



(Official Name: Roanoke Valley Area Metropolitan Planning Organization)

UNIFIED PLANNING WORK PROGRAM

Fiscal Year 2021

(July 1, 2020 – June 30, 2021)

DRAFT May 7, 2020

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RVTPO - FY 2020 UPWP

Prepared on behalf of the Roanoke Valley Transportation Planning Organization (RVTPO) by the staff of the Roanoke Valley-Alleghany Regional Commission through a cooperative process involving the cities of Roanoke and Salem, the counties of Botetourt, Bedford, Montgomery and Roanoke, the town of Vinton, the Greater Roanoke Transit Company, the Roanoke-Blacksburg Regional Airport Commission, the Virginia Department of Transportation, the Virginia Department of Rail and Public Transportation, the Federal Highway Administration, and the Federal Transit Administration.

The preparation of this program was financially aided through grants from the Federal Highway Administration, Federal Transit Administration, Virginia Department of Rail and Public Transportation and the Virginia Department of Transportation.

The RVTPO will strive to provide reasonable accommodations and services for persons who require special assistance to participate in its public involvement opportunities. Contact the Public Involvement and Community Outreach Coordinator at (540) 343-4417 for more information.

The RVTPO fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. For more information, or to obtain a Discrimination Complaint Form, see www.rvarc.org or call (540) 343-4417.

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RESOLUTION OF APPROVAL TO BE ADDED

I. INTRODUCTION

The Unified Planning Work Program (UPWP) for transportation planning identifies all activities to be undertaken in the Roanoke Valley Transportation Planning Organization (RVTPO) study area for this fiscal year. The UPWP provides a mechanism for the coordination of transportation planning activities in the region and is required as a basis and condition for all federal funding assistance for transportation planning by the joint metropolitan planning regulations of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).

The work tasks within this UPWP are reflective of issues and concerns originating from transportation agencies at the federal, state and local levels. An overarching theme to the RVTPO's transportation work is the establishment and pursuit of performance targets, the use of performance measures to track progress towards meeting those targets, and a performance-driven outcome-based approach to transportation planning, programming and decision-making.

Specifically, FHWA and FTA have requested that the following three priority areas of emphasis be incorporated into the work undertaken through the UPWP.

1) MAP-21 and FAST Act Implementation

MAP-21 and the FAST Act [23 U.S.C. 134 (h)(1)] contain the following planning factors that must be addressed in the transportation planning process:

- A. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency;
- B. Increase the safety of the transportation system for motorized and nonmotorized users;
- C. Increase the security of the transportation system for motorized and nonmotorized users;
- D. Increase the accessibility and mobility of people and for freight;
- E. Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- F. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- G. Promote efficient system management and operation;
- H. Emphasize the preservation of the existing transportation system;
- I. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- J. Enhance travel and tourism.

2) Regional Models of Cooperation

In order to ensure a regional approach to transportation planning, the RVTPO will promote cooperation and encourage stakeholders to think beyond traditional borders and adopt a coordinated approach to transportation planning. A coordinated approach supports common goals and capitalizes on opportunities related to project delivery, congestion management, safety, freight, livability, and commerce across local government and urban/rural boundaries.

3) Ladders of Opportunity

As part of the transportation planning process, the RVTPO will identify transportation connectivity gaps in accessing essential services including employment, health care,

schools/education, and recreation. The RVTPPO's work will involve the relevant stakeholders to develop infrastructure and operational solutions that provide the public, especially traditionally underserved populations, with adequate access to essential services.

Reflecting the federal priorities, the following task descriptions and the associated budgets are based on a best estimate of what can be accomplished with the available federal, state and local resources. The Roanoke Valley Transportation Planning Organization has developed this work program to address the metropolitan planning regulations and requirements in the FAST Act, Section 1201; 23 U.S.C. 134.

Historical Context for Transportation Planning

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 created a number of planning requirements. In October 1993, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued final regulations regarding metropolitan planning.

The Transportation Equity Act of the 21st Century (TEA-21), which became law in June 1998, reaffirms the structure of the metropolitan planning process. Most of the modifications to the process are aimed at streamlining and strengthening the provisions included in ISTEA. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) which became law August 10, 2005 and the Moving Ahead for Progress in the 21st Century (MAP-21) which became law on July 6, 2012, and the Fixing America's Surface Transportation Act (FAST Act) which became law on December 4, 2015 further reaffirm and extend the structure of the metropolitan planning process that began with ISTEA.

On February 14, 2007, the FHWA and the FTA released their long-awaited Statewide and Metropolitan Planning Rule (72 Fed. Reg. 7224). The final rule revises planning regulations at 23 C.F.R. Part 450 and 49 C.F.R. Part 613 to reflect the many changes made by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (Pub. L. 109-59 August 10, 2005).

