

March 3, 2022

**MEMORANDUM**

TO: Members, Transportation Technical Committee  
 FROM: Cristina Finch, AICP, LEED AP, Secretary to the Transportation Technical Committee  
 SUBJ: March 10, 2022 TTC Meeting/Agenda

The March meeting of the Transportation Technical Committee (TTC) will be held Thursday, March 10, 2022 at 1:30 p.m. at the Roanoke Valley-Alleghany Regional Commission office (Top Floor Conference Room), 313 Luck Avenue, SW, Roanoke, VA. In accordance with Virginia Occupational Safety and Health regulations, all attendees (vaccinated or unvaccinated) must wear a mask while inside the Commission building. All attendees who are unvaccinated or are otherwise at-risk must physical distance themselves from others. RVARC staff will make the necessary accommodations to comply with these regulations.

**TTC AGENDA**

1. Welcome, Call to Order ..... *TTC Secretary Cristina Finch*
2. Roll Call (including consideration of remote participation) ..... *TTC Secretary Cristina Finch*
3. **Action Requested:** Approval of the Consent Agenda items: ..... *Chair Jamison*
  - A. Approval of the Agenda
  - B. Action on the February 10, 2022 TTC Minutes, pp. 3 – 13
4. Chair’s Remarks ..... *Chair Jamison*
5. Continued Development of the Roanoke Valley ..... *Cristina Finch & David Jackson, Cambridge Systematic*  
 Transportation Plan, pp. 14 – 17
6. **Action Requested:** Recommendation on Draft FY23-28/29 Surface ..... *Cristina Finch*  
 Transportation Block Grant (STBG) Financial Plan, pp. 18 – 34
7. Annual Review of the Traffic Congestion Management Process, p. 35..... *Rachel Ruhlen*  
 Attachment #1: [Congestion Management Process Implementation](#)
8. Review of Draft Unified Planning Work Program, p. 36..... *Cristina Finch*  
 Attachment #2: [FY23 Unified Planning Work Program](#)

**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

9. Other Business
  
10. Comments by TTC Members and/or Citizens
  
11. Adjournment (by 2:45 p.m.)

**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

## MINUTES

The February meeting of the Transportation Technical Committee was held on Thursday, February 10, 2022 at 1:30 p.m. at the Roanoke Valley-Alleghany Regional Commission, 313 Luck Avenue, SW, Roanoke, VA.

### VOTING MEMBERS PRESENT

Mariel Fowler	County of Bedford
David Givens	County of Botetourt
Jonathan McCoy	County of Botetourt
Megan Cronise	County of Roanoke
Will Crawford	County of Roanoke
Wayne Leftwich	City of Roanoke
Mark Jamison, <i>Chair</i>	City of Roanoke
Crystal Williams	City of Salem
Cody Sexton, <i>Vice Chair</i>	Town of Vinton
Anita McMillan	Town of Vinton
William Long	Greater Roanoke Transit Company
Frank Maguire	Roanoke Valley Greenway Commission
Michael Gray	Virginia Dept. of Transportation - Salem District
Daniel Sonenklar ( <i>via zoom</i> )	Virginia Dept. of Rail and Public Transportation

### VOTING MEMBERS ABSENT

Dan Brugh	County of Montgomery
Nathan Sanford	Unified Human Serv. Transp. System (RADAR)

### NON-VOTING MEMBERS ABSENT

Kevin Jones	Federal Highway Administration
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**RVARC Staff Present:** Cristina Finch, Bryan Hill, Rachel Ruhlen, Jere, Andrea Garland and Virginia Mullen.

**Others Present:** David Jackson, Cambridge Systematics; Antony Ford, Virginia Department of Transportation; Grace Stankus, Virginia Department of Rail and Public Transportation.

### 1. WELCOME, CALL TO ORDER

Chair Jamison called the meeting to order at 1:30 p.m.

### 2. ROLL CALL (including consideration of remote participation)

Cristina Finch, Secretary to the TTC, called the roll and stated a quorum was present.

**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

**3. ACTION REQUESTED: APPROVAL OF CONSENT AGENDA ITEMS**

The following consent agenda items were distributed earlier:

- A. February 10, 2022 RVTPO Meeting Agenda
- B. January 13, 2022 TTC Minutes

**Motion:** by Cody Sexton to approve items (A) and (B), under the consent agenda, as presented; seconded by Frank Maguire.

**TTC Action:** Motion carried unanimously.

**4. CHAIR REMARKS**

- Chair Jamison reported that the TPO Board heard and granted a request from the Town of Vinton to provide an exception to the STBG policy regarding submission of cost overrun requests by the Fall deadline.
- Chair Jamison reported that at the request of the Town of Vinton and Roanoke County, the TPO also included in the draft FY23-28 financial plan the Glade Creek Greenway Phase 3 PE which had ranked lower in the STBG scoring and had not been included in the draft plan the TTC had recommended last month.
- Chair Jamison noted that there is currently a public comment opportunity available on an adjustment to the FY22-27 financial plan and the new FY23-28 financial plan. He encouraged members to direct their citizens to participate in the survey, available on [www.rvarc.org](http://www.rvarc.org).
- Chair Jamison reported there was a discussion at the January TPO meeting on the Transportation plan update, particularly on some of the objectives. David Jackson with Cambridge Systematics will present information on the next part of the development process.
- Chair Jamison asked members to provide any reflections on construction costs in the Valley, and experiences post-bid on what folks have encountered and how they manage the issues with the rising prices.

**5. CONTINUED DEVELOPMENT OF THE ROANOKE VALLEY TRANSPORTATION PLAN**

Cristina Finch reported that David Jackson will be joining in virtually to present an update on the development of the Roanoke Valley Transportation Plan. Ms. Finch added that the draft solution process is included in today's agenda packet. Ms. Finch noted that the RVTP consultant team and the OIPI GAP consultants' team would continue to work together with RVTPO staff to implement the approach to developing the solutions. The goal is to have recommended preferred solutions for the agreed set of priority gap needs for the TTC review and recommendation by the April TTC meeting.

David Jackson presented via zoom a presentation on the next steps of the update of the Roanoke Valley Transportation Plan. (The Presentation is included in the Minutes).

Vice Chair Cody Sexton asked if the solutions are the tools to be used to solve needs. Ms. Finch replied with yes.

Mr. Gray asked how the projects are being prioritized. Ms. Finch replied that Mr. Gray’s comment is referring to a future step (#8) in the process. Currently, steps #1 through #3 of the solutions phases are the ones being reviewed. Metaphorically speaking this process is making sure that all the common needed tools are included in the toolbox, later it will be decided what specific tool may be used to solve specific needs. Ms. Cronise asked what if a tool that is needed at a later point is not already included in the toolbox, what would the process of adding it be. Ms. Finch replied that this would refer to “unique” which would be discussed at a later phase.

Chair Jamison noted that members are encouraged to review the information and if there are any comments or questions, they should contact Ms. Finch.

**6. ACTION REQUESTED: RECOMMENDATION ON FY23-24 TRANSPORTATION ALTERNATIVE SET-ASIDE PROGRAM ALLOCATIONS**

Mr. Bryan Hill, in summarizing his staff report, stated that the RVTPO Policy Board will have a preliminary amount of \$715,036 in FY23 and FY24 to allocate to TA projects. The current TA project requests total \$981,000. Mr. Hill also informed the Committee that staff had coordinated with Salem District VDOT staff and Commonwealth Transportation Board Member Dr. Raymond Smoot on recommended TA allocations. As a result of those conversations, staff recommended the following scenario for consideration by the Committee:

Locality	Project	Total Project Cost	TA Amount Requested	CTB Member Recommended Allocations	TPO Allocations
City of Roanoke	Williamson Road Pedestrian Improvements	\$575,000	\$460,000	\$0	\$460,000
Roanoke County	Glade Creek Greenway Vinyard Park West	\$651,375	\$521,000	\$266,064	\$255,036
<b>TOTALS</b>		\$1,226,375	\$981,000	\$266,064	\$715,036

Mr. Hill reminded the Committee of comments made by Roanoke County staff at the January TTC meeting, whereby the Glade Creek Greenway Vinyard Park West project may not be eligible for TA funds as if built on its own does not connect to anything. The proposed funding scenario assumes that the RVTPO will fund the Town of Vinton's Glade Creek Greenway Phase 3 PE project (from Washington Avenue/Pollard Street via North Pollard Street to Vinyard Park) via the Surface Transportation Block Grant (STBG) funding program which VDOT has said would indicate a connection and make Roanoke County's TA request eligible to receive the funding.

After significant discussion, Mr. Hill confirmed that the recommended scenario is contingent upon the RVTPO subsequently funding the Glade Creek Greenway Phase 3 PE project with \$370,000.

**Motion:** by Frank McGuire to approve the TA Funding scenario, as presented; seconded by Megan Cronise.

**TTC Action:** Roll call vote - Ayes 14 (Fowler, Givens, McCoy, Cronise, Crawford, Leftwich, Jamison, Williams, McMillan, Sexton, Long, Maguire, Sonenklar, Gray); Nays 0; and Abstentions 0. Motion carried unanimously.

**7. ACTION REQUESTED: RECOMMENDATION ON FY24 SMART SCALE RVTPO CANDIDATE PROJECT REQUESTS**

Mr. Bryan Hill reminded the Committee at the January TTC meeting of the initial project scores based on 10 candidate project request forms submitted from RVTPO localities. As discussed last month, RVARC and Roanoke County staff anticipated that two projects might be fully funded through the Highway Safety Improvement Program (HSIP). Mr. Hill updated the Committee that in fact, they have not received funding.

Based on discussions at and following last month's meeting, Botetourt County informed staff that it wishes to withdraw its request for the Rte. 220 Superstreet project.

