

# Permanent Patching: Residential/Rural Roads (P501106)

Category                    Transportation  
 Sub Category            Highway Maintenance  
 Administering Agency   Transportation (AAGE30)  
 Planning Area            Countywide

Date Last Modified        5/19/16  
 Required Adequate Public Facility   No  
 Relocation Impact        None  
 Status                        Ongoing

	Total	Thru FY15	Est FY16	Total 6 Years	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Beyond 6 Yrs
<b>EXPENDITURE SCHEDULE (\$000s)</b>											
Planning, Design and Supervision	5,726	5	3,486	2,235	360	210	360	435	435	435	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	36,966	21,382	2,419	13,165	2,040	1,190	2,040	2,465	2,715	2,715	0
Other	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>42,692</b>	<b>21,387</b>	<b>5,905</b>	<b>15,400</b>	<b>2,400</b>	<b>1,400</b>	<b>2,400</b>	<b>2,900</b>	<b>3,150</b>	<b>3,150</b>	<b>0</b>

	Total	Thru FY15	Est FY16	Total 6 Years	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Beyond 6 Yrs
<b>FUNDING SCHEDULE (\$000s)</b>											
G.O. Bonds	41,700	20,395	5,905	15,400	2,400	1,400	2,400	2,900	3,150	3,150	0
State Aid	992	992	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>42,692</b>	<b>21,387</b>	<b>5,905</b>	<b>15,400</b>	<b>2,400</b>	<b>1,400</b>	<b>2,400</b>	<b>2,900</b>	<b>3,150</b>	<b>3,150</b>	<b>0</b>

### APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 17	2,400
Appropriation Request Est.	FY 18	1,400
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		27,292
Expenditure / Encumbrances		21,388
Unencumbered Balance		5,904

Date First Appropriation	FY 11
First Cost Estimate	
Current Scope	FY 17
Last FY's Cost Estimate	34,892

### 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 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 FY21-22 to this ongoing level-of-effort 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 2015 pavement condition survey indicated that 672 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

\$40M is the annual cost required to maintain the current Countywide Pavement Condition Index of 67 for residential and rural roads. Related CIP projects include Residential and Rural Road Rehabilitation (#500914) and Resurfacing: Residential/Rural Roads (#500511).

### Disclosures

Expenditures will continue indefinitely.

The Executive asserts that this project conforms to the requirements 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, Department of Permitting Services, City of Gaithersburg, Facility Planning: Transportation (CIP #509337)