# **Roanoke Valley Area Metropolitan Planning Organization**

## UNIFIED PLANNING WORK PROGRAM

Fiscal Year 2006

(July 1, 2005– June 30, 2006)

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



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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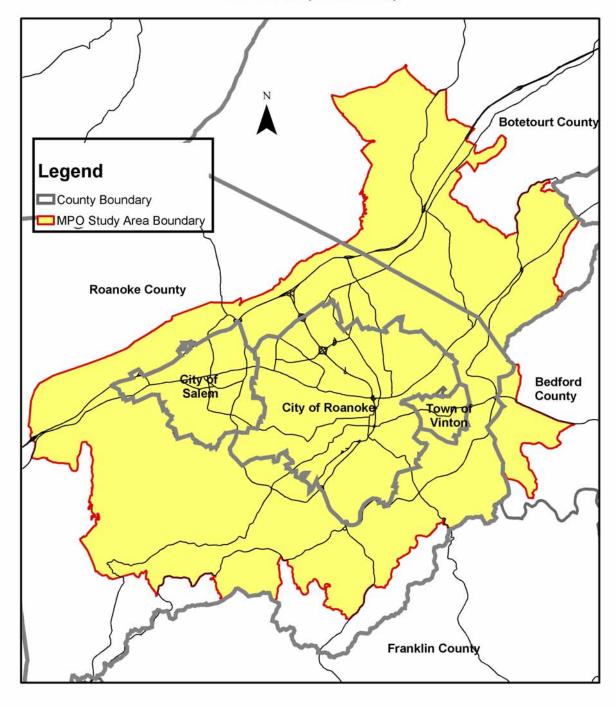
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## Roanoke Valley Area Metropolitan Planning Organization (MPO)

2025 MPO Study Area Boundary





## Roanoke Valley Area Metropolitan Planning Organization

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The 28th day of April, 2005

#### RESOLUTION

by the

Roanoke Valley Area Metropolitan Planning Organization Approving the FY 2006 Unified Planning Work Program

WHEREAS, the <u>FY 2006 Unified Planning Work Program</u> 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;

**BE IT THEREFORE RESOLVED**, that the Roanoke Valley Area Metropolitan Planning Organization does hereby approve and adopt the <u>FY 2006 Unified Planning Work Program</u>.

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 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 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.

#### 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 it 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 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.

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.

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<sup>&</sup>lt;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.

#### **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.

Funding levels for this UPWP are much higher than in FY 2005. The FY 2005 combined allocation, not including carryover funding, was \$316,519; while the FY 2006 combined allocation, not including carryover funding, is \$382,911. This is an increase of 21%. The reason unobligated (carryover) funding is not considered in this comparison, is that it is not a consistent source of funding from year to year.

Note, however, that the funding proposed for use in this UPWP does include a substantial amount of unobligated funds from FY 2004. This funding will allow the RVAMPO to undertake additional activities that would not be included in a "typical" years work program.

Figure 3
FY 2006 RVAMPO PROPOSED FUNDING BY FEDERAL, STATE AND LOCAL SOURCES
(July 1, 2005 to June 30, 2006)

	FHWA - Section 112 (PL) 80% Fed & 20 % State/Local	FTA - Section 5303 80% Fed & 20 % State/Local	GRAND TOTAL
New FY 2006	\$325,553	\$57,358	\$382,911
Deprogrammed FY 2005	\$0	\$0	\$0
Unobligated FY 2004	\$79,314	\$0	\$79,314
TOTAL	\$404,867	\$57,358	\$462,225

#### PROPOSED FY 2006 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 a up-to-date 3-C Agreement that clearly identifies that roles and responsibilities of each party involved in the metropolitan planning process.

**Estimated Budget:** \$48,802 (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:** \$1,800 (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 2005 and June 2006, 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 2006 UPWP. If during FY 2006, 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 2007. 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 2006, as a revised draft in March 2006 and as a final document for adoption in April 2006. The approved UPWP will be printed, distributed to the Policy Board, and made available to the public.

**Products:** UPWP for FY 2007 and amendments to the FY 2006 UPWP as needed.

**Estimated Budget:** \$8,500 (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 FY2006 will proceed along four avenues:

- 1) Socioeconomic Data Update and Report: Preliminary socioeconomic (population, housing and employment data) data updates were begun as a part of the FY2005 UPWP. Socioeconomic data compilation for the base year and projections to the forecast year (2035) will be completed in FY2006. The results will be compiled in a deliverable report.
- 2) **Study Area Boundary:** Staff will partner with local government, state, and federal staff and officials to update the MPO study area boundary to a horizon year of 2035. Once the study area boundary has been determined and finalized, any necessary adjustments to

Transportation Analysis Zones (TAZs) will be done and socioeconomic data (see item 1) will be compiled for each TAZ.

