Residential and Rural Road Rehabilitation
(P500914)

Category	Transportation	Date Last Modified	05/21/18
SubCategory	Highway Maintenance	Administering Agency	Transportation
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	9,550	9	3,001	6,540	690	990	1,215	1,215	1,215	1,215	-
Construction	89,131	48,165	1,906	39,060	5,910	5,610	6,885	6,885	6,885	6,885	-
Other	16	16	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	98,697	48,190	4,907	45,600	6,600	6,600	8,100	8,100	8,100	8,100	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
G.O. Bonds	84,617	38,374	2,009	44,234	6,600	5,234	8,100	8,100	8,100	8,100	-
Recordation Tax Premium (MCG)	14,080	9,816	2,898	1,366	-	1,366	-	-	-	-	-
TOTAL FUNDING SOURCES	98,697	48,190	4,907	45,600	6,600	6,600	8,100	8,100	8,100	8,100	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 19 Request	6,600	Year First Appropriation	FY09
Appropriation FY 20 Request	6,600	Last FY's Cost Estimate	79,497
Cumulative Appropriation	53,097		
Expenditure / Encumbrances	48,473		
Unencumbered Balance	4,624		

PROJECT 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.

COST CHANGE

Cost increase due to the addition of FY23-24 to this ongoing level of effort project as well as a $4.5 million increase in FY19 partially offset by a $1.5 million reduction in FY22.

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 2017 pavement condition survey indicated that 339 lane-miles (or 8 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

$44 million is the annual cost required to maintain the current Countywide Pavement Condition Index of 66 on residential and rural roads. Related CIP projects include Permanent Patching: Residential/Rural Roads (No. 501106) and Residential and Rural Road Rehabilitation (No. 500914).

DISCLOSURES

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

COORDINATION

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