

# **Roanoke Valley Area Metropolitan Planning Organization**

## **UNIFIED PLANNING WORK PROGRAM Fiscal Year 2012**

(July 1, 2011– June 30, 2012)

**Approved April 28, 2011**

Roanoke Valley Area Metropolitan Planning Organization  
c/o Roanoke Valley-Alleghany Regional Commission  
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ROANOKE VALLEY AREA  
**MPO** METROPOLITAN  
P L A N N I N G  
ORGANIZATION

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Prepared on behalf of the Roanoke Valley Area Metropolitan Organization 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 and Roanoke, the town of Vinton, the Greater Roanoke Transit Company, the Roanoke Regional Airport Commission, the Virginia Department of Transportation, the 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.

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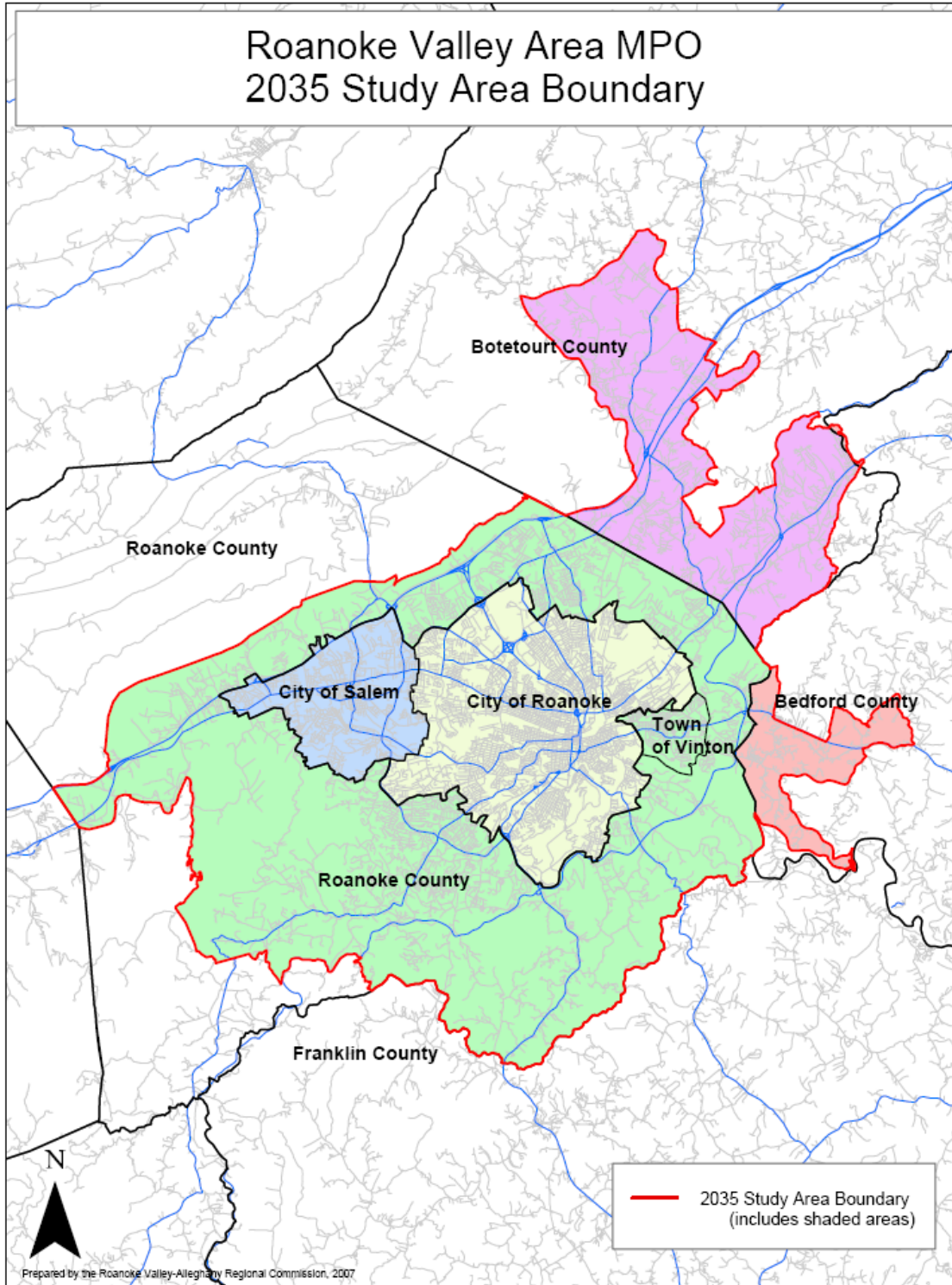


Figure 1.0



Roanoke Valley Area  
**Metropolitan Planning Organization**

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The 28<sup>th</sup> day of April, 2011

**RESOLUTION**

**by the Roanoke Valley Area Metropolitan Planning Organization Policy Board  
Approving the FY 2012 Unified Planning Work Program**

**WHEREAS**, the FY 2012 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 Area MPO 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 MPO's Transportation Technical Committee;

**THEREFORE BE IT RESOLVED** that the Roanoke Valley Area Metropolitan Planning Organization Policy Board does hereby approve and adopt the FY 2012 Unified Planning Work Program, as presented.

A handwritten signature in black ink that reads "Wayne G. Strickland".

