



December 1, 2022

MEMORANDUM

TO: Members, Transportation Technical Committee
FROM: Cristina Finch, AICP, LEED AP, Secretary to the Transportation Technical Committee
SUBJ: December 8, 2022 TTC Meeting/Agenda

The December meeting of the Transportation Technical Committee (TTC) will be held Thursday, December 8, 2022 at 1:30 p.m. at the Roanoke Valley-Alleghany Regional Commission office (Top Floor Conference Room), 313 Luck Avenue, SW, Roanoke, VA.

Please Note: RVARC's elevator is under maintenance and currently not in operation. Please contact Bryan Hill, RVARC's ADA Coordinator, at bhill@rvarc.org to request remote participation if you need ADA accommodations. We apologize for the inconvenience!

TTC AGENDA

1. Welcome, Call to Order *Chair Sexton*
2. Roll Call (including consideration of remote participation) *Chair Sexton*
3. **Action Requested:** Approval of the Consent Agenda items: *Chair Sexton*
 - A. Approval of the Agenda
 - B. Action on the November 10, 2022 TTC Minutes, pp. 2 – 25
4. Chair's Remarks *Chair Sexton*
5. Continued Development of Draft Roanoke Valley Transportation..... *Cristina Finch*
Plan (RVTP) -2045 Update, pp. 26 – 30 and Attachment #1
 - A. Summary of Public Comments.....*Elizabeth Elmore & Alison Stinnette*
 - B. Benefits and Viability Analysis of Draft Priority..... *David Jackson*
Projects to Pursue *Cambridge Systematics*
 - C. Summary of Feedback on Draft RVTP.....*Bryan Hill*
Amendments and Adjustment Process
6. Other Business
7. Comments by TTC Members and/or Citizens
8. Adjournment (by 3:30 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 November meeting of the Transportation Technical Committee was held on Thursday, November 10, 2022 at 1:30 p.m. at the Roanoke Valley-Alleghany Regional Commission, 313 Luck Avenue, SW, Roanoke, VA.

1. WELCOME, CALL TO ORDER

Chair Sexton 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.

VOTING MEMBERS PRESENT

Mariel Fowler	County of Bedford
Jonathan McCoy	County of Botetourt
Megan Cronise	County of Roanoke
Dwayne D'Ardenne	City of Roanoke
Josh Pratt (<i>Alt. for Crystal Williams</i>)	City of Salem
Anita McMillan	Town of Vinton
Cody Sexton, <i>Chair</i>	Town of Vinton
William Long	Greater Roanoke Transit Company
Frank Maguire, <i>Vice Chair</i>	Roanoke Valley Greenway Commission
Michael Gray	Virginia Dept. of Transportation - Salem District
Daniel Wagner (<i>via zoom</i>)	Virginia Dept. of Rail and Public Transportation

VOTING MEMBERS ABSENT

Nick Baker	County of Botetourt
Dan Brugh	County of Montgomery
Will Crawford	County of Roanoke
Wayne Leftwich	City of Roanoke
Chuck Van Allman	City of Salem
Nathan Sanford	Unified Human Serv. Transp. System (RADAR)
Kyle Kotchou	Roanoke-Blacksburg Regional Airport

NON-VOTING MEMBERS ABSENT

Kevin Jones	Federal Highway Administration
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RVARC Staff Present: Cristina Finch, Bryan Hill, Alison Stinnette, Jonathan Stanton, Andrea Garland, and Virginia Mullen.

Others Present: David Jackson (via zoom), Cambridge Systematics.

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. November 10, 2022 TTC Meeting Agenda

B. October 13, 2022 TTC Minutes

Ms. Cronise submitted via email the following edits to page 1 of the Minutes under "Voting Members Present":

Megan Cronise (~~via zoom~~)

County of Roanoke

Dwayne D'Ardenne (~~via zoom~~)

City of Roanoke

Motion: by Frank Maguire to approve consent agenda items (A), as presented & (B), as amended; seconded by Dwayne D'Ardenne.

TTC Action: Motion carried unanimously.

4. **CHAIR REMARKS**

Chair Sexton was sad to announce that Jackie Pace passed away on Tuesday, November 8th. Visitation and funeral services will be held on Friday, November 11th at Oakey's North Chapel (6732 Peters Creek Road, Roanoke VA 24019).

5. **DRAFT ROANOKE VALLEY TRANSPORTATION PLAN UPDATE**

A. Draft Project Prioritization Methodology to Meet Fiscal Constraint

Mr. David Jackson, Cristina Finch and Bryan Hill presented an update on the Draft Roanoke Valley Transportation Plan - 2045 Update. (The PowerPoint presentation is included with the Minutes).

Chair Sexton asked in terms of timing what is the value of doing the benefits analysis on the eighteen projects from the "RVTPO Priority Projects to Pursue" (handout Ms. Finch distributed at the meeting and included with the Minutes) right now (before the initial SMART SCALE Round 5 funding scenario is known). He noted he would like to avoid rework in this process. Ms. Finch replied that the benefits evaluation would help with project prioritization for funding and potentially swapping projects if desired.

Chair Sexton asked what happens when a project makes it into the initial funding scenario, but our regional analysis shows it as a lower priority. Would that mean the project would not get funded? Michael Gray asked what happens if six months from now funding becomes available for a project not on the priority list. Would it be addressed with an amendment process so the project could be added to the list? Mr. Gray explained that sometimes there are projects with very low benefit and very low cost that score better than high benefit high-cost projects in SMART SCALE. How would the process work in this case? Ms. Finch replied that ultimately the RVTPO approves the use of federal funds. Ms. Finch invited TTC members to provide staff with guidance on if it is worth doing the benefits evaluation on the eighteen projects.

Chair Sexton asked about fiscal constraint being incorrect if we get fewer than anticipated projects. Ms. Finch explained fiscal constraint for funded projects is what is awarded.

Chair Sexton asked Mr. Jackson if it is presumed that only projects that would likely have the political support needed to move forward would make it through this process? What kind of analysis is being done on projects that would be a good idea but our local board or our regional board may not support them? Mr. Jackson replied that a lot of times the viability evaluation comes before the benefits assessment. There is the presumption that any of the projects going through the benefit assessment have the support by the region in total or the localities.

Ms. Finch began a discussion to review the projects to pursue that are not currently seeking SMART SCALE Round 5. The following projects were discussed:

- “Virginia Tech Carilion Access Improvements”- A concept verification was done by WRA. Next step is to do an interchange access report. There is a cost range for the project done by WRA consultants. Remove “Access Management” solutions and limit from and limit to - should be Franklin Road.
- “Brambleton Avenue Bicycle and Pedestrian Improvements” - A preliminary engineering report for this project has not been done yet. Cost estimate is very general.
- “Campbell Avenue Bicycle and Pedestrian Improvements”- There is a preliminary engineering report for this project. It was suggested “ped safety” to be added to the need category. Possible SMART SCALE Round 6 application.
- “Chaparral Drive Pedestrian Improvement” - This project was identified from one citizen’s identified need. There is a concept plan which utilized survey materials from the recent upgrade to the high school. Due to the cost, TA is not a realistic funding option, and it was not successful in STBG previously. The County will not be pursuing this project at this moment.
- “Church Avenue Streetscape”- There is no preliminary engineering for this project though converting it from one to two-way and adding bike accommodations is possible. It was suggested to add “bicycle safety” and “signal upgrades at intersections.”
- “Cove Road Streetscape”- It was suggested to add “bike safety” to the need category.
- “East Main Street Phase II”- This project would become phase 3. More information will be provided from Salem. Cost estimate will be to be re-addressed.

It was also suggested the I-81 Widening Project Southbound from Exit 137 to Exit 128 be added to this list. The primary need categories are to improve congestion and auto safety. There was discussion about some of the projects not having a clearly defined scope or cost estimate and if they instead belong in the plan on the priority regional needs list while the

scope or cost is still being developed. A concern about removing projects off the list was also expressed.

