





















TRANSPORTATION IMPROVEMENT PROGRAM

for the

ROANOKE VALLEY
TRANSPORTATION PLANNING ORGANIZATION

Federal Fiscal Years 2021-2024

APPROVED:

Amended	Adjusted	Adjusted

WWW.RVTPO.ORG



DRAFT RVTPO FY 2021-24

Transportation Improvement Program



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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

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Botetourt County Representatives
The Honorable Steve Clinton
The Honorable Billy Martin, Sr.**
Montgomery County Representative
The Honorable Steve Fijalkowski

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)

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Federal Highway Administration Kevin Jones

Federal Transit Administration

Vacancy

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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)

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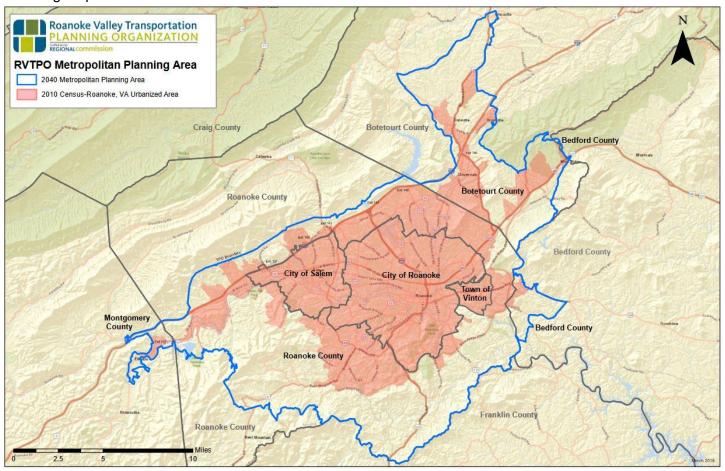
AICP, LEED AP, Director of

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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 and 2045 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 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;
- 2. Two 15-day comment periods (ending April 16, 2020 and June 18, 2020) where the public submitted 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 June 25, 2020.

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.

FY2021-2024 Transportation Improvement Program 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.

3.0 Understanding the TIP

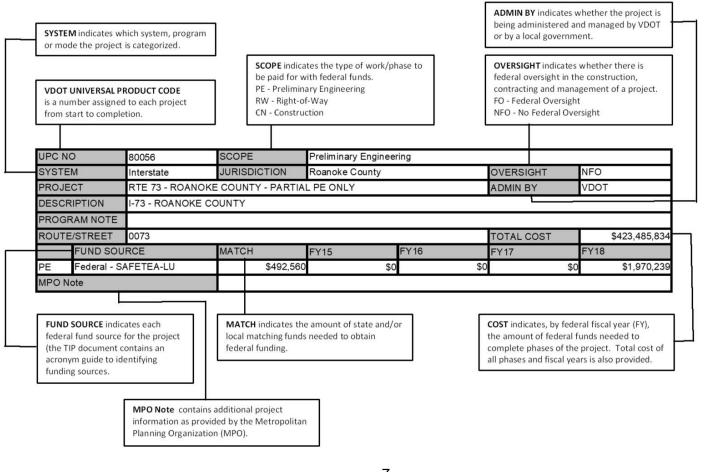
The Transportation Improvement Program (TIP) identifies capital and operating projects anticipated to receive federal funding over a four-year period during federal fiscal years 2021 through 2024 (October 1, 2020 to September 30, 2023). Projects that are funded only through state or local sources are not included unless they are considered to be regionally significant (see Section 8.0). In accordance with 23 CFR 450.318(i), any project included in the TIP shall be consistent with the approved fiscally constrained long-range multimodal transportation plan (CLRMTP). Once approved, the TIP is incorporated without change into the Statewide Transportation Improvement Program or STIP.

Ungrouped vs. Grouped Projects

Some projects in the TIP are identified as individual (ungrouped) projects whereas others are grouped together and may be shown as a single item. The grouping of projects allows flexibility to make funding adjustments more easily to minor projects that don't merit the need for extensive oversight and public involvement thus reducing paperwork. Projects that are not considered to be of appropriate scale for individual ungrouped identification in a given program year may be grouped by function, work type, and/or geographic area using applicable classifications under 23 CFR 771.117(c) and (d) and/or 40 CFR part 93.

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. The diagram below explains the type of detailed information provided for individually listed projects in Section 6.0

Diagram of Highway Project Information



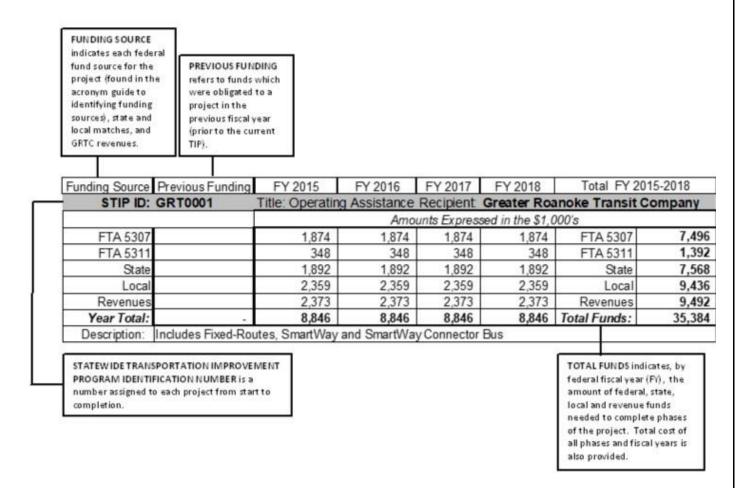
References to the project system are explained in the table below.

Table 1: Project System

System	Description
Interstate	The Interstate System contains projects identified as being part of the limited-access system of highways that carry route designations such as I-81 and I-64.
Primary Roads	The Primary System contains projects located along major roadways which carry a route designation of less than 600. Projects listed in this category are primarily located within counties and are listed in numerical order by route number without regard to jurisdiction.
Secondary Roads	The Secondary System contains projects located along minor roadways which carry a route designation of 600 or greater. Projects listed in this category are primarily located within counties and are listed in numerical order by route number without regard to jurisdiction.
Urban Roads	The Urban System contains projects located within cities and towns. Projects are organized by jurisdiction and listed by street name.
Miscellaneous	Miscellaneous Projects are regional in nature and are not associated with one of the previous Systems.
Rail Safety	Rail safety projects include those related to safety such as gates, flashing lights, etc. at railroad crossings.
Transportation Enhancement / Alternative	Transportation enhancement or alternative projects may include greenway trails, sidewalks, 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.

The diagram below explains the type of detailed information provided for individually listed projects in Section 7.0.

Diagram of Transit Project Information



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.

3.1 Making Changes to the TIP

Text changes or revisions to projects listed in the TIP (including addition/deletion of projects) occur on an ongoing basis and are classified as either administrative modifications (or adjustments) or as amendments. On a general basis, the RVTPO follows the State's schedule for developing the TIP; 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 <u>CFR Part 450, Section 104</u>) define amendment and administrative modification (referred to as an adjustment) as follows:

<u>Amendment</u> 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 redemonstration of fiscal constraint.

<u>Administrative Modification (Adjustment)</u> 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.

In addition, technical corrections or formatting updates may be made to the TIP by staff as needed and don't require approval. Technical corrections may include typographical, grammatical, or syntactical errors that address, for example, an error in spelling, grammar, or deletion of a redundant word. It does not include changes to funding amounts.

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 or removing an ungrouped 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

- Adding or removing a grouped project.
- 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 the following table will be used. The sliding scale is a minimum guideline for determining TIP amendments. RVARC staff may at any time determine that any proposed change to the TIP will be handled as an amendment.

Table 2: Sliding Scale of TIP Amendment and Adjustment Thresholds

TIP Project	Minimum Cost Increase
Estimated Cost	Requiring Amendment
\$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
- o 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 including a public comment period and a public hearing conducted 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).

An obligation is the Federal government's legal commitment to pay the Federal share of a project's cost. An obligated project is one that has been authorized by the Federal agency and for which funds have been committed. Projects for which funds have been obligated are not necessarily initiated or completed during the program year, and the amount of the obligation will not necessarily equal the total cost of the project. For projects under the auspices of the FTA, obligation occurs when the FTA grant is awarded. For projects under the auspices of the FHWA, obligation occurs when a project agreement is executed and the State/grantee requests that the funds be obligated.

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

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

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

Example Project Obligations Report:

				STIP Tra	ansaction	s				
				Roanoke M	PO Study Ar	ea				
			Federal Ol	bligated Fun	ds: 10/01/201	8 - 09/30/201	9			
				Funding S	ource/Amoun	t				
Locality	UPC / Description	NHS/NHP	STP/STBG	EB/MG	CMAQ	RSTP	BROS	DEMO	SAFE	TOTAL
				L	Jrban					
Roanoke	688 13TH STREET A	AND HOLLINS DO	OAD - JAMISON A	.VE: 08 MILE NO	DTH INT ODAN	GE AVENUE (0.9	790 MI)			
	688 TIP:	\$0	(\$2,077,664)	\$561,239	\$0	\$0	\$0	\$0	\$0	(\$1,516,425)
	Obligated:		\$314,938	\$0	\$0	\$0	\$0	\$0	\$0	\$314,938
	J								Remaining:	*
	URBAN SUBTOTAL									
	TIP:	\$0	(\$2,077,664)	\$561,239	\$0	\$0	\$0	\$0	\$0	(\$1,516,425)
	Obligated:	\$0	\$314,938	\$0	\$0	\$0	\$0	\$0	\$0	\$314,938
	Released:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
									Remaining:	*

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.

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 (CLRMTP) 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 table (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

	FFY2	2021	FFY2	2022	FFY2	2023	FFY:	2024	TO	ΓAL
	Projected		Projected		Projected		Projected		Projected	
	Obligation	Planned	Obligation	Planned	Obligation	Planned	Obligation	Planned	Obligation	Planned
Fund Source Federal	Authority	Obligation	Authority	Obligation	Authority	Obligation	Authority	Obligation	Authority	Obligation
BR	\$75,000	\$75,000	\$1,198,091	\$1,198,091	\$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
Subtotal Federal	\$15,864,067	\$15,864,067	\$9,483,536	\$9,483,536	\$7,439,722	\$7,439,722	\$4,051,862	\$4,051,862	\$36,839,187	\$36,839,187
Other										
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
Subtotal Other	\$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
Total	\$19,214,131	\$19,214,131	\$11,193,544	\$11,193,544	\$9,277,153	\$9,277,153	\$4,914,827	\$4,914,827	\$44,599,655	\$44,599,655
		•	•		,	•	•		•	
Federal - ACC (1)										
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
Subtotal Federal - ACC (1)	\$1,383,197	\$1,383,197	\$7,289,188	\$7,289,188	\$4,907,314	\$4,907,314	\$3,805,971	\$3,805,971	\$17,385,670	\$17,385,670
Maintenance - Federal (4)										
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
Subtotal Maintenance - Federal (4)	\$37,857,619	\$37,857,619	\$34,968,163	\$34,968,163	\$36,420,854	\$36,420,854	\$37,470,081	\$37,470,081	\$146,716,717	\$146,716,717

⁽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 21st Century (TEA-21) legislation.