Wayne G. Strickland, Secretary,  
Roanoke Valley Area Metropolitan Planning  
Organization



# The Regional Commission

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The 28<sup>th</sup> day of April, 2011

## RESOLUTION

### **Authorizing the Filing of an Application with the Virginia Department of Rail and Public Transportation for Grants of Federal Funds Under the Federal Transit Administration Section 5303 Program and State Matching Funds, in the Amount of \$79,059**

**WHEREAS**, the contract for financial assistance will impose certain obligations upon this Body, including the provision of the local funds to support project costs; and

**WHEREAS**, a recipient of Federal Transit Administration funding is required to provide certifications and assurances that all pertinent federal statutes, regulations, executive orders and directives will be obeyed and it is the intent of this Body to comply fully with all required certifications and assurances; and

**WHEREAS**, it is the goal of this Body that minority business enterprise (disadvantaged business and women business enterprise) be utilized to the fullest extent possible in connection with this project, and that definitive procedures shall be established and administered to ensure that minority businesses shall have the maximum feasible opportunity to compete for contracts and purchase orders when procuring construction contracts, supplies, equipment contracts, or consultant and other services;

### **NOW, THEREFORE, BE IT RESOLVED BY THE ROANOKE VALLEY-ALLEGHANY REGIONAL COMMISSION:**

1. That Wayne G. Strickland, Executive Director, is authorized to prepare and file an application on behalf of the Roanoke Valley-Alleghany Regional Commission with the Virginia Department of Rail and Public Transportation for federal and state financial assistance under the Federal Transit Administration Section 5303 Program and State Aid Program.
2. That Wayne G. Strickland, Executive Director, is authorized to execute and file with such application all necessary certifications and assurances or any other documents or information required by Virginia Department of Rail and Public Transportation in connection with the application or the project.

3. That Wayne G. Strickland, Executive Director, is authorized to set forth and execute minority business enterprise (disadvantaged enterprise business and women enterprise) policies and procedures in connection with procurements under this project.
4. That Wayne G. Strickland, Executive Director, is authorized to execute a grant agreement on behalf of the Roanoke Valley-Alleghany Regional Commission with the Virginia Department of Rail and Public Transportation to aid in the financing of the FY 2012 Unified Planning Work Program.
5. That the Roanoke Valley-Alleghany Regional Commission hereby certifies that the local share of the project costs identified in the application shall be made available to the FY 2012 Unified Planning Work Program from resources available to this Body.

The undersigned duly qualified and acting Chairman of the Roanoke Valley-Alleghany Regional Commission certifies that the foregoing is a true and correct copy of a resolution adopted at a legally convened meeting of the Roanoke Valley-Alleghany Regional Commission held on April 28, 2011.

  
\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
Billy W. Martin, Vice Chairman  
(Title)

\_\_\_\_\_  
April 28, 2011  
(Date)

## **INTRODUCTION**

The Unified Planning Work Program (UPWP) for transportation planning identifies all activities to be undertaken in the Roanoke Valley Area Metropolitan Planning Organization (RVAMPO) study area for the fiscal year 2012. 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. The descriptions of the tasks to be accomplished and the budgets for these tasks are based on a best estimate of what can be accomplished within the confines of available federal, state and local resources.

The Intermodal Surface Transportation Efficiency Act 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 21<sup>st</sup> 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, further reaffirms and extends the structure of the metropolitan planning process.

On February 14<sup>th</sup>, 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). The Roanoke Valley Area Metropolitan Planning Organization (RVAMPO) has developed this work program to address the final metropolitan planning regulations and the new requirements in SAFETEA-LU.

### **Metropolitan Planning Area**

The RVAMPO study area consists of the Cities of Roanoke and Salem, the Town of Vinton, and portions of the Counties of Bedford, Botetourt and Roanoke. See Figure 1 for an illustration of the region.

Based on the 2000 Census, the RVAMPO study area population was 219,122 and encompasses a land area of 239sq. miles. The study area consists of a small geographic portion of the Roanoke Metropolitan Statistical Area (MSA), defined as of 2003 to consist of the Cities of Roanoke and Salem, the Town of Vinton, and the Counties of Botetourt, Craig, Franklin and Roanoke. However, the RVAMPO planning area holds the majority of the MSA population. The total



Roanoke MSA Census 2000 (2003 definition) population was 288,309 and encompasses a land area of 1876 sq. miles.

### **Air Quality Considerations**

In 1997, the Environmental Protection Agency (EPA) made an amendment to the Clear Air Act's National Ambient Air Quality Standards (NAAQS). The amendment essentially replaced the 1-hour ozone standard with a more stringent 8-hour standard. In the late 1990s the ozone levels taken at an air quality monitor in the Roanoke area had exceeded the newer 8-hour standard. Due to these exceedances, the RVAMPO and its member localities worked with the Virginia Department of Environmental Quality (DEQ) to establish a nonattainment boundary for the Roanoke area. This agreed upon boundary encompassed the entire Roanoke MSA (1990 definition – counties of Roanoke and Botetourt, cities of Roanoke and Salem and town of Vinton.) The EPA required that all areas that exceeded the new standard establish a nonattainment boundary and submit it to them for review. The recommended boundary for the Roanoke area was submitted along with the others from around the Commonwealth of Virginia in June 2000.

Since that time, EPA's "new" 1997 standards had come under legal challenge. The challenge subsequently went to the U.S. Supreme Court in the fall of 2000. The U.S. Supreme Court upheld EPA's standards, but questioned how they were to implement the standards.

In the fall of 2002 the EPA extended an opportunity to regions which were to be designated nonattainment under the 8-hour standard, but which were in attainment for the previous 1-hour standard, to pursue an Ozone Early Action Compact (EAC) followed by an Ozone Early Action Plan (EAP). This opportunity extends from a protocol that was developed in EPA's Region 6 and subsequently extended through administrative action to other EPA Regions in the country. The RVAMPO is located in EPA's Region 3.

The EAC is essentially an agreement between local governments, the DEQ and the EPA to pursue an Ozone EAP before an air quality plan would have been otherwise required under traditional nonattainment designation. The EAP must incorporate the same scientific rigor as the traditional approach and the EAP will be incorporated into the State Implementation Plan (SIP).

