

M E M O R A N D U M

April 17, 2009

TO: County Council

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

SUBJECT: **Public Hearing/Action**—supplemental appropriation to the FY09 Capital Budget, Department of Transportation: Resurfacing – Rural/Residential Roads, \$1,058,400; Resurfacing – Primary/Arterial Roads, \$1,344,480; and Rural & Residential Road Rehabilitation, \$197,120 (Source: G.O. Bonds)

Transportation, Infrastructure, Energy and Environment (T&E) Committee recommendation (3-0): Approve the Executive's request now.

* * *

The Executive has recommended a supplemental appropriation in FY09 for each of these three projects, totaling \$2,600,000. These increases are needed to accomplish the scopes of work already programmed for FY09, but cannot be completed because of the rapidly increasing costs of hot-mix asphalt: from \$313 to \$800 per liquid ton. The Executive has also forwarded proposed amendments to the CIP reflecting these expenditures in FY09 (©1-7). Once approved all this additional work can be finished in 2-3 weeks.

Council staff recommendation: Approve the notion that there will be an appropriation, but postpone these approvals until CIP Reconciliation. Once the Council has taken its first cut on all proposed amendments, it can decide whether this work should be completed in FY09 (May or June) or in FY10 (July).

The larger problem is that, by going to hot-mix asphalt from other methods used earlier, the County will fall very far behind in pavement maintenance very quickly. Even with the appropriation, only 40 lane-miles of primary/arterial roadways will be resurfaced, only 55% of the 73 miles that needs to be resurfaced annually to keep up. Only 42 lane-miles of rural/residential streets will be resurfaced, only 27% of the 154 lane-miles that needs to be resurfaced each year to stay even. Finally, even with the appropriation, only 11 lane-miles of rural and residential streets will be rehabilitated, barely 3% of the 352 lane-miles that need rehabilitation; at this rate it will take 32 more years to finish the job.



OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

MEMORANDUM

March 19, 2009

TO: Phil Andrews, President, County Council

FROM: Isiah Leggett, County Executive 

SUBJECT: Supplemental Appropriation #15-S09-CMCG-4 to the FY09 Capital Budget
Montgomery County Government
Department of Transportation
Resurfacing: Rural/Residential Roads (No. 500511), \$1,058,400
Resurfacing: Primary/Arterial Roads (No. 508527), \$1,344,480
Rural & Residential Road Rehabilitation (No. 500914), \$197,120

I am recommending a supplemental appropriation to the FY09 Capital Budget in the amount of \$2,600,000 for the following projects: Resurfacing Rural/Residential Roads (No. 500511) \$1,058,400; Resurfacing Primary/Arterial Roads (No. 508527), \$1,344,480; and Rural & Residential Road Rehabilitation (No. 500914), \$197,120. Appropriation for these projects will fund road resurfacing and rehabilitation countywide to meet the FY09 programmed outputs and resident expectations.

This increase is needed because of the significant escalation in the cost of hot mix asphalt driven by the Liquid Asphalt Price Index due to market volatility during the past paving season. Over the past year, the Liquid Asphalt Price Index, referenced and used in our contracts, has risen from \$313 per liquid ton to over \$800 per liquid ton. This, in turn, has resulted in a corresponding adverse affect on the Department of Transportation's (DOT) resurfacing programs. Specifically, targeted lane mileage outputs will be reduced by roughly 20-percent as a direct result of material cost escalation.

I recommend that the County Council approve this supplemental appropriation in the amount of \$2,600,000 and specify the source of funds as G.O. Bonds.

I appreciate your prompt consideration of this action.

IL:rkc

Attachment: Supplemental Appropriation #15-S09-CMCG-4

c: Arthur Holmes, Jr., Director, Department of Transportation
Joseph Beach, Director, Office of Management & Budget
Kathleen Boucher, Assistant Chief Administrative Officer

Resolution No: _____

Introduced: _____

Adopted: _____

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: Council President at the Request of the County Executive

SUBJECT: Supplemental Appropriation #15-S09-CMCG-4 to the FY09 Capital Budget
Montgomery County Government
Department of Transportation
Resurfacing: Rural/Residential Roads (No. 500511), \$1,058,400
Resurfacing: Primary/Arterial Roads (No. 508527), \$1,344,480
Rural & Residential Road Rehabilitation (No. 500914), \$197,120

