

# Roanoke Valley Area Metropolitan Planning Organization

## UNIFIED PLANNING WORK PROGRAM Fiscal Year 2010

(July 1, 2009– June 30, 2010)

**Approved April 23, 2009**

**Amended September 24, 2009**

Roanoke Valley Area Metropolitan Planning Organization  
c/o Roanoke Valley-Alleghany Regional Commission  
313 Luck Avenue, SW, P.O. Box 2569  
Roanoke Virginia 24010  
Ph: 540-343-4417, Fax: 540-343-4416

ROANOKE VALLEY AREA  
**MPO** METROPOLITAN  
PLANNING  
ORGANIZATION

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.

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**TABLE OF CONTENTS**  
**FY 2010 UNIFIED PLANNING WORK PROGRAM**  
Program Administration, Activities, and Budget

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<b>RESOLUTION .....</b>	<b>iii</b>
<b>INTRODUCTION .....</b>	<b>1</b>
<b>FY 2010 WORK PROGRAM AND BUDGET .....</b>	<b>6</b>
<b>1. Program Support &amp; Administration .....</b>	<b>6</b>
<b>1.01 General Administration &amp; Operations .....</b>	<b>6</b>
<b>1.02 Training and Staff Development .....</b>	<b>7</b>
<b>1.03 Work Program Management .....</b>	<b>7</b>
<b>2. Program Activities .....</b>	<b>8</b>
<b>2.01 Long Range Transportation Planning .....</b>	<b>8</b>
<b>2.02 Transportation Improvement Program .....</b>	<b>9</b>
<b>2.03 Public Participation – Environmental Justice .....</b>	<b>10</b>
<b>2.04 Air Quality and Green Infrastructure Planning .....</b>	<b>11</b>
<b>2.05 Regional Corridor Studies .....</b>	<b>12</b>
<b>2.06 Transportation Demand Management and Human Services Transportation Planning .....</b>	<b>12</b>
<b>2.07 Bicycle and Greenway Systems Planning .....</b>	<b>14</b>
<b>2.08 Safety Planning .....</b>	<b>15</b>
<b>2.09 Technical Support Activities .....</b>	<b>15</b>
<b>2.10 Public Transportation Planning .....</b>	<b>16</b>
<b>2.11 Planning Seminars .....</b>	<b>17</b>
<b>2.12 Microsimulation Traffic Modeling .....</b>	<b>17</b>

