

# Residential and Rural Road Rehabilitation (P500914)

Category
SubCategory
Planning Area

Transportation
Highway Maintenance
Countywide

Date Last Modified Administering Agency Status 05/22/23
Transportation
Ongoing

#### EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY22	Rem FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
Planning, Design and Supervision	7,762	11	461	7,290	1,215	1,215	1,215	1,215	1,215	1,215	-
Construction	120,891	79,581	-	41,310	6,885	6,885	6,885	6,885	6,885	6,885	-
Other	44	44	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	128,697	79,636	461	48,600	8,100	8,100	8,100	8,100	8,100	8,100	-

#### FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY22	Rem FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
G.O. Bonds	106,517	65,556	461	40,500	8,100	2,332	5,768	8,100	8,100	8,100	-
Land Sale	8,100	-	-	8,100	-	5,768	2,332	-	-	-	-
Recordation Tax Premium (MCG)	14,080	14,080	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	128,697	79,636	461	48,600	8,100	8,100	8,100	8,100	8,100	8,100	-

#### APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 24 Request	8,100	Year First Appropriation	FY09
Cumulative Appropriation	88,197	Last FY's Cost Estimate	128,697
Expenditure / Encumbrances	80,109		
Unencumbered Balance	8,088		

# 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.

## 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 2019 pavement condition survey indicated that 276 lane-miles (or 6 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

\$57 million is the annual cost required to maintain the current Countywide Pavement Condition Index of 66 on residential and rural roads. \$60 million is the annual requirement to achieve a Countywide Pavement Condition Index of 70 for residential and rural roads. Related CIP projects include Permanent Patching: Residential/Rural Roads (No. 501106) and Residential and Rural Road Rehabilitation (No. 500914). In FY24 and FY25, there is a switch in funding between GO Bond and Land Sale Proceeds.

## **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.