

Approved: April 27, 2006

Roanoke Valley Area Metropolitan Planning Organization

UNIFIED PLANNING WORK PROGRAM Fiscal Year 2007

(July 1, 2006– June 30, 2007)

Roanoke Valley Area Metropolitan Planning Organization
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ROANOKE VALLEY AREA
MPO METROPOLITAN
P L A N N I N G
ORGANIZATION

Approved: April 27, 2006

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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Roanoke Valley Area Metropolitan Planning Organization (MPO)

2025 MPO Study Area Boundary

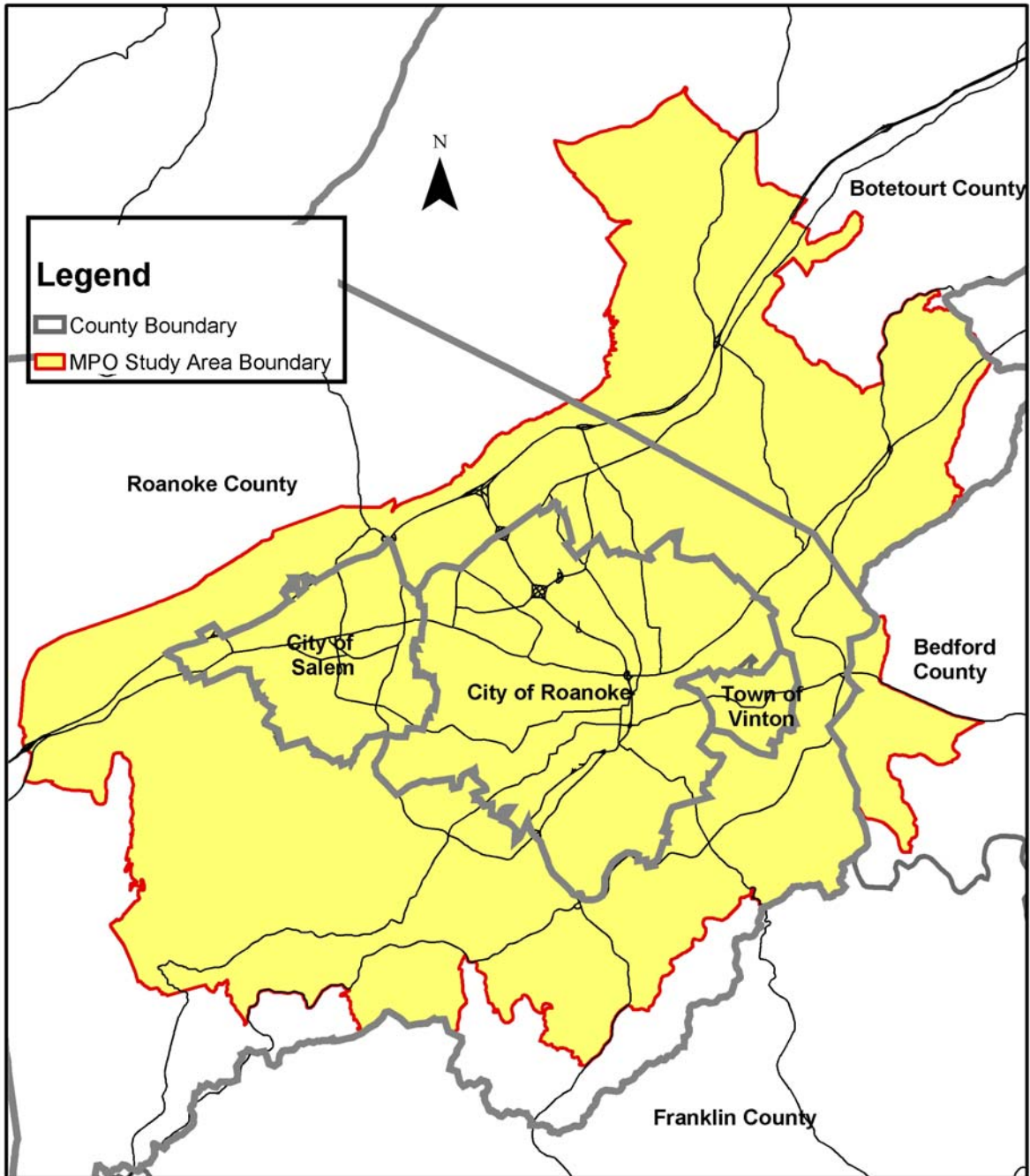


Figure 1.0



Roanoke Valley Area
Metropolitan Planning Organization

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The 27th day of April, 2006

RESOLUTION

by the

***Roanoke Valley Area Metropolitan Planning Organization
Approving the FY 2007 Unified Planning Work Program***

WHEREAS, the FY 2007 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; 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 thoroughly reviewed by the Transportation Technical Committee;

THEREFORE BE IT RESOLVED that the Roanoke Valley Area Metropolitan Planning Organization does hereby approve and adopt the FY 2007 Unified Planning Work Program, as presented.

Don Davis
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 2006. 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 21st Century (TEA-21), which became law in June 1998, reaffirms the structure of the metropolitan planning process. Most of the modifications to the process are aimed at streamlining and strengthening the provisions included in ISTEA. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) which became law August 10, 2005, reaffirms and extends the structure of the metropolitan planning process. Although final rules from the FTA and FHWA concerning implementation of SAFETEA-LU provisions was not yet available at the adoption of the FY2007 UPWP every effort has been made to develop the FY2007 UPWP with regards to preparing for compliance with all SAFETEA-LU provisions by July 1, 2007. 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 TEA-21; and to anticipate upcoming requirements of 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 217,635 and encompasses a land area of 228sq. 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 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. Over the past several years the ozone levels taken at an air quality monitor in the Roanoke area have exceeded the new 8-hour standard. Due to these exceedances, the RVAMPO and its member localities have recently worked with the Virginia Department of Environmental Quality (DEQ) to establish a nonattainment boundary for the Roanoke area. This agreed upon boundary will encompass 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 have 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 them.