At the February 10 TTC meeting, Roanoke County informed staff and the Committee of a change in the Pedestrian Improvements on Williamson Road project request. Previously, this request was a VDOT HSIP project (Highway Safety Improvement Program - UPC 113947) under design with a funding deficit. The original project location was on Williamson Road (Rte. 11) from the North Roanoke Assisted Living to Clubhouse Drive. County staff learned from VDOT that the project could be fully funded from North Roanoke Assisted Living to Plymouth Drive. Roanoke County is interested in continuing the project from Plymouth Drive to Dent Road/Clubhouse Drive. As a result, this segment is now an orphaned project that is no longer attached to UPC 113947. This reduced the score by 10 points because the project was no longer underway (5 points) and did not have leverage (5 points).

The RVTPO has a maximum of four applications it can submit in August 2022 but may initiate five pre-applications in March. Staff developed a simple and straightforward prioritization and scoring process for the requests, in order to recommend to the RVTPO Policy Board up to five project applications to initiate in March with four ultimately being submitted in August 2022.

Staff recommended the TTC to consider recommending to the Policy Board to pursue the first four ranked projects from the below table.

Rank	Score	Agency	Project Name
1	50	Roanoke County	Pedestrian Improvements on Williamson Road
2	45	Roanoke County	West Main Street Phase 3 Sidewalk
3	45	Roanoke County	Pedestrian Crossing Improvements on Route 419 and at Plantation/ Hershberger Intersections (UPC 117212)
4	35	City of Roanoke	Orange Ave and Williamson Rd. Intersection Improvements
5	35	City of Roanoke	I-581/Orange Ave Interchange Improvements
6	35	City of Roanoke	Virginia Tech Carilion Research Institute Interchange Project
7	30	Roanoke County	U.S. Route 11/460 at Dow Hollow Road Intersection Improvements
8	30	Roanoke County	Route 419 Intersections/Projects (one or more) between Bower Road and Apperson Drive
9	15	Botetourt County	Exit 150 Improvement Project

Mr. Hill added that staff recommends project #8 *Route 419 Intersections/Project (one or more) between Bower Road and Apperson Drive* as the fifth RVTPO pre-application. Ms. Megan Cronise confirmed that Roanoke County is agreeable to project #8 being the fifth project pre-application. Mr. Hill indicated that projects #5, #6, #7 & #9 would most likely be recommended by staff for submission by the RVARC. Chair Jamison confirmed that the Roanoke City would be agreeable with project #6 being the fifth pre-application submission for the RVARC. Mr. Hill acknowledged that request and agreed to include it in the upcoming staff recommendation to the RVARC for their February 24 meeting.

Mr. Cody Sexton asked if any analysis had been done if these projects could do better or worse if a regional body versus a locality applies for them. Mr. Michael Gray answered that it is very difficult to know for certain.

**Motion:** by Cody Sexton to:

- 1) Recommend to the RVTPO the following five (5) projects for submission:
  - #1 - West Main Street Phase 3 Sidewalk
  - #2 - Pedestrian Crossing Imp. On Rte. 419 and at Plantation/Hershberger Intersections (UPC 117212)
  - #3 - Pedestrian Improvements on Williamson Road (UPC 113947)
  - #4 - Orange Ave and Williamson Rd. Intersection Improvements
  - #8 - Route 419 Intersections/Projects (one or more) between Bower Road and Apperson Drive (fifth pre-application)
  
- 2) Request that staff ask the RVARC to support the following projects:
  - #5 - City of Roanoke I-581/Orange Ave Interchange Improvements
  - #7 - Roanoke Co. U.S. Route 11/460 at Dow Hollow Road Intersection Improvements
  - #9 - Botetourt Co. Exit 150 Improvement Project
  - #6 - City of Roanoke Virginia Tech Carilion Research Institute Interchange Project (fifth pre-application)

The Motion was seconded by Megan Cronise.

**TTC Action:** Motion carried unanimously.

**8. ACTION REQUESTED: RECOMMENDATION ON ADJUSTMENT OF FY22-27 SURFACE TRANSPORTATION BLOCK GRANT (STBG) FINANCIAL PLAN**

Cristina Finch reported that the RVTPO Policy Board annually reviews currently funded STBG projects and accepts requests for additional funding in the Fall. Two projects were submitted at that time. Also, as was mentioned earlier last month the Town of Vinton made a request to the Policy Board for an exception to the policy (Policy #7) which the Board granted and approved the public input be south on the \$370,000 request. Since then, Vinton's request has increased to \$384,112. Ms. Finch noted that the three projects that have requested additional funding are summarized in the staff report (pages 69 through 74 of the agenda packet) and went over the projects.

Ms. Finch asked the TTC members to make a recommendation to the Policy Board on an adjustment to the FY22-27 STBG Financial Plan regarding the three requests for cost overrun funding.

Ms. Megan Cronise commented that Roanoke County has not started the PE on the Orange Market Park and Ride/Parking Lot Improvements project, therefore projects that are further along in the process should have greater priority than this project. Ms. Cronise removed the Orange Market project from consideration for request for additional funding at this time.

Vice Chair Sexton commented that if the bid for the Town of Vinton is higher than expected then could the Town ask the RVTPO for more money? He added that he thinks all the localities will be faced with this question relatively soon. Ms. Finch replied that the same question came up at the January RVTPO meeting and the Board had asked staff to revisit the policy and procedures on how to handle cost overruns and staff will be looking into that.



**Motion:** by Cody Sexton to recommend to the RVTPO Policy Board to grant the additional funding request for the two projects- Tinker Creek Trail Extension and Walnut Avenue Bicycle and Pedestrian Improvements (5th Street to City/Town limits); seconded by Jonathan McCoy.

**TTC Action:** Roll call vote - Ayes 14 (Fowler, Givens, McCoy, Cronise, Crawford, Leftwich, Jamison, Williams, McMillan, Sexton, Long, Maguire, Sonenklar, Gray); Nays 0; and Abstentions 0. Motion carried unanimously.

**9. OTHER BUSINESS**

No other business was discussed.

**10. COMMENTS BY MEMBERS AND / OR CITIZENS**

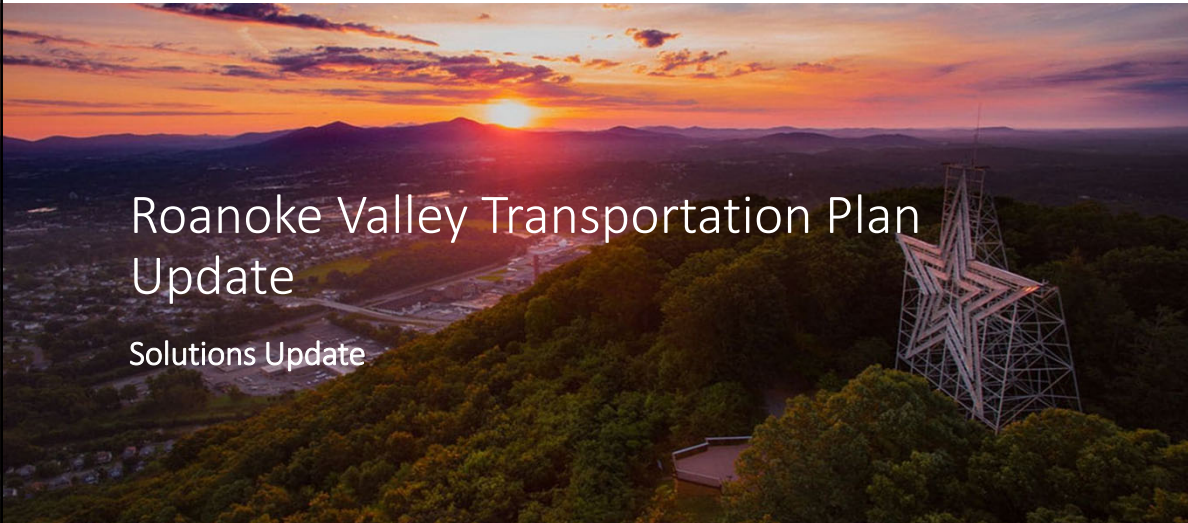
Mr. Gray asked if the Regional Commission staff is involved in the pedestrian safety study currently undergoing in the area. Ms. Finch answered with a no. Chair Jamison commented that Texas A&M and Virginia Tech Transportation Institute are performing a curb management research project.

**11. ADJOURNMENT**

The meeting was adjourned at 3:00 p.m.

