

September 1, 2022

**MEMORANDUM**

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

The September meeting of the Transportation Technical Committee (TTC) will be held Thursday, September 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.

**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 July 14, 2022 TTC Minutes, pp. 2 – 14
  - C. Action on the August 11, 2022 TTC Minutes, pp. 15 – 33
4. Chair’s Remarks ..... *Chair Sexton*
5. First Draft of the Roanoke Valley Transportation Plan Update ..... *Cristina Finch & David Jackson,*  
 Including the Draft FY24-27 Transportation Improvement Program, pp.34 *Cambridge Systematic*  
 Attachment #1: Draft Roanoke Valley Transportation Plan 9-1-22
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 July meeting of the Transportation Technical Committee was held on Thursday, July 14, 2022 at 1:30 p.m. at the Roanoke Valley-Alleghany Regional Commission, 313 Luck Avenue, SW, Roanoke, VA.

### 1. WELCOME, CALL TO ORDER

The meeting was called to order by Vice-Chair Frank Maguire.

### 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
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
Dwayne D'Ardenne	City of Roanoke
Anita McMillan	Town of Vinton
Nathan McClung	Town of Vinton
William Long	Greater Roanoke Transit Company
Frank Maguire	Roanoke Valley Greenway Commission
Michael Gray( <i>via zoom</i> )	Virginia Dept. of Transportation - Salem District
Daniel Wagner	Virginia Dept. of Rail and Public Transportation

#### VOTING MEMBERS ABSENT

Dan Brugh	County of Montgomery
Crystal Williams	City of Salem
Cody Sexton, <i>Vice Chair</i>	Town of Vinton
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, Alison Stinnette, Jonathan Stanton, Jeremy Holmes

**Others Present:** David Jackson, Cambridge Systematics; Anthony Ford VDOT; Dalton Kaiser, Community Development Intern Botetourt Co

### **3. CONTINUED DEVELOPMENT OF THE UPDATE TO ROANOKE VALLEY TRANSPORTATION PLAN**

Ms. Cristina Finch and Mr. David Jackson jointly delivered a PowerPoint presentation on the ongoing development of the Roanoke Valley Transportation Plan (RVTP). The presentation (attached) discussed the following items:

- RVTP schedule, process, and timeline
  - Needs to solutions to projects
  - Defining the differences between addresses, gap, and priority gap needs
  - Identifying potential solutions - scoring quartile and priority gap need
  - Identifying preferred solutions and considerations
  - Next steps: solutions to projects
    - Capital, services, and studies

Discussion ensued regarding the combination of the RVTP and the TIP, and the process of identifying comments and how they were translated into needs. Additional comments were made by Committee members regarding various needs and projects discussed during the presentation.

### **4. FIRST DRAFT OF AMENDMENT #6 TO THE VISION 2040:**

#### **A. Projects with Cost Increases 10% or More**

Ms. Alison Stinnette reviewed a working list of current projects on the RVTP Constrained List of Projects whose project budgets have increased 10% or higher. Discussion ensued regarding the various reasons, such as inflation and the current global market and health factors, for budget adjustments. Ms. Stinnette will continue to coordinate with locality staff to get updated project budget figures for the August TTC meeting.

#### **B. Review of Inclusion of SMART SCALE Round 5 Candidate**

Mr. Bryan Hill reviewed the current information obtained by staff on SMART SCALE project applications from localities, the RVTP, and the RVARC (urbanized area only). At the time, several project applications were still without cost estimates. It was also noted that VDOT had not yet developed right-of-way phase estimates, which would change the overall project total. It was anticipated that many right-of-way estimates would be developed after the August 1 application deadline.

#### **C. Inclusion of New Projects to the Plan**

Mr. Bryan Hill distributed a handout (attached) and discussed the need for newly funded projects to be amended into the RVTP. Among these new projects were those recently adopted into the VDOT Six-Year Improvement Program—which would be added to the Constrained List of Projects. Two other projects are new SMART SCALE applications not currently found on the RVTP Vision List. Mr. Hill will continue to coordinate with locality staff to get the most updated project budget figures for the August TTC meeting when the amendment is considered for recommendation to the RVTP Policy Board.

## **5. PURSUIT OF FEDERAL GRANTS**

Mr. Jonathan Stanton provided an update on the status of new funding opportunities through the 2021 Infrastructure Investment and Jobs Act. Staff will provide email updates to members based on the release of federal Notices of Funding Opportunities.

## **6. ADJOURNMENT**

The Work Session adjourned at 3:30 p.m.

# Roanoke Valley Transportation Plan Update

Approach/Schedule/Solutions Update

*presented to*  
*Transportation Technical Committee*

*presented by*  
*RVTPO, Cambridge Systematics, Inc.*



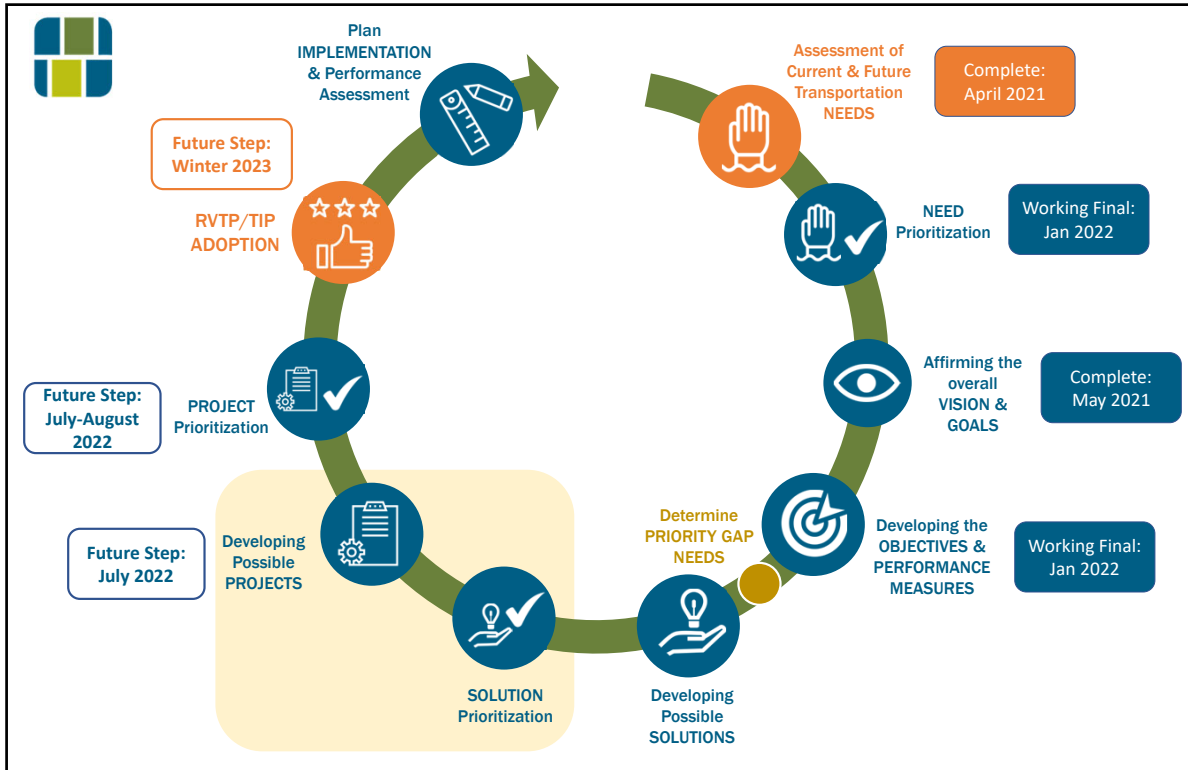
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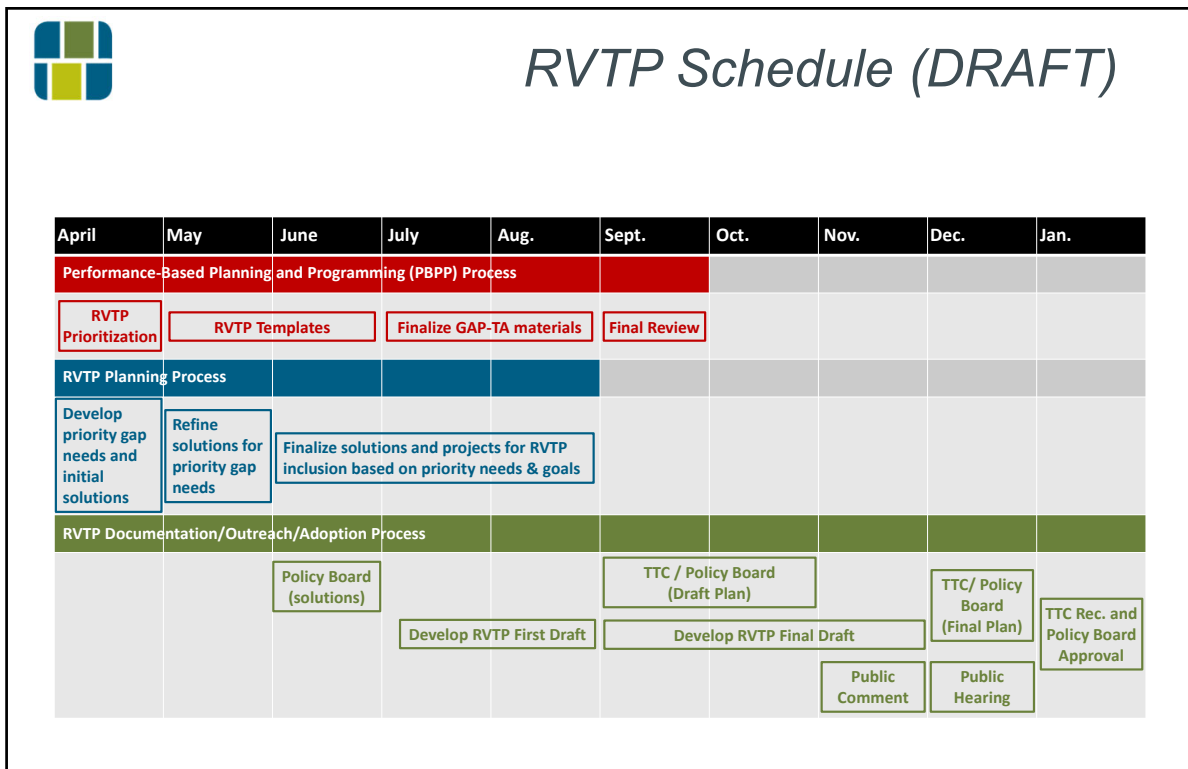
## Agenda