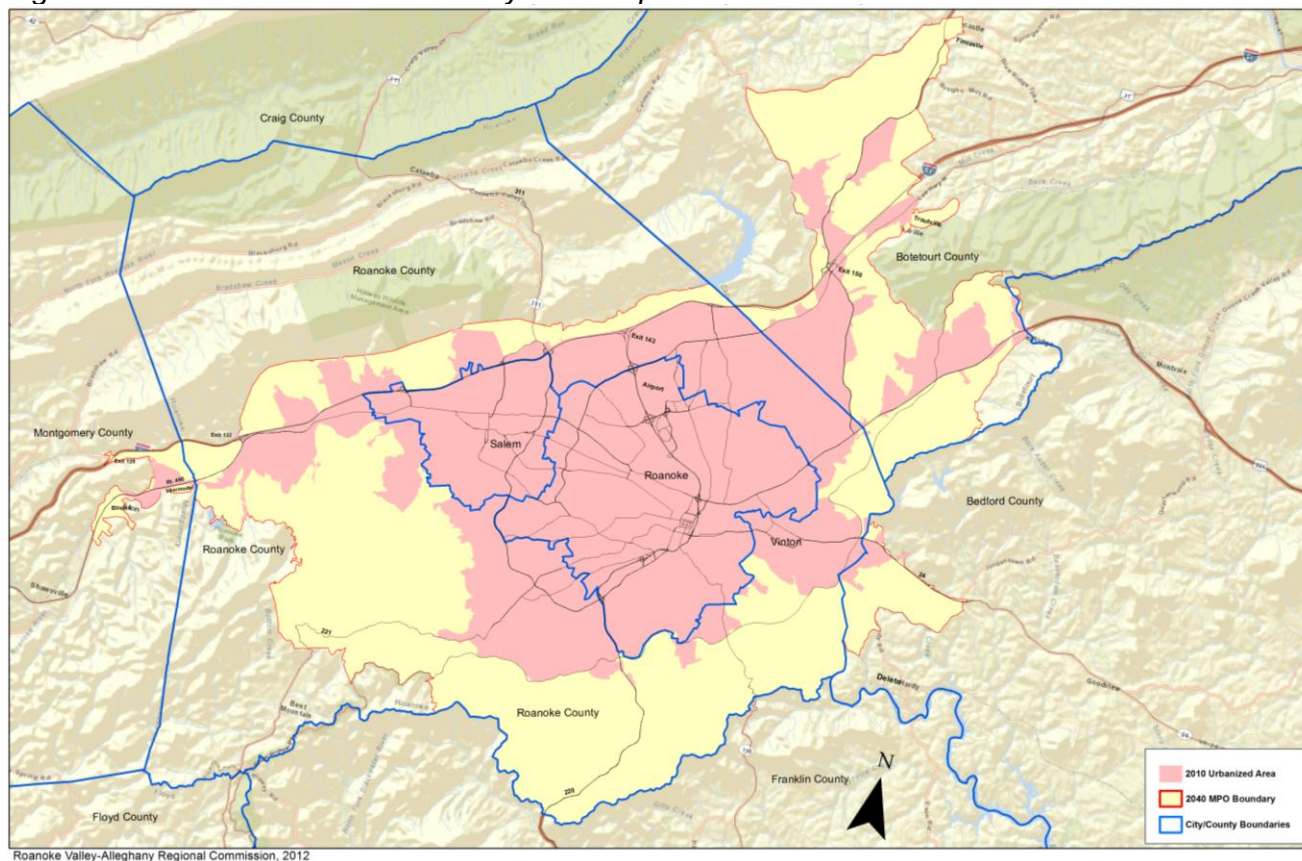
II. METROPOLITAN PLANNING AREA

The RVTPPO 2040 and 2045 study areas consist of the Cities of Roanoke and Salem, the Towns of Fincastle, Troutville and Vinton, and portions of the Counties of Bedford, Botetourt, Montgomery and Roanoke. See Figure 1 for an illustration of the region. Based on the 2010 Census, the RVTPPO 2040 study area population was 231,337 and encompasses a land area of 247 sq. miles.

On March 26, 2012 the US Census Bureau released the Urbanized Area Boundaries (UZAs) (see the following map) based on Census 2010 results. The RVTPPO's Census 2010 UZA contains a population of 210,111, and the RVTPPO was subsequently classified as a Transportation Management Area (TMA) MPO.

On April 15, 2020 the RVTPPO went through its second official Federal Compliance Review which will be repeated every four years. Recommendations on improving the planning and programming process are expected in Summer 2020.

Figure 1: RVTPO 2040 and 2045 Study Area Map



III. AIR QUALITY CONSIDERATIONS

In October 2015, the Federal Environmental Protection Agency established the 8-hour Ozone standard at 70 parts per billion (ppb). Recent trends in ground level ozone for the Roanoke Valley indicate that RVTPO is in compliance with the October 2015 8-hour Ozone standard. According to the Virginia Department of Environmental Quality, the Roanoke design value for 2015-2018 is 61 ppb. The RVTPO's transportation planning and programming work will consider the desire to maintain the region's air quality standard compliance.

IV. RESPONSIBILITIES FOR TRANSPORTATION PLANNING

The Roanoke Valley Transportation Planning Organization (RVTPO) is the organization responsible for conducting the continuing, comprehensive, and coordinated (3-C) planning process for the Roanoke Valley area in accordance with requirements of Section 134 (Title 23 U.S.C.) of the Federal Highway Act of 1962, and Section 8 of the Federal Transit Act. The RVTPO – Doing Business As (DBA) name (official name: Roanoke Valley Area Metropolitan Planning Organization) is the official Metropolitan Planning Organization for the Roanoke Valley area, designated by the Governor of Virginia, under Section 134 of the Federal Aid Highway Act, and the joint metropolitan planning regulations of FHWA and FTA.

The decision-making body of the RVTPO is its Policy Board which consists of sixteen voting members. The voting membership of the Policy Board consists of the following representatives:

Voting Membership on the RVTPO Policy Board

Bedford County	1 representative
Botetourt County	2 representatives
Roanoke County	2 representatives
Montgomery County	1 representative
City of Roanoke	2 representatives
City of Salem	2 representatives
Town of Vinton	2 representatives
Greater Roanoke Transit Company	1 representative
Virginia Department of Transportation	1 representative
Virginia Department of Rail and Public Transportation	1 representative
Roanoke Blacksburg Regional Airport Commission	1 representative

More details about the Board’s structure can be found online at rvarc.org. Staff of the Roanoke Valley-Alleghany Regional Commission perform the day-to-day operations of the RVTPO. The staff, in conjunction with RVTPO’s member agencies, collect, analyze and evaluate demographic, land use, and transportation data to gain a better understanding of the transportation system requirements of the area. Staff members also prepare materials for use at Policy Board, Technical Committee as well as any sub-committee meetings.

Professional staff members participate in all RVTPO meetings, provide expertise as needed, and provide administration of the transportation planning program. In addition, staff members represent the agency at other meetings of importance to planning activities within the region.

