



Roanoke Valley Transportation
PLANNING ORGANIZATION
Staffed by the
REGIONAL commission

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

Project Development and Selection Procedures

DRAFT Update November 19, 2018

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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.

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

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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 ~~the a~~Appendix A for reference.

The procedures outlined in this document are effective immediately following the RVTPO Policy Board's approval of them. Unused funds allocated from previous procedures will be re-allocated using these procedures.

2. PROJECT INITIATION DEVELOPMENT

Through the long-range planning process, the RVTPO Policy Board's priorities have been identified and included in the constrained long-range multimodal transportation plan. It is the expectation of the Board that these priorities will be pursued by the localities and modal agencies that lead transportation project development in the Roanoke Valley. In addition, it is the expectation of the Board, in adherence to the 2018 Planning Agreement, that localities and VDOT, VDRPT, Valley Metro, and RADAR will be coordinating with each other (and other organizations as necessary) to pursue transportation improvements and to identify which entity or entities will apply for STBG funds to support such projects.

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 ~~in~~ 23 U.S.C. 133 is listed in Appendix ~~A-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 ~~AB~~. 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 candidate projects is provided in a separate document available online via rvtpo.org. This ~~application form~~ is to be used when submitting applications for new candidate projects.

3. GENERAL POLICIES

- 1) Projects must be identified in the current RVTPO Constrained Long-Range Multimodal Transportation Plan (CLR~~M~~TP) 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) Candidate project sponsor(s) and VDOT and/or DRPT will provide assurance to the RVTPO that any funds allocated for the candidate project can be federally obligated within 12 months of allocation and expended within 36 months of such obligation.
- 4) Pursuant to the two-year application ~~cycle~~process, projects in the first two years of any Six-Year Funding Plan will be considered “previously funded and committed” in ~~the next future~~ application and adjustment processes~~cycle~~. 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-~~24~~10. The series of illustrations that follows helps ~~to~~ 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.

- 5) 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 ~~in~~-through FY17 would also be committed as indicated in the yellow box up to the total funding request recommended.

RVTPO Commitment to Fund

Version March 12, 2015

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

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

Project	Funding Request	Previous Allocations	FY16	FY17	FY18	FY19	FY20	FY21
Roanoke River Greenway - Greenhill Park (Rke Cnty) to Hiverside Park (Salem); UPC 97171; administered by Roanoke County	\$ 2,990,760	\$ 2,990,760	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roanoke River Greenway - Eddy Avenue Bridge (Salem); UPC 56409 ; administered by City of Salem	\$ 405,600	\$ 405,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roanoke River Greenway - Apperson Dr. Bridge (Salem); UPC 105206; administered by City of Salem	\$ 657,000	\$ 657,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roanoke River Greenway - City of Salem line to Bridge Street; UPC 102769; administered by City of Roanoke	\$ 2,863,800	\$ 2,863,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roanoke River Greenway - Water Pollution Control Plant to the Blue Ridge Parkway; UPC 91191; administered by Roanoke County	\$ 5,857,840	\$ 1,085,650	\$ 3,164,400	\$ 1,607,790	\$ -	\$ -	\$ -	\$ -
Downtown Roanoke Multimodal Transportation Study	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bus Replacement for Smart Way Commuter Service - 2007 Freightliner	\$ 560,000	\$ 560,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Plantation Road, Bicycle, Pedestrian and Streetscape Improvement Project	\$ 1,279,500	\$ 1,068,008	\$ 211,495	\$ -	\$ -	\$ -	\$ -	\$ -
Exit 140 Park and Ride Reconstruction	\$ 2,650,000	\$ 1,608,244	\$ 568,074	\$ 172,059	\$ 301,623	\$ -	\$ -	\$ -
West Main Street Pedestrian Improvement Project	\$ 177,950	\$ 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	\$ 14,127,470		\$ -	\$ 1,796,315	\$ 1,955,439	\$ 1,955,439	\$ 1,955,439	\$ 1,955,439
Garden City Trail Connection	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Plantation Road - Lila Drive Intersection	\$ 968,750		\$ -	\$ -	\$ -	\$ 968,750	\$ -	\$ -
Tinker Creek Greenway Connectivity Study	\$ 400,000		\$ -	\$ -	\$ -	\$ 326,577	\$ 73,423	\$ -
West Main Street Pedestrian Improvements - Phase II	\$ 803,995		\$ -	\$ -	\$ -	\$ -	\$ 803,995	\$ -
Bus Stop Accessibility - GRTC	\$ 1,000,000		\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ -
Campbell Avenue Bike and Ped Improvements	\$ 3,300,000		\$ -	\$ -	\$ -	\$ -	\$ 88,307	\$ 1,965,725
Total Funding Allocated:			\$ 3,943,969	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164
Total Funding Available:			\$ 3,943,969	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164	\$ 3,921,164
Difference:			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

