733,750</b>

**Roanoke MPO**

**Construction : Rail**

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T18998	Salem District-wide	0000		\$0
		CN: RAIL			
Miscellaneous	112018	Statewide	HIGHWAY-RAIL SAFETY (0000)		\$700,000
		Highway-Rail Safety Inventory Section 130 PE Only			
		FROM: Statewide TO: Statewide			
Miscellaneous	112213	Statewide	HIGHWAY RAIL SAFETY (0000)		\$300,000
		Highway-Rail Section 130 Pre Scoping PE Only			
		FROM: Statewide TO: Statewide			
Miscellaneous	112497	Statewide	VARIOUS (0000)		\$500,000
		ENVIRONMENTAL EQ429 FORM PROCESSING CHARGES			
		FROM: FOR HIGHWAY/RAIL SAFETY PROJECTS WITHOUT PE NUMBERS TO: ASSIGNED			
Construction : Rail Total					\$1,500,000

**Construction : Safety/ITS/Operational Improvements**

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Interstate	116202	Botetourt County	I-81 (0081)		\$10,042,040
		#I-81 CIP - Extend lanes at Troutville Safety Rest Area			
		FROM: .3 MI N of Safety Rest Area TO: 1 MI S of Safety Rest Area (1.3000 MI)			
Interstate	99542	Roanoke County	EDGEBROOK ROAD (0081)		\$3,728,154
		I-81 Exit 140 Park & Ride Expansion & Construct NewSidewalk			
		FROM: Int Rte 1128 and Rte 1150 TO: 0.17 Mi. West of Int Rte 1128 and 1150 (0.1700 MI)			
Interstate	108906	Roanoke County	I-81 (0081)		\$29,830,716
		#HB2.FY17 I-81 Auxiliary Lanes from Exit 141 to 143			
		FROM: 0.009 Mi. East of Int. N. Electric Rd TO: 0.026 Mi. West of Int. SBL I-81 Entrance Ramp (2.0000 MI)			
Interstate	111373	Roanoke County	I-81 (0081)		\$32,168,111
		#SMART18 - I-81 SB Auxiliary Lane from Exit 143 to 141			
		FROM: 0.009 Mi. East of Int. N. Electric Rd TO: 0.026 Mi. West of Int. SBL I-81 Entrance Ramp (2.0000 MI)			
Interstate	113173	Roanoke County	0081		\$1,720,000
		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			
Interstate	115937	Roanoke County	I-81 (0081)		\$117,871,895
		#I-81 CIP -- MM139 to MM141 adding lane in each direction			
		FROM: 0.0 Mi from Red Lane Overpass TO: 0.3 Mi North of Electric Rd (2.4000 MI)			
Interstate	116201	Roanoke County	I-81 (0081)		\$322,157,080
		#I-81 CIP - MM 144 to Exit 150 adding NB and SB lanes			
		FROM: MM 144 TO: MM 151 (7.2000 MI)			
Interstate	116203	Roanoke County	I-81 (0081)		\$174,608,365
		#I-81 - MM136 to MM139 adding lane in each direction			
		FROM: Exit 137 Interchange TO: .0 MI from Red LN overpass ( )			
Interstate	116039	Statewide	0081		\$12,500,000
		I-81 DMS Installation			
		FROM: Various TO: Various			

## Roanoke MPO

### Construction : Safety/ITS/Operational Improvements

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Interstate	113570	Roanoke	I-581 (0581)		\$150,000
			I-581 Exit 2 Interchange Study		
			FROM: I-581 TO: Peters Creek Road		
Interstate	92558	Montgomery County	NORTH FORK ROAD (0603)		\$15,831,822
			RTE. 603 - IRONTO/ELLISTON CONNECTOR		
			FROM: I-81 Exit 128 TO: Intersection Rte. 11/460 (2.0110 MI)		
Interstate	T21476	Salem District-wide	VARIOUS (9999)		\$500,000
			Interstate & Primary Cable Guardrail Install-Districtwide		
			FROM: Variuos TO: Various		
Interstate	108991	Salem District-wide	9999		\$2,000,000
			Systemic Roadway Departure Treatments		
			FROM: VARIOUS TO: VARIOUS		
Interstate	109556	Salem District-wide	9999		\$0
			Safety Prescoping - Salem		
Interstate	107802	Statewide	9999		\$918,907
			Incident Management Emergency Evacuation and Detour Plans		
			FROM: Various TO: Various		
Interstate	110551	Statewide	9999		\$362,560
			Traffic Video Expansion - Statewide		
			FROM: Various TO: Various		
Interstate	110912	Statewide	9999		\$813,019
			Statewide Truck Parking Management System - Phase 1		
			FROM: Various TO: Various		
Interstate	111613	Statewide	9999		\$1,807,000
			Statewide Truck Parking Management System - Phase 2		
			FROM: Various TO: Various		
Interstate	111892	Statewide	9999		\$0
			ATMS - Phase 1, 2, 3, 4		
			FROM: Various TO: Various		
Interstate	114400	Statewide	9999		\$300,000
			Drone Technology Project		
			FROM: Various TO: Various		
Interstate	115854	Statewide	9999		\$1,250,000
			ITTF FY20 Arterial Operations Program Dashboard		
			FROM: n/a TO: n/a		
Interstate	115855	Statewide	9999		\$4,700,000
			ITTF FY20 High Speed Communications		
			FROM: Various TO: Various		
Miscellaneous	T18999	Salem District-wide	0000		\$0
			CN: SAFETY/ITS/OPERATIONAL/IMPROVEMENTS		
Miscellaneous	105481	Statewide	0000		\$1,400,000
			Impement iPeMS (Iteris Performance Measrement System)		
			FROM: various TO: various		

## Roanoke MPO

### Construction : Safety/ITS/Operational Improvements

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	114193	Statewide	VARIOUS (9999)		\$0
			PEDESTRIAN IMPROVEMENTS AT PRIORITY CORRIDOR STATEWIDE		
			FROM: VARIOUS TO: VARIOUS		
Primary	107053	Bedford County	STEWARTSVILLE ROAD (0024)		\$1,325,556
			Rt. 24 Bedford County - Safety Improvements		
			FROM: 0.152 Miles West of Route 886 TO: 0.156 Miles West of Route 635 South ( Spradlin Road ) (2.3400 MI)		
Primary	108905	Roanoke County	PLANTATION ROAD (0115)		\$1,269,396
			#HB2.FY17 Lila Dr / Rte 115 Intersection Safety Improvements		
			FROM: 0.025 MI N. Intersection of Lila Drive & Plantation Road TO: 0.051 MI S. Intersection of Lila Drive & Plantation Road (0.1000 MI)		
Primary	114638	Bedford County	0122		\$66,505
			Install Flashing Beacons on Intersection Warning Signs		
			FROM: Route 644 TO: Route 644		
Primary	115457	Botetourt County	ROANOKE ROAD (0220)		\$4,551,000
			#SMART20 - Rte 220 and International Parkway Intersection		
			FROM: 0.25 mi N International Parkway TO: 0.25 mi N International Parkway (0.5000 MI)		
Primary	107063	Bedford County	0221		\$2,550,000
			Rt. 221 Bedford Co. - Pedestrian Safety Improvements		
			FROM: 0.17 miles West along Rte. 663 from Int. w/ Rte. 221 TO: Intersection of Rte. 221 and Rte. 1425 (1.8200 MI)		
Primary	107054	Roanoke County	THOMPSON MEMORIAL DRIVE (0311)		\$532,523
			Route 311 - Roanoke County - Pedestrian Safety Improvements		
			FROM: NCL Salem TO: 0.02 Mile North of I-81 SB Ramp (0.0900 MI)		
Primary	111066	Roanoke County	CATAWBA VALLEY DRIVE (0311)		\$2,880,000
			Pedestrian Bridge over Rt. 311 - Roanoke County		
			FROM: Route 864 TO: 0.2 miles North of Route 864		
Primary	107061	Roanoke County	ELECTRIC ROAD (0419)		\$6,568,683
			#HB2.FY17 Rte 419 Safety Improvements at Tanglewood		
			FROM: Route 867 TO: Route 220 (0.5700 MI)		
Primary	111407	Roanoke County	RTE 419 ELECTRIC RD. (0419)		\$660,986
			#SMART18 - Rte 419 & Rte 221 Adaptive Traffic Control		
			FROM: Rte 221 TO: Rte 419		
Primary	115460	Roanoke County	ELECTRIC ROAD (0419)		\$17,505,000
			#SMART20 - Rte 419 & Rte 220 Diverging Diamond Interchange		
			FROM: 0.13 Mi. W. Rte. 220 TO: 0.23 Mi. E.. Rte. 220 (0.4000 MI)		
Primary	108514	Bedford County	BEDFORD BYPASS (0460)		\$1,852,843
			Pave Existing Shoulders and Install Rumble Strips & Signs.		
			FROM: 0.35 Miles West of Route 679 Baldwin Street TO: 1.08 Miles East of Route 714 East Main Street (5.0500 MI)		
Primary	109582	Bedford County	WEST LYNCHBURG - SALEM TURNPIKE (0460)		\$4,510,000
			US 460 Safety Improvements: HSIP		
			FROM: Route 741 (Beale Trail Road / Little Patriot Drive) TO: Route 689 (Johnson School Road) (4.7800 MI)		
Primary	109566	Roanoke	ORANGE AVENUE (0460)		\$1,899
			Orange Avenue/ Blue Hills Signal Upgrade - City of Roanoke		
			FROM: Orange Avenue TO: Blue Hills		

## Roanoke MPO

### Construction : Safety/ITS/Operational Improvements

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Primary	109570	Roanoke	ORANGE AVENUE NE (0460)		\$551,533
			Orange Avenue/ Hollins Road Signal Upgrade - City of Roanoke		
			FROM: Int. of US 460 TO: And Route 115		
Primary	107055	Roanoke County	WILLIAMSON ROAD (9999)		\$1,325,400
			Route 11 & 117 Roanoke Co. - Pedestrian Safety Improvements		
			FROM: 0.45 Mile South of Int. of Route 11 & Route 117 TO: Int. of Route 11 & Route 117 (0.4500 MI)		
Primary	T21479	Salem District-wide	VARIOUS (9999)		\$500,000
			Districtwide Rumble Strip Installation-Primary Routes		
			FROM: Various TO: Various		
Primary	T21463	Salem District-wide	9999		\$2,562,984
			Districtwide Systemic Roadway Departure Countermeasures		
			FROM: Various TO: Various		
Primary	107069	Salem District-wide	9999		\$800,000
			Safety Improvements - Yearly HSIP open container funds		
			FROM: Various TO: Various		
Primary	114331	Salem District-wide	VARIOUS (9999)		\$0
			INSTALL ADVANCED SIGNAL CONTROL TECHNOLOGY AND COMMUNICATION		
			FROM: VARIOUS TO: VARIOUS		
Primary	114335	Salem District-wide	VARIOUS (9999)		\$0
			INSTALL HIGH VISIBILITY REFLECTIVE SIGNAL BACKPLATES		
			FROM: VARIOUS TO: VARIOUS		
Secondary	15190	Roanoke County	COTTON HILL RD (0688)		\$5,895,794
			RTE 688 - RECONSTRUCTION		
			FROM: 0.056 MILE SOUTH ROUTE 221 TO: 0.105 MILE SOUTH ROUTE 934 (0.6566 MI)		
Secondary	15187	Roanoke County	MCVITTY ROAD (1662)		\$4,797,813
			RTE 1662 - RECONSTRUCTION & REPLACE BRIDGE OVER MUD LICK CK		
			FROM: INT. OF ROUTE 1663 TO: INT. OF ROUTE 419 (0.4680 MI)		
Secondary	15188	Roanoke County	OLD CAVE SPR LN (1663)		\$3,248,044
			RTE 1663 - RECONSTRUCT; DRAINAGE STRUCT/BRANCH MUD LICK CK		
			FROM: SOUTH INT. ROUTE 221 TO: INT. OF ROUTE 1662 (0.2830 MI)		
Secondary	113144	Roanoke County	STARKEY ROAD (0904)		\$3,258,115
			Starkey Road/Buck Mountain Road Intersection Improvements		
			FROM: 0.07 Mi. West of Int. with Starkey Rd. / Buck Mountain Rd TO: 0.04 Mi. North of Int. with Starkey Rd. / Buck Mountain Rd. (0.1700 MI)		
Urban	111135	Roanoke	9999		\$277,460
			Flashing Yellow Arrow - Various locations - Roanoke City		
			FROM: Various TO: Various		
Urban	111137	Roanoke	9999		\$108,000
			Rectangular Rapid Flashing Beacons - Roanoke City		
			FROM: Various TO: Various		
Urban	113569	Roanoke	AIRPORT ROAD (0000)		\$739,825
			State Road 118 Tunnel Lighting Improvements		
			FROM: Airport Road Tunnel TO: N/A		