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

- *IM Interstate Maintenance* (IM) program provides reconstruction, maintenance, and improvements to the National System of Interstate and Defense Highways. The Commonwealth Transportation Board (CTB) administers these programs.
- **NHPP National Highway Performance Program** (NHPP) provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in VDOT's asset management plan for the NHS.
- **NHS National Highway System** (NHS) projects can be funded only if they are on the National Highway System, which is established by Congress.
- **Non-Federal** Any funding that does not come from federal sources is grouped into the non-federal funding category.
- **STBG Surface Transportation Block Grant Program** (STBG, formerly RSTP) 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** 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

Abbreviation	Funding Source
AC	Advance Construction funds
ARRA	American Recovery and Reinvestment Act of 2009
BR/BROS	Bridge Rehabilitation and Replacement Program
DEMO	Federal Demonstration funds
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 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 (<u>Vision 2040: Roanoke Valley Transportation</u>). 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).

4.2.1 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. Documentation of RVTPO Policy Board funding approvals or Transportation Technical

Committee funding adjustments related to STBG that take place during the timeframe of this TIP are included in Appendix H.

The RVTPO's STBG process is described in the <u>Surface Transportation Block Grant Program: Roanoke Valley Urbanized Area Suballocation Funding Project Development and Selection Procedures included in Appendix G. 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." (<u>RVTPO Resolution, April 25, 2019</u>)</u>

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 <u>23 U.S.C. section</u> <u>134(j)(3) and (5)(a)</u>, and <u>23 CFR 450.330</u>.

For more information, visit the <u>RVTPO STBG Funding Program</u> website at rvarc.org/stbg.

4.2.2 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. In 2018, the RVTPO approved the following policy regarding TA funds:

The Policy Board of the Roanoke Valley Transportation Planning Organization (RVTPO) will allocate Transportation Alternatives Set Aside Block Grant Program (TA) funding on a two-year application cycle, which conforms to Virginia Department of Transportation (VDOT) and Commonwealth Transportation Board policies. As the application and scoring period does not occur annually, but rather in odd years beginning with 2017, the RVTPO Policy Board will make applications based on two fiscal years of funding. Consistent with VDOT policies, the RVTPO TA allocations will include those made for both fiscal years' worth of funding with the

understanding that the first-year funds, if applicable, are "allocated" and the second-year awards are "committed". The second fiscal year funding will not be available for obligation or reimbursement until the next federal fiscal year. Under the two-year cycle, the maximum request is \$2 million per application.

Documentation of RVTPO Policy Board funding approvals related to TA Set-Aside funding that take place during the timeframe of this TIP are included in Appendix I for reference. For more information, visit the RVTPO TA Program website at rvarc.org/ta.

4.2.3 Commonwealth Transportation Board's Six-Year Improvement Program

Within the 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. Stakeholders select projects for submittal to state-management funding programs and the RVTPO may endorse the projects at the time of submittal and/or as part of this TIP process. Projects selected for grant applications should consider the following elements as they are important when determining RVTPO project investment priorities.

- Conformance to the RVTPO adopted long-range transportation plan and consideration of member 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;
 - o Increase the security of the transportation system for motorized and non-motorized users;
 - o 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;
 - o 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.

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
Safety	Number of fatalities
Final Rule published 1/15/16.	2. Fatality rate (per 100 million VMT)
Effective date 1/14/16.	3. Number of serious injuries
RVTPO adopted PM targets	4. Serious injury rate (per 100 million VMT)
1/25/18.	5. Number of non-motorized fatalities and serious injuries.
Pavement and Bridge	1. % of pavements on the Interstate system in good condition
Final Rule published 1/18/17.	2. % of pavements on the Interstate system in poor condition
Effective date 5/20/17.	3. % of pavements on the non-Interstate NHS in good condition
RVTPO adopted PM targets	4. % of pavements on the non-Interstate NHS in poor condition
10/25/18.	5. % of NHS bridges classified as in good condition
	6. % of NHS bridges classified as in poor condition
Highway System Performance	1. % of person miles traveled on the Interstate system that are
Final Rule published 1/18/17.	reliable
Effective date 5/20/17.	2. % of person miles traveled on the non-Interstate NHS that are
RVTPO adopted PM targets	reliable
10/25/18.	3. % of Interstate system mileage providing for reliable truck
	travel times (Truck Travel Time Reliability)
Transit Asset Management	1. % of revenue vehicles that have met or exceeded their useful
Final Rule published 7/26/16.	life benchmark
Effective date 10/1/16.	2. % of non-revenue vehicles that have met or exceeded their
RVTPO adopted PM targets	useful life benchmark
10/25/18.	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 CLRMTP 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	Target	2013-2017
	Performance	Reduction	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 2018-2021¹. 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 6.

Table 6: Pavement Condition Measures and Performance Targets

Interstate Pavement Condition Measures ²	CY 2018-2019	CY 2018-2021
	Two-Year Target	Four-Year Target
Percentage of Pavements in Good Condition	N/A ³	45.0%
Percentage of Pavements in Poor Condition	N/A ³	3.0%
Non-Interstate NHS Pavement Condition Measures ⁴	2018-2019	2018-2021
	Two-Year Target	Four-Year Target
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 7.

¹ Virginia's Baseline Performance Period Report data is through December 2017.

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

³ 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.

⁴ 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

NHS Bridge Condition Measures	CY 2018-2019 Two-Year Target	CY 2018-2021 Four-Year Target
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 RVTPO 2019 Data

Interstate Pavement Condition Measures	CY 2018-2021	RVTPO 2019
	Four-Year Target	Data
Percentage of Pavements in Good Condition	45.0%	39.0%
Percentage of Pavements in Poor Condition	3.0%	0.10%
Non-Interstate NHS Pavement Condition Measures	2018-2021	RVTPO 2019
	Four-Year Target	Data
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 RVTPO 2019 Data

NHS Bridge Condition Measures	CY 2018-2021 Four-Year Target	RVTPO 2019 Data
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 10.

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

NHS Travel Time Reliability Performance	CY 2018-2019 Two-Year Target	CY 2018-2021 Four-Year Target
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 ¹	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 11 below.

Table 11: Freight Reliability Performance Measure and Targets

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

¹ 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. Table 12 describes each of these measures.

Table 12: TAM Performance Measures by Asset Category

Asset Category	Relevant Assets	Measure	Measure Type	Desired Direction
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 following table.

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

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

The tables below list the TIP projects by locality and by ungrouped vs. grouped projects by category. More information about the project groupings can be found in VDOT's STIP Procedures Document (July 2019 version) available online (http://www.virginiadot.org/about/stip.asp).

6.1 Bedford County

Group - Construction: Bridge Rehabilitation/Replacement/Reconstruction

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

Group - Construction: Safety/Intelligent Transportation Systems/Operational Improvements

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

Ungrouped Projects -

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

Group - Construction: Bridge Rehabilitation/Replacement/Reconstruction

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

Group - Construction: Safety/Intelligent Transportation Systems/Operational Improvements

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
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

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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

Group - Construction: Safety/Intelligent Transportation Systems/Operational Improvements

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

Ungrouped Projects -

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
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

Group - Construction: Bridge Rehabilitation/Replacement/Reconstruction

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

Group - Construction: Safety/Intelligent Transportation Systems/Operational Improvements

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
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

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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
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

Ungrouped Projects -

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
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

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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
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

Group - Construction: Bridge Rehabilitation/Replacement/Reconstruction

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
Primary	111367	Mason Creek Greenway Ph3 - 419 Multimodal Impovements.	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

Ungrouped Projects -

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

Group - Construction: Bridge Rehabilitation/Replacement/Reconstruction

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

Group - Construction: Bridge Rehabilitation/Replacement/Reconstruction

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
Miscellaneous	T19000	Bridge Rehabilitation / Replacement	Various locations district-wide	Various	\$65,829,909	Not Started

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
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	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
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

Group - Maintenance of Traffic and Safety Operations

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
Miscellaneous	T14720	Salem: Traffic and Safety Operations	Funding identified to be obligated districtwide as projects are identified		\$15,382,423	N/A

Group - Preventive Maintenance for Bridges

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
Miscellaneous	T14721	Salem: Preventive Maint. for Bridges	Funding identified to be obligated districtwide as projects are identified		\$45,370,193	N/A

Group - Preventive Maintenance and System Preservation

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

Group - Construction: Rail

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
Miscellaneous	T18998	Construction: Rail Projects	Funding identified to be obligated districtwide as projects are identified		\$1,500,000	N/A

Group - Construction: Federal Lands Highway

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
Miscellaneous	T19001	Federal Lands Highway	Funding identified to be obligated districtwide as projects are identified		\$1,733,750	N/A

Group - Transit: Amenities

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

Ungrouped Projects -

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
Interstate	115852	ITTF FY20 Micro Transit	From: Various To: Various		\$500,000	N/A

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 Project Status
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

Group - Construction: Rail

System	UPC	Project Name	Description	Street/Route	Estimate	March 2020 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

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	Miscellaneous	112497	Environmental EQ429	Various	Assigned	\$500,000	N/A
			Form Processing				
			Charges – PE Only				

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 202	1-2024
STIP ID:	GRT0001	Title: Operating Ass	sistance	Recipient:	Greater Roanoke	Transit Company	
FTA 5307		2,147,090	2,147,090	2,147,090	2,147,090	FTA 5307	8,588,360
FTA 5311		354,000	354,000	354,000	354,000	FTA 5311	1,416,000
State		2,407,236	2,407,236	2,407,236	2,407,236	State	9,628,944
Local		1,566,000	1,566,000	1,566,000	1,566,000	Local	6,264,000
Revenues		2,314,000	2,314,000	2,314,000	2,314,000	Revenues	9,256,000
Year Total:		8,788,326	8,788,326	8,788,326		Total Funds:	35,153,304
Description:				, , ,			
STIP ID:	GRT0002	Title: Preventative N	// // // // // // // // // // // // //	Recipient:	Greater Roanoke	Transit Company	
FTA 5307		715,697	715,697	715,697	715,697	FTA 5307	2,862,788
State		- 10,001	- 10,007	-	- 110,007	State	-
Local		178,924	178,924	178,924	178,924	Local	715,696
Year Total:		- 894,621	894,621	894,621		Total Funds:	3,578,484
Description:		004,021	034,021	034,021	004,021	Total Lanas.	0,010,404
STIP ID:	GRT0003	Title: Transit Enhar	ncements	Recipient:	Greater Roanoke	Transit Company	
FTA 5307		Titlo: Transit Erinal	loomonio	rtcoipiont.	Creater Roundite	FTA 5307	-
State						State	_
Local						Local	-
Year Total:			-	-	_	Total Funds:	_
Description:						rotarrunus.	
STIP ID:	GRT0004	Title: Replacement	Bus	Recipient:	Greater Roanoke	Transit Company	
FTA 5339				97,200		FTA 5339	97,200
FTA 5307						FTA 5307	-
STBG		1,564,351	1,564,351	1,639,419		STBG	4,768,122
State		391,088	391,088	658,255		State	1,440,431
Local				14,400		Local	14,400
Year Total:		- 1,955,439	1,955,439	2,409,274	-	Total Funds:	6,320,152
Description:			•				
STIP ID:	GRT0005	Title: Expansion Bus	3	Recipient:	Greater Roanoke	Transit Company	
FTA 5339		······		······································		FTA 5339	-
State		•••••	800,000	900,000		State	1,700,000
Local		*******				Local	-
Year Total:		-	800,000	900,000	-	Total Funds:	1,700,000
Description:			•				
STIP ID:	GRT0006	Title: Support Vehic	les	Recipient:	Greater Roanoke	Transit Company	
FTA 5339			72,000	80,000	48,000	FTA 5339	200,000
Flexible STP						Flexible STP	-
State			9,000	10,000	6,000	State	25,000
Local			9,000	10,000	6,000	Local	25,000
Year Total:			90,000	100,000	60,000	Total Funds:	250,000
Description:							
STIP ID:	GRT0007	Title: Bus Stop Enh	ancements	Recipient:	Greater Roanoke	Transit Company	
FTA 5339			40,500	40,500	40,500	FTA 5339	121,500
State			103,500	103,500	103,500	State	310,500
Local			6,000	6,000	6,000	Local	18,000
Year Total:			150,000	150,000	150,000	Total Funds:	450,000
Description:					,		
	e.g. Bus shelters/b	enches					