- 6) After coordination with and consent of affected project sponsors, RVTPO staff are authorized to change the year of expenditure of allocated funds without approval of the Policy Board. Staff will notify the affected project sponsors along with VDOT/VDRPT that the adjustment has occurred and maintain a copy of the current financial plan on the RVTPO website. Changes to the total allocated funds to a project will be approved by the Policy Board during the Annual Adjustment Process.

- 7) The RVTPO Policy Board strongly advises that no STBG application represent more than two years of STBG funding (Note: the term two-years should be interpreted to mean an equivalent lump sum.).

- 8) Additional funding requests for existing STBG ~~urban suballocation~~ projects will be considered annually during the adjustment process. ~~and a~~ decision will be made regarding additional funding requests for existing STBG projects before committing unallocated funds to new projects selected as part of the bi-annual application process.
- 9) 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~~SMART SCALE, Revenue Sharing, Transportation Alternatives, etc.). In particular, for transportation projects that exceed \$10M in total cost and require a multi-source funding approach, the RVTPO Policy Board strongly encourages its members to apply for STBG funds up to approximately \$10M as leverage to secure other funding sources.
- 10) Candidate projects that are also included in the Regional Study on Transportation Project Prioritization for Economic Development and Growth (See Appendix C) 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. No other candidate projects may receive conditional commitment of funding in years 3-6.

Project sponsors that are unsuccessful in securing funds to fully fund the project within the timeframe outlined in their STBG application may be required to re-compete for STBG funds, and the RVTPO Policy Board may de-allocate or adjust the timing of the conditionally committed funds.

- 11) Eligible applicants are expected to coordinate and plan projects ahead of noted deadlines. Requests for funds that occur outside of the project application or adjustment processes will only 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. Such requests should be submitted to RVTPO staff with justification for why the request was not made during the regular process and why it is imperative that the Board consider the out-of-cycle appeal.

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 New Candidate Project Application Year Tentative Schedule

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	Applicants are present and available to answer questions about their project applications. Questions to applicants and applicants present for Q&A to the TTC.	November TTC meeting
3	TTC Members score/rank candidate projects which will be due one week after the November TTC meeting.	November
4	Current project sponsors submit to staff an update on project progress and funding. Any additional funding requests are made at this time.	By November 15
5	RVTPO Policy Board is presented an overview of all candidate projects.	November/December
6	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
7	TTC recommends a draft six-year STBG financial plan based on the status of existing projects and the priority list of investments.	December/January
8	RVTPO Policy Board reviews the draft six-year financial plan, approves its release for public comment and a public hearing.	January
9	RVTPO Policy Board holds a public hearing, makes any necessary adjustments to the six-year financial plan, and approves the plan.	February

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-K+). 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 RVTPO's performance measure targets and SMART SCALE

evaluation measures. 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 1 (best meets the criteria based on the guidance provided) to 12 (least meets the criteria based on the guidance provided).