- 3) **Scenario Planning:** The long-range transportation planning process seeks to incorporate many interconnected forces, which often have subtle but powerful effects on the entire system. The final result of the planning process the financially constrained list of projects and the vision list of projects incorporate assumptions which are well documented but represent a consensus scenario which emerges in the process. Scenario planning seeks to develop several reasonable alternate scenarios, which can be used to generate alternate sets of future socioeconomic data forecasts (see item 1) and/or can explore alternate future funding scenarios. This gives the planning process greater flexibility to adapt to hard to predict future conditions.
- 4) Official Public Meeting Concerning Long-Range Planning Assumptions: A variety public participation and environmental justice activities are listed in a separate section of the FY2006 UPWP. This public meeting is listed within the Long Range Transportation Planning section, because it will be the official "public meeting" concerning socioeconomic data forecasts and long-range planning assumptions.

Long range transportation planning is the major staff activity in the FY2006 UPWP.

**Products:** Socioeconomic data report, updated study area boundary and TAZs, at least 2 alternate scenarios and accompanying socioeconomic data and/or financial forecasts, and Long-Range Planning Assumptions public meeting.

**Estimated Budget:** \$59,699 (included for planning purposes only; not intended to be restrictive).

#### 2.02 <u>Transportation Improvement Program</u>

**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 2005-07, as well as advanced preparation for FY 2007-09. 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.

**Products:** FY 2007-2009 TIP, amendments to the FY 2005-2007 TIP, listing of TIP projects with obligated federal funding in preceding year.

**Estimated Budget:** \$30,882 (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) *Electronic Kiosk:* Staff is partnering with the College of Information Technology at Radford University to develop an electronic kiosk for direct public interaction. The programming and user interface of the kiosk is being developed by successive student teams over several academic semesters. A budget for kiosk related hardware is included in this subtask.<sup>2</sup>
- 2) **Benefits and Burdens Framework:** Staff completed demographic profiles for the RVAMPO service area as a part of FY 2005 UPWP. This subtask will extend that work into the development of a planning level benefit and burdens framework to evaluate proposed transportation projects resulting from the long-range transportation planning process. Staff will develop the framework in consultation with multiple stakeholder groups and input from various levels of private, non-profit and public organizations. The purpose of the framework is to screen projects resulting from the 4-step travel demand model for possible Environmental Justice concerns. The framework will not be designed for evaluation of existing plans or projects.<sup>3</sup>
- 3) *Focus Groups:* Staff will continue to engage neighborhood organizations and civic leagues in focus group settings.

<sup>2</sup> Due to academic schedules and coordination between multiple student teams, there is a possibility that the electronic kiosk will not be fully tested by the end of FY 2006.

<sup>&</sup>lt;sup>3</sup> The benefits/burdens framework will be designed for use in the planning process. As such, it is not intended to substitute for any project level environmental requirements such as the NEPA process or to evaluate current projects that have already completed the NEPA process.

4) *Public Participation Plan Review:* Staff will review the current public participation plan and policy and recommend modifications should any be warranted.

**Products:** Electronic kiosk for public involvement, benefits and burdens framework, at least 4 focus groups with neighborhood groups civic leagues.

**Estimated Budget:** \$31,224 (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:** \$21,564 (included for planning purposes only; not intended to be restrictive).

#### 2.05 Intelligent Transportation Systems Planning

**Objective and Description:** Intelligent Transportation Systems (ITS) is the coordination of new technology, improvements in information systems, communications and sensors with the conventional surface transportation infrastructure in a management approach. Examples of ITS range from vehicle sensors in pavement for traffic signals to information technology on transit systems.

The main focus of this task is to integrate ITS goals and objectives as well as other information from the ITS Regional Architecture in the next Long-Range Transportation Update.

**Products:** Research into ITS. Information for inclusion in the Long Range-Transportation Plan Update.

**Estimated Budget:** \$6,727 (included for planning purposes only; not intended to be restrictive).

#### 2.06 Mobility Maps

**Objective and Description:** Citizens are not always aware of the variety of transportation and mobility options that are available to them for their work and non-work travel. Greater awareness should translate to more balanced choices across various transportation and mobility options. Staff will produce "Mobility Maps" designed to be an end product for direct distribution to citizens.<sup>4</sup> The "Mobility Maps" will feature greenway and trail links, public transportation routes, bicycle routes and pedestrian routes.

