

MEMORANDUM

September 29, 2011

TO: Transportation, Infrastructure, Energy and Environment Committee

FROM: ^{GO} Glenn Orlin, Deputy Council Staff Director

SUBJECT: Briefing—County road maintenance

The Committee Chair has asked for the Department of Transportation to provide a briefing on the current status of its road resurfacing programs in the county. The briefing will be led by Al Roshdieh, Deputy Director of DOT, and Keith Compton, Chief of DOT's Highway Services Division.

DOT's resurfacing program is spread out over several projects in the Capital Improvements Program (CIP), as well as a line item in the Operating Budget:

- **Resurfacing: Primary/Arterial.** This traditional and continuing program periodically resurfaces the County's 874 lane-miles of major highways, arterial and minor arterial roads, and primary residential streets. Its funding in FY12 is \$7.5 million. The CIP's latest project description form (PDF) is on ©1.
- **ARRA Highway Improvements.** This one-time project supplemented the work under the Resurfacing: Primary/Arterial program with about \$6.7 million in Federal stimulus funds in FYs10-11. The PDF is on ©2. DOT's status report detailing the progress on both the Resurfacing: Primary/Arterial and ARRA Highway Improvements programs is on ©3-4.
- **Residential and Rural Road Rehabilitation.** This relatively new (starting in FY09) and continuing program performs extensive structural reconstruction of both the surface and base layers, and often includes replacement of drains and—if present—curb and gutter. Its funding in FY12 is \$5.4 million. The CIP's latest PDF is on ©5, and detail of the current status of work performed under this program in the neighborhoods east of the Forest Glen Metro Station is on ©6-9.

- **Permanent Patching: Residential Roads.** This very new (starting in FY11) continuing program provides for deep patching of residential and rural roads to prolong their structural integrity until total rehabilitation or reconstruction (under the prior program) can occur. Its funding in FY12 is \$3 million. The CIP's latest PDF is on ©10, and the current work under this program is on ©11.
- **Resurfacing: Residential/Rural Roads.** This traditional and continuing program periodically resurfaces the County's 4,128 lane-miles of secondary and tertiary residential streets and rural byways. Its funding in FY12 is only \$534,000, but this is low only because the Council approved added \$4 million in FY11 and, at CIP Reconciliation, accelerated \$4,956,000 of funds into FY11 from FYs12-14 (including \$1 million from FY12). The CIP's latest PDF is on ©12, and the current work under this program is on ©13-14.
- **Resurfacing Park Roads and Bridge Improvements.** In FY07 DOT took over responsibility for periodically resurfacing 14 miles and repairing 13 bridges on local roads otherwise maintained by M-NCPPC. Its funding in FY12 is \$600,000, the same amount programmed annually in subsequent years. The CIP's latest PDF is on ©15.
- **Operating Budget: General Fund.** In the Operating Budget there is \$284,010 for contracted surface treatment for residential and rural roads, such as crack seal or slurry seal. This is preventive maintenance to ward off the more serious deterioration that would otherwise lead to more expensive permanent patching or rehabilitation work.

Despite the considerable funds budgeted for resurfacing, they generally do not fund the effort recommended according to industry standards. The County's Infrastructure Maintenance Task Force, a group of capital budget managers across the major County agencies, biennially report how well each maintenance effort is funded against these standards. Based on the Task Force's most recent report (March 2010), the County is funding:

- close to what is necessary for primary/arterial roads
- about 8% of the need for residential street rehabilitation
- about 9% of the need for permanent patching on residential streets
- about half the need for residential resurfacing, and
- about 9% of the need for surface treatments such as slurry seal.

Resurfacing: Primary/Arterial -- No. 508527

Category
Subcategory
Administering Agency
Planning Area

Transportation
Highway Maintenance
Transportation
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

November 16, 2010
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY10	Rem. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	7,483	0	1,183	6,300	975	1,125	1,050	1,050	1,050	1,050	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	35,737	0	37	35,700	5,525	6,375	5,950	5,950	5,950	5,950	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	43,220	0	1,220	42,000	6,500	7,500	7,000	7,000	7,000	7,000	*

FUNDING SCHEDULE (\$000)

G.O. Bonds	43,220	0	1,220	42,000	6,500	7,500	7,000	7,000	7,000	7,000	0
Total	43,220	0	1,220	42,000	6,500	7,500	7,000	7,000	7,000	7,000	0

DESCRIPTION

The County maintains approximately 874 lane miles of primary and arterial roadways. This project provides for the systematic milling, repair, and bituminous concrete resurfacing of selected primary and arterial roads and revitalization of others. This project includes the Main Street Montgomery Program and provides for a systematic, full-service, and coordinated revitalization of the primary and arterial road infrastructure to ensure viability of the primary transportation network and enhance safety and ease of use for all users. A portion of the work will be performed by the County's in-house paving crew.

Mileage of primary/arterial roads has been adjusted to conform with the inventory maintained by the State Highway Administration. This inventory is updated annually.

COST CHANGE

Increase due to addition of FY15-16 to this ongoing level of effort project. FY11 expenditures of two million accelerated by FY10 supplemental request; FY11-16 reduction due to reallocation of 2 million in FY11, 1 million in FY12, and 1.5 million per year in FY13-14 from this project to Permanent Patching/Residential/Rural Roads CIP# 501106.

JUSTIFICATION

Primary and Arterial roadways provide transport support for tens of thousands of trips each day. Primary and arterial roads connect diverse origins and destinations that include commercial, retail, industrial, residential, places of worship, recreation, and community facilities. The repair of the County's primary and arterial roadway infrastructure is critical to mobility throughout the County. In addition, the state of disrepair of the primary and arterial roadway system causes travel delays, increased traffic congestion, and compromises the safety and ease of travel along all primary and arterial roads, including pedestrians and bicyclists. Well maintained road surfaces increases safety and assist in the relief of traffic congestion.