- A. **Regional Project Consideration** – *Assessed on the extent to which the project is a priority in 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. An individual project scores higher or lower given the following priority levels:*

Is this project listed in the -	Ranking
CLRMTP Constrained Short- or Medium-Term List?	(Very High)
CLRMTP Vision Short- or Medium-Term List?	(High)
CLRMTP Constrained or Vision Long-Term List?	(Medium)
Other RVTPO Plan/Study	(Low)
Not in a RVTPO Plan/Study	(Very Low)

- B. **Support the Economic Vitality of the Metropolitan Area Especially by Enabling Global Competitiveness, Productivity, and Efficiency** - *(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)*

- How many square feet of commercial/industrial development will be supported by the project?
- Does this project have the potential to enhance intermodal access for freight?

- C. **Increase the Safety and Security of the Transportation System for Motorized and Non-motorized Users** - *(project includes provision to help prevent accidents, such as railroad crossings, or pedestrian safety/security)*

- How will this project reduce fatalities and serious injuries on roadways?
- How will this project reduce non-motorized fatalities and serious injuries?

- D. **Increase the Accessibility and Mobility Options Available to People and/or Freight** - *(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)*

- How will this project increase access to jobs?
- How will this project increase access to jobs for disadvantaged populations?
- How will this project increase access to multimodal travel choices?

- E. **Protect and Enhance the Environment, Promote Energy Conservation, and Improve the Quality of Life, and Promote Consistency between Transportation Improvements and State and Local Planned Growth and Economic Development Patterns** - *(project includes provision for improvements that involve the reduction of fuel consumption, wetlands mitigation or improve natural wildlife habitats)*

- Does this project have the potential to improve air quality?
- Does this project have the potential to minimize impact on natural/cultural resources?

- F. Promote Efficient System Management and Operation** - *(project includes provision for improvements such as congestion/management systems, signal coordination, turn lanes and intelligent transportation system applications)*

RVTPO Performance Measures: MOVED TO H.

- ~~How will this project help improve reliability for person-miles traveled on the Interstate?~~
- ~~How will this project help improve reliability on the non-interstate National Highway System (NHS)?~~
- ~~How will this project help improve truck time reliability on the Interstate?~~

Other:

- ~~How else does the project promote efficient system management and operation?~~

- G. Emphasize the Preservation of the Existing Transportation System** - *(project includes provision for system preservation, such as resurfacing, rehabilitation of pavement, roadway or bridge replacement)*

RVTPO Performance Measures:

- Will this project help preserve interstate and non-interstate NHS pavements that are currently in good condition?
- Will this project help improve interstate and non-interstate NHS pavements that are currently in poor condition?
- Will this project help preserve bridges in good condition?
- Will this project help improve bridges in poor condition?
- Will this project replace/improve transit revenue vehicles, non-revenue vehicles, or transit facilities that are close to exceeding their useable lifespan?

Other:

- How else will this project preserve the existing transportation system?

- H. Improve the Resiliency and Reliability of the Transportation System and Reduce or Mitigate Stormwater Impacts of Surface Transportation** – *(project improves the transportation system’s ability to accommodate unexpected incidents, weather events, etc.; improve travel time, and/or improve stormwater flow)*

RVTPO Performance Measures:

- How will this project help improve reliability for person-miles traveled on the Interstate?
- How will this project help improve reliability on the non-interstate National Highway System (NHS)?
- How will this project help improve truck time reliability on the Interstate?

- I. Enhance travel and tourism** – *(project improves people’s ability to visit the Roanoke Valley and access destinations of interest)*

- H.J. Land Use Coordination** - *(project supports improved walkability to existing or planned development particularly for non-work purposes)*

- To what extent will the project support resident/employee access via walking to non-work destinations?

- I.K. Project Readiness** - *(consider previous work done or the extent to which work needs to be done to get the project ready for construction)*

- Has the project already completed conceptual or preliminary engineering, utility studies, environmental studies, right-of-way acquisition?
- How soon can this project move to construction?

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

The TTC will recommend adjustments to increase project funding on existing projects. Every practical effort will be made to adhere to the most recent RSTP priority ranking (i.e. scoring) in making financial adjustments. The RVTPB 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 ~~TTC~~RVTPB 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 RVTPB 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 ~~TTC and RVTPB Policy Board~~RVTPB staff with a request and justification for a change in funding and/or scope. The TTC and RVTPB 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 RVTPB 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 surplus-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.	By November 15
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
<u>43</u>	If needed, the RVTPO Policy Board holds a public hearing. RVTPO approves six-year financial plan.	February

Critical project adjustments may be considered at other times of the year as well, consistent with Section 3 General Policies, #6 and #11.