V. TOTAL PROPOSED FUNDING BY FEDERAL SOURCE FOR FY2021

The primary funding sources for transportation planning activities included in this work program are the FHWA Section 112 (PL) and FTA Section 5303. The funding to support this UPWP includes unobligated PL funds from FY2019. The proposed funding amounts (including state and local matching funds) for the RVTPO work program are shown in the following table.

FY 2021 RVTPO PROPOSED FUNDING BY FEDERAL, STATE AND LOCAL SOURCES
(July 1, 2020 to June 30, 2021)

	FHWA – Section 112 (PL) 80% Federal 10% State, 10% Local	FTA – Section 5303 80% Federal 10% State, 10% Local	GRAND TOTAL
New FY 2021	\$394,580	\$179,719	\$574,299
Direct Carryover FY 2020	\$0	\$0	\$0
Carryover FY 2019	\$86,898	\$0	\$86,898
TOTAL	\$481,478	\$179,719	\$661,197

VI. FY 2021 WORK PROGRAM TASKS AND BUDGET

The Federal TMA Certification Review taking place in the Spring 2020 will provide recommendations to improve the work of the RVTPPO; staff will work to implement these recommendations beginning in FY21. In the 2016 review, it was noted that becoming a TMA requires more formalized decision-making processes, especially given today's funding constraints and the need to strategically prioritize investments, the RVTPPO should focus on a process-oriented approach when developing planning programs and work products that goes beyond simply developing static plans. These processes include methods to collect, prioritize, and evaluate the effectiveness (or progress) of planning and public engagement efforts. This will continue be an overarching focus of the RVTPPO's work in the coming fiscal year. Unless otherwise stated, the tasks listed in the following sections will be performed/led by RVARC staff.

1. PROGRAM SUPPORT & ADMINISTRATION

1.01 General Administration & Operations

Objective and Description: This task includes ongoing activities that ensure proper management and operation of a continuing, comprehensive, and coordinated (3-C) planning process as described in the Planning Agreement on Performance Based Metropolitan Transportation Planning Responsibilities for the Roanoke Valley Region. The primary objectives of this task are (1) to implement the UPWP throughout the fiscal year and provide all required administrative functions including all accounting functions, personnel administration, office management, financial reporting, contract administration, and purchase and upkeep of necessary office equipment; and (2) to support the activities of the RVTPPO through the preparation of reports, presentations, agendas, minutes and mailings for all Policy Board, Technical Committee, and related meetings, as well as attendance at those meetings. Attendance at staff meetings, stakeholder coordination meetings, and timekeeping are included in this task as well.

Products and Schedule: Efficient office operation, accurate financial information, preparation of quarterly reports, preparation of information in support of RVTPPO activities. (ongoing)

Estimated Budget: \$98,566 (\$74,695 PL and \$23,871 FTA/5303) (included for planning purposes only; not intended to be restrictive).

1.02 Training and Staff Development

Objective and Description: To meet the demands of an ever-changing region, and those of new and updated federal transportation regulations/guidelines, it is important to educate and maintain a staff and board/committee members that can respond to these challenges. This task will help insure that by providing on-going training and development of staff and RVTPPO Policy Board members.

Products and Schedule: Well-trained and informed staff and Policy Board members. (as needed)

Estimated Budget: \$4,958 (\$2,139 PL and \$2,819 FTA/5303) (included for planning purposes only; not intended to be restrictive).

1.03 Work Program Management

Objective and Description: To meet the requirements of 23 CFR Part 420 and 23 CFR Part 450, the RVTPO, in cooperation with the Virginia Department of Transportation, the Virginia Department of Rail and Public Transportation, and the Greater Roanoke Transit Company, is responsible for the development of a Unified Planning Work Program (UPWP). This UPWP describes all regional transportation planning activities anticipated in the Roanoke Valley area in the next fiscal year that will utilize federal funding. The UPWP also identifies state and local matching dollars for these federal planning programs.

This task provides for management of the UPWP and monitoring progress on identified activities. If during this fiscal year, an amendment to the UPWP is deemed necessary, due to changes in planning priorities and/or the inclusion of new planning projects, staff will identify and detail such amendments for consideration by the RVTPO Policy Board.

This task also provides for the development of a UPWP for the next fiscal year. The document will incorporate suggestions from federal funding agencies, state transportation agencies, transit operating agencies, and local governments participating in the RVTPO. The approved UPWP will be distributed to the Policy Board and made available to the public on the RVARC website (rvarc.org).

Products and Schedule:

- UPWP for FY 2022 (Spring 2021)
- Maintenance/amendments to the FY 2021 UPWP (as needed)
- Monitoring of FY2021 UPWP budget and progress on activities (ongoing)

Lead: RVARC staff

Estimated Budget: \$13,290 (\$8,393 PL and \$4,897 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2. PROGRAM ACTIVITIES

2.01 Long-Range Metropolitan Transportation Planning

Objective and Description: The long-range metropolitan transportation planning effort enables local stakeholders to think beyond traditional borders and adopt a coordinated approach to transportation planning for people and freight. This effort may include scenario planning to evaluate where funds are invested based on regional transportation needs and goals. The region's long-range Metropolitan Transportation Plan, "Vision 2040: Roanoke Valley Transportation, was approved in September 2017. Preparations for the next plan, "Vision 2045: Roanoke Valley Transportation" have begun and will continue this fiscal year.

As the RVTPO continues its performance-based planning and programming, staff will further develop the performance management approach to transportation planning and programming. Performance-based planning and programming includes using transportation performance measures, setting targets, reporting performance, and programming transportation investments directed toward the achievement of transportation system performance outcomes.