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Cristina D. Finch, AICP, LEED AP, Secretary,  
Transportation Technical Committee



# Roanoke Valley Transportation Plan Update

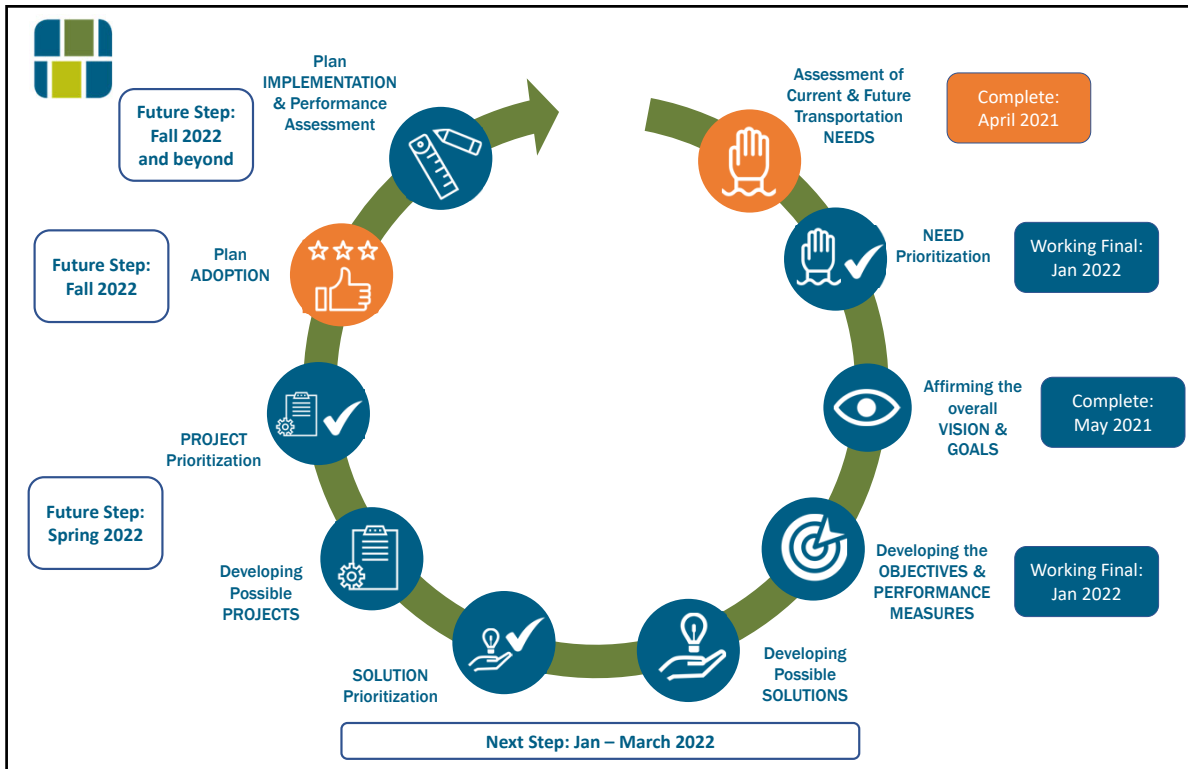
## Solutions Update

presented to  
Transportation Technical Committee

presented by  
Cambridge Systematics, Inc.



1



2



## Definitions



**Vision** describes the desired future state



**Goals** describe what guides us toward attaining the vision and our overall desired outcomes



**Objectives** describe how we are going to attain the vision, objectives represent our specific desired outcomes



**Needs** are transportation problems or issues identified in the community.



**Solutions** offer various ideas of how to address a need and achieve the goals and objectives



**Projects/Services** represent the preferred means to address a need and achieve objectives

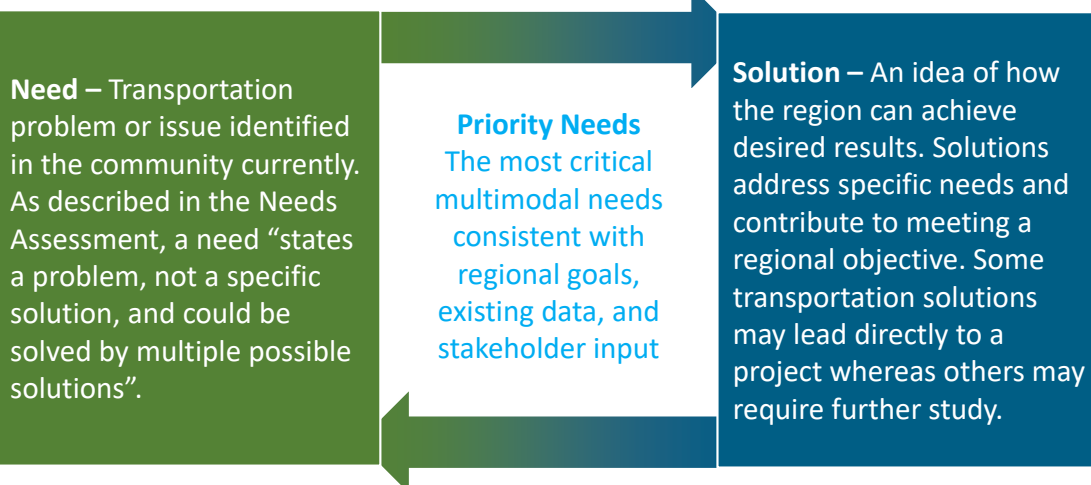


**Measures** quantify objectives, enabling us to assess the degree to which the system is achieving objectives

3



## Needs to Solutions



4



# Needs to Solutions

**Addressed Need** – For many needs, proposed solutions and projects exist

Need addressed through a programmed (funded) project (SYIP/TIP)

Monitor performance outcomes once project is implemented

**Gap Need** – Focus on priority needs where potential solutions or projects do not exist (or are not fully funded)

Funded project does not yet exist – but an unfunded, proposed project or concept and/or study might exist

Identify potential and preferred solutions to further develop into projects

5



## Solutions Process



6



Common transportation solutions (will be customized based on specific need & context)

Need types addressed by the solution

Objectives potentially supported by solution (dependent on actual need and context)

# Common Solutions Draft List

Solution				1. Provide a safe and secure transportation system	2. Enable reliable mobility	3. Enable convenient and affordable access to destinations	4. Foster environmental sustainability	5. Maintain and operate an efficient and resilient transportation system	6. Support economic vitality	7. Promote equitable transportation investments											
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
Access Management	Roadway	Congestion	Safety (auto)	X	X				X					X							X
Lane Reconfiguration - Road Diet	Roadway	System Management (operations, assets)	Safety (auto)	X	X																X
Lane Reconfiguration - Lane Narrowing	Roadway	System Management (operations, assets)	Safety (auto)	X					X		X		X								X
Shoulder Improvement	Roadway	Safety (auto)	Safety (bike)	X	X				X					X							X
Left Shoulder	Roadway	Safety (auto)	Safety (bike)	X		X			X												X
New Turn Lane	Roadway	Congestion	Safety (auto)	X	X	X															X
New General Travel Lanes(s)	Roadway	Congestion	Safety (auto)	X	X	X			X												X
New Bridge (motor vehicle, bicycle, pedestrian, railroad, etc.)	Roadway	Congestion	Safety (auto)	X	X	X			X					X							X
Signal Coordination/Timing	Roadway	Congestion	Safety (auto)	X	X	X							X								X
Intersection Reconfiguration (install new signal or innovative intersection)	Roadway	Congestion	Safety (auto)	X	X	X															X
Interchange Reconfiguration	Roadway	Congestion	Safety (auto)	X	X				X												X
Safety Improvements for Motorists - Street Lighting	Roadway	Safety (auto)	System Management (operations, assets)	X										X							X
Safety Improvements for Motorists - Pavement Markings	Roadway	Safety (auto)	System Management (operations, assets)	X										X							X
Safety Improvements for Motorists - Lane Markings	Roadway	Safety (auto)	System Management (operations, assets)	X										X							X

7



## Next Steps (February & March)



Refine solutions list and compile addressed needs and gap needs

Refine the list of potential solutions to address needs and conduct analysis to segment needs into addressed needs and gap needs



Identify priority gap needs to initiate process to develop solutions

Review gap needs and identify priority gap needs by jurisdiction/agency, align these priority gap needs with potential solutions

Staff to coordinate with member organizations to highlight priority gap needs and solutions



TTC meeting (March)

RVTP team to brief TTC on priority gap needs and potential solutions development process