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

APPENDIX A – Project Selection Process Consistency

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

(3) INCLUDED PROJECTS.—

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

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

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

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

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

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

(5) SELECTION OF PROJECTS.—

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

(i) by—

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

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

(ii) in cooperation with the metropolitan planning organization.

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

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

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

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

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

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

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

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

APPENDIX B – Project Eligibility

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

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

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

D. ELIGIBILITY

1. Eligible Projects and Activities:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

APPENDIX C – Projects included in the 2018 Regional Study on Transportation Project Prioritization for Economic Development and Growth

1. Widen I-81 from 4 to 6 lanes between Exits 140 and 141	
	<i>I-81 Southbound Improvements between Exit 141 and 140</i>
	<i>I-81 Northbound Improvements between Exit 141 and 140</i>
2. Widen I-81 SB from 2 to 3 lanes between Exit 150 and the Truck Weigh Station	
3. Widen I-81 from 4 to 6 lanes between Exits 137 and 140	
4. Reconstruct US 460 between 11th St NE and Gus Nicks Blvd to increase capacity and operations	
5. Construct a diverging diamond interchange with bike/pedestrian accommodation at 419/220	
6. Reconfigure US220/International Pkwy intersection to increase turning capacity and improve safety	
7. Reconstruct the I-581/Peters Creek Rd interchange to improve turning movements and access to Valleypointe Pkwy and Thirlane Rd	
8. Build the downtown Roanoke Intermodal Station (Amtrak, intercity bus, transit)	
9. Construct high regional priority pedestrian projects located in the RVTPO's multimodal centers as documented in the Regional Pedestrian Vision Plan	
<i>Improvements for pedestrians accessing transit</i>	<i>10th Street and Patterson Avenue</i>
<i>Streetscape</i>	<i>10th Street from Campbell Ave to Shenandoah Ave</i>
<i>Pedestrian improvements</i>	<i>10th Street from Grayson Ave to Williamson Rd</i>
<i>Improvements for pedestrians accessing transit</i>	<i>13th Street SE at Dale Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>13th Street SE at Montrose Avenue</i>
<i>Traffic-calming strategies should be incorporated into improvements. The priority should be on installing trees and providing an improved pedestrian environment.</i>	
	<i>13th Street SE from Tazewell to Dale</i>
<i>Improvements for pedestrians accessing transit</i>	<i>13th Street SW at Campbell Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>13th Street SW at Cleveland Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>13th Street SW at Patterson Avenue</i>
<i>Install sidewalks, streetscape</i>	<i>13th Street SW from Cleveland to Patterson Ave</i>
<i>Pedestrian improvements</i>	<i>3rd Street and Franklin Rd</i>