B. Draft Amendment/Adjustment Process

Mr. Bryan Hill updated members on the RVTP Draft Amendment/Adjustment Process (the PowerPoint presentation is included in the Minutes). Mr. Hill noted he will be emailing the draft and asked members to provide comments by November 23rd.

Ms. Finch acknowledged the sliding scale for cost estimates provided in the presentation indicates a flexibility in cost estimates that was a concern in the previous conversation related cost estimates for Priority Projects to Pursue. Mr. Gray noted the importance of the cost estimate when considering if it would end up being put out for public comment one or more times due to cost estimate increases. Ms. Finch noted the importance of the members' comfort level with the project scopes and estimates when considering which projects to include in the priority projects list.

6. OTHER BUSINESS

No other business was discussed.

7. COMMENTS BY MEMBERS AND / OR CITIZENS

Ms. Finch announced that the Regional Commission is hiring a Transportation Planner, more information can be obtained at [Jobs/Internships | RVARC](#).

8. ADJOURNMENT

The meeting was adjourned at 3:30 p.m.

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

Roanoke Valley Transportation Plan (RVTP) Update

RVTP Review

presented to
Transportation Technical Committee

presented by
RVTPO, Cambridge Systematics, Inc.



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Agenda

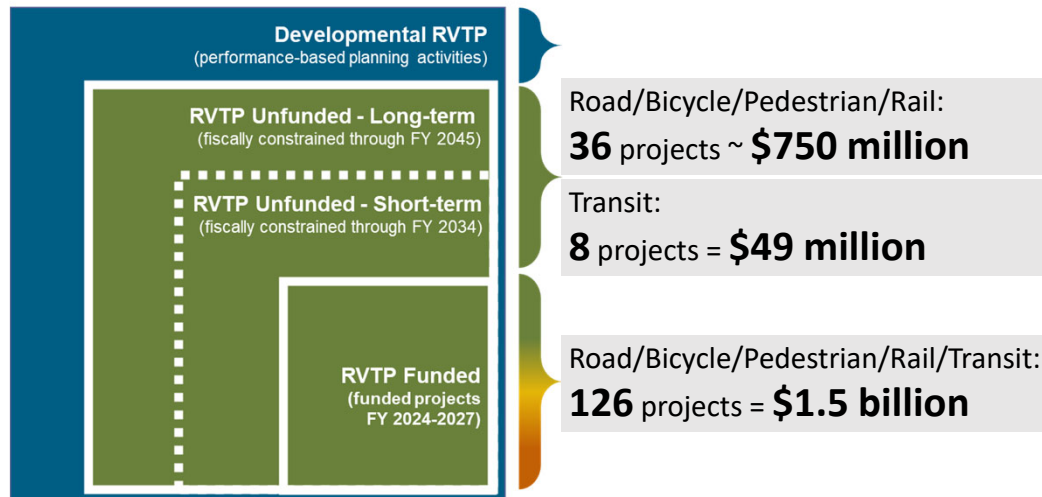
- **Constraint**
 - RVTP Financial Plan review
 - Fiscal constraint – funding assumptions
 - Actual constraints by funding program
- **Project prioritization**
- **Priority projects to pursue review**
 - Discuss scope and benefits
 - Discuss project readiness, including cost estimate source and assumptions, and transportation solutions included

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RVTP Financial Plan

From Planning to Programming



3



RVTP Financial Plan

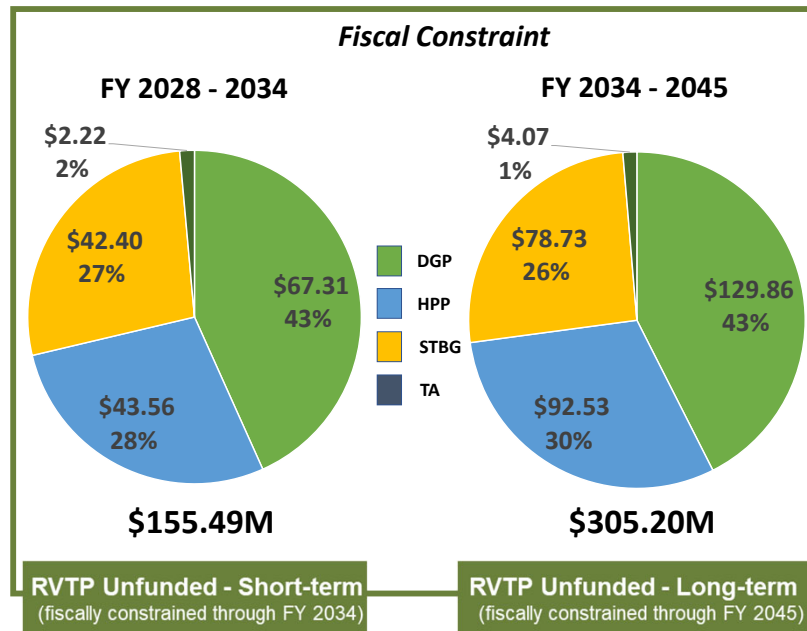
From Planning to Programming



4



Fiscal Constraint RVTP Financial Plan



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Fiscal Constraint RVTP Financial Plan

Fiscal Constraint by Funding Program	Short Term Anticipated Allocations (FY28-FY34)	Long Term Anticipated Allocations (FY35-FY45)	Draft RVTP Totals
Total Fiscal Constraint (New Construction funded by DGP, HPP, STBG, TA)	\$155,494,716	\$305,199,471	\$460,694,187
Based on the FY 2021 – 2026 Six-Year Financial Plan (SYFP), modified for the COVID-19 update and the state revenue estimates available in December 2020. Does not include the estimated impacts on funding from the Bipartisan Infrastructure Law through 2045 within RTPO.			
Total Draft RVTP Project Cost	\$468,589,853	\$282,000,000	\$750,589,853
Based on SMART SCALE Round 5 application submitted costs and existing cost estimates for other priority projects to pursue, in some cases not including potential ROW costs.			
Difference (Fiscal Constraint – RVTP Project Cost)	-\$313,095,137	\$23,199,471	-\$289,895,666

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Program Constraint

RVTP Financial Plan

Actual Constraint by Funding Program

- **SMART SCALE:** limit of 4 applications each for RVTPO, localities, transit agencies (64 application slots over SS 6 & 7)
- **STBG:** no greater than 2-years worth of funding for any one project = \$12M
- **TA:** limited funding pot = ~\$600k every 2 years, 20% match
- **Other Discretionary:** amount depends on source, 20% match
- **Transit:** like TA - formula for 5307, 5339, 5310; State/Local and Farebox & Other Revenues

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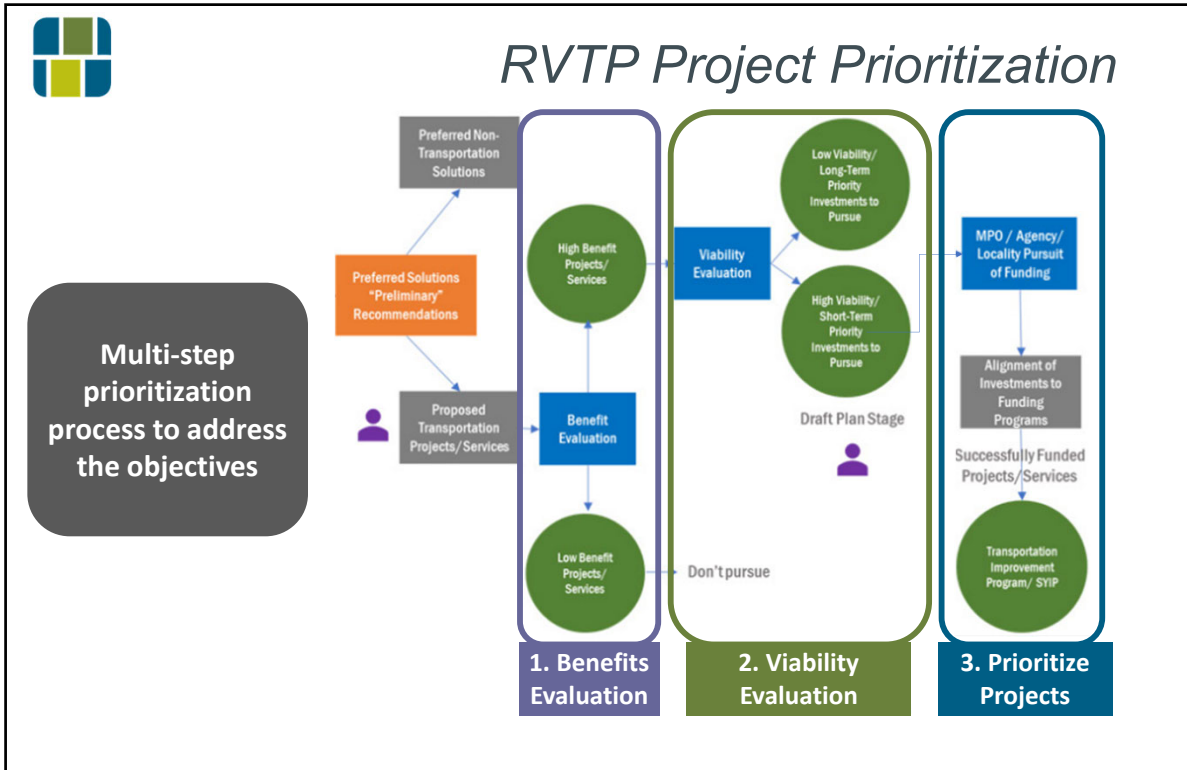
RVTP Project Prioritization