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 primary/arterial 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 primary/arterial network. The system also provides for budget optimization and recommending annual budgets for a systematic approach to maintaining a healthy primary/arterial pavement inventory.

OTHER

One aspect of this project will focus on improving pedestrian mobility by creating a safer walking environment, utilizing selected engineering technologies, and ensuring Americans with Disabilities Act (ADA) compliance. Several existing CIP and operating funding sources will be focused in support of the Main Street Montgomery campaign. The design and planning stages, as well as final completion of the project will comply the Department of Transportation (DOT), Maryland State Highway Administration (MSHA), Manual on Uniform Traffic Control Devices (MUTCD), American Association of State Highway Officials (AASHTO), and ADA standards.

OTHER DISCLOSURES

- A pedestrian impact analysis has been completed for this project.
- * Expenditures will continue indefinitely.

APPROPRIATION AND EXPENDITURE DATA	COORDINATION	MAP																																																
<table border="1"> <tr> <td>Date First Appropriation</td> <td>FY85</td> <td>(\$000)</td> </tr> <tr> <td>First Cost Estimate</td> <td>FY11</td> <td>52,916</td> </tr> <tr> <td>Current Scope</td> <td></td> <td></td> </tr> <tr> <td>Last FY's Cost Estimate</td> <td></td> <td>52,916</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>Appropriation Request</td> <td>FY12</td> <td>7,500</td> </tr> <tr> <td>Supplemental Appropriation Request</td> <td></td> <td>0</td> </tr> <tr> <td>Transfer</td> <td></td> <td>0</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>Cumulative Appropriation</td> <td></td> <td>7,720</td> </tr> <tr> <td>Expenditures / Encumbrances</td> <td></td> <td>1,219</td> </tr> <tr> <td>Unencumbered Balance</td> <td></td> <td>6,501</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>Partial Closeout Thru</td> <td>FY09</td> <td>62,996</td> </tr> <tr> <td>New Partial Closeout</td> <td>FY10</td> <td>9,696</td> </tr> <tr> <td>Total Partial Closeout</td> <td></td> <td>72,692</td> </tr> </table>	Date First Appropriation	FY85	(\$000)	First Cost Estimate	FY11	52,916	Current Scope			Last FY's Cost Estimate		52,916				Appropriation Request	FY12	7,500	Supplemental Appropriation Request		0	Transfer		0				Cumulative Appropriation		7,720	Expenditures / Encumbrances		1,219	Unencumbered Balance		6,501				Partial Closeout Thru	FY09	62,996	New Partial Closeout	FY10	9,696	Total Partial Closeout		72,692	<p>Washington Suburban Sanitary Commission Other Utilities Department of Transportation Department of Housing and Community Affairs Montgomery County Public Schools Maryland - National Capital Park and Planning Commission Department of Economic Development Department of Permitting Services Regional Services Centers Community Associations Montgomery County Pedestrian Safety Advisory Committee Commission on People with Disabilities</p>	
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ARRA Highway Improvements -- No. 501003

Category
Subcategory
Administering Agency
Planning Area

Transportation
Highway Maintenance
Transportation
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

June 11, 2010
No
None.
Final Design Stage

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY09	Est. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	1,014	0	860	154	154	0	0	0	0	0	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	5,730	0	4,855	875	875	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	6,744	0	5,715	1,029	1,029	0	0	0	0	0	0

FUNDING SCHEDULE (\$000)

Fed Stimulus (State Allocation)	6,744	0	5,715	1,029	1,029	0	0	0	0	0	0
Total	6,744	0	5,715	1,029	1,029	0	0	0	0	0	0

DESCRIPTION

This project provides for paving and resurfacing of various primary roads within the County that are in the Federal Aid System and to be funded under the American Recovery and Reinvestment Act (ARRA) Federal economic stimulus program. Approximately 45 lane miles on stretches of road throughout the County will be resurfaced including: (1) Barnesville Road from Mt. Ephraim Road to FT117 Buck Lodge Road; (2) Shady Grove Road from I270 to Darnestown Road; (3) Forest Glen Road from MD97 - Georgia Avenue to Brunett Avenue; (4) Old Columbia Pike from MD198/Spencerville Road to US29-Columbia Pike ramp; (5) Randolph Road East of Nebel Street; (6) Travilah Road from River Road to Dufief Mill Road; and (7) Wightman Road from Brink Road to Goshen Road as actual pavement conditions and associated funding allows.

ESTIMATED SCHEDULE

Work to be completed in FY11.

COST CHANGE

Increase due to addition of the Travilah Road and Wightman Road projects with funds made available from the transfer of \$1,029,000 from ARRA Traffic Improvements (No. 501002).

JUSTIFICATION

The repair of the County's primary and arterial roadway infrastructure is critical to mobility throughout the County. In addition, the state of disrepair of the primary and arterial roadway system causes travel delays, increased traffic congestion, and compromises the safety and ease of travel. Well maintained road surfaces assist in the relief of traffic congestion.

The March 2008 "Report of the Infrastructure Maintenance Task Force" identified an annual resurfacing program level of effort based on a 12 year resurfacing frequency.

OTHER

Plans and Studies:

Montgomery County completed a countywide Pavement Management Study in FY08 that physically inspected and rated all County maintained roadways. An independent consultant, specializing in pavement management, conducted all physical inspections and developed subsequent ratings based on levels of observed pavement distress (type and extent), average daily traffic (ADT) and designation as an emergency route.