**Roanoke MPO****Construction : Safety/ITS/Operational Improvements**

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Urban	111360	Roanoke	FRANKLIN ROAD (0220) Franklin Road Sidewalk Improvements- Rt. 220 B- Roanoke City FROM: 3100 Block TO: 220 Franklin Rd Bypass (0.7600 MI)		\$1,011,897
Urban	111370	Roanoke	ORANGE AVENUE (0460) #SMART18 - Hollins Rd & Orange Ave Intersection Improvements FROM: 0.2 Mi West of Int Orange Ave/Hollins Rd TO: Int Hollins Rd/Rhodes Ave (0.2000 MI)		\$4,200,847
Urban	113324	Roanoke	ORANGE AVENUE (0000) Installation of Pedestrian Countdown Signal FROM: Gainsboro Road TO: Burrell Street		\$101,984
Urban	115454	Roanoke	ORANGE AVENUE (0460) #SMART20 - Orange Ave (US 460) Improvements FROM: King Street TO: Blue Hills/Mexico Way (0.6000 MI)		\$2,818,704
Urban	8753	Salem	EAST MAIN STREET (0460) #HB2.FY17 Rte460 - Add'n of CTL w/ Bike Ln, Curb, Sidewalk FROM: 0.028 Mi. West of Route 311 (Thompson Memorial Blvd.) TO: 0.006 Mi. West of Brand Ave. (0.5473 MI)		\$15,925,395
Urban	100656	Salem	ROUTE 419 (0419) Construct sidewalk on west side of Rte 419 & connect to RRG FROM: existing RRG in Rotary Park TO: City Limits (0.6700 MI)		\$463,694
Urban	113322	Vinton	HARDY ROAD (0000) Hardy Road/Dillon Woods Crosswalk FROM: Bypass Road TO: McDonald Street		\$182,693
Construction : Safety/ITS/Operational Improvements Total					\$827,704,242

**Construction : Transportation Enhancement/Byway/Non-Traditional**

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Enhancement	105439	Roanoke	ROANOKE RIVER GREENWAY (0000) RRG (Aerial Way Dr to Roanoke Ave, SW extended) - RSTP FROM: Aerial Way Dr TO: Roanoke Ave SW extended (0.5400 MI)		\$5,012,713
Enhancement	113356	Roanoke County	0618 Roanoke River Greenway, Parkway Crossing FROM: 3204 Highland Rd TO: 3404 Rutrough Rd		\$491,606
Enhancement	101838	Salem	ROANOKE RIVER GREENWAY (EN00) Bridge on Phase 3A_City of Salem Roanoke River Greenway FROM: approximately 1200' E. Mill Lane TO: Eddy St.		\$751,969
Enhancement	91191	Roanoke County	EN08 Rnke River Grnwy - City of Roanoke to Route 618 FROM: City of Roanoke TO: Rte 618 (Highland Rd) (2.6000 MI)		\$6,857,566
Enhancement	97171	Roanoke County	EN08 #HB2.FY17 Roanoke Co, RRG, Green Hill Pk to Riverside Pk FROM: Green Hill Park TO: Riverside Park (1.7300 MI)		\$8,014,409
Enhancement	103607	Roanoke County	PLANTATION ROAD (RT. 115) (EN12) Roanoke Co., Plantation Road Streetscape Improvements FROM: Williamson Road (Route 11) TO: Gander Way / Friendship Ln (0.7200 MI)		\$2,898,266



## Roanoke MPO

### Construction : Transportation Enhancement/Byway/Non-Traditional

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Enhancement	107521	Botetourt County	EN15		\$595,438
			DALEVILLE GREENWAY - TAP		
			FROM: Glebe Road (RTE 675) TO: Orchard Lake Drive (RTE 1035) (0.8130 MI)		
Enhancement	106265	Roanoke	GARDEN CITY BLVD (EN15)		\$1,680,336
			GARDEN CITY BLVD BIKE/PED - TRANSPORTATION ALTERNATIVES		
			FROM: Davenport Ave/Ivywood St TO: Riverland Rd		
Enhancement	106268	Salem	HANGING ROCK BATTLEFIELD TRAIL (EN15)		\$1,333,117
			HANGING ROCK BATTLEFIELD TRAIL - TRANSPORTATION ALTERNATIVES		
			FROM: existing Hanging Rock Battlefield Trail TO: East Main St		
Enhancement	109612	Salem	E MAIN ST (EN16)		\$988,418
			DOWNTOWN STREETScape IMPROVEMENTS		
			FROM: West side of Broad St TO: East side of White Oak Alley (0.1000 MI)		
Enhancement	109611	Vinton	EN16		\$662,789
			GLADE CREEK GREENWAY, PHASE 2		
			FROM: Intersection of 5th St and Walnut Ave TO: Gus Nicks Blvd (0.7000 MI)		
Enhancement	111317	Roanoke County	WILLIAMSON ROAD (EN17)		\$1,934,000
			#SMART20 - Williamson Road Sidewalk Improvements		
			FROM: Peters Creek Road TO: Plantation Road		
Miscellaneous	T18992	Salem District-wide	0000		\$0
			CN: TRANSPORTATION ENHANCEMENT/BYWAY/OTHER NON-TRADITIONAL		
Miscellaneous	110101	Roanoke	TINKER CREEK TRAIL (9999)		\$7,251,474
			Tinker Creek Trail Extension		
			FROM: Wise Avenue TO: Masons Mill Park		
Miscellaneous	111649	Vinton	GLADE CREEK GREENWAY (9999)		\$1,684,030
			Walnut Ave Bike/Ped Accommodations (5th St to Town limit)		
			FROM: 5th Street TO: Town Limits		
Primary	111367	Salem	ELECTRIC ROAD (0419)		\$2,610,310
			#SMART18 - Mason Creek Greenway Ph3 - 419 Multimodal Imprv		
			FROM: Mason Creek Greenway TO: Hanging Rock Battlefield Trail		
Urban	72180	Roanoke	EN03		\$1,949,924
			CITY OF ROANOKE - ROANOKE RIVER GREENWAY		
			WITHIN THE CITY OF ROANOKE LIMITS		
Urban	113568	Roanoke	ROANOKE RIVER GREENWAY (0000)		\$897,770
			Roanoke River Greenway Bridge across Barnhardt Creek		
			FROM: 200 ft E of Barnhardt Creek TO: 150 ft W of Barnhardt Creek		
Urban	111366	Roanoke County	PLANTATION ROAD (0115)		\$1,855,097
			#SMART18 - Plantation Rd Bike/Ped/Streetscape Phase II		
			FROM: Walrond Drive TO: Gander Way (0.2000 MI)		
Urban	108899	Salem	BOULEVARD (8010)		\$770,032
			#HB2.FY17 Multimodal Improvements along Boulevard		
			FROM: .08 mi west of Reavis Ln TO: Salem City Limit (0.4500 MI)		
Urban	111371	Salem	EAST MAIN STREET (0460)		\$3,629,869
			#SMART18 - Downtown Salem Int. & Streetscape Improvements		
			FROM: West Main St TO: East Main St		

**Roanoke MPO**

**Construction : Transportation Enhancement/Byway/Non-Traditional**

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Urban	113566	Salem	ELIZABETH GREENWAY (0000)		\$1,104,400
			Elizabeth Greenway		
			FROM: Mason Creek Greenway TO: East Main Street Greenway		
Construction : Transportation Enhancement/Byway/Non-Traditional Total					\$52,973,533

**Maintenance : Preventive Maintenance and System Preservation**

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T14722	Salem District-wide	0000		\$85,964,101
			STIP-MN Salem: Preventive MN and System Preservation		
Maintenance : Preventive Maintenance and System Preservation Total					\$85,964,101

**Maintenance : Preventive Maintenance for Bridges**

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T14721	Salem District-wide	0000		\$45,370,193
			STIP-MN Salem: Preventive MN for Bridges		
Maintenance : Preventive Maintenance for Bridges Total					\$45,370,193

**Maintenance : Traffic and Safety Operations**

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T14720	Salem District-wide	0000		\$15,382,423
			STIP-MN Salem: Traffic and Safety Operations		
Maintenance : Traffic and Safety Operations Total					\$15,382,423

**Transit : Amenities**

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T19021	Salem District-wide	0000		\$0
			CN: TRANSIT AMENITIES		
Public Transportation	111882	Multi-jurisdictional: Roanoke MPO	AUTOMATIC VEHICLE LOCATOR (9999)		\$1,904,000
			#SMART18 - GRTC Automatic Vehicle Locator/Real-Time Project		
			FROM: n/a TO: n/a		
Transit : Amenities Total					\$1,904,000

**Transit : Vehicles**

	System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T18675	Multi-jurisdictional: Roanoke MPO	BUS REPLACEMENT (9999)		\$5,960,149
			Bus Replacement and Rebuild Program (FY17-19)		
			FROM: N/A TO: N/A		
Transit : Vehicles Total					\$5,960,149

**Roanoke MPO Total**

**\$1,104,322,300**

**APPENDIX B - Ungrouped Projects**

## Roanoke MPO Interstate Projects

UPC NO	75910	SCOPE	Relocation			
SYSTEM	Interstate	JURISDICTION	Botetourt County		OVERSIGHT	NFO
PROJECT	Route 11,220,220A Access Management Project at I-81 Exit 150				ADMIN BY	VDOT
DESCRIPTION	FROM: 0.30 MILE SOUTH OF ROUTE 220 TO: 0.74 MILE NORTH OF ROUTE 220 (1.0410 MI)					
PROGRAM NOTE	All funds obligated based on current allocations/estimate					
ROUTE/STREET	0081				TOTAL COST	\$50,185,950
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
		\$0	\$0	\$0	\$0	\$0

UPC NO	110395	SCOPE				
SYSTEM	Interstate	JURISDICTION	Roanoke County		OVERSIGHT	NFO
PROJECT	#HB2.FY17 I-81 AUX LN FR EXIT 141 -143 GARVEE DEBT SERVICE				ADMIN BY	VDOT
DESCRIPTION						
PROGRAM NOTE	Includes \$1,722,333 GARVEE Debt Service Interest Prev, \$656,701 GARVEE Debt Service Interest FFY21, \$1,006,516 GARVEE Debt Service Interest FFY22, \$962,167 GARVEE Debt Service Interest FFY23, \$896,889 GARVEE Debt Service Interest FFY24, \$4,854,488 GARVEE Debt Service Interest FFY25-FFY36. Total GARVEE Debt Service Interest \$10,099,094. Corresponding CN UPC 108906 which is included in the Roanoke MPO CN: Safety/ITS/Operational Improvements grouping.					
ROUTE/STREET	0081				TOTAL COST	\$10,099,094
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
PE	Federal - AC CONVERSION	\$0	\$0	\$1,006,516	\$962,517	\$896,889
	Federal - NHS/NHPP	\$0	\$656,701	\$0	\$0	\$0
PE TOTAL		\$0	\$656,701	\$1,006,516	\$962,517	\$896,889
PE AC	Federal - AC	\$0	\$7,720,060	\$0	\$0	\$0