Objectives

1. Consider anticipated fiscal constraint and comply with requirements
2. Inform decisions on Priority Projects to Pursue for future rounds of SMART SCALE, STBG, TA, Other Discretionary, and Transit funding
3. Establish regional buy-in on use of federal funds for eligible investments
4. Improve and accelerate the process for advancing concepts and solutions addressing regional priority needs into project scopes ready to compete for funding

Meeting these objectives is consistent with RVTPOs commitment to an ongoing performance-based planning and programming process

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RVTP Project Prioritization

1. Benefit Evaluation *(qualitative)*

- Evaluate projects based on their ability to positively support meeting the region's transportation goals and objectives

Vision	The Roanoke Valley's seamless regional multimodal transportation system is safe, cost-effective, environmentally conscious, well-maintained and reliable, accessible for all users, and promotes the economic vitality of the community.						
	Provide a safe and secure transportation system	Enable reliable mobility	Ensure convenient and affordable access to destinations	Foster environmental sustainability	Maintain and operate an efficient and resilient transportation system	Support economic vitality	Promote equitable transportation investments
Unfunded Projects	34	13	32	25	20	17	32
	\$543.5	\$368.5	\$658.8	\$387.4	\$296.0	\$489.2	\$688.6
	74%	50%	89%	52%	40%	66%	93%

Note: Unfunded project totals (millions) represent the sum of all projects considered to support each goal, not the cost component of each project supporting a particular goal. For example, the total cost of a single roadway widening project could be included in the safety goal, the reliable mobility goal, and the economic vitality goal. The results of this comparison are intended to show the balance of unfunded projects in addressing the RVTP goals.

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RVTP Project Prioritization

1. Benefit Evaluation *(quantitative)*

- **Evaluate projects based on their ability to generate benefits** that advance the region's transportation goals and objectives
 - Benefit scoring criteria will center around performance measures that are consistent with RVTP objectives, utilize existing data sources and tools, and are transparent to implement
 - Rely on a simple and familiar combination of quantitative and qualitative measures
 - RVTP staff will coordinate with TTC members to determine "high benefit" projects and services
 - Projects or services considered low benefit will not be pursued for funding and move into the Developmental RVTP for further study

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RVTP Project Prioritization

2. Viability Evaluation

- **Focuses on high benefit projects or services that are the best candidates** to submit for funding consideration as priority projects to pursue
 - A "viable" project or service is one that has been studied and developed to the level of detail that is required for competitive funding applications
 - Criteria could include topics like project readiness, cost, right of way sufficiency, funding likelihood, implementation timeframe, coordination with other projects, or regional and local support
 - Criteria are qualitative and require a careful review of each candidate high-benefit project based on a standard level of scope and costing detail

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RVTP Project Prioritization

2. Viability Evaluation

- **Funding Eligibility** – comparison to key funding sources based on project cost and scope
 - SMART SCALE – HPP or DGP
 - STBG
 - TA
 - Other Federal discretionary grants
- **Three outcomes** –
 - Eligible likely (EL) - Project cost/scope fit into program standards
 - Eligible unlikely (EU) - Project cost/scope do not fit into program standards
 - Ineligible (I)

Helps assess potential and position project in advance of future grant cycles

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RVTP Project Prioritization

3. Prioritized Projects & Fiscal Constraint

- **“High Benefit” and “High Viability” projects and services become Priority Projects to Pursue**
 - Priority Projects to Pursue can be ranked in order of cost/benefit score to determine the order in which the projects or services should be pursued for funding (for example, next ten years versus following ten years)
 - Useful insight to regional discussions on future grant application strategy and decisions
 - “Low Viability or Low Benefit” projects and services remain in the Developmental RVTP (and likely need to be studied in greater detail, further developed before they can be submitted for funding consideration)

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RVTP Project Prioritization SMART SCALE 5 & Other Priority Projects

18 SS5 Apps & 18 others totaling ~ \$420 million in Draft RVTP

- Address priority gap needs
- Support meeting multiple goals and objectives
- Varied project sources, status, cost assumptions, benefits, etc.
- Enough project detail to:
 - Conduct basic quantitative benefits analysis (by Dec. 2022)
 - Review funding eligibility
- **Uncertain project details to review viability**
 - **What are potential project benefits?**
 - **What are project readiness considerations?**

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RVTP Project Prioritization Next Steps

Review the 18 projects (by December TTC)

- **Conduct initial benefits evaluation based on existing measures**
 - Safety
 - Reliability
 - Asset condition
 - Other measures addressing other RVTP goals and objectives pending
- **Conduct initial viability evaluation based on project insights**
- **Reach initial conclusions on potential projects to advance for future grant cycles in 2023 and beyond**
 - First discussion in continuous process to vet and position projects