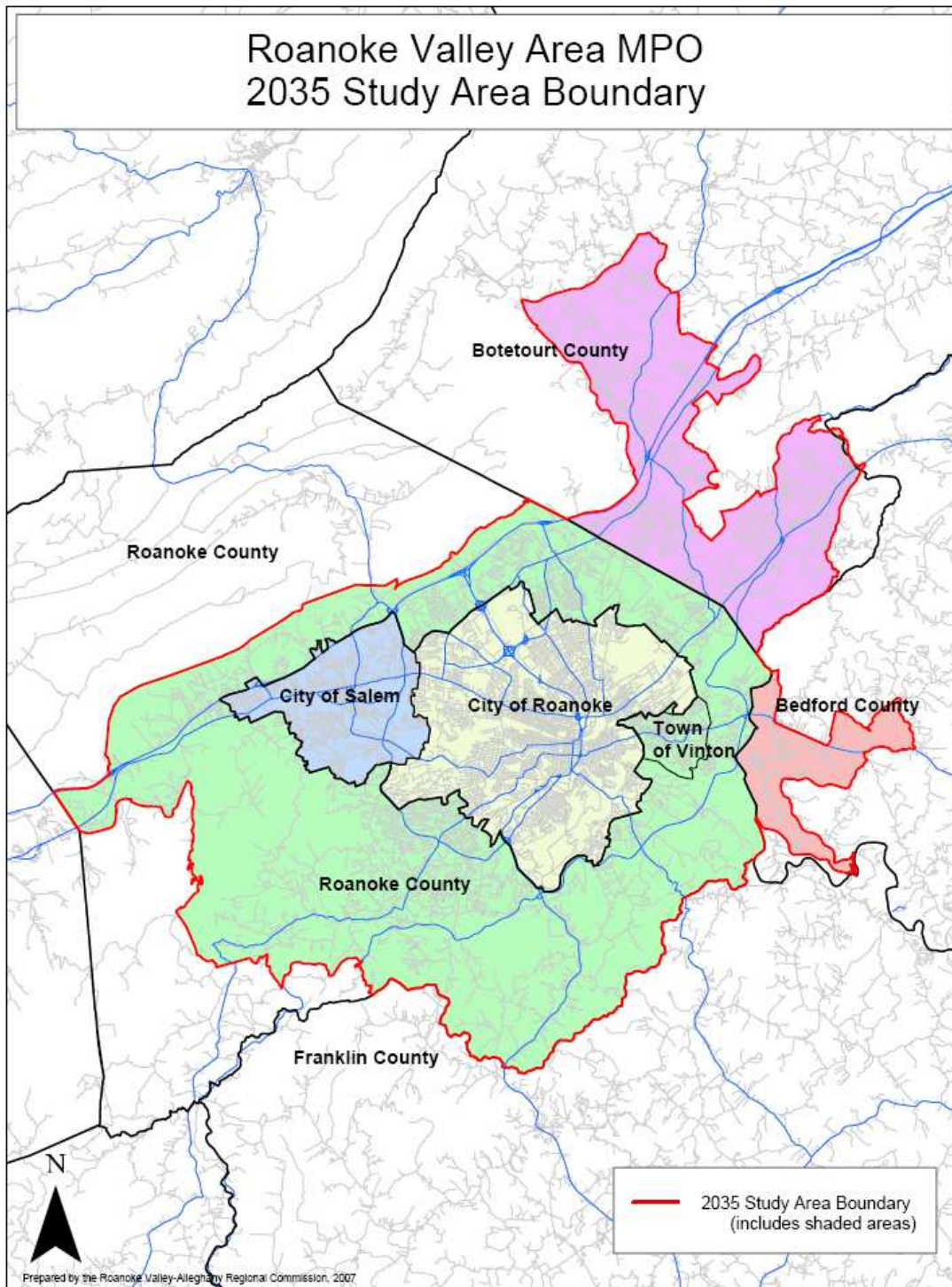


Figure 1.0

## **RESOLUTION**

*by the*

***Roanoke Valley Area Metropolitan Planning Organization  
Approving the FY 2010 Unified Planning Work Program***

**WHEREAS**, the *FY 2010 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 RVAMPO Study Area Boundary, and

**WHEREAS**, this Work Program details all transportation and transportation-related planning activities anticipated within the RVAMPO Study Area Boundary during the coming fiscal year, and

**WHEREAS**, this Work Program has been thoroughly reviewed by the Transportation Technical Committee;

**BE IT THEREFORE RESOLVED**, that the Roanoke Valley Area Metropolitan Planning Organization does hereby approve and adopt the *FY 2010 Unified Planning Work Program*.

David Trinkle  
Chairman

## **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 2010. 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 Consideration**

In 1997, the Environmental Protection Agency (EPA) made an amendment to the Clean 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 exceed 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. Early 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.

### **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.

**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.

<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).



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 2010**

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 2008. This funding will allow the RVAMPO to undertake additional activities that would not be included in a "typical" years work program.

**Figure 3**  
**FY 2010 RVAMPO PROPOSED FUNDING BY FEDERAL, STATE AND LOCAL SOURCES**  
 (July 1, 2009 to June 30, 2010)

	<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 2010	\$372,081	\$103,561	\$475,642
Deprogrammed FY 2009	\$0	\$0	\$0
Unobligated FY 2008	\$66,081	\$0	\$66,081
<b>TOTAL</b>	<b>\$438,162</b>	<b>\$103,561</b>	<b>\$541,723</b>

**PROPOSED FY 2010 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 2010 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:** \$57,652 (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:** \$2,328 (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 2009 and June 2010, 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 2010 UPWP. If during FY 2010, 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 2011. 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 2010, as a revised draft in March 2010 and as a final document for adoption in April 2010. The approved UPWP will be printed, distributed to the Policy Board, and made available to the public.