- RVTP Process Overview and Schedule
- Needs to Projects Process
- Solutions
  - Approach to identify Priority Gap Needs
  - Approach to identify Potential Solutions
  - Approach to determine Preferred Solutions
- Translating Solutions to Projects
  - Examples
- RVTP Content
- Next Steps

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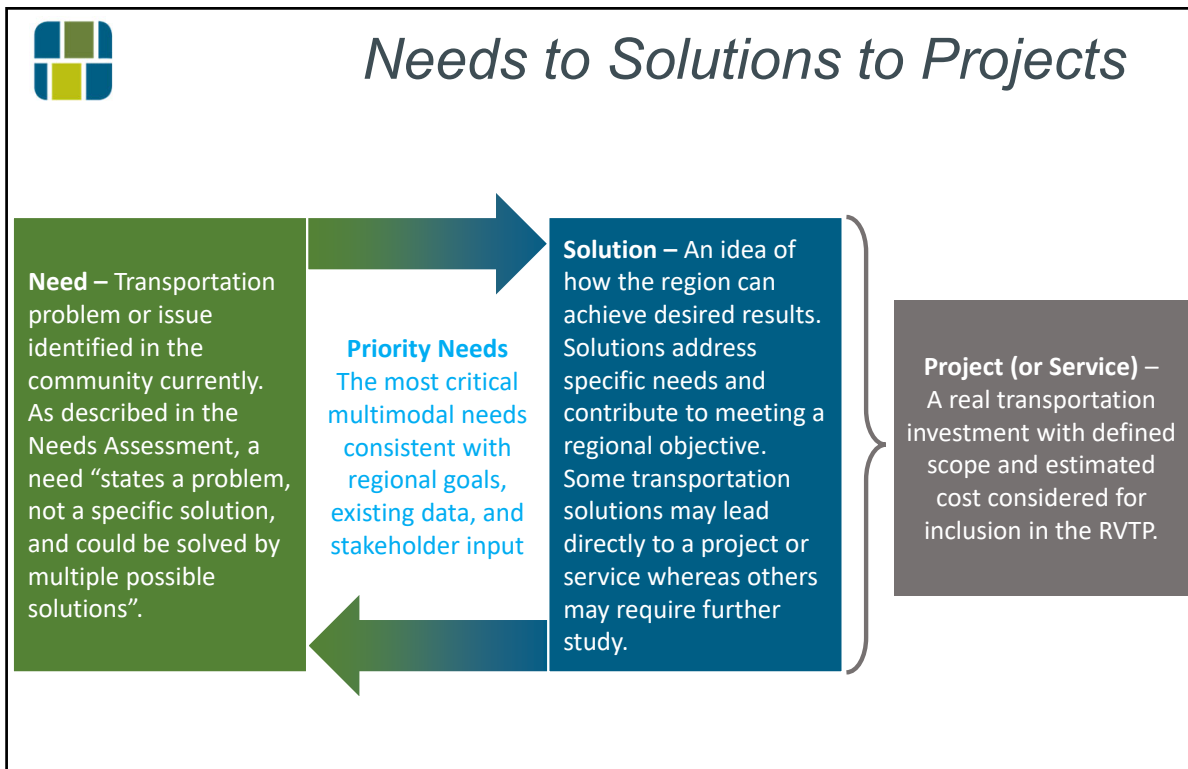
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# Needs to Solutions to Projects

**Addressed Need** – Proposed solutions and projects/services exist

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

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

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

Identify potential and preferred solutions to develop into projects/services (or studies)

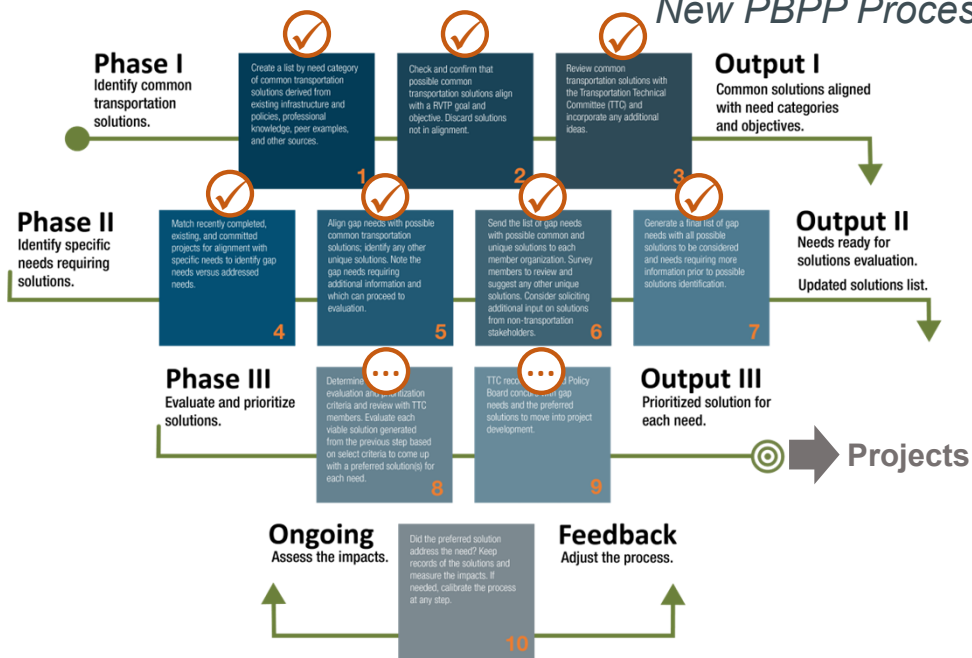
Identify project or service for potential inclusion in the RVTP

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# Needs to Solutions to Projects

## New PBPP Process



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# Solutions

## Start with Priority Gap Needs

### Complete Work

1. Compare Needs to Projects
2. Determine Overlaps
3. Identify Priority Gap Needs

Reached conclusions through using the NEST and TTC member input.

Need Type	Priority Gap Needs	Bedford	Botetourt	Montgomery	Roanoke	Roanoke City	Salem	Vinton
Access (Non-Transit)	7	1	3	1	1	3	2	
Access (Transit)	7				6	5	5	5
Congestion	10		3	1	7	3	1	2
Safety (auto)	22	1	4		9	6	1	3
Safety (bike)	38		1	1	29	6	3	1
Safety (ped)	52		2		37	17	5	3
System Management (operations, assets)	8	1	3	1	4	2	2	1
System Management (transit)	13					8	4	1
<b>Total</b>	<b>157</b>	<b>3</b>	<b>16</b>	<b>4</b>	<b>93</b>	<b>50</b>	<b>23</b>	<b>16</b>

Note, this includes gap needs determined to be a priority by any jurisdiction. For needs crossing jurisdiction lines, if any jurisdiction identified as a priority, it is counted.

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# Solutions

## Identify Potential Solutions

### Complete Work

#### Identify Potential Solutions for Priority Gap Needs

- Based on common and unique transportation solution lists (originally developed in April)
- Based on prior programmed or planned projects/services (from the existing RVTPO constrained and vision list projects, past plans/studies, and ongoing plans/studies such as STARS or Project Pipeline)
- Based on TTC member review and input

Need Priority Score Quartile	Priority Gap Need
1	59
2	26
3	42
4	30
<b>Total</b>	<b>157</b>

Developed potential solutions for all priority gap needs

Focusing on higher priority needs within each need type for preferred solutions

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# Solutions

## Where Did Solutions Come From?

### Complete Work

#### Identify Potential Solutions for Priority Gap Needs

- **Possible Common Transportation Solutions** – Identify potential common transportation solutions given needs definition and local context. For each solution provide a general scope and rationale.
- **Possible Unique or Non-Transportation Solutions** – If applicable, identify other unique and/or non-transportation solutions to address the need.
- **Relevant Recent or Ongoing Studies and/or Recommendations** – For the priority gap need, identify planned projects, for example, projects in the fiscally constrained Vision 2040 plan, vision list projects, or other recommendations from recent plans or planning studies applicable to the need.
- **Needs Requires Additional Information** – Note if the priority gap need definition requires further clarification prior to determining potential solutions. This could occur as part of this process, through collaboration with the TTC, or as part of a future study.

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# Solutions

## Identify Preferred Solutions

### Ongoing Work

#### Identify Preferred Solutions

**Review Potential Solutions Based on Simple Criteria** – Qualitative review based on three factors: efficacy, unintended outcomes, future factors.