		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 202	1-2024
STIP ID:	GRT0008	Title: Rehab/Renovat	ion of	Dociniont	Greater Roanoke	Transit Company	
אווי וט.	GRIUUU	Admin/Maint Building		Recipient.	Greater Roanoke	Transit Company	
FTA 5339	T	54,810	3		270.000	FTA 5339	324,8
State		140,070			690,000	State	830,0
Local		8,120			40,000	Local	48,12
Year Total:		- 203,000	_	_	,	Total Funds:	1,203,0
Description:		200,000			1,000,000	rotarranas.	1,200,0
	ODTOOO			.		T :: 0	
STIP ID:	GRT0009	Title: Shop Equipme			Greater Roanoke		
FTA 5339			5,400	5,400	5,400	FTA 5339	16,2
State			13,800	13,800	13,800	State	41,4
Local			800	800	800	Local	2,4
Year Total:		-	20,000	20,000	20,000	Total Funds:	60,0
Description:							
STIP ID:	GRT0010	Title: ADP Software		Recipient:	Greater Roanoke	Transit Company	'
FTA 5339		4,131	6,075	2,700		FTA 5339	12,9
State		10,557	15,525	6,900		State	32,9
Local		612	900	400		Local	1,9
Year Total:		- 15,300	22,500	10.000	_	Total Funds:	47,8
Description:		10,000	22,000	10,000		rotarr unas.	77,0
STIP ID:	GRT0011	Title: ADP Hardware		Pecinient:	Greater Roanoke	Transit Company	
FTA 5339		24,214	20,250	Necipierit.	Greater Noarioke	FTA 5339	44,4
			51,750				113,6
State		61,880				State	
Local		3,587	3,000			Local	6,5
Year Total:	 	- 89,681	75,000	-	-	Total Funds:	164,6
Description:	ODTOGGO	Titles Occasión		Desiriest	O	T	
STIP ID:	GRT0012	Title: Security		Recipient.	Greater Roanoke		
FTA 5339						FTA 5339	
State						State	
Local						Local	
Year Total:	 	-		-	-	Total Funds:	
Description:	0070010						
STIP ID:	GRT0013	Title: New Downtown		Recipient:	Greater Roanoke	Transit Company	
		Mulitmodal Facility -	J .				
		Construction, Equipr	nent				
FTA 5307		Construction, Equipr 9,200,000	nent			FTA 5307	9,200,0
FTA 5307 STBG			ment			FTA 5307 STBG	9,200,0
		9,200,000	nent			······	9,200,00
STBG		9,200,000	nent			STBG	
STBG State		9,200,000	nent -	-	-	STBG State Local	
STBG State Local Year Total :		9,200,000 400,000 2,300,000		-	-	STBG State Local	2,300,00
STBG State Local Year Total: Description:		9,200,000 400,000 2,300,000 - 11,900,000	-	- Provincest:		STBG State Local Total Funds:	2,300,0
STBG State Local Year Total: Description: STIP ID:	GRT0014	9,200,000 400,000 2,300,000	-	- Recipient:	- Greater Roanoke	STBG State Local Total Funds: Transit Company	2,300,0
STBG State Local Year Total: Description: STIP ID: FTA 5311	GRT0014	9,200,000 400,000 2,300,000 - 11,900,000	-	- Recipient:		STBG State Local Total Funds: Transit Company FTA 5311	2,300,0
STBG State Local Year Total: Description: STIP ID: FTA 5311 State	GRT0014	9,200,000 400,000 2,300,000 - 11,900,000	-	- Recipient:		STBG State Local Total Funds: Transit Company FTA 5311 State	2,300,0
STBG State Local Year Total: Description: STIP ID: FTA 5311 State Local	GRT0014	9,200,000 400,000 2,300,000 - 11,900,000	- build Buses	- Recipient:	Greater Roanoke	STBG State Local Total Funds: Transit Company FTA 5311 State Local	2,300,0
STBG State Local Year Total: Description: STIP ID: FTA 5311 State Local Year Total:	GRT0014	9,200,000 400,000 2,300,000 - 11,900,000	-	- Recipient:	Greater Roanoke	STBG State Local Total Funds: Transit Company FTA 5311 State	2,300,0
STBG State Local Year Total: Description: STIP ID: FTA 5311 State Local Year Total: Description:	GRT0014	9,200,000 400,000 2,300,000 - 11,900,000 Title: Rehabilitate/Re	ebuild Buses	-	Greater Roanoke	STBG State Local Total Funds: Transit Company FTA 5311 State Local Total Funds:	2,300,0
STBG State Local Year Total: Description: STIP ID: FTA 5311 State Local Year Total: Description: STIP ID:	GRT0014 GRT0015	9,200,000 400,000 2,300,000 - 11,900,000 Title: Rehabilitate/Re	ebuild Buses	-	Greater Roanoke	STBG State Local Total Funds: Transit Company FTA 5311 State Local Total Funds: Transit Company	2,300,00
STBG State Local Year Total: Description: STIP ID: FTA 5311 State Local Year Total: Description: STIP ID: FTA 5339	GRT0014 GRT0015	9,200,000 400,000 2,300,000 - 11,900,000 Title: Rehabilitate/Re	ebuild Buses	-	Greater Roanoke	STBG State Local Total Funds: Transit Company FTA 5311 State Local Total Funds: Transit Company FTA 5339	2,300,00
STBG State Local Year Total: Description: STIP ID: FTA 5311 State Local Year Total: Description: STIP ID: FTA 5339 State	GRT0014 GRT0015	9,200,000 400,000 2,300,000 - 11,900,000 Title: Rehabilitate/Re Title: Fare Collection 77,169 197,209	ebuild Buses	-	Greater Roanoke	STBG State Local Total Funds: Transit Company FTA 5311 State Local Total Funds: Transit Company FTA 5339 State	2,300,0 11,500,0 77,1 197,2
STBG State Local Year Total: Description: STIP ID: FTA 5311 State Local Year Total: Description: STIP ID: FTA 5339	GRT0014 GRT0015	9,200,000 400,000 2,300,000 - 11,900,000 Title: Rehabilitate/Re	ebuild Buses	-	Greater Roanoke - Greater Roanoke	STBG State Local Total Funds: Transit Company FTA 5311 State Local Total Funds: Transit Company FTA 5339	2,300,00

		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021	1-2024
STIP ID:	GRT0016	Title: Automatic Veh	nicle Locator	Recipient:	Greater Roanoke	Transit Company	
FTA 5339						FTA 5339	-
State		1,700,000				State	1,700,000
Local						Local	-
Year Total:		- 1,700,000	-	-	-	Total Funds:	1,700,000
Description:	Name of the State						
STIP ID:	GRT0017	Title: Miscellaneous	Office	Recipient:	Greater Roanoke	Transit Company	
FTA 5339			10,800			FTA 5339	10,800
State			27,600			State	27,600
Local			1,600			Local	1,600
Year Total:		-	40,000	-	-	Total Funds:	40,000
Description:							
STIP ID:	GRT0018	Title: Radio Commu	ınication System	Recipient:	Greater Roanoke	Transit Company	
Flexible STP		400,000				Flexible STP	400,000
State		80,000				State	80,000
Local		20,000				Local	20,000
Year Total:		- 500,000	-	-	-	Total Funds:	500,000
Description:							

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

		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021	-2024
STIP ID:	RAD0001	Title: New Freedom Assistance	Operating	Recipient:	RADAR - UHSTS,	Inc. Roanoke Coun	ty
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
Year Total:	•	230,631	230,631	230,631	230,631	Total Funds:	922,524
Description:	To support CORTRA	N and Local Office on	Aging Vital Transporta	ation Service Program			
STIP ID:	RAD0002	Title: Paratransit Ve	ehicles	Recipient:	RADAR - UHSTS,	Inc. Roanoke Coun	ty
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
Year Total:	-	160,000	160,000	160,000	160,000	Total Funds:	640,000
Description:	Approx. 2 vehicles/ye	ar	•				

7.3 Lutheran Family Services of Virginia Project Details

		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021	-2024
STIP ID:	LFS0001	Title: Paratransit Ve	ehicles	Recipient:	Lutheran Family S	ervices	
FTA 5310		36,000				FTA 5310	36,000
State						State	-
Local		9,000				Local	9,000
Year Total:	-	45,000	-	-	-	Total Funds:	45,000

7.4 Transit Funding Summaries

Greater Roanoke Transit							
Company		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 202	21-2024
FTA 5307	-	12,062,787	2,862,787	2,862,787	2,862,787	FTA 5307	1
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
TIONIDIO CTT	-	-		-	-	-	-
STBG	-	1,964,351	1,564,351	1,639,419	-	STBG	4,768,122
FHWA TAP	-	-	-		_	FHWA TAP	- 1,7 00, 122
1111007(17)	_	-	-	-	-	-	-
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
Totals		26,332,177	12,840,886	13,274,721	10,912,947	revenues	62,960,731
RADAR - UHSTS, Inc. Roanoke County		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 202	21-2024
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	_
<u></u>							l
F I A DPF1	-	- 1	-	-	-	FTA DPF	-
FTA DPF FTA TIGER	- -	-		-		FTA DPF FTA TIGER	-
FTA TIGER						FTA TIGER	- -
FTA TIGER FBD	- - -	-	-	-	-	FTA TIGER FBD	- - -
FTA TIGER	- - - -	-				FTA TIGER	- - - -
FTA TIGER FBD	- - - - -					FTA TIGER FBD	- - - -
FTA TIGER FBD Flexible STP	- - - - -		- - - -			FTA TIGER FBD Flexible STP	- - - - -
FTA TIGER FBD Flexible STP STBG	- - - - - - -		- - - -			FTA TIGER FBD Flexible STP - STBG	- - - - - -
FTA TIGER FBD Flexible STP STBG FHWA TAP	-			- - - - -	- - - - -	FTA TIGER FBD Flexible STP - STBG FHWA TAP	- - - - - - -
FTA TIGER FBD Flexible STP STBG FHWA TAP Other Federal	-			- - - - - - -		FTA TIGER FBD Flexible STP - STBG FHWA TAP - Other Federal	- - - - - - - - 369,010
FTA TIGER FBD Flexible STP STBG FHWA TAP Other Federal State	-	- - - - - - - - - 92,252	- - - - - - - - - 92,252	- - - - - - - - 92,252	- - - - - - - - 92,252	FTA TIGER FBD Flexible STP - STBG FHWA TAP	- - - - - - - 369,010 172,252
FTA TIGER FBD Flexible STP STBG FHWA TAP Other Federal	- - - - -			- - - - - - -		FTA TIGER FBD Flexible STP - STBG FHWA TAP - Other Federal State	- - - - - - - 369,010 172,252 48,000

Lutheran Family Services of							
Virginia		FY 2021	FY 2022	FY 2023	FY 2024	Total FY 202	1-2024
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 202	21-2024
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.