**Products:** UPWP for FY 2011 and amendments to the FY 2010 UPWP as needed.

**Estimated Budget:** \$10,630 (included for planning purposes only; not intended to be restrictive).

## 2. PROGRAM ACTIVITIES

### 2.01 Long Range Transportation Planning

**Objective and Description:** The RVAMPO’s Long-Range Transportation Plan 2035 was adopted in Fiscal Year 2009. Item 2.01 will focus on kicking off the planning process for the next CL RTP update in FY 2013 or 2014, 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 - Amendments** – Any forthcoming federal infrastructure investment “i.e. stimulus” program may require additional amendments to CL RTP 2035, in order to reflect additional funds than would be added to the original financial constraint.
- 2) **Census TAZ-UP Program:** The US Census Bureau and FHWA have delayed the TAZ-UP program to 2010 or possibly 2011. This sub-item reflects RVAMPO staff participation in the process should it be scheduled for FY 2010.
- 3) **National Household Transportation Survey (NHTS) Add-On Data Evaluation:** The Commonwealth of Virginia is participating in the NHTS Add-On program for both statewide and MPO specific samples. Data from the NHTS should be available for staff review and analysis in FY2010.
- 4) **Official Public Meeting Concerning Long-Range Planning Assumptions:** This will be the fifth in a series of yearly public meetings concerning the long-range planning process and its assumptions.
- 5) **New Kiosk Questions and Deployment Schedule** – The touch screen kiosk was very successful in the years leading up to the development of CL RTP 2035. To begin the public input process for the next CL RTP update a new slate of questions will be developed with CAC and TTC participation. The kiosk will be updated and then deployed on a new deployment schedule.
- 6) **New Scenarios for Scenario Planning** – Scenarios involving Baby Boom Cohort Retirement, Climate Change and Energy Prices were employed in the CL RTP 2035 planning process. This sub-item would review and update existing scenarios, and develop new scenarios using previously unexplored topics.
- 7) **Further Freight Analysis** – A basic freight commodity and value analysis was performed during the CL RTP 2035 planning process. This analysis will be expanded to and incorporated into the process for the next CL RTP update.
- 8) **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.

Long range transportation planning is the major staff activity in the FY2010 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:

- Assistance with 4-step transportation model software
- Assistance with TIP management software
- Assistance with Freight Data Analysis
- Assistance with corridor (micro simulation) software
- Assistance with Scenario Planning software
- Assistance with planning visualization and photo rendering
- Turning movement and traffic counts

A total of **\$108,000** 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, Completion of TAZ-UP process, NHTS data review, 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:** \$191,784 {\$108,000 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:

- 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.

**Products:** Amendments to current TIP as needed, annual listing of projects with federal obligations (federal funds). 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:** \$47,893 (included for planning purposes only; not intended to be restrictive).

### **2.03 Public Participation – Environmental Justice**

**Objective and Description:** Ongoing public consultation and public participation provide needed guidance to the long-range planning process, so that it remains relevant to community concerns. In addition, there is a need to establish checks and balances so that the long-range planning process does not impose undue burdens on, or fail to fairly allocate benefits to concentrations of poverty, minority, disability, limited English proficiency or any other federally protected groups. This process of considering benefits and burdens concerning federally protected groups is generally termed Environmental Justice.

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

- 1) **Focus Groups:** Staff will schedule a new series of focus groups with neighborhood groups, civic leagues and/or neighborhood watch groups. This will be a foundational series of focus groups for the next CLRTP update.
- 2) **Electronic Kiosk:** Deployment and routine maintenance of Electronic Kiosk. A new slate of questions will be developed as a part of item 2.01 in this UPWP. This item includes analysis of kiosk results.
- 3) **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.

**Products:** Continued kiosk deployment, neighborhood focus groups and MPO website maintenance. ***Item 2.03 supports planning factor #4 – “Accessibility” by increasing accessibility to public input and participation in the transportation planning process.***

**Estimated Budget:** \$16,154 (included for planning purposes only; not intended to be restrictive).

## **2.04 Air Quality and Green Infrastructure 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. Early 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. Similarly in FY2008 RVAMPO staff had begun the groundwork for a voluntary regional compact concerning fine particulate matter (PM 2.5). This task will include completion of any remaining work on the PM 2.5 local/regional compact along with implementation of the compact.

On a similar note, several localities within the RVAMPO have embarked on methodologies to measure their “carbon footprint” within their jurisdiction. These efforts usually include both transportation and non-transportation, such as lighting, heating and air conditioning and building insulation, elements. There is a desire among local officials to develop a way relate the transportation and non-transportation contributions to carbon emissions.