Background

1. Section 307 of the Montgomery County Charter provides that any supplemental appropriation shall be recommended by the County Executive who shall specify the source of funds to finance it. The Council shall hold a public hearing on each proposed supplemental appropriation after at least one week's notice. A supplemental appropriation that would comply with, avail the County of, or put into effect a grant or a Federal, State or County law or regulation, or one that is approved after January 1 of any fiscal year, requires an affirmative vote of five Councilmembers. A supplemental appropriation for any other purpose that is approved before January 1 of any fiscal year requires an affirmative vote of six Councilmembers. The Council may, in a single action, approve more than one supplemental appropriation. The Executive may disapprove or reduce a supplemental appropriation, and the Council may reapprove the appropriation, as if it were an item in the annual budget.
2. The County Executive recommends the following capital project appropriation increases:

<u>Project Name</u>	<u>Project Number</u>	<u>Cost Element</u>	<u>Amount</u>	<u>Source of Funds</u>
Resurfacing:				
Rural/Residential Roads	500511	Construction	\$1,058,400	G.O. Bonds
Resurfacing:				
Primary/Arterial Roads	508527	Construction	\$1,344,480	G.O. Bonds
Rural & Residential Road Rehabilitation	500914	Construction	<u>\$197,120</u>	G.O. Bonds
TOTAL			\$2,600,000	G.O. Bonds

3. This increase is needed because of the significant escalation in the cost of hot mix asphalt driven by the Liquid Asphalt Price Index due to market volatility. Over the past year, the Liquid Asphalt Price Index, referenced and used in our contracts, has risen from \$313 per liquid ton to over \$800 per liquid ton. This, in turn, has resulted in a corresponding adverse affect on the Department of Transportation's (DOT) resurfacing programs. Specifically, targeted lane mileage outputs will be reduced by roughly 20-percent as a direct result of material cost escalation.
4. The County Executive recommends a supplemental appropriation in the amount of \$2,600,000 for the following projects: Resurfacing Rural/Residential Roads (No. 500511) \$1,058,400; Resurfacing Primary/Arterial Roads (No. 508527), \$1,344,480; and Rural & Residential Road Rehabilitation (No. 500914), \$197,120, and specifies that the source of funds will be G.O. Bonds.
5. Notice of public hearing was given and a public hearing was held.

Action

The County Council for Montgomery County, Maryland, approves the following action:

A supplemental appropriation to the FY09 Capital Budget is approved as follows:

<u>Project Name</u>	<u>Project Number</u>	<u>Cost Element</u>	<u>Amount</u>	<u>Source of Funds</u>
Resurfacing: Rural/Residential Roads	500511	Construction	\$1,058,400	G.O. Bonds
Resurfacing: Primary/Arterial Roads	508527	Construction	\$1,344,480	G.O. Bonds
Rural & Residential Road Rehabilitation	500914	Construction	<u>\$197,120</u>	G.O. Bonds
TOTAL			\$2,600,000	G.O. Bonds

This is a correct copy of Council action.

Linda M. Lauer, Clerk of the Council



SUPPLEMENTAL OR SPECIAL APPROPRIATION REQUEST SUMMARY

1. Please fill in the following table:

Agency	Montgomery County Government
Department	Department of Transportation
Fund (County Government only)	CIP
Fiscal year	FY09
Supplemental or Special	Supplemental

2. What is the amount and source of funding?

Source of funding (Please list sources)	Amount
G.O. Bonds	\$2,600,000
Total request	\$2,600,000

3. Please explain why you did not request this during the annual budget process.

The cost escalation cited herein is unprecedented and was unknown during the FY09-14 budget preparation.

Since the budget preparation, there has been significant escalation of the Liquid Asphalt Price Index due to market volatility. The Maryland State Highway Administration (SHA), in combination with the Maryland Asphalt Association (MAA), publishes a monthly Liquid Asphalt Price Index. Over the past year, the cost index of liquid asphalt, referenced and used in our contracts, has risen from \$313 per liquid ton to over \$800 per liquid ton, resulting in our local asphalt prices to increase an average of 25% to furnish and install (in-place) hot mix asphalt.

Without the additional funding request, this cost escalation will result in a lower lane mileage output of road resurfacing. Specifically, targeted lane mileage outputs will be reduced by roughly 20-percent as a direct result of material cost escalation.