**Determine Preferred Solution** – Combine insights from TTC review and input with the criteria review to identify preferred solution(s).

**Translate Solutions to Projects, Services, and Studies within the RVTP** – For each preferred solution identify and define candidate projects, services, and studies.

Criteria	Rating	Considerations
<b>Efficacy</b>	Highly Effective (3), Moderately Effective (2), Somewhat Effective (1), or No Effect (0) (for each objective)	How effective is the solution expected to be at advancing the region toward its objectives?
<b>Potential to Generate Unintended New Needs</b>	Highly Unlikely (3), Unlikely (2), Likely (1), Certain (0)	What is the likelihood that this solution would exacerbate or create another problem or need?
<b>Resilience to Future Factors</b>	More Important (1) Less Important (0) (for each future factor)	If the future factors unfold as anticipated over the coming decades, does the solution become more or less important in meeting needs?

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# Solutions Constraining the List

## Ongoing Work

### Identify Preferred Solutions - Considerations

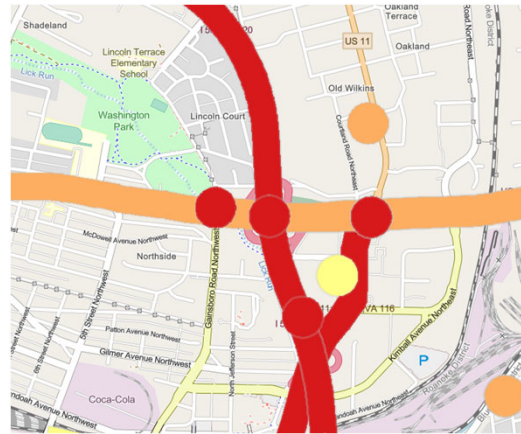
**Combining / Connecting Priority Gap Needs –** Multiple priority gap needs on a single corridor within a short distance should be considered for combination into a single priority gap need (enabling a solution that addresses multiple needs)

**One Solution Addressing Multiple Priority Gap Needs (or any need) –** Each solution should be reviewed to consider how it could potentially address other needs on the corridor or in the area (consider context and economy of scale)



**Helps constrain potential project list and elevates more regionally significant solutions and projects**

Multiple Priority Gap Needs in Downtown Roanoke



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# Solutions to Projects

## Next Step

**Preferred solutions for priority gap needs**

### Projects

**Capital (Infrastructure):**  
Defined project scopes and cost estimates (primarily roadway or active transportation based) for prioritization within the RVTP.

**Services:**  
Defined investments to maintain and strategically expand transportation services like public transit, intercity bus service, passenger rail, and other mobility services.

**Studies:**  
Where obvious solutions and/or projects are not ready for inclusion on the RVTP, the team will identify the need for future studies.

**Incorporated within the project prioritization approach to identify projects for inclusion in the plan**

**August – refine and prioritize projects**

*GAP-TA Prioritization Process document available in June agenda packet*

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# Needs to Solutions to Projects Examples

Using the NEST and other resources to inform potential solutions, preferred solutions, and possible projects/services/studies

**RVTP Needs Evaluation and Solutions Tool (NEST)**

View Map with Prioritization Metrics

Roanoke Valley Transportation PLANNING ORGANIZATION REGIONAL COMMISSION

Select Prioritized Needs by Location

Needs Location:  **Needs Location**

Prioritized Needs Location is:

Select Prioritized Needs Type

Prioritized Transportation Needs:  **Prioritized Transportation Needs**

Need Type is:

Select Programmed Project Type

Remove Transit Projects from View:  **Remove Transit Projects from View**

SYIP and TIP Projects:  **SYIP and TIP Projects**

Project Type is:

Transportation Solution is:

Select Plan / Study Type

Plans and Studies:  **Plans and Studies**

Study / Plan Type is:

Search by Project UPC, Title, or Description

Search for Prioritized Needs

Powered by Esri

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## RVTP Content "One-stop shop"

**Next Step**

Traditional report meeting requirements and telling the complete story of RVTP development

Meet public engagement requirements  
Meet Federal metropolitan planning & programming requirements



Includes need, solution, and project details

Planning tool for partners and public to interact with RVTP needs, solutions, and projects (RVTP NEST)



Interactive, web-based highlights of the Plan for diverse audiences

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## Next Steps (July-September)



**Refine and finalize preferred solutions (ongoing)**

RVTP team and TTC members to develop and review preferred solutions

Staff to coordinate with members to reach conclusions on preferred solutions



**Develop projects and start prioritization (by end of July)**

RVTP team to refine projects, services, and studies and setup and implement prioritization process

RVTP team to implement prioritization process developed by GAP team



**TTC meeting (August)**

RVTP team to review preferred solutions, projects, and prioritization approach



**Finalize project development and prioritization (by end of August)**

RVTP team to develop project scopes, costs, and finalize prioritization

RVTP team to finalize and document project lists



**Develop Draft RVTP (by early September)**

RVTP team to develop Draft RVTP for TTC review

**STAFF BRIEFING**

**July 14, 2022 TTC Work Session**

**First Draft of Amendment #6 to the Vision 2040: Roanoke Valley Transportation Plan: Inclusion of New Projects to the Plan**

As the FY23-28 Six-Year Improvement Program was adopted last month, this discussion will include a list of new projects to the Roanoke Valley Transportation Plan (RVTP) that have received funding since the most recent amendment.

<b>UPC</b>	<b>Project Name</b>	<b>Locality</b>	<b>Cost Estimate</b>
T26374	Churchill And Grandview - Drainage Improvements - Roanoke	Roanoke	\$838,000
T26375	3600 Block Peakwood Dr - Drainage Improvements - Roanoke	Roanoke	\$471,000
T26384	Shenandoah Ave Diversion - Drainage Improvements - Roanoke	Roanoke	\$3,764,000
T26386	1400-1500 Block Main St Drainage Improvements - Roanoke	Roanoke	\$1,969,000
T26392	West End Drainage Project - Phase 1 - Roanoke	Roanoke	\$1,168,000
T26395	18th St. SE (Wise - Tazewell)- Curb, Gutter, SW - Roanoke	Roanoke	\$3,297,000
T26750	Glade Creek Greenway Phase 3 PE/Study	Vinton	\$275,000
T26754	I-581-Exit 2 (Peters Creek Rd) Interchange Improvements Ph 1	Multi-jurisdictional	\$16,998,000
T26782	Williamson Rd Pedestrian Safety - Roanoke	Roanoke	\$575,000
T26802	Glade Creek Greenway Vinyard Park West - Roanoke Co	Roanoke County	\$651,000
T27104	#BF - City of Roanoke - Bridge Replace Persinger Rd - Year 4	Roanoke	\$3,905,000
T27105	#BF - City of Roanoke - Super Replace 13th Street - Year 4	Roanoke	\$6,822,000
120996	#BF - Salem Year 3 - Bridge Rehab Contract (B)	Botetourt County	\$6,156,000
121969	8th Street, NW - Curb, Gutter, SW - Roanoke	Roanoke	\$3,077,000
121998	Salem - Franklin Street Improvements	Salem	\$5,485,000
121999	Grayson Ave, NW - Curb, Gutter, SW - Roanoke	Roanoke	\$3,135,000
121971	#SGR23lp - Roanoke Fkey 1556 Campbell Ave SW	Roanoke	\$381,000
121977	#SGR23lp - Roanoke Fkey 1554 Campbell Ave SW	Roanoke	\$451,000
122001	Tyree and Tennessee Drainage Improvements - Roanoke	Roanoke	\$849,000
122002	4000 Block Virginia Ave, NW - Drainage Improvements - Roanoke	Roanoke	\$893,000

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## MINUTES

The August meeting of the Transportation Technical Committee was held on Thursday, August 11, 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
Will Crawford	County of Roanoke
Wayne Leftwich	City of Roanoke
Dwayne D'Ardenne	City of Roanoke
Crystal Williams	City of Salem
Cody Sexton, <i>Chair</i>	Town of Vinton
Nathan McClung	Town of Vinton
Frank Maguire, <i>Vice Chair</i>	Roanoke Valley Greenway Commission
William Long ( <i>via zoom</i> )	Greater Roanoke Transit Company
Michael Gray	Virginia Dept. of Transportation - Salem District
Daniel Wagner	Virginia Dept. of Rail and Public Transportation

**VOTING MEMBERS ABSENT**

David Givens	County of Botetourt
Dan Brugh	County of Montgomery
Anita McMillan	Town of Vinton
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, Alison Stinnette, Jonathan Stanton, Jeremy Holmes, and Virginia Mullen.

**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

**Others Present:** David Jackson (via zoom), Cambridge Systematics; William Simpson, City of Salem; Maxwell Dillon, City of Salem; Hong Liu, City of Roanoke.

Chair Sexton reported that Mr. William Long, representing the Greater Roanoke Transit Company, requested to participate remotely in today's meeting of the Roanoke Valley Transportation Technical Committee under the "RVTP Written Policy for Electronic Meeting Participation", allowing for remote participation under special circumstances with a physical quorum present. Mr. Long's request is due to a personal matter.

**Unanimous Consent Request:** by Chair Sexton to approve the remote participation request by Mr. Long.

**Action by the Chair:** without objection, the request was approved.

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

The following consent agenda items were distributed earlier:

- A. August 11, 2022 TTC Meeting Agenda
- B. June 9, 2022 TTC Minutes

**Motion:** by Dwayne D'Ardenne to approve items (A) and (B), under the consent agenda, as presented; seconded by Jonathan McCoy.