Activities for task 2.04 follow two major subtasks:

- ***Ozone, Fine Particulate Matter (PM 2.5) , and Greenhouse Gas (GHG) monitoring*** – Currently RVAMPO localities are in attainment for both Ozone and PM 2.5. Compliance to both standards is borderline and will require continued monitoring and analysis, especially if one of the standards is changed. Federal action may require Greenhouse Gas (GHG) monitoring and assessment in FY 2010. Staff will monitor federal and state policies concerning GHG.
- ***Transportation “Carbon Footprint” Comparisons*** – RVAMPO staff will research common transportation strategies that help public and private agencies reduce their carbon footprint. Likewise, staff will research data on equivalences and conversion that relate energy savings in non-transportation strategies to their equivalent in transportation strategies. For instance, X number transit users per year are approximately equivalent to X number of Compact Fluorescent Bulbs. The final product will be a report that relates a wide menu of transportation strategies applicable to the RVAMPO region and the approximate effectiveness of such strategies compared to similar non-transportation strategies. Staff will also consider transportation infrastructure expansion impact on existing urban tree canopy.

**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. 3) A report relating transportation

emission reduction strategies to popular non-transportation emission reduction strategies. ***Item 2.04 supports planning factor #5 – Quality of Life, Environment and Energy Conservation.***

***Estimated Budget:*** \$23,319 total hours (included for planning purposes only; not intended to be restrictive).

## **2.05 Regional Corridor Studies**

***Objective and Description:*** Corridor studies can uncover projected ideas that feed the CLRTP. Likewise, the CLRTP can suggest corridors that warrant pre-NEPA corridor studies to help move the project to next stage. The following corridors were suggested by local governments and other stakeholders in the FY2010 work program development process. Analysis of each corridor may include but is not limited to: safety planning, access management, corridor simulation (software), intersection evaluation, operations evaluation and/or transit/bicycle/pedestrian connections.

- 419 – Roanoke County, City of Roanoke and City of Salem Assistance
- Hollins and Peter’s Creek Corridor Study Assistance

***Products:*** Assistance with corridor 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:*** \$15,350 (included for planning purposes only; not intended to be restrictive). RVARC Staff obtained a Virginia Multimodal Planning Grant in the amount of \$80,000 for the “Route 419 Intergovernmental Coordination Plan” much of which will be completed using consultant services. The UPWP hours dedicated to route 419 will be for interfacing the “Route 419 Intergovernmental Coordination Plan” with the general corridor study process.

## **2.06 Transportation Demand Management and Human Services-Public Transit Coordinated Transportation planning processes**

***Objective and Description:*** 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 2010.

VDRPT is requiring a Transportation Demand Management (TDM) plan from all TDM agencies in the state. VDRPT consultants will be performing basic tasks for plan development for all



TDM agencies. Additional elements of the TDM Plan will be the responsibility of the regional agencies. Several possible TDM elements are focused on the RVAMPO service area and are listed in CL RTP 2035.

Activities in item 2.06 will proceed along the following sub-tasks

**Transportation Demand Management Planning Process:**

- **Long-range Transportation Demand Management (TDM) Plan Assistance** – Private sector consultants, contracted by VDRPT, will deliver the initial plan. Staff will assist with plan additions, amendments, recommendations, analysis and review.
- **Ride Share Strategic Marketing Plan Assistance** – A cornerstone of any successful transportation demand management program is a successful, consistent communication, outreach and marketing effort. Staff would assist in the development of a strategic marketing plan for the RIDE Solutions TDM program through researching the plans of similarly sized TDM agencies throughout the country, analyzing trends in the development of communications technologies, and establishing best practices based on the expected growth of funding for RIDE Solutions over the next 5 to 10 years.
- **Car Sharing Feasibility Study** – Car sharing is a concept outlined in CL RTP 2035. Staff would research the feasibility of car sharing operations within the RVAMPO service area. Staff would complement existing City or Roanoke research into car sharing and extend the concept to the entire urban area. Staff would research and compare several models of car sharing operations including but not limited to: private non profit, partnerships with private for-profit operators including discussion of existing parking and zoning regulations and their impact on the models of operation.
- **Smart Way linkages to other transit** – Staff will consult with Valley Metro and RADAR officials to explore the possibility of linking other fixed route and demand responsive transit services to several Smart Way stops, especially at park and ride lots.