**Products:** Mobility Maps for direct distribution to citizens.

Estimated Budget: \$20,872 (included for planning purposes only; not intended to be

restrictive)

#### 2.07 Bicycle Plan Implementation

**Objective and Description:** A well thought out plan doesn't do the community any good 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:** \$12,590 (included for planning purposes only; not intended to be restrictive).

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<sup>&</sup>lt;sup>4</sup> The cost of supplies, layout design and printing has been included in the budget for this idem.

#### 2.08 Regional Thoroughfare Plan

Objective and Description: The long-range transportation planning process uses several parameters including a financially constrained list of projects and a 20 to 25 year time horizon. The Regional Thoroughfare Plan will incorporate needs beyond the current long range planning horizon and will not be constrained by future financial projections. As such, this task will result in a Regional Thoroughfare Plan that incorporates transportation improvements that are not in the constrained long-range plan. This will assist local governments in their planning needs and also provide a starting point to the next long-range transportation plan update. The Transportation Technical Committee (TTC) will be the coordinating subcommittee for this task. The work for this task will proceed along the following subtasks:

- 1) Assemble Master Project List: The components of this list will be assembled from past thoroughfare plans, the 2025 Long-Range Transportation Plan 4-step model output and stakeholder input.
- 2) Consensus Project List: Staff will use a 6-step process to transform the master project list into a working project list acceptable to the TTC and other stakeholders for inclusion in the first draft.
- 3) First Draft and Stakeholder Review
- 4) Final Report

**Products:** 1) Master Project List Map; 2) Working Project List Map; and 3) Final Report

**Estimated Budget:** \$41,292 (included for planning purposes only; not intended to be restrictive)

#### 2.09 Regional Signage Study

**Objective and Description:** Travelers to the region rely on signs to safely find their way to and from activity centers. Lack of adequate way-finding signage may present safety concerns as travelers, unfamiliar with the region, attempt to locate an activity center or transportation corridor. This task will focus on the relationship of regional activity centers and major transportation corridors. The work for this task will proceed along the following subtasks:

#### Subtasks:

- 1. Develop a list of destinations and activity centers for the region.
- 2. Inventory existing *cultural interest signs* (brown) *and tourist oriented directional signs* (blue) on I-81, I-581, US 220, US 11, US 460 and Blue Ridge Parkway. These signs and standards are defined in the Federal Highway Manual on Uniform Traffic Control Devices (MUTCD). *Staff would not consider commercial local service signs (food, gas and lodging)*.
- 3. Through field work, from the viewpoint of a tourist, see if all destinations can be found based on existing signage.
- 4. Contact activity centers/destinations for any sign related comments or issues they have experienced.
- 5. Identify gaps in the regional directional signage.

- 6. Make recommendations about new signage that could be placed on the major regional corridors that meet MUTCD standard.
- 7. Make recommendations about local (municipal) level signage on more local roads if inadequate. Staff would not develop any new standard for local governments to follow.

**Products:** Final Report

**Estimated Budget:** \$20,753 (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 2006 special emphasis will be placed in integrating freight into the long-range planning process (see item 2.01) and the thoroughfare planning process (see item 2.08). The freight elements of those two processes will be incorporated in this task.

Finally, staff will assist VDOT, as necessary, in addressing freight strategies identified in VTRANS 2025 by:

- 1) Soliciting and documenting feedback from representative jurisdictions on the critical freight issues on local and regional transportation systems; and,
- 2) Reviewing and verifying employers within the MPO region that employ more than 100 persons and generate freight traffic.

**Products:** 1) Freight elements of long-range planning and thoroughfare planning processesitems 2.01 and 2.08 respectively; 2) Continued support of the Freight Advisory Committee. 3) Assistance with VTRANS 2025 freight strategies as described above.

**Estimated Budget:** \$12,732 (included for planning purposes only; not intended to be restrictive)

#### 2.11 Regional Safety Team – Safety Analysis

Objective and Description: Staff will conduct a preliminary "Safety Analysis" using available resources concerning accident and safety related occurrences. The "Safety Analysis" will be general in detail and serve as an "indicator" of possible safety related trends. Staff will then form a committee composed of various community representatives to act as a community leader and clearinghouse for transportation safety information and best practices. The committee shall include representatives from law enforcement agencies, municipal traffic engineers/planners, Radar and other interested parties. The safety team will encompass various modes of transportation including, bicycle, pedestrian, public transportation and vehicular traffic. The safety team will use the preliminary analysis as a starting point for discussion concerning the integration of safety concerns in the planning process. (See counterpart in FY 2006 Rural Transportation Planning Assistance Program Scope of Work for the Roanoke Valley-Alleghany Regional Commission.)

