# Resurfacing: Rural/Residential Roads -- No. 500511

| | | | |
|---|---|---|---|
| Category | **Transportation** | Date Last Modified | **May 20, 2004** |
| Agency | **Public Works & Transportation** | Previous PDF Page Number | **NONE** |
| Planning Area | **Countywide** | Required Adequate Public Facility | **NO** |
| Relocation Impact | **None.** | | |

## EXPENDITURE SCHEDULE ($000)

| Cost Element | Total | Thru FY03 | Est. FY04 | Total 6 Years | FY05 | FY06 | FY07 | FY08 | FY09 | FY10 | Beyond 6 Years |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Planning, Design and Supervision | 1,200 | 0 | 0 | 1,200 | 200 | 200 | 200 | 200 | 200 | 200 | 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 | 11,467 | 0 | 0 | 11,467 | 1,133 | 1,467 | 1,467 | 2,133 | 2,467 | 2,800 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 12,667 | 0 | 0 | 12,667 | 1,333 | 1,667 | 1,667 | 2,333 | 2,667 | 3,000 | * |

## FUNDING SCHEDULE ($000)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| G.O. Bonds | 12,667 | 0 | 0 | 12,667 | 1,333 | 1,667 | 1,667 | 2,333 | 2,667 | 3,000 | 0 |

## ANNUAL OPERATING BUDGET IMPACT ($000)

**DESCRIPTION**

This project provides for the permanent patching (bituminous concrete asphalt) of rural (as defined by the Proposal for a Rural/Rustic Roads Program, March 1990) and residential roadways to ensure long term structural integrity of the road base. The County maintains a total of 263 lane miles of rural roads and 2,800 lane miles of residential roads (with additional miles of roads being accepted into the maintenance system each year). The Department estimates that upward to 1,000 lane miles of rural and residential roads require permanent patching due to deferred maintenance. The County spends approximately $8,000 per lane mile on this type of patching, 4-5 times more than cyclic, proactive permanent patching. This work must be completed in advance of any surface treatment.

**Service Area**

Countywide

**Capacity**

The proposed funding levels will prepare approximately 209 lane miles of the road base for resurfacing in FY05, increasing to approximately 420 lane miles in FY10.

**JUSTIFICATION**

The deterioration of bituminous pavement occurs because of bitumen evaporation, infiltration of moisture, and patterned traffic movement. Timely, cyclical overlays preserve pavements and prevent total and costly reconstruction (observed through direct experience and as depicted on pavement life cycle graphs). Highway Maintenance Section records show that rural and residential roadways are currently being resurfaced on average of once every 15 to 25 years. (Industry standards recommend a five-year cycle.) Deferring surface treatment beyond industry standard cycles causes rapid deterioration of the pavement surface, base, and sub-base. Major and costly permanent repairs are now required to the base and sub-base because roads are not being resurfaced in a timely manner.

**STATUS**

New CIP project

**OTHER**

The design and planning stages, as well as project construction, will comply with the Department of Public Works and Transportation (DPWT), Maryland State Highway Administration (MSHA), Manual on Uniform Traffic Control Devices (MUTCD), American Association of State and Highway Officials (AASTO), and American with Disabilities Act (ADA). * Expenditures will continue indefinitely.

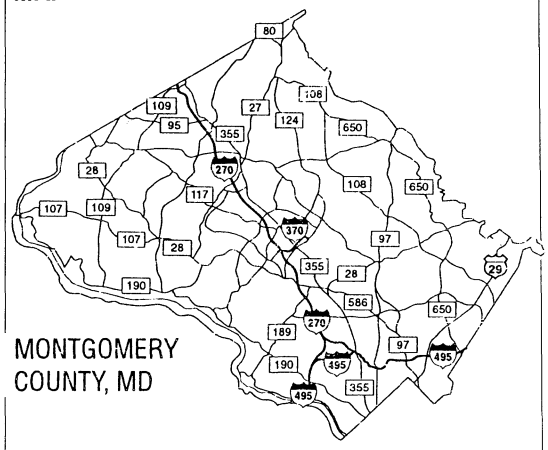
**FISCAL NOTE**

G.O. bonds will be used for permanent patching (which should last the lifetime of the roadway if timely surface treatment is provided). Current Revenue from the Department's operating budget will be used for the resurfacing. The recommended methods of resurfacing for rural and residential roads are tar and chip and slurry seal respectively.

### APPROPRIATION AND EXPENDITURE DATA

| | | |
|---|---|---|
| Date First Appropriation | FY05 | ($000) |
| Initial Cost Estimate | | 2,000 |
| First Cost Estimate Current Scope | FY05 | 12,667 |
| Last FY's Cost Estimate | | 0 |
| Present Cost Estimate | | 12,667 |
| Appropriation Request | FY05 | 1,333 |
| Appropriation Request Est. | FY06 | 1,667 |
| Supplemental Appropriation Request | FY04 | 0 |
| Transfer | | 0 |
| Cumulative Appropriation | | 0 |
| Expenditures/ Encumbrances | | 0 |
| Unencumbered Balance | | 0 |
| Partial Closeout Thru | FY02 | 0 |
| New Partial Closeout | FY03 | 0 |
| Total Partial Closeout | | 0 |

### COORDINATION

WSSC
Washington Gas Light Company
PEPCO
Cable TV
Verizon Wireless
United States Post Office

### MAP