FISCAL NOTE

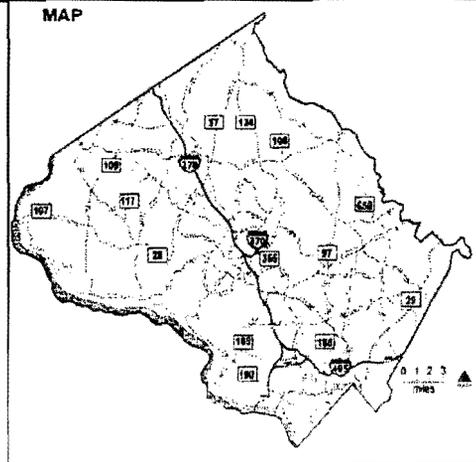
Funding is provided under the Federal economic stimulus ARRA, Local Highway Allocation, awarded to the County through a Highway Improvements Program grant. Total grant funds are \$8.49M and do not require a County match. See the ARRA Traffic Improvements project (#501002) for the remainder of the grant. Conditions precedent to disbursement of the grant require the State of Maryland to approve planning, specifications and estimates as well as the low, responsive and responsible bidder for construction.

OTHER DISCLOSURES

- A pedestrian impact analysis will be performed during design or is in progress.

APPROPRIATION AND EXPENDITURE DATA		
Date First Appropriation	FY10	(\$000)
First Cost Estimate		
Current Scope	FY11	6,744
Last FY's Cost Estimate		5,715
Appropriation Request	FY11	0
Appropriation Request Est.	FY12	0
Supplemental Appropriation Request		1,029
Transfer		0
Cumulative Appropriation		5,715
Expenditures / Encumbrances		0
Unencumbered Balance		5,715
Partial Closeout Thru	FY08	0
New Partial Closeout	FY09	0
Total Partial Closeout		0

COORDINATION
Maryland State Highway Administration
(MSHA)



COUNTY MARYLAND

Highway Services

Department of Transportation (MCDOT)

PRIMARY / ARTERIAL RESURFACING PROGRAMS

The Primary/Arterial Roads Resurfacing Programs are instituted to protect and maintain the County's primary roadway transportation infrastructure. The County has approximately 957 lane miles of Primary/Arterial roads. The scope of work includes milling, repair, bituminous concrete resurfacing, patching and revitalization. Roadway resurfacing is the process of applying a new wearing surface on County-maintained roadways throughout the County. This Program provides for systematic, full-service and coordinated revitalization to enhance access and safety for all users.

2011 CONSTRUCTION SEASON: Update: 9/15/2011

Click on the road name (if underlined) to read or download a Project Newsletter describing the scope of the project.

Check back periodically as projects get added or scheduled. This schedule may be changed and substitutions may be made at any time due to weather or operational reasons.

Road Name	From:	To:	Project Scope	Start Date	Status
<u>Arctic Avenue</u>	Aspen Hill Rd.	Bel Pre Rd.	Patching	7/5/2011	100% Complete
<u>Battery Lane</u>	Old Georgetown Rd.	Rockville Pike	HMA	5/9/2011	100% Complete
<u>Bauer Drive</u>	Marianna Dr.	Norbeck Rd.	Patching	7/18/2011	100% Complete
<u>Bowie Mill Road</u>	MD 108	Muncaster Mill Rd.	HMA	3/7/2011	100% Complete
<u>Dewey Road</u>	Garrett Park Rd.	Randolph Rd.	Patching	5/9/2011	100% Complete
Emory Lane	Muncaster Mill Rd.	Georgia Ave.	HMA	Spring 2012	
Executive Boulevard	Jefferson St.	Old Georgetown Rd.	HMA	Spring 2012	
<u>Falls Chapel Way</u>	Falls Rd.	Falls Rd.	2x Micro	8/8/2011	100% Complete
Fenton Street	Wayne Ave.	Philadelphia Ave.	HMA	Spring 2012	
Forest Glen Road	MD 97	Brunett Ave.	ARRA	8/1/2011	25% Complete
<u>Gold Mine Road</u>	MD 650	Georgia Ave.	Patching	9/12/2011	Scheduled
<u>Lockwood Drive</u>	MD 650	Stewart La.	2x Micro	8/15/2011	100%

					Complete
<u>Marianna Drive</u>	Aspen Hill Rd.	Bauer Dr.	2x Micro	8/1/2011	100% Complete
<u>Medical Center Drive</u>	Great Seneca Hwy.	Key West Ave.	HMA	Fall 2011	
<u>Middlebrook Road</u>	MD 355	Great Seneca Hwy.	2x Micro	8/15/2011	80% Complete
<u>Muddy Branch Road</u>	Darnestown Rd.	Dufief Mill Rd.	2x Micro	8/29/2011	100% Complete
<u>Muddy Branch Road</u>	West Diamond Ave.	Diamondback Dr.	HMA	Spring 2012	
<u>Observation Drive</u>	Ridge Rd.	End	2x Micro	8/15/2010	100% Complete
<u>Old Columbia Pike</u>	MD 198	US 29	ARRA	4/4/2011	98% Complete
<u>Randolph Road</u>	Nebel St.	Rock Creek Bridge	ARRA	6/27/2011	75% Complete
<u>Renn Street</u>	Parkland Dr.	Arctic Ave.	2x Micro	8/1/2011	100% Complete
<u>Research Boulevard</u>	Shady Grove Rd.	Omega Dr.	2x Micro	8/29/2011	100% Complete
<u>Shady Grove Road</u>	I-270	Darnestown Rd.	ARRA	5/23/2011	95% Complete
<u>Shakespeare Blvd.</u>	MD 355	Observation Dr.	2x Micro	7/30/2010	100% Complete
<u>Summit Avenue</u>	Knowles Ave.	Cedar La.	HMA	Spring 2012	
<u>Tenbrook Drive</u>	Forest Glen Rd.	Dennis Ave.	HMA	Spring 2012	
<u>Tucker Lane</u>	MD 650	MD 108	Patching	8/22/2011	80% Complete
<u>West Frankfort Drive</u>	Parkland Rd.	Arctic Ave.	2x Micro	8/1/2011	100% Complete
<u>Whittier/Woodhaven Blvd.</u>			Patching	8/19/2011	Scheduled

Click on the underlined link(s) provided below to view respective project schedules:

ARRA	<u>Federally Funded Paving Program</u>
Patching	<u>Full-Depth Permanent Patching</u>
2x Micro	<u>Double-Shot Micro Resurfacing</u>
HMA	<u>Hot Mix Asphalt Paving</u>

TBD = Schedule for this project To Be Determined at a later date.