**Products:** 1) Preliminary Rural Safety Analysis – Planning Level Detail. 2) Formation of transportation safety team, which will assist staff in developing priorities for safety, related planning efforts

**Estimated Budget:** \$18,479 (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 FY2006 as opportunities and needs arise; however, circumstances may not permit all subtasks to be finalized by the end of FY2006.

#### 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.

#### **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:** \$27,201 (included for planning purposes only; not intended to be restrictive)

#### 2.13 Pedestrian Walkway Inventory

Objective and Description: Pedestrian connections to and from employment and retail centers are often overlooked in traditional transportation planning. In urbanized areas there is increasingly a geographical mix of housing, employment and retail land uses that facilitate pedestrian trips. However, the supply of pedestrian walkways and sidewalks does not always reflect the increased desirability of pedestrian trips. This task will inventory pedestrian walkways at major regional retail and employment concentrations. Special emphasis will be placed on identifying locations for new pedestrian accommodations that connect retail, employment and/or housing land uses.

**Products:** Pedestrian Walkway Inventory – Final Report

**Estimated Budget:** \$17,101 (included for planning purposes only; not intended to be restrictive)

#### 2.14 Regional Greenway Plan Update

Objective and Description: Regional Greenway networks can fill important gaps in existing pedestrian facilities in an urbanized region. When connected in an interlinking fashion, greenways can connect neighborhoods with major regional activity centers including schools, retail establishments, places of employment, and etc.

This project will update and expand upon the *Roanoke Valley Conceptual Greenway Plan* completed in 1995 by the Fifth Planning District Commission, Roanoke City, Roanoke County, Salem, and the Town of Vinton. Since the completion of the last plan, there have been many changes regarding greenway facilities, local, regional, and neighborhood plan updates. A document is needed to address these developments and to develop a scheduling and implementation process for the greenway network comparable to VDOT's Six Year Plan and the Transportation Improvement Program.

Staff will utilize PL funding to perform fieldwork, form a steering committee, produce maps, coordinate with existing plans, hire and coordinate with a consultant, among other tasks. Additional activities such as utilizing a consultant to assist with plan development will be performed using funds from the State Transportation Planning Grant Pilot if the RVAMPO grant application is successful.

**Products:** The resulting product would be an updated greenways master plan document.

Estimated Budget: \$48,158 (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:** \$5,240 (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:** \$8,248 (included for planning purposes only; not intended to be restrictive).

#### 2. 17 Model Brownfield Redevelopment Project

**Objective and Description**: Building on FHWA's continuing research of where and how transportation has functioned as a mechanism for brownfield redevelopment, the RVAMPO project will create a model brownfield redevelopment plan that can be used to demonstrate the relationship between transportation and brownfield redevelopment.

The RVAMPO redevelopment plan will utilize an existing "brownfield" site within the MPO area and take it through a master plan process. The process will focus on related transportation issues of the site redevelopment for multiple future use scenarios chosen by the MPO. The scenarios could include commercial use, industrial use or a mixed use.

**Products:** The resulting product would be a master plan document that would detail land use characteristics, traffic volumes generated by the redevelopment, and funding strategy. The master plan will be developed as a design level not an engineered site plan.

Estimated Budget: \$20,361 (included for planning purposes only; not intended to be restrictive).

#### 2.18 Interstate 581/Route 220 Corridor Study

**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, 23<sup>rd</sup> 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, 13<sup>th</sup> 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.

**Estimated Budget:** \$300,000 over a two-year period; \$150,000 allocated for FY2005. Note that this study is funded through 100% State Planning and Research Funds (SPR), included for planning purposes only; not intended to be restrictive.

#### 2.19 Roanoke/Smith Mountain Lake Connection 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; \$125,000 allocated for FY2006. Note that this study is funded through 100% State Planning and Research Funds (SPR). (included for planning purposes only; not intended to be restrictive)

Figure 4

FY 2006 RVAMPO PROPOSED REVENUES AND EXPENDITURES BY FEDERAL, STATE AND LOCAL SOURCES (July 1, 2005 to June 30, 2006)