Develop preferred solutions for priority gap needs

Review each suite of priority gap need solutions and develop preferred solutions

8

**STAFF REPORT**

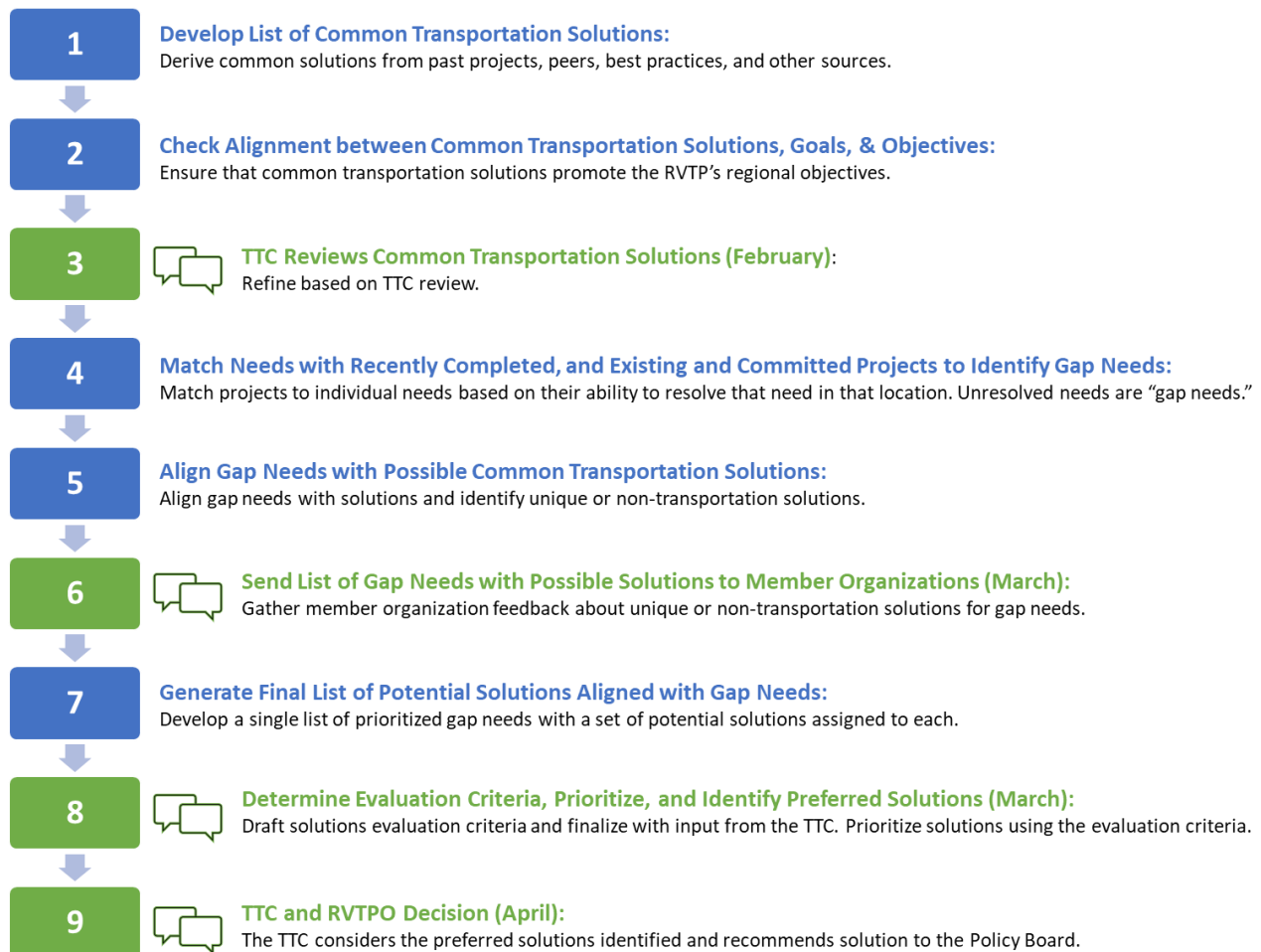
**TTC Meeting March 10, 2022**

SUBJ: Continued Development of the Roanoke Valley Transportation Plan

At the February 10<sup>th</sup> TTC meeting, members were briefed on the methodology for developing solutions and highlights of common transportation solutions. A summary spreadsheet of common transportation solutions was shared for TTC review and comment. Since February, the RVTP team has revised the common transportation solutions to address TTC feedback and conducted initial analysis reviewing needs compared to programmed projects as a means to assess “addressed” and “gap” needs.

Solutions Overview

**Solutions are ideas of how the region can achieve desired results.** Solutions address specific transportation needs and contribute to meeting a regional objective. The solutions development process is presented in the below figure. This staff report describes the approach to conclude step 1 through step 3 and highlights the approach and next steps for steps 4 through 6.





Within the February TTC meeting agenda packet is a detailed methodology document from the OIPI GAP consultant team detailing how solutions will be developed as part of the Plan process (following the steps presented in the above figure).

### Common Transportation Solutions (Step 1 – Step 3)

A list of 41 common transportation solutions was shared with the TTC for review and comment. The following general comments were received. The RVTP team will add solutions to the master list, clarify descriptions to address the comments, or note where potential solutions are considered unique and new for the region:

- Shuttle services – Supporting access to targeted destinations or within activity centers (*add as new solution*)
- Alternative transportation infrastructure – Solutions supporting new travel modes or technologies, for example drone delivery or new roadway/roadside infrastructure supporting connected/autonomous vehicles (*reserve for unique solutions list*)
- Grade separated railroad crossing – The existing “add new bridge” solution includes reference to grade separated railroad crossings. Clarify that new bridges in many cases are a grade separation solution (intersections, rail, bike/pedestrian). (*clarify existing solution*)
- Traffic calming as a standalone solution – Traffic calming is a unique/multi-faceted solution, which may overlap streetscape improvements, but not always (*add as new solution*)
- Rumble strips and other pavement improvements promoting safety are included in “safety improvements for motorists – pavement markings solution” (*clarify existing solution*)
- New general travel lane solution should specify what that may include (i.e., widening an existing street) (*clarify existing solution*)
- Intersection reconfiguration implies a geometric change, but not necessarily a new signal, new turn lanes, etc., recommend separating intersection reconfiguration from intersection improvements (e.g., signal, turn lane, etc...) (*add as new solution*)
- Expanded TDM incentive strategies – Include parking strategies or list as separate solutions including on- and off-street parking management and curb management in activity centers (*reserve for unique solutions list*)
- Bike/ped crossing improvement focuses primarily on treatments at intersections or mid-block crossings of sidewalks, bike accommodations, greenways, trails, etc..., this would not change the roadway, but would include striping, signals, signage, median refuge, etc... (*clarify existing solution*)

The common transportation solutions represent the menu within which potential common solutions to specific needs will be developed. Ultimately an individual solution or multiple solutions will be tailored to meet individual or multiple needs at priority locations and may involve unique transportation or non-transportation solutions. There is flexibility in the use of these solutions to address needs within each priority need investigated through this process.

## Addressed and Gap Needs (Step 4)

The RVTP team is conducting an analysis to compare RVTPO needs to programmed projects, planned projects, and recent and ongoing studies to determine addressed needs versus gap needs.

- **Addressed Need** – If a RVTP need overlaps completely, partially, or is within a specified distance of a FY 2022-2027 Six-Year Improvement Program (SYIP) project and/or a RVTPO TIP project it will be evaluated as an addressed need. Effectively, any project with a UPC number will count within this overlap analysis.

For each overlap, project scopes are reviewed to determine if the project completely addresses the overlapping needs. In cases where some needs are addressed, the remaining need type will remain as a gap need (for example, if a corridor had transit access, bike access, and motor vehicle congestion needs, but the project is a roadway widening without bicycle accommodations or future transit – then only one need would be addressed).

- **Gap Need** – If a RVTP need does not overlap any programmed project, then it is considered a gap need. It is possible that a project in a nearby location (for example on the same corridor upstream or downstream from the need location may address a need. The RVTP team will evaluate these cases on a need by need basis.

The RVTP team will complete this analysis and align the gap needs with the results of the priority needs process to identify a subset of gap needs within each jurisdiction to focus attention on developing solutions. Once this alignment is complete, the results will be shared with each member jurisdiction in order to review the results and reach decisions on a set of priority gap needs. The priority gap needs will be the focus of the process to develop solutions.

The solutions process will consider prior programmed projects, planned projects (from the existing RVTPO constrained and vision list projects, and studies (for example, STARS or Project Pipeline). Where these recent and ongoing planning efforts address the priority gap need, the RVTP team will carry these forward into the next phase of developing and prioritizing projects.

In other cases, where there is no recent or ongoing planning effort addressing the priority gap need, the RVTP team will work from the common transportation solutions list developed in Step 1 through Step 3 to develop a set of options for further study to address the need. Where there is no obvious preferred solution, or additional study needs to be conducted, RVTP will identify these needs as opportunities for additional future analysis as part of the ongoing transportation planning process.



## Next Steps

The RVTP team will finalize the gap needs assessment and coordinate with members within the next few weeks for review and discussion on establishing a list of priority gap needs. Once there is agreement on the priority gap needs, the RVTP team will develop solutions for each priority gap need.

**TTC Action:** None.

**STAFF REPORT**

**TTC Meeting March 10, 2022**

**SUBJ: Recommendation on Draft FY23-28/29 Surface Transportation Block Grant (STBG) Financial Plan**

The RVTPO Policy Board annually reviews the need for adjustments to its existing STBG project allocations and every other year considers requests for new projects. The Board approved an adjustment to existing project allocations last month and this month will consider funding new projects. The candidate projects have been scored and prioritized by the TTC and the public has provided feedback on the draft investments.

The draft FY23-28/29 STBG Financial Plan is attached though updated FY28 amounts have not yet been received. The TTC is asked to review the draft financial plan and make a recommendation to the Policy Board. The Board will be taking action this month and those investment choices will be incorporated into the draft Six-Year Improvement Program which will be approved by the Commonwealth Transportation Board in June.

**Priority STBG investments for inclusion in the FY23-28/29 Plan:**

<b>Priority # by Ranking</b>	<b>Project Title:</b>	<b>STBG Investment under Consideration:</b>	<b>Project Description:</b>
1	I-581/U.S. 460 and Williamson Road Interchange Improvements	<b>\$2M conditional</b> STBG towards undefined project(s) if the remaining funds required are secured via SMART SCALE in June 2024.	Project(s) not yet defined; safety and congestion around these interchanges is currently being studied.
2	Orange Ave. (U.S. 460) – 11 <sup>th</sup> to 24 <sup>th</sup> St. Improvements	<b>\$5M conditional</b> STBG towards \$23M project if the remaining funds needed are secured via SMART SCALE in June 2024.	Modify or eliminate intersections to limit vehicle conflict points.
3	Orange Ave. and Williamson Rd. Intersection Improvements	<b>Available amount up to \$5M conditional</b> STBG towards \$7.6M project if the remaining funds needed are secured via SMART SCALE in June 2024. <b>Currently noted in the plan at \$4,452,660.</b>	Add turn lanes and install a signal at the NB off-ramp to eliminate the weave to 460EB.
4	I-581 at Exit 2 (Peters Creek Road) Interchange Improvements, Phase 1	<b>\$4,058,056 Committed</b>	Install a signal at the off-ramp to eliminate the weave to EB Peter's Creek Rd.

9	Glade Creek Greenway Phase 3 PE	<b>\$275,000 Committed</b>	Design off-road path for bicyclists and pedestrians between Washington Avenue/Pollard Street and Vinyard Park. Does not include construction.
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**Other potential investments should additional funds become available:**

<b>Priority # by Ranking</b>	<b>Project Title:</b>	<b>STBG Investment under Consideration:</b>	<b>Project Description:</b>
5	Roanoke River Greenway – East (Construction only)	\$7,618,754	Construct a 10' asphalt path along neighborhood streets and off-road for people walking or biking from the Roanoke River Greenway at Bennington Street to Tinker Creek Greenway at Underhill Avenue.
6	Route 419/Electric Road Study between Route 11/Apperson and Bower Road Projects	\$5,000,000	Project(s) not yet defined; capacity, safety, access, transit, and Transportation Demand Management is currently being studied.
7	Washington Avenue Corridor Improvement Study	\$150,000	Study to look at safety, access, congestion, and multimodal deficiencies.
8	West Main Street Pedestrian Improvements, Phase 3	\$3,016,962	Build sidewalk on the south side of West Main Street from the City of Salem to Alleghany Drive and on the north side of West Main Street from Daugherty Road to Technology Drive.
10	Walrond Drive Multimodal Improvements	\$4,447,452	Build a sidewalk on the north side of Walrond Drive between Plantation Road and Walrond Park.
11	Chaparral Drive Pedestrian Improvements	\$3,733,930	Build a sidewalk in front of Cave Spring High School from Purple Finch Rd. to Woodthrush Dr.

