



(Official Name: Roanoke Valley Area Metropolitan Planning Organization)

UNIFIED PLANNING WORK PROGRAM

Fiscal Year 2020

(July 1, 2019 – June 30, 2020)

Approved April 25, 2019

Roanoke Valley Transportation Planning Organization (RVTPO)
c/o Roanoke Valley-Alleghany Regional Commission
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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.

TABLE OF CONTENTS
FY 2020 UNIFIED PLANNING WORK PROGRAM
Program Administration, Activities, and Budget

I.	INTRODUCTION	1
II.	METROPOLITAN PLANNING AREA	2
III.	AIR QUALITY CONSIDERATIONS	3
IV.	RESPONSIBILITIES FOR TRANSPORTATION PLANNING	3
V.	TOTAL PROPOSED FUNDING BY FEDERAL SOURCE FOR FY2020.....	4
VI.	FY 2020 WORK PROGRAM TASKS AND BUDGET	5
1.	PROGRAM SUPPORT & ADMINISTRATION	5
1.01	General Administration & Operations	5
1.02	Training and Staff Development	5
1.03	Work Program Management.....	6
2.	PROGRAM ACTIVITIES	6
2.01	Long-Range Metropolitan Transportation Planning	6
2.02	Transportation Improvement Program, Surface Transportation Block Grant Program, Transportation Alternatives, and Performance Measures reporting	8
2.03	Congestion Management Process	10
2.04	Public Transportation Planning	11
2.05	Public/Stakeholder Involvement, Environmental Justice	12
2.06	Corridor/Area, Safety, Security, Resiliency and Reliability Planning	14
2.07	Bicycle and Pedestrian Planning	15
2.08	Regional Land Use and Transportation	16
2.09	General Technical Assistance	17
VII.	FY 2020 RVTPPO PROPOSED REVENUES AND EXPENDITURES BY FEDERAL, STATE AND LOCAL SOURCES.....	17
	Proposed Revenue	17
	Proposed Expenditures	18



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The 25th day of April 2019

RESOLUTION

by the Policy Board of the Roanoke Valley Transportation Planning Organization
Approving the FY 2020 Unified Planning Work Program

WHEREAS, the FY 2020 Unified Planning Work Program will serve as the basis for all federal Department of Transportation (DOT) funding participation and will be included in all requests for DOT planning funds within the Roanoke Valley TPO Service Area; and

WHEREAS, this Work Program details all transportation and transportation-related planning activities anticipated within the area during the coming fiscal year; and

WHEREAS, this Work Program has been reviewed by the TPO's Transportation Technical Committee;

NOW THEREFORE BE IT RESOLVED, that the Policy Board of the Roanoke Valley Transportation Planning Organization does hereby approve the FY 2020 Unified Planning Work Program, as presented.


Wayne Strickland
Secretary to the Roanoke Valley
Transportation Planning Organization

TPO POLICY BOARD: Cities of Roanoke and Salem; Counties of Bedford, Botetourt, Montgomery and Roanoke;
Town of Vietton; Greater Roanoke Transit Company (Valley Metro); Roanoke-Blacksburg Regional Airport;
Virginia Department of Rail & Public Transportation; Virginia Department of Transportation

Roanoke Valley Area Metropolitan Planning Organization

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 RVTPO'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).