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Locality	RVTPOTitle	Street	Limit_From	Limit_To	Description	Primary Solution	Secondary Solution	Third Solution	Fourth Solution	Fifth Solution	Primary Need Category	Secondary Need Category	Third Need Category	RVTP_NIDs	Total Cost Estimate	Discretionary Federal/State Grant (DFG) - List Name	Smart Scale DGP Federal	Smart Scale HPPP Federal	TA Total	STBG Total
City of Roanoke	Virginia Tech Carilion Access Improvements	U.S. 220	U.S. 220	Jefferson St./Reserve Ave.	Provide more direct access from U.S. 220 to VTCRI campus.	Access Management	Interchange Reconfiguration				Access (non-transit)			N_2062_T	\$120,000,000	Private funding, IJIA Programs	EU	EU	I	EU
City of Roanoke	Brambleton Avenue Bicycle and Pedestrian Improvements	Brambleton Avenue	2300 Block of Brambleton Avenue	Overland Road	Construct bike lanes and a sidewalk on both sides of Brambleton Avenue from Carilion Clinic traffic signal (former Shenandoah Building) to Overland Road.	New Sidewalk	New Bike Lane				Safety (ped)	Safety (bike)		N_69_2_P_S N_892_B_S	\$15,000,000	EU	EL	EU	EU	EU
City of Roanoke	Campbell Avenue Bicycle and Pedestrian Improvements	Campbell Avenue	Tinker Creek	Williamson Road (Downtown)	Streetscape improvements would consist of sidewalk, curb and gutter, street trees, and milling and resurfacing the existing roadway and any related stormwater improvements.	Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)	New Sidewalk	Pavement Repair/Repaving	Stormwater management/transportation infrastructure resilience (flooding prevention, etc...)		Safety (bike)			N_1104_B_S	\$19,109,162	EU	EL	EU	EU	EU
Roanoke County	Chaparral Drive Pedestrian Improvements	Chaparral Drive	Purple Finch Road	Woodthrush Drive	Build a sidewalk in front of Cave Spring High School.	New Sidewalk					Safety (ped)			N_396_P_S N_77_P_S	\$3,733,930	EU	EL	EU	EL	EU
City of Roanoke	Church Avenue Streetscape	Church Avenue	Jefferson St.	5th St.	Streetscape improvements	Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)					Safety (ped)			N_200_P_S	\$9,000,000	EU	EL	EU	EL	EU
City of Roanoke	Cove Road Streetscape	Cove Road	Hershberger Road	Peters Creek Road	Add turn lanes, C&G, sidewalk, bike lanes, drainage	New Turn Lane	New Sidewalk	New Bike Lane	Stormwater management/transportation infrastructure resilience (flooding prevention, etc...)		Safety (ped)	Safety (auto)		N_108_P_S N_1010_MV_S	\$20,000,000	EU	EL	EU	EU	EU
City of Salem	East Main Street Phase II	Lynchburg Turnpike	Brand Avenue	Kessler Mill Road	Improve drainage, capacity, and non-motorized facilities by adding storm sewer, curbing, sidewalks, bike lanes, and turn lanes. (Previous UPC 106710)	Stormwater management/transportation infrastructure resilience (flooding prevention, etc...)	New Sidewalk	New Bike Lane	New Turn Lane		Safety (ped)	Safety (auto)	Safety (bike)	N_165_P_S N_1659_MV_S N_431_B_S	\$22,131,630	EU	EL	EL	EU	EU
City of Roanoke	Hershberger Road Streetscape	Hershberger Road	Cove Rd.	Peters Creek Road	Add turn lanes, C&G, sidewalk, bike lanes, drainage	New Turn Lane	New Sidewalk	New Bike Lane	Stormwater management/transportation infrastructure resilience (flooding prevention, etc...)		Safety (ped)	Congestion		N_104_T N_104_PS N_2068_T	\$20,000,000	EU	EL	EU	EU	EU
City of Roanoke	Hollins Road Widening	Hollins Road	Orange Ave.	Liberty Rd.	Widening to 4 lanes w/bicycle lanes	New Through Travel Lane	New Bike Lane				Congestion	Safety (bike)	Safety (auto)	NA	\$6,000,000	EU	EU	EU	EU	EL

Locality	RVTPO Title	Street	Limit_From	Limit_To	Description	Primary Solution	Secondary Solution	Third Solution	Fourth Solution	Fifth Solution	Primary Need Category	Secondary Need Category	Third Need Category	RVTP_NIDs	Total Cost Estimate	Discretionary Federal/State Grant (DFG) - List Name	Smart Scale DGP Federal	Smart Scale HPPP Federal	TA Total	STBG Total
City of Roanoke	Jefferson Street Multimodal Improvements	Jefferson Street	Elm Ave.	McClanahan Rd.	Multimodal improvements, lane reconfigurations, & streetscape improvements	Lane Reconfiguration - Road Diet	Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)				Safety (ped)	Congestion	Safety (auto)	N_590_B_S N_125_P_S N_71_P_S N_2062_T N_1113_MV_S	\$20,000,000	EU	EL	EU	EU	EU
City of Roanoke	King Street Multimodal Improvements	King Street	Gus Nicks Blvd.	Orange Ave.	Add turn lanes, C&G, sidewalk, bike lanes, drainage, reconstruct signal	New Turn Lane	New Sidewalk	New Bike Lane	Stormwater management/transportation infrastructure resilience (flooding prevention, etc...)	Signal Coordination/Re-timing	Congestion	Safety (auto)		N_981_N_SM N_145_P_S	\$22,000,000	EU	EL	EU	EU	EU
City of Roanoke	Liberty Road Multimodal Improvements	Liberty Road	Burrell St.	Hollins Rd.	Add turn lanes, C&G, sidewalk, bike lanes, drainage, reconstruct signal	New Turn Lane	New Sidewalk	New Bike Lane	Stormwater management/transportation infrastructure resilience (flooding prevention, etc...)	Signal Coordination/Re-timing	Safety (ped)			N_198_P_S	\$20,000,000	EU	EL	EU	EU	EL
City of Roanoke	Main Street Bridge Replacement and Intersection Reconstruction	Main Street	Ferdinand/Elm	Winona Ave.	Replacement of Main Street bridge with bike lanes and construction of a roundabout at Ferdinand Ave. SW	Bridge Rehabilitation/Replacement	Traffic Calming	New Sidewalk	New Bike Lane		Safety (ped)	Congestion		N_195_P_S N_1376_N_SM	\$25,000,000	SGR	EU	EU	EU	EL
City of Roanoke	Memorial Avenue Streetscape	Memorial Avenue	Grandin Rd.	Denniston Ave.	Streetscape improvements	Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)					Safety (bike)			N_1130_B_S	\$5,000,000	EU	EL	EL	EU	EU
City of Roanoke	Lick Run Greenway Phase 4	Off-Road	Lewiston Road (Countryside Park)	Peters Creek Road	Multi-use bicycle & pedestrian trail	New Shared-Use Path/ADA Accessible Greenway Trail					Safety (bike)			N_533_N_A N_533_B_S	\$10,000,000	EU	EL	EL	EU	EU
City of Roanoke	Valley View Boulevard Extension	Valley View Boulevard	I-581	Cove Rd.	Extend Valley View Boulevard to Andrews and then Cove Road	Access Management					Access (non-transit)			N_948_N_A	\$75,000,000	Private funding, IJIA Programs	EU	EU	I	EU
City of Salem, Roanoke County, Montgomery County	Virginian Line Track Improvements to facilitate AMTRAK Expansion	Virginian Line Railroad	MP251 in Salem	RVTPO Boundary	A distance of approximately 8.5 miles of Virginian Line railroad (including the bridges/culverts that support the track) will be improved to enable AMTRAK passenger service between Roanoke and the New River Valley.	New Transit Route (local, commuter, intercity)	Transit Route Realignment/Expansion/Modification				System Management (Transit)			NA	Awaiting cost estimate.	Federal Railroad Administration, VPRA	EU	EU	I	EU
City of Roanoke	Wiley Drive over Roanoke River near Franklin Road Bridge Replacement	Wiley Drive	Roanoke River (near Franklin Road)		Replace existing bridge with a higher one to minimize facility closures due to flooding. New bridge to include a shared-use path for bikes/pedestrians and one-lane for eastbound motor vehicles.	Bridge Rehabilitation/Replacement	New Shared-Use Path/ADA Accessible Greenway Trail				System Management (non-Transit)				\$3,500,000	Federal Earmark, Local	I	I	I	EU