**TTC Action:**

Recommendation to the Policy Board on the FY23-28/29 STBG Financial Plan.

## Summary of Public Input on 2022 Roanoke Valley Transportation Investments: Surface Transportation Block Grant

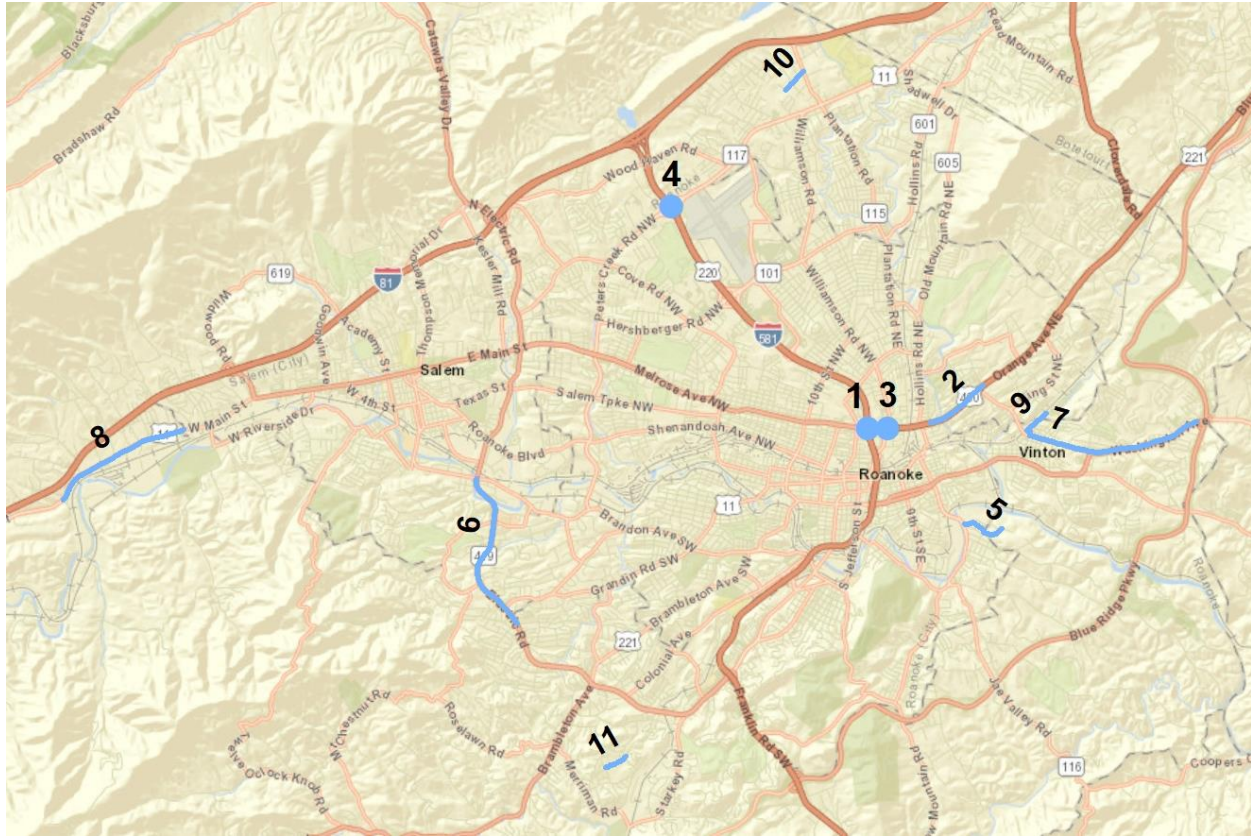
Public input was accepted on eleven new project requests for funding through the FY2023-2029 financial plan of the Surface Transportation Block Grant (STBG). The RVTPO Policy Board held a public comment period, and a survey to collect public input was available from February 10, 2022 to February 23, 2022. Public input was also accepted in the same survey on an adjustment to the FY2022-2027 STBG financial plan which considered additional funding for three existing projects; this information is not included in this summary.

The survey was promoted through:

- Blog post with the survey link on the RVARC website
- Emailed survey link to over 400 people who have taken an RVTPO survey, served on a committee, or participated in a workshop or meeting
- Survey link in an eblast to the media and to subscribers to the RVARC e-newsletter
- Facebook post on RVARC Facebook page
- Facebook post boosted to RVTPO zip codes
- Newspaper ads in the Roanoke Tribune and the Roanoke Times
- Shared by stakeholders including Roanoke County, Vinton, and the Roanoke Regional Chamber

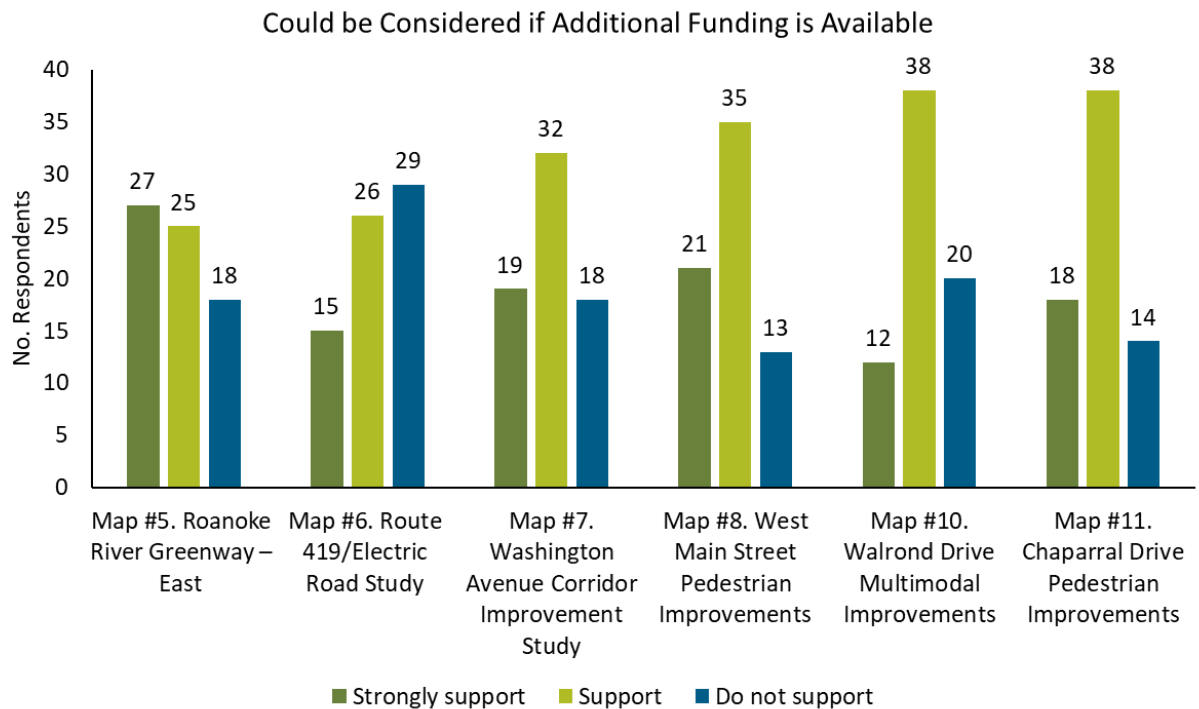
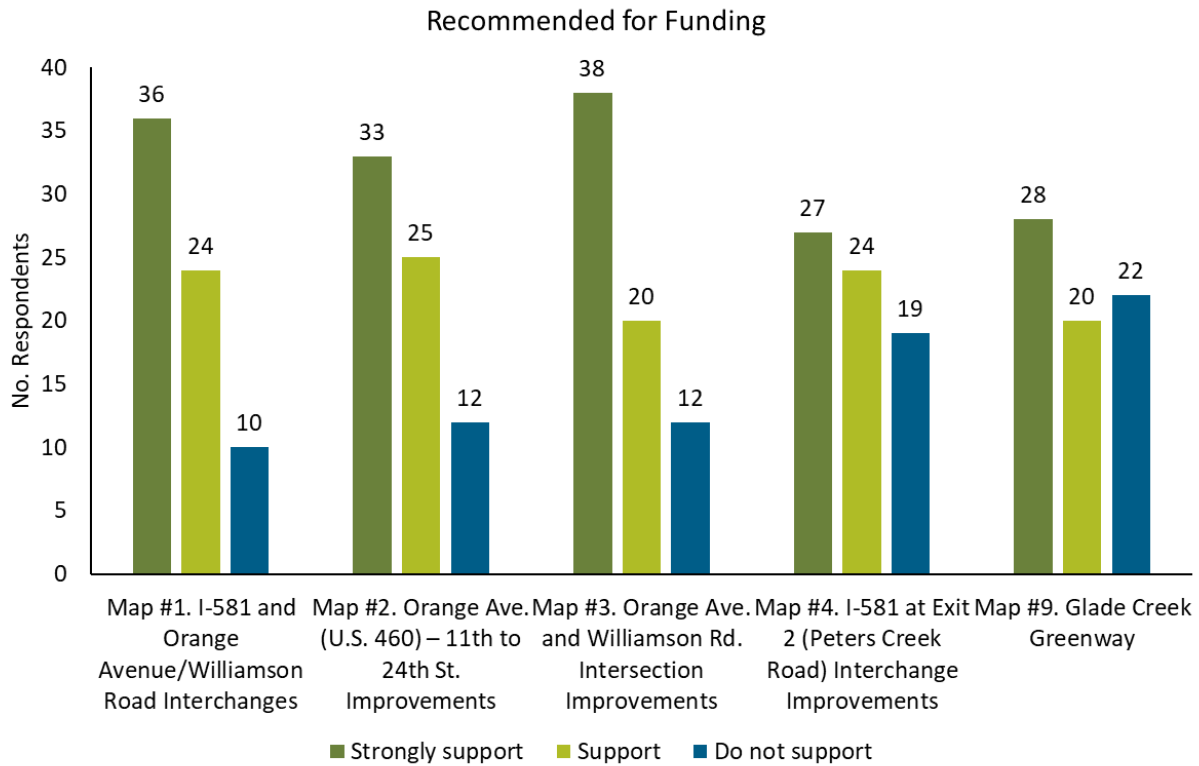
The survey introduction referred respondents to the RVARC website for an interactive map and more information. 80 people participated in the survey.