In the fall of 2002 the EPA extended an opportunity to regions which are to be designated nonattainment under the 8-hour standard, but which are 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 faster 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 2007, the region will revert to the traditional process.

Local officials, the Virginia DEQ and the EPA had all signed an EAC for the Roanoke Metropolitan Statistical Area by December 23, 2002. The region is currently under the EAP planning process.

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 members¹ (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.

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.

¹ 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.

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.

Total Proposed Funding by Federal Source for FY 2006

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 2005. This funding will allow the RVAMPO to undertake additional activities that would not be included in a “typical” years work program.

Figure 3
FY 2007 RVAMPO PROPOSED FUNDING BY FEDERAL, STATE AND LOCAL SOURCES
 (July 1, 2006 to June 30, 2007)

	FHWA - Section 112 (PL) 80% Fed & 20 % State/Local	FTA - Section 5303 80% Fed & 20 % State/Local	GRAND TOTAL
New FY 2007	\$408,631	\$72,607	\$481,238
Deprogrammed FY 2006	0	0	
Unobligated FY 2005	\$39,050	0	\$39,050
Deobligate for FY 2008	-\$38,864	0	-\$38,864
TOTAL	\$408,817	\$72,607	\$481,424

PROPOSED FY 2007 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 2006 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: \$71,743 (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: \$2,372 (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 2006 and June 2007, 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 2007 UPWP. If during FY 2007, 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 2008. 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 2007, as a revised draft in March 2007 and as a final document for adoption in April 2007. The approved UPWP will be printed, distributed to the Policy Board, and made available to the public.

Products: UPWP for FY 2008 and amendments to the FY 2007 UPWP as needed.

Estimated Budget: \$12,597 (included for planning purposes only; not intended to be restrictive).

