Residential and Rural Road Rehabilitation (P500914)

Category Sub Category Administering Agency Planning Area	Transportation Highway Mainter Transportation (/ Countywide	Date Last Modified Required Adequate Public Facility Relocation Impact Status			cility	11/17/14 No None Ongoing						
		Total	Thru FY14	Rem FY14	Total 6 Years	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Beyond 6 Yrs
EXPENDITURE SCHEDULE (\$000s)												
Planning, Design and Supervision		9,123	9	3,174	5,940	990	1,290	690	990	990	990	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		59,165	25,091	414	33,660	5,610	7,310	3,910	5,610	5,610	5,610	0
Other		9	9	0	0	0	0	0	0	0	0	0
	Total	68,297	25,109	3,588	39,600	6,600	8,600	4,600	6,600	6,600	6,600	0
FUNDING SCHEDULE (\$000s)												
G.O. Bonds		52,968	17,803	3,363	31,802	6,600	8,600	1,066	3,702	6,600	5,234	0
Recordation Tax Premiun	n	15,329	7,306	225	7,798	0	0	3,534	2,898	0	1,366	0
	Total	68,297	25,109	3,588	39,600	6,600	8,600	4,600	6,600	6,600	6,600	0

APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 16	8,600
Supplemental Appropriation Request	0	
Transfer	0	
Cumulative Appropriation	35,297	
Expenditure / Encumbrances	26,067	
Unencumbered Balance	9,230	

Date First Appropriation	n FY 09	
First Cost Estimate		
Current Scope	FY 16	68,297
Last FY's Cost Estimate	68,297	
Partial Closeout Thru		0
New Partial Closeout	0	
Total Partial Closeout	0	

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 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 2013 pavement condition survey indicated that 180 lane miles (4 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

\$36 million is the annual cost required to maintain the current Countywide Pavement Condition Index of 68 on residential/rural roads. Related CIP projects include Permanent/Patching: Residential/Rural Roads (#501106) and Resurfacing: Residential/Rural Roads (#500511).

Disclosures

A pedestrian impact analysis has been completed for this project.

Expenditures will continue indefinitely.

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