4

Residential and Rural Road Rehabilitation -- No. 500914

Category
Subcategory
Administering Agency
Planning Area

Transportation
Highway Maintenance
Transportation
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

January 09, 2010
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY09	Est. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	5,872	0	262	5,610	615	810	945	1,080	1,080	1,080	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	34,425	1,152	1,483	31,790	3,485	4,590	5,355	6,120	6,120	6,120	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	40,297	1,152	1,745	37,400	4,100	5,400	6,300	7,200	7,200	7,200	*

FUNDING SCHEDULE (\$000)

G.O. Bonds	30,247	1,152	1,545	27,550	4,100	1,050	4,000	4,000	7,200	7,200	0
Recordation Tax Premium	10,050	0	200	9,850	0	4,350	2,300	3,200	0	0	0
Total	40,297	1,152	1,745	37,400	4,100	5,400	6,300	7,200	7,200	7,200	0

DESCRIPTION

This project provides for the major rehabilitation of rural and residential roadways in older communities to include extensive pavement rehabilitation and reconstruction including the associated rehabilitation of ancillary elements such as under drains, subgrade drains, and curbs and gutters (if present). This project will not make major changes to the location or size of existing drainage structures, if any.

COST CHANGE

Increase due to addition of FY15-16 to this ongoing level of effort 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 and recommending annual budgets for a systematic approach to maintaining a healthy residential pavement inventory.

The latest survey indicated that 1,095 lane miles (27 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-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.

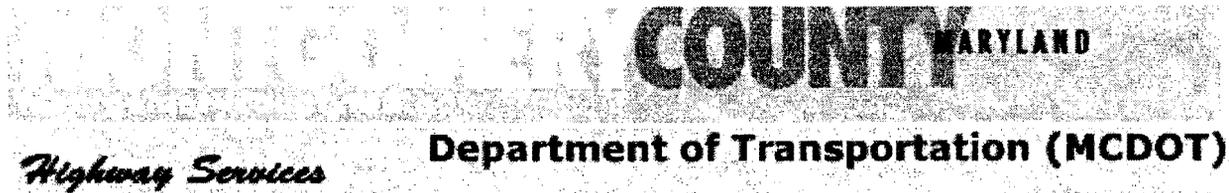
A well maintained residential road carrying low to moderate traffic levels is likely to provide a service life of 20 years or more. Conversely, lack of programmed maintenance will shorten the service life of residential roads considerably, in many cases to less than 15 years before rehabilitation is needed.

OTHER DISCLOSURES

- A pedestrian impact analysis has been completed for this project.
- * Expenditures will continue indefinitely.

APPROPRIATION AND EXPENDITURE DATA	COORDINATION	MAP												
<table border="1"> <tr> <td>Date First Appropriation</td> <td>FY09</td> <td>(\$000)</td> </tr> <tr> <td>First Cost Estimate</td> <td>FY11</td> <td>40,297</td> </tr> <tr> <td>Current Scope</td> <td></td> <td></td> </tr> <tr> <td>Last FY's Cost Estimate</td> <td></td> <td>25,897</td> </tr> </table>	Date First Appropriation	FY09	(\$000)	First Cost Estimate	FY11	40,297	Current Scope			Last FY's Cost Estimate		25,897	<p>Washington Suburban Sanitary Commission Washington Gas Light Company Department of Permitting Services PEPCO Cable TV Verizon Montgomery County Public Schools Regional Services Centers Community Associations Commission of People with Disabilities</p>	
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<table border="1"> <tr> <td>Appropriation Request</td> <td>FY11</td> <td>4,100</td> </tr> <tr> <td>Appropriation Request Est.</td> <td>FY12</td> <td>5,400</td> </tr> <tr> <td>Supplemental Appropriation Request</td> <td></td> <td>0</td> </tr> <tr> <td>Transfer</td> <td></td> <td>0</td> </tr> </table>	Appropriation Request	FY11	4,100	Appropriation Request Est.	FY12	5,400	Supplemental Appropriation Request		0	Transfer		0		
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Transfer		0												
<table border="1"> <tr> <td>Cumulative Appropriation</td> <td></td> <td>2,897</td> </tr> <tr> <td>Expenditures / Encumbrances</td> <td></td> <td>2,708</td> </tr> <tr> <td>Unencumbered Balance</td> <td></td> <td>189</td> </tr> </table>	Cumulative Appropriation		2,897	Expenditures / Encumbrances		2,708	Unencumbered Balance		189					
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Partial Closeout Thru	FY08	0												
New Partial Closeout	FY09	0												
Total Partial Closeout		0												

11-17
(5)



Rural & Residential Road Rehabilitation

This project provides for the major rehabilitation of residential roadways in older communities, to include extensive pavement rehabilitation and reconstruction, such as the associated rehabilitation of ancillary elements that may be under drains, subgrade drains, and curbs and gutters (if present). This project will not make major changes to the location or size of existing drainage structures, if any. Pavement reconstruction is the rehabilitation or replacement of the entire existing pavement structure by the placement of an equivalent or increased pavement structure. Rehabilitation usually requires the total removal and replacement of pavement exhibiting widespread areas of fatigue-related distress, base failures, subgrade failures, and locations on which otherwise aggressive pavement restoration approach is deemed impractical. We will be working in the Forest Glen area this year.