2. PROGRAM ACTIVITIES

2.01 Long Range Transportation Planning

Objective and Description: Long-range transportation activities for FY2007 will proceed along four avenues:

- 1) **4-Step Model Software Acquisition and Training** – staff will acquire 4-step model software and in conjunction with VDOT train several staff members up to the skill level required for executing basic model runs as required by planning issues that may face RVAMPO staff in FY2007. VDOT will continue to calibrate, validate and maintain the 4-step model.
- 2) **Basic 4-Step Model Runs:** Pursuant to #1 above, staff will perform basic model runs for local governments and other stakeholders on an as needed basis.
- 3) **Corridor Simulation Software Acquisition and Training** – staff will acquire corridor simulation software (syncro and/or corsim) and staff training for software use. The

software will be used to evaluate management and operations issues in the long-range planning process.

- 4) **Final TAZ Delineation:** Staff will finalize the TAZ update process that began in FY2006 and finalize all TAZs and supply appropriate socioeconomic data VDOT for 4-step model calibration and validation.
- 5) **Scenario Planning:** Staff will review scenarios produced in FY2006 and contact stakeholders concerning the possible development of a supplemental scenario(s) to complement existing scenarios. All published scenarios should be regarded as comprising a “portfolio” that provides a decision making framework for planners and policy officials.
- 6) **Official Public Meeting Concerning Long-Range Planning Assumptions:** This will be the second in a series of yearly public meetings concerning the long-range planning process and its assumptions. The first “yearly” meeting was held March 9, 2006 in fulfillment of the FY 2006 UPWP.

Long range transportation planning is the major staff activity in the FY2007 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 TEALUS 4.0 TIP management software
- Assistance with Freight Data Analysis
- Assistance with corridor (micro simulation) software
- Assistance with CommunityVIS software
- Assistance with planning visualization and photo rendering
- Turning movement and traffic counts

. A complete description of the on call consultant function is available in the Request for Proposals at www.rvarc.org. A total of \$40,000 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.

Products: 4-Step Model acquisition and basic model runs as time permits, Final TAZ Delineation, Scenario Planning Review and an Annual Public Meeting.

Estimated Budget: \$108,778 (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 three-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 and at major public libraries.

This task provides for the maintenance and amendment of the regional Transportation Improvement Program for FY 2006-8. 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.

The following specific activities and deliverables are included in FY 2007:

1. **Evaluation of TEALUS 4.0 software** - TEALUS 4.0 has recently been released, staff will comprehensively evaluate the software to determine whether the MPO staff should adopt the software for future TIP development. As a part of the evaluation, the current TIP will be used for testing purposes. Staff will decide whether or not to use TEALUS 4.0 in the development of the FY 2007-10 TIP (see below).
2. **Development of FY 2007-10 TIP** – According to SAFETEA-LU all TIPs produced after July 1, 2007 will have a 4-year scope. Staff will develop a FY 2007-10 to comply with SAFETEA-LU provisions.

Products: FY 2007-2010 TIP, amendments to current TIP as needed, annual listing of projects with federal obligations (federal funds) and evaluation of TEALUS 4.0 software.

Estimated Budget: \$46,726 (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) **Public Participation Plan Update:** Staff will review the current public participation plan and update the plan to comply with new SAFETEA-LU provisions as documented by FTA and FHWA guidance.
- 2) **Benefits and Burdens Framework:** Staff completed demographic profiles for the RVAMPO service area as a part of FY 2005 UPWP and a “Benefits and Burdens Framework” as a part of the FY 2006 UPWP. Staff will review and refine the framework in preparation for the next long-range plan update.
- 3) **Focus Groups:** Staff will continue to engage neighborhood organizations and civic leagues in focus group settings.
- 4) **Electronic Kiosk:** Deployment of Electronic Kiosk that was developed in FY2006. Periodic review of input received and summary in end of year report.

Products: Public participation plan update to reflect provisions of SAFETEA-LU, focus groups with neighborhood groups and civic leagues, report from first year of electronic kiosk deployment. (*Note: This item is intended to help bring the MPO process into compliance with SAFETEA-LU*)

Estimated Budget: \$28,545 (included for planning purposes only; not intended to be restrictive).

2.04 Ozone Early Action Plan - Implementation

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. Staff will focus on implementation of various transportation and transportation demand related strategies contained in the plan.

Products: Implementation of transportation and transportation demand related strategies outlined in the adopted Ozone Early Action Plan (EAP)

Estimated Budget: \$17,866 (included for planning purposes only; not intended to be restrictive).

