

# Bridge Preservation Program -- No. 500313

Category  
Subcategory  
Administering Agency  
Planning Area

Transportation  
Bridges  
Transportation  
Countywide

Date Last Modified  
Required Adequate Public Facility  
Relocation Impact  
Status

January 04, 2012  
No  
None.  
On-going

## EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY11	Est. FY12	Total 6 Years	FY13	FY14	FY15	FY16	FY17	FY18	Beyond 6 Years
Planning, Design, and Supervision	2,465	1,258	335	872	142	142	142	142	152	152	0
Land	28	6	10	12	2	2	2	2	2	2	0
Site Improvements and Utilities	2	2	0	0	0	0	0	0	0	0	0
Construction	6,282	3,542	580	2,160	360	360	360	360	360	360	0
Other	2	2	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>8,779</b>	<b>4,810</b>	<b>925</b>	<b>3,044</b>	<b>504</b>	<b>504</b>	<b>504</b>	<b>504</b>	<b>514</b>	<b>514</b>	<b>*</b>

## FUNDING SCHEDULE (\$000)

Federal Aid	366	366	0	0	0	0	0	0	0	0	0
G.O. Bonds	8,373	4,444	885	3,044	504	504	504	504	514	514	0
Intergovernmental	40	0	40	0	0	0	0	0	0	0	0
<b>Total</b>	<b>8,779</b>	<b>4,810</b>	<b>925</b>	<b>3,044</b>	<b>504</b>	<b>504</b>	<b>504</b>	<b>504</b>	<b>514</b>	<b>514</b>	<b>0</b>

## DESCRIPTION

This project includes actions or strategies that prevent, delay or reduce deterioration of bridges or bridge elements, restore the function of existing bridges, keep bridges in good condition and extend their useful life. Preservation actions may be preventive or condition driven. This project provides for removal of corrosion and installation of protective coatings on existing County steel bridges that have been identified as needing surface recoating through the Biennial Bridge Inspection Program. In addition, this project provides for the repair or replacement of leaking deck joints to minimize the deterioration and corrosion of bridge superstructure and substructure elements beneath the joints as identified through the biennial bridge inspection program. Bridge preservation field operations include the removal of the existing coating system which may contain hazardous materials; containment of blast cleaning and waste paint particles; disposal of the hazardous materials at a pre-approved disposal site, as required by Maryland and Federal environmental regulations; installation of protective coating system; joint repair or replacement; and inspection to ensure compliance with environmental and contract requirements.

## COST CHANGE

Increase due to the addition of FY17-18 and overhead costs to this on-going level of effort project.

## JUSTIFICATION

The benefits of this program will include extending the useful service life of existing steel bridges, prevention of long-term structural deficiencies, decreases in vehicle load restrictions, and reduced potential road closures and public inconvenience. The long-term goal of this program will be to protect existing bridges and keep them in good condition to reduce bridge renovation/replacement costs. The expected life cycle of a coating system is 15 years. Candidate bridges for each year are identified based on the bridge coating evaluations under the Biennial Bridge Inspection Program and the available funds under the bridge preservation program.

The County currently has 117 highway and 28 pedestrian steel girder, beam and truss structures in its bridge inventory. These numbers will change when steel highway or pedestrian bridges are added into or dropped from the County's bridge inventory. The degree of specialized work required to restore the protective coatings to in-service bridges is beyond the scope of routine operations. Proper protective coating systems are an essential component of bridge maintenance to prevent long-term structural steel deterioration. The County currently has 50 bridges with deck joints in its inventory. Damage both to the joint and to the portion of the bridge beneath the joint that is exposed to debris, water and deicing salts must be addressed and prevented to prolong the life of the bridge. Many defects identified through the Biennial Bridge Inspection Program are the direct result of bridges not being properly protected to withstand chemical and environmental elements. These defects include frozen and deteriorated steel bearings, corroded structural steel, and steel beam section loss.

## OTHER

Sixty-four bridges have been repainted since the first contract in FY03. Bridge painting is no longer eligible for Federal aid; therefore, Federal aid has been adjusted. The "Intergovernmental" revenue shown in the funding schedule is from Howard County for its share of painting costs for two bridges that Montgomery County and Howard County share.

## OTHER DISCLOSURES

- \* Expenditures will continue indefinitely.

## APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY03	(\$000)
First Cost Estimate	FY13	8,779
Current Scope		
Last FY's Cost Estimate		7,751
Appropriation Request	FY13	1,008
Appropriation Request Est.	FY14	0
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		5,735
Expenditures / Encumbrances		5,112
Unencumbered Balance		623
Partial Closeout Thru	FY10	0
New Partial Closeout	FY11	0
Total Partial Closeout		0

## COORDINATION

Maryland Department of Natural Resources  
Maryland State Highway Administration  
Occupational Safety and Health  
Administration  
Maryland-National Capital Park and Planning  
Commission  
Utilities  
CSX Transportation  
Washington Metropolitan Area Transit  
Authority  
Montgomery County Department of Permitting  
Services  
Bridge Renovation Program

## MAP