Locality	RVTPOTitle	Street	Limit_From	Limit_To	Description	Primary Solution	Secondary Solution	Third Solution	Fourth Solution	Fifth Solution	Primary Need Category	Secondary Need Category	Third Need Category	RVTP_NIDs	Smart Scale R5 Total
Botetourt County	Valley Road sidewalk under I-81	Valley Road (Rt. 779)	Appalachian Trail	Appalachian Trail	Under I-81, construct a sidewalk for Appalachian Trail users.	New Sidewalk					Safety (ped)			NA	\$3,001,973
Roanoke County	Electric Road Pedestrian Signal Improvements	Electric Road	Brambleton Avenue	Postal Drive	Construct pedestrian signals and crosswalks at two adjacent Route 419/Electric Road intersections: Route 221/Brambleton Avenue and Postal Drive/Berry Lane.	Pedestrian Crossing Improvement					Safety (ped)			N_59_3_P_S N_1250_N_A N_69_3_P_S N_59_1_P_S	\$3,944,955
Roanoke County	Williamson Road Sidewalk	Williamson Road	Plymouth Dr.	Clubhouse Dr.	Extend sidewalk in design between North Roanoke Assisted Living and Plymouth Drive (UPC 113947) along the western side of Williamson Road from Plymouth Drive to Clubhouse Drive, with pedestrian signals and crosswalks at the Williamson/Clubhouse/Dent signalized intersection.	New Sidewalk	Pedestrian Crossing Improvement				Safety (ped)			N_83_P_S	\$5,717,387
Roanoke County	Walrond Drive Pedestrian Improvements	Walrond Drive	Plantation Road	Walrond Park Road	Sidewalk, ADA ramps, crosswalks, curb, gutter, underground stormwater detention and street trees.	New Sidewalk	Stormwater management/transportation infrastructure resilience (flooding prevention, etc...)	Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)	Pedestrian Crossing Improvement		Safety (ped)	Safety (bike)		N_449_P_S N_449_B_S	\$6,624,260
Roanoke County	Electric Road Safety Improvements	Electric Road	Stoneybrook Dr.	Grandin Rd. Ext.	Route 419/Electric Road Safety Improvements, Stoneybrook Road to Grandin Road Extension. This project proposes to modify the Stoneybrook Drive and Glen Heather Drive intersections to Restricted Crossing U-Turn intersections. Sidewalk is also proposed along the western side of Route 419 between Glen Heather Drive and Grandin Road Extension.	Intersection Reconfiguration (install new signal or innovative intersection)	New Sidewalk				Safety (ped)			N_59_1_P_S	\$6,624,464
Roanoke County	West Main Street Pedestrian Improvements, Phase 3	West Main Street	City of Salem limit	Technology Drive	This project will complete the missing sidewalk pieces that could not be constructed from UPC 108882, West Main Street Pedestrian Improvements, Phase 2, due to insufficient funds. Those segments include the south side of West Main Street between the City of Salem and Daugherty Road and the north side of West Main Street between Daugherty Road and Technology Drive. The sidewalk will be five feet wide concrete with pedestrian crosswalks at public roads.	New Sidewalk	Pedestrian Crossing Improvement				Safety (ped)			N_55_P_S	\$7,059,184

Locality	RVTPOTitle	Street	Limit_From	Limit_To	Description	Primary Solution	Secondary Solution	Third Solution	Fourth Solution	Fifth Solution	Primary Need Category	Secondary Need Category	Third Need Category	RVTP_NIDs	Smart Scale R5 Total
City of Roanoke	Orange Avenue/ Kimball/ Plantation Road Improvements	Orange Avenue	Kimball Avenue/Plantation Road		The proposed improvements for this project include widening the northbound Kimball Avenue and southbound Plantation Road approaches to Route 460 to provide three approach lanes. The northbound approach would be widened within the median along Kimball Avenue to provide a left-turn lane, a through lane, and a right-turn lane. The southbound approach would be widened to provide a left-turn lane, a through lane, and a shared through/right-turn lane. In addition, the westbound Route 460 left turn lane is proposed to be extended to the railroad overpass to reduce the potential for left-turning vehicles extending out of the turn lane, which was observed under existing conditions.	Lane Reconfiguration - Road Diet	New Through Travel Lane	New Turn Lane			Safety (auto)	Safety (ped)		N_710_N_SM N_168_P_S	\$8,533,761
Botetourt County	U.S. 220 Access Management	U.S. 220	Route 11	Appalachian Trail	Improvements to the Exit 150 1-81/220 interchange to address safety, traffic flow, and access concerns largely associated with weaving from tractor-trailers and other vehicles exiting the interstate.	Interchange Reconfiguration					Safety (auto)	Congestion		NA	\$15,831,723
Town of Vinton	Hardy Road and Bypass Road Roundabout	Bypass Road	Hardy Road (Rt. 24/634)		Convert the intersection of Hardy Road/Bypass Road (Rt. 24) and Hardy Road (Rt. 634) from a signalized intersection to a two-lane roundabout. The project includes sidewalk in the immediate area of the roundabout.	Traffic Calming	New Sidewalk				Safety (ped)	Safety (auto)	Congestion	N_88_P_S N_256_2_MV_S N_227_MV_S N_8_T	\$17,123,028
Roanoke County	I-581 at Peters Creek Road Interchange Improvements	Peters Creek Road	Thirlane Road	Valleypointe Parkway	Close two I-581 off-ramps with substandard weave movements. Signalize remaining I-581 off-ramps, restrict left turns from SB Thirlane Road to minimize conflict points near interchange ramps. Add a downstream U-turn along Peters Creek Rd for re-directed left turns. Add a second EB Peters Creek left turn lane onto Valleypointe Pkwy to increase capacity. Add pedestrian and bicycle accommodations along Peters Creek Rd.	Interchange Reconfiguration	New Turn Lane	New Bike Lane	New Sidewalk		System Management (non-transit)	Safety (ped)	Safety (bike)	N_57_MV_S N_57_P_S N_1180_MV_S	\$20,438,688
Botetourt County	U.S. 220 in Daleville - Intersection Conversions to RCUTs	U.S. 220	Tinker Mountain Drive	Valley Road	Convert crossovers along the Route 220 Corridor in Daleville to RCUT's to provide a superstreet concept.	Intersection Reconfiguration (install new signal or innovative intersection)	Access Management				Safety (auto)	Congestion		N_207_T N_207_MV_S N_189_P_S	\$20,511,303
City of Roanoke	I-581/ U.S. 460/ U.S. 11 Improvements	Orange Avenue	I-581	U.S. 11/Williamson Road	The STARS Route 460 (Orange Avenue) study has identified operational and safety issues for the 460 corridor. The study's findings suggest improvements proposed for the Orange Ave and Williamson Rd intersection, including a signalized off-ramp from I-581, an additional eastbound left-turn lane, and additional lanes on Williamson Rd north of the intersection. These solutions mitigate the identified safety issues, improve traffic operations, and alleviate congestion. As noted in the STARS Route 460 (Orange Avenue) study, the I-581 interchange at Route 460 has vehicular, pedestrian, and bicycle-related safety and congestion issues. This project will provide solutions to mitigate the safety issues for all users, provide additional travel mode choices, improve traffic operations, and alleviate congestion.	New Turn Lane	New Through Travel Lane	Signal Coordination/ Re-timing	New Sidewalk	New Bike Lane	Safety (auto)	Safety (ped)	Congestion	N_683_MV_S N_749_MV_S N_749_P_S N_749_B_S N_683_T	\$25,670,186

Locality	RVTPOTitle	Street	Limit_From	Limit_To	Description	Primary Solution	Secondary Solution	Third Solution	Fourth Solution	Fifth Solution	Primary Need Category	Secondary Need Category	Third Need Category	RVTP_NIDs	Smart Scale R5 Total
City of Roanoke	Orange Avenue - 11th to 24th Operational Intersection Improvements	Orange Avenue	11th Street	24th Street	Traffic operational and safety improvements along Orange Avenue from 11th Street, N.E intersection to 24th Street, N.E.	Traffic Calming	Intersection Reconfiguration (install new signal or innovative intersection)				Congestion	Safety (auto)		N_1652_T N_1659_MV_S N_1659_N_SM	\$28,251,041
Roanoke County	East Roanoke River Greenway Gap, Phase 2	Off-Road	Water Pollution Control Plant	VRFA property	Construction of the Roanoke River Greenway from the Water Pollution Control Plant to VRFA property	New Shared-Use Path/ADA Accessible Greenway Trail					Safety (bike)	Safety (ped)		N_532_B_S N_532_N_A N_532_P_S	\$29,422,284
Botetourt County	U.S. 220 Access Management and Park & Ride	U.S. 220	Appalachian Trail	Commons Parkway	Addition of multi-use path along 220 N and 220 S to Commons Parkway to provide Appalachian Trail users safe crossing of 220, including a traffic signal restricting cross-traffic from Wesley Rd to Commons Pkwy. Additionally, the construction of a new Park and Ride facility with greater capacity than the current site.	Shared-Use Path/ADA Accessible Greenway Trail Crossing Improvement	New Park and Ride Lot	Signal Coordination/ Re-timing			Safety (auto)	Safety (ped)		NA	\$31,543,823
City of Roanoke	Williamson Road Multimodal Improvements	Williamson Road	Hershberger Road	Wells Avenue	This corridor-wide safety improvements project along Williamson Road from Hershberger Rd to Wells Ave includes lane reallocations, a two-way left-turn lane, the inclusion of bicycle lanes where none currently exist, pedestrian sidewalk, and crosswalk improvements, and traffic signal optimizations. The project's goals are to improve access and safety for the traveling public along the corridor.	Lane Reconfiguration - Road Diet	New Turn Lane	New Bike Lane	New Sidewalk		Safety (ped)	Safety (bike)	Congestion	N_864_P_S N_61_P_S N_141_B_S N_141_P_S N_48_T	\$66,712,353
Roanoke County	Electric Road Safety Improvements	Electric Road	Grandin Rd Ext.	Keagy Rd.	Activities for this project include: an RCUT on Grandin Rd. Ext., Keagy Rd. South crosswalk, sidewalk from Grandin Rd. Ext. to Keagy Village on the County side, sidewalk from Starbucks to Keagy Rd. South on the City side, Keagy Rd. North crosswalks.	Intersection Reconfiguration (install new signal or innovative intersection)	Pedestrian Crossing Improvement	New Sidewalk			Safety (ped)			N_59_1_P_S N_435_P_S N_119_P_S	\$12,489,305 (does not include ROW)
City of Salem	Texas Street Widening	Texas Street	Roanoke Boulevard	Electric Road	Improve I81 Bypass route, specifically along Texas St (Route 11, Alt US 460) from Electric Rd (Route 419) to Roanoke Blvd. Project to include new signal and intersection improvements at Texas St & Electric Rd, widening Texas St to have 4 vehicular travel lanes with bike/ped accomodations.	New Through Travel Lane	Intersection Reconfiguration (install new signal or innovative intersection)	New Sidewalk	New Bike Lane		Safety (auto)	Safety (ped)	Congestion	N_1659_N_SM	\$23,505,499 (does not include ROW)