The survey asked respondents about their level of support for the investments under consideration for STBG funding and their level of support for investments that could be considered if additional funding becomes available. The funding requests, the project costs, and descriptions (if available) were included. The survey included the following map showing the locations of the projects and a [link to the draft financial plan](#).



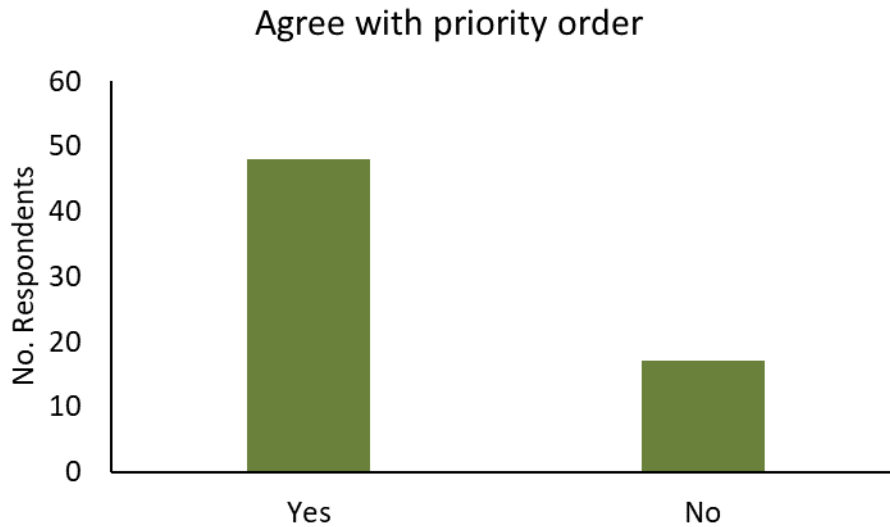
A majority of respondents supported or strongly supported all of the projects. In previous surveys, typically less than 20% of respondents do not support the proposed project investment. In the first part of the survey on the three existing projects (data not shown), an unusually high number of respondents opposed the project, and comments suggested this was due to the phrase “cost overruns”. This initial opposition may have influenced how respondents viewed the second part of the survey on the new projects. More than 20% did not support six of the eleven projects, including two of the projects recommended for funding:

- Map #4. I-581 at Exit 2 (Peters Creek Road) Interchange Improvements (27% did not support)
- Map #9. Glade Creek Greenway (31% did not support)
- Map #5. Roanoke River Greenway – East (26% did not support)
- Map #6. Route 419/Electric Road Study (41% did not support)
- Map #7. Washington Avenue Corridor Improvement Study (26% did not support)
- Map #10. Walrond Drive Multimodal Improvements (29% did not support)





The projects' priority order was determined by the scores the projects received. Priority #9, Glade Creek Greenway Phase 3, is being considered for funding above higher priorities because funding of this project will allow the Phase 4 Glade Creek Greenway project to be eligible for funding via a different source of funding (Transportation Alternatives) for which it would not otherwise be eligible due to a lack of connection with a destination since Phase 4 is contained within Vinyard Park.



Participants who did not agree with the priority order commented:

- #5 Roanoke River Greenway should be ranked last
- 3,4,9,5,11 then rest.
- A sidewalk at a school take priority over a greenway .
- Don't understand #4 Which ramp? Orange/Williamson is interstate onto 6-lane and will always be a mess, don't waste money on it.
- Focus on roads and sidewalks vs bike lanes.
- Greenway waste of money walk at a track. People learn to drive no problems at intersections.
- Greenways over neighborhood sidewalks? That should give us a clue as to a portion of what's wrong with today's world.
- I believe that the projects that are going to have sidewalks should be given higher priority. Especially #11 - ALL streets with a school should have sidewalks the entire length of the street.
- I would move #4 up to #2.
- Once again, need more info.
- Pedestrian access should be prioritized.
- Sidewalks are ALWAYS more important than road work because of SAFETY, CONVENIENCE, and walkability reducing car trips.
- Very worried that making the Orange Ave/Williamson Road intersection larger with more turn lanes will only make it less safe. No safe way to bike or walk through that intersection as is. Expanding that intersection should not be a priority. The Peters Creek interchange is an expensive solution to crashes that are primarily property damage and

non-serious injuries. Feels like a cheaper fix could be done and a full signal should not be a priority.

- While attractive, Greenways serve a relatively small number of people...and are not a safety priority.

Participants had these additional comments about the 2023-2029 STBG financial plan:

- Far more people use sidewalks to reach their jobs vs people using bike lanes that don't even pay attention to road laws. Ease of access to work should take priority over bike lanes.
- I cannot support anything for 5M dollars that's stated undecided.
- I would like to see more projects that include sidewalks and bike lanes. 419/Electric Rd, Brambleton Rd, Chaparral Dr, Merriman Rd - all need sidewalks and 419 / Brambleton needs bike lanes. Please consider these kinds of projects
- If you feel compelled to do "Orange Ave. (U.S. 460) and Williamson Rd. Intersection Improvement" then please create a safe and separated way to cross Orange Ave for people biking and walking somewhere. A Lick Run Greenway bridge would be my preference. A bigger, more complicated, intersection is just doubling down on a major barrier.
- Most in the Valley oppose more roundabouts in high traffic areas
- There is no sidewalk going up to Lucy Adison Middle School on 5th Street north of Salem, approximately. Very hilly and not much reaction time for drivers to spot children in the road.
- Would be nice to have running total for selections to prevent overspending of the available funds
- Would like to see some bike/ped safety projects in Botetourt.

Participants were invited to share any other comments or transportation problems:

- Bus service to Peters Creek Road for DMV access for underserved citizens.
- Enforce the removal of abandoned vehicles from streets/roads in Roanoke, Salem, Roanoke County. Provide bus service along the US 220 South corridor to alleviate traffic congestion. Restrict tractor-trailer and large trucks to right lane along US 220 South.
- Historically I have commented numerous times in the past on how important it is to prepare for and foresee the availability of Norfolk Southern's former Virginian Railway line between the New River Valley and the Roanoke Valley. I have urged that transportation planners in both valleys confer and come up with a plan to maximize use of this rail corridor in the likelihood that NS would decide it no longer needs two mainlines between the Valleys. Now what I predicted for several years has occurred, and the state of Virginia has acquired from NSD this line between Salem and Merrimac. The main justification for the purchase was to extend Amtrak service west to the NRV. But there would be little taxpayer or citizen return on this multi-million dollar investment running only one or two Amtrak trains daily. What we need now is a comprehensive study on the use of this line as a transit connection between the Valleys, with fast, frequent service. We have the SmartWay bus now, but it is inadequate and suffers reliability delays on I-81. In the future, to promote growth in both Valleys, we need a dependable, hourly service. The Virginian line serves South Yard in Roanoke, adjacent to the Carilion/Virginia Tech campus, and discussion now underway of the western



terminus of the line indicates a most probable location at the New River Valley Mall. Some people who work for Tech now have to drive to and from the Roanoke Campus, sometimes more than once a day, taking their chances on I-81. A safer, faster, and more reliable rail link is the key to future growth in this corridor and a way for Virginia to maximize the benefit of purchasing this line. Furthermore, transit oriented development in Roanoke and Montgomery Counties in places such as Bradshaw, Ironto, and Ellett Valley could help pay back the incremental investment in making this a high frequency transit link. One problem here, with this draft report where there is no mention of anything like this in Chapter 7, as well as other programs such as SmartScale, is that neither the Roanoke TPO nor the NRV MPO is excited about using a project choice or a funding opportunity for something that goes out of its jurisdiction. However, the benefits to both Valleys are so substantial that it behooves the two groups to cooperate and pursue a rigorous study of the engineering, energy, environmental and social costs and benefits of using this new state rail line to improve travel and commutation between the Valleys in the future.

- Look at solutions other than road construction. Would rather have more bus service and a train depot instead of signals and paving.
- Needs to better signage (or something) of Yield getting on 581 southbound at Hershberger while people are trying to get off the ramp. (crossing traffic) People getting OFF have the right of way vs getting on 581.
- Please keep working on 419 and 220 interchange.
- Sidewalk desperately needed from Mudlick Creek bridge on Grandin Rd to Garst Mill Rd and Brambleton Ave. intersection.
- Sidewalk extension from Kabuki restaurant on Franklin Rd to the Tanglewood area; Not pleased to be installing sidewalks in the county when the locality Roanoke County should have included those infrastructure improvements when residential construction occurred. Residents who choose to live in the suburbs should pay for their own additional infrastructure.
- SO MANY....
- There is no sidewalk going up to Lucy Adison Middle School on 5th Street north of Salem, approximately. Very hilly and not much reaction time for drivers to spot children in the road.
- Would like to see some bike/ped safety projects in Botetourt. Specifically connectivity between Ashley Plantation, Troutville Park, Greenfield Park, Daleville Town Center, to the Appalachian Trail, Carvins Cove, and the future Tinker Creek Greenway.