PROPOSED REVENUES	FHWA Section 112	State Match	Local Match	FTA Section 5303	State Match	Local Match	TOTAL
New FY 2006	260,442	32,556	32,555	45,886	5,736	5,736	382,911
Deprogrammed FY 2005							
Unobligated FY 2004	63,451	7,932	7,931	0	0	0	79,314
Total	323,893	40.488	40,486	45,886	5,736	5,736	462,225
PROPOSED EXPENDITURES	FHWA Section 112	State Match	Local Match	FTA Section 5303	State Match	Local Match	TOTAL
1. Program Support & Administration 1.01 General Administration & Operations 1.02 Training and Staff Development 1.03 Work Program Management	\$40,032 \$32,992 \$1,440 \$5,600	\$5,004 \$4,124 \$180 \$200	\$5,004 \$4,124 \$180 \$200	\$7,250 \$6,050 \$1,200	\$906 \$756 - \$150	\$906 \$756 - \$150	\$59,102 \$48,802 \$1800 \$8500

2. Program Activities	\$283,861	\$35,484	\$35,482	\$38,636	\$4,830	\$4,830	\$403,123
2.01 Long Range Planning	\$39,907	\$4,991	\$4,989	\$7,850	\$981	\$981	\$59,699
2.02 Transportation Improvement Program	\$20,002	\$2,500	\$2,500	\$4,704	\$588	\$588	\$30,882
2.03 Public Participation – Environmental							
Justice	\$20,764	\$2,596	\$2,596	\$4,214	\$527	\$527	\$31,224
2.04 Ozone Early Action Plan -							
Implementation	\$14,058	\$1,757	\$1,757	\$3,194	\$399	\$399	\$21,564
2.05 Intelligent Transportation Systems							
Planning	\$3,589	\$448	\$448	\$1,794	\$224	\$224	\$6,727
2.06 Mobility Maps	\$16,698	\$2,087	\$2,087	-	-	-	\$20,872
2.07 Bicycle Plan Implementation	\$10,072	\$1,259	\$1,259	-	-	-	\$12,590
2.08 Regional Thoroughfare Plan	\$33,034	\$4,129	\$4,129	-	-	-	\$41,292
2.09 Regional Signage Study	\$16,603	\$2,075	\$2,075	-	-	-	\$20,753
2.10 Freight Strategies Implementation	\$10,186	\$1,273	\$1,273	-	-	-	\$12,732
2.11 Regional Safety Team – Safety					-	-	
Analysis	\$12,614	\$1,577	\$1,577	\$2,169	\$271	\$271	\$18,479
2.12 General Technical Assistance and							
Technical Support Activities	\$17,838	\$2,230	\$2,230	\$3,923	\$490	\$490	\$27,201
2.13 Pedestrian Walkway Inventory	\$13,681	\$1,710	\$1,710	-	-	-	\$17,101
2.14 Regional Greenway Plan Update	\$38,526	\$4,816	\$4,816	-	-	-	\$48,158
2.15 Transit Route Maps	-	-	-	\$4,190	\$525	\$525	5,240
2.16 GRTC Financial Capacity Analysis	-	-	-	\$6,598	\$825	\$825	\$8,248
2.17 Model Brownfield Redevelopment	\$16,289	\$2,036	2,036	-	-	-	\$20,361
2.18 Interstate 581/Route 220	-						
2.19 Roanoke/Smith Mountain Lake							
Connection Study							
5 0 0 1 - 0 - 1 - 1 - 1 - 1 - 1 - 1							
Total Proposed Expenditures:	323,893	40,488	40,486	45,886	5,736	5,736	462,225
Town Troposod Emperation os.							

## Roanoke Valley Area Metropolitan Planning Organization

VDOT Support (SPR funding) for RVAMPO FY 2006 UPWP Activities

Work Program Activity	Total SPR (District & Central Office)
Task 1 - Program Support & Administration	\$11,000
Task 2 - Program Activities	
2.01 - Long Range Planning	8,000
2.02 - Transportation Improvement Program	10,000
2.03 - Public Participation	6,000
2.04 - Ozone Early Action Plan	500
2.05 - ITS Planning	500
2.06 - Mobility Maps	500
2.07 - Bicycle Plan Implementation	1,500
2.08 - Regional Thoroughfare Plan	13,000
2.09 - Regional Signage Study	5,000
2.10 - Freight Strategies Implementation	5,000
2.11 - Regional Safety Team - Safety Analysis	8,000
2.12 - General Technical Assistance & Support	4,000
2.13 - Pedestrian Walway Inventory	500
2.15 - Central Roanoke Mobility Study	20,000
2.16 - Model Brownfields Redovelopment Project	500
2.17 - Regional Greenway Plan Update	4,000
2.18 - Roanoke/Smith Mountain Lake Connection Study	20,000
TOTAL	\$118,000