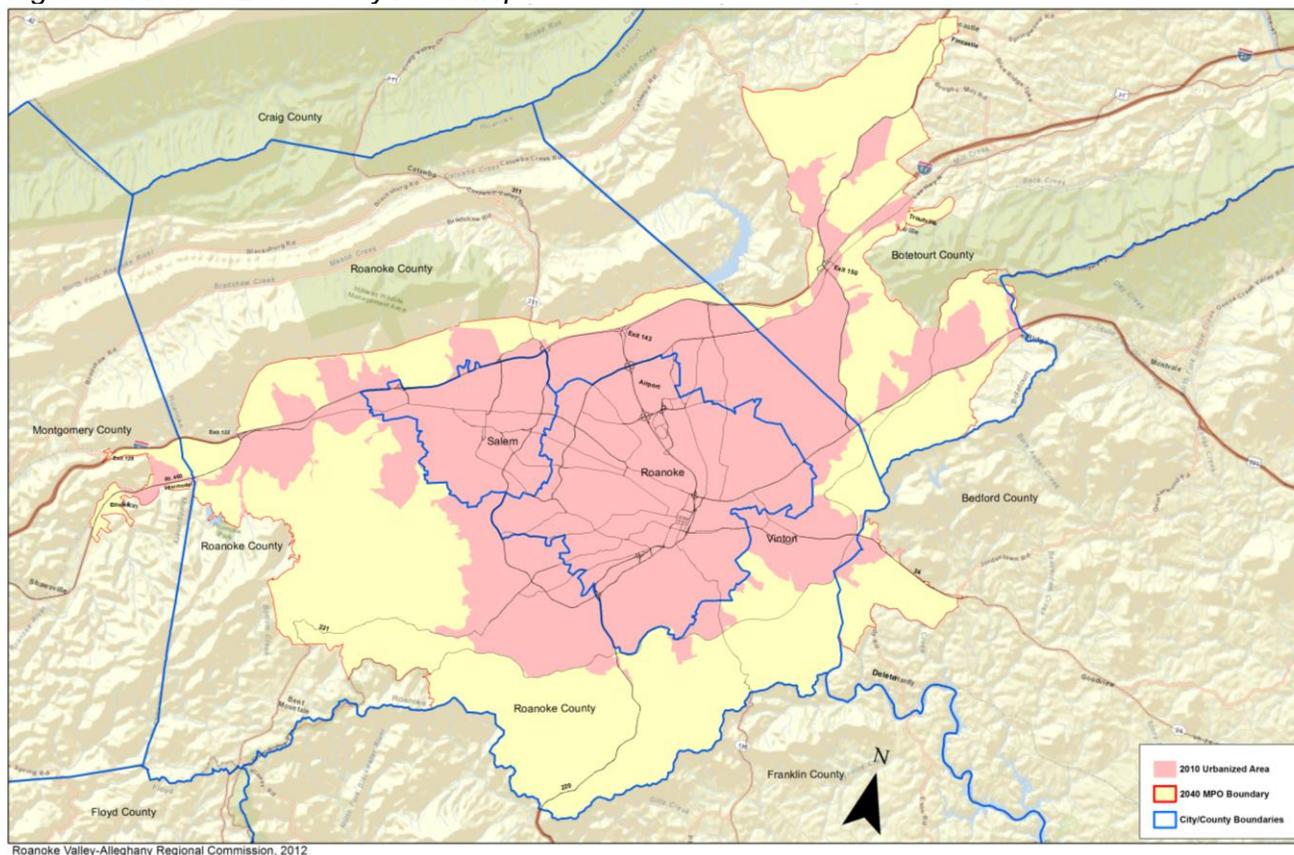
II. METROPOLITAN PLANNING AREA

The RVTPO 2040 study area consists 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 RVTPO 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 RVTPO's Census 2010 UZA contains a population of 210,111, and the RVTPO was subsequently classified as a Transportation Management Area (TMA) MPO.

On March 2–3, 2016 the RVTPO went through its first official Federal Compliance Review which will be repeated every four years and anticipated to occur again in FY20.

Figure 1: RVTPO 2040 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 FY2020

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 FY2018. The proposed funding amounts (including state and local matching funds) for the RVTPO work program are shown in the following table.

FY 2020 RVTPO PROPOSED FUNDING BY FEDERAL, STATE AND LOCAL SOURCES
(July 1, 2019 to June 30, 2020)

	FHWA – Section 112 (PL) 80% Federal 10% State, 10% Local	FTA – Section 5303 80% Federal 10% State, 10% Local	GRAND TOTAL
New FY 2020	\$386,474	\$166,706	\$553,180
Direct Carryover FY 2019	\$0	\$0	\$0
Carryover FY 2018	\$35,881	\$0	\$35,881
TOTAL	\$422,355	\$166,706	\$589,061

VI. FY 2020 WORK PROGRAM TASKS AND BUDGET

As a result of the Federal TMA Certification Review in the Spring 2016, one overarching recommendation is to update RVTPO planning documents to include system resiliency/reliability, stormwater mitigation, as well as travel and tourism enhancement. This Work Program will continue that process where needed. In addition, 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 RVTPO 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 RVTPO's work in the coming fiscal year.

Unless otherwise stated, the tasks listed in the following sections will be performed and 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 RVTPO through the preparation of reports, presentations, agendas, minutes and mailings for all Policy Board, Technical Committee, and related subcommittee 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 RVTPO activities. (ongoing)

Estimated Budget: \$95,956 (\$71,884 PL and \$24,072 FTA/5303) (included for planning purposes only; not intended to be restrictive).