Update: August 4, 2011

The Forest Glen Street Rehabilitation Project started August 23, 2010 and is 40% complete.

Click on [Forest Glen Information](#) to download a Project Newsletter describing the scope of the project.

Highway Services · Montgomery County Department of Transportation

100 Edison Park Dr, 4th Floor · Gaithersburg, Maryland 20878 ·

mcdot.highway@montgomerycountymd.gov

· telephone: 240-777-7623 [begin_of_the_skype_highlighting](#) 240-777-7623

[end_of_the_skype_highlighting](#) · fax: 240-777-7670 ·

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MCDOT NEWS

News from the Montgomery County Department of Transportation (MCDOT)
Division of Highway Services

FOREST GLEN REHABILITATION PROJECT

Streets, Sidewalks and Curbs to be Renewed

PURPOSE

This Newsletter is to inform you of the upcoming project to rehabilitate streets, curbs and sidewalks in the community of Forest Glen. This is the second phase of the Capital funded project which employs long term strategies to rehabilitate, preserve and enhance the physical and operating conditions of the residential roadway system as it exists; and will ensure that the system is fully functional and serviceable for many years to come.

BACKGROUND

Thanks to the new Capital Improvement Program, Rural & Residential Road Rehabilitation sponsored by County Executive Isiah Leggett and supported by the County Council, the Department of Transportation (MCDOT) is pleased to announce an initiative to rehabilitate streets, curbs and sidewalks throughout well established and mature neighborhoods such as Forest Glen.

Through a new Pavement Management System, a comprehensive condition

inventory of all County roads was developed, identifying and rating the condition of each pavement. Accordingly, MCDOT now develops County-wide resurfacing schedules based upon the objective rating system coupled with budgetary parameters.

Overall, the pavements in the Forest Glen community were noted to be in need of rehabilitation and a good fit for the new Rural & Residential Road Rehabilitation program.

SCOPE OF PROJECT

The project replaces roadway pavement and ancillary elements such as curbs (where existing) and sidewalks "in kind". The project will not widen nor alter the character of the streets throughout the community. The streets, sidewalks and curbs in the community have been inspected and evaluated, resulting in the planned work. The project will proceed according to the project work plan (noted below) which will include roadway patching, replacement of defective curbs and sidewalks and resurfacing using hot mix asphalt

(HMA).

The outcome will be a new surface for both streets and sidewalks. Residents will also enjoy the use of new driveway aprons should they elect to participate in the Driveway Apron Replacement Program, described on page 2 of this newsletter. The MCDOT has contracted with a private contractor to perform all related work. The contractor was selected through the public bidding process and has a proven track record of successfully completing similar work elsewhere in the county.

PROJECT WORK PLAN

Generally, the work will proceed as follows:

1. A MCDOT Arborist will inspect the trees within the area of construction influence and then develop a tree protection plan to minimize damage to existing trees that may result from any planned construction
2. Tree Protection is installed within construction zones and staging areas.
3. MCDOT inspectors identify areas of curbing and

sidewalk in need of repair.

4. MCDOT contractor removes and replaces defective curbs and sidewalks. This work activity also ensures that all curb ramps comply with Americans with Disabilities Act (ADA) standards.
5. MCDOT contractor replaces the driveway aprons of those residents taking advantage of the Apron Repair Program. (See Additional Project Notes).
6. Prior to paving the streets, the MCDOT contractor performs full depth pavement patching of the roadway to restore structural integrity. These limited locations will be marked with white spray paint.
7. The MCDOT contractor edge mills (smooth grinds) the asphalt buildup adjacent to the curbs as necessary to restore proper drainage.
8. Utility Adjustments - Sewer and storm drain manholes, water valves and gas valves, and other underground utility access

FOREST GLEN REHABILITATION PROJECT

covers need to be elevated to the same grade as the proposed pavement, usually 1" to 2". During construction activities, all utility surface adjustments will be maintained by the placement of temporary asphalt ramps until placement of final paving occurs.

9. The MCDOT contractor paves the streets with hot mix asphalt.

SCHEDULE

The proposed schedule of activities may be affected by the weather and other operational requirements. The second phase of the Forest Glen project is scheduled to begin on or about March 21, 2011 and should be completed by Fall 2011.

IMPACTS

All construction work will be scheduled between the hours of 7 am and 5 pm, Monday through Friday. Continuous traffic will be maintained at all times utilizing alternate one-way traffic patterns, when necessary. However, minor traffic delays may be experienced as our traffic control flagger's manually direct traffic safely through the construction zone.

The Forest Glen Rehabilitation Project will necessitate temporary lane closures and temporary parking restrictions. Signs will be posted identifying such restrictions. Access to homes will

be available at all times, however minor delays may be experienced as workers restrict traffic from freshly placed hot mix asphalt.

This type of comprehensive neighborhood system preservation project is generally characterized by moderate noise and dust. However, MCDOT will do its best to keep the site in good house-keeping order.

We apologize in advance for any unavoidable inconvenience this project may cause and appreciate your cooperation. MCDOT is confident that the residents of Forest Glen will welcome the results of this program.

ADDITIONAL PROJECT NOTES

Driveway aprons and Lead walks:

The sidewalk and curb replacement work will be performed by a private contractor under contract to the Department of Transportation. While our contractor is in your neighborhood performing repairs, you may want to take advantage of our popular **Driveway Apron and Lead walk Repair Program**.