Locality	System	UPC	Project Name	Description	Street/Route	Estimate
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



Roanoke MPO

Project Groupings

GROUI	PING	Construction : Bridg	e Rehabilitation/Rep	lacement/Reconstru	ction		
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 - Bl	R	\$299,523	\$0	\$1,198,091	\$0	\$0
	Federal - S	TP/STBG	\$3,091	\$0	\$12,364	\$0	\$0
	Federal - T	AP/F	\$83,129	\$0	\$332,514	\$0	\$0
CN TO	ΓAL		\$385,742	\$0	\$1,542,969	\$0	\$0
CN AC	Federal - AC		\$0	\$0	\$4,775	\$0	\$0

GRO	UPING	Construction : Fede	ral Lands Highway					
ROU	TE/STREET					TOTAL COST		\$1,733,750
	FUND SOU	RCE	MATCH	FY21	FY22	FY23	FY24	
			\$0	\$0	\$0	\$0		\$0

GROUI	PING	Construction : Rail						
ROUTE	STREET					TOTAL COST		\$1,500,000
	FUND SOU	RCE	MATCH	FY21	FY22	FY23	FY24	
			\$0	\$0	\$0	\$0		\$0

GROUI	PING	Construction : Safe	ty/ITS/Operational In	nprovements			
ROUTE	STREET					TOTAL COST	\$827,704,242
	FUND SOU	IRCE	MATCH	FY21	FY22	FY23	FY24
PE	Federal - A	C CONVERSION	\$381,222	\$1,000,000	\$1,000,000	\$0	\$636,000
	Federal - H	SIP	\$127,175	\$25,700	\$275,000	\$0	\$208,000
	Federal - N	HS/NHPP	\$43,127	\$0	\$0	\$0	\$172,506
	Federal - RSTP		\$60,000	\$0	\$0	\$240,000	\$0
PE TO	-		\$611,524	\$1,025,700	\$1,275,000	\$240,000	\$1,016,506
PE AC	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 - R	STP	\$741,502	\$0	\$319,095	\$2,646,913	\$0
RW TC	TAL		\$981,024	\$0	\$797,500	\$2,971,913	\$633,087
RW AC	Federal - A	С	\$158,272	\$0	\$0	\$633,087	\$0
CN	Federal - A	C CONVERSION	\$1,114,839	\$147,694	\$3,028,292	\$2,381,181	\$383,000
	Federal - H	SIP	\$667,654	\$1,358,600	\$4,488,295	\$161,993	\$0
	Federal - RSTP		\$481,578	\$0	\$0	\$1,359,397	\$566,913
	Federal - S	TP/STBG	\$31,250	\$0	\$0	\$0	\$125,000
CN TO	TAL		\$2,295,321	\$1,506,294	\$7,516,587	\$3,902,571	\$1,074,913
CN AC	Federal - A	C	\$4,447,162	\$1,887,860	\$979,984	\$919,715	\$14,001,087

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

GROU	PING	Maintenance : Prev	entive Maintenance	and System Preserva	ation		
PROG	RAM NOTE	Funding identified to	be obligated distric	twide as projects are	identified.		
ROUTI	E/STREET					TOTAL COST	\$85,964,101
	FUND SOU	RCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - N	HFP	\$0	\$2,500,000	\$2,500,000	\$0	\$0
	Federal - N	HS/NHPP	\$0	\$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
CN TO	CN TOTAL		\$0	\$17,336,449	\$19,755,260	\$21,761,464	\$27,110,928

GRO	JPING	Maintenance : Prev	entive Maintenance	for Bridges			
PROC	RAM NOTE	Funding identified to	o be obligated distric	twide as projects are	identified.		
ROUT	E/STREET					TOTAL COST	\$45,370,193
	FUND SOU	IRCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - B	R	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
	Federal - N	HS/NHPP	\$0	\$2,714,026	\$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
CN TO	OTAL		\$0	\$17,425,395	\$10,692,278	\$9,776,634	\$7,475,886

GROUI	PING	Maintenance : Traff	ic and Safety Operat	tions			
PROGI	RAM NOTE	Funding identified to be obligated districtwide as projects are identified.					
ROUTE	STREET					TOTAL COST	\$15,382,423
	FUND SOU	RCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - S	TP/STBG	\$0	\$3,095,775	\$4,520,625	\$4,882,756	\$2,883,267

GROU	PING	Transit : Amenities						
ROUTE	E/STREET					TOTAL COST		\$1,904,000
	FUND SOU	RCE	MATCH	FY21	FY22	FY23	FY24	
			\$0	\$0	\$0	\$0		\$0

	GROUF	PING	Transit : Vehicles						
	ROUTE	STREET					TOTAL COST		\$5,960,149
		FUND SOU	RCE	MATCH	FY21	FY22	FY23	FY24	
Ī	CN	Federal - R	STP	\$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

	Syste	em	UPC Juris	diction / Name	e / Description	Street(Route)		Estimate
Miscellaneous	T19000	Salem District-w	de		0000		'	\$0
		BRIDGE REHAL	BILITATION	N/REPLACEM	IENT			
Primary	77300	Botetourt County	,		0011			\$5,018,555
		RTE. 11 OVER	INKER C	REEK (STR 0	3166) - BRIDGE	REPLACEMENT		
		FROM: 0.02 Mile	North of F	Route 1039 To	D: 0.13 Mile Nort	th of Route 1039 (0.1100 MI)		
Primary	77302	Botetourt County	,		0011			\$3,803,513
		RTE. 11 OVER	INKER C	REEK (STR. 3	3167) - BRIDGE	REPLACEMENT		
		FROM: Route 8	8 TO: 0.0	9 Mile North o	of Route 838 (0.0	0900 MI)		
Primary	77305	Roanoke County	,		0116			\$7,171,589
		RTE. 116 OVER	BACK CR	EEK (STR. 14	4928) - BRIDGE	REPLACEMENT		
		FROM: 0.293 M	LE SOUTH	H ROUTE 945	TO: 0.564 MIL	E SOUTH ROUTE 945 (0.3100 MI)		
Primary	82193	Roanoke County			0220			\$18,885,090
		RTE. 220 OVER	BACK CR	EEK (STR. 14	4935) - BRIDGE	REPLACEMENT		
		FROM: 0.199 M	SOUTH C	F ROUTE 65	7 TO: 0.311 MI I	NORTH OF ROUTE 657 (0.5310 MI)		
Primary	94726	Roanoke County	,		0221			\$3,635,790
		RTE. 221 OVER	MARTINS	CREEK (STE	R. 14945) - BRID	DGE REPLACEMEN		
		FROM: 0.03 mi	6. Int Rte 6	96 TO: 0.07 n	ni N. Int. Rte 696	6		
Secondary	62650	Bedford County			HARDY FORD E	BRIDGE (0634)		\$12,982,098
		#SGR RTE. 634	OVER RC	ANOKE RIVE	R (STR. 02718)) - BRIDGE REPLA		
		FROM: 0.19 Mi.	West of Fr	anklin County	Line TO: 0.12 M	Mi. East of Bedford County Line (0.310	0 MI)	
Secondary	52803	Botetourt County	•		CATAWBA RD ((0779)		\$7,857,623
		RTE 779 - INT I	//PROVEM	IENTS & BRID	OGE OVER AMS	STERDAM CREEK		
		FROM: 0.169 M	LE EAST I	ROUTE 672 E	AST TO: 0.236	MILE WEST ROUTE 672 EAST (0.42	13 MI)	
Urban	110574	Salem			APPERSON DR	RIVE (0011)		\$3,328,203
		#SGR - Apperso	n Drive Bri	dge Replacer	nent			
		FROM: East Riv	erside Driv	e TO: Route 4	119 - Electric Ro	ad (0.0900 MI)		
Urban	76677	Vinton			WALNUT AVEN	IUE (U000)		\$3,147,448
		replace bridge a	nd approac	ches over Glad	de Creek			
		FROM: 0.098 M	les West o	f 5th St. TO: (0.052 Miles East	of 5th St. (0.1500 MI)		
Construction : Brid	dge Rehabili	tation/Replaceme	nt/Recons	truction Total				\$65,829,909

Construction: Federal Lands Highway

	System	UPC Jurisdiction / Name / Description	on Street(Route)	Estimate
Enhancement	110155 Roanoke C	ounty FL16		\$1,733,750
	Roanoke R	iver Greenway - Blue Ridge Pkwy to Expl	ore Park	
	FROM: Blue	e Ridge Parkway TO: Explore Park		
Miscellaneous	T19001 Salem Distr	ict-wide 0000		\$0
	FEDERAL I	_ANDS HIGHWAY		
Construction · Fed	leral Lands Highway Tot	al		\$1.733.750

Roanoke MPO

Construction: Rail

	Syst	em l	PC Jurisdiction / N	ame / Description	Street(Route)	Estimate
Miscellaneous	T18998	Salem District-wi	е	0000		\$0
		CN: RAIL				
Miscellaneous	112018	Statewide		HIGHWAY-RAIL SA	AFETY (0000)	\$700,000
		Highway-Rail Sa	ty Inventory Sectio	n 130 PE Only		
		FROM: Statewide	TO: Statewide			
Miscellaneous	112213	Statewide		HIGHWAY RAIL SA	AFETY (0000)	\$300,000
		Highway-Rail Se	ion 130 Pre Scopin	g PE Only		
		FROM: Statewide	TO: Statewide			
Miscellaneous	112497	Statewide		VARIOUS (0000)		\$500,000
		ENVIRONMENT	L EQ429 FORM PF	ROCESSING CHARGE	S	
		FROM: FOR HIG	WAY/RAIL SAFET	Y PROJECTS WITHO	UT PE NUMBERS TO: ASSIGNED	
Construction : Rai	l Total					\$1,500,000