This item covers the general long-range transportation planning activities. The overall approach to long-range planning in the Roanoke Valley will be performance-driven, outcome-based that considers all modes, ages, and abilities in the development of its multimodal transportation system. This item includes:

Ongoing Activities:

- ***Continued Development of the “Vision 2045: Roanoke Valley Transportation” Plan:*** Specific tasks will likely include developing content updates required from the Vision 2040 plan and new content based on evolving considerations for the future; incorporating safety, economic development, congestion management, and other regional planning efforts into the plan; engaging citizens in key decision-points; developing the model with VDOT staff to demonstrate the impacts of no build and future scenarios; working with state agencies to determine fiscal constraint; as well as other related technical work.
- ***“Vision 2040: Roanoke Valley Transportation” Adjustments/Amendments:*** Staff will work with stakeholders to administratively modify or amend the CLRMTMP as needed to reflect changes to performance measures, investment strategies to accomplish regional transportation goals, and any other necessary change to the long-range plan during the fiscal year.
- ***Federal Transportation Performance Measures Integration:*** Federal guidance concerning the integration of specific performance measures in TMA MPO long-range transportation planning processes will continue. This sub-item is intended to address any necessary work to integrate federally required and federally recommended performance measures and performance measures targets into the performance-based long-range transportation planning process. This item will continue assessing the data needs required for the performance-based approach to long-range planning.
- ***Air Quality and Environmental Analysis and Planning:*** The Federal EPA revised the nationwide 8-hour Ozone Standard, in early October 2015, to 70 parts per billion (ppb) based on a 3-year average. All indications from the Virginia Department of Environmental Quality (DEQ) are that RVTPO is in compliance with the October 2015 standard. Similarly, RVTPO staff is monitoring announcements and news concerning both fine particulate PM2.5 and Greenhouse Gases (GHGs) in case the federal government requires transportation planning process compliance for those two classes of pollutants in addition to ground level Ozone. This subtask is intended for any applicable air-quality or environmental analysis and planning that may be required by the federal EPA. Currently RVTPO is in an Ozone Early Action Compact – Early Action Plan area and is not subject to conformity analysis.
- ***Travel Demand Model / Transit Travel Demand Model Application:*** This sub-item provides staff time and resources to apply the 2040 travel demand model to planning situations and scenarios and continue coordination with VDOT modelers to prepare for the 2045 plan including updating the model. As needed, RVTPO staff will continue to work with Valley Metro staff to apply the Transit Boarding Estimation Model (TBEST), a transit travel demand model, to evaluate future improvements to the regional transit system.
- ***Coordination with Other Long-Range Plans:*** In particular, ensure that metropolitan transportation planning is coordinated with the VTrans statewide transportation plan, the rural long-range transportation plan, and furthers the vision presented in the Livable Roanoke Valley plan.
- ***Other Technical Work:*** Any other technical long-range plan process work; such work may involve consultant assistance.

“2.01 Long Range Transportation Planning” is the element responsible for demonstrating FAST Act compliance for the long-range transportation planning process.

Products and Schedule:

- CLRMTP 2045 technical work (ongoing)
- CLRMTP 2040 amendments and adjustments (Summers of 2020 and 2021 and/or as needed)
- Coordination with VTrans, VDOT’S Rural Long-Range Transportation Planning Process, Livable Roanoke Valley plan implementation and other long-range plans (ongoing)
- Travel Demand Model update and application (ongoing)
- Monitoring of Ozone and PM 2.5 trends with regards to continued air quality compliance; Monitoring of federal and state policies concerning Greenhouse Gas (GHG) and their possible impact on the RVTPPO planning process; Public outreach and maintenance of air quality action day communications lists (as needed).
- Other long-range transportation planning technical work as required (ongoing)

This item supports the federal planning factors to the extent possible given time, financial and other constraints.

Lead: RVARC staff

Support: travel demand modeling support from VDOT, planning support from consultants - as needed

Estimated Budget: \$154,333 (\$112,350 PL and \$41,983 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2.02 Programming Process, Transportation Improvement Program, Surface Transportation Block Grant Program, Transportation Alternative Set-Aside, and Performance Measures

Objective and Description: As required by federal planning and programming regulations, the Transportation Improvement Program (TIP) for the Roanoke Valley area is a four-year program of highway, transit, bicycle, and pedestrian projects receiving federal funds. State and locally funded projects may also be included in the TIP for coordination purposes. The TIP is updated every three years, with major amendments in intervening years, as needed, and must be approved by the RVTPPO Policy Board and the Governor of Virginia. The TIP is required as a condition for all federal funding assistance for transportation improvements within the RVTPPO area.

The RVTPPO administers the allocation of Roanoke Valley formula funds for a few federal programs. The RVTPPO’s federal apportionment of Surface Transportation Block Grant (STBG) Program: Roanoke Valley Urbanized Area Suballocation Funding, referred to previously as the Regional Surface Transportation Program (RSTP), is a category of funding that is determined by the RVTPPO Policy Board through a process described in a separate document titled the “STBG Project Development and Selection Procedures”. The Transportation Alternatives Set-Aside (TA) is a smaller category of funding for which the RVTPPO Policy Board will select projects within the RVTPPO Study Area Boundary. The Roanoke Valley also receives FTA 5310 funds (transportation for the elderly and people with disabilities). Although DRPT manages these funds for the RVTPPO, staff are involved with the coordination of projects and monitors the

use of these funds as they are approved by the RVTPO Policy Board and programmed in the TIP.

SMART SCALE is Virginia's prioritization process for selecting and investing in transportation projects; applications are due every even year. MERIT is DRPT's public transportation grants program and applications are accepted yearly.