The major benefits for pursuing the EAC/EAP approach are cleaner air at an earlier date and the EAP can be tailored to the region and is much more flexible with regards to local input. Another difference between the EAC/EAP and the traditional nonattainment approach is that transportation conformity and offsetting regulations will be postponed under the EAC/EAP until 2007. If the region is once again in attainment for the 8-hour ozone standard and maintains attainment until and beyond 2012, the effective date of air quality nonattainment designation will be waived indefinitely. This will have the net effect of having not been declared nonattainment in the first place. However, if the region is still not in attainment of the 8-hour standard by the end of 2007, the region will revert to the traditional process. As of FY2008 RVARC staff has been informed that the Ozone EAC/EAP process has been successful, and that the Roanoke Region will be deemed in attainment for the 8-hour Ozone standard that was current during the EAC/EAP period on April 15, 2008.

In early March 2008 the Federal EPA revised the nationwide 8-hour Ozone Standard to 75 parts per billion (ppb) based on a 3-year average. Indications are that the Roanoke Region's 3-year average for the 2006, 2007 and 2008 Ozone seasons are at 74 ppb, within the new nationwide standard. As such, it is likely that the EAC/EAP will continue to be regarded as successful, and that the RVAMPO transportation planning process will not have to include the traditional air quality conformity analyses for the major planning products.

In Spring and Summer 2010, the Federal EPA is once again reviewing the nationwide 8-hour Ozone Standard. The Federal EPA has stated that the primary 8-hour Ozone Standard will be revised to a final value somewhere within the range of 60 ppb to 70 ppb. As of December 2010, the Federal EPA has requested an extension to continue ongoing scientific review before releasing a new standard. The Federal EPA asserts that the final standard will be set by the end of July, 2011. As of the writing of the FY 2012 UPWP the final revised primary 8-hour Ozone Standard has not been finalized.

### **Responsibilities for Transportation Planning**

The Roanoke Valley Area Metropolitan Planning Organization (RVAMPO) 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 RVAMPO 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 policy making body of the RVAMPO is its Board which consists of fifteen voting members<sup>1</sup> (see figure 2). The voting membership of the Policy Board consists of two representatives each from the Cities of Roanoke and Salem, the Counties of Botetourt and Roanoke, and the Town of Vinton; and one representative each from the County of Bedford, Virginia Department of Transportation, the Greater Roanoke Transit Company, the Roanoke Regional Airport Commission, and the Roanoke Valley-Alleghany Regional Commission.

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<sup>1</sup> RVAMPO Bylaws were updated on April 24, 2003, to allocate a voting member for Bedford County. Portions of Bedford County (see figure 1) were included in the RVAMPO study area for the first time as a part of the Census Bureau's most recent urbanized boundary designations (Census 2000).

**Figure 2: Voting Membership on the RVAMPO Policy Board**

Bedford County	1 representative
Botetourt County	2 representatives
Roanoke County	2 representatives
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
Roanoke Regional Airport Commission	1 representative
Roanoke Valley-Alleghany Regional Commission	1 representative

Other agencies with non-voting membership on the RVAMPO Policy Board include: the Virginia Department of Rail and Public Transportation, Federal Highway Administration and Federal Transit Administration.

Staff of the transportation planning division of the Roanoke Valley-Alleghany Regional Commission performs the day-to-day operations of the RVAMPO. The staff, in conjunction with RVAMPO'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 also prepares materials for use at Board and Committee meetings as well as any existing sub-committee meetings.

Professional staff members participate in all RVAMPO 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.

### **SAFETEA-LU Planning Factors**

SAFETEA-LU contains eight planning factors that must be addressed in the transportation planning process: 1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency; 2) Increase the safety of the transportation system for motorized and nonmotorized users; 3) Increase the security of the transportation system for motorized and nonmotorized users; 4) Increase the accessibility and mobility of people and for freight; 5) 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; 6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight; 7) Promote efficient system management and operation; and 8) Emphasize the preservation of the existing transportation system.

### **Total Proposed Funding by Federal Source for FY 2011**

The primary funding source for transportation planning activities included in this work program are the FHWA Section 112 (PL), FTA Section 5303, and FHWA State Planning and Research (SPR). The proposed funding amounts (including state and local matching funds) for the RVAMPO work program are shown in Figure 3 below.

Note, however, that the funding proposed for use in this UPWP does include unobligated funds from FY 2010. This funding will allow the RVAMPO to undertake additional activities that would not be included in a “typical” years work program.

**Figure 3**  
**FY 2012 RVAMPO PROPOSED FUNDING BY FEDERAL, STATE AND LOCAL SOURCES**  
 (July 1, 2011 to June 30, 2012)

	<b>FHWA - Section 112 (PL)</b> 80% Fed & 20 % State/Local	<b>FTA - Section 5303</b> 80% Fed & 20 % State/Local	<b>GRAND TOTAL</b>
New FY 2012	\$387,618	\$87,843	\$475,461
Deprogrammed FY 2011	\$0	\$0	\$0
Unobligated FY 2010	\$139,418	\$0	\$139,418
<b>TOTAL</b>	<b>\$527,036</b>	<b>\$87,843</b>	<b>\$614,879</b>

## **PROPOSED FY 2012 WORK PROGRAM AND BUDGET**

### **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 3-C Memorandum of Understanding. The primary objectives of this task are to (1) implement the FY 2012 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 of necessary office equipment; and (2) to support the activities of the RVAMPO through the preparation of reports, presentations, agendas, minutes and mailings for all Policy Board, Technical Committee and Community Advisory Committee meetings, as well as attendance at those meetings. Attendance at staff meetings and timekeeping are included in this task as well.

In addition, staff will annually evaluate the validity of the current 3-C Agreement between the RVAMPO, Virginia Department of Transportation, and the Greater Roanoke Transit Company. If any areas of concern are identified, staff will prepare a report identifying the issue(s) and provide possible solutions. Since this is an agreement between three organizations, any change to the Agreement will need to be reviewed and approved by each.

**Products:** Efficient office operation, accurate financial information, preparation of quarterly reports, preparation of information in support of RVAMPO activities, and an up-to-date 3-C Agreement that clearly identifies that roles and responsibilities of each party involved in the metropolitan planning process.