Rural & Residential 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

March 16, 2009
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY07	Est. FY08	Total 6 Years	FY09	FY10	FY11	FY12	FY13	FY14	Beyond 6 Years
Planning, Design, and Supervision	5,400	0	0	5,400	600	800	1,000	1,000	1,000	1,000	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	20,497	0	0	20,497	597	900	3,100	4,400	5,300	6,200	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	25,897	0	0	25,897	1,197	1,700	4,100	5,400	6,300	7,200	*

FUNDING SCHEDULE (\$000)

G.O. Bonds	18,197	0	0	18,197	1,197	1,500	3,500	4,000	4,000	4,000	0
Recordation Tax Premium	7,700	0	0	7,700	0	200	600	1,400	2,300	3,200	0
Total	25,897	0	0	25,897	1,197	1,700	4,100	5,400	6,300	7,200	0

DESCRIPTION

This project provides for the major rehabilitation of 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. A recent sampling of residential roadway pavements indicate that over 1,400 lane-miles of residential roadway pavement require structural rehabilitation. 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 where an otherwise aggressive pavement restoration approach is deemed impractical. Rural and residential roads that have been rated as "poor" (level 2) or "very poor" (level 1) conditions will be rehabilitated.

COST CHANGE

Add funding required to maintain planned lane output which had been reduced due to cost escalation in the price of liquid asphalt.

JUSTIFICATION

The Department of Transportation (DOT) has undertaken a sample study of residential road pavement conditions utilizing a pavement condition rating system based upon types of observed distress (i.e., areas of pavement fatigue, base and sub-base failures, cracking, spalling, patches, and profile) and extent of observed distress (i.e., percentage of surface area exhibiting various forms of distress). Based upon levels of observed pavement distress, pavements are rated as very good (level 5), good (level 4), fair (level 3), poor (level 2), and very poor (level 1).

The study included a cross section of approximately 6 percent of the residential road inventory (248 lane miles). The study, which is deemed representative of the residential road inventory as whole, will be expanded to include the entire rural and residential road inventory of 3,885 lane miles. The expanded study, to be conducted by a consultant is expected to be completed by August 2008.

OTHER

Hot mix asphalt pavements have a finite service 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 (ADT), 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.

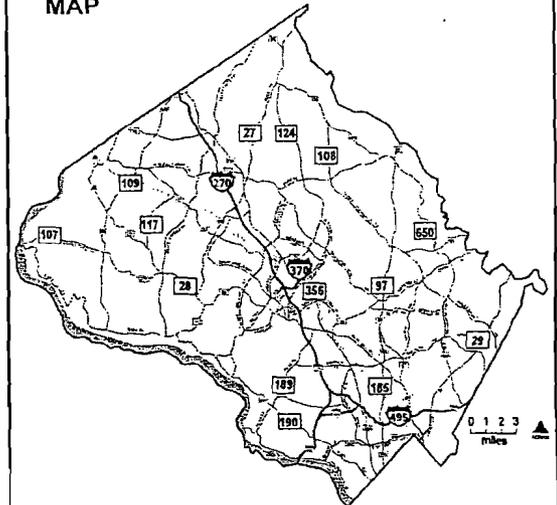
APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY09	(\$000)
First Cost Estimate		
Current Scope	FY09	18,000
Last FY's Cost Estimate		0
Appropriation Request	FY09	1,000
Appropriation Request Est.	FY10	1,700
Supplemental Appropriation Request		197
Transfer		0
Cumulative Appropriation		0
Expenditures / Encumbrances		0
Unencumbered Balance		0
Partial Closeout Thru	FY06	0
New Partial Closeout	FY07	0
Total Partial Closeout		0

COORDINATION

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

MAP



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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

March 17, 2009
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY07	Est. FY08	Total 6 Years	FY09	FY10	FY11	FY12	FY13	FY14	Beyond 6 Years
Planning, Design, and Supervision	7,864	0	1,248	6,616	993	586	1,206	1,277	1,277	1,277	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	48,449	0	5,220	43,229	6,352	7,914	7,294	7,223	7,223	7,223	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	56,313	0	6,468	49,845	7,345	8,500	8,500	8,500	8,500	8,500	*

FUNDING SCHEDULE (\$000)

G.O. Bonds	55,933	0	6,088	49,845	7,345	8,500	8,500	8,500	8,500	8,500	0
Current Revenue: General	380	0	380	0	0	0	0	0	0	0	0
Total	56,313	0	6,468	49,845	7,345	8,500	8,500	8,500	8,500	8,500	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

Add funding required to maintain planned lane output which had been reduced due to cost escalation in the price of liquid asphalt.

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 assist in the relief of traffic congestion.

The March 2006, "Report of the Infrastructure Maintenance Task Force," identified an annual resurfacing program level of effort based on a 12 year resurfacing frequency.

OTHER

One aspect of this project will focus on improving pedestrian mobility by creating a safer walking environment, utilizing selected engineering technologies, and ensuring 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 Americans with Disabilities Act (ADA) standards.