**Human Services-Public Transit Coordinated Transportation Planning Process**

- **Regional Transit System/ Combined System Models** – Staff will research combined regional transit system structures from around the country and produce a report of best practices for consideration in the RVAMPO service area.
- **Vinton Human Services Transit Connection Study** – the Town of Vinton is expecting a new Low-and-Moderate (LMI) housing complex to be completed within the town limits. This study would investigate transportation strategies ranging including paratransit or extension of fixed-route transit that could serve the new housing complex.

**Products:** Car Sharing Feasibility Study, Regional Transit System Best Practices Report, Vinton Connections Systems Study. **Item 2.06 supports planning factors #4 – Accessibility and Mobility, #6 – Enhanced Integration, and #7 – Management and Operation.**

**Estimated Budget:** \$26,142 (included for planning purposes only; not intended to be restrictive)

## **2.07 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 FY2005 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 Update** – The current RVAMPO Bicycle Plan dates from 2005. Staff will initiate a wholesale Bicycle Plan Update process for FY 2010.

**2) Regional Pedestrian/Bicycle Advisory Board** - RVAMPO staff will continue to staff the recently created Regional Pedestrian/Bicycle Advisory Board.

**3) Implementation Tracking –Review/Update** – RVAMPO staff will track yearly progress towards the implementation of the Roanoke River Greenway portion of the Regional Greenway Conceptual Plan. RVAMPO staff will consult with local government staff to produce a color-coded map that depicts up to date progress towards greenway conceptual plan implementation. This is a review and possible update to the implementation tracking produced in FY2008.

**4) General Assistance to Local Governments and Greenway Commission** – MPO Staff assistance, public information materials design, and other areas as necessary. In addition City of Roanoke has requested:

- RVAMPO staff will help develop master site plans for greenways; Murray Run & Garden City Greenways.
- 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.

**5) 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.
- Assist in updating City of Roanoke “Green Infrastructure” Map.

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

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

**8) Greenway Monitoring System** – develop and implement a greenway usage monitoring/estimation system for using during all seasons. Monitoring system could include deployment of trail counters or other monitors.

**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:** \$51,631 (included for planning purposes only; not intended to be restrictive).

## **2.08 Safety Planning**

**Objective and Description:** Staff will continue to attend the Blue Ridge Transportation Safety Board meetings for coordination of common transportation safety related issues. Staff will continue to provide assistance to local governments, school systems and VDOT concerning Safe Routes to School Plans and funding. This item will also include any crash related data analysis the may be available and relevant to the MPO planning process.

In addition staff will investigate the following safety topics:

- **I-81 Detour Routes** – Staff will work with VDOT and local governments to update the I-81 detour route work that began in FY 2008. The goal will be to develop general detour plans that all parties can use as a template.
- **Incident Management** – Staff will work with VDOT and local governments to determine the feasibility of developing an Incident Management Response planning process.

**Products:** 1) Safe Routes to School Planning as needed 2) Continued coordination and membership on the Blue Ridge Transportation Safety Board 3) I-81 Detour and Incident Management Planning Work; and, 4) Acquisition of new crash and accident data for analysis. *Item 2.08 supports planning factor #2 – Safety.*

**Estimated Budget:** \$12,081 (included for planning purposes only; not intended to be restrictive).

## **2.09 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 FY2010 as opportunities and needs arise; however, circumstances may not permit all subtasks to be finalized by the end of FY2010.

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

**Estimated Budget:** \$9,629 (included for planning purposes only; not intended to be restrictive).

## **2.10 Public Transportation Planning Assistance**

**Objective and Description:** The two major public transportation agencies, Valley Metro (GRTC) – fixed route transit – and RADAR (UHTS) – 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:

- **Transit Development Plans (TDP) Assistance** – Transit Development Plans are being developed by VDRPT contracted private consultants for the Greater Roanoke Transit Company (Valley Metro) and Greater Roanoke Human Services Transportation Corporation (RADAR). Staff will assist with plan review, amendments, analysis or updates needed by either transit property in FY 2010.
- **Transit Route Mapping Assistance** – for both Valley Metro and RADAR pending updated transit route or schedules.
- **Financial Capacity Analysis, Valley Metro** – yearly independent review of Valley Metro’s financial figures in preparation of their Tri-annual review process.
- **Transit Feasibility Study Rocky Mount to Roanoke** – The FY 2010 Rural Transportation Planning Assistance Program SCOPE OF WORK for the area outside of the RVAMPO Study Area Boundary has the following description of this task:
- **Performance Measures and Performance Evaluation Model Assistance for Valley Metro**- Valley Metro’s recently developed draft Transit Development Plan (TDP) reports several system-wide and route level performance measures. Staff will assist Valley Metro to extend the performance measure work begun in the TDP by:
  - Researching performance measures used by other transit systems;
  - Developing a list of additional (not evaluated in the TDP) performance measures for Valley Metro’s consideration;
  - Develop a model of final performance measures and test the measures with Valley Metro data; and,
  - Present the performance measures model to Valley Metro staff and conduct a brief training session.