UPC NO	111983	SCOPE				
SYSTEM	Interstate	JURISDICTION	Roanoke County		OVERSIGHT	NFO
PROJECT	#SMART18 - 81 SB Aux Ln frm Exit 143-141 GARVEE Debt Service				ADMIN BY	VDOT
DESCRIPTION						
PROGRAM NOTE	Includes \$866,209 GARVEE Debt Service Interest FFY21, \$1,148,692 GARVEE Debt Service Interest FFY22, \$1,102,910 GARVEE Debt Service Interest FFY23, \$1,040,812 GARVEE Debt Service Interest FFY24, \$6,347,017 GARVEE Debt Service Interest FFY25-FFY36. Total GARVEE Debt Service Interest \$10,505,640. Corresponding CN UPC 111373 which is included in the Roanoke MPO CN: Safety/ITS/Operational Improvements grouping.					
ROUTE/STREET	0081				TOTAL COST	\$10,505,640
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
PE	Federal - AC CONVERSION	\$0	\$0	\$1,148,692	\$1,102,910	\$1,040,812
	Federal - NHS/NHPP	\$0	\$866,209	\$0	\$0	\$0
PE TOTAL		\$0	\$866,209	\$1,148,692	\$1,102,910	\$1,040,812
PE AC	Federal - AC	\$0	\$9,639,431	\$0	\$0	\$0

UPC NO	16595	SCOPE	Reconstruction w/ Added Capacity			
SYSTEM	Interstate	JURISDICTION	Roanoke	OVERSIGHT	FO	
PROJECT	RTE 581 - VALLEY VIEW INTERCHANGE PHASE II			ADMIN BY	VDOT	
DESCRIPTION	FROM: 0.300 MI. S. ROUTE 101 (HERSHBERGER ROAD) TO: 1.560 MI. S. ROUTE 101 (HERSHBERGER ROAD) (1.2600 MI)					
PROGRAM NOTE	Waiting Financial Closure.					
ROUTE/STREET	0581			TOTAL COST	\$60,409,490	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
		\$0	\$0	\$0	\$0	\$0

UPC NO	115852	SCOPE	Traffic Management/Engineering			
SYSTEM	Interstate	JURISDICTION	Statewide	OVERSIGHT	NFO	
PROJECT	ITTF FY20 Micro Transit			ADMIN BY	DRPT	
DESCRIPTION	FROM: Various TO: Various					
ROUTE/STREET	9999			TOTAL COST	\$500,000	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
PE AC	Federal - AC OTHER	\$0	\$500,000	\$0	\$0	\$0

## Roanoke MPO Primary Projects

UPC NO	17698	SCOPE	Reconstruction w/o Added Capacity			
SYSTEM	Primary	JURISDICTION	Roanoke County		OVERSIGHT	NFO
PROJECT	RTE 11/460 - Widen to 4-LN w/curb, gutter, and raised median				ADMIN BY	VDOT
DESCRIPTION	FROM: .055 MI. E. OF WCL SALEM TO: 0.10 MILE WEST ROUTE 830 (2.1880 MI)					
PROGRAM NOTE	Waiting Financial Closure					
ROUTE/STREET	W.MAIN ST. (0011)				TOTAL COST	\$46,124,165
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
		\$0	\$0	\$0	\$0	\$0

UPC NO	113947	SCOPE	Safety			
SYSTEM	Primary	JURISDICTION	Roanoke County		OVERSIGHT	NFO
PROJECT	Pedestrian Improvements on Route 11 (Williamson Road)				ADMIN BY	VDOT
DESCRIPTION	FROM: Clubhouse Drive TO: 0.2 mi. South of Greenway Drive					
ROUTE/STREET	WILLIAMSON ROAD (0011)				TOTAL COST	\$750,000
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
PE	Federal - HSIP	\$0	\$0	\$150,000	\$0	\$0
CN	Federal - HSIP	\$0	\$0	\$0	\$0	\$600,000

UPC NO	98220	SCOPE	Preliminary Engineering			
SYSTEM	Primary	JURISDICTION	Roanoke County		OVERSIGHT	NFO
PROJECT	RTE. 115, Plantation Rd Corridor Improvements				ADMIN BY	Locally
DESCRIPTION	FROM: Williamson Road (Route 11) TO: Gander Way / Friendship Ln (0.7200 MI)					
PROGRAM NOTE	Waiting Financial Closure.					
ROUTE/STREET	PLANTATION ROAD (0115)				TOTAL COST	\$1,513,910
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
		\$0	\$0	\$0	\$0	\$0

UPC NO	T23169	SCOPE	Safety			
SYSTEM	Primary	JURISDICTION	Salem District-wide		OVERSIGHT	NFO
PROJECT	Systemic Improvements-Unsignalized Intersections				ADMIN BY	VDOT
DESCRIPTION	FROM: Various TO: Various					
ROUTE/STREET	VARIOUS (9999)				TOTAL COST	\$463,889
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
PE	Federal - AC CONVERSION	\$0	\$0	\$111,111	\$0	\$0
	Federal - HSIP	\$0	\$186,111	\$0	\$0	\$0
PE TOTAL		\$0	\$186,111	\$111,111	\$0	\$0
PE AC	Federal - AC	\$0	\$111,111	\$0	\$0	\$0
	Federal - AC OTHER	\$0	\$166,667	\$0	\$0	\$0
PE AC		\$0	\$277,778	\$0	\$0	\$0

UPC NO	T23168	SCOPE	Safety			
SYSTEM	Primary	JURISDICTION	Salem District-wide		OVERSIGHT	NFO
PROJECT	Systemic HSIP Pedestrian Crossing Improvements				ADMIN BY	VDOT
DESCRIPTION	FROM: various TO: various					
ROUTE/STREET	9999				TOTAL COST	\$1,021,751
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - AC CONVERSION	\$0	\$136,537	\$150,191	\$314,034	\$216,183

UPC NO	T23167	SCOPE	Safety			
SYSTEM	Primary	JURISDICTION	Salem District-wide		OVERSIGHT	NFO
PROJECT	Systemic HSIP Curve Delineation-PE Only				ADMIN BY	VDOT
DESCRIPTION	FROM: various TO: various					
ROUTE/STREET	9999				TOTAL COST	\$4,511,961
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
PE AC	Federal - AC OTHER	\$0	\$416,964	\$0	\$0	\$0
CN AC	Federal - AC OTHER	\$0	\$3,814,461	\$0	\$0	\$0

## Roanoke MPO Urban Projects

UPC NO	688	SCOPE	Reconstruction w/ Added Capacity			
SYSTEM	Urban	JURISDICTION	Roanoke	OVERSIGHT	NFO	
PROJECT	13TH STREET AND HOLLINS ROAD			ADMIN BY	VDOT	
DESCRIPTION	FROM: JAMISON AVE TO: .08 MILE NORTH INT. ORANGE AVENUE (0.9790 MI)					
ROUTE/STREET	13TH ST/ HOLLINS RD (U000)			TOTAL COST	\$23,960,970	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - STP/STBG	\$672,519	\$2,690,076	\$0	\$0	\$0
CN AC	Federal - AC OTHER	\$0	\$51,697	\$0	\$0	\$0

UPC NO	108896	SCOPE	Facilities for Pedestrians and Bicycles			
SYSTEM	Urban	JURISDICTION	Roanoke	OVERSIGHT	NFO	
PROJECT	#HB2.FY17 Colonial Avenue Improvements			ADMIN BY	Locally	
DESCRIPTION	FROM: 300 ft beyond Winding Way Rd SW TO: Clearfield Rd SW (0.5000 MI)					
PROGRAM NOTE	All funds obligated based on current allocations/estimate					
ROUTE/STREET	COLONIAL AVENUE (8001)			TOTAL COST	\$7,000,000	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
		\$0	\$0	\$0	\$0	\$0

UPC NO	113565	SCOPE	Facilities for Pedestrians and Bicycles			
SYSTEM	Urban	JURISDICTION	Vinton	OVERSIGHT	NFO	
PROJECT	Walnut Avenue Bicycle and Pedestrian Accommodations			ADMIN BY	Locally	
DESCRIPTION	FROM: W. Lee Avenue TO: 1st Street					
ROUTE/STREET	WALNUT AVENUE (0000)			TOTAL COST	\$545,250	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
RW	Federal - RSTP	\$2,400	\$0	\$9,600	\$0	\$0
CN	Federal - RSTP	\$92,750	\$0	\$0	\$371,000	\$0



## Roanoke MPO

### Miscellaneous Projects

UPC NO	113567	SCOPE	Facilities for Pedestrians and Bicycles			
SYSTEM	Miscellaneous	JURISDICTION	Roanoke County	OVERSIGHT	NFO	
PROJECT	Roanoke River Greenway through Explore Park			ADMIN BY	Locally	
DESCRIPTION	FROM: Entrance to Explore Park TO: Through Explore Park					
ROUTE/STREET	ROANOKE RIVER GREENWAY (9999)			TOTAL COST	\$3,020,308	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - RSTP	\$517,726	\$2,070,904	\$0	\$0	\$0

**APPENDIX C – Public Input Survey Results**

## RVTPO TIP 2021-2024 Public Input Survey Results

A survey to collect public input on the Roanoke Valley Transportation Planning Organization Transportation Improvement Program for fiscal years 2021-2024 was available between April 2 – April 20, 2020. Fifty-three people took the survey (attached). The survey was promoted through:

- Survey link on the RVARC blog (Transportation) and the RVARC Facebook page
- Newspaper ads in the Roanoke Times and the Roanoke Tribune (one day in the paper copy and 10 days on the Roanoke Times website)
- Emailed survey link to about 200 people who had taken an RVTPO survey, served on a committee, or participated in a workshop or meeting
- Survey link in the RVARC e-newsletter
- Facebook post on RVARC Facebook page
- Facebook post boosted to RVTPO zip codes
- Google ad boosted to RVTPO zip codes