2.05 Operations Management and Planning

Objective and Description: The Virginia Department of Transportation (VDOT) has recently constructed a “Smart Travel Center” at VDOT’s Salem Construction District. This represents an opportunity to coordinate operations management and intelligent transportation systems (ITS) concepts in the long-range planning process.

The main focus of this element is to work with staff in an effort to better plan for operations management and ITS in the next Long-Range Transportation Update.

Products: Staff report concerning integrating operations and management into the transportation planning process and 1) Coordination and Dialogue with VDOT's "Smart Travel Center" 2) Staff participation in Talking Operations series of web conferences.

Estimated Budget: \$9,181 (included for planning purposes only; not intended to be restrictive).

2.06 MPO Bylaws Review and Update

Objective and Description: The 3C process requires a properly functioning MPO Policy Board. The purpose of this element is to comprehensively review the current RVAMPO bylaws and compare them with case studies from MPOs around the country. The resulting recommended bylaws will touch on all elements of the policy board including meeting schedule, officers, tenure, committees, use of technology in voting etc.

Products: RVAMPO bylaws update. (*Note: This item is intended to help bring the MPO process into compliance with SAFETEA-LU*)

Estimated Budget: \$9,326 (included for planning purposes only; not intended to be restrictive)

2.07 Bicycle Plan Implementation

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 2005. This task is focused on facilitating implementation of plan recommendations using two strategies:

- 1) **Facilitation and Encouragement:** Staff will partner with local government planning and public works departments to facilitate bicycle accommodation implementation. For example, staff will work with localities that use maintenance and paving schedules to encourage implementation of bicycle accommodations during the paving cycle (i.e. repaving and restriping existing right-of-way). This subtask will entail additional analysis using the BCI model and possibly entail additional fieldwork.
- 2) **Annual Review and Amendment Process:** Staff will work with local government stakeholders to review and consider amendments to the bicycle plan on an annual basis. This will allow for the incorporation of new accommodations that result from comprehensive plan updates, private development or other changes in circumstance that were unforeseen at plan adoption.

Products: 1) Additional fieldwork and analysis to encourage implementation of plan recommendations. 2) Annual review and amendment (if warranted) of RVAMPO bicycle plan.

Estimated Budget: \$13,619 (included for planning purposes only; not intended to be restrictive).

2.08 Preparation for Valley Metro Ridership Survey

Objective and Description: The Greater Roanoke Transit Company (Valley Metro) is required to do a comprehensive rider ship survey every five years. The procedures of the survey are detailed

in and FTA circular including duration of survey (1 year). The purpose of this element is to prepare for the next Valley Metro Ridership Survey (FY 2008) by:

1. Researching up to date regulations and methods.
2. Developing survey instrument (electronic and/or paper)
3. Testing survey procedure during a one week dry run.
4. Evaluating results from “dry run” and recommending changes in process.
5. Developing an execution plan for survey that includes staffing issues, responsible parties and contingency plans.

Products: Numbers 1 through 5 listed above.

Estimated Budget: \$6,742 (included for planning purposes only; not intended to be restrictive)

2.09 Emergency Evacuation Plan (Transportation Security)

Objective and Description: In the event of terrorism, security event or significant natural disaster, it may become necessary to evacuate the area served by the RVAMPO. This would pose a coordination and logistical challenge that would place significant burdens on the surface transportation system. The purpose of this element is to coordinated with stakeholders such as: transportation officials, law enforcement, emergency responders, local officials, hospital officials and others to develop an evacuation plan that focuses on designating appropriate transportation routes and policies that facilitate safe and orderly evacuation. Issues such as emergency signage, transportation route management and communication with the public will be addressed as a part of the plan.