**TTC Action:** Motion carried unanimously.

4. **CHAIR REMARKS**

- Chair Sexton thanked the TTC members for electing him as a Chair. He also thanked Vice Chair Maguire for chairing the July TTC meeting.

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

The RVTP plan development team continues to implement the new performance-based planning process developed by the OIPI GAP-TA team to identify potential solutions, highlight preferred solutions, and establish projects, services, and studies for potential inclusion in the RVTP. This process will be finalized in August and September in parallel to RVTP materials development, including the RVTP report, interactive maps and databases, and interactive on-line plan.

Mr. David Jackson and Ms. Cristina Finch updated members on the RVTP process overview and schedule; solutions, projects, services, and studies review; RVTP performance-based planning and programming process and next steps (the PowerPoint presentation is included with the Minutes).

Mr. Michael Gray noted that he is not really comfortable with the needs that were identified. He further explained that public comment is very important, but it has to go through a filter before a comment is determined as a need. A comment from an individual(s) doesn't

automatically mean it's a need. Ms. Finch replied that staff didn't want to discount anyone's perspective on what is a transportation need, therefore everything had been captured, later filtered through the prioritization process. Mr. Gray suggested that moving forward public input needs to be kept separate from the needs identified through different means (data, local government, etc..).

Mr. Gray commented that the Six-Year Program sets the priorities in the state, where the TIP is a reactive document that outlines the obligations for the projects as they move forward through the project development process. The key piece is the planning efforts that are included in the Long-Range Plan as part of the Six-Year program and the STBG process. The key piece for a project going from an idea to a funded project is the Six-Year and the STBG programs, which are completely missing. Mr. Gray asked why it is emphasized so much on the TIP since that is just an obligation document. Ms. Finch replied that the goal is to have a one stop shop. She further explained that the NEST, the TIP as part of the RVTP, and the interactive story map would tell the complete story of the Roanoke Valley transportation investments in the region.

Mr. Gray asked if the TIP would be an appendix to the RVTP plan. Ms. Finch replied that staff had been working with the OIPI gap team to develop project sheets that are very similar to what Hampton Roads and Richmond already use. The way the plan will be structured is still in the works.

Ms. Megan Cronise asked if the orange outlined sheet (shown in the presentation) will need to be filled out for each project that is included in the Long-Range Plan. Ms. Cronise noted that that's a lot of work and a lot of detailed information to be provided for unfunded projects.

Mr. Gray asked how grouped projects would be addressed. Ms. Finch replied that this will be discussed over the next few months but certainly the goal will be not to make the process overburdensome.

## **6. OVERVIEW OF THE TRANSPORTATION IMPROVEMENT PROGRAM**

Mr. Bryan Hill provided an overview of the Transportation Improvement Program (TIP), consisting of background, required elements, development, and next steps (PowerPoint presentation is included with the Minutes). Mr. Hill also invited Mr. Michael Gray, Virginia Department of Transportation and Mr. Daniel Wagner, Virginia Department of Rail and Public Transportation to share how each agency uses the TIP and what are some similarities and differences.

## **7. DRAFT AMENDMENT #6 TO THE VISION 2040: ROANOKE VALLEY TRANSPORTATION PLAN**

### **A. Projects with Estimated Budget Adjustments 10% or More**

Following the July Work Session, RVARC staff reached out to localities for additional information on projects, requiring budget adjustments. A summary and feedback were provided with the staff report on page 9 of the agenda packet. New information was received after the agenda packet was initially published. Ms. Alison Stinnette handed out an updated

FY23 Budget Adjustment Rationale Sheet (handout is included with the Minutes). Staff continues to seek information from the localities and VDOT regarding the projects with estimated budget adjustments. Staff recommended the following existing projects in the Roanoke Valley Transportation Plan be amended, based upon having project budget adjustment increases of 10% or more:

Locality	Project Name	Project Description	Original Cost	New Estimated Cost
Roanoke City	9 <sup>th</sup> Street Multimodal Improvements	Pedestrians, cyclist, and vehicle operators could benefit from sidewalks and on-road parking.	\$625,000	\$889,000
Roanoke City	Roanoke River Greenway Bridge the Gap Phase 2 Segment 2	People could safely walk or bike along Aerial Way Drive from the Norwich neighborhood.	\$7,985,000	\$9,726,000
Vinton	Walnut Ave Bike/Ped Accommodations (5 <sup>th</sup> St to Town Limit)	Pedestrians and cyclists could travel on Walnut Ave. and 5th St. to the Vinton town limit.	\$1,684,030	\$2,068,000
Roanoke County	Roanoke River Greenway through Explore Park	Pedestrians and cyclists could travel through the Explore Park to Rutrough Rd.	\$3,020,308	\$4,222,000
Roanoke County	#SMART18- West Main Street Sidewalk Installation	People could benefit from new sidewalk installation.	\$1,037,000	\$1,152,000
Salem District-Wide	Rte 220 Access Management Project	This will improve traffic flow and safety on Rte. 220.	\$10,196,000	\$11,696,000
Roanoke County	Pedestrian Improvements on Route 11 (Williamson)	Pedestrian Improvements on Route 11 - North Roanoke Assisted Living to Clubhouse Drive.	\$1,500,000	\$2,573,000
Roanoke County	Dry Hollow Road Safety Improvements	Safety Improvements around West River Rd.	\$2,185,000	\$4,637,000
Salem	Downtown Salem – Roanoke Boulevard	Improvements for pedestrians and cyclists.	\$1,000,000	\$1,841,000
Salem	Elizabeth Greenway	Pedestrian and cyclists could travel through this path to connect between East Main Street and Mason Creek Greenway.	\$1,104,400	\$1,832,000
Salem	#SGR18LB – Apperson Drive Bridge Replacement	Bridge replacement.	\$7,497,000	\$8,438,000
Roanoke City	Franklin Road Sidewalk Improvements – Rte 220 B Phase 2	People could benefit from the sidewalk, crosswalk, and drainage improvements.	\$1,791,000	\$2,241,000

Chair Sexton commented that he really liked how the table shows the original estimated cost and the final cost, which shows the age of the estimate.

Mr. Hill added that the 14-day public comment period began on August 4, 2022. Staff has received over 100 comments to date.

Ms. Megan Cronise commented that she is not sure if the Dry Hollow Road Safety Improvements project should be included in the table or have received public comment. Additionally, Ms. Cronise noted that the Pedestrian Improvements on Route 11 project is a VDOT-administered project located in Roanoke County and suggested adding a “responsibility” column to the table.

**B. Inclusion of New Projects which have Received Funding since the Last Plan Adoption**

Mr. Hill noted as discussed at last month’s TTC Work Session, the FY 23-28 Six-Year Improvement Program (SYIP) was adopted in June with several new projects funded in the RVTPO Service Area. The table presented in the staff report (and below) outlines the projects which have received funding since the most recent amendment and would need to be added to the Roanoke Valley Transportation Plan’s (RVTP) Constrained List of Projects.

Project Number	UPC	Project Name	Locality	Cost Estimate
A6-13	120996	#BF - Salem Year 3 - Bridge Rehab Contract (B)	Botetourt County	\$6,156,000
A6-33	N/A	Rt 779 Appalachian Trail Safety Improvements	Botetourt County	\$1,159,501
A6-15	T26374	Churchill And Grandview - Drainage Improvements - Roanoke	City of Roanoke	\$838,000
A6-16	T26375	3600 Block Peakwood Dr - Drainage Improvements - Roanoke	City of Roanoke	\$471,000
A6-17	T26384	Shenandoah Ave Diversion - Drainage Improvements - Roanoke	City of Roanoke	\$3,764,000
A6-18	T26386	1400-1500 Block Main St Drainage Improvements - Roanoke	City of Roanoke	\$1,969,000
A6-19	T26392	West End Drainage Project - Phase 1 - Roanoke	City of Roanoke	\$1,168,000
A6-20	T26395	18th St. SE (Wise - Tazewell)- Curb, Gutter, SW - Roanoke	City of Roanoke	\$3,297,000
A6-14	T26782	Williamson Rd Pedestrian Safety - Roanoke	City of Roanoke	\$575,000
A6-21	T27104	#BF - City of Roanoke - Bridge Replace Persinger Rd - Year 4	City of Roanoke	\$3,905,000
A6-22	T27105	#BF - City of Roanoke - Super Replace 13th Street - Year 4	City of Roanoke	\$6,822,000
A6-23	121969	8th Street, NW - Curb, Gutter, SW - Roanoke	City of Roanoke	\$3,077,000
A6-24	121999	Grayson Ave, NW - Curb, Gutter, SW - Roanoke	City of Roanoke	\$3,135,000
A6-25	121971	#SGR23LP - Roanoke FKEY 1556 Campbell Ave SW	City of Roanoke	\$381,000

A6-26	121977	#SGR23LP - Roanoke FKEY 1554 Campbell Ave SW	City of Roanoke	\$451,000
A6-27	122001	Tyree and Tennessee Drainage Improvements - Roanoke	City of Roanoke	\$849,000
A6-28	122002	4000 Block Virginia Ave, NW - Drainage Improvements - Roanoke	City of Roanoke	\$893,000
A6-29	T26754	I-581-Exit 2 (Peters Creek Rd) Interchange Improvements Ph 1	Multi-jurisdictional	\$16,998,000
A6-30	T26802	Glade Creek Greenway Vinyard Park West - Roanoke Co	Roanoke County	\$651,000
A6-31	121998	Salem - Franklin Street Improvements	Salem	\$5,485,000
A6-34	N/A	I-81 Bypass along Texas St. from Roanoke Blvd. to Electric Rd. - Salem	Salem	Undetermined
A6-32	T26750	Glade Creek Greenway Phase 3 PE/Study	Vinton	\$275,000

Mr. Michael Gray asked if the revenue sharing projects from the table need to be included in the Long-Range Plan since they are not eligible to receive federal funding and are not funded with such. Ms. Finch replied that this is part of the effort to have an all-comprehensive list of projects and that is why they were included.