The driveway apron is defined as that portion of the driveway that is within the public right-of-way, generally from the curb to the back edge of the sidewalk or to the property line. The lead walk is the sidewalk that leads from the edge of the road to your property line and usually connects to the sidewalk that leads to your front door.

Montgomery County is not

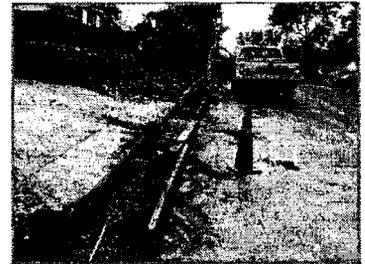
responsible for maintaining your driveway apron or lead walk because those elements provide access to your home and benefits only the property owner not the general public. County policy requires that the private property owner bear responsibility for the maintenance of the apron and associated drainage pipe, if present. The **Driveway Apron and Lead walk Repair Program** allows homeowners to take advantage of the county's competitively bid contract prices (public procurement process) to repair your existing driveway apron or lead walk.

When work begins in your neighborhood, an Inspector will evaluate your apron or lead walk to determine if its condition qualifies you to exercise the replacement option. The Inspector will then leave instructions at your door.

If you do not find a notice left at your door and you believe that your apron or lead walk should be replaced, you may request an Inspector to review the condition of your apron. Please contact the Inspector while crews are working in your neighborhood or call the Project Manager.

Driveway apron and lead walk services are provided by the contractor at the square yard unit price established by the competitive bid process. The Inspector will measure your driveway apron or lead walk and provide you with the estimated cost, based on both the square yard unit price and those measurements.

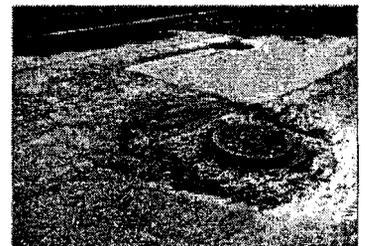
Thank you for your cooperation and patience as we work to improve the Forest Glen subdivision for residents and users.



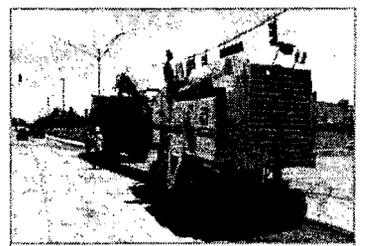
Curb forms being made ready for concrete



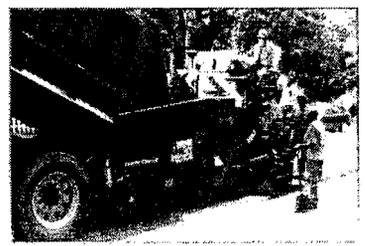
Pouring new concrete into forms



Utilities will be raised to meet new HMA



Typical milling operation



Typical asphalt paving operation

Permanent Patching: Residential/Rural Roads -- No. 501106

Category
Subcategory
Administering Agency
Planning Area

Transportation
Highway Maintenance
Transportation
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

January 09, 2010
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY09	Est. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	2,700	0	0	2,700	450	450	450	450	450	450	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	15,300	0	0	15,300	2,550	2,550	2,550	2,550	2,550	2,550	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	18,000	0	0	18,000	3,000	3,000	3,000	3,000	3,000	3,000	*

FUNDING SCHEDULE (\$000)

G.O. Bonds	18,000	0	0	18,000	3,000	3,000	3,000	3,000	3,000	3,000	0
Total	18,000	0	0	18,000	3,000	3,000	3,000	3,000	3,000	3,000	0

DESCRIPTION

This project provides for permanent patching of rural/residential roads in older residential communities. This permanent patching program provides for deep patching of rural and residential roads to restore limited structural integrity, prolong pavement performance, and to ensure viability until rehabilitation or total reconstruction can occur.

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.

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.

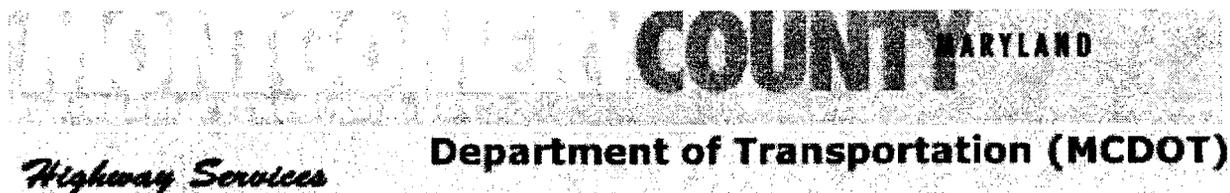
The latest survey indicated that 1,095 lane miles of residential pavement have fallen into the lowest possible category and are in need of structural reconstruction. Typically, pavements rated in this category require between 15-20 percent permanent patching per lane mile.

Physical condition inspections of residential pavements will occur on a 2-year cycle.

OTHER DISCLOSURES

- * Expenditures will continue indefinitely.