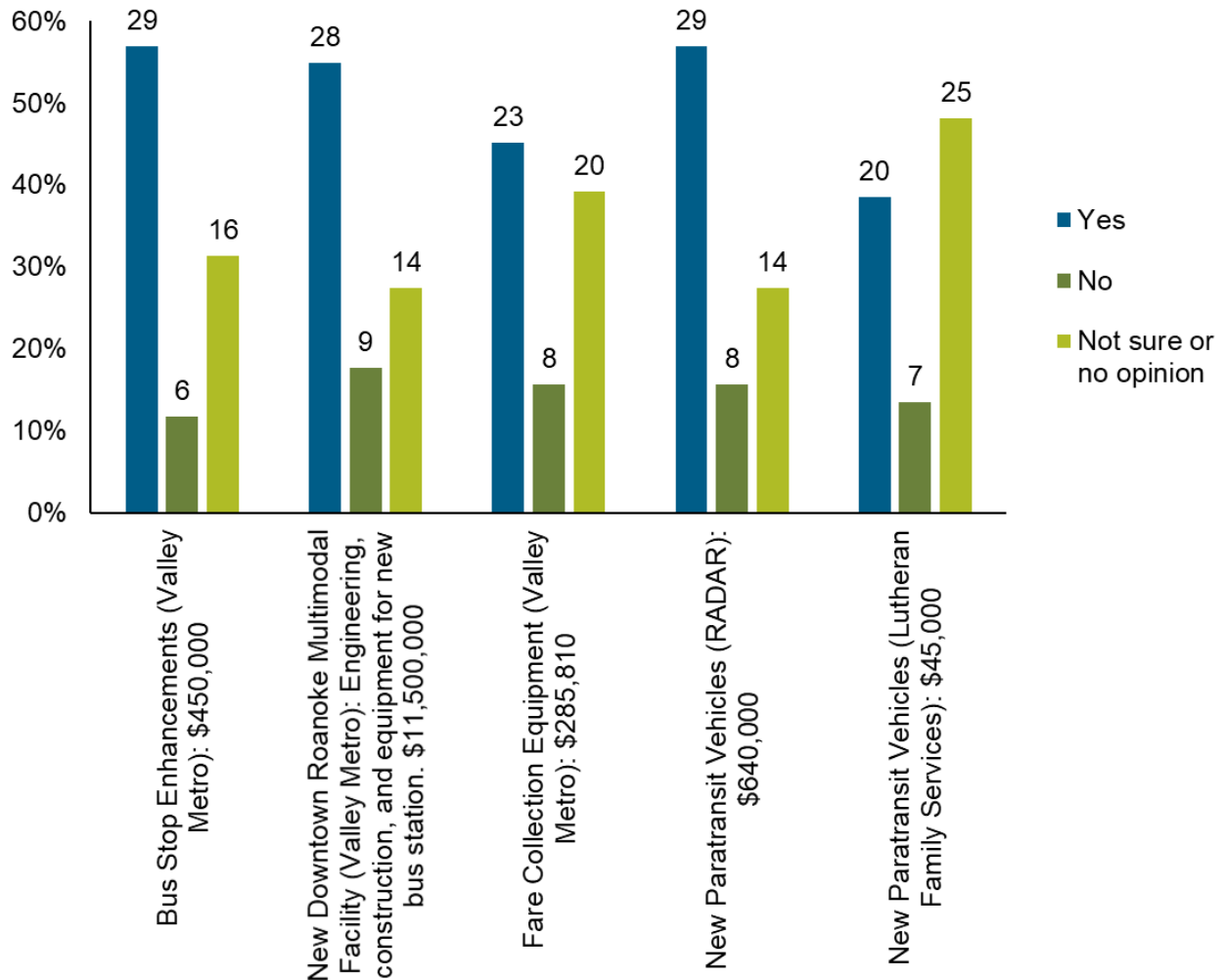
The survey listed five projects eligible for transit funding and seven projects eligible for highway/surface funding (which included a transit project). These projects were selected from among all projects in the draft Transportation Improvement Program because they have not been in the previous Transportation Improvement Program or had not previously been part of public input opportunities.

Participants were asked to comment on any project listed in the draft Transportation Improvement Program and how the public input experience could be improved.

Finally, participants were asked demographic questions to determine the extent to which the promotion efforts listed previously sufficiently engaged people from all RVTPO zip codes and of all race/ethnicities in the RVTPO.

## Transit Funding

Participants were informed that their input will help the RVTPO decide which projects to fund if there isn't enough funding available for all projects. Participants were asked to agree or disagree that each project is a good investment for the RVTPO or indicated Not Sure or No Opinion.



Participants were asked if there were other projects they'd like to see submitted for future transit funding.

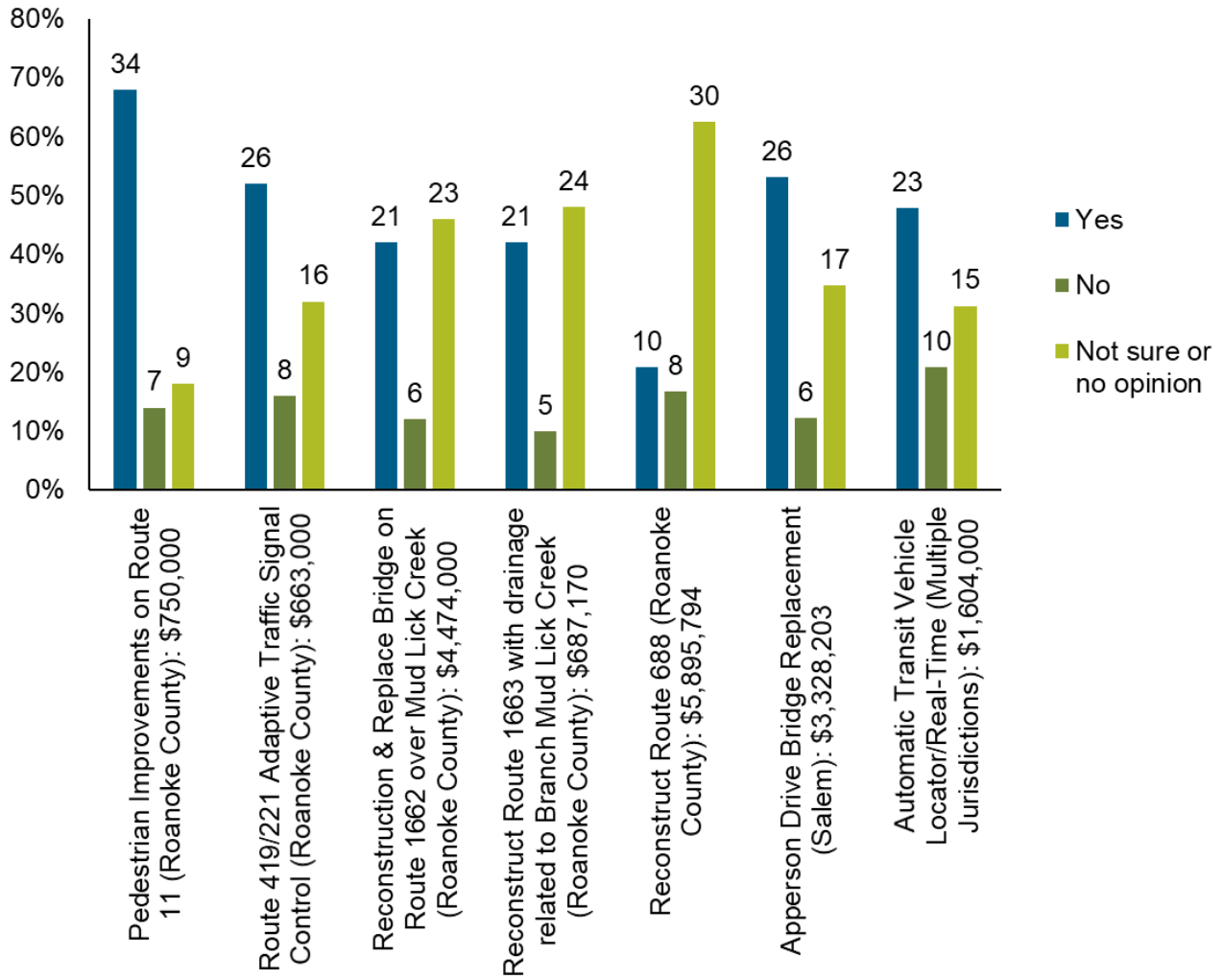
Project suggestion	RVTPO Response
Anything that will directly impact the poor of our region who are continually neglected. For example, transportation projects that assist poor people in getting to jobs in Roanoke County and throughout the region.	We've shared your comment with Valley Metro

Project suggestion	RVTPO Response
Connect the Greenways and better signage on greenways.	We've shared your comment with the Greenway Commission.
Expand Valley Metro service. Perhaps purchase smaller buses. Add electric buses.	We've shared your comment with Valley Metro.
Funding to expand paratransit services and to lower the per trip cost.	We've shared your comment with RADAR.
I do not use public transportation	We hope you will try it out!
I would like to see fare equipment additions for paratransit vehicles in the future.	We've shared your comment with RADAR.
Light rail connection to the NRV -- study needs to be done using the former Virginian Railway line.	We've shared your comment with the RVTPO Policy Board and Technical Committee.
Lighting on I81 at exits	This would not be eligible for transit funding. We've shared your comment with the RVTPO Policy Board and Technical Committee.
Lower fares, and/or no fares for low-income people.	We've shared your comment with Valley Metro.
New study to make the City of Roanoke bus system more efficient. Including the exploration of alternative routes in which not every route begins and ends at the downtown facility. There should be more spoke routes (e.g. Peter's Creek road, Electric Road, Cove Road)	The Transit Vision Plan was completed in 2016.
Regional transportation services to surrounding cities and counties.	RVARC completed the Rural Transit Feasibility Study in May 2019.

<b>Project suggestion</b>	<b>RVTPO Response</b>
<p>Roanoke City hired AECOM to define their Multimodal Facility. AECOM specifically and highly recommended a true Multimodal facility by keeping all modes (rail, bus, taxi, bikes) of transportation together (see link). Moving the new bus station away from the train station is a huge mistake! Why? It is not multimodal!  <a href="https://www.roanokeva.gov/DocumentCenter/View/4870/Downtown-Intermodal-Study---Final">https://www.roanokeva.gov/DocumentCenter/View/4870/Downtown-Intermodal-Study---Final</a></p>	<p>We've shared your comment with Valley Metro and the City of Roanoke.</p>
<p>Sidewalk and crosswalk enhancements to improve access to bus stops.</p>	<p>We've shared your comment with the RVTPO Policy Board and Technical Committee.</p>
<p>Smaller buses that use alternative fuels or get better gas mileage for routes that aren't as popular, or at hours when ridership is down.</p>	<p>We've shared your comment with Valley Metro.</p>

### Highway/Surface Funding

Participants were informed that the projects listed all have identified funding and can be refused but another project cannot be substituted. Participants were asked to agree or disagree that each project is a good investment for the RVTPO or indicated Not Sure or No Opinion.



Participants were asked if there were other projects they'd like to see submitted for future highway/surface funding.

Project suggestion	RVTPO Response
Bike lanes or better shoulders for cyclists!	We've shared your comment with the RVTPO Policy Board and Technical Committee.
Concentrate on I81-581 congestion /merger controls.	We've shared your comment with the RVTPO Policy Board and Technical Committee.

<b>Project suggestion</b>	<b>RVTPO Response</b>
Connect the Greenways	We've shared your comment with the Greenway Commission.
It is pretty hard to find information about these projects, which are sometimes multi-million dollar investments. For instance, my opinion on the Apperson Drive Bridge Replacement depends upon why it's being replaced and the anticipated design of the replacement.	We are improving our public input process and hope to include project purpose and more information about projects in future surveys.
No. Too much being spent on roads. Bike and pedestrian investments get much more public benefit for the dollar.	We've shared your comment with the RVTPO Policy Board and Technical Committee.
Plantation road towards orange avenue is pretty terrible for pedestrians and cyclists. If improved, the neighborhoods around Preston Park and Monterrey would be significantly more connected to the downtown area.	We've shared your comment with the RVTPO Policy Board and Technical Committee.
Redo Route 11 at Exit 150 to allow more access to Troutville.	We've shared your comment with the RVTPO Policy Board and Technical Committee.
Sidewalks, sidewalks, sidewalks	We've shared your comment with the RVTPO Policy Board and Technical Committee.
Too much money for automobile transportation and not enough for rail, pedestrian and bike paths separate from traffic. No language to require developers to include connectors to greenways.	We've shared your comment about development ordinances with localities.



### Other comments

Participants were asked to provide any other comments about the Transportation Improvement Program.