Ms. Cronise noted that a UPC number is available for the Glade Creek Greenway project and there is an updated cost on the I-581 Exit 2 Peters Creek Interchange Improvement project and will be providing the numbers to staff to edit the table.

Ms. Cronise asked if the VDRPT grant for the McAfee Knob shuttle should be included in the table. Ms. Finch replied that this project was addressed through the TIP process back in May, but it is something to think about if the goal is to have one stop shop.

**Motion:** by Chair Sexton to recommend to the RVTPO Policy Board to approval of Draft Amendment #6 to the Roanoke Valley Transportation Plan (RVTP), which includes:

1. Updated budget estimates to existing projects on the Constrained List with increases of 10% or more;

2. Addition of two new projects to the Vision List: Rte. 779 Appalachian Trail Safety Improvements (Botetourt County) & I-81 Bypass along Texas St. from Roanoke Blvd. to Electric Rd. (Salem); and
3. Inclusion of newly funded projects in the FY23-28 Six-Year Improvement Program to the Constrained List.

Chair Sexton recommended separating the vision list projects from the rest in the TPO's staff report and amending the information with the new details provided by Megan Cronise.

The motion was seconded by Jonathan McCoy.

**TTC Action:** Roll call vote – Ayes 11 (Fowler, McCoy, Cronise, Crawford, Leftwich, Williams, Sexton, McClung, Long, Wagner, Gray); Nays 0; and Abstentions 0. Motion carried unanimously. Motion carried unanimously.

**8. OTHER BUSINESS**

No other business was discussed.

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

Chair Sexton thanked TTC members for their effort to get through the SMART SCALE process this year.

**10. ADJOURNMENT**

The meeting was adjourned at 3:22 p.m.

---

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

# Roanoke Valley Transportation Plan Update

Approach/Schedule/Solutions Update

*presented to*  
*Transportation Technical Committee*

*presented by*  
*RVTPO, Cambridge Systematics, Inc.*



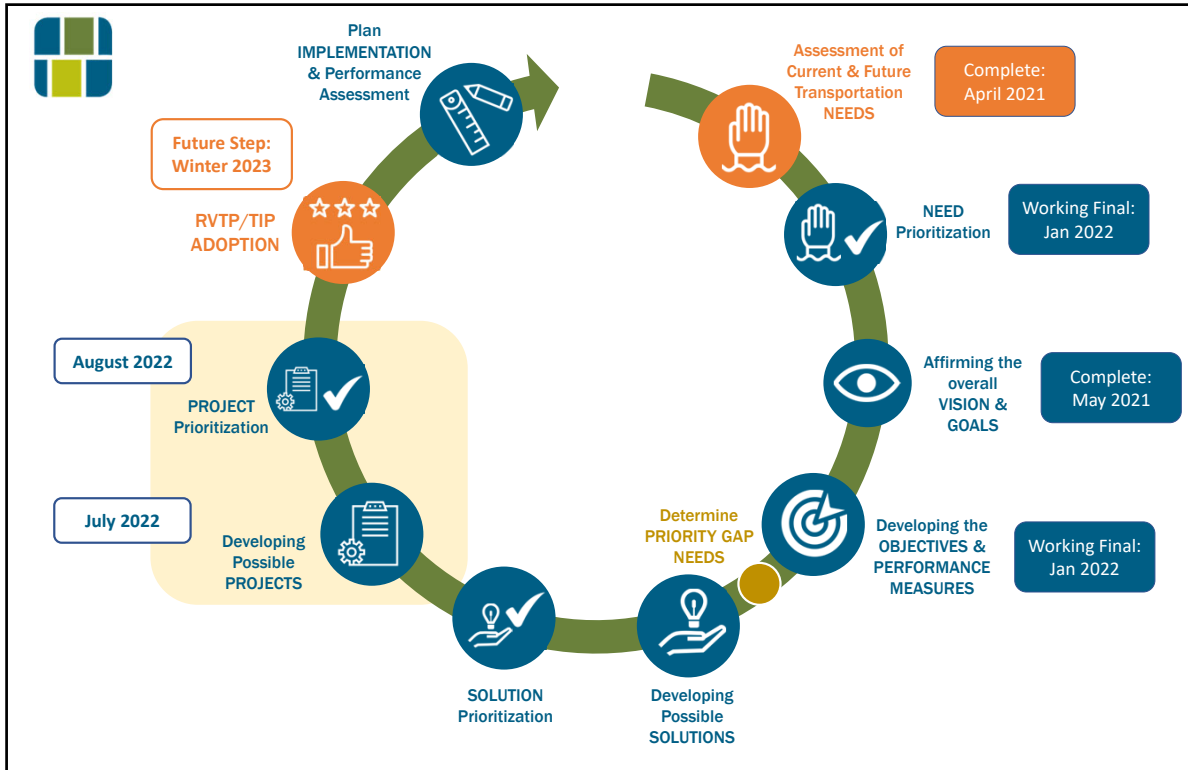
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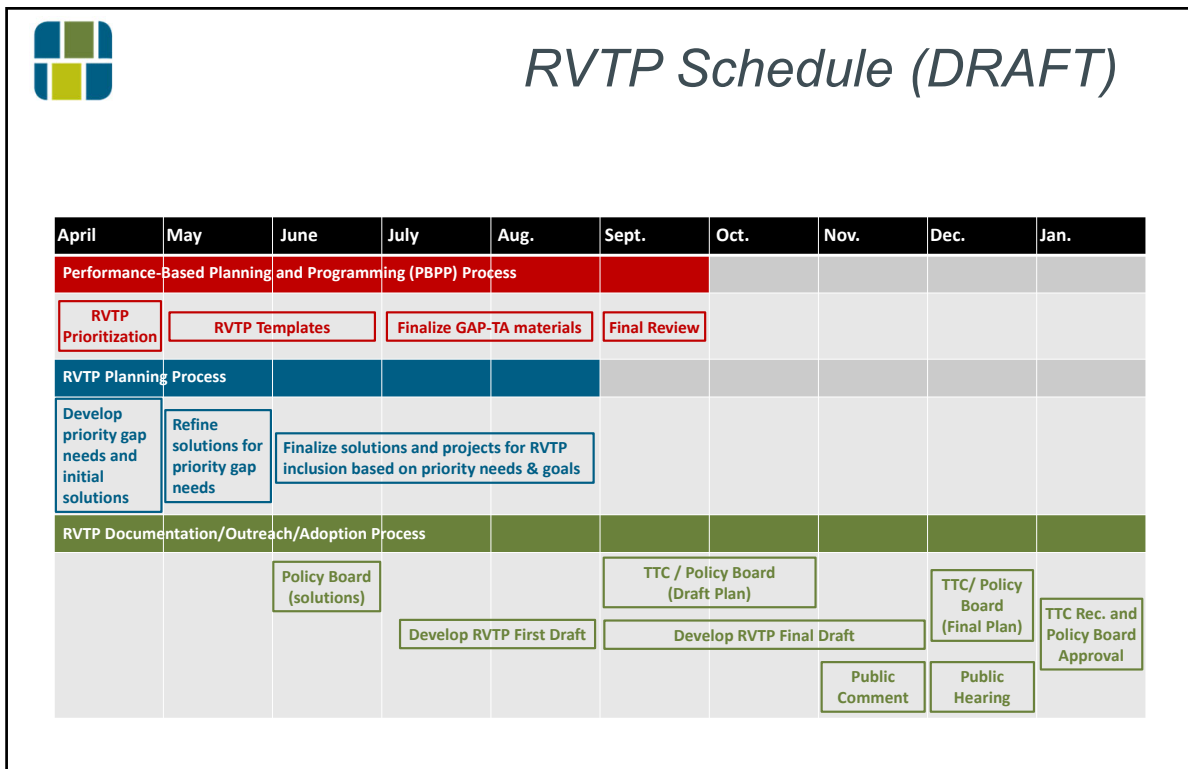
## Agenda

- RVTP Process Overview and Schedule
- Solutions, Projects, Services, and Studies Review
- RVTP Performance Based Planning and Programming Process
  - RVTP Funded Projects – RVTPO TIP
  - RVTP Unfunded Projects – RVTPO Long-Range Plan
    - Projects to pursue (fiscally constrained list)
    - Other projects and solutions (vision list)
- Next Steps