**Estimated Budget:** \$55,851 (\$47,221 PL and \$8,630 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, Policy Board and Technical Committee members.

**Products:** Well-trained and informed RVAMPO staff, Policy Board and Technical Committee members.

**Estimated Budget:** \$2,303 (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 RVAMPO, 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 between July 2011 and June 2012, that will utilize federal funding, including Title I Section 134 metropolitan planning funds, and Title III Section 8 metropolitan planning funds. The UPWP also identifies state and local matching dollars for these federal planning programs.

This task provides for management of the FY 2012 UPWP. If during FY 2012, 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 MPO Policy Board.

This task also provides for the development of a UPWP for FY 2013. The document will incorporate suggestions from federal funding agencies, state transportation agencies, transit operating agencies, local governments participating in RVAMPO, and the public through the

RVAMPO's public involvement process. The new UPWP will be presented in draft to the RVAMPO Technical Committee and Policy Board in February 2012, as a revised draft in March 2012 and as a final document for adoption in April 2012. The approved UPWP will be printed, distributed to the Policy Board, and made available to the public on the RVARC website.

**Products:** UPWP for FY 2013 and amendments to the FY 2012 UPWP as needed.

**Estimated Budget:** \$10,220 (\$8,062 PL and \$2,158 FTA/5303) (included for planning purposes only; not intended to be restrictive).

## **2. PROGRAM ACTIVITIES**

### **2.01 Long Range Transportation Planning**

**Objective and Description:** Item 2.01 will focus on kicking off the planning process for the next CL RTP update which is anticipated for FY 2014 or FY2015, preparing the LRTP planning process for official TMA designation if FY 2012, and processing any amendments to the recently adopted plan that are needed. Individual areas of focus for item 2.01 follow:

- 1) **CL RTP 2035 – Adoption and Amendments** – Any additional activities required for the adoption of RVAMPO CL RTP 2035 and/or forthcoming amendments to CL RTP 2035, in order to reflect additional funds than could be added to the original financial constraint.
- 2) **Preparing LRTP process for TMA designation:** It is anticipated that the RVAMPO will be officially designated a Transportation Management Area (TMA) MPO by the end of FY 2012. Typical TMA – MPO requirements such as:
  - a. Developing a Congestion Management Plan which includes:
    - o Integration of Transportation Demand Management (TDM) Long-Range Planning – A long-range TDM plan was completed in FY 2010. This sub-item allocates resources to integrating the findings of that planning process into the RVAMPO LRTP planning process.
    - o Integration of Transit Development Plans (TDP) for Valley Metro (GRTC) and RADAR (UHSTS) findings into Congestion Management Planning to the greatest extent possible.
  - b. Developing a RSTP Project Selection Process including consideration of Public Transit and Public Mobility Projects.
  - c. Incorporating Performance Measures into the LRTP Process including Public Transportation Performance Measures as applicable.
  - d. Preparing for an official LRTP Planning Review including both highway and public transportation planning activities.
- 3) **Preparing LRTP process for Traditional Ozone Non-attainment Designation:** The federal EPA has requested an extension to determine the new national 8-hour Ozone standard by July 2011. There is a distinct possibility that RVAMPO will be designated non-attainment under the new standard. Preparations to integrate air-quality modeling and CMAQ project selection procedures may need to start in FY 2012. CMAQ project selection procedures are anticipated to include but not limited to: roadway improvements,

operations management strategies and public transportation/ public mobility related projects.

- 4) **Official Public Meeting Concerning Long-Range Planning Assumptions:** This will be the sixth in a series of yearly public meetings concerning the long-range planning process and its assumptions.
- 5) **New LRTP (2040) Planning Process** – The new LRTP 2040 planning process will begin with development of a 2040 Study Area Boundary based on the TAZs delineated in the CTPP TAZ-UP program of FY 2011.
- 6) **Continued Scenario Planning Development** – Scenarios involving a one or multiple themes will continue to be developed in FY 2012. Each scenario is anticipated to result in a 10 to 30 page scenario report which explores the scenario in question and details its relationship with and impact on the long-range transportation planning process. Scenarios are anticipated to include multiple transportation approaches and perspectives including public transportation and public mobility perspectives.
- 7) **Transportation and Land Use Archival System Maintenance** – Item “Transportation and Land Use Phase II” in RVAMPO’s FY2008 UPWP established a prototype transportation and land use data archival system for updating transportation and land use data on a regular basis so that “time series” or “snapshot” data analysis can be performed in future long-range transportation planning processes. This item would populate that database for the previous years data and add the “snapshot” to the catalog of previous years’ snapshots.

Long range transportation planning is the major staff activity in the FY2012 UPWP.

Item “2.01 Long Range Transportation Planning” also contains provisions for and on call consultant or consultants to provide assistance to RVAMPO staff concerning:

1. **Long Range Transportation Planning** – Specialized studies and analysis in support of the MPO Constrained Long Range Transportation Plan. Examples could include assistance with obtaining and analyzing public input, developing and evaluating trends and forecast data, and assessing transportation-related policy and regulatory issues. Assistance may also be needed with the application of a regional travel demand model using CUBE Voyager software.
2. **Corridor Planning** – Analysis of routes or proposed roadway links, including traffic counts, forecasting of traffic, assessment of intersection and roadway geometrics, capacity and safety analysis, and recommended improvements. This item may also include multimodal analysis and inventory of land use and policy considerations.
3. **Microsimulation/Modeling** – Studies using software to provide computer simulation of corridors and roadway networks using Syncro, CORSIM, MINUTP, TP+, the Highway Capacity Manual, and other available tools. Training may also be included in these projects.
4. **Traffic/Turning Movements Counts** – Perform data collection as needed, including: ADT’s, 12-hour counts, intersection turning movement counts, occupancy rates, speed/delay runs, pedestrian and bike counts, and parking turnover.
5. **Visualization/Photo Rendering** – Examples of visualization techniques include sketches, drawings, artist renderings, physical models and maps, simulated photos, videos, computer modeled images, interactive GIS systems, GIS based scenario planning tools, photo manipulation and computer simulation.
6. **Pedestrian and Greenway Planning** – services as needed
7. **Transportation Plans** – Develop or assist in the development of studies or plans, as needed.

