

FY 2007

Rural Transportation Planning Assistance Program

SCOPE OF WORK

for the

Roanoke Valley-Alleghany Regional Commission

(July 1, 2006 – June 30, 2007)

Approved by the Roanoke Valley-Alleghany Regional Commission – February 23, 2006

Prepared by the Roanoke Valley-Alleghany Regional Commission staff through a cooperative process involving the city of Covington, the town of Clifton Forge, the counties of Botetourt, Craig, Franklin and Roanoke, the Virginia Department of Transportation, and the Federal Highway Administration.

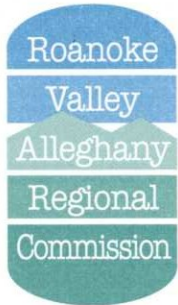
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The 23rd day of February, 2006

RESOLUTION

Approval of the FY 2007 Rural Transportation Planning Assistance Program Scope of Work

WHEREAS, the *FY 2007 Rural Transportation Planning Assistance Program Scope of Work* will serve as the basis for all federal Department of Transportation (DOT) and/or Virginia Department of Transportation (VDOT) funding participation and will be included in all requests for DOT/VDOT planning funds; and

WHEREAS, this Planning Assistance Program Scope of Work details all transportation and transportation-related planning activities anticipated within the rural area of the district during the coming fiscal year.

NOW, BE IT THEREFORE RESOLVED, that the Roanoke Valley-Alleghany Regional Commission does hereby approve and adopt the *FY 2007 Rural Transportation Planning Assistance Program Scope of Work*.

Brian K. Brown
Chairman

INTRODUCTION

The Virginia Department of Transportation (VDOT) has allocated part of the State Planning and Research (SPR) money made available under the Transportation Equity Act for the 21st Century (TEA-21) and continued under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) to provide transportation planning *assistance* for non-urbanized portions of the State, including those within the Roanoke Valley-Alleghany region. Also, as part of this SPR funding allocation, VDOT has established a pool of funds available for *additional* transportation planning projects through a competitive *grant* application process. These programs aid the State in fulfilling the requirements of the State Planning Process to address the transportation needs of non-metropolitan areas. Funds appropriated under 23 U.S.C. 307(c) (SPR funds) are to be used in cooperation with the Department of Transportation and Commonwealth of Virginia, for transportation planning as required by Section 135, Title 23, U.S. Code. These federal funds provide 80% financing and require 20% local match.

At a minimum, the scope of work shall address the following activities:

- Review of statewide transportation plans and compilation of local government comments relative to plan updates.
- Review of the annual Statewide Transportation Improvement Program.
- Development of regional consensus on priorities of highway and transit programs for consideration by the Commonwealth Transportation Board.
- Identification of major regional issues pertaining to transportation safety, road capacity, and accessibility.
- Identification of methods to expand and enhance transit services and to increase the use of such services.

In addition, the scope of work shall include other specific activities as requested by VDOT and/or the Federal Highway Administration. The scope of work may also include activities or studies addressing other transportation planning related issues that may be of specific interest to the region. However, the cost to carry out the entire program must be kept within the financial assistance being provided unless additional local funds are made available to finance the additional work. The criteria for the determination of eligibility of studies for inclusion as part

of this document are based upon 23 U.S.C. 307(c), State Planning and Research.

Agencies and/or governments participating in the selection of projects for the Rural Transportation Planning Assistance Program – Scope of Work include the Federal Highway Administration, the Virginia Department of Transportation, the Town of Clifton Forge, the City of Covington, and the counties of Alleghany, Botetourt, Craig, Franklin and Roanoke.

I. PROGRAM ADMINISTRATION

A. Rural Transportation Program Management

Description: This activity includes all ongoing department-wide management and administrative activities, not attributable to specific program activities. There are two objectives for this work task: (1) the administration of transportation planning work program activities; and (2) the completion of necessary contracts, invoices, progress reports, correspondence, and grant applications in support of the work program.

Deliverable End Product: The primary result of this task will be a well functioning transportation program.

- Preparation of Commission agendas, notices, minutes and memorandums.
- Preparation of quarterly financial progress reports.
- Purchase of professional reports, materials, equipment, and services as needed to assist staff in work activities.

B. Rural Transportation Planning Assistance Program – Scope of Work

Description: This task provides for the annual preparation of the Rural Transportation Planning Assistance Program – Scope of Work for the upcoming fiscal year (i.e. July 1, 2007 to June 30, 2008). Any amendments or revisions to the existing scope of work are also a part of this element.