## Demographic

Demographic information was collected to determine if the participants' demographic characteristics are similar to those of the region. Participants were asked their zip code, race/ethnicity, household income, and age. Demographic information was provided by 84% of survey respondents.

Zip code information was used during the survey period to adjust advertising to reach zip codes that were under-responding relative to their proportion of the regional population. RVTPO standard practice is to target Facebook advertising to under-responding zip codes, but due to an error this was not done. Zip codes 24012, 24019, and 24153 are under-represented in this survey by 3% or more, and zip code 24019 is under-represented by 5%, which suggests that

other outreach methods are now reaching these zip codes as well as 24017, which have in the past consistently been under-represented by at least 5% without targeted Facebook advertising (Table 5).

Table 1. Zip code responses compared to population

Zip code	% population	% response	Difference
24012	11%	8%	3% under
24013	3%	8%	5% over
24014	7%	8%	1% over
24015	6%	17%	11% over
24016	3%	5%	2% over
24017	9%	7%	2% under
24018	14%	17%	3% over
24019	10%	5%	5% under
24153	14%	10%	4% under
24175	3%	2%	1% under
24179	7%	7%	Same
<b>Other RVTPO zip codes</b>	14%	7%	7% over

Race/ethnicity was provided by 67 participants (Table 6). Black or African American and Hispanic or Latino are underrepresented relative to the proportion of the population.

Table 2. Race/ethnicity of participants

Race/ethnicity	% population	% response	Difference from population
White	78%	84%	6% over
Black or African American	14%	6%	8% under
Hispanic or Latino	4%	1%	3% under

<b>Other</b>	4%	8%	4% over
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Age was provided by 65 participants (Table 7). Age categories from 18 to 35 years and 65 years and over are underrepresented relative to the proportion of the population. People 35 to 44 years are represented in proportion to the population and people 45 years to 64 years are overrepresented relative to the proportion of the population.

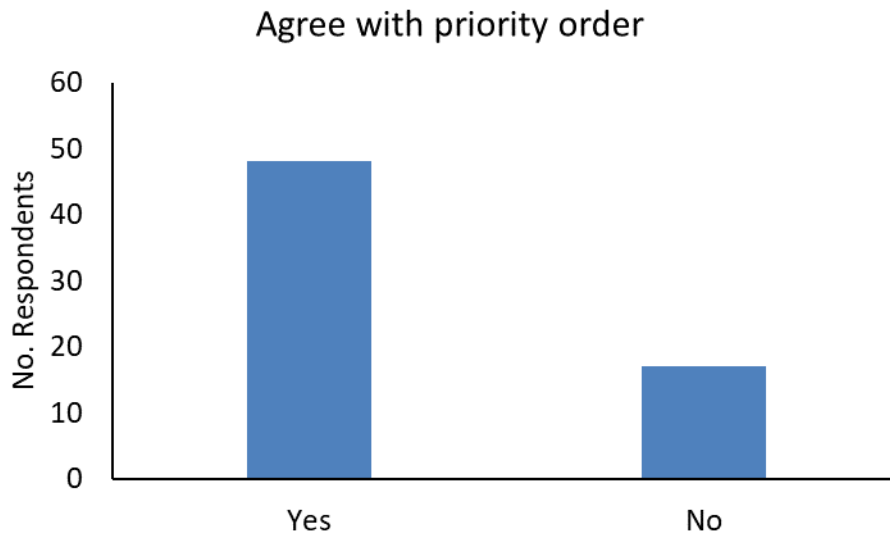
*Table 3. Age of survey participants*

<b>Age</b>	<b>% population</b>	<b>% response</b>	<b>Difference from population</b>
<b>18 to 24 years</b>	10%	2%	8% under
<b>25 to 34 years</b>	15%	8%	7% under
<b>35 to 44 years</b>	14%	22%	8% over
<b>45 to 54 years</b>	16%	15%	1% over
<b>55 to 64 years</b>	17%	22%	5% over
<b>65 years and over</b>	28%	32%	4% over

Household income was provided by 65 participants (Table 8). Four percent of participants have a household income of less than \$20,000. It is likely that people in poverty are underrepresented in this survey. (Census data household income brackets do not align with the income brackets in the survey.)

*Table 4. Annual household income of survey participants*

<b>Annual household income</b>	<b>% population</b>	<b>Annual household income</b>	<b>% response</b>
<b>Less than \$25,000</b>	20%	Less than \$20,000	2%
<b>\$25,000 to \$49,999</b>	21%	\$20,000 to \$44,999	17%
<b>\$50,000 to \$99,999</b>	32%	\$45,000 to \$89,999	25%
<b>\$100,000 to \$149,999</b>	15%	\$90,000 to \$139,000	26%
<b>\$150,000 or more</b>	12%	\$140,000 or more	31%



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65 years and over	28%	32%	4% over

Household income was provided by 65 participants (Table 8). Four percent of participants have a household income of less than \$20,000, and the RVTPO region has a poverty rate of 12%. It is likely that people in poverty are under-represented in this survey.

Table 8. Annual household income of survey participants

Annual household income	% response
Less than \$20,000	2%
\$20,000 to \$44,999	17%
\$45,000 to \$89,999	25%
\$90,000 to \$139,000	26%
\$140,000 or more	31%



**Adjustment to FY 2022-2027 Surface Transportation Block Grant (STBG) Financial Plan**  
Approved on February 24, 2022

Project	Project UPC	Conditionally Committed Funding	Committed Funding	Previous Allocations	FY22	FY23	FY24	FY25	FY26	FY27	
Roanoke River Greenway - Greenhill Park (Roanoke County) to Riverside Park (Salem)	97171		\$ 7,673,829	\$ 6,963,829	\$ 710,000	\$ -	\$ -	\$ -	\$ -	\$ -	
Roanoke River Greenway - Eddy Avenue Bridge (Salem)	106486		\$ 1,289,114	\$ 1,289,114	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Roanoke River Greenway - City of Salem line to Bridge Street	105439		\$ 4,363,800	\$ 4,363,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Roanoke River Greenway - Water Pollution Control Plant to the Blue Ridge Parkway	91191		\$ 1,505,371	\$ 1,505,371	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Plantation Road, Bicycle, Pedestrian and Streetscape Improvement Project	103607		\$ 1,679,503	\$ 1,679,503	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Tinker Creek Trail Extension	110101		\$ 4,816,301	\$ 2,803,064	\$ 938,695	\$ 583,448	\$ 433,240	\$ 57,854	\$ -	\$ -	
Bus Replacement and Rebuild Program	T18675/ DRPT		\$ 13,622,784	\$ 9,618,071	\$ 1,955,439	\$ 2,049,274	\$ -	\$ -	\$ -	\$ -	
Garden City Trail Connection	106265		\$ 200,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Walnut Avenue Bicycle and Pedestrian Accommodations (5th Street to City/Town limit)	111649		\$ 2,068,142	\$ 1,446,282	\$ 384,112	\$ 237,748	\$ -	\$ -	\$ -	\$ -	
Route 419/U.S. 220 Diverging Diamond Interchange	115460		\$ 5,731,866	\$ 1,736,198	\$ 535,198	\$ 87,225	\$ 1,098,627	\$ 1,223,223	\$ 1,051,395	\$ -	
Roanoke River Greenway through Explore Park	113567		\$ 3,020,308	\$ 431,678	\$ 384,378	\$ 393,937	\$ 1,810,315	\$ -	\$ -	\$ -	
Walnut Avenue Bicycle and Pedestrian Accommodations (W. Lee Avenue to 1st Street)	113565		\$ 417,610	\$ 405,610	\$ 12,000	\$ -	\$ -	\$ -	\$ -	\$ -	
Route 220 at International Parkway Improvements	115457		\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Starkey Road/Buck Mountain Road Intersection Improvements	113144		\$ 2,098,115	\$ -	\$ 30,327	\$ 778,090	\$ 641,759	\$ 647,939	\$ -	\$ -	
Elizabeth Greenway	113566		\$ 1,104,400	\$ 191,068	\$ -	\$ 913,332	\$ -	\$ -	\$ -	\$ -	
I-581 Exit 2 Interchange Study	113570		\$ 190,000	\$ 190,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
New Downtown Transit Transfer Center - Real-Time Transit Passenger Information (RTPi) Project	TBD		\$ 400,000	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Route 220 Superstreet and Access Management	T24740		\$ 924,000	\$ -	\$ -	\$ -	\$ 735,389	\$ 188,611	\$ -	\$ -	
Orange Market Park and Ride/Parking Lot Improvements	T24579		\$ 343,573	\$ 343,573	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Route 419 Streetscape Improvements, Phase 2	119462		\$ 4,347,150	\$ -	\$ -	\$ -	\$ 194,193	\$ 1,616,639	\$ 2,358,948	\$ 177,370	
Roanoke River Greenway - East	119666		\$ 710,000	\$ 710,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Aviation Drive/Valley View Blvd. Pedestrian Improvements	119555		\$ 131,332	\$ -	\$ -	\$ -	\$ 125,000	\$ 6,332	\$ -	\$ -	
Valleypointe Parkway Realignment	119468		\$ 2,500,000	\$ -	\$ -	\$ -	\$ 100,000	\$ 692,293	\$ 479,769	\$ 1,227,938	
Gus Nicks Boulevard Pedestrian/Bicycle Crossing	119911		\$ 403,912	\$ 403,912	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Greenway Connection - Riverland Road	119586		\$ 975,568	\$ 645,421	\$ 330,147	\$ -	\$ -	\$ -	\$ -	\$ -	
Oak Grove Streetscape Improvements - Crosswalk	T24550		\$ 218,748	\$ 218,748	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Route 460 (Orange Ave) Improvements near Blue Hills Drive	119464		\$ 676,720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 676,720	
Route 460 (Orange Ave) Improvements at King Street	119461		\$ 550,280	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 550,280	
Route 460 at West Ruritan Road Intersection Improvements	119450		\$ 785,549	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 785,549	
Route 460 Intersections from Carson Road to Huntridge Road	119449		\$ 427,803	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 427,803	
Route 460 and Alternate Route 220 Intersection Improvements	120611		\$ 2,544,860	\$ -	\$ -	\$ 486,592	\$ 325,000	\$ 740,761	\$ 992,507	\$ -	
<b>Total Funding Allocated:</b>			\$ 70,368,839	\$ 40,193,443	\$ 5,280,296	\$ 5,529,646	\$ 5,463,523	\$ 5,173,652	\$ 4,882,619	\$ 3,845,660	
<b>Total STBG Funding Available:</b>			\$ 86,154,555	\$ 40,193,443	\$ 5,280,296	\$ 5,804,646	\$ 5,920,739	\$ 6,021,391	\$ 6,123,755	\$ 6,227,859	
<b>Balance Entry (UPC 104126):</b>			\$ -	\$ -	\$ -	\$ 275,000	\$ 457,216	\$ 847,739	\$ 1,241,136	\$ 2,382,199	
										<b>Remaining through FY27:</b>	<b>\$ 5,203,290</b>