2



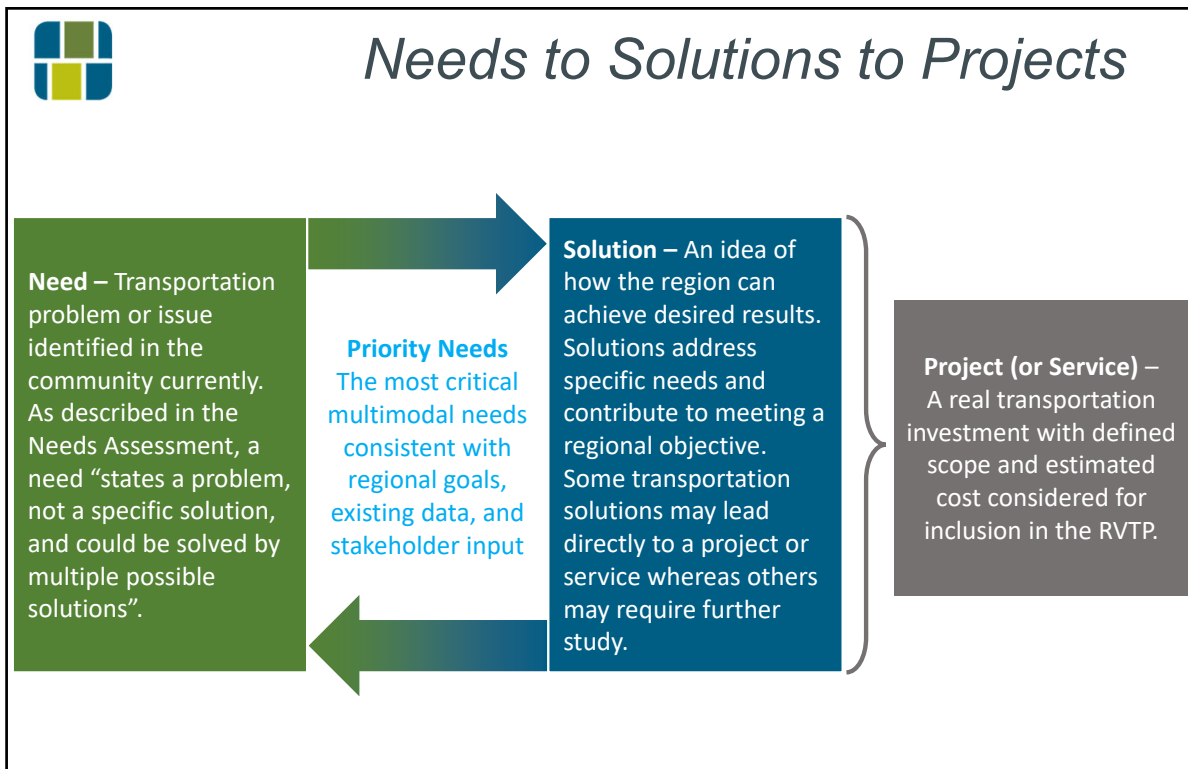
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# Solutions to Projects

## Projects/Services/Studies

Preferred solutions for priority gap needs

**Capital (Infrastructure):**  
Defined project scopes and cost estimates (primarily roadway or active transportation based) for prioritization within the RVTP.

**Services:**  
Defined investments to maintain and strategically expand transportation services like public transit, intercity bus service, passenger rail, and other mobility services.

**Studies:**  
Where obvious solutions and/or projects are not ready for inclusion on the RVTP, the team will identify the need for future studies.

Focus for identifying projects for inclusion in the RVTP (both fiscally constrained list and vision list)

Included in RVTP vision list representing future priorities for regional studies

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# Solutions to Projects

## Priority Transportation Needs

Roanoke Valley Transportation Planning Organization

Introduction

This spreadsheet lists the regional priority transportation needs identified in the Roanoke Valley Transportation Plan along with available information for understanding the nature of the need. Additional information will be added as the needs are matched with possible solutions and in some cases advance to the stage of projects.  
[See the NEST tool to map the projects: https://experience.arcgis.com/experience/7c2b2fb55b1b42c58954799c2156b922](https://experience.arcgis.com/experience/7c2b2fb55b1b42c58954799c2156b922)

Instructions

Select a need type and a locality from the two shaded cells below to see the associated needs ranked by score.

Need Type

Safety (ped)

Locality

Roanoke City

Need ID	Simple Location	Detailed Location	Need	Score	Investment to Date	Rationale	Priority Gap Ne	Possible Solutions	Project Service/St
N_63_P_S	U.S. 460 - Orange	24th St. NE to Blue Hills Drive NE		91	Route 41 & 42, 31 & 32 fixed-route transit, #SMART22 - ROUTE 460 (ORANGE AVENUE) IMPROVEMENTS AT KING STREET & NEAR BLUE HILLS DRIVE, SMART20 - ORANGE AVE (US 460) IMPROVEMENTS (includes new sidewalk and ped crossing improvement)	Partially	Yes		Study pedestrian safety needs in this corridor.

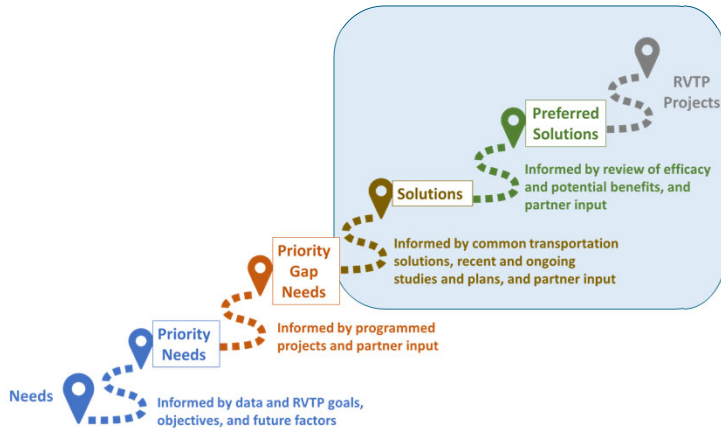
### • TTC review –

- Do potential projects, services, studies support RVTP goals and objectives?
- Do potential projects, services, studies address current needs?
- Are solutions resilient to the future factors?
- Are existing vision list project still priorities for inclusion in the RVTP?

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# RVTP PBPP Process



- RVTP will now include:**
- **Documented path** from needs to solutions to projects to help inform future planning and programming decisions
  - **Unique regional project “pipeline”** addressing regional needs and meeting objectives
  - **Linkage of projects and solutions** to potential performance outcomes
  - **Regional priorities and consensus** for future grant opportunities
  - **Maximize limited planning resources** on most critical needs
  - **Awareness of future factors** within decision making

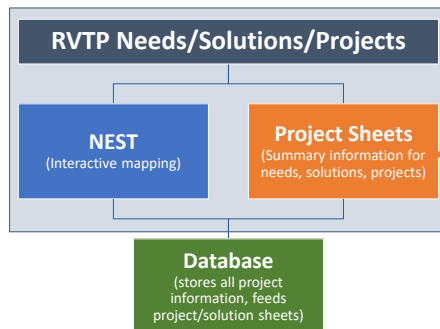
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# RVTP PBPP Process

## RVTP Needs – Solutions – Projects Information

- Interaction with regional data, RVTP needs, priority needs, solutions, studies, and projects



- Database of all RVTP information (projects, solutions, needs,)
- RVTP staff manage and update as project details change (via TIP/RVTP amendments)
- Changes here automatically update project sheets

DRAFT Need/Solution/Project sheets

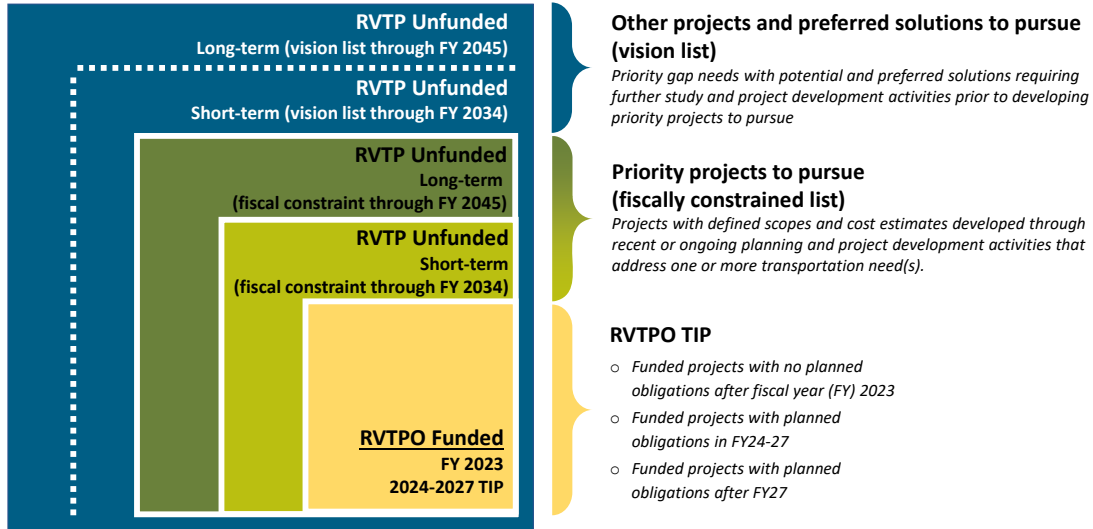
<p><b>RVTPO Title:</b></p> <p>State Title: RVTPO_ID: State ID: Locality: Date Added to Plan:</p> <p><b>Project Description:</b></p> <p>Needs Addressed: (select from 9 options)</p> <p>Transportation Solutions Utilized: Regionally Significant: Yes/No</p> <p>Project Administrator: System (e.g. interstate, transit): Street/Road/Facility Name: Route #: Functional Classification: Limits From Description: Limits From Latitude/Longitude: Limits To Description: Limits To Latitude/Longitude: Project Length (mi.):</p> <p>Status: (Project to be pursued OR Project fully or partially funded OR Project Complete, awaiting financial closeout.)</p> <p>Total Estimated Cost: Planned Date of Construction Advertisement:</p> <p>RVTPO Funding: (STBG, TA, 5310) RVTPO Notes: Brief summary of changes throughout project timeline, changes in funding sources, scope, amendments, etc.</p> <p><b>FUNDING ALLOCATIONS</b></p> <table border="1"> <tr> <th>Funding Source(s)</th> <th>FY 2021</th> <th>FY 2022</th> <th>FY 2023</th> <th>FY 2024</th> <th>TOTAL</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>TOTALS</b></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p><b>PLANNED OBLIGATIONS</b> RVTPO Elects to not track planned year of expenditures for this project.</p> <p><b>ACTUAL OBLIGATIONS</b></p> <table border="1"> <tr> <th>Phase</th> <th>FFY2019</th> <th>FFY2020</th> <th>FFY2021</th> <th>FFY2022</th> <th>TOTAL</th> </tr> <tr> <td>PE</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>ROW</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Construction</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>TOTALS</b></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Funding Source(s)	FY 2021	FY 2022	FY 2023	FY 2024	TOTAL							<b>TOTALS</b>						Phase	FFY2019	FFY2020	FFY2021	FFY2022	TOTAL	PE						ROW						Construction						<b>TOTALS</b>						<p>Picture</p> <p>Location Map</p>
Funding Source(s)	FY 2021	FY 2022	FY 2023	FY 2024	TOTAL																																												
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# RVTP PBPP Process