<b>Comment</b>	<b>RVTPO Response</b>
Anything that can provide employment to those unemployed or adversely financially impacted because of the pandemic would be particularly good investments. Any continued efforts in education and accessibility that would encourage all residents to take more advantage of public transportation would also be welcomed.	RIDE Solutions promotes transit as part of its programming.
Better synchronize traffic signal lights for current traffic flows. Otherwise, they impede traffic flow, bunching vehicles between lights.	We've shared your comment with the RVTPO Policy Board and Technical Committee.
Bike Lane on all of Route 11 between Salem and Roanoke.	We've shared your comment with the RVTPO Policy Board and Technical Committee.
I doubt the public can understand much if anything about any of the proposed programs without at least reading the TIP document. This poorly scanned and barely readable, sometimes unreadable, copy of the TIP sends a clear message to the public about how much you value this process -- no at all.	We apologize for the poor quality of the document. We have identified the issues and intend to do better in the future.
Light rail connection between Roanoke and New River Valley is of critical importance for the future. Smartway bus is okay, but infrequent and unreliable. Planning needs to begin NOW for a better light rail service with multiple hourly departures, linking the Carilion campus with the New River Valley Mall using the former Virginian Railway line, which Norfolk Southern no longer needs because of decline in coal transportation.	We've shared your comment with the RVTPO Policy Board and Technical Committee.
Lots of great stuff in the TIP. Please prioritize greenway and pedestrian projects.	We've shared your comment with the RVTPO Policy Board and Technical Committee.
Please stop wasting money by adding lanes to I-81. This method is a very old practice that has been proven not to reduce congestion or increase safety. Instead, enforce the speed limit and other driving laws stringently and create solutions to put tractor trailers onto the railroad.	We've shared your comment with the RVTPO Policy Board and Technical Committee.
The 13th and Hollins project (UP 688) seems like it is based on traffic doubling and intended to increase traffic. The roundabout with slip lanes at Campbell is likely to make one of the few bike routes between Roanoke and Vinton much more difficult to use. As currently designed it seems to be a lot of money for something that may make the area worse. It also appears that the project design is over a decade old.	We've shared your comment with the City of Roanoke.
The projects on the TIP are excellent overall.	Thank you

Comment	RVTPO Response
TIP still has too much money for automobile type transportation and not enough for public transportation. No future light-rail is even mentioned. Practically all bike improvement language is a bike-auto shared road bed and no separated bike-ped ways.	We've shared your comment with the RVTPO Policy Board and Technical Committee.

Participants were asked how the RVTPO could improve this survey.

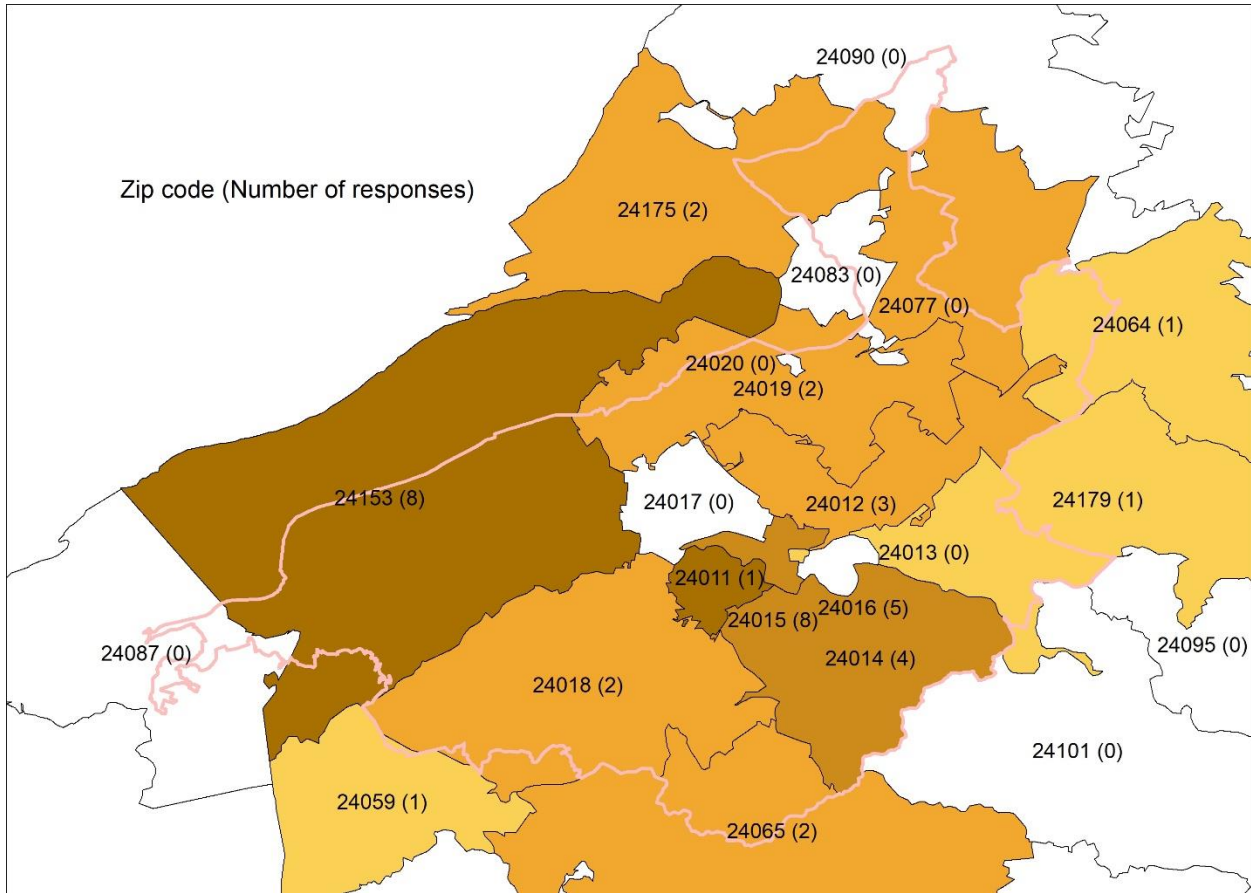
Comment	RVTPO Response
Give more details on what each question entails.	We are working to include project purpose and more information about projects in future surveys.
I know a different survey asked this, but I would like the opportunity to express which order I'd prioritize the remaining projects in.	Thank you for your comment.
Include maps of the various proposed repairs. I'm new to the area and don't know all the route numbers.	We are working to provide maps.
Just keep going.	Thank you.
Make the whole thing user friendly for the general public. The document and survey are understandable only to those working in the transportation field.	We are working to provide project title and information in more accessible language.
More details about the projects. I don't know what adaptive traffic signaling is. Use language that is more easily understood.	We are working to provide project title and information in more accessible language.
More public input BEFORE submitting SmartScale request to state each year.	We are working on improving the timing of public input opportunities.
Please give more detail on the options. Many of them use industry terms that the average person will not understand.	We are working to provide project title and information in more accessible language.
Please provide larger project descriptions, maps, and more information about how projects have been evaluated and why the public should care about them. The current project description for UPC 115454 is "Safety improvements – what exactly?" I'm a fan of safety improvements, but the specifics matter.	We are working to provide project title and information in more accessible language and maps.
Provide maps showing location and scope of projects.	We are working to provide maps.
RVTPO does a poor job of replying to the public who take great care and time providing input and feedback. When someone emails or writes the RVTPO, every letter/email should be acknowledged!	We apologize for the oversight! We have contacted you since receiving your comment and hope we've addressed the issue to your satisfaction.
The draft TIP is a scanned pdf and the links aren't clickable. Not all links have urls spelled out and when they do you have to type them into the web browser because you can't copy and paste text from a scanned pdf.	We apologize for the poor quality of the document. We have identified the issues and intend to do better in the future. Your feedback is helpful to our

Comment	RVTPO Response
<p>That shouldn't even be necessary if there were more information in the survey so that there wasn't a need to look at supplemental documents. Every time you refer to a supplemental document, you are saying "You probably don't understand this" without more information. Obviously you do not care about getting any public comment or you would not make it so hard for the public to provide meaningful input. Asking for public feedback insults the public, especially anyone that cares enough to try.</p> <p>I went through the process of downloading the draft TIP and reading some additional documents and finally decided this was not worth it.</p>	<p>efforts to improve the public input experience</p>
<p>Try harder! At least pretend to care.</p>	<p>We will work to improve the quality of our surveys, the clarity of information, and the timeliness of input sought. We do care and appreciate that you too care enough to provide input. Thank you!</p>

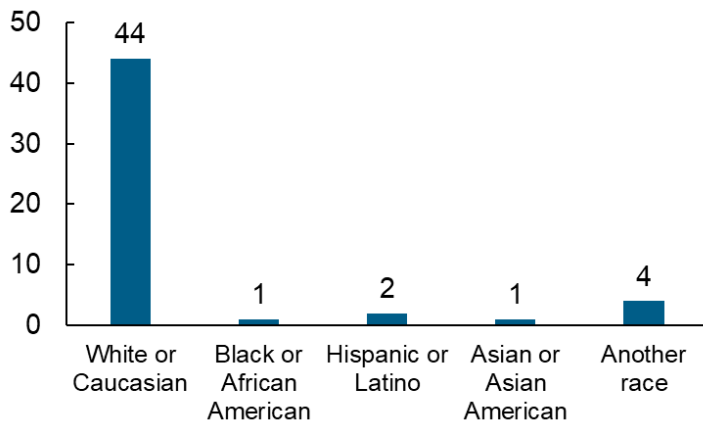
### Demographic questions

Forty-three of 53 survey participants provided their zip code.

Zip code	Number of responses
24011	1
24012	3
24014	4
24015	8
24016	5
24018	2
24019	2
24059	1
24064	1
24065	2
24121	1
24153	8
24175	2
24179	1
24279	1
24556	1



Fifty-two of 53 survey participants provided race/ethnicity.



This survey had no or low participation from some zip codes and from people who identify as minorities. Staff continue to try different strategies to improve public participation from under-responding zip codes and minorities. For this survey, staff purchased Google Ads for the first time to promote the survey which unfortunately yielded a very low response rate.

**APPENDIX D: Resolution Approving Final TIP 2021-2024**



The 25<sup>th</sup> day of June 2020

## **RESOLUTION**

### **Approval of the Final Transportation Improvement Program for Fiscal Years 2021, 2022, 2023 and 2024 for the Roanoke Urbanized Area**

**WHEREAS**, it is the position of the Roanoke Valley Transportation Planning Organization that projects proposed for improving transportation in the Roanoke urban area should be examined closely; and

**WHEREAS**, the Transportation Improvement Program has been prepared to initiate review by the Roanoke Valley Transportation Planning Organization of proposed transportation improvements for federal fiscal years 2021, 2022, 2023 and 2024; and

**WHEREAS**, inclusion of transportation projects in the Transportation Improvement Program is a condition of federal participation in the funding of that project; and

**WHEREAS**, the Transportation Improvement Program is required to be submitted to the Virginia Department of Transportation for inclusion in the State Transportation Improvement Program; and

**WHEREAS**, the TPO's Transportation Technical Committee has reviewed this document and has recommended that the Policy Board of the Roanoke Valley Transportation Planning Organization forward the FY2021-2024 Transportation Improvement Program to the Virginia Department of Transportation for inclusion in the State Transportation Improvement Program;

**NOW, THEREFORE, BE IT RESOLVED** that the Policy Board of the Roanoke Valley Transportation Planning Organization approves the FY2021-2024 Transportation Improvement Program, as presented, and forwards the document to the Virginia Department of Transportation for inclusion in the State Transportation Improvement Program.