FY 2023-2028/29 Surface Transportation Block Grant (STBG) Financial Plan  
Draft March 2, 2022

Project	Project UPC	Conditionally Committed Funding	Committed Funding	Previous Allocations	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Project Updates/ Other Notes
Roanoke River Greenway - Greenhill Park (Roanoke County) to Riverside Park (Salem)	97171		\$ 7,673,829	\$ 7,673,829	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Roanoke River Greenway - Eddy Avenue Bridge (Salem)	106486		\$ 1,289,114	\$ 1,289,114	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Complete, awaiting closeout.
Roanoke River Greenway - City of Salem line to Bridge Street	105439		\$ 4,363,800	\$ 4,363,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Complete, awaiting closeout.
Roanoke River Greenway - Water Pollution Control Plant to the Blue Ridge Parkway	91191		\$ 1,505,371	\$ 1,505,371	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Plantation Road, Bicycle, Pedestrian and Streetscape Improvement Project	103607		\$ 1,679,503	\$ 1,679,503	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Complete, awaiting closeout.
Tinker Creek Trail Extension	110101		\$ 4,816,301	\$ 3,741,759	\$ 583,448	\$ 433,240	\$ 57,854	\$ -	\$ -	\$ -	\$ -	
Bus Replacement and Rebuild Program	T18675/DRPT		\$ 13,622,784	\$ 11,573,510	\$ 2,049,274	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Garden City Trail Connection	106265		\$ 200,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Complete, awaiting closeout.
Walnut Avenue Bicycle and Pedestrian Accommodations (5th Street to City/Town limit)	111649		\$ 2,068,142	\$ 1,830,394	\$ 237,748	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Route 419/U.S. 220 Diverging Diamond Interchange	115460		\$ 5,731,866	\$ 2,271,396	\$ 87,225	\$ 1,098,627	\$ 1,223,223	\$ 1,051,395	\$ -	\$ -	\$ -	
Roanoke River Greenway through Explore Park	113567		\$ 3,020,308	\$ 816,056	\$ 393,937	\$ 1,810,315	\$ -	\$ -	\$ -	\$ -	\$ -	
Walnut Avenue Bicycle and Pedestrian Accommodations (W. Lee Avenue to 1st Street)	113565		\$ 417,610	\$ 417,610	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Route 220 at International Parkway Improvements	115457		\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Starkey Road/Buck Mountain Road Intersection Improvements	113144		\$ 2,098,115	\$ 30,327	\$ 778,090	\$ 641,759	\$ 647,939	\$ -	\$ -	\$ -	\$ -	
Elizabeth Greenway	113566		\$ 1,104,400	\$ 191,068	\$ 913,332	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
I-581 Exit 2 Interchange Study	113570		\$ 190,000	\$ 190,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
New Downtown Transit Transfer Center - Real-Time Transit Passenger Information (RTPi) Project	TBD		\$ 400,000	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Route 220 Superstreet and Access Management	T24740		\$ 924,000	\$ -	\$ -	\$ 735,389	\$ 188,611	\$ -	\$ -	\$ -	\$ -	
Orange Market Park and Ride/Parking Lot Improvements	T24579		\$ 343,573	\$ 343,573	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Route 419 Streetscape Improvements, Phase 2	119462		\$ 4,347,150	\$ -	\$ -	\$ 194,193	\$ 1,616,639	\$ 2,358,948	\$ 177,370	\$ -	\$ -	
Roanoke River Greenway - East	119666		\$ 710,000	\$ 710,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Aviation Drive/Valley View Blvd. Pedestrian Improvements	119555		\$ 131,332	\$ -	\$ -	\$ 125,000	\$ 6,332	\$ -	\$ -	\$ -	\$ -	
Valleypointe Parkway Realignment	119468		\$ 2,500,000	\$ -	\$ -	\$ 100,000	\$ 692,293	\$ 479,769	\$ 1,227,938	\$ -	\$ -	
Gus Nicks Boulevard Pedestrian/Bicycle Crossing	119911		\$ 403,912	\$ 403,912	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Greenway Connection - Riverland Road	119586		\$ 975,568	\$ 975,568	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Oak Grove Streetscape Improvements - Crosswalk	T24550		\$ 218,748	\$ 218,748	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Route 460 (Orange Ave) Improvements near Blue Hills Drive	119464		\$ 676,720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 676,720	\$ -	\$ -	
Route 460 (Orange Ave) Improvements at King Street	119461		\$ 550,280	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 550,280	\$ -	\$ -	
Route 460 at West Ruritan Road Intersection Improvements	119450		\$ 785,549	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 785,549	\$ -	\$ -	
Route 460 Intersections from Carson Road to Huntridge Road	119449		\$ 427,803	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 427,803	\$ -	\$ -	
Route 460 and Alternate Route 220 Intersection Improvements	120611		\$ 2,544,860	\$ -	\$ 486,592	\$ 325,000	\$ 740,761	\$ 992,507	\$ -	\$ -	\$ -	
I-581/U.S. 460 and Williamson Road Interchange Improvements	TBD	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 320,147	\$ 1,445,553	\$ 234,300	\$ -	Leverage for TBD project (total cost unknown) in SMART SCALE Round 5
Orange Ave. (U.S. 460) - 11th to 24th St. Improvements	TBD	\$ 5,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,161,447	\$ 838,553	Leverage for \$23M project in SMART SCALE Round 5, previously unsuccessful in SMART SCALE Round 4.
Orange Ave. (U.S. 460) and Williamson Rd. Intersection Improvement	TBD	\$ 4,452,660	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,452,660	Leverage for \$7.6M project in SMART SCALE Round 5.
I-581 at Exit 2 (Peters Creek Road) Interchange Improvements, Phase 1	TBD		\$ 4,058,056	\$ -	\$ -	\$ 457,216	\$ 847,739	\$ 920,989	\$ 936,646	\$ 895,466	\$ -	Committed funds to be used as leverage in SMART SCALE Round 5 toward \$16.9M Option 3 project or build Option 1 if Option 3 is unsuccessful in SMART SCALE.
Glade Creek Greenway, Phase 3 PE	TBD		\$ 275,000	\$ -	\$ 275,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Included by Board on 1-27-22 for public comment.
<b>Total Funding Allocated:</b>			\$ 86,154,555	\$ 45,473,739	\$ 5,804,646	\$ 5,920,739	\$ 6,021,391	\$ 6,123,755	\$ 6,227,859	\$ 5,291,213	\$ 5,291,213	
<b>Total STBG Funding Available:</b>			\$ 86,154,555	\$ 45,473,739	\$ 5,804,646	\$ 5,920,739	\$ 6,021,391	\$ 6,123,755	\$ 6,227,859	\$ 5,291,213	\$ 5,291,213	Reflects additional funding from state revenues, IJA through FY27 as notified on 2-2-22. FY28 updated amount not yet received at the time of publishing.
<b>Balance Entry (UPC 104126):</b>			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
										\$ -		Remaining through FY28:
										\$ -		Remaining through Year 7 (FY29):

**STAFF REPORT**  
**TTC Meeting March 10, 2022**  
**SUBJ: Annual Review of the Traffic Congestion Management Process**

The Traffic Congestion Management Process adopted by the Roanoke Valley Transportation Planning Organization in 2020 states that RVARC will produce an annual Traffic Congestion Management Process report to:

- Document the progress of each strategy, monitoring the effects of strategies on traffic congestion,
- Justify changing, eliminating, or adding strategies,
- Showcase successes and identify missed opportunities,
- Assess the impact of strategies on traffic congestion and monitor regional traffic congestion trends, and
- Review the balance of traffic congestion management strategies with other transportation goals.

Attachment #1 “Congestion Management Process Implementation” fulfills this requirement.

**TTC Action:**

None.

**STAFF REPORT**  
**TTC Meeting March 10, 2022**  
**SUBJ: Review of Draft FY23 Unified Planning Work Program**

Every year, the RVTPO Policy Board approves a Unified Planning Work Program (UPWP) to identify the transportation planning activities the RVTPO will undertake in the next fiscal year. The focus for next year is on the federally required and state-related items. The Regional Commission is revamping its work program process and will be utilizing the RVTPO's plans/studies/programs to guide transportation work next fiscal year. The Regional Commission's budgeting process is underway, and dollar amounts will be added to the final draft that will be shared in April. At that time, the TTC will be asked to make a recommendation to the RVTPO Policy Board.

**TTC Action:**

Provide feedback on the planning activities in the Draft FY23 UPWP.