## RVTP Projects/Services/Studies Organization

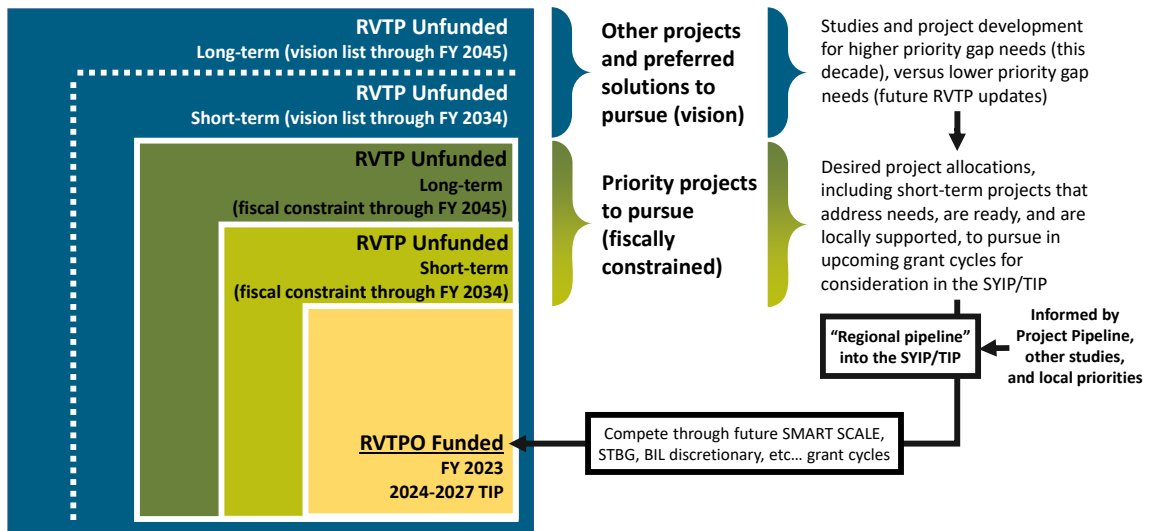


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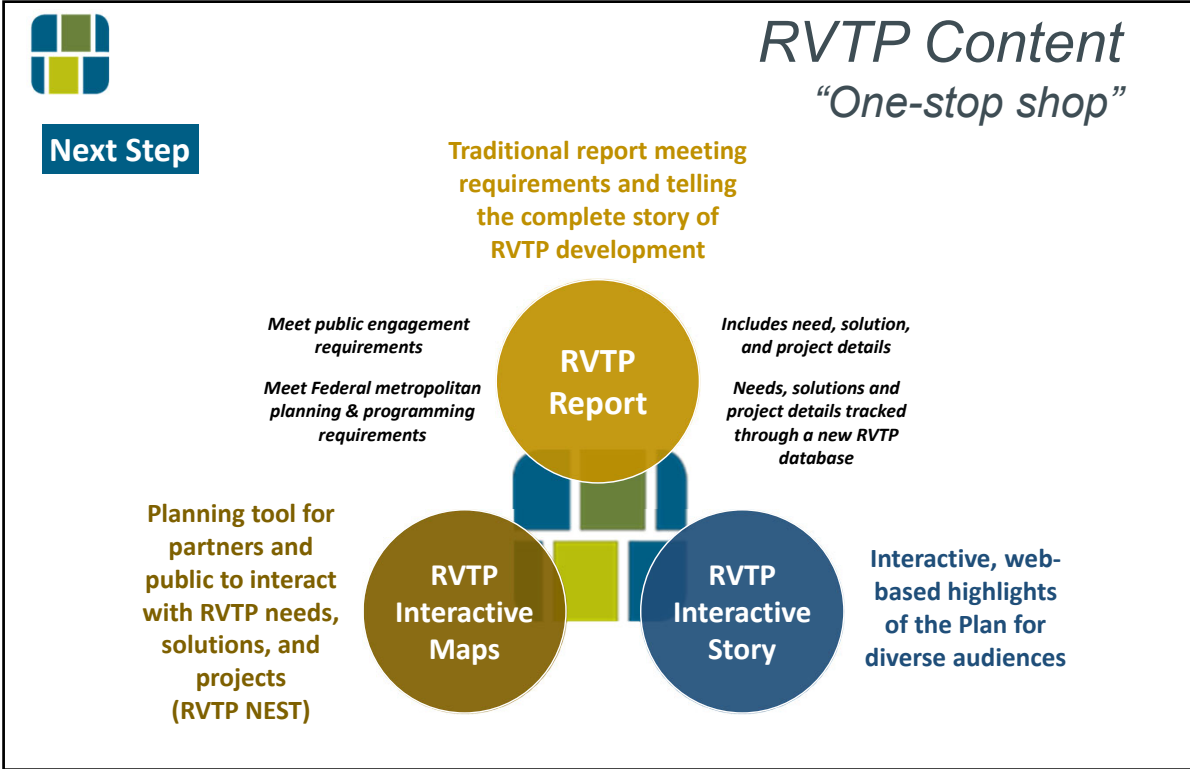


# RVTP PBPP Process

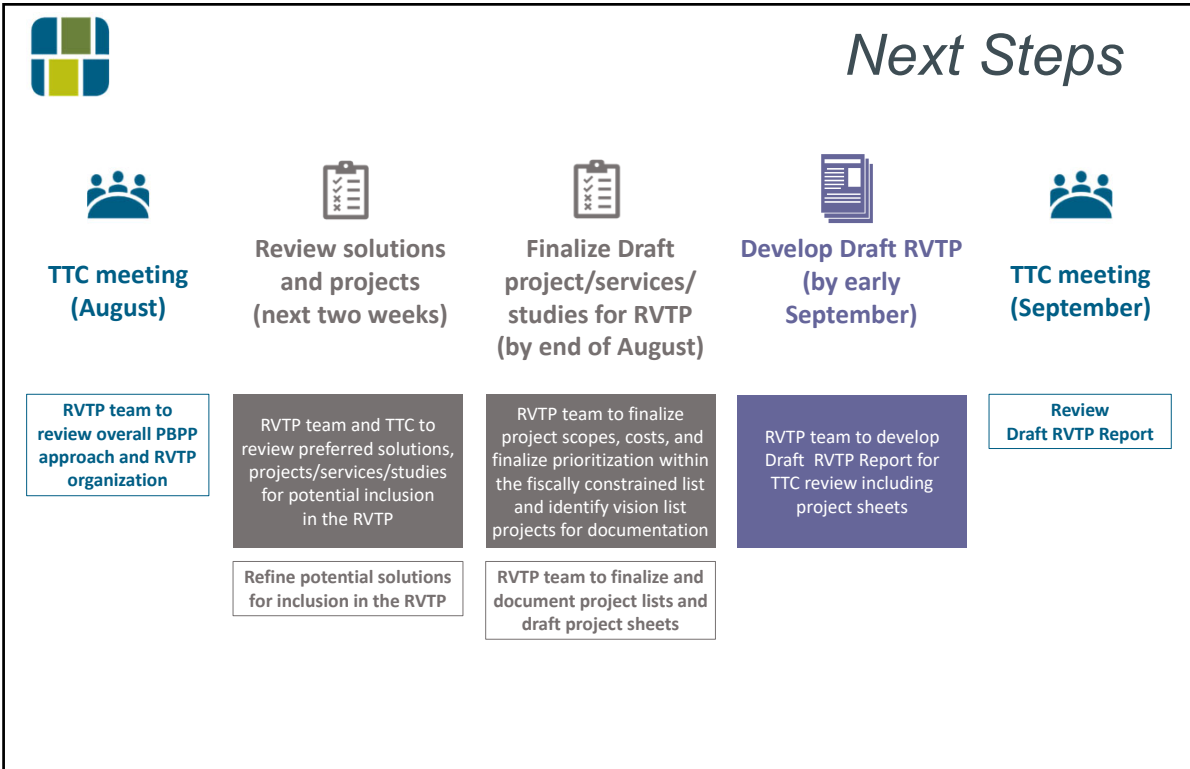
## RVTP Projects/Services/Studies Organization



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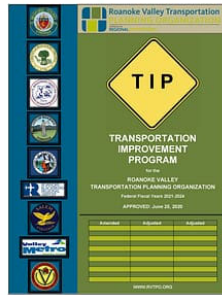


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## OVERVIEW OF THE TRANSPORTATION IMPROVEMENT PROGRAM



August 11, 2022 TTC Meeting

[www.RVTPO.org](http://www.RVTPO.org)

Staffed by the  
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## BACKGROUND

- Multi-year program of planned obligations of federal funds for the implementation of surface transportation projects within the Roanoke Valley metropolitan planning area (MPA)
- Aligns with federally funded transportation investment priorities established by the:
  - RVTPO Surface Transportation Block Grant (STBG) Financial Plan;
  - RVTPO Transportation Alternative (TA) Decisions; and
  - CTB's Six-Year Improvement Programs for VDOT and DRPT
- Developed by the RVTPO in cooperation with state transportation agencies and local public transportation operators
- Before any federally funded surface transportation project can be built in the Roanoke Valley, it must be included in a current TIP that has been approved by the RVTPO Board

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## DEFINITIONS

Allocations – Project allocations are the funds available each fiscal year as identified in the VDOT' and DRPT budgets and the SYIP.