Products: Final Report

Estimated Budget: \$12,553 (included for planning purposes only; not intended to be restrictive)

2.10 Freight Strategies Implementation

Objective and Description: The primary goal of the RVAMPO Freight Strategies Implementation task is to continue to proceed towards implementation of several of the strategies recommended in the recently completed “Regional Freight Study” (FY 2003). Wilbur Smith Associates assisted RVARC staff in the completion of the FY 2003 Regional Freight Study, which identifies several innovative and strategic “next steps” to improve freight transportation in the region. The continuing activities of this task will focus on two specific elements: integrating freight into the long-range planning process and the continued support of the freight advisory committee. Staff will work with local government planners to advance the concept of freight villages and/or warehousing and logistics zoning in local comprehensive and other plans. Likewise, staff will continue to work with private sector representatives and chambers of commerce to support the recently established “Freight Advisory Committee.” The “Freight Advisory Committee” serves two primary roles: (1) Business to Business contacts (shippers,

receivers, logistics, support etc.) within the freight field; and (2) Private sector advisory group (stakeholder) to the MPO planning process.

In FY 2007 special emphasis will be placed in integrating freight into the long-range planning process. This will be accomplished by the purchase of supplemental freight data (zip code level) through a VDOT contract with a private sector data provider. Staff will review and summarize the supplemental data as a part of this project.

Products: 1) Purchase of supplemental freight data (zip code level); 2) Summary support of said data for RVAMPO. 3) Staff participation in Talking Freight series of webcasts.

Estimated Budget: \$5,540 (included for planning purposes only; not intended to be restrictive)

2.11 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. In addition, staff will conduct specific transportation safety related studies such as a “Top 10” dangerous intersection report and flood prone roadway report. Staff will investigate forming a regional road safety audit team for road safety audits on an as needed basis. Finally, staff will investigate application of the “Safe Routes to School” program to other elements of the FY 2007 UPWP

Products: 1) Top 10 Dangerous Intersections study, 2) Flood prone roadway report 3) Investigation of applicability of safe routes to school concepts in other planning projects and 4) Continued coordination and membership on the Blue Ridge Transportation Safety Board.

Estimated Budget: \$12,467 (included for planning purposes only; not intended to be restrictive)

2.12 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 FY2007 as opportunities and needs arise; however, circumstances may not permit all subtasks to be finalized by the end of FY2007.

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)** – as needed

- **Minor Support to Statewide Multimodal Freight Study** – as needed

Products:

- **Technical Support Activities** - travel time studies, turning movement counts and other technical support activities as requested.
- **Transportation Enhancement Assistance** – as requested by local governments
- **General Technical Assistance** – as requested by local governments

Estimated Budget: \$21,928 (included for planning purposes only; not intended to be restrictive)

2.13 Transportation and Land Use Connection (Regional Transportation Impact Studies)

Objective and Description: Recent policy developments are calling greater attention to the link between transportation and land use. Staff will address the transportation/land use question using a 3- step process. The purpose of this process is to 1) Uncover historic transportation/ land use patterns using parcel data and aerial photography; 2) Relate these transportation/land use patterns to local comprehensive plans and the RVAMPO long-range plan; and 3) Evaluate the future impact of these patterns by using ITE trip generation estimates at specific sites of regional significance and by supplementing ITE estimates with actual field observations by staff. A central question of element 2.13 will be the relationship of local comprehensive plans and the RVAMPO long-range transportation plan to either changing the historic transportation/land use pattern or perpetuating the pattern. At the end of this study member local governments and the MPO will be able to see how comprehensive plans and the RVAMPO long-range transportation plan can be used as a tool to change the transportation/land-use pattern in the future if the historic pattern proves unsustainable. Each specific step of the 3-step process is described below:

1. **Establish the Historic Transportation/ Land Use Pattern (growth changes mapping):** Using parcel data, staff will highlight development and growth in 10-year increments by examining the year built for structures in the Roanoke Valley. Aerial photography from 1970 to 2001 will be used to provide visual examples of high growth areas. Aerial photography will be used to identify new terrain road construction. The analysis will seek to identify the impact of road construction upon land use. Staff will also begin to compile land use ‘snapshots’ by saving and filing copies of parcel data at 5 year increments for comparison to data to be released later. Census data aggregated for Roanoke County, Salem, and Roanoke City will be compiled to show population growth for comparison to the parcel data.
2. **Relate the Transportation/ Land Use Pattern to Existing Plans:** Staff will compile current and future land use from local government comprehensive plans and zoning maps. Staff will reduce the categories to general residential, commercial, industrial, institutional and planned united development/mixed use categories for easier comparison on a regional scale. Staff will then overlay the current long-range plan “Constrained List of Projects” and VDOT’s current 6 year improvement program projects over the regional land use layer. Staff will prepare a brief report addressing questions such as “What

percentage of constrained list funds are allocated for projects in residential, commercial, mixed use etc land uses?"