OTHER DISCLOSURES

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

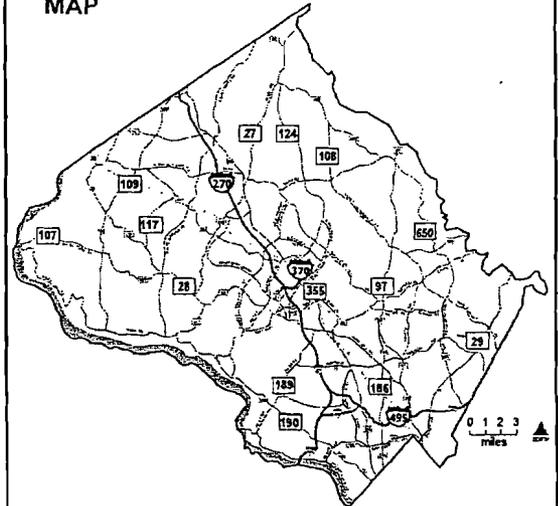
APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY85	(\$000)
First Cost Estimate	FY09	54,968
Current Scope		
Last FY's Cost Estimate		45,380
Appropriation Request	FY09	6,000
Appropriation Request Est.	FY10	8,500
Supplemental Appropriation Request		1,345
Transfer		0
Cumulative Appropriation		6,468
Expenditures / Encumbrances		4,778
Unencumbered Balance		1,690
Partial Closeout Thru	FY06	42,346
New Partial Closeout	FY07	7,254
Total Partial Closeout		49,600

COORDINATION

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

MAP



Resurfacing: Rural/Residential Roads -- No. 500511

Category
Subcategory
Administering Agency
Planning Area

Transportation
Highway Maintenance
Transportation
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

March 16, 2009
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY07	Est. FY08	Total 6 Years	FY09	FY10	FY11	FY12	FY13	FY14	Beyond 6 Years
Planning, Design, and Supervision	7,518	1	423	7,094	993	1,064	1,206	1,277	1,277	1,277	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	35,273	5,180	2,129	27,964	5,065	4,436	4,294	4,723	4,723	4,723	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	42,791	5,181	2,552	35,058	6,058	5,500	5,500	6,000	6,000	6,000	*

FUNDING SCHEDULE (\$000)

G.O. Bonds	40,841	3,255	2,528	35,058	6,058	5,500	5,500	6,000	6,000	6,000	0
Current Revenue: General	333	309	24	0	0	0	0	0	0	0	0
PAYGO	1,617	1,617	0	0	0	0	0	0	0	0	0
Total	42,791	5,181	2,552	35,058	6,058	5,500	5,500	6,000	6,000	6,000	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 3885 lane miles of rural and residential roads. The department estimates that 2006 lane miles (52-percent) of rural / residential pavement requires significant levels of preventative maintenance to safeguard the infrastructure from incremental failure requiring more costly rehabilitative / reconstruction efforts. 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. Rural and residential roads that have been rated as 'fair condition' (level 3) are ideal candidates for preventative maintenance.

CAPACITY

This project will not affect the capacity of the rural and residential road network. However, additional lane miles of rural and residential road will be added to the existing inventory as new roads are accepted by Executive Order.

COST CHANGE

Add funding required to maintain planned lane output which had been reduced due to cost escalation in the price of liquid asphalt.

JUSTIFICATION

The Department of Transportation (DOT) has undertaken a sample study of rural and residential road pavement conditions utilizing a pavement condition rating system based upon types of observed distress (i.e., areas of pavement fatigue, base and sub-base failures, cracking, spalling, patches, and profile) and extent of observed distress (i.e., percentage of surface area exhibiting various forms of distress). Based upon levels of observed pavement distress, pavements are rated as very good (level 5), good (level 4), fair (level 3), poor (level 2), and very poor (level 1). The study included a cross section of approximately 6 percent of the residential road inventory (248 lane miles). The study, which is deemed representative of the residential road inventory as a whole, will be expanded to include the entire rural / residential road inventory of 3,885 lane miles. The expanded study, to be conducted by a consultant, is expected to be completed by August 2008.

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 and Highway 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. Expenditures will continue indefinitely.

OTHER DISCLOSURES

- * Expenditures will continue indefinitely.

APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY05	(\$000)
First Cost Estimate	FY09	41,733
Current Scope		
Last FY's Cost Estimate		19,433
Appropriation Request	FY09	5,000
Appropriation Request Est.	FY10	5,500
Supplemental Appropriation Request		1,058
Transfer		0
Cumulative Appropriation		7,733
Expenditures / Encumbrances		5,578
Unencumbered Balance		2,155
Partial Closeout Thru	FY06	0
New Partial Closeout	FY07	0
Total Partial Closeout		0

COORDINATION

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

MAP