**Description:** Evaluate the feasibility and economic impact of instituting fixed-route transit service from Rocky Mount to Roanoke. Estimate potential ridership, stop locations, frequency, and cost of the service. Coordinate with Franklin County, Rocky Mount, Roanoke County, and Valley Metro. Data from the 2008 National Household Transportation Survey will be utilized for commuter analysis. Project support will also be provided through the Regional Commission’s RIDE Solutions program.

This task will provide assistance to complete the “Urban” portion of the companion project listed in the FY 2010 Rural Transportation Planning Assistance Program Scope of Work”

**Products:** Items 1- 4 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:** \$25,377 (included for planning purposes only; not intended to be restrictive).

## **2.11 Seminars and Stakeholder Training**

**Objective and Description:** 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:** Various teleconferences and seminars throughout FY2010. *Item 2.11 will potentially support a variety of planning factors depending on topics chosen for seminars and training.*

**Estimated Budget:** \$1932 (included for planning purposes only; not intended to be restrictive).

## **2.12 Microsimulation Traffic Modeling**

**Objective and Description:** Computer microsimulation traffic models simulate individual vehicles on computer representations of transportation corridors or other transportation facilities. RVAMPO staff has received training on computer microsimulation software, however, there is a current lack of base models for regional transportation corridors in the RVAMPO. This task describes a process to select, gather data, model and verify results for regional transportation corridors. The basic process is as follows:

- **Corridor Selection** – Staff will work with a combination of the TTC, Local Government Stakeholders and VDOT to select candidate transportation corridors for simulation;
- **Data Collection and Fieldwork** – Staff will collect data and do necessary fieldwork for selected candidate corridors;
- **Simulation Model Development** – Staff, or an on-call consultant (as described in item 2.01 of this document), will develop and run the simulation models for selected candidate corridors;
- **Field Verification** – Staff will use the RVAMPO travel time data collection procedure, which makes use of a Global Positioning System Device, to field test speed and delay on the candidate corridors and compare field results with model results.

FY 2010 UPWP – Approved April 23, 2009  
Amended September 24, 2009

- ***Delivery of Model to Stakeholders*** – Staff will transfer developed corridor models to interested local government or VDOT stakeholders.

***Products:*** Transportation simulation models for various regional corridors in the RVAMPO region. ***Item 2.12 support planning factors #2 Safety, #6 Connectivity, and #7 Management and Operation***

***Estimated Budget:*** \$49,821 (included for planning purposes only; not intended to be restrictive).

**Figure 4**

**FY 2010 RVAMPO PROPOSED REVENUES AND EXPENDITURES BY FEDERAL, STATE AND LOCAL SOURCES**  
 (July 1, 2009 to June 30, 2010)

	FHWA	State	Local	Total FHWA	FTA	State	Local	Total FTA	Total Both
<b>Proposed Revenue</b>									
<i>New FY 2010</i>	297,665	37,208	37,208	372,081	82,849	10,356	10,356	103,561	475,642
<i>Unobligated FY 2008</i>	52,865	6,608	6,608	66,081	0	0	0	0	66,081
<i>Direct Carryover FY 2009</i>	0	0	0	0	0	0	0	0	0
<b>Total Revenue</b>	<b>350,530</b>	<b>43,816</b>	<b>43,816</b>	<b>438,162</b>	<b>82,849</b>	<b>10,356</b>	<b>10,356</b>	<b>103,561</b>	<b>541,723</b>
 <b>Proposed Expenditures</b>									
<u><i>Program Support &amp; Admin</i></u>									
<i>1.01 Gen Admin &amp; Operations</i>	38,178	4,772	4,772	47,722	7,944	993	993	9,930	57,652
<i>1.02 Training &amp; Staff Development</i>	1,862	233	233	2,328	0	0	0	0	2,328
<i>1.03 Work Program Mgt</i>	6,518	815	815	8,148	1,986	248	248	2,482	10,630
<b>Total Operations</b>	<b>46,558</b>	<b>5,820</b>	<b>5,820</b>	<b>58,198</b>	<b>9,930</b>	<b>1,241</b>	<b>1,241</b>	<b>12,412</b>	<b>70,610</b>