APPROPRIATION AND EXPENDITURE DATA	COORDINATION	MAP												
<table border="1"> <tr> <td>Date First Appropriation</td> <td>FY11</td> <td>(\$000)</td> </tr> <tr> <td>First Cost Estimate</td> <td></td> <td></td> </tr> <tr> <td>Current Scope</td> <td>FY11</td> <td>18,000</td> </tr> <tr> <td>Last FY's Cost Estimate</td> <td></td> <td>0</td> </tr> </table>	Date First Appropriation	FY11	(\$000)	First Cost Estimate			Current Scope	FY11	18,000	Last FY's Cost Estimate		0	Washington Suburban Sanitary Commission Washington Gas Light Company Department of Permitting Services PEPCO Cable TV Verizon Montgomery County Public Schools Regional Services Centers Community Associations Commission of People with Disabilities	
Date First Appropriation	FY11	(\$000)												
First Cost Estimate														
Current Scope	FY11	18,000												
Last FY's Cost Estimate		0												
<table border="1"> <tr> <td>Appropriation Request</td> <td>FY11</td> <td>3,000</td> </tr> <tr> <td>Appropriation Request Est.</td> <td>FY12</td> <td>3,000</td> </tr> <tr> <td>Supplemental Appropriation Request</td> <td></td> <td>0</td> </tr> <tr> <td>Transfer</td> <td></td> <td>0</td> </tr> </table>	Appropriation Request	FY11	3,000	Appropriation Request Est.	FY12	3,000	Supplemental Appropriation Request		0	Transfer		0		
Appropriation Request	FY11	3,000												
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Supplemental Appropriation Request		0												
Transfer		0												
<table border="1"> <tr> <td>Cumulative Appropriation</td> <td></td> <td>0</td> </tr> <tr> <td>Expenditures / Encumbrances</td> <td></td> <td>0</td> </tr> <tr> <td>Unencumbered Balance</td> <td></td> <td>0</td> </tr> </table>	Cumulative Appropriation		0	Expenditures / Encumbrances		0	Unencumbered Balance		0					
Cumulative Appropriation		0												
Expenditures / Encumbrances		0												
Unencumbered Balance		0												
<table border="1"> <tr> <td>Partial Closeout Thru</td> <td>FY08</td> <td>0</td> </tr> <tr> <td>New Partial Closeout</td> <td>FY09</td> <td>0</td> </tr> <tr> <td>Total Partial Closeout</td> <td></td> <td>0</td> </tr> </table>	Partial Closeout Thru	FY08	0	New Partial Closeout	FY09	0	Total Partial Closeout		0					
Partial Closeout Thru	FY08	0												
New Partial Closeout	FY09	0												
Total Partial Closeout		0												



Permanent Patching Program

The Permanent Patching Program provides for deep patching of roadways to restore limited structural integrity, prolong pavement performance, and to ensure viability until rehabilitation or reconstruction can occur. Permanent Patching is accomplished with hot mix asphalt (HMA) and will yield a service of life of between 15-20 years.

2011 CONSTRUCTION SEASON: Update: 9/15/2011

Click on the **Neighborhood or Location name** (if underlined) to read or download a Project Newsletter describing the scope of the project.

Check back periodically as projects get added or scheduled. This schedule may be changed and substitutions may be made at any time due to weather and/or operational reasons.

Roadway or Subdivision	From:	To:	Start Date	Status
<u>Hornell Drive</u>	Donora Rd.	Road End	5/09/2011	100%
<u>Dewey Road</u>	Garrett Park Rd.	Randolph Rd.	5/09/2011	100%
<u>Rock Creek Manor</u>			7/5/2011	100%
<u>Arctic Avenue</u>	Aspen Hill Rd.	Bel Pre Rd.	7/5/2011	100%
<u>Bauer Drive</u>	Mariana Dr.	Norbeck Rd.	7/18/2011	100%
<u>Tucker Lane</u>	MD 650	MD 108	8/22/2011	80%
<u>Parkside Estates</u>			9/6/2011	5%
<u>Gold Mine Road</u>	New Hampshire Ave.	Georgia Ave.	9/12/2011	5%
<u>Whittier/Woodhaven Blvd.</u>			9/19/2011	5%
<u>Olney Village</u>			10/3/2011	
<u>Fawsett Farms Manor/River Falls</u>			Fall 2011	
<u>Stoneybrook/Parkside</u>			Fall 2011	
<u>Garrett Park</u>			Fall 2011	
<u>Oakview</u>			Fall 2011	

(11)

Resurfacing: Residential/Rural Roads -- No. 500511

Category
Subcategory
Administering Agency
Planning Area

Transportation
Highway Maintenance
Transportation
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

June 22, 2011
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY10	Rem. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	6,010	56	2,386	3,568	1,568	80	113	307	750	750	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	46,736	23,405	3,115	20,216	8,888	454	637	1,737	4,250	4,250	0
Other	45	45	0	0	0	0	0	0	0	0	0
Total	52,791	23,506	5,501	23,784	10,456	534	750	2,044	5,000	5,000	*

FUNDING SCHEDULE (\$000)

Current Revenue: General	309	309	0	0	0	0	0	0	0	0	0
G.O. Bonds	50,865	21,580	5,501	23,784	10,456	534	750	2,044	5,000	5,000	0
PAYGO	1,617	1,617	0	0	0	0	0	0	0	0	0
Total	52,791	23,506	5,501	23,784	10,456	534	750	2,044	5,000	5,000	0

DESCRIPTION

This project provides for the permanent patching and resurfacing of rural and residential roadways using durable hot mix asphalt to restore long-term structural integrity to the aging rural and residential roadway infrastructure. The County maintains a combined total of 4,128 lane miles of rural and residential roads. Preventative maintenance includes full-depth patching of distressed areas of pavement in combination with a new hot mix asphalt wearing surface of 1-inch to 2-inches depending on the levels of observed distress.

COST CHANGE

Increase due to FY11 supplemental appropriation of \$8.956 million, including acceleration of \$4.956 million in expenditures from FY12-14.

JUSTIFICATION

The Department of Transportation instituted a contemporary pavement management system. This system provides for systematic physical condition surveys. The 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 cost, as well as the overall Pavement Condition Index (PCI) of the entire residential network. The system also provides for budget optimization and recommending annual budgets for a systematic approach to maintaining a healthy residential pavement inventory.