<i>Intersection safety improvements</i>	<i>9th St SE and Bullitt</i>
<i>Intersection safety improvements</i>	<i>9th St SE and Jamison</i>
<i>Install sidewalks, streetscape</i>	<i>9th St SE from Bullitt to Riverland Rd</i>
<i>Traffic-calming strategies should be incorporated into improvements. The priority should be on installing trees and providing an improved pedestrian environment. Ninth Street should be reconfigured into an urban boulevard.</i>	<i>9th St SE from Tazewell to Bullitt</i>
<i>Improvements for pedestrians accessing transit</i>	<i>9th Street at Dale Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>9th Street at Elm Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>9th Street at Highland Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>9th Street at Montrose Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>9th Street at Penmar Avenue</i>
<i>Streetscape</i>	<i>Apperson Dr and Colorado St junction</i>
<i>Pedestrian intersection improvements</i>	<i>Apperson Dr and Riverland Dr</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Apperson Dr at Yorkshire Street</i>
<i>Sidewalk</i>	<i>Apperson Dr from American Legion to 419</i>
<i>Sidewalk</i>	<i>Apperson Dr from Colorado to American Legion</i>
<i>Trail connection</i>	<i>Botetourt/Roanoke Co Greenway Connector</i>
<i>Sidewalk</i>	<i>Braeburn Dr from Ridgewood to Apperson Dr</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Campbell Avenue and 3rd St SW</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Campbell Avenue and 5th St SW</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Campbell Avenue and 6th St SW</i>
<i>Install sidewalks, streetscape</i>	<i>Campbell Avenue from 7th St SW to 18th St SW</i>
<i>Sidewalk on Catawba Road from Glebe Road to Rt 220</i>	<i>Catawba Rd from Rt. 220 to Glebe Rd</i>
<i>Sidewalk</i>	<i>Colorado St from Rowan to Front</i>
<i>Pedestrian connection</i>	<i>Cresthill Dr - Mud Lick Greenway to Garst Mill Rd</i>
<i>Pedestrian improvements</i>	<i>Dale Avenue from 19th to 13th</i>
<i>Sidewalk</i>	<i>Daugherty from West Main to school</i>
<i>Greenway hard surface</i>	<i>Dry Creek Greenway from Carrollton to West Main</i>
<i>Improvements for pedestrians accessing transit</i>	<i>East 4th Street at Delaware Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>East Cleveland Avenue at S Blair Street</i>

<i>Improvements for pedestrians accessing transit</i>	<i>East Cleveland Avenue at S Poplar Street</i>
<i>Crosswalk/signal/signage</i>	<i>East Main Street and Lynchburg Turnpike</i>
<i>Pedestrian improvements and streetscape</i>	<i>East Main Street from Thompson Memorial to Rt 419</i>
<i>Pedestrian intersection improvements</i>	<i>Elm Ave at Ferdinand Ave</i>
<i>Pedestrian improvements</i>	<i>Elm Ave from Jefferson St to 4th St SE</i>
<i>Pedestrian improvements</i>	<i>Elm Ave from Jefferson St to Ferdinand Ave</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Ferncliff Avenue at William Fleming High School</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Franklin Rd at Albemarle Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Franklin Rd at Edinburgh Street</i>
<i>Pedestrian intersection improvements</i>	<i>Franklin Rd at Elm Ave</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Franklin Rd at Highland Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Franklin Rd at Mountain Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Franklin Rd at Reserve Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Franklin Rd at Walnut Avenue</i>
<i>Pedestrian improvements</i>	<i>Franklin Rd at Williamson Rd</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Franklin Rd at Woods Avenue</i>
<i>Pedestrian improvements</i>	<i>Franklin Rd from Rt 220 to Market Ave</i>
<i>Install sidewalks</i>	<i>Franklin Rd from Willow Oak to west city limit</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Gainsboro Road and Loudon Avenue</i>
<i>Sidewalk along Glebe Rd from Rt 220 to Catawba Road</i>	<i>Glebe Road from Rt 220 to Orchard Lake</i>
<i>Trail connection</i>	<i>Glebe Road to Greenfield Connector</i>
<i>Sidewalk</i>	<i>Grandin Rd corridor from Airview to Electric</i>
<i>Pedestrian intersection improvements - evaluate potential to relocate along railroad under Elm</i>	<i>Greenway crossing at Williamson and Elm</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Hershberger Rd and Bean Street</i>
<i>Pedestrian improvements</i>	<i>Hershberger Rd and Rutgers St</i>
<i>Pedestrian crossing from Fairland to Valley View</i>	<i>I-581 north end ped crossing at Valley View</i>
<i>Pedestrian bridge</i>	<i>I-581 Pedestrian Bridge</i>
<i>Sidewalk</i>	<i>Idaho St from Lynchburg Tpke to Texas</i>