1.02 Training and Staff Development

Objective and Description: To meet the growing 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 RVTPO Policy Board members.

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

Estimated Budget: \$3,486 (\$1,634 PL and \$1,852 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 new UPWP will be presented in draft to the Transportation Technical Committee and RVTPO Policy Board in March 2020 and as a final document for adoption in April 2020. 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 2021 (Spring 2020)
- Maintenance/amendments to the FY 2020 UPWP (as needed)
- Monitoring of FY2020 UPWP budget and progress on activities (ongoing)

Lead: RVARC staff

Estimated Budget: \$13,107 (\$8,169 PL and \$4,938 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 reviewing content updates required from the Vision 2040 plan, evaluating new content to be added, incorporating safety, economic development, and congestion management planning efforts into the plan, engaging citizens in key decision-points, modeling the impacts of projects as they are amended into the plan and future scenarios, adjusting traffic and demographic analysis to the 2045 framework, working with state agencies to determine fiscal constraint, as well as continuing other related technical work.
- ***“Vision 2040: Roanoke Valley Transportation” Amendments:*** Staff will work with stakeholders to amend the CLRMTP in advance of the upcoming FY20 grant cycles and to develop any other necessary long-range plan amendment(s) 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. Likewise, RVTPO staff will continue to apply the Transit Boarding Estimation Model (TBEST), a transit travel demand model to evaluate the future improvements to the regional transit system.
- ***Freight Academy Capstone Work:*** Staff will complete freight planning capstone project work with team members following participation in the Freight Academy.
- ***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. The VTrans plan will continue to be updated next fiscal year, and staff will continue to work with the state on this effort.

- **Other Technical Work:** Any other technical long-range plan process work.

“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 2019 and 2020 and/or as needed)
- Freight Academy capstone project (Summer/Fall 2019)
- Coordination with VTrans, VDOT’S Rural Long-Range Transportation Planning Process, Livable Roanoke Valley plan implementation (ongoing)
- Travel Demand Model 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

Estimated Budget: \$80,211 (\$53,072 PL and \$27,139 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2.02 Transportation Improvement Program, Surface Transportation Block Grant Program, Transportation Alternatives, and Performance Measures reporting

Objective and Description: As required by federal planning 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.

The Performance Measures tracking and reporting process will reflect federal and state-mandated performance measures as well as any additional measures elected by the RVTPO Policy Board to be tracked. It is anticipated that additional performance measures and target-setting guidance will continue to be received from the FTA and FHWA and will need to be integrated into the existing state-mandated process. The effort will include collecting performance data and reporting the transportation system's performance based on those targets.

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:

New Activities:

- ***Surface Transportation Block Group Funding Round 4:*** The RVTPO will accept new candidate project applications in FY20 for surface transportation block grant funding. Staff will facilitate the receipt and project selection process of candidate projects as well as any public involvement needed to create the FY21-26 financial plan.
- ***Transportation Alternatives Funding:*** The RVTPO will select new projects to receive transportation alternatives set-aside funding in FY20. Staff will facilitate the Policy Board's endorsement of TA project applications and coordinate VDOT/Technical Committee's review of projects.
- ***SMART SCALE Funding Round 4:*** The RVTPO will apply for up to four projects during the SMART SCALE Round 4 grant period. Staff will work with stakeholders to facilitate the process for selecting which projects the RVTPO will apply for and prepare the grant applications. Staff will also coordinate with regional stakeholders who are also applying for SMART SCALE grants and ensure projects have regional support before submittal.
- ***FY21-24 Transportation Improvement Program:*** The FY21-24 TIP will be developed in FY20. Staff will coordinate with VDOT, DRPT, and transit agencies to write the document.

Ongoing Activities:

- Development of a report on the state of transportation and transportation funding in the RVTPO region.
- Continue to approve new performance measure targets and update existing targets as required by the federal government.
- 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.
- Facilitate the RVTPO Policy Board's approval of STBG and TA funding; Monitor projects to ensure the timely delivery of projects and committed funding.
- Amendments and/or Adjustments to 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.
- Data collection and analysis for the RVTPO Performance Measures Report update.
- Evaluation and data collection of new performance measures and targets for incorporation into the performance measures report.