2. A total of **\$70,000** from the estimated budget below is reserved for on call consultant activities. Before on call consultant services are used a brief description of proposed on call services will be forwarded to VDOT and FHWA for approval.

“2.01 Long Range Transportation Planning” is the element responsible for demonstrating SAFETEA-LU compliance for the long-rang transportation planning process.

**Products:** CLRTP 2035 Amendments, 2040 Study Area Boundary Adjustment, Integration of anticipated TMA and CMAQ requirements into LRTP planning process, Annual Public Open House and Coordination with VDOTS Rural Long-Range Transportation Planning Process. **Item 2.01 supports all planning factors (#1 - #8) to the extent possible given time, financial and other constraints.**

**Estimated Budget:** \$169,951 (\$163,497 PL and \$6,454 FTA/5303) {\$70,000 included for on call consultant work as described above} (included for planning purposes only; not intended to be restrictive).

## **2.02 Transportation Improvement Program**

**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, pedestrian, safety, maintenance and transportation enhancement projects receiving federal funds. State and locally funded projects are also included in the TIP for coordination purposes. The TIP is updated every two years, with a major amendment in intervening years, and must be approved by the MPO’s Policy Board and the governor of Virginia. The TIP is required as a condition for all federal funding assistance for transportation improvements within the RVAMPO area.

The general public and all other interested parties will be given an opportunity to review and comment on the proposed TIP as described under the RVAMPO’s adopted public involvement policy. To facilitate public review, the TIP will be accessible electronically through the Internet.

This task provides for the maintenance and amendment of the current regional Transportation Improvement Program. This task will require active support of all RVAMPO committees and coordination with member agencies. Some of the major activities that will be undertaken as part of this task include amending the current TIP as needed, preparation of the RVAMPO Self-Certification Statement and activities to assure that the Statement is being followed, and the preparation of an annual listing of projects for which federal funds have been obligated in the previous year.

Additional activities covered in this task may include but are not limited to:

- Preparation of TIP process for anticipated RSTP and CMAQ requirements.
- Data collection and analysis for yearly Performance Measures update.
- Coordination with VDOT on TIP, STIP and Six Year Improvement Program (SYIP) details, procedures and updates.



- Coordination with FTA, VDRPT, Valley Metro (GRTC) and RADAR (UHSTS) on public transportation related programming with regards to SYIP and TIP issues.
- Development of GIS layers to display TIP projects
- Staff evaluation and testing of web technology to display TIP projects
- Staff evaluation and/or development of an in house TIP database/project tracking system.

This item also provides for a major amendment to the current TIP assuming financial data is available for new TIP development within FY 2012.

**Products:** Development of a major amendment to the current TIP, annual listing of projects with federal obligations (federal funds), Data collection and analysis for annual listing of performance measures. Preparation of TIP process for anticipated incorporation of RSTP and CMAQ funds in future TIPs. Additional products may include TIP GIS development, website development related to the TIP and/or TIP database/tracking system development. *Item 2.02 is a programming document it supports all planning factors (#1 - #8) to the extent that programming funds are available in a given 4-year time horizon.*

**Estimated Budget:** \$20,335 (\$18,845 PL and \$1,490 FTA/5303) (included for planning purposes only; not intended to be restrictive).

### **2.03 Sustainable Communities Regional Planning Grant Program, Public Participation, Environmental Justice, Stakeholder Training and Seminars**

**Objective and Description:** In past UPWPs related efforts including stakeholder training, seminars for local planners, public participation and environmental justice activities have been funded over separate items. Item 2.03 combines these similar activities under one category. In addition, the Roanoke Valley-Alleghany Regional Commission (RVARC) was recently successful in obtaining a Sustainable Communities Regional Planning Grant that covers the majority of the RVAMPO study area. The Sustainable Communities Regional Planning Grant will employ a large public and stakeholder engagement effort that includes various elements such as touch screen kiosks, facilitated stakeholder group meetings, large public and community meetings, and electronic engagement methods including those generally labeled as “Web 2.0” RVAMPO will participate in the engagement initiatives within the RVAMPO study area as a form of in-kind effort to the Sustainable Communities Regional Planning Grant outreach activities. The intention is that the Sustainable Communities outreach will also serve as a forum where public and stakeholder input concerning regional transportation issues will also be obtained, thereby, extending the reach and effectiveness of the traditional RVAMPO public involvement process.

In addition to the Sustainable Communities Regional Planning Grant outreach activities, traditional RVAMPO public and stakeholder involvement activities will include but are not limited to the following:

RVAMPO Public Participation and Environmental Justice activities will proceed along the following avenues:

- 1) **Focus Groups:** Staff will continue to schedule a series of focus groups with neighborhood groups, civic leagues and/or other defined groups. This will be a foundational series of focus groups for the next CLRTP update.
- 2) **MPO Website Strategy:** – The RVAMPO website should be periodically reevaluated and updated to ensure a smooth user interface. This subtask allocates resources specifically for website improvement. In addition, staff will research and begin to implement “Web 2.0” public participation strategies. “Web 2.0” commonly refers to social media that is enabled by internet and web technologies.
- 3) **MPO Demographic Profiles** – RVAMPO Demographic Profiles will be updated depending on suitability of US Census Bureau, American Community Survey data.

In addition, stakeholder engagement primarily employ webinars and other seminar style events.

- 4) **Webinars, Teleconferences and Seminars** - The American Planning Association (APA) produces a series of teleconferences on planning issues. RVAMPO staff will select relevant MPO related teleconferences and make arrangements to host a teleconference download site for local planners, citizens and other interested parties. A discussion will follow each teleconference concerning how RVAMPO staff may apply concepts from the teleconference in the long-range planning process.