	Syste	em U	PC Jurisdiction / Nan	ne / Description	Street(Route)	Estimate
Interstate	116202	Botetourt County		I-81 (0081)		\$10,042,040
		#I-81 CIP - Extend	I lanes at Troutville Sa	afety Rest Area		
		FROM: .3 MI N of	Safety Rest Area TO:	1 MI S of Safety Re	est Area (1.3000 MI)	
Interstate	99542	Roanoke County		EDGEBROOK RO	AD (0081)	\$3,728,154
		I-81 Exit 140 Park	& Ride Expansion &	Construct NewSide	walk	
		FROM: Int Rte 112	28 and Rte 1150 TO:	0.17 Mi. West of Int	Rte 1128 and 1150 (0.1700 M	11)
Interstate	108906	Roanoke County		I-81 (0081)		\$29,830,716
		#HB2.FY17 I-81 A	uxiliary Lanes from E	xit 141 to 143		
		FROM: 0.009 Mi.	East of Int. N. Electric	Rd TO: 0.026 Mi. V	Vest 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	m Exit 143 to 141		
		FROM: 0.009 Mi.	East of Int. N. Electric	Rd TO: 0.026 Mi. V	Vest of Int. SBL I-81 Entrance	Ramp (2.0000 MI)
Interstate	113173	Roanoke County		0081		\$1,720,000
		I-81 Exit 137 SB S	afety Improvements			
		FROM: Beginning	of I-81 Exit 137 SB O	ff-Ramp TO: End of	f I-81 Exit 137 SB Off-Ramp	
Interstate	115937	Roanoke County		I-81 (0081)		\$117,871,895
		#I-81 CIP MM13	39 to MM141 adding la	ane in each direction	n	
		FROM: 0.0 Mi fror	n Red Lane Overpass	TO: 0.3 Mi North o	f Electric Rd (2.4000 MI)	
Interstate	116201	Roanoke County		I-81 (0081)		\$322,157,080
		#I-81 CIP - MM 14	4 to Exit 150 adding I	NB and SB lanes		
		FROM: MM 144 T	O: MM 151 (7.2000 M	11)		
Interstate	116203	Roanoke County		I-81 (0081)		\$174,608,365
		#I-81 - MM136 to	MM139 adding lane ir	each direction		
		FROM: Exit 137 Ir	terchange TO: .0 MI	from Red LN overpa	ass (_)	
Interstate	116039	Statewide		0081		\$12,500,000
		I-81 DMS Installat	ion			
		FROM: Various To	D: Various			

Roanoke MPO

	Syst	m UPC Jurisdiction / Name / Description Str	eet(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 (06	\$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
	.00.01	Impement iPeMS (Iteris Performance Measrement System)	ψ·,·100,000
		important it divid (italia i diformation ividadiomonit dystem)	

Roanoke MPO

	Syst		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	h (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. Road (0.1000 MI)	Intersection of Lila Drive & Plantation
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 Rou	te 714 East Main Street (5.0500 MI)
Primary	109582	Bedford County WEST LYNCHBURG - SALEM TURNP	IKE (0460) \$4,510,000
		US 460 Safety Improvements: HSIP	
		FROM: Route 741 (Beale Trail Road / Little Patriot Drive) TO: Route 689 (Johnson	on 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

	Syste	em 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 Stark Mountain Rd. (0.1700 MI)	ey Rd. / Buck
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

	Syste	em	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Urban	111360	Roanoke	FRANKLIN ROAD ((0220)	\$1,011,897
		Franklin Road	Sidewalk Improvements- Rt. 220 B- Roanoke	City	
		FROM: 3100	Block TO: 220 Franklin Rd Bypass (0.7600 MI)		
Urban	111370	Roanoke	ORANGE AVENUE	(0460)	\$4,200,847
		#SMART18 -	Hollins Rd & Orange Ave Intersection Improve	ments	
		FROM: 0.2 M	i West of Int Orange Ave/Hollins Rd TO: Int Ho	Ilins Rd/Rhodes Ave (0.2000 M	l)
Urban	113324	Roanoke	ORANGE AVENUE	E (0000)	\$101,984
		Installation of	Pedestrian Countdown Signal		
		FROM: Gains	boro Road TO: Burrell Street		
Urban	115454	Roanoke	ORANGE AVENUE	E (0460)	\$2,818,704
		#SMART20 -	Orange Ave (US 460) Improvements		
		FROM: King S	Street TO: Blue Hills/Mexico Way (0.6000 MI)		
Urban	8753	Salem	EAST MAIN STREE	ET (0460)	\$15,925,395
		#HB2.FY17 R	tte460 - Add'n of CTL w/ Bike Ln, Curb, Sidewa	alk	
		FROM: 0.028	Mi. West of Route 311 (Thompson Memorial E	Blvd.) TO: 0.006 Mi. West of Bra	and Ave. (0.5473 MI)
Urban	100656	Salem	ROUTE 419 (0419)		\$463,694
		Construct side	ewalk on west side of Rte 419 & connect to RR	RG .	
		FROM: existir	ng RRG in Rotary Park TO: City Limits (0.6700	MI)	
Urban	113322	Vinton	HARDY ROAD (000	00)	\$182,693
		Hardy Road/D	Dillon Woods Crosswalk		
		FROM: Bypas	ss Road TO: McDonald Street		
Construction:	Safety/ITS/Ope	rational Improv	vements Total		\$827,704,242

Construction: Transportation Enhancement/Byway/Non-Traditional

	Syste	em	UPC Jurisdiction	on / Name / Description	Street(Route)	Estimate
Enhancement	105439	Roanoke		ROANOKE RIV	ER GREENWAY (0000)	\$5,012,713
		RRG (Aerial V	ay Dr to Roanoke	e Ave, SW extended) - R	STP	
		FROM: Aerial	Way Dr TO: Roan	noke Ave SW extended (0	0.5400 MI)	
Enhancement	113356	Roanoke Cou	nty	0618		\$491,606
		Roanoke Rive	r Greenway, Park	way Crossing		
		FROM: 3204 I	lighland Rd TO: 3	3404 Rutrough Rd		
Enhancement	101838	Salem		ROANOKE RIV	ER GREENWAY (EN00)	\$751,969
		Bridge on Pha	se 3A_City of Sale	em Roanoke River Greer	nway	
		FROM: approx	imately 1200' E. I	Mill Lane TO: Eddy St.		
Enhancement	91191	Roanoke Cou	nty	EN08		\$6,857,566
		Rnke River Gr	nwy - City of Roar	noke to Route 618		
		FROM: City of	Roanoke TO: Rte	e 618 (Highland Rd) (2.60	000 MI)	
Enhancement	97171	Roanoke Cou	nty	EN08		\$8,014,409
		#HB2.FY17 R	oanoke Co, RRG,	Green Hill Pk to Riversion	le Pk	
		FROM: Green	Hill Park TO: Rive	erside Park (1.7300 MI)		
Enhancement	103607	Roanoke Cou	nty	PLANTATION F	ROAD (RT. 115) (EN12)	\$2,898,266
		Roanoke Co.,	Plantation Road S	Streetscape Improvemen	ts	
		FROM: William	nson Road (Route	: 11) TO: Gander Way / F	Friendship Ln (0.7200 MI)	

Roanoke MPO

Construction: Transportation Enhancement/Byway/Non-Traditional

	Syste	em 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		\$770,032
		#HB2.FY17 Multimodal Improvements along Boulevard	, ,,,,
		FROM: .08 mi west of Reavis Ln TO: Salem City Limit (0.4500 MI)	
 Urban	111371	• • • • • • • • • • • • • • • • • • • •	\$3,629,869
		#SMART18 - Downtown Salem Int. & Streetscape Improvements	ψ5,020,000
		"Own to 10 - Downtown Calon int. & Otreetscape Improvements	

Roanoke MPO

Construction	: Transportation	Enhancement/l	Byway/Non-	·Traditional
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	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate		
Urban	113566 Salem	ELIZABETH GRE	ENWAY (0000)	\$1,104,400		
	Elizabeth Gr	reenway				
	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 J	Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T14722 Salem Dis	rict-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 Distr	ict-wide 0000		\$45,370,193
Maintenance : Pre	ventive Maintenance for	Bridges Total		\$45,370,193

Maintenance : Traffic and Safety Operations

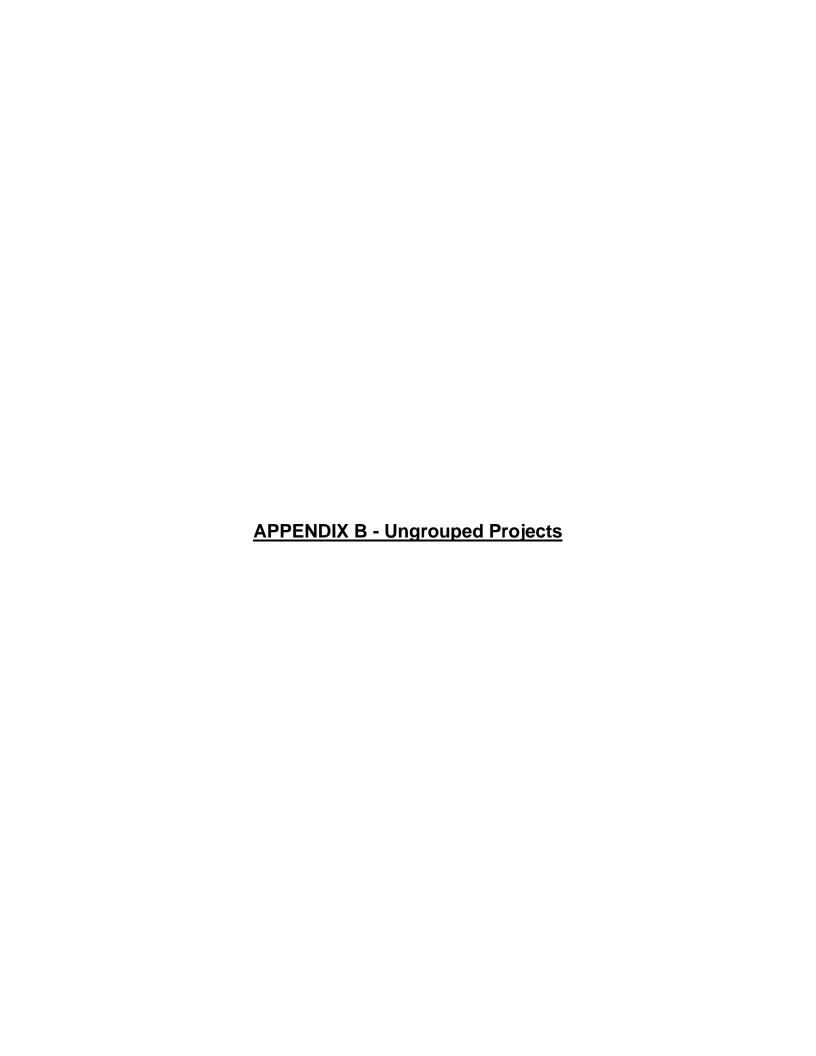
	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T14720 Salem Distr	ict-wide 0000		\$15,382,423
Maintenance : Tra	ffic and Safety Operation	ns Total		\$15,382,423

