

# Residential and Rural Road Rehabilitation -- No. 500914

Category  
Subcategory  
Administering Agency  
Planning Area

Transportation  
Highway Maintenance  
Transportation  
Countywide

Date Last Modified  
Required Adequate Public Facility  
Relocation Impact  
Status

May 17, 2012  
No  
None.  
On-going

## EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY11	Est. FY12	Total 6 Years	FY13	FY14	FY15	FY16	FY17	FY18	Beyond 6 Years
Planning, Design, and Supervision	7,870	5	1,475	6,390	990	1,080	1,080	1,080	1,080	1,080	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	47,119	6,739	4,170	36,210	5,610	6,120	6,120	6,120	6,120	6,120	0
Other	8	0	8	0	0	0	0	0	0	0	0
<b>Total</b>	<b>54,997</b>	<b>6,744</b>	<b>5,653</b>	<b>42,600</b>	<b>6,600</b>	<b>7,200</b>	<b>7,200</b>	<b>7,200</b>	<b>7,200</b>	<b>7,200</b>	<b>*</b>

## FUNDING SCHEDULE (\$000)

G.O. Bonds	47,691	6,544	1,303	39,844	6,600	4,444	7,200	7,200	7,200	7,200	0
Recordation Tax Premium	7,306	200	4,350	2,756	0	2,756	0	0	0	0	0
<b>Total</b>	<b>54,997</b>	<b>6,744</b>	<b>5,653</b>	<b>42,600</b>	<b>6,600</b>	<b>7,200</b>	<b>7,200</b>	<b>7,200</b>	<b>7,200</b>	<b>7,200</b>	<b>0</b>

## DESCRIPTION

This project provides for the major rehabilitation of rural and residential roadways in older communities to include extensive pavement rehabilitation and reconstruction including the associated rehabilitation of ancillary elements such as under drains, sub-grade drains, and curbs and gutters (if present). This project will not make major changes to the location or size of existing drainage structures, if any. Pavement rehabilitation includes the replacement of existing failed pavement sections by the placement of an equivalent or increased pavement section. The rehabilitation usually requires the total removal and replacement of failed pavement exhibiting widespread areas of fatigue related distress, base failures and sub-grade failures.

## COST CHANGE

Increase in FY13 to address pavement infrastructure maintenance backlog; increase also due to the addition of FY17-18 to this ongoing level of effort project.

## JUSTIFICATION

In FY09, the Department of Transportation instituted a contemporary pavement management system. This system provides for systematic physical condition surveys. The physical condition surveys note the type, level, and extent of residential pavement deterioration combined with average daily traffic and other usage characteristics. This information is used to calculate specific pavement ratings, types of repair strategies needed, and associated repair costs, as well as the overall Pavement Condition Index (PCI) of the entire residential network. The system also provides for budget optimization for a systematic approach to maintaining a healthy residential pavement inventory.

The updated 2010 pavement condition survey indicated that 1,006 lane miles (24 percent) of residential pavement have fallen into the lowest possible category and are in need of structural reconstruction. Typically, pavements rated in this category require between 15-20 percent permanent patching per lane mile. Physical condition inspections of residential pavements will occur on a 2-3 year cycle.

## OTHER

Hot mix asphalt pavements have a finite life of approximately 20 years based upon a number of factors including but not limited to: original construction materials, means and methods, underlying soil conditions, drainage, daily traffic volume, other loading such as construction traffic and heavy truck traffic, age, and maintenance history.

A well maintained residential road carrying low to moderate traffic levels is likely to provide a service life of 20 years or more. Conversely, lack of programmed maintenance will shorten the service life of residential roads considerably, in many cases to less than 15 years before rehabilitation is needed.

## OTHER DISCLOSURES

- A pedestrian impact analysis has been completed for this project.
- \* Expenditures will continue indefinitely.

## APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY09	(\$000)
First Cost Estimate	FY13	54,997
Current Scope		
Last FY's Cost Estimate		40,297
Appropriation Request	FY13	6,600
Appropriation Request Est.	FY14	7,200
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		12,397
Expenditures / Encumbrances		6,858
Unencumbered Balance		5,539
Partial Closeout Thru	FY10	0
New Partial Closeout	FY11	0
Total Partial Closeout		0

## COORDINATION

Washington Suburban Sanitary Commission  
Washington Gas Light Company  
Department of Permitting Services  
PEPCO  
Cable TV  
Verizon  
Montgomery County Public Schools  
Regional Services Centers  
Community Associations  
Commission on People with Disabilities

## MAP

