Bridge Preservation Program (P500313)

Category
Sub Category
Administering Agency
Planning Area

Transportation Bridges

Transportation (AAGE30)

Date Last Modified

12/23/13

Required Adequate Public Facility Relocation Impact

No None

Countywide

Status Ongoing

	Total	Thru FY13	Est FY14	Total 6 Years	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Beyond 6 Yrs
			EXPENDIT	JRE SCHE	DULE (\$000)s)					
Planning, Design and Supervision	2,769	1,428	449	892	142	142	152	152	152	152	0
Land	32	6	14	12	2	2	2	2	2	2	0
Site Improvements and Utilities	2	2	0	0	0	0	0	0	0	0	0
Construction	7,002	4,098	744	2,160	360	360	360	360	360	360	0
Other	2	2	0	0	0	0	0	0	0	0	0
Total	9,807	5,536	1,207	3,064	504	504	514	514	514	514	0
			FUNDIN	G SCHEDU	LE (\$000s)						
Federal Aid	366	366	0	0	0	0	0	0	0	0	0
G.O. Bonds	9,401	5,170	1,167	3,064	504	504	514	514	514	514	0
Intergovernmental	40	0	40	0	0	0	0	0	0	0	0
Total	9 807	5 536	1 207	3 064	504	504	514	514	514	514	0

APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 15	1,008
Appropriation Request Est.	FY 16	0
Supplemental Appropriation Request	0	
Transfer	0	
Cumulative Appropriation		6,743
Expenditure / Encumbrances	5,684	
Unencumbered Balance	1,059	

Date First Appropriation	FY 03	
First Cost Estimate		
Current Scope	FY 15	9,807
Last FY's Cost Estimate		8,779
Partial Closeout Thru		0
New Partial Closeout		0
Total Partial Closeout		0

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 FY19-20 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 115 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.

Disclosures

Expenditures will continue indefinitely.

Coordination

Bridge Preservation Program (P500313)

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