Products and Schedule:

- TIP or RVTPO funding program amendments/adjustments (Summer 2019 and/or as needed)
- RVTPO State of Transportation report (Summer 2019)
- Performance Measures Report (Fall 2019)
- Annual listing of projects with federal obligations (Winter 2019/2020)
- Current STBG project updates (Fall 2019 – Winter 2020)
- FY21-26 STBG Financial Plan (Fall 2019-Spring 2020)
- TA set-aside project selection (Fall 2019-Spring 2020)
- SMART SCALE project applications (Spring/Summer 2020)
- FY21-24 Transportation Improvement Program (Winter 2019/Spring 2020)
- Up-to-date website with related information, data collection and analysis for annual listing of performance measures, and staff-administered public involvement process for products requiring input (ongoing)
- Staff participation in meetings related to the above-mentioned 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: \$90,792 (\$63,203 PL and \$27,589 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2.03 Congestion Management Process

Objective and Description: This section provides for implementation of the Congestion Management Process (CMP) and the CMP Plan's recommendations as well as routine maintenance of the CMP planning process including any amendments, adjustments or updates of the plan 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 Plan Update:*** Staff will continue the process of updating the CMP plan initiated in FY19 which will include addressing the federal requirements noted in the 2018 Planning Agreement and the 2016 TMA Certification Review comments.
- ***Congestion Management Process:*** Staff will continue implementing regional CMP objectives/strategies, monitoring system performance measures, collecting data, and analyzing congestion 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 Plan update (Spring 2020)
- 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: \$21,879 (\$16,379 PL and \$5,500 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 (CORTTRAN 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:

- **Transit Strategic Plans (TSP):** DRPT has implemented a new requirement for transit agencies to develop Transit Strategic Plans and have asked MPOs to reserve time to assist with this effort. In FY19 Valley Metro adopted a new Transit Development Plan. As such, the need to create a TSP will take place in FY21/22. Staff will help prepare for that effort 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. Staff will be responsible for accomplishing approximately half of the on-board surveys and for collecting and analyzing the resulting data.

Ongoing Activities:

- **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 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. 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 are taking the lead on the update to this plan in FY19. 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.
- **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 in FY20 will involve continued support work and coordination to implement the project to all bus routes. Valley Metro is leading this project and 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:

- 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: \$36,424 (\$0 PL and \$36,424 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 RVTPPO's planning efforts. Activities will include but are not limited to the following activities:

New Activity:

- ***Federal Planning Certification Review:*** 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 last Certification Review took place in March 2016 and it is anticipated that another review will take place in the Spring 2020.

Ongoing Activities:

- ***Update the Title VI and Limited English Proficiency (LEP) Plan:*** With a new Public Participation Plan (PPP) adopted by the RVTPO Policy Board in 2018, staff will follow-up by finishing the update to the Title VI and LEP Plan initiated in FY 19 to ensure consistency with the new PPP.
- ***Public Participation:*** As described in the 2018 Public Participation Plan, 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.
- ***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 RVARC will take the lead on planning this event in FY20.
- ***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 2019)
- Update to the Title VI/LEP Plan (Summer 2019)
- Necessary amendments or adjustments to the Public Participation Plan, Title VI Plan and/or Limited English Proficiency (LEP) Plan, public and stakeholder outreach at various scales. (ongoing)
- Federal Certification Review (Spring 2020)
- 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: \$122,165 (\$99,526 PL and \$22,639 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 but is not limited to: access management, safety, security, operations evaluation, resiliency, reliability, multimodal connections, parking, current and future land use, existing activity density, and adjacent land zoning.

New Activities:

- ***I-81 Freight Rail Study Review:*** Staff will review VDRPT’s 2010 Feasibility Plan for Maximum Truck to Rail Diversion in Virginia’s I-81 Corridor and work with VDRPT and/or VDOT to better understand the potential for rail diversion of interstate truck flows from I-81. Staff will summarize the study and where possible, provide updated data related to annual truck flows, annual potential number of rail cars hauling two containers per flat car and double stack of four containers per flat car, as well as potential savings in road maintenance costs from potential truck diversions.

Ongoing Activities:

- ***I-581 Exit 2 Interchange Study:*** Continue to 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.
- ***Route 419 Data Collection from Route 220 to Route 221:*** The scope of this effort changed in FY19 from a full study to vehicle/bicycle/pedestrian counts in segments

along the corridor. The purpose of this effort will be to analyze existing motorized and non-motorized traffic and activity and provide data for potential future grant application.