This task item primarily involves work related with the above-mentioned items and any work involving grants or the programming of funds; some activities covered in this task may include but are not limited to:

Ongoing Activities:

- Continue to approve new performance measure targets and update existing targets as required by the federal government. As data is available, staff will update the RVTPO Performance Measures Report.
- Continue work to submit SMART SCALE round 4 applications; prepare for the next round of SMART SCALE applications, facilitate the RVTPO's selection of projects for SMART SCALE funding pursuit, and monitor new developments with the SMART SCALE process.
- Administer the RVTPO's STBG program per the approved policies and procedures; update the program's policies and procedures as needed; monitor the status of STBG projects.
- Manage the RVTPO's TA and FTA 5310 funding programs in coordination with the respective state agency.
- Amendments and/or Adjustments to the current TIP or specific STBG/TA funding program allocations.
- Coordination with OIPI, VDOT and VDRPT on TIP, STIP, SMARTSCALE, Six-Year Improvement Program (SYIP) details, procedures and updates, and performance measures. Such coordination will involve travel to statewide meetings related to these and similar topics.
- Coordination with FTA, Valley Metro (GRTC) and RADAR (UHSTS) on transit-related funding and programming with regards to the SYIP, TIP, and formula grant programs.
- Coordination with VDOT, VDRPT, Valley Metro and RADAR on the publication of the Annual Obligations Report.
- Provide assistance with grant funding applications, as requested.

Products and Schedule:

- TIP amendments/adjustments (ongoing as needed)
- Annual listing of projects with federal obligations (Winter 2020/2021)
- Adjustments to STBG, TA funding plans (ongoing as needed)
- Current STBG project updates (Fall 2020 – Winter 2021)
- FY22-27 STBG Financial Plan (Fall 2020 – Spring 2021)
- Update STBG Project Development and Selection Procedures (ongoing as needed)
- SMART SCALE project applications (Summer 2020 – Spring 2021)
- Up-to-date website with related information, data collection and analysis of performance measures, and staff-administered public involvement process for products requiring input (ongoing)
- Staff participation in meetings on the above-mentioned and related topics (ongoing)
- Additional products may include grant applications for transportation funding, funding analysis, new performance measures data development, and others (ongoing)

This item is focused on programming funds and it supports all planning factors (#1 - #11) to the extent that programming funds are available in a given 4-year time horizon.

Lead: RVARC staff

Estimated Budget: \$89,653 (\$58,976 PL and \$30,677 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2.03 Congestion Management Process

Objective and Description: This section provides for development and implementation of the Congestion Management Process (CMP) as well as amendments, adjustments, or updates of the process to incorporate new data or findings.

This task item primarily involves work related with the above-mentioned items; some activities covered in this task may include but are not limited to:

Ongoing Activities:

- **CMP Update:** Staff will complete the process of updating the CMP initiated in FY19 which will include addressing the federal requirements noted in the 2018 Planning Agreement and the 2016/2020 TMA Certification Review comments.
- **CMP Implementation:** Staff will continue implementing regional CMP objectives/strategies, monitoring system performance measures, collecting data, and analyzing congestion, coordinating congestion management with other agencies, as well as integrating new data sources and data analysis into the CMP planning process. This work will support the Performance-Based Planning and Programming (PBPP) framework and may be used as input to the long-range transportation planning process and programming of projects through the Transportation Improvement Program.

Products and Schedule:

- CMP update (Summer/Fall 2021)
- Ongoing CMP data collection, regional congestion analysis, performance measures development and integration or relevant performance measures into the RVTPPO's Performance Measures Report.

This item supports planning factors #1-Economic Vitality, #4-Accessibility and Mobility #5-Quality of Life, Environment and Energy Conservation, #7-Efficient System, #9-Reliability, #10-Reducing Stormwater Impacts, #11-Enhancing Travel and Tourism.

Lead: RVARC staff

Estimated Budget: \$17,678 (\$12,716 PL and \$4,962 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2.04 Public Transportation Planning

Objective and Description: The Greater Roanoke Transit Company (Valley Metro) is the Roanoke Valley designated recipient and provider of fixed-route transit. Unified Human Services Transportation Systems, Inc. (RADAR) provides paratransit services in the Roanoke Valley under contract to Valley Metro (STAR service) and Roanoke County (CORTAN service). On a

smaller scale, Botetourt County also provides transit services to its senior and disabled populations. This item aims to provide public transportation planning assistance and support the Roanoke Valley's planning efforts for transit service enhancements. At a minimum this item will include:

New Activities:

- ***Vanpool Planning:*** RideSolutions has sought funding through DRPT to support piloting vanpools within its service area. Staff will provide assistance to plan for vanpool services that will connect citizens to jobs and businesses to employees within the Roanoke Valley and to nearby rural areas.

Ongoing Activities:

- ***Transit Strategic Plans (TSP):*** The need to create a TSP will take place in FY21/22. Staff will provide any needed assistance/coordination with Valley Metro in the lead.
- ***National Transit Database (NTD) On-Board Survey Support:*** Valley Metro will perform its triennial NTD on-board survey during FY20. Due to COVID-19, surveys were not completed in FY20 and will resume in FY21 when possible. Staff will work with Valley Metro to finalize and report data to the Federal Transit Administration and analyze data for transportation planning purposes including understanding bus stop activity levels.
- ***Implementation of Roanoke Valley Transit Vision Plan (TVP):*** This ongoing effort specifically reflects two of the federal priorities: regional models of cooperation and ladders of opportunity. Continuing activities include supporting localities and transit agencies with any examinations of existing transit services, current funding sources and implementation of the plan's recommendations as well as continuing to engage stakeholders to implement the future vision for the region's transit services. Activities may also include support planning for the new downtown Roanoke transit transfer facility, transit route analysis for modified or expanded transit services, changes in the route schedule, or other assistance needed to implement the TVP recommendations.
- ***Regional Transit Development Plans (TDPs):*** In FY19, Valley Metro and RADAR completed their new six-year Transit Development Plans (TDP). Yearly updates are also required for the TDPs. Valley Metro will be transitioning from the current TDP to a TSP to be developed as mentioned previously. Staff will support Valley Metro and RADAR to implement the recommendations of their TDPs which may include modeling the ridership impacts of changes in service, collecting data to support a recommendation's implementation, mapping proposed service changes or other technical assistance.
- ***Update to the Coordinated Human Services Transportation Plan (CHSTP):*** VDRPT and their consultant updated this plan in 2019. Staff will continue to participate in the CHSTP process and coordinate among stakeholders as needed. Staff will review products of the process, provide input, and assist with implementing the plan as needed.
- ***Human Services-Public Transit Coordinated Transportation Planning:*** Staff will provide assistance with coordinating human services transportation and will participate in related regional coordination meetings.
- ***Passenger Rail and Public Transit Coordination:*** Staff will support the ongoing effort to plan improvements for transfers between public transit and rail and consider expansions of passenger rail services.
- ***AVL/Real-time Transit Information Project:*** In FY19, Valley Metro launched the first phase of its new ITS transit information project which includes real-time transit arrival information for the public, enhanced dispatching capabilities, transit service information