Transit: Amenities

	System	UPC Jurisdiction / N	ame / Description	Street(Route)	Estimate
Miscellaneous	T19021 Salem Dis	trict-wide	0000		\$0
	CN: TRAN	ISIT AMENITIES			
Public Transportation	111882 Multi-juriso	dictional: Roanoke MPO	AUTOMATIC VEH	HICLE LOCATOR (9999)	\$1,904,000
	#SMART18 - GRTC Automatic Vehicle Locator/Real-Time Project				
	FROM: n/s	a TO: n/a			
Transit : Amenities	s Total				\$1,904,000

Transit: Vehicles

	System	UPC Jurisdiction / N	lame / Description	Street(Route)	Estimate
Miscellaneous	T18675 Multi-juriso	lictional: Roanoke MPO	BUS REPLACEM	MENT (9999)	\$5,960,149
	Bus Repla	cement and Rebuild Progr	am (FY17-19)		
	FROM: N/	A TO: N/A			
Transit : Vehicles	Total				\$5,960,149
Roanoke MPO To	otal				\$1,104,322,300



Roanoke MPO

Interstate Projects

UPC NO)	75910	SCOPE	Relocation					
SYSTE	М	Interstate	JURISDICTION	Botetourt County		OVERSIGHT	NFO		
PROJE	СТ	Route 11,220,220A	Access Managemer	ent Project at I-81 Exit 150 ADMIN BY VDOT					
DESCR	IPTION	FROM: 0.30 MILE SOUTH OF ROUTE 220 TO: 0.74 MILE NORTH OF ROUTE 220 (1.0410 MI)							
PROGR	RAM NOTE	All funds obligated b	pased on current allo	cations/estimate					
ROUTE	/STREET	0081				TOTAL COST	\$50,185,950		
	FUND SOURCE MATCH FY21 FY22			FY22	FY23	FY24			
		\$0	\$0	\$0	\$0	\$0			

UPC N	0	110395	SCOPE				
SYSTE	M	Interstate	JURISDICTION	Roanoke County		OVERSIGHT	NFO
PROJE	СТ	#HB2.FY17 I-81 AU	AUX LN FR EXIT 141 -143 GARVEE DEBT SERVICE			ADMIN BY	VDOT
DESCR	RIPTION						
PROGF	PROGRAM NOTE Includes \$1,722,333 GARVEE Debt Service Interest Prev, \$656,701 GARVEE GARVEE Debt Service Interest FFY22, \$962,167 GARVEE Debt Service Interest FFY24, \$4,854,488 GARVEE Debt Service Interest FFY25-FF \$10,099,094. Corresponding CN UPC 108906 which is included in the Roanoke Improvements grouping.					t FFY23, \$896,889 G 36. Total GARVEE D	SARVEE Debt ebt Service Interest
ROUTE	STREET	0081				TOTAL COST	\$10,099,094
	FUND SOU	IRCE	MATCH	FY21	FY22	FY23	FY24
PE	Federal - A	C CONVERSION	\$0	\$0	\$1,006,516	\$962,517	\$896,889
	Federal - NHS/NHPP		\$0	\$656,701	\$0	\$0	\$0
PE TO	ΓAL		\$0	\$656,701	\$1,006,516	\$962,517	\$896,889
PE AC	Federal - A	С	\$0	\$7,720,060	\$0	\$0	\$0

UPC N	0	111983	SCOPE				
SYSTE	М	Interstate	JURISDICTION	Roanoke County	Roanoke County		NFO
PROJE	:CT	#SMART18 - 81 SB	SMART18 - 81 SB Aux Ln frm Exit 143-141 GARVEE Debt Servic			ADMIN BY	VDOT
DESCF	RIPTION						
PROGI	ROGRAM NOTE Includes \$866,209 GARVEE Debt Service Interest FFY21, \$1,148,692 GARVEE \$1,102,910 GARVEE Debt Service Interest FFY23, \$1,040,812 GARVEE Debt Service Interest FFY25-FFY36. Total GARVEE Debt Service Interest FFY21, \$1,148,692 GARVEE Debt Service Interest FFY21, \$1,148,692 GARVEE Debt Service Interest FFY21, \$1,040,812 GARVEE Debt Service Interest FFY23, \$1,040,812 GARVEE Debt Service Interest FFY25-FFY36. Total GARVEE Debt Service Interest FFY36-FFY36. Total GARVEE Debt Service Interest FFY36-FFY3					ervice Interest FFY2 rest \$10,505,640. Co	4, \$6,347,017 prresponding
ROUTE	STREET	0081				TOTAL COST	\$10,505,640
	FUND SOU	RCE	MATCH	FY21	FY22	FY23	FY24
PE	Federal - A	CCONVERSION	\$0	\$0	\$1,148,692	\$1,102,910	\$1,040,812
	Federal - NHS/NHPP \$0		\$866,209	\$0	\$0	\$0	
PE TO	TAL		\$0	\$866,209	\$1,148,692	\$1,102,910	\$1,040,812
PE AC	Federal - A	C	\$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 INTERCHAN	GE PHASE II	GE 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 C	losure.					
ROUTE/STREET	0581				TOTAL COST	\$60,409,490	
FUND SOU	IRCE	MATCH	FY21	FY22	FY23	FY24	
		\$0	\$0	\$0	\$0	\$0	

UPC NO)	115852	SCOPE	Traffic Management/Engineering			
SYSTE	М	Interstate	JURISDICTION	Statewide		OVERSIGHT	NFO
PROJE	СТ	ITTF FY20 Micro Tr	ansit		ADMIN BY	DRPT	
DESCR	RIPTION	FROM: Various TO: Various					
ROUTE	/STREET	9999				TOTAL COST	\$500,000
	FUND SOU	RCE	CE MATCH FY21 FY22			FY23	FY24
PE AC	Federal - A	COTHER	\$0	\$0 \$500,000 \$			\$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 - Wide	n to 4-LN w/curb, gut	/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 C	losure					
ROUTE/STREET	W.MAIN ST. (0011)	1			TOTAL COST	\$46,124,165	
FUND SOL	FUND SOURCE MATCH FY21 FY22			FY22	FY23	FY24	
·		\$0	\$0	\$0	\$0	\$0	

UPC N	0	113947	SCOPE	Safety				
SYSTE	M	Primary	JURISDICTION	Roanoke County		OVERSIGHT	NFO	
PROJE	CT	Pedestrian Improve	ments on Route 11 (Williamson Road)		ADMIN BY	VDOT	
DESCF	RIPTION	FROM: Clubhouse	Clubhouse Drive TO: 0.2 mi. South of Greenway Drive					
ROUTE	STREET	WILLIAMSON ROA	D (0011)			TOTAL COST	\$750,000	
	FUND SOU	RCE	MATCH	FY21	FY22	FY23	FY24	
PE	Federal - H	- HSIP \$0		\$0	\$150,000	\$0	\$0	
CN	Federal - H	SIP	\$0	\$0	\$0	\$0	\$600,000	

UPC NO)	98220	SCOPE	Preliminary Engineering				
SYSTE	М	Primary	JURISDICTION	Roanoke County		OVERSIGHT	NFO	
PROJE	СТ	RTE. 115, Plantation Rd Corridor Improvements ADMIN BY Locally						
DESCR	SCRIPTION FROM: Williamson Road (Route 11) TO: Gander Way / Friendship Ln (0.7200 MI)							
PROGR	RAM NOTE	Waiting Financial C	losure.					
ROUTE	STREET	PLANTATION ROA	D (0115)			TOTAL COST	\$1,513,910	
	FUND SOU	IRCE 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 SOU	IRCE	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	AC Federal - AC		\$0	\$111,111	\$0	\$0	\$0
	Federal - A	C OTHER	\$0	\$166,667	\$0	\$0	\$0
PE AC			\$0	\$277,778	\$0	\$0	\$0

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UPC N	0	T23168	SCOPE	Safety				
SYSTE	M	Primary	JURISDICTION	Salem District-wide		OVERSIGHT	NFO	
PROJE	CT	Systemic HSIP Ped	estrian Crossing Imp	provements	ADMIN BY VDOT			
DESCF	RIPTION	FROM: various TO: various						
ROUTE	STREET	REET 9999				TOTAL COST	\$1,021,751	
FUND SOURCE MATCH		MATCH	FY21	FY22	FY23	FY24		
CN	Federal - A	C CONVERSION	\$0	\$136,537	\$150,191	\$314,034	\$216,183	

UPC N	0	T23167	SCOPE	Safety			
SYSTE	М	Primary	JURISDICTION	Salem District-wide		OVERSIGHT	NFO
PROJE	CT	Systemic HSIP Cur	c HSIP Curve Delineation-PE Only				VDOT
DESCR	RIPTION	FROM: various TO:	FROM: various TO: various				
ROUTE	ROUTE/STREET 9999				TOTAL COST	\$4,511,961	
	FUND SOURCE		MATCH	FY21	FY22	FY23	FY24
PE AC	Federal - A	C OTHER	\$0	\$416,964	\$0	\$0	\$0
CN AC	Federal - A	C OTHER	\$0	\$3,814,461	\$0	\$0	\$0

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Roanoke MPO

Urban Projects

UPC N	10	688	SCOPE	Reconstruction w/ Added Capacity			
SYSTE	M	Urban	JURISDICTION	Roanoke		OVERSIGHT	NFO
PROJE	CT	13TH STREET AND	D HOLLINS ROAD ADMIN BY		VDOT		
DESCI	RIPTION	FROM: JAMISON A	FROM: JAMISON AVE TO: .08 MILE NORTH INT. ORANGE AVENUE (0.9790			MI)	
ROUTI	E/STREET	13TH ST/ HOLLINS	RD (U000)			TOTAL COST	\$23,960,970
	FUND SOL	IRCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - S	TP/STBG	\$672,519	\$2,690,076	\$0	\$0	\$0
CN AC			\$0	\$51,697	\$0	\$0	\$0