3. ***Evaluation of Future Impacts of Patterns:*** Staff will select trip generation tables published by the Institute of Transportation Engineers (ITE) for various land uses and use them to establish predicted trip generation for several sites in the region. Staff will then partner with a University or Private Consultants to conduct observational studies at the previously selected regional sites. A comparison between the ITE predicted rates and regional observations will be noted. The result will be applied to the patterns discovered in steps 1 and 2 of this process. Questions to be analyzed at this stage include: "If historic patterns continue will the corridor be able to absorb future trip generation?" In a sense this will be the transportation/land-use version of a build out analysis.

Products: A final report that synthesizes steps 1-3 above.

Estimated Budget: \$30,345 (included for planning purposes only; not intended to be restrictive)

2.14 Regional Greenway Plan Update – Phase II

Objective and Description: Additional hours to complete Regional Greenway Master Plan Update begun in FY 2006.

Products: Regional Greenway Master Plan Update.

Estimated Budget: \$16,190 (included for planning purposes only; not intended to be restrictive).

2.15 Transit Route Maps

Objective and Description: As transit routes are changed and as new services are added, the generation of custom transit route maps becomes necessary to support marketing and public information initiatives in support of public transportation. This project will result in a series of updated transit maps, as requested by the Greater Roanoke Transit Company.

Products: Snow route maps, general fixed route maps, and special route maps will be produced.

Estimated Budget: \$6,772 (included for planning purposes only; not intended to be restrictive).

2.16 Greater Roanoke Transit Company Financial Capacity Analysis

Objective and Description: In meeting their federal requirements, GRTC must periodically update an analysis that looks at its financial capacity. This analysis serves to analyze the financial strengths and weaknesses of GRTC and to depict its future financial needs. Ten years of data will be used for this analysis in compliance with Federal Transit Administration (FTA) circular 7008.1 "Urban Mass Transportation Financial Capacity Policy."

Products: A report documenting the analyses and findings.

Estimated Budget: \$5,688 (included for planning purposes only; not intended to be restrictive).

2.17 I-81 NEPA Process MPO Report

Objective and Description: I-81 in Virginia is currently under a tiered NEPA process. A Tier 1 report was recently published; however a Tier 2 report is required for the I-81 corridor within the RVAMPO Study Area Boundary. Staff will compile a report of issues that the RVAMPO feels should be incorporated into the Tier 2 document. The RVAMPO will publish the report and submit it as official RVAMPO feedback for the NEPA process on I-81

Products: RVAMPO report to be submitted as a part of the NEPA process on I-81

Estimated Budget: \$ 7,368 (included for planning purposes only; not intended to be restrictive).

2.18 Neighborhood Transportation Corridors

Objective and Description: As regional thoroughfares such as 460 and 419 become more congested, motorists are increasingly traveling through neighborhoods en route to a destination. This element will identify neighborhood street systems, near regionally significant thoroughfares, that are currently, or have the potential to become a cut through for pass through traffic. Staff will then recommend traffic calming measures that can be applied to the selected routes.

Products: Final Report

Estimated Budget: \$5,412 (included for planning purposes only; not intended to be restrictive).

2.19 Trolley Impact Study

Objective and Description: An urban trolley (downtown to future biomedical center) feasibility study was completed by a consultant in 2004. This study would follow-up on that study with an in-depth review of new trolley starts since the previous study was completed. The final report will address such concepts as:

- Rider ship predictions- *before and after evaluation.*
- Economic Impact prediction - *before and after evaluation*
 - Which economic model was used?
- Effect on property values along trolley line.
- Funding Mechanisms used (federal, state, local, private, non-profit)
- Public Private Partnerships
- Innovative Finance (Naming Rights, Advertising, etc.)