Deliverable End Product: The *FY 2007 Rural Transportation Planning Assistance Program – Scope of Work*, which documents the activities to be accomplished by the Roanoke Valley-Alleghany Regional Commission staff in the upcoming fiscal year. It will

also include any amendments or revisions to the existing scope of work.

II. PROGRAM ACTIVITIES

A. Regional Long-Range Transportation Planning – Phase I

Description: The purpose of this program is to create a regional long-range plan in the rural portion of the Roanoke Valley-Alleghany Regional Commission (RVARC) to complement the long-range transportation plan developed by the Roanoke Valley Area Metropolitan Planning Organization (RVAMPO) for the metropolitan area. This program is broken up into four phases across a multi-year effort that will result in a “safety conscious, GIS based long-range multimodal plan (highways, bicycle/pedestrian, freight, aviation and transit) for the RVARC. The four phases are: Phase I – Goals and Data Collection (FY 2007); Phase 2 – Analysis and Problem Identification (FY 2008); Phase 3 Public Outreach and Recommendation Development (FY 2009); and Phase 4- Public Endorsement and Regional Adoption (FY 2010). The specific tasks and deliverables for Phase I are:

Rural Transportation Planning Program	
FY07 Regional Long Range Transportation Plan	
Tasks and Deliverables	
Phase I: Goals and Data Collection	
<i>Tasks</i>	<i>Responsibility</i>
1. Establish Rural Technical Committee (RTC)	Planning District Commission
A. Committee to include representatives of member jurisdictions, VDOT, DRPT, VDOA and FHWA	
B. PDC will act as staff to committee	
C. The RTC should help guide the development of the Regional Long Range Transportation Plan and help identify regional and local work elements for the rural planning assistance annual scope of work.	
2. Host kick-off meeting to introduce new program (First quarter)	VDOT and PDC staff
3. Hold meetings with local elected and government officials to discuss and document transportation safety and capacity concerns (First and second quarter)	VDOT and PDC staff
4. Develop transportation goals for region (Second and third quarter)	RTC
A. It is suggested that federal planning factors be used as a basis for establishing regional goals (VDOT will provide goals used for the State Highway Plan – Each region can customize these as needed)	
5. Identify objectives and measures for each goal	RTC
A. VDOT will provide objectives and measures used for the State Highway Plan – Each region can customize these as needed	
6. Establish/Update Public Involvement Process (Second and third quarter)	PDC staff and RTC
7. Inventory/Data Collection (All quarters)	
A. Transportation	

1. Compile highway network inventory for major collectors and above	VDOT staff
2. Develop inventory and map of significant projects in SYIP	VDOT staff (inventory) PDC staff (map)
3. Develop inventory and map of existing transit services	PDC staff/RTC
4. Develop inventory and map of existing bike/ped accommodations	PDC staff/RTC
5. Develop inventory and map of major freight generators in the region	PDC staff/RTC
6. Develop inventory and map of existing aviation facilities	PDC staff/RTC
B. Land Use	
1. Identify and map activity centers for residential, commercial, industrial, and public services (schools, hospitals, etc.)	PDC staff/RTC
2. Identify and map high growth areas for residential, commercial and industrial development	PDC staff/RTC
3. Map sewer and water availability and future expansion plans	VA Econ Dev Partnership (VEDP)\PDC staff
C. Socio-economic	
1. Population growth and projections by county (VEC)	PDC staff
2. Employment growth and projections by county (VEC)	
3. Identify and map disadvantaged groups a. Examples – Elderly, Low-income, Disabled, etc.	
D. Review and summarize existing regional/local plans and studies	
1. Document main issues, recommendations, etc.	PDC Staff
Deliverables	
<p>Phase I Report containing the following elements</p> <ul style="list-style-type: none"> • Regional goals, objectives and measures • Public Involvement Plan • Transportation inventories and maps • Land use maps and associated narratives • Regional socio-economic profile and maps • Summary of existing plans and studies 	
<ul style="list-style-type: none"> • RTC meeting minutes • GIS data files/layers to be provided to VDOT and localities 	

Deliverable End Product: Phase I Report including (Regional goals, objectives and measures, public involvement plan, transportation inventories and maps, land use maps, socio-economic profile and maps and summary of existing plans and studies. In addition committee meeting minutes and GIS data files and layers will be available as products.

B. Safety Conscious Planning Phase II – Flood Prone Roadway Report

Description: In FY 2007 staff will focus transportation safety planning efforts on a “Flood Prone Roadway Report.” As a part of Safety Conscious Planning Phase II staff will continue attendance of the Blue Ridge Transportation Safety Board.