in real-time, NTD reporting and reports for the Smart Way and trolley services. Activities this year will involve continued support work and coordination to implement the project to all bus routes. Valley Metro is leading this project; where needed, staff will continue providing technical support in mapping, waypoints, transit stop geolocations, data analytics, etc.

- **Maintenance and Development of Transit-related GIS shapefiles and maps:** Staff will develop new or update existing transit-related GIS shapefiles and regional planning maps as modifications are made to the regional transit network.
- **General Transit Planning:** As needed, staff will incorporate transit components into other studies and plans identified in this Work Program and support any coordination of urban transit service planning with the rural area or other intercity transit services.

Products and Schedule:

- NTD surveys and reporting (ongoing)
- Planning for the initiation of pilot vanpool service(s) (as needed)
- Transit service analysis, studies, mapping, etc. as needed (ongoing)
- Maintenance of GIS databases and mapping (ongoing)

This item supports all of the federal planning factors as well as Regional Models of Cooperation and Ladders of Opportunity.

Lead: RVARC staff

Estimated Budget: \$30,441 (\$0 PL and \$30,441 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2.05 Public/Stakeholder Involvement, Environmental Justice

Objective and Description: Public involvement, stakeholder outreach, and consideration of Environmental Justice are key elements of the RVTPO's planning efforts. Activities will include but are not limited to the following activities:

Ongoing Activities:

- **Federal Planning Certification Review - Recommendations Implementation:** Due to the urbanized area's population being above 200,000, the Roanoke Valley is designated a Transportation Management Area (TMA). Every four years the Federal Highway Administration, Federal Transit Administration, and the State conduct a review of the RVTPO's adherence to good transportation planning practices for metropolitan planning organizations as outlined in the federal code. The most recent Certification Review took place in April 2020. Staff will review and follow-up on the federal recommendations to improve the transportation planning and programming process in the Roanoke Valley.
- **Title VI:** Staff updated the Title VI Implementation Plan in FY20 and will continue to implement the activities identified in the plan to ensure compliance with Title VI and related authorities.
- **Public Participation:** As described in the 2018 Public Participation Plan, staff will continue to seek "early and continuous" public input and provide "ample opportunity for public comment" on:
 - Development of the Constrained Long-Range Multimodal Transportation Plan,
 - Amendments to the Constrained Long-Range Multimodal Transportation Plan, the Transportation Improvement Program, or the Public Participation Plan,

- Other key decision points.

As noted in the Public Participation Plan, staff will review the Plan for needed updates every three years, to be conducted this fiscal year.

- **TPO Website Strategy:** The RVTPO website should be periodically reevaluated and updated to ensure materials are current and that users will experience a smooth interface. This subtask allocates resources specifically for website improvement as well as public involvement through social media and other methods.
- **TPO Demographic Profiles Maintenance and Updates:** RVTPO Demographic Profiles will be updated depending on new American Community Survey or other dependable data sources becoming available.
- **Multi-Regions Alternative Transportation Social:** Staff will participate in planning for the annual Multi-Regions Alternative Transportation Social that will feature alternative transportation project updates and new initiatives shared with counterparts across the Roanoke Valley and the New River Valley. It is anticipated that the New River Valley will take the lead on planning this event in FY21.
- **Celebrate Transportation Day:** In 2018, the Virginia General Assembly passed HJ59 designating the Thursday before Memorial Day in 2019, and in each succeeding year, as Celebrate Transportation Day in Virginia. Staff may develop and participate in related activities.
- **Conferences, Webinars, Teleconferences and Seminars:** Staff will remain current on broader transportation, land use, and other related planning activities by participating in transportation and planning conferences and meetings for various organizations/groups including but not limited to the Association of Metropolitan Planning Organizations (AMPO), Governor's Transportation Conference, Virginia Chapter of the American Planning Association, Virginia Association of Metropolitan Planning Organizations, and the Virginia Transit Association. Additionally, the American Planning Association (APA) and the Association of Pedestrian and Bicycle Professionals (APBP) produce a series of teleconferences on planning issues. As needed, RVTPO staff will select relevant teleconferences and make arrangements to host a teleconference download site for local planners, citizens and other interested parties.
- **Public Involvement Forum, Fees, Subscriptions or Consulting Services:** Staff may need to enlist the services of on-line public involvement forums or other specialized citizen and community-based forums.
- **General Public and Stakeholder Involvement Opportunities:** Staff may pursue a wide variety of public and stakeholder involvement opportunities not specifically listed in the aforementioned items. Staff will also participate in meetings of local groups and organizations as needed to coordinate transportation input to the metropolitan planning process and education among the public about transportation planning.

Products and Schedule:

- Multi-Regions Alternative Transportation Social (Fall 2020)
- Celebrate Transportation Day activities (May 2021)
- Necessary amendments or adjustments to the Public Participation Plan, Title VI Implementation, public and stakeholder outreach at various scales. (ongoing)
- Implementation of recommendations from the 2020 Federal Certification Review (ongoing)
- Attendance at conferences, webinars, teleconferences, seminars; TPO website maintenance, and update of TPO Demographic Profiles. (ongoing)
- Attendance at transportation-related meetings of local organizations or as requested. (ongoing)

This item supports planning factor #4—Accessibility by increasing accessibility to public input and participation in the transportation planning process and supports Regional Models of Cooperation.