Janet Scheid  
Chair

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

**Roanoke Valley Area Metropolitan Planning Organization**

**APPENDIX E – Self-Certification Statement**

## **METROPOLITAN TRANSPORTATION PLANNING AND PROGRAMMING PROCESS SELF-CERTIFICATION STATEMENT**

In accordance with 23 CFR 450.336, the Virginia Department of Transportation, the Virginia Department of Rail and Public Transportation, and the Roanoke Valley Transportation Planning Organization (d.b.a. RVTPO, but officially known as the Roanoke Valley Area Metropolitan Planning Organization) for the Roanoke, VA urbanized area hereby certify that the transportation planning and programming process is being conducted in accordance with all applicable requirements of:

- (1) 23 U.S.C. 134, 49 U.S.C. 5303, and 23 CFR part 450 Subpart C (Metropolitan Planning);
- (2) In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93 (Conformity Determination);
- (3) Title VI of Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1), 49 CFR part 21;
- (4) 49 U.S.C. 5332 prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
- (5) Section 1101(b) of the FAST ACT (Pub. L. 114-357) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects (DBE Involvement);
- (6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
- (7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;
- (8) The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
- (9) Section 324 of Title 23, U.S.C., regarding the prohibition of discrimination based on gender; and
- (10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

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

**Roanoke Valley Area Metropolitan Planning Organization**





**Roanoke Valley Transportation**  
**PLANNING ORGANIZATION**  
 Staffed by the  
**REGIONAL commission**

313 Luck Avenue, SW  
 Roanoke, Virginia 24016  
 P: 540.343.4417 / F: 540.343.4416  
[rvtpo.org](http://rvtpo.org)

**Roanoke Valley Area MPO**

Janet Scheel  
 Signature

Chair, TPO  
 Title

June 30, 2020  
 Date

**Virginia Department of Transportation**

\_\_\_\_\_  
 Signature

Salem District Engineer  
 Title

July 6, 2020  
 Date

**Virginia Department of Rail and Public Transportation**

Jennifer L. Mitchell  
 Signature

Director  
 Title

7/15/2020  
 Date

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

**Roanoke Valley Area Metropolitan Planning Organization**

**APPENDIX F – Amendments and Adjustments**

**APPENDIX G – Surface Transportation Block Grant Project  
Development and Selection Procedures**



Roanoke Valley Transportation  
**PLANNING ORGANIZATION**  
Staffed by the  
REGIONAL **commission**

# **Surface Transportation Block Grant Program: Roanoke Valley Urbanized Area Suballocation Funding**

*(Previously called RSTP-Regional Surface Transportation Program)*

## **Project Development and Selection Procedures**

Approved Revisions:

**Updated 4-25-19**  
Adjusted 9-28-17  
Adjusted 6-22-17  
Updated 4-28-16  
Updated 6-26-14  
Approved 3-28-13

## **NON-DISCRIMINATION**

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

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

## **ACKNOWLEDGMENTS**

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

**RVTPO Policy Board**

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

**Non-Voting Members:**

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

**Transportation Technical Committee**

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

**Non-Voting Members:**

Kevin Jones	Federal Highway Administration
Melissa McGill	Federal Transit Administration

**Regional Commission Staff**

Wayne G. Strickland	Executive Director
Cristina D. Finch, AICP, LEED AP	Director of Transportation
Dorian Allen	Transportation Planner I

April 25, 2019

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The 25<sup>th</sup> day of April 2019

## RESOLUTION

by the Policy Board of the Roanoke Valley Transportation Planning Organization  
Approving the Surface Transportation Block Grant Program: Roanoke Valley Urbanized Area  
Suballocation Funding Project Development and Selection Procedures

**WHEREAS**, the Roanoke Valley Transportation Planning Organization (RVTPO) is a Transportation Management Area (TMA) as classified by the Federal Government; and

**WHEREAS**, the RVTPO Policy Board has the opportunity and responsibility to prioritize the Surface Transportation Block Grant – Urbanized Areas with Population over 200,000 (STBG) funds, formerly referred to as Regional Surface Transportation Program (RSTP) funds, allocated by the federal government to the Roanoke region for eligible transportation projects within the Roanoke Valley Study Area Boundary; and

**WHEREAS**, the STBG Project Development and Selection Procedures document serves as a guide to applicants, staff, and stakeholders regarding opportunities to apply for funding, financial adjustments to previously approved projects, policies related to the allocation and use of funds, the scheduling of related activities, and the process for the Policy Board's selection of projects; and

**WHEREAS**, the RVTPO Policy Board members have reviewed the updated STBG Project Development and Selection Procedures and will use the Procedures to guide transportation investment decisions using STBG funds.

**NOW, THEREFORE BE IT RESOLVED** that the Roanoke Valley Transportation Planning Organization Policy Board does hereby approve the Surface Transportation Block Grant Program: Roanoke Valley Urbanized Area Suballocation Funding Project Development and Selection Procedures, as presented.



Wayne Strickland  
Secretary to the Roanoke Valley  
Transportation Planning Organization

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

**Roanoke Valley Area Metropolitan Planning Organization**



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## **1. INTRODUCTION**

This document describes the process the Roanoke Valley Transportation Planning Organization (RVTPO) will undertake to select transportation projects funded by the Roanoke Valley's apportionment of the Fixing America's Surface Transportation (FAST) Act's Surface Transportation Block Grant Program suballocation for urbanized areas with greater than 200,000 population, previously referred to as the Regional Surface Transportation Program (RSTP), herein after referred to as STBG. Projects funded through STBG will be included in the RVTPO's Transportation Improvement Program (TIP).

RVTPO's STBG project selection is a cooperative process among the members of the RVTPO. The procedure for prioritizing and selecting projects includes the submittal of candidate projects by RVTPO members and development of a prioritized candidate project list by the RVTPO Transportation Technical Committee (TTC). A numeric rating procedure is used to rate each candidate project based on the criteria established by the RVTPO Policy Board and updated at its discretion. The results of the ratings and project recommendations are reported to the RVTPO Policy Board for funding consideration. The RVTPO Policy Board considers the recommendations from the TTC and selects the final recommended list of STBG projects for submittal to the Commonwealth Transportation Board for approval as part of the Six-Year Improvement Program. Amendments to 23 U.S.C funded projects, and in particular STBG funded projects, must be approved by the Commonwealth Transportation Board. This project selection process, as outlined above, is consistent with 23 U.S.C. section 134(j)(3) and (5)(a), and 23 CFR 450.330 included in Appendix A for reference.

The procedures outlined in this document are effective immediately following the RVTPO Policy Board's approval of them. Unused funds allocated from previous procedures will be re-allocated using these procedures and any exceptions to these procedures are as outlined in Section 3 General Policies.

## **2. PROJECT DEVELOPMENT**

This section further describes how the legislation within 23 U.S.C. 133 – Surface transportation block grant program – applies to the RVTPO's regional apportionment of STBG in terms of who can apply for funds and project eligibility. STBG funds are apportioned by the State to the Metropolitan Planning Areas (MPAs) that have Transportation Management Area (TMA) status within Virginia. Metropolitan Planning Organizations, like the RVTPO, are responsible for selecting projects for STBG funding.

### **2.1 Eligible Applicants**

Eligible applicants (candidate project sponsors) of STBG funds in the Roanoke Valley Area include the RVTPO Policy Board member local governments who have all or a portion of their territory in the RVTPO Study Area Boundary, Greater Roanoke Transit Company (GRTC – "Valley Metro"), Unified Human Services Transportation Systems, Inc. (RADAR), the Roanoke-Blacksburg Regional Airport, the Virginia Department of Transportation (VDOT), and the Virginia Department of Rail and Public Transportation (DRPT).

## **2.2 Eligible Projects**

STBG funding is intentionally very flexible in how it can support transportation investments. The list of eligible projects and activities per 23 U.S.C. 133 is listed in Appendix B as stated in the Federal Highway Administration's STBG implementation guidance from March 7, 2016.

Candidate projects are often parts of larger efforts that incorporate transportation, housing, economic development, education and/or urban policy elements. It can be difficult to determine, with certainty, the likely eligibility of specific candidate projects simply by reading the eligibility guidance in Appendix B. Project sponsors who would like to determine eligibility before taking the time and expense of applying for STBG funds are invited to send RVTPO staff a summary of the candidate project idea. RVTPO staff will coordinate with FHWA or FTA staff to confirm eligibility.

An application form for new candidate projects is provided in a separate document available online via [rvtpo.org](http://rvtpo.org).

## **3. GENERAL POLICIES**

- 1) Projects must be identified in or qualify for inclusion in the current RVTPO Constrained Long-Range Multimodal Transportation Plan (CLRMTMP) available online via [rvtpo.org](http://rvtpo.org).
- 2) A construction project must be a permanent improvement and not temporary construction that must be replaced in the near future.
- 3) Funds allocated for the candidate project must be federally obligated within 12 months of allocation and expended within 36 months of such obligation.
- 4) Pursuant to the two-year application process, projects in the first two years of any Six-Year Funding Plan will be considered "previously funded and committed" in future application and adjustment processes. Projects not yet funded within the first two years may be considered in priority order during an adjustment cycle if additional funding becomes available, or they will have to re-compete with the new candidate projects in the next application and scoring process unless they receive a "conditional commitment" status explained in Policy 9. The series of illustrations that follows helps illustrate how the "previously funded and committed" status would have worked on the FY16-21 RSTP Six-Year Financial Plan that was approved on March 12, 2015. Future financial plans would follow a similar pattern.

Previous Allocations and projects beginning in FY16 and FY17 would have been deemed "committed to fund" for the next application round.

The out years of projects started through FY17 would also be committed as indicated in the yellow box up to the total funding request recommended.

**Roanoke Valley Transportation Planning Organization (RVTPO)  
FY 16-21 RSTP Six-Year Financial Plan**

**RVTPO Commitment to Fund**

Version March 12, 2015

\* RVTPO Policy Board Action: Approved on March 12, 2015, based on 2-6-15 preliminary allocations provided by VDOT.

Project	Funding Request	Previous Allocations	FY16	FY17	FY18	FY19	FY20	FY21
Roanoke River Greenway - Greenhill Park (Rke Crty) to Hiverside Park (Salem); UPC 97171; administered by Roanoke County	\$ 2,990,760	\$ 2,990,760	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roanoke River Greenway - Eddy Avenue Bridge (Salem); UPC 56409 ; administered by City of Salem	\$ 405,600	\$ 405,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roanoke River Greenway - Apperson Dr. Bridge (Salem); UPC 105206; administered by City of Salem	\$ 657,000	\$ 657,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roanoke River Greenway - City of Salem line to Bridge Street; UPC 102769; administered by City of Roanoke	\$ 2,863,800	\$ 2,863,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roanoke River Greenway - Water Pollution Control Plant to the Blue Ridge Parkway; UPC 91191; administered by Roanoke County	\$ 5,857,840	\$ 1,085,650	\$ 3,164,400	\$ 1,607,790	\$ -	\$ -	\$ -	\$ -
Downtown Roanoke Multimodal Transportation Study	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bus Replacement for Smart Way Commuter Service - 2007 Freightliner	\$ 560,000	\$ 560,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Plantation Road, Bicycle, Pedestrian and Streetscape Improvement Project	\$ 1,279,500	\$ 1,068,008	\$ 211,495	\$ -	\$ -	\$ -	\$ -	\$ -
Exit 140 Park and Ride Reconstruction	\$ 2,650,000	\$ 1,608,244	\$ 568,074	\$ 172,059	\$ 301,623	\$ -	\$ -	\$ -
West Main Street Pedestrian Improvement Project	\$ 177,956	\$ 177,956	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Walnut Avenue Phase I	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tinker Creek Pedestrian Bridge	\$ 1,459,500		\$ -	\$ 145,000	\$ 1,314,500	\$ -	\$ -	\$ -
Tinker Creek Trail Extension	\$ 1,220,000		\$ -	\$ 200,000	\$ 349,602	\$ 670,398	\$ -	\$ -
Bus Replacement and Rebuild Program	\$ 14,127,475		\$ -	\$ 1,796,315	\$ 1,955,439	\$ 1,955,439	\$ 1,955,439	\$ 1,955,439
Garden City Trail Connection	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Plantation Road - Lila Drive Intersection	\$ 968,750		\$ -	\$ -	\$ -	\$ 968,750	\$ -	\$ -
Tinker Creek Greenway Connectivity Study	\$ 400,000		\$ -	\$ -	\$ -	\$ 326,577	\$ 73,423	\$ -
West Main Street Pedestrian Improvements - Phase II	\$ 803,995		\$ -	\$ -	\$ -	\$ -	\$ 803,995	\$ -
Bus Stop Accessibility - GRTC	\$ 1,000,000		\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ -
Campbell Avenue Bike and Ped Improvements	\$ 3,300,000		\$ -	\$ -	\$ -	\$ -	\$ 88,307	\$ 1,965,725
	Total Funding Allocated:		\$ 3,943,969	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164
	Total Funding Available:		\$ 3,943,969	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164
	Difference:		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

- 5) After coordination with and consent of affected project sponsors, the TTC and VDOT, RVTPO staff are authorized to make administrative changes to the year of expenditure of allocated funds without approval of the Policy Board only when such change would not impact the project's committed status. Changes to the total allocated funds to a project or moving funds into the first two years of a financial plan in order to commit to funding a project will be approved by the Policy Board during the Annual Adjustment Process.
- 6) The RVTPO Policy Board strongly advises that no STBG application constitute more than two years of STBG funding (Note: the term two-years should be interpreted to mean an equivalent lump sum.).
- 7) Additional funding requests for existing STBG projects will be considered annually during the adjustment process. During the bi-annual application process, a decision will be made regarding additional funding requests for existing STBG projects before committing unallocated funds to new projects.