- Inventory of flood prone roadways for planning purposes (road improvements, evacuation routes, limitation of development). This will

update and expand the Rural Flood Prone Roadway Study that was completed in 1999. In cooperation with VDOT, VDEM, fire and rescue departments and local governments.

(See counterpart in FY 2007 Unified Planning Work Program –UPWP- for the Roanoke Valley Area Metropolitan Planning Organization.)

Deliverable End Product: 1) Rural Portion of Flood Prone Roadway Report (see note above concerning Urban portion of report). 2) Continued staff membership on Blue Ridge Transportation Safety Board.

C. Ozone Early Action Plan (EAP) - Implementation

Description: In December 2002 officials from the counties of Botetourt and Roanoke, the town of Vinton, and the cities of Roanoke and Salem entered into an Ozone Early Action Compact (EAC) with the Virginia Department of Environmental Quality (DEQ) and the federal EPA. In March 2004 regional governments adopted the Ozone Early Action Plan (EAP), which resulted from the EAC process. This element involves the implementation of transportation strategies to support the adopted Early Action Plan (EAP) as it applies to the rural portion of the EAP service area. *(See counterpart in FY 2007 Unified Planning Work Program –UPWP- for the Roanoke Valley Area Metropolitan Planning Organization.)*

Deliverable End Product: Implementation of various transportation demand reduction strategies that support the adopted Ozone Early Action Plan (EAP).

D. General Technical Assistance, Technical Support Activities, and Regional Greenways Mapping Assistance.

Description: RVARC 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).
- **Regional Greenways Mapping Assistance** – GPS and mapping Assistance to the Regional Greenway Commission as needed.
- **Transportation Enhancement Assistance** – Local government assistance on the preparation of Transportation Enhancement (TE) grants as needed.
- **VDOT Transportation Pilot Grant – “Roanoke Valley/ New River Valley Mobility Study” Assistance** – In kind staff assistance consisting primarily of meeting attendance and basic research to support regional study performed by Virginia Tech Transportation Institute. (Technical Correction 07-25-2005)

Deliverable End Product: Specific technical assistance products requested by member local governments and other partner agencies.

E. Alleghany County Comprehensive Plan – Transportation Element

Description: Alleghany County is planning on updating their comprehensive plan in FY2007. The county has requested that RVARC staff write the transportation element of the comprehensive plan update.

Deliverable End Product: Transportation Element of Alleghany County Comprehensive Plan Update.

F. Rural Bicycle Plan - Implementation

Description: A well thought out plan doesn't do the community any good if it is filed away and not implemented. RVARC staff updated the rural bicycle plan in FY 2006. 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.

Deliverable End Product: 1) Additional fieldwork and analysis to encourage implementation of plan recommendations. 2) Annual review and amendment (if warranted) of the rural bicycle plan.

G. Transportation and Land Use Connection - Rural Portion

Description: This activity is the rural portion of element **2.13 Transportation and Land Use Connection (Regional Transportation Impact Studies)**: in the RVAMPO FY 2007UPWP.

Rural participation in this project will be focused on high growth areas of Botetourt County that lie just outside the RVAMPO study area boundary. In addition high growth areas of Franklin County may be considered. Following is a project description found in the FY 2007 RVAMPO UPWP:

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.*

Deliverable End Product: Rural contribution to Transportation and Land Use connection report.

III. BUDGET

Tasks	VDOT (SPR)	Local	Total
Program Administration	\$8,035	\$2,009	\$10,044
A. Program Management	\$6,428	\$1,607	\$8,035
B. RTPAP – Scope of Work	\$1,607	\$402	\$2,009
Program Activities			
A. Regional Long-Range Transportation Planning: Phase I	\$16,756	\$4,188	\$20,944
B. Safety Conscious Planning Phase II – Flood Prone Roadways	\$8,259	\$2,065	\$10,324
C. Ozone Early Action Plan Implementation (EAP)	\$2,017	\$504	\$2,521
D. General Technical Assistance, Support and Mapping	\$5,824	\$1,456	\$7,280
E. Alleghany County Comprehensive Plan – Transportation Element	\$1,794	\$449	\$2,243
F. Rural Bicycle Plan - Implementation	\$1,885	\$471	\$2,356
G. Transportation and Land Use Connection – Rural Portion	\$3,430	\$858	\$4,288
TOTAL	\$48,000	\$12,000	\$60,000