- **Gus Nicks Blvd/Washington Avenue Corridor Improvement Study/Plan:** Staff will complete the study of the Gus Nicks/Washington Ave. corridor to identify aesthetic, bike/pedestrian, peak traffic flow, turning lane/access management, and/or other related transportation improvements. This study will include alternatives and cost estimates for each alternative.
- **Regional Multimodal Corridors:** RVTPPO staff will continue the effort initiated in FY19 to apply the Multimodal System Design Guidelines to corridors in the RVTPPO area. Specifically, RVTPPO staff will work with Valley Metro, the City of Roanoke and other stakeholders as needed to study Downtown Roanoke's future transit corridors in preparation for the downtown transit station relocation. Work will include evaluating bus stop placement, pedestrian accessibility at stops, on-street parking coordination as well as compatibility with the surrounding land uses.
- **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.
- **Participation in the I-81 Corridor Coalition and related activities.**
- **Other corridor/area, safety, security, resiliency, and reliability work as needed.**

Products and Schedule:

- Participation in I-581 Exit 2 Interchange Study and I-81 meetings (ongoing)
- Route 419 Data Collection (Winter 2020)
- Gus Nicks Blvd/Washington Avenue Corridor Improvement Study/Plan (Summer 2019)
- Mapping of future transit corridors/stops in Downtown Roanoke (Winter/Spring 2020)
- Participation in meetings to improve I-81 (ongoing)
- Assistance with other corridor and area studies, corridor evaluations and/or corridor data summaries as needed. (ongoing)

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: \$34,192 (\$24,144 PL and \$10,048 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:

- **Sidewalk Inventory and Analysis along Valley Metro Bus Routes and other Identified Roadways in Vinton:** This analysis will include field visits along Valley

Metro's bus routes to evaluate the need of ADA compliance and ridership proximity between stops. In addition to the bus routes, identified Vinton road segments will also be evaluated for ADA compliance, lack of sidewalks, sidewalk conditions, gaps, etc. Where needed cost estimates for construction, rehabilitation, and/or sidewalk maintenance will be provided.

Ongoing Activities:

- ***Bicycle/Pedestrian On-Road Counts Program:*** Staff will continue evaluating the value of the current bicycle/pedestrian on-road counts program and seek 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 Advisory Committee:*** Staff will continue to manage the Regional Bicycle & Pedestrian Advisory Committee (PBAC).
- ***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:

- Vinton Sidewalk Inventory and Analysis (Fall 2019/Winter 2020)
- Bicycle/Pedestrian traffic counts (ongoing)
- Greenway user counts (ongoing)
- Pedestrian & Bicycle Advisory 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: \$29,817 (\$29,817 PL and \$0 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2.08 Regional Land Use and Transportation

Objective and Description: Land development has a direct effect on the region's transportation network. As such, the relationship and coordination between land use and transportation is critical to the success of a region and is related to the RVTPPO's long-range, congestion management, and corridor/area planning efforts among others. This task continues previous work to study transportation and land use.

Ongoing Activities:

- **Transportation/Land Use Coordination:** This task involves coordinating state, regional and local government efforts around transportation and land-use by utilizing the existing Urban Development Areas and Multimodal Centers and Districts Framework and analyzing local zoning and land use compatibility with regional multimodal transportation. Such coordination fosters principles of Smart Growth (e.g. compact building design, mixed-use and transit-oriented development), particularly within areas targeted by localities for urban growth and new/re-development.

VDOT's Transportation Efficient Land Use and Design guide and VDRPT's Multimodal System Design Guidelines are important references to guide land use/transportation planning coordination. Products of this effort support the long-range planning process, the congestion management process, and corridor/area planning 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:

- Mapping of future land use/transportation mapping (Fall 2019)
- Growth analysis for the RVTPO study area and its UDAs (Spring 2020)

This item supports planning factors #1–Economic Vitality, #4–Accessibility and Mobility, #5–Quality of Life, Environment and Energy Conservation, #6–Connectivity, #8–Preservation of Existing System, #9–Resiliency and Reliability, #10–Reducing Stormwater Impacts, and #11–Travel and Tourism.