- 8) The RVTPO Policy Board encourages applications requesting STBG funds to be used as a match to leverage funding from other potential transportation project funding sources (e.g. SMART SCALE, Revenue Sharing, Transportation Alternatives, etc.).
- 9) Candidate projects that are also included in the 2018 Regional Study on Transportation Project Prioritization for Economic Development and Growth requesting STBG funding to cover a portion of the project expense, thus leveraging other funding sources, may be tentatively programmed in years 3-6 of any six-year financial plan under the “conditional commitment” that the remaining required funds to complete the project be secured.
- 10) Project sponsors that are unsuccessful in securing funds to fully fund the project within the timeframe outlined in their STBG application may be required to re-compete for STBG funds, and the RVTPO Policy Board may de-allocate or adjust the timing of the funds.
- 11) Requests for funds that occur outside of the project application or adjustment processes may be considered by the RVTPO Policy Board if urgent unforeseen circumstances have arisen that prevented the request from being initiated prior to the deadlines for project applications or adjustments. Under such circumstances, the RVTPO Policy Board may direct the TTC to review the request and recommend their findings to the Policy Board.

## **4. APPLICATION PROCESS**

There will be an opportunity to submit new applications for candidate projects in September of each odd-numbered calendar year. The timing of receiving and determining new candidate project funding requests will enable decisions to be made prior to submission of any related SMART SCALE application.

TTC members will score all projects – including their own applications; staff will administer the process and not score projects. The TTC will review scoring results and recommend multi-year project allocations.

The RVTPO Policy Board will review candidate project scoring results and prioritization as well as the TTC’s recommended multi-year project allocations before approving the six-year STBG financial plan for project allocations. A prioritized list of candidate projects applied for but not programmed for funding will be maintained by RVTPO staff in case additional funding becomes available. Such projects may be considered for programming during the annual adjustment process.

### **4.1 STBG Project Prioritization and Programming**

For each STBG new application cycle, the scoring results are presented to the RVTPO Policy Board and the public. The RVTPO Policy Board provides guidance on program development, and the TTC develops a draft six-year STBG financial plan based on RVTPO Policy Board direction and the STBG scoring results. A public comment period and public hearing allows the public to comment on the draft STBG financial plan, including the scoring results for individual projects. The RVTPO Policy Board takes into account public comments regarding the draft STBG financial plan, ultimately approving the final STBG financial plan for implementation.

Once the scoring is complete, the TTC develops a recommended funding scenario based on scoring results and any other factors deemed relevant to be forwarded to the RVTPO Policy Board. The RVTPO Policy Board may modify the funding scenario recommended by the TTC. Additional considerations that may be used by the RVTPO Policy Board include:

- Public feedback from the public comment period and / or public hearing
- TTC project scores or staff's recommended changes to the draft funding scenario
- Project segmentation – starting the next phase of a multi-segment roadway improvement, e.g., to complete a major multi-segment project; and
- Other information on project status.

The prioritization process does not require that the RVTPO Policy Board fund projects in order of their scores. Further, the RVTPO Policy Board is not required to select the highest scoring project. The process is a means to assist the RVTPO Policy Board members in evaluating and comparing proposed improvements. The RVTPO Policy Board continues to retain final decision-making authority on improvements to be included in the RVTPO's six-year STBG financial plan.

The following table shows the tentative schedule for submitting and selecting projects for STBG funding as well as requesting any increases in funding for existing projects.

**Table 4.1-1: Tentative Schedule for STBG Funding Decisions**

<b>Action #</b>	<b>Description</b>	<b>Month</b>
1	Applications for new candidate projects due to staff. Application forms and submittal instructions are available on rvtpo.org.	September (by 5:00 p.m. of the last Friday of the month.)
2	Current project sponsors submit to staff an update on project progress and funding. Any additional funding requests are made at this time.	October
3	TTC Members score/rank candidate projects which will be due one week after the November TTC meeting.	November
4	RVTPO Policy Board is presented an overview of all candidate projects.	November/December
5	TTC reviews status of existing STBG projects, considers scores and ranking of candidate project applications, and recommends a priority list of investments for existing and candidate projects.	December/January
6	TTC recommends a draft six-year STBG financial plan based on the status of existing projects and the priority list of investments.	December/January
7	RVTPO Policy Board reviews the draft six-year financial plan, approves its release for public comment and a public hearing.	January
8	RVTPO Policy Board holds a public hearing, makes any necessary adjustments to the six-year financial plan, and approves the plan.	March-May

**4.2 New Candidate Project Scoring Categories**

Each TTC member will have the opportunity to score all candidate projects using the following scoring categories (A-L). Guidance is provided in each category to help the TTC members compare the value of the candidate projects relative to each other. The guidance provided for each category is derived from the federal planning factors. For additional guidance, applicants may refer to the RVTPO’s performance measure targets. The number of total candidate project applications in the current cycle will determine the total number of points for each scoring category.

For example, if there are 12 candidate project applications submitted, for each scoring category, the TTC member will consider the worth of each project in relation to the other 11 projects and give the project a score ranking from 12 (best meets the criteria based on the guidance provided) to 1 (least meets the criteria based on the guidance provided).

- A. Regional Project Consideration** (worth double the score) – Assessed on the extent to which the project is consistent with the Constrained Long-Range Multimodal Transportation Plan, benefits, impacts and/or is sponsored by more than one eligible recipient. A combination of these factors will be used to assess point value.
- B. Support the Economic Vitality of the Metropolitan Area Especially by Enabling Global Competitiveness, Productivity, and Efficiency** - (e.g. project serves a corridor with commercial and/or industrial development growth by adding capacity with improvements such as adding travel lanes to existing streets, new interchanges or bridge replacement/widening)
- C. Increase the Safety and Security of the Transportation System for Motorized and Non-motorized Users** - (e.g. project includes provision to help prevent accidents, reduce fatalities and serious injuries on roadways, such as railroad crossings, or pedestrian safety/security)
- D. Increase the Accessibility and Mobility of People and Freight** - (e.g. project includes provision for improvements such as transit capital acquisition, intermodal connection, park & ride lots, carpool/vanpool projects, bike lanes or sidewalk modifications to comply with the Americans with Disability Act of 1990)
- E. 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** - (e.g. project includes provision for improvements that involve the reduction of fuel consumption, wetlands mitigation or improve natural wildlife habitats)
- F. Promote Efficient System Management and Operation** - (e.g. project includes provision for improvements such as congestion/management systems, signal coordination, turn lanes and intelligent transportation system applications)
- G. Emphasize the Preservation of the Existing Transportation System** - (e.g. project includes provision for multimodal system preservation, such as resurfacing, rehabilitation of pavement, roadway or bridge replacement, replace/improve transit revenue vehicles, non-revenue vehicles, or transit facilities that are close to exceeding their useable lifespan)
- H. Improve the Resiliency and Reliability of the Transportation System and Reduce or Mitigate Stormwater Impacts of Surface Transportation** – (e.g. project improves the transportation system’s ability to accommodate unexpected incidents, weather events, etc.; improve travel time, and/or improve stormwater flow)
- I. Enhance travel and tourism** – (e.g. project improves people’s ability to visit the Roanoke Valley and access destinations of interest)
- J. Enhance Land Use Coordination** - (e.g. project supports improved multimodal connectivity to existing or planned development)
- K. Demonstrate Project Readiness** - (e.g. consider previous work done or the extent to which work needs to be done to get the project ready for construction)
- L. Project included in previous plans that had a public input process associated with the plan** - (e.g. local plans or other regional plans)



**Benefit/Cost Consideration:**

This value will be calculated by staff after receiving the above scores.

- Total average score divided by total cost
- Total average score divided by total STBG request

## **5. ANNUAL ADJUSTMENT PROCESS**

TTC will annually consider changes (with the exception of situations that fall under Policy #5) to existing projects and recommend changes to the RVTPO Policy Board. The RVTPO Policy Board will have final decision-making authority on all annual adjustments.

### **5.1 Cost Estimates and Cost Overruns**

Basic considerations for cost overruns are as follows:

- a. If the cost/annual allocation and the scope of a project changes less than 10% on any one STBG funded project, the locality/agency should notify the RVTPO staff with a request and justification for a change in funding. The TTC will review the request and recommend use of any applicable balance entry reserve account or, if possible, recommend committing future year funding to preserve the project to the RVTPO Policy Board.
- b. If the cost/annual allocation and/or scope of the project changes by more than 10% on any one STBG funded project, the locality/agency should notify the RVTPO staff with a request and justification for a change in funding and/or scope. The TTC and RVTPO Policy Board will review the request and may recommend one or any combination of the following:
  - 1) Scale back the project;
  - 2) Use local funds;
  - 3) Use of SMART SCALE funds;
  - 4) Use STBG balance entry reserve account funds (if available);
  - 5) Use existing STBG funds from another project (either at the suggestion of the project sponsor from another STBG project awarded to the same project sponsor; or at the discretion of the RVTPO Policy Board from all projects);
  - 6) Use future STBG allocations (in the form of a Phase II application to be evaluated during a future candidate list and rating);
  - 7) Use future non-STBG funds;
  - 8) Drop the project

All project candidates were originally scored using the same procedures in a fair and transparent process. The fact that a particular project sponsor (locality or agency) underestimates project costs should not unduly adversely affect funding availability allocated to other projects also funded through the process of these selection procedures and final decision of the RVTPO Policy Board.

## **5.2 Transfer of Unused Funds**

The re-allocation of unused STBG allocations on completed or cancelled projects will be determined by the RVTPO Policy Board. In general, if there are unused STBG funds allocated to a project that has been completed or cancelled, upon notification by the project sponsor, staff will place the funds into the balance entry account (a holding account for future use). The use of balance entry funds for existing or new projects will be determined during the processes described in sections 4 and 5.3.

## **5.3 Adjustment Process Tentative Schedules**

The schedule for considering funding increases for existing projects during new project application years is included in the schedule provided previously in Table 4.1-1. The following table 5.3-1 shows the tentative schedule for making funding adjustments to existing STBG projects when no new candidate projects are being considered.

**Table 5.3-1: Tentative Schedule for STBG Funding Decisions**

<b>Action #</b>	<b>Description</b>	<b>Month</b>
1	Annually, current project sponsors submit to staff an update on project progress and funding. Any additional funding requests are made at this time.	October
2	Staff presents current project status to TTC. TTC recommends any funding increases for existing projects. RVTPO Policy Board reviews status of current projects and any funding increase recommendations. RVTPO Policy Board schedules a public hearing prior to approving any increases in funding.	December/January
3	If needed, the RVTPO Policy Board holds a public hearing. RVTPO approves six-year financial plan.	March-May

Project adjustments may be considered at other times of the year as well.