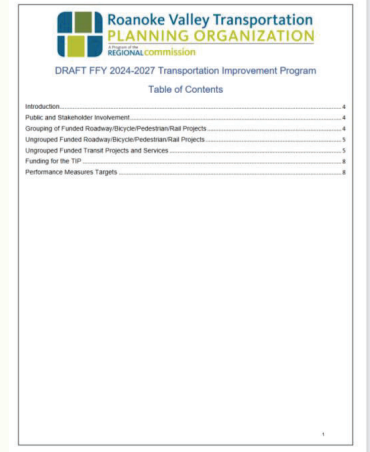
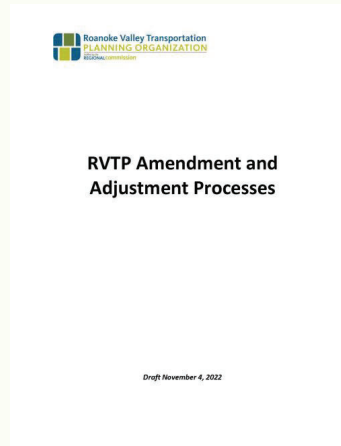
Locality	RVTPOTitle	Description	Primary Solution	Primary Need Category	RVTP_NIDs	Total Cost Estimate	Discretionary Federal/State Grant (DFG) - List Name
Roanoke County	Purchase of RADAR paratransit vehicles	Capital assistance to support transportation for people with disabilities in the City of Roanoke, City of Salem, and the Town of Vinton beyond the 3/4-mile area around fixed routes to destinations within those localities.	Transit Route/Service Continuation	System Management (transit)	Stakeholder Identified Maintenance Need	\$640,000	FTA 5310 Local Funding
City of Roanoke	VM Fixed-Routes: 11, 12, 15, 16, 21, 22, 25, 26, 31, 32, 35, 36, 41, 42, 51, 52, 55, 56, 61, 62, 65, 66, 71, 72, 75, 76, 85, 86, 91, 92. SmartWay: Base, Express and Connector. Starline Trolley.	See the list of all fixed-route buses, SmartWay Base, Express and Connector and Starline Trolley.	Transit Route/Service Continuation	Access (Transit)	Continuation of Existing Services	\$35,153,304	FTA 5307 FTA 5311 State Funding Local Funding Fare Revenues
City of Roanoke	Preventative Maintenance for Valley Metro Vehicles	Maintenance to keep vehicles/equipment running smoothly.	Transit Equipment (Vehicles, Hardware, Maintenance Items, etc.)	System Management (transit)	Stakeholder Identified Maintenance Need	\$3,578,484	FTA 5307 State Funding Local Funding
City of Roanoke	Replace Valley Metro transit vehicles	Fixed-route buses and paratransit service vehicles utilized by RADAR under contract to Valley Metro.	Transit Route/Service Continuation	System Management (transit)	Continuation of Existing Service	\$6,320,152	FTA 5339 STBG State Funding Local Funding
City of Roanoke	Valley Metro Support Vehicles	These are vehicles used by supervisors, dispatch, maintenance, admin, etc. that support the service but don't carry passengers.	Transit Equipment (Vehicles, Hardware, Maintenance Items, etc.)	System Management (transit)	Stakeholder Identified Maintenance Need	\$240,000	FTA 5339 State Funding Local Funding
City of Roanoke	Bus Stop Enhancements	Bus stop amenities may include trashcans, lights, benches, or shelters. The specific stops have not been identified.	Transit Stop/Rail Station Amenities	System Management (transit)	Stakeholder Identified Maintenance Need	\$600,000	FTA 5339 State Funding Local Funding
City of Roanoke	Renovation of Administration and Maintenance Building	Upgrades to the maintenance space and a break area in the maintenance shop.	Transit Facility Renovation/ Rehabilitation	System Management (transit)	Stakeholder Identified Maintenance Need	\$1,000,000	FTA 5307 State Funding Local Funding
Systemwide	Shop Equipment	Equipment used to maintain buses and non-bus support vehicles.	Transit Equipment (Vehicles, Hardware, Maintenance Items,	System Management (transit)	Stakeholder Identified Maintenance Need	\$80,000	FTA 5339 State Funding Local Funding

RVTP and TIP Draft Amendment/Adjustment Processes



Roanoke Valley Transportation PLANNING ORGANIZATION

Staffed by the
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November 10, 2022 TTC Meeting

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Introduction

Where We Are

- Current separate processes for RVTP and TIP
- Perceived issues with current RVTP amendment structure (10% across the board)

Looking to Improve

- In the RVTP update, the TIP is more closely associated and incorporated into the Plan than previously.
- Projects may be listed in the TIP, but more information is provided about them in the Plan, hence the increased need for periodic revision.
- The same amendment and adjustment requirements in the TIP regarding cost increases are being adopted for the RVTP.

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Amendments

Actions Requiring an Amendment

- Adding or deleting a funded or unfunded priority project to pursue
 - Roadway projects on a CoSS
 - Federally eligible roadway projects on the regional network model
 - Federally eligible bicycle, pedestrian, or transit project/service anywhere in the region
- Adding or deleting a grouping category or ungrouped project in the TIP
- A major change in project cost estimate
- Major change in Project/Project Phase Initiation Dates
- Major change in design concept or design scope

Amendment A revision that involves a major change to a project included in a metropolitan plan or TIP including the addition or deletion of a project or a major change in project cost, project/project phase initiation dates, or a major change in design concept or design scope (e.g., changing project termini or the number of through traffic lanes or changing the number of stations in the case of fixed guideway transit projects).

Sliding Scales of Project/Phase Cost Increase Thresholds

FHWA Project/Phase Cost Thresholds for Amendments

Approved RVTP Total Estimated Project Cost	Estimate Increase Requiring Adjustment
\$2 million or less	>100%
>\$2 million to \$10 million	>50%
>\$10 million	>25%
>\$20 million to \$35 million	>15%
>\$35 million	>10%

FTA Project/Phase Cost Thresholds for Amendments

Approved RVTP Total Estimated Project Cost	Estimate Increase Requiring Amendment
\$2 million or less	>100%
>\$2 million to \$10 million	>50%
>\$10 million	>25%

Adjustments

Examples of Adjustment Actions

- A new priority transportation need
- Minor changes in project design concept, scope, or description that do not add/remove a transportation solution or need addressed by the project
- Moving a project funding from year to year
- Minor changes within a project phase start date
- Change in a project's lead agency
- Change in the funding source (s)
- Funding changes less than the threshold established in the sliding scale

Administrative Modification

(Adjustment) A minor revision that includes minor changes to project/project phase costs, minor changes to funding sources of previously included projects, and minor changes to project/project phase initiation dates.