Lead: RVARC staff

Estimated Budget: \$8,025 (\$8,025 PL and \$0 FTA/5303) (included for planning purposes only; not intended to be restrictive).

2.09 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 FY20 as opportunities and needs arise; however, circumstances may not permit all subtasks to be finalized by the end of FY20.

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 Requested by Stakeholders or Citizens:** As needed.

Lead: RVARC staff

Estimated Budget: \$53,007 (\$46,502 PL and \$6,505 FTA/5303) (included for planning purposes only; not intended to be restrictive).

VII. FY 2020 RVTP0 PROPOSED REVENUES AND EXPENDITURES BY FEDERAL, STATE AND LOCAL SOURCES

(July 1, 2019 to June 30, 2020)

	PL	State	Local	Total PL	5303	State	Local	Total 5303	Total
<u>Proposed Revenue</u>									
<i>New FY 2020</i>	\$309,179	\$38,647	\$38,647	\$386,474	\$133,364	\$16,671	\$16,671	\$166,706	\$553,180
<i>Direct Carryover FY 2019</i>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Carryover FY 2018</i>	\$28,705	\$3,588	\$3,588	\$35,881	\$0	\$0	\$0	\$0	\$35,881
<i>Total Revenue</i>	\$337,884	\$42,235	\$42,235	\$422,355	\$133,364	\$16,671	\$16,671	\$166,706	\$589,061

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

Proposed Expenditures

	PL	State	Local	Total PL	5303	State	Local	Total 5303	Total
<u>Program Support & Admin</u>									
<i>1.01 General Administration & Operations</i>	\$57,507	\$7,188	\$7,189	\$71,884	\$19,258	\$2,407	\$2,407	\$24,072	\$95,956
<i>1.02 Training & Staff Development</i>	\$1,307	\$163	\$163	\$1,633	\$1,482	\$185	\$185	\$1,852	\$3,486
<i>1.03 Work Program Management</i>	\$6,535	\$817	\$817	\$8,169	\$3,950	\$494	\$494	\$4,938	\$13,107
Total for Program Support & Administration:	\$65,349	\$8,168	\$8,169	\$81,686	\$24,690	\$3,086	\$3,086	\$30,862	\$112,549

	PL	State	Local	Total PL	5303	State	Local	Total 5303	Total
<u>Program Activities</u>									
<i>2.01 Long-Range Plan</i>	\$42,458	\$5,307	\$5,307	\$53,072	\$21,711	\$2,714	\$2,714	\$27,139	\$80,211
<i>2.02 TIP, RSTP, TA and Performance Measures</i>	\$50,563	\$6,320	\$6,320	\$63,203	\$22,071	\$2,759	\$2,759	\$27,589	\$90,792
<i>2.03 Congestion Management Process (CMP)</i>	\$13,104	\$1,638	\$1,637	\$16,379	\$4,400	\$550	\$550	\$5,500	\$21,879
<i>2.04 Public Transportation Planning</i>	\$0	\$0	\$0	\$0	\$29,140	\$3,642	\$3,642	\$36,424	\$36,424
<i>2.05 Public and Stakeholder Involvement</i>	\$79,621	\$9,952	\$9,953	\$99,526	\$18,111	\$2,264	\$2,264	\$22,639	\$122,165
<i>2.06 Corridor, Area Studies, Safety Planning</i>	\$19,316	\$2,414	\$2,414	\$24,144	\$8,038	\$1,005	\$1,005	\$10,048	\$34,192
<i>2.07 Bicycle and Pedestrian Planning</i>	\$23,853	\$2,982	\$2,982	\$29,817	\$0	\$0	\$0	\$0	\$29,817
<i>2.08 Regional Land Use and Transportation</i>	\$6,419	\$803	\$803	\$8,025	\$0	\$0	\$0	\$0	\$8,025
<i>2.09 General Technical Assistance</i>	\$37,201	\$4,651	\$4,650	\$46,502	\$5,203	\$651	\$651	\$6,505	\$53,007
Total for Program Activities:	\$272,535	\$34,067	\$34,066	\$340,668	\$108,674	\$13,585	\$13,585	\$135,844	\$476,513

	PL	State	Local	Total PL	5303	State	Local	Total 5303	Total
Total Expenses:	\$337,884	\$42,235	\$42,235	\$422,355	\$133,364	\$16,671	\$16,671	\$166,706	\$589,061

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 RVTPO Area during FY 2020

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