**Products:** Public and stakeholder outreach at various scales, webinars, seminars, neighborhood focus groups and MPO website maintenance, and update of MPO Demographic Profiles. **Item 2.03 supports planning factor #4 – “Accessibility” by increasing accessibility to public input and participation in the transportation planning process.**

**Estimated Budget:** \$48,261 (included for planning purposes only; not intended to be restrictive).

#### **2.04 Air Quality Planning**

**Objective and Description:** The local governments (Counties of Botetourt and Roanoke, Cities of Roanoke and Salem and Town of Vinton) entered into an Ozone Early Action Compact (EAC) with the Virginia Department of Environmental Quality (DEQ) and the Federal Environmental Protection Agency (EPA) in late December 2002. This agreement led to the development of an Ozone Early Action Plan (EAP) in March 2004. The Ozone EAP was successful and the Federal Environmental Protection Agency (EPA) declared the Roanoke Area to be back in attainment for the 8-hour Ozone standard, that was in effect during the EAC/EAP process, on April 15, 2008. The Federal EPA revised the nationwide 8-hour Ozone Standard, in early March 2008, to 75 parts per billion (ppb) based on a 3-year average. Subsequently the Roanoke Region’s 3-year average for the 2006, 2007 and 2008 Ozone seasons stood at 74 ppb, within the new nationwide standard. In addition, the Federal EPA has announced its intention to further revise the 8-hour Ozone standard to a value within the 60 ppb to 70 ppb range, to be announced in August 2010. Similarly in FY2008 RVAMPO staff had begun the groundwork to monitoring both fine particulate PM2.5 and initial research into Greenhouse Gasses (GHGs) should action or compliance be required for those two classes of pollutants in addition to ground level Ozone.

The Federal EPA has announced that a revised 8-hour Ozone Standard should be available by July 2011. It is anticipated that RVAMPO may be classified as non-attainment under the new revised standard. This would unleash a new planning and stakeholder involvement process to conform to a non-attainment designation. It is anticipated that stakeholder involvement from public transportation agencies will be especially important in this process.

**Products:** 1) Monitoring of Ozone and PM 2.5 trends with regards to continued air quality compliance; 2) Monitoring of federal and state policies concerning Greenhouse Gas (GHG) and their possible impact on the RVAMPO planning process; and 3) Initiation of a non-attainment stakeholder and planning process pending designation.

**Estimated Budget:** \$25,174 (\$21,947 PL and \$3,227 FTA/5303) (included for planning purposes only; not intended to be restrictive).

## **2.05 Corridor Studies, Area Studies and Safety Planning**

**Objective and Description:** Corridor and area studies can uncover projected ideas that feed the CL RTP. Likewise, the CL RTP can suggest corridors that warrant pre-NEPA corridor studies to help move the project to next stage. The following corridors and areas were suggested by local governments and other stakeholders in the FY2012 work program development process. Analysis of each corridor or area may include but is not limited to: access management, corridor simulation (software), intersection evaluation, operations evaluation, transit/bicycle/pedestrian connections and parking availability/accessibility/issues.

- 419 – Roanoke County, City of Roanoke and City of Salem Assistance – Phase III Review and Follow-up
- Hollins and Peter’s Creek Corridor Study Assistance – Transportation Elements
- City of Roanoke Downtown Parking Study – Area Study
- Town of Vinton Downtown Parking Analysis – Area Study
- Synchro and/or HCS corridor analysis as requested

Particular attention to safety planning will be present in the corridor planning process. This may include but is not limited to: accident analysis, pedestrian safety, bicycle safety, driver behavior analysis and education.

Item 2.05 also includes staff time for “Safe Routes to School” planning assistance in the event that a member local government requires such assistance during FY2012.

**Products:** Assistance with corridor and area studies, corridor evaluations and/or corridor data summaries using the above corridors as partners in local, VDOT or consultant studies. **Item 2.05 supports planning factors #2- Safety, #7 – Management and Operation and #8 – Preservation of Existing System.**

**Estimated Budget:** \$55,917 (included for planning purposes only; not intended to be restrictive).

## **2.06 RVAMPO Bicycle Plan and Greenway Master Plan Implementation Planning and Assistance**

***Objective and Description:*** A well thought out plan does not benefit the community, if it is filed away and not implemented. The RVAMPO updated its bicycle plan in FY 2011 and the Regional Greenway Master Plan in FY2007. This task is focused on implementation planning, plan review and regional Greenway Plan assistance. The following activities will be included in item 2.07 at a minimum:

**1) *RVAMPO Bicycle Plan Adoption and Implementation***– Staff will present the recently developed (FY2011) Regional Bicycle Plan to local governments and stakeholders for official adoption and/or approval.

**2) *Regional Pedestrian/Bicycle Advisory Board*** - RVAMPO staff will continue to staff the recently created Regional Pedestrian/Bicycle Advisory Committee. In addition, staff will attend meetings and/or serve on the following committees: City of Roanoke BAC, Regional Greenway Commission, Regional Greenway Commission Standards and Design Subcommittee, Joint Greenway Commission-Pathfinders Marketing, PR and Education Subcommittee and other committees as appointed.

**3) *General Assistance to Local Governments and Greenway Commission*** – MPO Staff assistance, public information materials design, and other areas as necessary, such as:

- RVAMPO staff will work with Regional Greenway Commission to identify on-road connections between greenways, and provide mapping assistance to be featured in brochures that will be directly distributed to citizens promoting these on-road connections between greenways.
- Assistance to Botetourt County in developing an initial greenway plan for the MPO portion of the County.