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Amendment vs. Adjustment: Project Examples

Highway/Bike/Ped Example

Staff receives a request from the City of Salem to change the project scope from a greenway to a sidewalk behind the existing curb with bike lanes striped within the existing pavement. This is a major scope change (due to the solution change) to a project in the Funded Projects portion of the RVTP. **This request is an amendment.**

Project Details	
Basic Information	
RVTP Project Title:	Elizabeth Greenway
RVTP ID:	2040.0717.117
State Project Title:	ELIZABETH GREENWAY
State ID:	113566
Locality:	City of Salem
Project Administrator:	City of Salem
Location	
Facility Name:	Idaho Street
Route Number:	N/A
Functional Classification:	Other
Limits From:	Lynchburg Turnpike
Limits To:	Texas Street
Project Length (mi.):	0.15
Project Detail	
Project Description:	Construct approximately <1 mile of multiuse trail on Idaho Street and Lynchburg Turnpike, sidewalk on the west side of Corporate Blvd. and bike lanes to connect the Elizabeth Campus property and the Salem Commerce Park. Build a bike/ped accommodation along Texas St. Complete missing links between East Main Street and Mason Creek Greenway.
Transportation Solutions Utilized:	New Shared-Use Path/ADA Accessible Greenway Trail, New Sidewalk, New Bike Lane
Need Type(s) Addressed:	Safety (bike), Safety (ped)
Need ID(s) Addressed:	NA
Anticipated Transportation Benefits	People will be able to walk or bike between the Elizabeth Campus, Salem YMCA, and other businesses in the corridor.
Anticipated Objectives Met:	1A, 3A, 3B, 3D, 4A, 4B, 7A, 7B, 7C, 7D
Funding Allocations	
Funding Source	TOTAL
Information Pending	
Total Funding Allocations	TBD
Total Cost Estimate	\$1,832,171
Planned Obligations (Not Tracked)	
Groupings:	Construction : Transportation Enhancement/Bypass/Non-Traditional

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Amendment vs. Adjustment: Project Examples

Highway/Bike/Ped Example

Staff receives a request from the City of Roanoke that the project will increase in cost, which will be covered completely by the city. The project cost will increase by \$300,000. Regardless of the funding source, if the project's overall cost increase exceeds the established thresholds, an amendment is triggered. In this case, the increase is 34%. This is a funding change less than established thresholds. **This request is an adjustment.**

FHWA Project/Phase Cost Thresholds for Amendments

Approved RVTP Total Estimated Project Cost	Estimate Increase Requiring Adjustment
\$2 million or less	>100%
>\$2 million to \$10 million	>50%
>\$10 million	>25%
>\$20 million to \$35 million	>15%
>\$35 million	>10%



Project Details

Basic Information	
RVTP Project Title:	9th Street Pedestrian and Transit Improvements
RVTP ID:	2040.0717.012
State Project Title:	9TH STREET MULTIMODAL IMPROVEMENTS
State ID:	117994
Locality:	City of Roanoke
Project Administrator:	Town of Vinton

Location	
Facility Name:	9th Street, SE
Route Number:	N/A
Functional Classification:	Major Collector
Limits From:	Jamison Avenue
Limits To:	Highland Avenue
Project Length (mi.):	0.21

Project Detail	
Project Description:	Add bus shelters, pedestrian signals, upgraded ADA curb ramps.
Transportation Solutions Utilized:	Streetscape Improvements (lights, benches, landscaping, bike parking, etc.), Bicycle/Pedestrian Crossing Improvement, Bicycle/Pedestrian Crossing Improvement
Need Type(s) Addressed:	Safety (ped)
Need ID(s) Addressed:	
Anticipated Transportation Benefits:	Pedestrian, cyclists, and vehicle operators will benefit from the improvements made to sidewalks and on-road parking.
Anticipated Objectives Met:	1A, 3B, 3D, 4A, 4B, 5A, 7A, 7B, 7C, 7D

Funding Allocations	
Funding Source	TOTAL
Information Pending	
Total Funding Allocations	TBD
Total Cost Estimate	\$889,000

Planned Obligations (Not Tracked)	
Groupings:	Construction : Transportation Enhancement/Byway/Non-Traditional

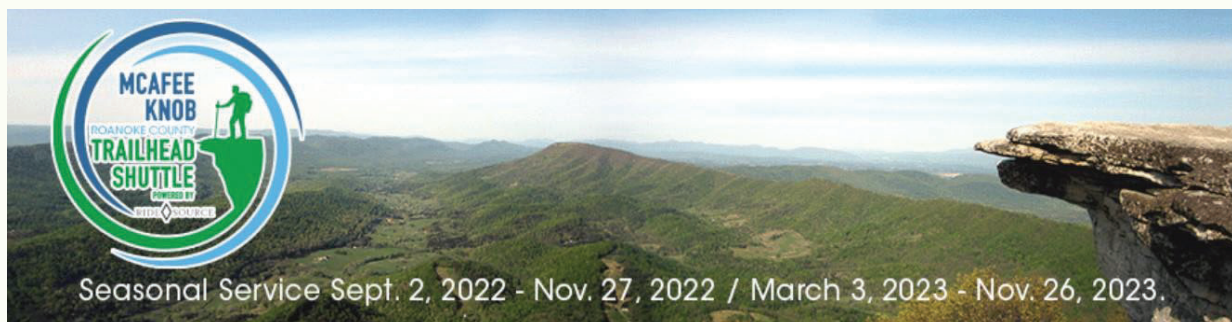
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Amendment vs. Adjustment: Project Examples

New Priority Regional Transportation Need

Staff receives a request from Roanoke County to add the McAfee Knob Trailhead Shuttle, currently a demonstration project, as a new priority regional transportation need. The Priority Regional Needs section of the RVTP would be **adjusted** to include the need. The TTC and RVTPO Policy Board would be notified of the inclusion.



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Amendment vs. Adjustment: Project Examples

New Priority Projects to Pursue

Staff receives a request from a locality for a New Priority Project to Pursue. Running under the assumption that there is an existing priority need and solution, an **amendment** would be required to include it in the RVTP Priority List of Projects.



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Procedures for Amendments and Adjustments

Who Can Initiate?

- Localities
- Modal agencies
- Regional agency

What Information to Submit in the Project Request?

1. Submitting agency
2. Project manager
3. Project title
4. Road/Facility Route/Name/Number
5. Project start and end locations
6. Project length
7. General project description
8. Primary need for the project
9. Cost in present year dollars
10. Anticipated year of project initiation

What Information to Submit for a New Need Request?

1. Need type
2. Location
3. Termini
4. Rationale for need

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Amendments Timeline

Milestone(Date
Deadline to request an amendment for consideration as early as the following month	First Friday of month prior to the month when the amendment is desired
Opening of 14-day public comment period	By the Fourth Thursday of the month prior to the month when the amendment is desired
TTC considers draft amendment and makes recommendation to RVTPO Policy Board	The following month's regularly scheduled TTC meeting unless a special-called meeting is requested.
Public hearing and consideration of draft amendment by the RVTPO Policy Board	The following month's regularly scheduled Board meeting unless a special-called meeting is requested.

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STAFF REPORT

December 8, 2022, TTC Meeting

SUBJ: Continued Development of Draft Roanoke Valley Transportation Plan (RVTP) – 2045 Update

The Draft RVTP report and supporting materials as provided to the public during the public comment period are on the Draft Roanoke Valley Transportation Plan [website](#). The public comment period for the RVTP was available from October 27th to November 27th, 2022. There were three surveys that covered the following topics: roadway, pedestrian and bicyclist, and transit. A public engagement summary of the input received is attached along with key results incorporated on the Draft Priority Projects to Pursue spreadsheet, also attached.