The latest survey indicated that 2,271 lane miles of roadway (fifty-five percent) require significant levels of rehabilitation.

Physical condition inspections of residential pavements will occur on a 2-year cycle.

OTHER

The design and planning stages, as well as project construction, will comply with the Department of Transportation (DOT), Maryland State Highway Administration (MSHA), Manual on Uniform Traffic Control Devices (MUTCD), American Association of State Highway and Transportation Officials (AASHTO), and American with Disabilities Act (ADA). Rural/residential road mileage has been adjusted to conform with the State inventory of road mileage maintained by the State Highway Administration (SHA). This inventory is updated annually.

FISCAL NOTE

FY11 Supplemental \$8.956 million and acceleration: FY12 expenditures of \$1.0 million accelerated into FY11, FY13 expenditures of \$1.0 million accelerated into FY11, FY14 expenditures of \$2.956 million accelerated into FY11.

OTHER DISCLOSURES

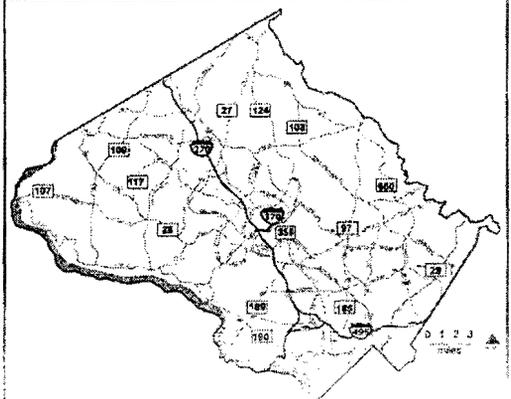
- * Expenditures will continue indefinitely.

APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY05	(\$000)
First Cost Estimate	FY12	52,791
Current Scope		52,791
Last FY's Cost Estimate		52,791
Appropriation Request	FY12	534
Supplemental Appropriation Request		8,956
Transfer		0
Cumulative Appropriation		30,507
Expenditures / Encumbrances		28,033
Unencumbered Balance		2,474
Partial Closeout Thru	FY08	0
New Partial Closeout	FY10	0
Total Partial Closeout		0

COORDINATION

Washington Suburban Sanitary Commission
Washington Gas Light Company
PEPCO
Cable TV
Verizon
United States Post Office



MONTGOMERY COUNTY MARYLAND

Department of Transportation (MCDOT)

Highway Services

RESIDENTIAL ROADWAY RESURFACING

This project provides for the permanent patching and resurfacing of residential roadways, using durable hot mix asphalt (HMA) or micro seal resurfacing to restore long term structural integrity to the aging residential infrastructure.

2011 CONSTRUCTION SEASON: Update 9/20/2011

Click on the **Neighborhood or Location name (if underlined)** to read or download a **Project Newsletter** describing the scope of the project.

Check back periodically as projects get added or scheduled. This schedule may be changed and substitutions may be made at any time due to weather and/or operational reasons.

Roadway or Subdivision	Scope of Project	Start Date	Status
<u>Plantations's Phase II</u>	HMA	10/20/2010	100% Complete
<u>Hornell Drive</u>	Patching	5/09/2011	100% Complete
<u>Forest Glen Phase I and II</u>	Rehab	3/23/2011	40% Complete
<u>Lantern Hollow Drive</u>	HMA	6/1/2011	100% Complete
<u>Three Sisters Road</u>	HMA	6/1/2011	100% Complete
<u>Potomac Falls/Potomac Manors/Great Falls Ests.</u>	Micro Resurfacing	6/6/2011	100% Complete
<u>Wheaton Woods</u>	HMA	6/6/2011	65% Complete
<u>Connecticut Avenue Estates</u>	HMA	6/8/2011	80% Complete
<u>Griffith Park</u>	HMA	6/20/2011	100% Complete
<u>Fox Hills West Phase I</u>	Micro Resurfacing	6/21/2011	55% Complete
<u>Hampshire Greens</u>	Micro Resurfacing	6/27/2011	100% Complete
<u>Hamlet North</u>	HMA	6/30/2011	100% Complete
<u>Rock Creek Manor</u>	Patching	7/5/2011	100% Complete
<u>Edinburgh</u>	HMA	7/11/2011	75% Complete
<u>Bradley Woods</u>	HMA	7/11/2011	100% Complete
<u>Mountain View Estates</u>	HMA	7/15/2011	100% Complete
<u>Sherwood Forest Manor</u>	Micro Resurfacing	7/18/2011	100% Complete
<u>Hadley Farms</u>	Micro Resurfacing	Summer 2011	55% Complete
<u>Parkside Estates</u>	Patching	9/5/2011	5% Complete
<u>Park Overlook</u>	HMA	9/6/2011	45% Complete
<u>Windsor Knolls</u>	Patching	10/3/2011	Scheduled
<u>Olney Village</u>	Patching	10/3/2011	Scheduled
<u>Stoneybrook/Parkside</u>	Patching	TBD	

(13)

Oakview	Patching	Fall 2011	
Fawsett Farms Manor/River Falls	Patching	TBD	
Maplewood	HMA	Fall 2011	
Garrett Park	Patching	Fall 2011	

Click on the underlined links below for more information and to view respective project schedules.

HMA	<u>Residential Hot Mix Asphalt Paving</u>
Patching	<u>Full-Depth Permanent Patching</u>
Rehab	<u>Roadway Rehabilitation</u>
Micro	<u>Micro Resurfacing</u>

Highway Services · Montgomery County Department of Transportation

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mcdot.highway@montgomerycountymd.gov

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end_of_the_skype_highlighting · fax: 240-777-7670 ·

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