**4) *Mapping Assistance to Local Governments and Greenway Commission*** – MPO staff will assist with the following subtasks and additional greenway mapping needs:

- Assist in the ongoing upgrade to existing greenway, trail, & park mapping such that new segments can be updated. These maps will be utilized in greenway commission and local government websites, marketing & other media opportunities, & be created into pocket maps that could be developed in-house.
- Assist in the graphic map design of park & greenway informational kiosks per any applicable sign plans.
- Greenway Mapping for grant applications – Local governments and Regional Greenway Commission typically request custom greenway maps for grant applications.
- Roanoke River Greenway Status Mapping.
- Update Regional Hike, Bike and Bus Map.

**5) *Website Assistance to Greenway Commission*** - MPO Staff will assist Greenway Commission in updating maps, graphics, illustrations and other aspects of Greenway Commission website.

**6) *Grant Assistance for Greenway Development*** – Assist Regional Greenway Commission in identifying and pursuing state, local, federal and private grants for greenway implementation.

**7) *Continued Greenway Monitoring and Trail User Counts*** – continue to expand the greenway usage monitoring/estimation system for using during all seasons. Monitoring system will include deployment of additional trail counters and other monitors as available.

**8) Pathways to Healthy Neighborhoods and related Active Transportation Assistance** – City or Roanoke requested RVAMPO staff assistance for Pathways to Healthy Neighborhoods and other active transportation planning initiatives.

**9) Glade Creek** – Assist Town of Vinton with potential Glade Creek Greenway project.

**10) Bicycle, Greenway and Pedestrian Planning GAP Analysis** – review regional and local bicycle, greenway and/or pedestrian plans and review for any gaps that need to be addressed.

**11) Bicycle Safety Review** – Staff will research state and local laws pertaining to protective clothing and bicycles with a specific emphasis on reflective clothing requirements.

**Products:** RVAMPO Bicycle Plan Update. *Item 2.07 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.*

**Estimated Budget:** \$79,648 (included for planning purposes only; not intended to be restrictive).

## **2.07 General Technical Assistance and Technical Support Activities**

**Objective and Description:** Staff will research, develop, maintain, and analyze data for use in a variety of technical support and planning support activities. Work activities will be organized around the following subtasks. Any combination of subtasks may be completed in FY2012 as opportunities and needs arise; however, circumstances may not permit all subtasks to be finalized by the end of FY2012.

Subtasks:

- **General Technical Assistance** to local governments, planners and citizens as requested.
- **Technical Support Activities** – a variety of planning support activities to support work program projects and/or the general planning process (i.e. turning movement counts).
- **Transportation Enhancement Assistance** – Local government assistance on the preparation of Transportation Enhancement (TE) grants as needed.
- **Minor Support to Statewide Multimodal Plan (VTRANS) Update** – as needed
- **Unanticipated requests from Valley Metro (GRTC) and RADAR (UHSTS)** – requests for special studies or projects that were not known or anticipated at the time of FY 2012 UPWP development.
- **Unanticipated requests for Mobility Planning or Transportation Demand Management Studies** – requests for special studies or projects that were not known or anticipated at the time of FY 2012 UPWP development.

**Estimated Budget:** \$70,482 (\$51,853 PL and \$18,629 FTA/5303) (included for planning purposes only; not intended to be restrictive).

## **2.08 Public Transportation Planning Assistance**

***Objective and Description:*** The two major public transportation agencies, Valley Metro (GRTC) – fixed route transit – and RADAR (UHSTS) – demand responsive transit regularly require transportation planning assistance to complete a variety of functions and plan for service enhancements. At a minimum item 2.10 will include:

- ***Regional Ride Guide Update*** – Staff will work with GRTC, UHTS and RIDE Solutions to develop a new Ride Guide to inform the public of public transportation and alternative transportation options. The final product will be in a format that can be directly distributed to citizens.
- ***Bus Stop Accessibility Study*** – Staff will partner with GRTC to perform fieldwork aimed at evaluating the current accessibility, from a variety of perspectives including with regards to common disabilities, of GRTC bus stops. Staff will recommend street, pedestrian and other improvements intended to improve bus stop accessibility.
- ***Transit Development Plans (TDP) Assistance*** – Transit Development Plans were developed by VDRPT contracted private consultants for the Greater Roanoke Transit Company (Valley Metro) and Unified Human Services Transportation Systems, Inc. (RADAR). Staff will assist with plan review, amendments, analysis or updates needed by either transit property in FY 2012.
- ***Transit Route Mapping Assistance*** – for both Valley Metro and RADAR pending updated transit route or schedules.
- ***Human Services-Public Transit Coordinated Transportation Planning*** - SAFETEA-LU requires a “Human Services-Public Transit Coordinated Transportation Plan” to be in place before transit operators can access Section 5310 Elderly/Disabled; Job Access Program; and the New Freedoms Program funds. In FY2009 Virginia Department of Rail and Public Transportation (VDRPT) updated the existing Human Services-Public Transit Coordinated Transportation Plan for the Planning District Commission that encompasses the RVAMPO. There will likely be plan adoption procedures, plan review and/or plan amendments needed in FY 2012.
- ***Craig County – Roanoke Transit Feasibility Assistance*** – The FY 2012 Rural Transportation Planning Assistance Program Scope of Work for the Roanoke Valley Alleghany Regional Commission identifies a Craig County – Roanoke Transit Feasibility Study. This sub-item is listed to account for any work needed in the “urban” RVAMPO portion of the study. It is anticipated that most of the work on this study will occur outside of the RVAMPO boundary.
- ***Google Transit Data Maintenance*** – Staff will take over GRTC data related to their presence on Google Transit. Staff will maintain and update data as needed to ensure Google Transit searches yield relevant results for the RVAMPO.
- ***DRPT Statewide Multi-Modal and Public Space Design Guidelines*** – Staff time to participate in the Virginia Department of Rail and Public Transportation (DRPT) Statewide Multi-Modal and Public Space Design Guidelines committee. May include travel.