<i>Improvements for pedestrians accessing transit</i>	<i>Jefferson St at Albemarle Avenue</i>
<i>Streetscape</i>	<i>Jefferson St from McClanahan to Bullitt</i>
<i>Sidewalk</i>	<i>Kimball St from Franklin St to Bowman Ave</i>
<i>Streetscape safety improvement strategy</i>	<i>Lafayette Boulevard from Melrose Ave to Cove Rd NW</i>
<i>Greenway hard surface</i>	<i>Lick Run Greenway along Norfolk Ave</i>
<i>Streetscape</i>	<i>Main Street from Thompson Memorial to 4th St</i>
<i>Streetscape</i>	<i>McClanahan St from Jefferson St to Franklin Rd</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Melrose Avenue and 23rd Street</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Melrose Avenue and Forest Park Boulevard</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Melrose Avenue and Palmetto Street</i>
<i>Pedestrian improvements</i>	<i>Melrose Avenue from 22nd to Victoria</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Memorial Avenue at Brunswick Street</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Memorial Avenue at Chesterfield Street</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Memorial Avenue at Faquier Street</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Memorial Avenue at Oxford Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Memorial Avenue at Wasena Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Memorial Avenue at Winborne Street</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Ogden Road at Honeywood/Windward</i>
<i>Pedestrian improvements</i>	<i>Ogden Road from Electric to Colonial</i>
<i>Pedestrian system, streetscape</i>	<i>Old Jefferson St from Williamson to Wiley Drive</i>
<i>Pedestrian connection</i>	<i>Orange Ave at Plantation Rd</i>
<i>Streetscape</i>	<i>Orange Ave from I-581 to Hollins Rd</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Patterson Avenue at 12th Street</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Patterson Avenue at 14th Street</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Patterson Avenue at 16th Street</i>
<i>Install sidewalks, streetscape</i>	<i>Patterson Avenue from 10th to 21st St</i>
<i>Pedestrian intersection improvements</i>	<i>Postal Dr / Berry and Electric Road</i>
<i>Pedestrian system, streetscape</i>	<i>Reserve Ave from Jefferson St to Franklin Rd</i>
<i>Pedestrian improvements</i>	<i>Ring Road</i>
<i>Crosswalk/signal</i>	<i>Roanoke Blvd and Hemlock/VA Center</i>

<i>Pedestrian improvements</i>	<i>Roanoke Blvd from Mason Creek Grwy to VA MedCtr Rd</i>
<i>Pedestrian improvements</i>	<i>Roanoke Blvd from VA MedCtr Rd to VA CareCtr Rd</i>
<i>Pedestrian connection</i>	<i>Rt 11 from Co Line to Campus Drive</i>
<i>Pedestrian crossing improvements</i>	<i>Rt 220 and Town Blvd/Marketplace Dr</i>
<i>Pedestrian improvements</i>	<i>Rt 220 from Market Ridge to Glebe Rd</i>
<i>Crosswalk/signal/signage</i>	<i>Rt 419 Electric Rd and Braeburn</i>
<i>Pedestrian intersection improvements</i>	<i>Rt 419 Electric Rd and Grandin Road</i>
<i>Crosswalk/signal/signage</i>	<i>Rt 419 Electric Rd and Keagy Rd</i>
<i>Pedestrian intersection improvements</i>	<i>Rt 419 Electric Rd and Ogden Rd</i>
<i>Pedestrian intersection improvements</i>	<i>Rt 419 Electric Rd and South Peak</i>
<i>Pedestrian improvements</i>	<i>Rt 419 Electric Rd at Tanglewood area</i>
<i>Pedestrian improvements</i>	<i>Rt 419 Electric Rd from Keagy to Apperson</i>
<i>Pedestrian improvements</i>	<i>Rt 419 Electric Rd from Ogden to city limit</i>
<i>Pedestrian improvements</i>	<i>Rt 419 Electric Rd from Stoneybrook to Woodmar</i>
<i>Pedestrian improvements</i>	<i>Rt 419 Electric Rd from Woodmar to Keagy</i>
<i>Install sidewalks</i>	<i>Rt 419 from Brambleton to Postal</i>
<i>Sidewalk</i>	<i>Rt 419 from Keagy to Salem</i>
<i>Install sidewalks</i>	<i>Rt 419 from Postal to Wentworth</i>
<i>Pedestrian intersection improvements</i>	<i>Rt 419 Tanglewood/Elmview</i>
<i>Install sidewalk, streetscape</i>	<i>Rt 460 /West Main St, Daugherty to Alleghany</i>
<i>Install sidewalk, streetscape</i>	<i>Rt 460 /West Main St, Daugherty to Ft Lewis Church</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Rutgers Street at Crossroad Shopping Center</i>
<i>Install sidewalks, streetscape, crosswalks</i>	<i>Rutgers Street from Town Square to Hershberger</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Salem Avenue and 3rd Street</i>
<i>Install sidewalks, streetscape</i>	<i>Salem Avenue from 5th St SW to Shaffers Blvd</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Salem Turnpike and 30th Street</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Salem Turnpike and Delta Drive</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Salem Turnpike and Delta Drive/24th Street</i>
<i>Pedestrian improvements</i>	<i>Salem Turnpike from 24th St to 30th</i>
<i>Pedestrian improvements</i>	<i>Salem Turnpike from 30th St to city limit</i>
<i>Pedestrian improvements</i>	<i>Shenandoah from city limit to Peters Creek Rd</i>
<i>Improvements for pedestrians accessing transit</i>	<i>South Pollard Avenue at Cedar Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Tazewell Avenue at 7th Street</i>