The public comments are intended to help guide decision making regarding which needs to spend time addressing and which projects to pursue for funding. Project prioritization is the remaining step in this planning process.

Project Prioritization Purpose:

Project prioritization will enable RVTPO to assess the benefits and viability of candidate projects for inclusion in the RVTP and continued implementation of the performance-based planning and programming (PBPP) process. There are three objectives for establishing and applying a project prioritization process:

1. Inform RVTP fiscal constraint decisions based on an analysis of candidate priority projects to pursue benefits and viability
2. Inform decisions on projects to pursue for future rounds of SMART SCALE, STBG, and TA funding
3. Improve the process and standards for advancing concepts and solutions addressing regional priority needs into project scopes that are ready to compete for funding

Project Prioritization Context:

The Draft RVTP includes priority projects to pursue. These proposed future investments are comprised of the preferred solutions identified at this time to address regional priority needs.

The RVTP is required to have a financial plan that demonstrates how the anticipated available funding will be utilized within the time horizon of the plan (through 2045). This budgetary component of the RVTP makes it different than most other plans which do not have fiscal constraint. The funded projects make up the first several years of the RVTP's financial plan with the remaining anticipated available money for use on unfunded priority projects to pursue. These projects may be current candidate projects for inclusion in the next SYIP (FY 2024 – FY 2029) or be other projects with defined scopes and costs that address priority regional transportation needs. These projects are priorities for the region to pursue through 2045 and include defined scopes and cost estimates developed through recent or ongoing planning and project development activities.

These unfunded projects address priority regional transportation needs and fall into two buckets:

- Short Term – Desired project allocations through FY34 (priority projects meeting regional goals and objectives for future grant cycles within the next 10 years)
- Long-Term – Desired project allocations FY35 to FY45 (projects for long-term funding cycles including higher-risk, higher-cost projects requiring further project development)

The timeframe for each project in the draft RVTP represents the desired timeframe by the lead agency. The final list of priority projects to pursue needs to be adjusted or some projects removed (via prioritization) in order to attain a fiscally constrained plan.

Total estimated costs associated with the RVTP Unfunded Projects are presented in Table 1.

Table 1. Draft RVTP Unfunded Projects

Project Horizon	Projects	Total Project Costs
Long-Term Constrained	9	\$282,000,000
Short-Term Constrained	28	\$468,589,853
Transit Constrained	8	\$48,731,940
Total	45	\$799,321,793

VDOT provided financial forecasts through the year 2045. The RVTPO forecasts starting in FY 2028 for non-transit, new construction projects (i.e., excluding maintenance, state of good repair, and all transit capital and operations funding) are presented in Table 2. More information about fiscal constraint and the assumptions behind the next four fiscal years (represented by the Transportation Improvement Program) as well as the additional anticipated short- and long-term allocations can be found in the [Financial Plan Attachment](#).

Table 2. RVTP Financial Forecasts

Fiscal Constraint by Funding Program	Short Term Anticipated Allocations (FY28-FY34)	Long Term Anticipated Allocations (FY35-FY45)
SMART SCALE: 8 new projects per round per agency (RVTPO, Valley Metro, and member localities)	18 submitted projects in Round 5 72 new projects in Round 6 & 7	216 new projects in Rounds 8-13
SMART SCALE District Grant Program (DGP)	\$67,311,621	\$129,859,743
SMART SCALE High Priority Program (HPP)	\$43,559,338	\$92,534,726
Surface Transportation Block Grant (STBG) RVTPO apportionment (Max. ~\$12M per application)	\$42,400,068	\$78,734,695
Transportation Alternatives (TA) RVTPO apportionment (Max. ~\$600k available per two-year cycle)	\$2,223,689	\$4,070,307

The estimates in Table 2 are based on the FY 2021 – 2026 Six-Year Financial Plan (SYFP), modified for the COVID-19 Update and the state revenue estimates available in December 2020.

Table 3 presents a comparison of total fiscal constraint for new construction projects, inclusive of SMART SCALE prioritized DGP and HPP funds, and RVTPO prioritized STBG and TA funds. Note the Table 2 and Table 3 fiscal constraint estimates **do not** include the estimated impacts on funding from the Bipartisan Infrastructure Law through 2045 within RVTPO.

Table 3. Draft RVTP Financial Forecasts

Fiscal Constraint by Funding Program	Short Term Anticipated Allocations (FY28-FY34)	Long Term Anticipated Allocations (FY35-FY45)	Draft RVTP Totals
Total Fiscal Constraint (New Construction funded by DGP, HPP, STBG, TA)	\$155,494,716	\$305,199,471	\$460,694,187
Total Draft RVTP Project Cost	\$468,589,853	\$282,000,000	\$750,589,853

Based on current fiscal constraint information in the Draft RVTP, short-term constrained project costs are above short-term anticipated allocations by approximately \$313 million. Long-term constrained projects costs are below long-term anticipated allocations by approximately \$23 million. The short-term outcome exists primarily due to the inclusion of all 18 short-term constrained projects currently being evaluated for HPP and DGP funding within SMART SCALE Round 5 totaling \$330 million.

This outcome sets the stage for developing and implementing a prioritization approach for the RVTP, building from the critical role that project prioritization plays within a performance-based planning and programming process.

Current Project Prioritization Approach:

RVTPO has direct decision-making authority over two funding programs: the Roanoke Valley apportionments of the Surface Transportation Block Grant (STBG) and Transportation Alternatives (TA). The RVTPO prioritizes STBG investments as described in the [STBG Project Development and Selection Procedures](#). VDOT is responsible for the prioritization of investments in the TA program and provides the scores to the RVTPO for final decision by the Policy Board.

Many other grant programs exist at the State and Federal level. Each grant program has unique criteria that determine whether or not a proposed project or investment is prioritized for funding. The RVTPO facilitates regional decision making on the federally eligible projects to pursue and approves the use of federal funding for projects within the plan. The RVTPO does not have control over whether or not the project is selected for funding. The RVTPO's primary prioritization role is in choosing which need to address, the preferred solution for that need, and the opportunities to follow to position projects for future funding.

Project Prioritization Framework:

The RVTPO's performance-based planning and programming (PBPP) process includes a four-phase approach to identifying and prioritizing projects. The four phases include:

- **Phase I** refines preferred solutions to address priority needs into a project or service. Candidate projects and services are already identified as priority projects to pursue in the RVTP. There are many potential solutions and project concepts to address priority gap needs identified in the [Priority Regional Transportation Needs Attachment](#) that may become projects considered in future prioritization cycles.
- **Phase II** is a benefit evaluation. Benefit evaluation includes scoring thresholds to rate the benefits of each project/service in relation to RVTP goals, objectives, and performance measures. The outcome identifies projects as high-benefit or low-benefit.
- **Phase III** is a viability evaluation. This phase evaluates the high-benefit projects and services identified in Phase II and determines if they are ready to move into funding pursuit.
- **Phase IV** involves RVTPO, localities, and transit agencies pursuing funding for the priority transportation improvements in the Roanoke Valley region.

For this cycle of the RVTP, given constraints to develop and implement a full prioritization process, the RVTP team implemented an interim approach to evaluate benefits and viability.

The results of this analysis (shared through an attached table) inform recommendations on the projects to retain in the priority projects to pursue list, versus those that will move to the priority or other needs list.

Benefits Analysis Completed:

- Alignment of candidate project with prioritized needs
- Anticipated change by Federal performance measure (quantitative - safety, qualitative – asset management, reliability, congestion)
 - Note – quantification of safety benefits consistent with SMART SCALE methodology
- Anticipated transportation benefits/potential burdens of investment
- Anticipated RVTP objectives met
- Public favorability outcome
- Summary of public comments per project

Viability Analysis Completed:

- Few candidate projects include enough scoping detail required for funding applications
- Two criteria reviewed:
 - Availability of cost estimate
 - Likelihood of funding

The attached summary table provides the results of the benefits and viability analysis. A recommendation is provided for the placement of each candidate project based on the information presented for TTC members to provide feedback.

TTC Action: None.