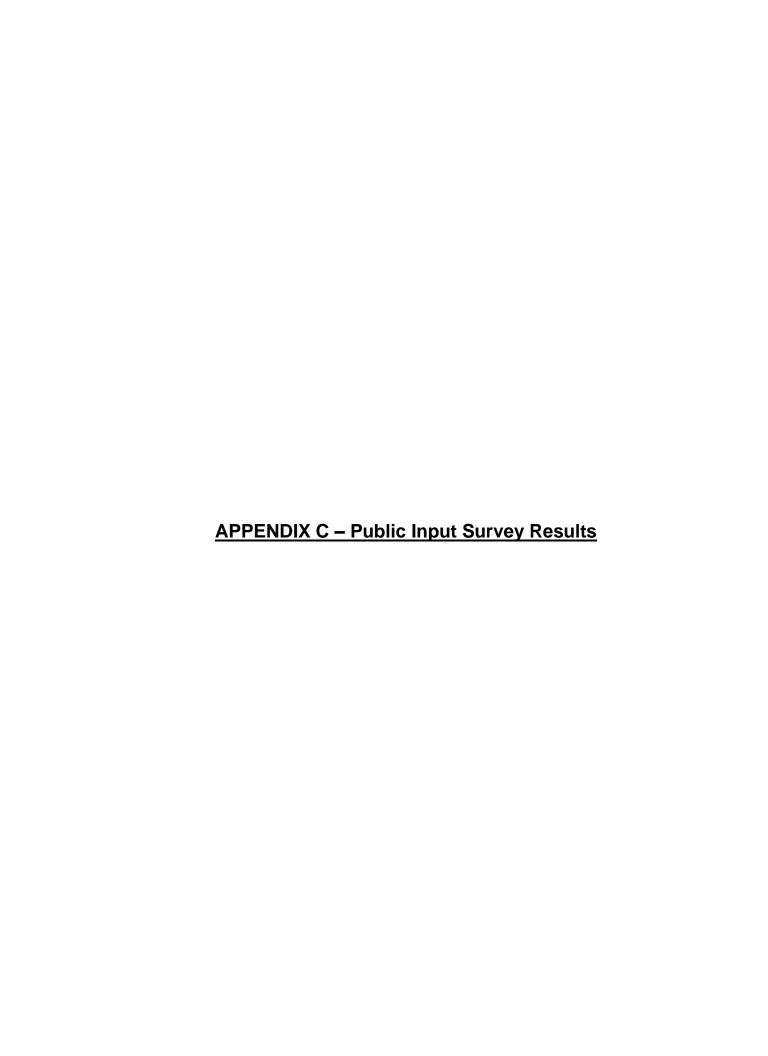
UPC NO	10889	SCOPE	Facilities for Pedestrians and Bicycles			
SYSTEM	Urban	JURISDICTION	Roanoke		OVERSIGHT	NFO
PROJECT	PROJECT #HB2.FY17 Colonial Avenue Improvements				ADMIN BY	Locally
DESCRIPTION	DESCRIPTION FROM: 300 ft beyond Winding Way Rd SW TO: Clearfield Rd SW (0.5000 MI)					
PROGRAM NO	GRAM NOTE All funds obligated based on current allocations/estimate					
ROUTE/STRE	ROUTE/STREET COLONIAL AVENUE (8001)				TOTAL COST	\$7,000,000
FUND SOURCE		MATCH	FY21	FY22	FY23	FY24
·		\$0	\$0	\$0	\$0	\$0

UPC N	0	113565	SCOPE	Facilities for Pedestrians and Bicycles			
SYSTE	M	Urban	JURISDICTION	Vinton		OVERSIGHT	NFO
PROJE	CT	Walnut Avenue Bicy	cycle and Pedestrian Accommodations ADMIN BY		Locally		
DESCF	RIPTION	FROM: W. Lee Ave	nue TO: 1st Street	ue TO: 1st Street			
ROUTE	STREET	WALNUT AVENUE	(0000)			TOTAL COST	\$545,250
	FUND SOURCE MATCH FY21 FY22		FY22	FY23	FY24		
RW	RW Federal - RSTP		\$2,400	\$0	\$9,600	\$0	\$0
CN	Federal - R	STP	\$92,750	\$0	\$0	\$371,000	\$0

Roanoke MPO

Miscellaneous Projects

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





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.

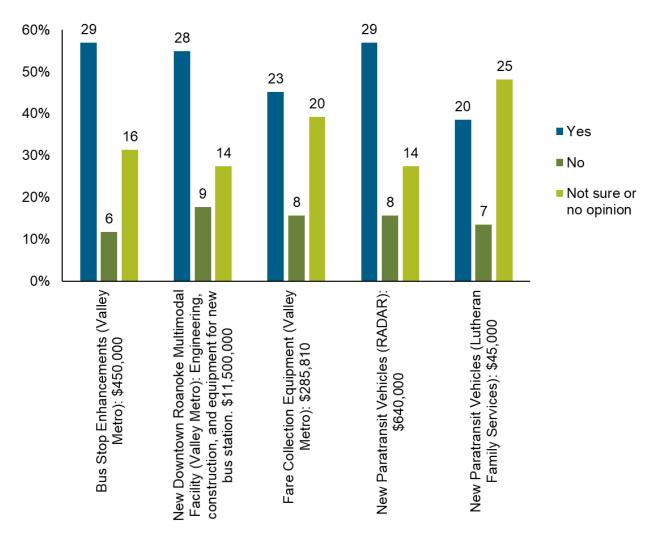
Participants were asked to comment on any project listed in the draft Transportation Improvement Program and how the public input experience could be improved.

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



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

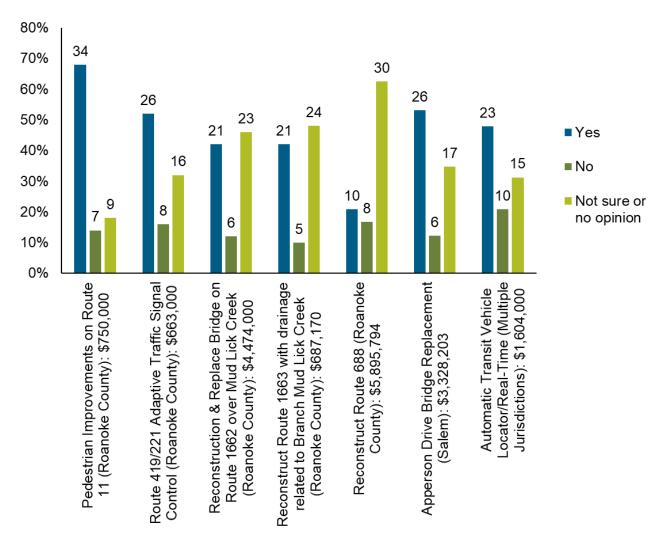


Project suggestion	RVTPO Response
Roanoke City hired AECOM to define their Multimodal Facility. AECOM specifically	
and highly recommended a true Multimodal facility by keeping all modes (rail,	We've shared
bus, taxi, bikes) of transportation together (see link). Moving the new bus station	your comment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



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



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



Other comments

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

Comment	RVTPO Response
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	RIDE Solutions promotes
and accessibility that would encourage all residents to take more	transit as part of its
advantage of public transportation would also be welcomed.	programming.
Better synchronize traffic signal lights for current traffic flows.	We've shared your comment
Otherwise, they impede traffic flow, bunching vehicles between	with the RVTPO Policy Board
lights.	and Technical Committee.
	We've shared your comment
	with the RVTPO Policy Board
Bike Lane on all of Route 11 between Salem and Roanoke.	and Technical Committee.
I doubt the public can understand much if anything about any of the	We apologize for the poor
proposed programs without at least reading the TIP document. This	quality of the document. We
poorly scanned and barely readable, sometimes unreadable, copy of	have identified the issues and
tthe TIP sends a clear message to the public about how much you	intend to do better in the
value this process no at all.	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	We've shared your comment
better light rail service with multiple hourly departures, linking the	with the RVTPO Policy Board
Carilion campus with the New River Valley Mall using the former	and Technical Committee.
Virginian Railway line, which Norfolk Southern no longer needs	
because of decline in coal transportation.	
	We've shared your comment
Lots of great stuff in the TIP. Please prioritize greenway and	with the RVTPO Policy Board
pedestrian projects.	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	We've shared your comment
increase safety. Instead, enforce the speed limit and other driving	with the RVTPO Policy Board
laws stringently and create solutions to put tractor trailers onto the	and Technical Committee.
railroad.	
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	Wolve shared your samment
may make the area worse. It also appears that the project design is	We've shared your comment
over a decade old.	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 an 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
	We are working to include project
	purpose and more information about
Give more details on what each question entails.	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	Thank you for your comment.
remaining projects in.	
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.	We are working to provide project
The document and survey are understandable only to those	title and information in more
working in the transportation field.	accessible language.
More details about the projects. I don't know what adaptive	We are working to provide project
traffic signaling is. Use language that is more easily	title and information in more
understood.	accessible language.
More public input BEFORE submitting SmartScale request to	We are working on improving the
state each year.	timing of public input opportunities.
,	We are working to provide project
Please give more detail on the options. Many of them use	title and information in more
industry terms that the average person will not understand.	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	We are working to provide project
description for UPC 115454 is "Safety improvements – what	title and information in more
exactly?" I'm a fan of safety improvements, but the specifics	accessible language and maps.
matter.	
Provide maps showing location and scope of projects.	We are working to provide maps.
1 1 7 22	We apologize for the oversight! We
RVTPO does a poor job of replying to the public who take	have contacted you since receiving
great care and time providing input and feedback. When	your comment and hope we've
someone emails or writes the RVTPO, every letter/email	addressed the issue to your
should be acknowledged!	satisfaction.
The draft TIP is a scanned pdf and the links aren't clickable.	We apologize for the poor quality of
Not all links have urls spelled out and when they do you	the document. We have identified th
have to type them into the web browser because you can't	issues and intend to do better in the
copy and paste text from a scanned pdf.	future. Your feedback is helpful to ou



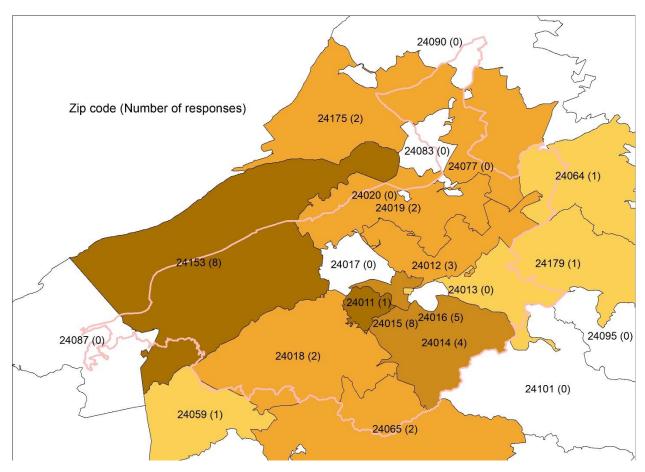
Comment	RVTPO Response
That shouldn't even be necessary if there were more information in the survey so that there wasn't a need to look at supplemental documents. Every time you refer to a supplemental document, you are saying "You probably don't understand this" without more information. Obviously 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 enought to try.	efforts to improve the public input experience
I went through the process of downloading the draft TIP and reading some additional documents and finally decided this was not worth it.	
	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.
Try harder! At least pretend to care.	Thank you!

<u>Demographic questions</u>

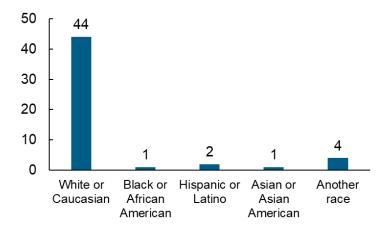
Forty-three of 53 survey participants provided their zip code.