<i>Improvements for pedestrians accessing transit</i>	<i>Tazewell Avenue at 9th Street</i>
<i>Traffic-calming strategies should be incorporated into improvements. The priority should be on installing trees and providing an improved pedestrian environment.</i>	<i>Tazewell Avenue SE from RR tracks to 12th St SE</i>
<i>Greenway hard surface</i>	<i>Tinker Creek Greenway county line to I-81</i>
<i>Pedestrian connection</i>	<i>Town Blvd/Marketplace Drive</i>
<i>Pedestrian intersection improvements</i>	<i>Town Square Blvd and Rutgers St</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Towne Square Boulevard at Office Max</i>
<i>Pedestrian connection</i>	<i>Union Street from Main to Eddy</i>
<i>Pedestrian intersection improvements</i>	<i>Valley View and Ring Road (Red Robin)</i>
<i>Pedestrian improvements</i>	<i>Valley View Blvd /Ring Rd connector (Smokey Bones)</i>
<i>Pedestrian intersection improvements</i>	<i>Valley View Blvd and Ring Road (Lewis Gale Clinic)</i>
<i>Pedestrian intersection improvements</i>	<i>Valley View Blvd at Mall main entrance</i>
<i>Pedestrian intersection improvements</i>	<i>Valley View Blvd at Movie Theater</i>
<i>Pedestrian intersection improvements</i>	<i>Valley View Blvd at Ring Road (Shakers)</i>
<i>Install sidewalk, streetscape, crosswalks</i>	<i>Valley View Blvd from Edinburgh to I-581</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Valley View Blvd N Northwest at Best Western</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Valley View Blvd N Northwest at Pier One Imports</i>
<i>Pedestrian improvements</i>	<i>Valley View Blvd NW from Hershberger to Ring Rd</i>
<i>Pedestrian connection from I-581 pedestrian bridge to Valley View Ring Road</i>	<i>Valley View Mall ped bridge trail</i>
<i>Pedestrian improvements</i>	<i>Valley View Ring Rd - Valley View Blvd to Walmart</i>
<i>Pedestrian intersection improvements</i>	<i>Valley View Ring Rd at entrance</i>
<i>Pedestrian intersection improvements</i>	<i>Valley View Ring Rd at main entrance</i>
<i>Pedestrian safety intersection improvements</i>	<i>Virginia Ave and Pollard St</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Virginia Ave at 2nd Street</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Virginia Ave at 3rd Street</i>
<i>Install sidewalk</i>	<i>Walnut Ave from Lee St to west town limit</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Washington Ave and N Blair Street</i>
<i>Crosswalk improvements, signage</i>	<i>Washington Ave and N Poplar St, church crosswalk</i>
<i>Crosswalks</i>	<i>Washington Ave and Pollard intersection</i>