The purpose of the final report is to provide an update to the Greater Roanoke Transit Company (“Valley Metro”) to assist in developing the Jefferson Street trolley concept.

Products: Final Report

Estimated Budget: \$ 9,666 (included for planning purposes only; not intended to be restrictive).

2.20 Central Roanoke Mobility Study (Interstate 581/Route 220)

Objective and Description: The primary objective of this study is to identify ways to improve access to and from the interstate and primary highways, and the local streets within the City of Roanoke. The study area is located along the Interstate 581/Route 220 corridors from just north of the Orange Avenue interchange to just south of the Wonju Street interchange. Other major streets that define the study area include:

- Jefferson Avenue and McClanahan Street in the southeast portion of the study area,
- Brandon Avenue, 23rd Street and Colonial Avenue in the southwest portion of the study area,
- Franklin Road, Gainsboro Road and Orange Avenue in the west and northwest portions of the study area, and
- Orange Avenue, Hollins Road, 13th Street and Bullitt Avenue in the northeast portion of the study area.

This project will include the development of an operational model, the use of the regional travel demand model and input from the City related to area development.

Products: A report or series of reports identifying transportation issues/deficiencies and detailing short-term and long-term improvements to the interstate, primary and local street systems within the study area. The study will be completed in late summer/early fall of this FY.

Estimated Budget: \$300,000 over a twenty- four month period; \$75,000 allocated for FY2007; the study will be completed in late summer/early fall of this FY. Note that this study is funded through 100% State Planning and Research Funds (SPR).

2.21 Smith Mountain Lake Connections Study

Objective and Description: This study will evaluate the connections between Smith Mountain Lake and Roanoke in two phases. The first phase will include analysis of the corridors connecting the lake and Roanoke based on existing and projected traffic. This analysis will identify safety and operational problem areas, and will provide potential short-term solutions – those that are low cost and can be implemented in the near-term (<5 years). Leading from the analysis completed in Phase 1, Phase 2 will address issues that are larger in nature, such as identifying corridors for major reconstruction or even new location routes. Included in this phase will be the identification of potential solutions for larger scale travel issues. The impacts of land use on transportation and any environmental issues related to potential solutions will also be addressed in this phase.

Products: A report or series of reports identifying transportation issues/deficiencies and providing short-term and long-term recommendations to the primary, secondary and local street systems within the study area.

Estimated Budget: \$250,000 over a two-year period; \$200,000 allocated for FY2007. Note that this study is funded through 100% State Planning and Research Funds (SPR).

Figure 4

FY 2007 RVAMPO PROPOSED REVENUES AND EXPENDITURES BY FEDERAL, STATE AND LOCAL SOURCES
(July 1, 2006 to June 30, 2007)

	FHWA	State	Local	Total FHWA	FTA	State	Local	Total FTA	Total Both
Proposed Revenue									
<i>New FY 2007</i>	326,905	40,863	40,863	408,631	58,085	7,261	7,261	72,607	481,238
<i>Unobligated FY 2005</i>	31,240	3,905	3,905	39,050	0	0	0	0	39,050
<i>Deobligate for 2008</i>	-31,092	-3,886	-3,886	-38,864					-38,864
Total Revenue	327,053	40,882	40,882	408,817	58,085	7,261	7,261	72,607	481,424

Proposed Expenditures

<u>Program Support & Admin</u>									
<i>1.01 Gen Admin & Operations</i>	52,512	6,564	6,564	65,640	4,882	610	611	6,103	71,743
<i>1.02 Training & Staff Development</i>	1,898	237	237	2,372					2,372
<i>Modeling Software</i>	16,000	2,000	2,000	20,000					20,000
<i>1.03 Work Program Mgt</i>	8,858	1,107	1,107	11,072	1,221	152	152	1,525	12,597
Total Operations	79,268	9,908	9,908	99,084	6,103	762	763	7,628	106,712

Proposed Expenditures Continued on Next Page:

	FHWA	State	Local	Total FHWA	FTA	State	Local	Total FTA	Total Both
<u>Program Activities</u>									
2.01 Long Range Plan	77,447	9,681	9,681	96,809	9,575	1,197	1,197	11,969	108,778
2.02 TIP	32,001	4,000	4,000	40,001	5,379	673	673	6,725	46,726
2.03 Public Participation	17,910	2,239	2,239	22,388	4,926	615	616	6,157	28,545
2.04 Ozone Early Action Plan	11,705	1,463	1,463	14,631	2,587	324	324	3,235	17,866
2.05 Operations Management	5,642	705	705	7,052	1,703	213	213	2,129	9,181
2.06 MPO Bylaws	7,460	933	933	9,326	0	0	0	0	9,326
2.07 Bicycle Plan Implementation	10,895	1,362	1,362	13,619	0	0	0	0	13,619
2.08 Preparation Ridership Survey	0	0	0	0	5,394	674	674	6,742	6,742
2.09 Emergency Evacuation	9,190	1,149	1,149	11,488	852	107	106	1,065	12,553
2.10 Freight Strategies Implementation	4,432	554	554	5,540	0	0	0	0	5,540
2.11 Safety Planning	9,518	1,190	1,190	11,898	455	57	57	569	12,467
2.12 Technical Support Activities	14,132	1,767	1,767	17,666	3,410	426	426	4,262	21,928
2.13 Transportation Land Use Connection	24,277	3,034	3,034	30,345	0	0	0	0	30,345
2.14 Greenway Update	12,952	1,619	1,619	16,190	0	0	0	0	16,190
2.15 Transit Route maps	0	0	0	0	5,418	677	677	6,772	6,772
2.16 Financial Capacity Analysis	0	0	0	0	4,550	569	569	5,688	5,688
2.17 I-81 NEPA Process	5,894	737	737	7,368	0	0	0	0	7,368
2.18 Neighborhood Transportation Corridors	4,330	541	541	5,412	0	0	0	0	5,412
2.19 Trolley Impact Study					7,733	967	966	9,666	9,666
				Total FHWA	FTA	State	Local	FTA	Total Both
Total Program Expenses	247,785	30,974	30,974	309,733	51,982	6,499	6,498	64,979	374,712
Total Expenses	327,053	40,882	40,882	408,817	58,085	7,261	7,261	72,607	481,424

Roanoke Valley Area Metropolitan Planning Organization

VDOT Salem District Support (SPR funding) for
RVAMPO FY 2007 UPWP Activities

Work Program Activity	Total SPR (District)
Task 1 -Program Support & Administration	\$5,000
Task 2 -Program Activities	- -
2.01 - Long Range Planning	5,000
2.02 - Transportation Improvement Program	5,000
2.03 - Public Participation	2,000
2.04 - Ozone Early Action Plan	500
2.05 - Operations Management and Planning	500
2.06 - MPO Bylaws Review and Update	500
2.07 - Bicycle Plan Implementation	1,500
2.09 - Emergency Evacuation Plan	3,000
2.10 -Freight Strategies Implementation	500
2.11 - Safety Planning	1,500
2.12 - General Technical Assistance & Support	1,500
2.13 - Transportation and Landuse Connection	1,000
2.14 - Regional Greenway Plan Update (Phase II)	2,000
2.17 - I-81 NEPA Process MPO Report	1,000
2.18 - Neighborhood Transportation Corridors	2,000
2.19 - Roanoke/Smith Mountain Lake Connection Study	6,000
2.20 - Central Roanoke Mobility Study	14,300
TOTAL	\$52,800

Approved: April 27, 2006

VDOT's Transportation and Mobility Planning Division (TMPD), located in the Central Office, will provide statewide oversight, guidance and support for the federally mandated Metropolitan Transportation Planning & Programming Process. At the direction of VDOT District staff involved in the MPO processes, TMPD will provide technical assistance in the development of transportation planning documents for the MPO areas. Additionally, TMPD will participate in special studies as requested by the VDOT District MPO representatives.

FY-07 Funding Statewide - \$500,000