



# Permanent Patching: Residential/Rural Roads (P501106)

Category	Transportation	Date Last Modified	01/05/18
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	3,837	5	646	3,186	450	435	435	622	622	622	-
Construction	48,755	29,388	1,053	18,314	2,550	2,465	2,715	3,528	3,528	3,528	-
<b>TOTAL EXPENDITURES</b>	<b>52,592</b>	<b>29,393</b>	<b>1,699</b>	<b>21,500</b>	<b>3,000</b>	<b>2,900</b>	<b>3,150</b>	<b>4,150</b>	<b>4,150</b>	<b>4,150</b>	<b>-</b>

## 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	51,600	28,401	1,699	21,500	3,000	2,900	3,150	4,150	4,150	4,150	-
State Aid	992	992	-	-	-	-	-	-	-	-	-
<b>TOTAL FUNDING SOURCES</b>	<b>52,592</b>	<b>29,393</b>	<b>1,699</b>	<b>21,500</b>	<b>3,000</b>	<b>2,900</b>	<b>3,150</b>	<b>4,150</b>	<b>4,150</b>	<b>4,150</b>	<b>-</b>

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

Appropriation FY 19 Request	3,000	Year First Appropriation	FY11
Appropriation FY 20 Request	2,900	Last FY's Cost Estimate	42,692
Cumulative Appropriation	31,092		
Expenditure / Encumbrances	29,788		
Unencumbered Balance	1,304		

## 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

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Cost increase due to the addition of FY23-24 to this ongoing level of effort project as well as a \$1.6 million increase in FY19.

## Project Justification

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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 2017 pavement condition survey indicated that 679 lane-miles (16 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

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\$44 million is the annual cost required to maintain the current Countywide Pavement Condition Index of 66 for residential and rural roads. Related CIP projects include Residential and Rural Road Rehabilitation (No. 500914) and Resurfacing: Residential/Rural Roads (No. 500511).

## Disclosures

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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

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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).