<i>Improvements for pedestrians accessing transit</i>	<i>Williamson Rd and 10th Street</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Williamson Rd and Angell Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Williamson Rd and Compton Street</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Williamson Rd and Forest Hill Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Williamson Rd and Lyndhurst Street/Fugate Road</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Williamson Rd and Oakland Boulevard</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Williamson Rd and Thurston Avenue</i>
<i>Improvements for pedestrians accessing transit</i>	<i>Williamson Rd at Rutherford Avenue</i>
<i>Pedestrian improvements</i>	<i>Williamson Rd from Abney to Clubhouse</i>
<i>Pedestrian improvements</i>	<i>Williamson Rd from Clubhouse to Middleton</i>
<i>Pedestrian improvements</i>	<i>Williamson Rd from Hollins Campus to Plantation Rd</i>
<i>Pedestrian improvements</i>	<i>Williamson Rd from Middleton to Greenway Dr</i>
<i>Install sidewalk, streetscape, crosswalks</i>	<i>Williamson Rd from Orange to north city limit</i>
10. Complete the Roanoke River Greenway, followed by the Phase II Greenways: Tinker Creek, Hanging Rock/Mason Creek, Lick Run, and Glade Creek	
<i>Roanoke River Greenway, City of Salem to Bridge St</i>	<i>Construction funded by RSTP</i>
<i>Roanoke River Greenway, Eddy Ave Bridge</i>	<i>Construction funded by RSTP</i>
<i>Roanoke River Greenway across Barnhardt Creek</i>	<i>Construction funded by RSTP</i>
<i>Roanoke River Greenway, Blue Ridge Pkwy crossing along Highland Rd (Roanoke County)</i>	<i>Funded by TAP. Construction in 2022</i>
<i>Roanoke River Greenway, Blue Ridge Pkwy to Explore Park (Roanoke County)</i>	<i>Funded, construction 2021</i>
<i>Roanoke River Greenway, city limit to Blue Ridge Pkwy (Roanoke County)</i>	<i>Funded by RSTP, TAP, and other. Construction 2019</i>
<i>Roanoke River Greenway, Explore Park to Rutrough Rd (Roanoke County)</i>	<i>Construction funded by RSTP</i>
<i>Roanoke River Greenway, Green Hill Park to Montgomery County Limits (Roanoke County)</i>	<i>Conceptual (Length??)</i>

<i>Roanoke River Greenway, Green Hill Park to Riverside Park (Roanoke County)</i>	<i>Funded by RSTP, other. Construction underway</i>
<i>Roanoke River Greenway Extension (east)</i>	<i>Conceptual (0.56 mile)*</i>
<i>Roanoke River Greenway Extension (west)</i>	<i>Conceptual (12.6 miles)*</i>
<i>Glade Creek Greenway, Phase 2 (underway)</i>	<i>Funded, construction 2020.</i>
<i>Glade Creek Greenway, Phase 3</i>	<i>Conceptual (Length??)</i>
<i>Hanging Rock, Main St to southern terminus</i>	<i>Conceptual (0.44 mile)*</i>
<i>Lick Run - Wood Haven Loop, Country Club to Wood Haven</i>	<i>Conceptual (1.12 miles)*</i>
<i>Lick Run Greenway, Valley View to Country Club</i>	<i>Conceptual (0.65 mile onroad + 1.41 mile)*</i>
<i>Mason Creek Greenway, north end to Main St</i>	<i>Conceptual (Length??)</i>
<i>Mason Creek Greenway, from Roanoke River Greenway to southern terminus</i>	<i>Conceptual (0.81 mile)*</i>
<i>Tinker Creek Greenway Connectivity Study</i>	<i>Funded by RSTP</i>
<i>Tinker Creek Greenway Phase 2</i>	<i>Construction</i>
<i>Tinker Creek Greenway, Masons Mill to Greensfield</i>	<i>Conceptual (Length??)</i>
<i>Tinker Creek Greenway / Lick Run Greenway Connector</i>	<i>Conceptual (1.35 miles)*</i>

*Length of greenway route is estimated based on 2018 Roanoke Valley Greenway Plan. Number and location of bridge projects needed are unknown.