Proposed Expenditures Continued on Next Page:

	FHWA	State	Local	Total FHWA	FTA	State	Local	Total FTA	Total Both
<b><u>Program Activities</u></b>									
<b>2.01 Long Range Plan</b>	137,164	17,147	17,147	171,458	16,260	2,033	2,033	20,326	191,784
<b>2.02 TIP</b>	28,851	3,606	3,606	36,063	9,464	1,183	1,183	11,830	47,893
<b>2.03 Public Participation</b>	10,534	1,317	1,317	13,168	2,388	299	299	2,986	16,154
<b>2.04 Air Quality and Green Infrastructure Planning</b>	9,713	1,214	1,214	12,141	8,942	1,118	1,118	11,178	23,319
<b>2.05 Regional Corridor Studies</b>	12,280	1,535	1,535	15,350	0	0	0	0	15,350
<b>2.06 TDM and Human Services Transportation Planning</b>	11,840	1,480	1,480	14,800	9,074	1,134	1,134	11,342	26,142
<b>2.07 Bicycle and Greenways Planning</b>	37,234	4,654	4,654	46,542	4,071	509	509	5,089	51,631
<b>2.08 Safety Planning</b>	9,667	1,207	1,207	12,081	0	0	0	0	12,081
<b>2.09 Technical Support Activities</b>	5,286	661	661	6,608	2,417	302	302	3,021	9,629
<b>2.10 Public Transportation Planning</b>	0	0	0	0	20,303	2,537	2,537	25,377	25,377
<b>2.11 Seminars</b>	1,546	193	193	1,932	0	0	0	0	1,932
<b>2.12 Microsimulation Traffic Modeling</b>	39,857	4,982	4,982	49,821	0	0	0	0	49,821
				<b>Total FHWA</b>				<b>Total FTA</b>	
<b>Total Program Expenses</b>	303,972	37,996	37,996	379,964	72,919	9,115	9,115	91,149	<b>471,113</b>
<b>Total Expenses</b>	350,530	43,816	43,816	438,162	82,849	10,356	10,356	103,561	<b>541,723</b>

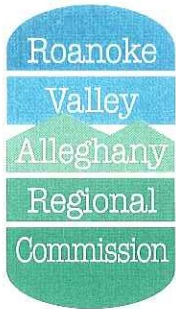


FY 2010 UPWP – Approved April 23, 2009  
Amended September 24, 2009

## Roanoke Valley Area Metropolitan Planning Organization

VDOT Salem District Support (SPR funding) for Planning Activities within the RVAMPO Area during FY  
2010

<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>



Roanoke Valley Area

# Metropolitan Planning Organization

313 Luck Avenue, SW / PO Box 2569 / Roanoke, Virginia 24010

TEL: 540.343.4417 / FAX: 540.343.4416 / [www.rvarc.org](http://www.rvarc.org) / [rvarc@rvarc.org](mailto:rvarc@rvarc.org)

The 24<sup>th</sup> day of September 2009

## RESOLUTION

by the

**Roanoke Valley Area Metropolitan Planning Organization**

**Approving Amendment #1 to the FY 2010 Unified Planning Work Program**

WHEREAS, the FY 2010 Unified Planning Work Program (UPWP) serves as the basis for all federal Department of Transportation (DOT) funding participation and will be included in all requests for DOT planning funds; and

WHEREAS, this work program details all transportation and transportation planning activities anticipated within study area of the Roanoke Valley Area Metropolitan Planning Organization during FY 2010; and

WHEREAS, Amendment #1 to the FY 2010 UPWP involves additional 5303 funds that will be applied to public transportation planning activities.

NOW, THEREFORE BE IT RESOLVED, that the Roanoke Valley Area Metropolitan Planning Organization Policy Board does hereby approve Amendment #1 to the FY 2010 Unified Planning Work Program, as presented.

David B. Trinkle  
Chairman