During the annual adjustment process, staff will work with current project sponsors to review the project status and additional funding needs of projects with some prior year allocation. The TTC will review this information and, where additional funds are requested, will make a recommendation to the RVTPO Policy Board.

## **APPENDIX A – Project Selection Process Consistency**

### 23 U.S.C. section 134(j)(3):

#### (3) INCLUDED PROJECTS.—

(A) PROJECTS UNDER THIS TITLE AND CHAPTER 53 OF TITLE 49.—A TIP developed under this subsection for a metropolitan area shall include the projects within the area that are proposed for funding under chapter 1 of this title and chapter 53 of title 49.

#### (B) PROJECTS UNDER CHAPTER 2.— (i) REGIONALLY SIGNIFICANT PROJECTS.—

Regionally significant projects proposed for funding under chapter 2 shall be identified individually in the transportation improvement program. (ii) OTHER PROJECTS.—Projects proposed for funding under chapter 2 that are not determined to be regionally significant shall be grouped in one line item or identified individually in the transportation improvement program.

(C) CONSISTENCY WITH LONG-RANGE TRANSPORTATION PLAN.—Each project shall be consistent with the long-range transportation plan developed under subsection (i) for the area.

(D) REQUIREMENT OF ANTICIPATED FULL FUNDING.—The program shall include a project, or an identified phase of a project, only if full funding can reasonably be anticipated to be available for the project or the identified phase within the time period contemplated for completion of the project or the identified phase.

### 23 U.S.C. section 134 (j)(5)(a):

#### (5) SELECTION OF PROJECTS.—

(A) IN GENERAL.—Except as otherwise provided in subsection (k)(4) and in addition to the TIP development required under paragraph (1), the selection of federally funded projects in metropolitan areas shall be carried out, from the approved TIP—

##### (i) by—

(I) in the case of projects under this title, the State; and

(II) in the case of projects under chapter 53 of title 49, the designated recipients of public transportation funding; and

(ii) in cooperation with the metropolitan planning organization.

### 23 CFR 450.330 TIP action by the FHWA and the FTA.

(a) The FHWA and the FTA shall jointly find that each metropolitan TIP is consistent with the metropolitan transportation plan produced by the continuing and comprehensive transportation process carried on cooperatively by the MPO, the State(s), and the public transportation operator(s) in accordance with 23 U.S.C. 134 and 49 U.S.C. 5303. This finding shall be based on the self-certification statement submitted by the State and MPO under §450.336, a review of the metropolitan transportation plan by the FHWA and the FTA, and upon other reviews as deemed necessary by the FHWA and the FTA.

(b) In nonattainment and maintenance areas, the MPO, as well as the FHWA and the FTA, shall determine conformity of any updated or amended TIP, in accordance with 40 CFR part 93. After the FHWA and the FTA issue a conformity determination on the TIP, the TIP shall be incorporated, without change, into the STIP, directly or by reference.

(c) If an MPO has not updated the metropolitan transportation plan in accordance with the cycles defined in §450.324(c), projects may only be advanced from a TIP that was approved

and found to conform (in nonattainment and maintenance areas) prior to expiration of the metropolitan transportation plan and meets the TIP update requirements of §450.326(a). Until the MPO approves (in attainment areas) or the FHWA and the FTA issue a conformity determination on (in nonattainment and maintenance areas) the updated metropolitan transportation plan, the MPO may not amend the TIP.

(d) In the case of extenuating circumstances, the FHWA and the FTA will consider and take appropriate action on requests to extend the STIP approval period for all or part of the TIP in accordance with §450.220(b).

(e) If an illustrative project is included in the TIP, no Federal action may be taken on that project by the FHWA and the FTA until it is formally included in the financially constrained and conforming metropolitan transportation plan and TIP.

(f) Where necessary in order to maintain or establish operations, the FHWA and the FTA may approve highway and transit operating assistance for specific projects or programs, even though the projects or programs may not be included in an approved TIP.

## **APPENDIX B – Project Eligibility**

Project eligibility is listed in 23 USC 133 – electronically available here:

<https://www.gpo.gov/fdsys/pkg/USCODE-2017-title23/pdf/USCODE-2017-title23-chap1-sec133.pdf>

The below is copied from FHWA’s Surface Transportation Block Grant Program (STBG) Implementation Guidance dated 3-7-16 which reflects the eligibility information from 23 USC 133.

### **D. ELIGIBILITY**

#### **1. Eligible Projects and Activities:**

- a. Location of Projects (23 U.S.C. 133(c)): STBG projects may not be undertaken on a road functionally classified as a local road or a rural minor collector unless the road was on a Federal-aid highway system on January 1, 1991, except-

- (1) For a bridge or tunnel project (other than the construction of a new bridge or tunnel at a new location);
- (2) For a project described in 23 U.S.C. 133(b)(4)-(11) and described below under "Eligible Activities" (b)(4) through (11);
- (3) For transportation alternatives projects described in 23 U.S.C. 101(a)(29) before enactment of the FAST Act (these are described in 23 U.S.C. 133(h) and in separate TA Set-Aside guidance.); and
- (4) As approved by the Secretary.

- b. Eligible Activities (23 U.S.C. 133(b)): Subject to the location of projects requirements in paragraph (a), the following eligible activities are listed in 23 U.S.C. 133(b):

- (1) Construction, as defined in 23 U.S.C. 101(a)(4), of the following:

- i. Highways, bridges, and tunnels, including designated routes of the Appalachian development highway system and local access roads under 40 U.S.C. 14501;
- ii. Ferry boats and terminal facilities eligible under 23 U.S.C. 129(c);
- iii. transit capital projects eligible under chapter 53 of title 49, United States Code;
- iv. Infrastructure-based intelligent transportation systems capital improvements, including the installation of vehicle-to-infrastructure communication equipment;
- v. Truck parking facilities eligible under Section 1401 of MAP-21 (23 U.S.C. 137 note); and

vi. Border infrastructure projects eligible under Section 1303 of SAFETEA-LU (23 U.S.C. 101 note).

(2) Operational improvements and capital and operating costs for traffic monitoring, management, and control facilities and programs. Operational improvement is defined in 23 U.S.C. 101(a)(18).

(3) Environmental measures eligible under 23 U.S.C. 119(g), 328, and 329, and transportation control measures listed in Section 108(f)(1)(A) (other than clause (xvi) of that section) of the Clean Air Act (42 U.S.C. 7408(f)(1)(A)).

(4) Highway and transit safety infrastructure improvements and programs, including railway-highway grade crossings.

(5) Fringe and corridor parking facilities and programs in accordance with 23 U.S.C. 137 and carpool projects in accordance with 23 U.S.C. 146. Carpool project is defined in 23 U.S.C. 101(a)(3).

(6) Recreational trails projects eligible under 23 U.S.C. 206, pedestrian and bicycle projects in accordance with 23 U.S.C. 217 (including modifications to comply with accessibility requirements under the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.)), and the Safe Routes to School Program under Section 1404 of SAFETEA-LU (23 U.S.C. 402 note).

(7) Planning, design, or construction of boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

(8) Development and implementation of a State asset management plan for the National Highway System (NHS) and a performance-based management program for other public roads.

(9) Protection (including painting, scour countermeasures, seismic retrofits, impact protection measures, security countermeasures, and protection against extreme events) for bridges (including approaches to bridges and other elevated structures) and tunnels on public roads, and inspection and evaluation of bridges and tunnels and other highway assets.

(10) Surface transportation planning programs, highway and transit research and development and technology transfer programs, and workforce development, training, and education under chapter 5 of title 23, United States Code.

(11) Surface transportation infrastructure modifications to facilitate direct intermodal interchange, transfer, and access into and out of a port terminal.

(12) Projects and strategies designed to support congestion pricing, including electronic toll collection and travel demand management strategies and programs.

(13) Upon request of a State and subject to the approval of the Secretary, if Transportation Infrastructure Finance and Innovation Act (TIFIA) credit assistance is approved for an STBG-eligible project, then the State may use STBG funds to pay the subsidy and administrative costs associated with providing Federal credit assistance for the projects.

(14) The creation and operation by a State of an office to assist in the design, implementation, and oversight of public-private partnerships eligible to receive funding under title 23 and chapter 53 of title 49, United States Code, and the payment of a stipend to unsuccessful private bidders to offset their proposal development costs, if necessary to encourage robust competition in public-private partnership procurements.

(15) Any type of project eligible under 23 U.S.C. 133 as in effect on the day before the FAST Act was enacted. Among these are:

- i. Replacement of bridges with fill material;
- ii. Training of bridge and tunnel inspectors;
- iii. Application of calcium magnesium acetate, sodium acetate/formate, or other environmentally acceptable, minimally corrosive anti-icing and deicing compositions for bridges (and approaches to bridges and other elevated structures) and tunnels;
- iv. Projects to accommodate other transportation modes continue to be eligible pursuant to 23 U.S.C. 142(c) if such accommodation does not adversely affect traffic safety;
- v. Transit capital projects eligible for assistance under chapter 53 of title 49, United States Code, including vehicles and facilities (publicly or privately owned) that are used to provide intercity passenger bus service;
- vi. Approach roadways to ferry terminals to accommodate other transportation modes and to provide access into and out of the ports;
- vii. Transportation alternatives previously described in 23 U.S.C. 101(a)(29) and described in 23 U.S.C. 213;
- viii. Projects relating to intersections having disproportionately high accident rates, high levels of congestion (as evidenced by interrupted traffic flow at the intersection and a level of service rating of "F" during peak travel hours, calculated in accordance with the Highway Capacity Manual), and are located on a Federal-aid highway;
- ix. Construction and operational improvements for any minor collector if the minor collector and the project to be carried out are in the same corridor and in proximity to an NHS route; the construction or improvements will enhance the level of service on the NHS route and

improve regional traffic flow; and the construction or improvements are more cost-effective, as determined by a benefit-cost analysis, than an improvement to the NHS route;

x. Workforce development, training, and education activities discussed in 23 U.S.C. 504(e);

xi. Advanced truck stop electrification systems. Truck stop electrification system is defined in 23 U.S.C. 101(a)(32);

xii. Installation of safety barriers and nets on bridges, hazard eliminations, projects to mitigate hazards caused by wildlife;

xiii. Electric vehicle and natural gas vehicle infrastructure in accordance with 23 U.S.C. 137;

xiv. Data collection, maintenance, and integration and the costs associated with obtaining, updating, and licensing software and equipment required for risk-based asset management and performance based management, and for similar activities related to the development and implementation of a performance based management program for other public roads;

xv. Construction of any bridge in accordance with 23 U.S.C. 144(f) that replaces any low water crossing (regardless of the length of the low water crossing); any bridge that was destroyed prior to January 1, 1965; any ferry that was in existence on January 1, 1984; or any road bridge that is rendered obsolete as a result of a Corps of Engineers flood control or channelization project and is not rebuilt with funds from the Corps of Engineers. Not subject to the Location of Project requirement in 23 U.S.C. 133(c); and

xvi. Actions in accordance with the definition and conditions in 23 U.S.C. 144(g) to preserve or reduce the impact of a project on the historic integrity of a historic bridge if the load capacity and safety features of the historic bridge are adequate to serve the intended use for the life of the historic bridge. Not subject to the Location of Project requirement in 23 U.S.C. 133(c).



**APPENDIX H – RVTPO Surface Transportation Block Grant  
Programming Decisions**

**APPENDIX I – RVTPD Transportation Alternatives Set-Aside Programming  
Decisions**

**APPENDIX J – Annual Listing of Transportation Project Obligations**