Lead: RVARC staff

Estimated Budget: \$105,469 (\$80,866 PL and \$24,603 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2.06 Corridor/Area, Safety, Security, Resiliency and Reliability Planning

Objective and Description: Corridor and area studies can further analyze transportation needs to identify potential projects that feed the CLRMTP. Likewise, the long-range plan can suggest corridors that warrant pre-NEPA corridor studies to help move the project to the next stage. Analysis of each corridor or area may include access management, safety, security, operations evaluation, resiliency, reliability, multimodal connections, parking, current and future land use, existing activity density, and adjacent land zoning. VDOT's Transportation Efficient Land Use and Design guide and VDRPT's Multimodal System Design Guidelines are important references to guide planning activities covered by this item.

New Activities:

- ***Update to the 2018 Regional Study on Transportation Project Prioritization for Economic Development and Growth (TED Study):*** Staff will reconvene the study's steering committee to update the TED Study. Input will be sought from the Transportation Technical Committee on recommended priority projects to support economic development.
- ***ByPass Road Corridor Study:*** Staff will analyze current traffic conditions, the need for bicycle, pedestrian and aesthetic improvements, and evaluate the space requirements for potential corridor improvements, and funding sources to support future projects.
- ***Dixie Caverns Transportation and Land Use Study:*** Staff will review several existing plans near the I-81 Exit 132 interchange and consider anticipated future land uses and resulting vehicle counts at Interstate 81 Exit 132 interchange at Dow Hollow Road and Dow Hollow Road/West Main Street (Route 11/460). Staff will work with Roanoke County and VDOT to consider the transportation needs of future land use scenarios.

Ongoing Activities:

- ***I-581 Exit 2 Interchange Study:*** As needed, staff will participate in this consultant-led study and work with Roanoke County and the City of Roanoke to identify operational improvements along Peter's Creek Road from Valleypointe Parkway to Thirlane Road, NW, and specifically to evaluate improvements to the interchange with I-581.
- ***I-81 Corridor Improvements:*** Staff will continue to coordinate with the State and other stakeholders on implementing improvements to I-81 and monitor related progress and legislation. Staff will coordinate work with the I-81 Corridor Improvement Committee and attend related meetings as needed.
- ***Land Use/Transportation Planning:*** Coordination between state and local governments around transportation and land-use by utilizing the Urban Development Areas and Multimodal Centers and Districts Framework and analyzing local zoning and land use compatibility with regional multimodal transportation. Products of this effort support the long-range planning process, the congestion management process and may include but is not limited to future build-out scenarios, land use/transportation investment

mapping, model comprehensive plan/zoning ordinance language, and other products that could be used by localities in their own transportation/land use planning efforts.

Products and Schedule:

- Updated TED Study (Winter/Spring 2021)
- Bypass Road Corridor Study (Winter 2020)
- Dixie Caverns Transportation and Land Use Study (Spring 2021)
- Participation in I-581 Exit 2 Interchange Study and I-81 meetings (ongoing)
- Participation in the I-81 Corridor Coalition and meetings to improve I-81 (ongoing)
- Other corridor/area, safety, security, resiliency, and reliability work as needed.

This item supports planning factors #2- Safety, #3-Security, #7-Efficient System, #8 – Preservation of Existing System, #9-Resiliency and Reliability, #11-Enhance Travel and Tourism.

Lead: RVARC staff

Estimated Budget: \$40,167 (\$31,881 PL and \$8,286 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2.07 Bicycle and Pedestrian Planning

Objective and Description: A continued effort to implement bicycle and pedestrian transportation recommendations from the Regional Bikeway Plan, the Regional Pedestrian Vision Plan, Regional Greenway Plan and the Regional Transit Vision plan is the organizing framework underlying this item. In addition to this general effort, the following specific plans, studies and tasks will be accomplished next fiscal year.

New Activities:

- **Valley to Valley Trail Study:** Staff will assist VDOT as a local liaison for developing the Valley to Valley Trail Study which is being undertaken by VDOT and Michael Baker International. Staff will attend stakeholder meetings and webinars, assist with communications between member localities and Michael Baker International, and will help coordinate and staff two public input meetings.
- **Update to the 2012 Bikeway Plan:** Staff will work on updating the Bikeway Plan within the context of the TPO's multimodal centers/districts and systems-approach to planning. The update will gather public input by considering citizen's socioeconomics to gauge interest in bicycle transportation for meeting daily needs, their related values, and define regional goals for bicycle transportation. In addition, the plan will reflect on challenges to greater citizen use of bicycle transportation and strategies for increasing the number of trips made by bicycle. Updated maps will show all bicycle accommodations and regional priorities for physical improvements and complement the existing pedestrian, greenway, and transit plans.

Ongoing Activities:

- **Bicycle/Pedestrian On-Road Counts:** Staff will continue monitoring on-road bicycle and pedestrian trips by conducting field work to maintain on-road counters,

downloading data and relocating counters as needed, managing, analyzing and mapping data, evaluating the program's value, and seeking options to improve the program.

- **Greenway User Counts:** Staff will continue monitoring greenway usage; the number and location of count sites will reflect data needed to support understanding use of the region's transportation system. This task will include field work to maintain counters, download data, and relocate counters as needed as well as to manage, analyze, and map data.
- **Regional Bicycle & Pedestrian Committee:** Staff will continue to manage the Regional Bicycle & Pedestrian Committee, facilitate approximately five meetings, and support activities related to urban transportation planning.
- **Maintenance and Development of bicycle/pedestrian/greenway shapefiles and maps:** Staff will develop new or update existing bicycle- or pedestrian-related GIS shapefiles and regional transportation planning maps as improvements are made to the regional bicycle/pedestrian network.

