



Permanent Patching: Residential/Rural Roads

(P501106)

Category	Transportation	Date Last Modified	08/26/21
SubCategory	Highway Maintenance	Administering Agency	Transportation
Planning Area	Countywide	Status	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	3,842	9	1,223	2,610	435	435	435	435	435	435	-
Construction	58,343	41,884	169	16,290	2,715	2,715	2,715	2,715	2,715	2,715	-
Other	7	7	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	62,192	41,900	1,392	18,900	3,150	3,150	3,150	3,150	3,150	3,150	-

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. Bond Premium	1,000	1,000	-	-	-	-	-	-	-	-	-
G.O. Bonds	60,200	39,908	1,392	18,900	3,150	3,150	3,150	3,150	3,150	3,150	-
State Aid	992	992	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	62,192	41,900	1,392	18,900	3,150	3,150	3,150	3,150	3,150	3,150	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 24 Request	3,150	Year First Appropriation	FY11
Cumulative Appropriation	46,442	Last FY's Cost Estimate	62,192
Expenditure / Encumbrances	43,161		
Unencumbered Balance	3,281		

PROJECT DESCRIPTION

This project provides for permanent patching of residential/rural roads in older residential communities. This permanent patching program provides for deep patching of residential and rural roads to restore limited structural integrity and prolong pavement performance. This program will ensure structural viability of older residential pavements until such a time that road rehabilitation occurs. Based on current funding trends, many residential roads identified as needing reconstruction may not be addressed for 40 years or longer. The permanent patching program is designed to address this problem. Pavement reconstruction involves either total removal and reconstruction of the pavement section or extensive deep patching followed by grinding along with a thick structural hot mix asphalt overlay. Permanent patching may improve the pavement rating such that total rehabilitation may be considered in lieu of total reconstruction, at significant overall savings.

COST CHANGE

Cost increase due to the addition of FY27 and FY28 to this ongoing level of effort project.

PROJECT JUSTIFICATION

In FY09, the Department of Transportation instituted a 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 and a systematic approach to maintaining a healthy residential pavement inventory. The updated 2019 pavement condition survey indicated that 799 lane-miles (19 percent) of residential pavement have fallen into the lowest possible category and are in need of structural patching. 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.

FISCAL NOTE

\$57 million is the annual cost required to maintain the current Countywide Pavement Condition Index of 66 for 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 Residential and Rural Road Rehabilitation (No. 500914) and Resurfacing: Residential/Rural Roads (No. 500511). In FY21, there was a funding switch utilizing GO Bonds, of which, \$1 million was allocated in GO Bond Premium.

DISCLOSURES

Expenditures will continue indefinitely. The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

COORDINATION

Maryland-National Capital Park and Planning Commission, Maryland State Highway Administration, Utility Companies, Montgomery County Department of Permitting Services, City of Gaithersburg, Facility Planning: Transportation (CIP No. 509337).