Obligations – An obligation is the Federal government's legal commitment to pay the Federal share of a project's cost.

Obligation Authority – The ability granted by the Federal agency to VDOT/DRPT to spend some amount of the funds obligated in the TIP.

Planned Obligations – Estimates of obligation amounts to be available to a project during a four-year TIP cycle.

Actual Obligations – The exact amount of obligations given to a project in a defined timeframe.

Grouped Projects – Projects that are not considered to be of appropriate scale for individual identification in a given program year may be grouped by function, work type, and/or geographic area using the applicable classifications under 23 CFR 771.117(c) and (d) and/or 40 CFR part 93.

Ungrouped Projects – Projects listed in the TIP which are of appropriate scale to be identified individually.

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## REQUIRED ELEMENTS OF THE TIP (23 CFR §450.326)

- A description of the anticipated effect of the TIP toward achieving the RVTPO's performance targets, linking investment priorities to those performance targets.
- Capital and non-capital surface transportation projects (or phases of projects) within the boundaries of the metropolitan planning area (TA, transit, FLAP, HSIP, bike/ped, STBG).
- Regionally Significant Project - A transportation project that is on a facility that serves regional transportation needs and would normally be included in the modelling of the metropolitan area's transportation network. The RVTPO's travel demand model includes major highways and fixed-route transit. Although non-motorized projects are not included in the RVTPO travel demand model, these and other projects that expect to utilize federal funds will also be considered regionally significant.
- Project information for PE, CN, and RW phases: description/scope, estimated cost, amount of federal funds, and responsible agencies.
- All federally funded projects, grouped and ungrouped, all of which shall be consistent with the Plan.
- A financial plan demonstrating how the approved TIP can be implemented with public and private funding sources.

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## VDOT AND DRPT PERSPECTIVES OF THE TIP



Michael Gray, VDOT Salem District Planning Manager

Daniel Wagner, Statewide Transit Planner, DRPT



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## TIP DEVELOPMENT

### The draft TIP project list is:

- Developed through the coordination of VDOT, DRPT, RVTPO, and public transit agencies, drawing projects from the approved RVTP
- Reviewed by the RVTPO, VDOT, transit agencies, and localities staffs



### The draft TIP document is:

- Produced and undergoes a 14-day public review/comment period

### The final TIP document is:

- Approved by the RVTPO Policy Board
- Approved by the Governor and included without change, directly or by reference, in the Statewide Transportation Improvement Program (STIP)

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## DEVELOPMENT SCHEDULE TO-DATE/NEXT STEPS

Milestone(s)	Date
<ul style="list-style-type: none"> <li>• VDOT Budget and Funds Management Division (BFMD) communicated draft High Level Milestones to all stakeholders.</li> </ul>	June 2022
<ul style="list-style-type: none"> <li>• VDOT and RVTPPO staff met to kickoff development of the FY 2024-2027 TIP.</li> </ul>	July 2022
<ul style="list-style-type: none"> <li>• VDOT District staff and RVTPPO staff conducting data quality review.</li> </ul>	August 2022
<ul style="list-style-type: none"> <li>• VDOT produces "snapshot" of TIP data.</li> </ul>	November 2022
<ul style="list-style-type: none"> <li>• VDOT prepares planned obligation data and provides to RVTPPO staff.</li> <li>• RVTPPO staff produces draft TIP document.</li> </ul>	August 2022 – January 2023
<ul style="list-style-type: none"> <li>• Draft TIP document made available for public review.</li> </ul>	Fall 2022
<ul style="list-style-type: none"> <li>• Final FY 2024-2027 TIP presentation to TTC.</li> <li>• Final FY 2024-2027 TIP presentation to RVTPPO Policy Board for approval and then submit to VDOT FPMD and DRPT for draft Statewide Transportation Improvement Program (STIP) preparation.</li> </ul>	January 2023
<ul style="list-style-type: none"> <li>• VDOT BFMD and DRPT compile final STIP and submit to FHWA/FTA for approval.</li> </ul>	July 2023
<ul style="list-style-type: none"> <li>• New FY 2024-2027 TIP goes into effect.</li> </ul>	October 2023
<ul style="list-style-type: none"> <li>• Actual obligations reporting</li> </ul>	Annually

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UPC #	Project	Locality	Original Estimated Cost	FY 23 Final SYIP Estimated Cost	Administered by	Locality Input	VDOT Input
117994	9TH STREET MULTIMODAL IMPROVEMENTS	Roanoke City	\$625,000	\$889,000		Current estimated budget adjustment is incorrect as the current budget estimate is less than the original budget estimate.	
113138	ROANOKE RIVER GREENWAY BRIDGE THE GAP PHASE II SEGMENT 2	Roanoke City	\$7,985,000	\$9,726,000		City has/will cover any cost beyond what was listed in the original budget estimate.	
111649	WALNUT AVE BIKE/PED ACCOMMODATIONS (5TH ST TO TOWN LIMIT)	Vinton	\$1,684,030	\$2,068,000		1. The original cost estimate was done in 2017 for a pedestrian bridge and the project was amended to bike/ped accomodation. 2. VDOT oversight charges were not in the original cost estimates. 3. Increase cost in construction materials and labor. 4. Delayed survey work. 5. Collaborate with property owners including Norfolk Southern. 6. 2020 and 2021 COVID led to delay in right-of-way negotiations and completion of the engineering plans.	
113567	ROANOKE RIVER GREENWAY THROUGH EXPLORE PARK	Roanoke County	\$3,020,308	\$4,222,000		Supply chain issues, inflation and labor shortages have increased project costs. (County Administered)	
108882	#SMART18 - WEST MAIN STREET SIDEWALK INSTALLATION	Roanoke County	\$1,037,000	\$1,152,000	VDOT	Supply chain issues, inflation and labor shortages have increased project costs	(VDOT Administered and Completed)
110887	RTE 220 ACCESS MANAGEMENT IMPROVEMENTS PROJECT	Salem District-Wide	\$10,196,000	\$11,696,000			
113947	PEDESTRIAN IMPROVEMENTS ON ROUTE 11 (WILLIAMSON ROAD)	Roanoke County	\$1,500,000	\$2,573,000	VDOT	Supply chain issues, inflation and labor shortages have increased project costs.	(VDOT Requested and Administered)
107309	DRY HOLLOW ROAD SAFETY IMPROVEMENTS	Roanoke County	\$2,185,000	\$4,637,000	VDOT	Changed significantly in the last 18 months. The project scope changed as complicating factors were discovered (a historic railroad bridge, for example) which led to a more expensive solution. VDOT informed the County about the scope change and the County requested additional funding through the Revenue Sharing program, with Board of Supervisors concurrence.	(VDOT Administered)
113142	DOWNTOWN SALEM - ROANOKE BOULEVARD	Salem	\$1,000,000	\$1,841,000			
113566	ELIZABETH GREENWAY	Salem	\$1,104,400	\$1,832,000			
110574	#SGR18LB - APPERSON DRIVE BRIDGE REPLACEMENT	Salem	\$7,497,000	\$8,438,000			
117221	FRANKLIN ROAD SIDEWALK IMPROVEMENTS - RT. 220 B- PHASE 2	Roanoke City	\$1,791,000	\$2,241,000		City has/will cover any cost beyond what was listed in the original budget estimate.	

## **STAFF REPORT**

### **September 8, 2022 TTC Meeting**

SUBJ: Continued Development of the Roanoke Valley Transportation Plan

The RVTP plan development team continues to implement the new performance-based planning process developed by the OIPI GAP-TA team to identify potential solutions, highlight preferred solutions, and establish projects, services, and studies for potential inclusion in the RVTP. This process is continuing during September in parallel to RVTP materials development, including the RVTP report, interactive maps and databases, and interactive on-line plan.

The Draft RVTP report is available for initial TTC review during September. It represents the culmination of implementing the performance-based planning process and includes the content to satisfy the requirements for both the Transportation Plan and the FY 2024-2027 Transportation Improvement Program. This unified RVTP includes funded projects over the next four years within the Transportation Improvement Program, fiscally constrained projects to pursue, and vision list projects and solutions.

The RVTP team will continue to revise the RVTP report and supporting on-line materials throughout September as project details are finalized and we receive input through the TTC review. The RVTP Policy Board will see an updated Draft RVTP report, based on initial TTC review, at their September meeting. The TTC will then have another opportunity to review and comment in October before it is released for public comment. The process for drafting and finalizing content will be iterative, with each new version building on the prior version and incorporating reviews and new information.

Items for TTC review:

1. Draft RVTP attached.
2. [Online RVTP ArcGIS StoryMap](#)
3. [NEST mapping tool](#)

Please provide comments to staff by Friday, September 16.

**TTC Action:** None.