**Products:** Items 1- 6 above. **Item 2.10 supports planning factors #1 – Economic Vitality, #4 – Accessibility and Mobility, #5 – Quality of Life, Environment and Energy Conservation, and #6 Connectivity.**

**Estimated Budget:** \$47,255 (\$0 PL and \$47,255 FTA/5303) (included for planning purposes only; not intended to be restrictive).

## **2.09 Freight Transportation Planning – Phase II**

**Objective and Description:** In the FY 2011 UPWP staff partnered with the University of Alabama at Huntsville to apply a freight planning methodology that they developed and tested with the MPO around Mobile, Alabama. Researchers at the University have decided to apply their methodology in two MPOs outside of Alabama. RVAMPO was chosen as one of those out-of-state MPOs. University researchers will supply training, data and a methodology using non-MPO funding that they have secured. RVAMPO staff will provide staff time to conduct up to several hundred freight stakeholder interviews using the researcher's methodology. The researchers will then take the results and help RVAMPO construct a data profile for freight planning purposes. This task requires a significant amount of fieldwork in the form of out-of-the office interviews. The following is a brief description of MPO staff participation provided by University officials:

*This research project proposes to develop a structured and repeatable process for equipping Metropolitan Planning Organization (MPO) staff members with the skills and tools necessary to enhance freight transportation planning through the engagement of and data collection from local industries. The RVARC employees will participate in a training event to prepare for implementation of the industry engagement program and support implementation of Industry Engagement Program in the MPO. The RVARC participants will use surveys and interviews with the major industry cluster players to fill in gaps from the FAF3 data and improve the forecast using local knowledge.*

Phase II will allow for staff time to complete up to 80 additional stakeholder interviews above and beyond those completed in FY 2011 (Phase I). Phase II will also include the final report.

**Products:** Regional Freight Planning Profile final report **Item 2.12 support planning factor # 1 Economic Vitality**

**Estimated Budget:** \$29,482 (included for planning purposes only; not intended to be restrictive).

**Figure 4**

**FY 2012 RVAMPO PROPOSED REVENUES AND EXPENDITURES BY FEDERAL, STATE AND LOCAL SOURCES**  
(July 1, 2011 to June 30, 2012)

	<b>FHWA</b>	<b>State</b>	<b>Local</b>	<b>Total FHWA</b>	<b>FTA</b>	<b>State</b>	<b>Local</b>	<b>Total FTA</b>	<b>Total Both</b>
<b>Proposed Revenue</b>									
<i>New FY 2012</i>	310,094	38,762	38,762	387,618	70,275	8,784	8,784	87,843	475,461
<i>Unobligated FY 2010</i>	11,534	13,942	13,942	139,418	0	0	0	0	139,418
<i>Direct Carryover FY 2011</i>	0	0	0	0	0	0	0	0	0
<b>Total Revenue</b>	<b>421,628</b>	<b>52,704</b>	<b>52,704</b>	<b>527,036</b>	<b>70,275</b>	<b>8,784</b>	<b>8,784</b>	<b>87,843</b>	<b>614,879</b>

**Proposed Expenditures**

<u><i>Program Support &amp; Admin</i></u>									
<i>1.01 Gen Admin &amp; Operations</i>	37,777	4,722	4,722	47,221	6,904	863	863	8,630	55,851
<i>1.02 Training &amp; Staff Development</i>	1,843	230	230	2,303	0	0	0	0	2,303
<i>1.03 Work Program Mgt</i>	6,450	806	806	8,062	1,726	216	216	2,158	10,220
<b>Total Operations</b>	<b>46,070</b>	<b>5,758</b>	<b>5,758</b>	<b>57,586</b>	<b>8,630</b>	<b>1,079</b>	<b>1,079</b>	<b>10,788</b>	<b>68,374</b>

**Proposed Expenditures Continued on Next Page:**



<u>Program Activities</u>	FHWA	State	Local	Total FHWA	FTA	State	Local	Total FTA	Total Both
<b>2.01 Long Range Plan</b>	130,797	16,350	16,350	163,497	5,163	645	646	6,454	169,951
<b>2.02 TIP</b>	15,075	1,885	1,885	18,845	1,192	149	149	1,490	20,335
<b>2.03 Sustainability Grant, Public and Stakeholder</b>	38,609	4,826	4,826	48,261	0	0	0	0	48,261
<b>2.04 Air Quality Planning</b>	17,557	2,195	2,195	21,947	2,582	323	322	3,227	25,174
<b>2.05 Corridor, Area Studies and Safety Planning</b>	44,733	5,592	5,592	55,917	0	0	0	0	55,917
<b>2.06 Bicycle and Greenways Planning</b>	63,718	7,965	7,965	79,648	0	0	0	0	79,648
<b>2.07 General Technical Assistance</b>	41,483	5,185	5,185	51,853	14,903	1,863	1,863	18,629	70,482
<b>2.08 Public Transportation Planning</b>	0	0	0	0	37,805	4,725	4,725	47,255	47,255
<b>2.09 Freight Transportation Planning – Phase II</b>	23,586	2,948	2,948	29,482	0	0	0	0	29,482
<b>Total Program Expenses</b>	<b>375,558</b>	<b>46,946</b>	<b>46,946</b>	<b>469,450</b>	<b>61,645</b>	<b>7,705</b>	<b>7,705</b>	<b>77,055</b>	<b>546,505</b>
<b>Total Expenses</b>	<b>421,628</b>	<b>52,704</b>	<b>52,704</b>	<b>527,036</b>	<b>70,275</b>	<b>8,784</b>	<b>8,784</b>	<b>87,843</b>	<b>614,879</b>

## Roanoke Valley Area Metropolitan Planning Organization

VDOT Salem District Support (SPR funding) for Planning Activities within the RVAMPO Area during FY 2012

<b>Work Program Activity</b>	<b>Total SPR (District)</b>
Program Support & Administration	\$8,000
Long Range Planning	\$18,000
Transportation Improvement Program	\$10,000
Other Project Planning Activities	\$38,000
<b>TOTAL</b>	<b>\$74,000</b>