Products and Schedule:

- Bicycle/Pedestrian traffic counts (ongoing)
- Greenway user counts (ongoing)
- Regional Bicycle & Pedestrian Committee support (ongoing)
- Maintenance of GIS databases and mapping (ongoing)

This item supports planning factors #1–Economic Vitality, #4–Accessibility and Mobility, #5–Quality of Life, Environment and Energy Conservation #6–Connectivity and #8–Preservation of Existing System, #10–Reducing Stormwater Impacts, and #11–Enhance Travel and Tourism.

Lead: RVARC staff

Estimated Budget: \$30,382 (\$30,382 PL and \$0 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2.08 General Technical Assistance

Objective and Description: Staff will research, develop, maintain, and analyze data for use in a variety of transportation planning technical support activities. Work activities will be organized around the following subtasks. Any combination of subtasks may be completed in FY21 as opportunities and needs arise; however, circumstances may not permit all subtasks to be finalized by the end of FY21.

Where feasible, this item also contains some provisions for an on-call consultant or consultants to provide general technical assistance on transportation planning activities.

Ongoing Activities:

- **General Technical Assistance:** Assist federal/state/local governments, transit agencies or other stakeholders and citizens on transportation work as requested.

- **Technical Support Activities:** Conduct a variety of planning activities to support work program projects identified previously in the UPWP and/or the general planning process.
- **Support to Statewide Multimodal Planning:** As needed.
- **Participation in other Transportation-Related Activities/Meetings:** As needed or as requested by stakeholders/citizens.

Lead: RVARC staff

Support: Technical/Planning support from consultants as needed

Estimated Budget: \$76,259 (\$69,079 PL and \$7,180 FTA/5303) (included for planning purposes only; not intended to be restrictive).

VII. FY 2021 RVTPO PROPOSED REVENUES AND EXPENDITURES BY FEDERAL, STATE AND LOCAL SOURCES

(July 1, 2020 to June 30, 2021)

	PL	State	Local	Total PL	5303	State	Local	Total 5303	Total
<u>Proposed Revenue</u>									
<i>New FY 2021</i>	\$315,664	\$39,458	\$39,458	\$394,580	\$143,775	\$17,972	\$17,972	\$179,719	\$574,299
<i>Direct Carryover FY 2020</i>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Carryover FY 2019</i>	\$69,519	\$8,689	\$8,689	\$86,898	\$0	\$0	\$0	\$0	\$86,898
<i>Total Revenue</i>	\$385,183	\$48,147	\$48,147	\$481,478	\$143,775	\$17,972	\$17,972	\$179,719	\$661,197

Note: Rounding of numbers may result in minor calculation discrepancies.

Proposed Expenditures

	PL	State	Local	Total PL	5303	State	Local	Total 5303	Total
<i>Program Support & Admin</i>									
<i>1.01 General Administration & Operations</i>	\$59,755	\$7,470	\$7,470	\$74,695	\$19,097	\$2,387	\$2,387	\$23,871	\$98,566
<i>1.02 Training & Staff Development</i>	\$1,711	\$214	\$214	\$2,139	\$2,255	\$282	\$282	\$2,819	\$4,958
<i>1.03 Work Program Management</i>	\$6,715	\$839	\$839	\$8,393	\$3,917	\$490	\$490	\$4,897	\$13,290
Total for Program Support & Administration:	\$68,181	\$8,523	\$8,523	\$85,227	\$25,269	\$3,159	\$3,159	\$31,587	\$116,814

	PL	State	Local	Total PL	5303	State	Local	Total 5303	Total
<i>Program Activities</i>									
<i>2.01 Long-Range Plan</i>	\$89,882	\$11,234	\$11,234	\$112,350	\$33,587	\$4,198	\$4,198	\$41,983	\$154,333
<i>2.02 TIP, STBG, TA, Performance Measures</i>	\$47,180	\$5,898	\$5,898	\$58,976	\$24,541	\$3,068	\$3,068	\$30,677	\$89,653
<i>2.03 Congestion Management Process (CMP)</i>	\$10,172	\$1,272	\$1,272	\$12,716	\$3,970	\$496	\$496	\$4,962	\$17,678
<i>2.04 Public Transportation Planning</i>	\$0	\$0	\$0	\$0	\$24,353	\$3,044	\$3,044	\$30,441	\$30,441
<i>2.05 Public and Stakeholder Involvement</i>	\$64,692	\$8,087	\$8,087	\$80,866	\$19,683	\$2,460	\$2,460	\$24,603	\$105,469
<i>2.06 Corridor, Area Studies, Safety Planning</i>	\$25,505	\$3,188	\$3,188	\$31,881	\$6,628	\$829	\$829	\$8,286	\$40,167
<i>2.07 Bicycle and Pedestrian Planning</i>	\$24,306	\$3,038	\$3,038	\$30,382	\$0	\$0	\$0	\$0	\$30,382
<i>2.08 General Technical Assistance</i>	\$55,263	\$6,908	\$6,908	\$69,079	\$5,744	\$718	\$718	\$7,180	\$76,259
Total for Program Activities:	\$317,000	\$39,625	\$39,625	\$396,250	\$118,506	\$14,813	\$14,813	\$148,132	\$544,382

	PL	State	Local	Total PL	5303	State	Local	Total 5303	Total
Total Expenses:	\$385,183	\$48,147	\$48,147	\$481,478	\$143,775	\$17,972	\$17,972	\$179,719	\$661,197

Note: Rounding of numbers may result in minor calculation discrepancies.

Roanoke Valley Transportation Planning Organization

VDOT Salem District Support (SPR funding) for Planning Activities within the RVTPPO Area during FY 2021

<u>Work Program Activity</u>	<u>Total SPR (District)</u>
VDOT District Planning Activities	\$8,800