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

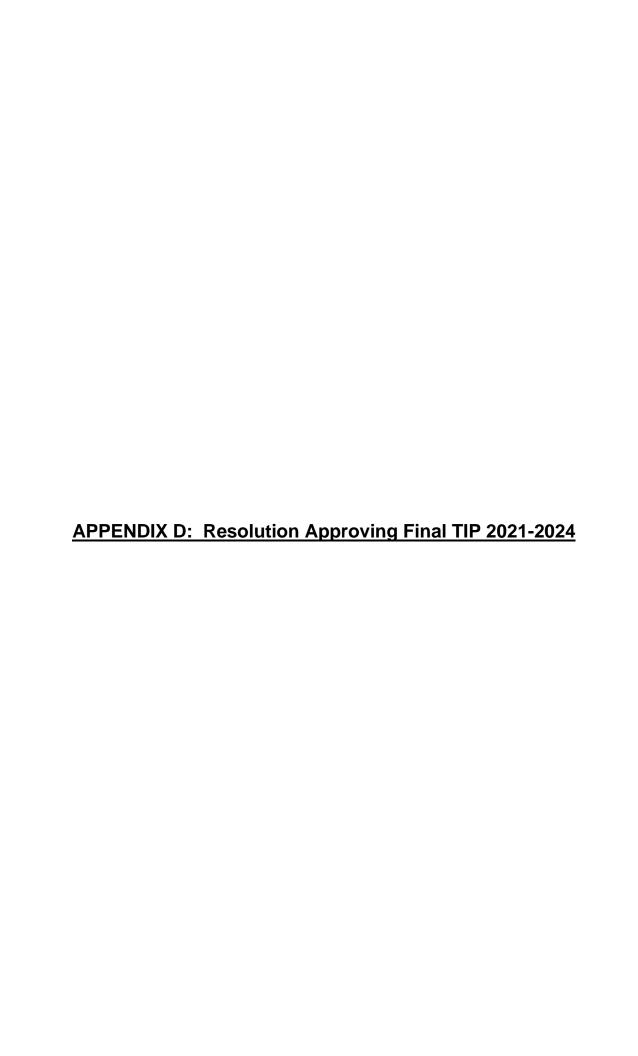


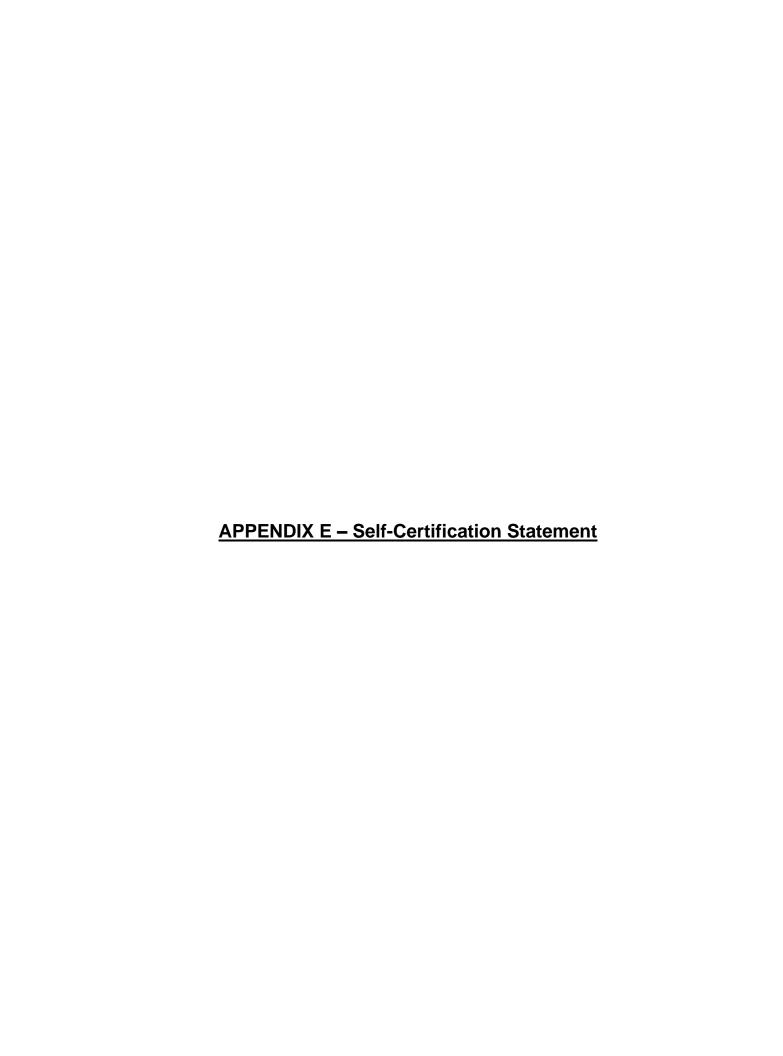


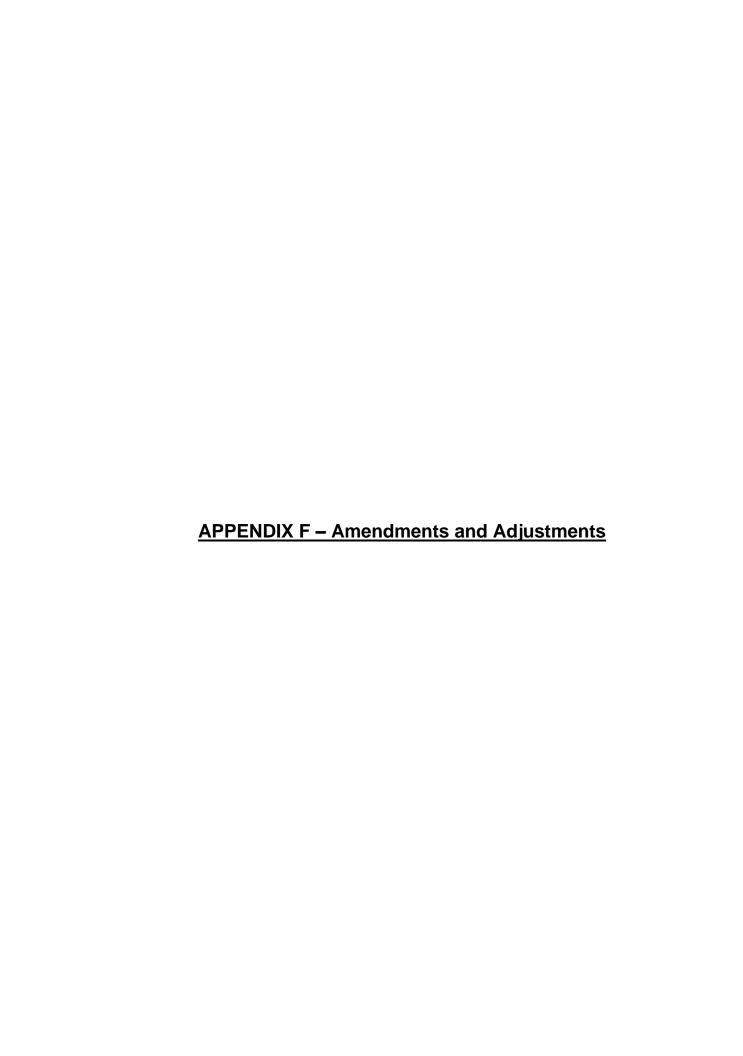
Fifty-two of 53 survey participants provided race/ethnicity.



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 underresponding 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.







<u>APPENDIX G – Surface Transportation Block Grant Project</u>

<u>Development and Selection Procedures</u>



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



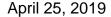
NON-DISCRIMINATION

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 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

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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

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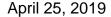
Non-Voting Members:

Kevin JonesFederal Highway AdministrationMelissa McGillFederal 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
Craig Meadows
Montgomery County Chief Administrative Official
Richard "Pete" Peters
Town of Vinton Chief Administrative Official Designee
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City of Salem Chief Administrative Official Designee





Transportation Technical Committee

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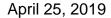
Non-Voting Members:

Kevin JonesFederal Highway AdministrationMelissa McGillFederal Transit Administration

Regional Commission Staff

Wayne G. Strickland Executive Director

Cristina D. Finch, AICP, LEED AP Director of Transportation
Dorian Allen Transportation Planner I







313 Luck Avenue, SW Roanoke, Virginia 24016 P: 540.343.4417 / F: 540.343.4416

The 25th day of April 2019

RESOLUTION

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

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 <u>Surface Transportation Block Grant Program: Roanoke Valley Urbanized Area Suballocation Funding Project Development and Selection Procedures, as presented.</u>

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 reallocated 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.

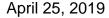
An application form for new candidate projects is provided in a separate document available online via rvtpo.org.

3. GENERAL POLICIES

- 1) Projects must be identified in or qualify for inclusion in the current RVTPO Constrained Long-Range Multimodal Transportation Plan (CLRMTP) available online via 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)

RVTPO Commitment to Fund

Version March 12, 2015

	Funding	Previous	T		Т
* RVTPO Policy Board Action: Approved on March 12, 2015, based on 2-6-15 preliminary	allocations provide	ed by VDOT.	ζ,	Γ)	\
FT 10-21 NOTE SIX-Teal Fillaticial Flati					

Project	Funding Request	Previous locations	FY16	FY17	FY18		FY19		FY20	FY21
Roanoke River Greenway - Greenhill Park (Rke Cnty) to Riverside 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	\$	\$	\$ -	\$		\$		\$ v
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	\$ 1,279,503	\$ 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	\$ 177,95	\$ 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	\$	٠	\$ -
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		\$	\$	\$.4	\$		\$	88,307	\$ 1,965,725
		Allocated:	\$ 3,943,969	\$ -1	\$ 3,921,164	<u> </u>	3,921,164	-	3,921,164	\$ 3,921,164
	Total Fu	 Available:	\$ 3,943,969	\$ 3,921,164	\$ 3,921,164	<u> </u>	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 recompete 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

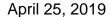
There will be an opportunity to submit new applications for candidate projects in September of each odd-numbered calendar year. The timing of receiving and determining new candidate project funding requests will enable decisions to be made prior to submission of any related SMART SCALE application.

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

Action #	Description	Month				
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

Action #	Description	Month					
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):

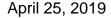
- (3) INCLUDED PROJECTS.-
- (A) PROJECTS UNDER THIS TITLE AND CHAPTER 53 OF TITLE 49.—A TIP developed under this subsection for a metropolitan area shall include the projects within the area that are proposed for funding under chapter 1 of this title and chapter 53 of title 49.
- (B) PROJECTS UNDER CHAPTER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



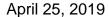
APPENDIX B - Project Eligibility

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.

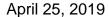
D. ELIGIBILITY

- 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



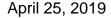


- vi. Border infrastructure projects eligible under Section 1303 of SAFETEA- LU (23 U.S.C. 101 note).
- (2) Operational improvements and capital and operating costs for traffic monitoring, management, and control facilities and programs. Operational improvement is defined in 23 U.S.C. 101(a)(18).
- (3) 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. <u>Transportation alternatives</u> 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

