

Residential and Rural Road Rehabilitation (P500914)

Category Transportation
 Sub Category Highway Maintenance
 Administering Agency Transportation (AAGE30)
 Planning Area Countywide

Date Last Modified 5/19/17
 Required Adequate Public Facility No
 Relocation Impact None
 Status Ongoing

	Total	Thru FY16	Rem FY16	Total 6 Years	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Beyond 6 Yrs
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EXPENDITURE SCHEDULE (\$000s)

Planning, Design and Supervision	6,977	9	1,975	4,993	343	690	315	990	1,215	1,440	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	72,511	43,271	948	28,292	1,942	3,910	1,785	5,610	6,885	8,160	0
Other	9	9	0	0	0	0	0	0	0	0	0
Total	79,497	43,289	2,923	33,285	2,285	4,600	2,100	6,600	8,100	9,600	0

FUNDING SCHEDULE (\$000s)

G.O. Bonds	65,417	35,758	2,923	26,736	0	1,702	2,100	5,234	8,100	9,600	0
Recordation Tax Premium	14,080	7,531	0	6,549	2,285	2,898	0	1,366	0	0	0
Total	79,497	43,289	2,923	33,285	2,285	4,600	2,100	6,600	8,100	9,600	0

APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 18	4,600
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		48,497
Expenditure / Encumbrances		43,672
Unencumbered Balance		4,825

Date First Appropriation	FY 09
First Cost Estimate	
Current Scope	FY 17 79,497
Last FY's Cost Estimate	79,497

Description

This project provides for the major rehabilitation of residential and rural 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 installation and replacement of curbs and gutters. 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.

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 2015 pavement condition survey indicated that 308 lane-miles (or 7 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.

Fiscal Note

\$40M is the annual cost required to maintain the current Countywide Pavement Condition Index of 67 on residential and rural roads. Related CIP projects include Permanent Patching: Residential/Rural Roads (#501106) and Residential and Rural Road Rehabilitation (#500914). In FY16, a supplemental appropriation of \$2.3M in GO Bonds was approved for this project.

Disclosures

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

Coordination

Residential and Rural Road Rehabilitation (P500914)

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