

Delaware Memorial Bridge - New Projects

Crossings Strategic Capital Improvement Plan

Ranking	Project	2021	External Funding 2021	2022	External Funding 2022	2023	External Funding 2023	2024	External Funding 2024	2025	External Funding 2025
	New Projects										
29	Bridge Worker Fall Protection	\$ 460,000	\$ -	\$ 1,270,000	\$ -	\$ 1,270,000	\$ -	\$ -	\$ -	\$ -	\$ -
	Grand Total	\$ 460,000	\$ -	\$ 1,270,000	\$ -	\$ 1,270,000	\$ -	\$ -	\$ -	\$ -	\$ -

29 **Bridge Worker Fall Protection - Safety**

The walkways underneath the bridges are original to the Delaware Memorial Bridges and are not up to safety standards. The project will install lifelines throughout the length of the bridge for personnel to tie-off while accessing the walkways. This project has an estimated DRBA cost of \$460,000 in 2021 and \$2,540,000 in the out years. This effort has no anticipated annual operating cost impact.

Delaware Memorial Bridge - Out Year Projects

Crossings Strategic Capital Improvement Plan

Ranking	Project	2021	External Funding		External Funding		External Funding		External Funding	
			2021	2022	2022	2023	2023	2024	2024	2025
	Out Year Projects									
67	Cable Preservation (Both Structures)	\$ -	\$ -	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
68	Fall Prevention Fencing	\$ -	\$ -	\$ 2,000,000	\$ -	\$ -	\$ 10,000,000	\$ -	\$ 10,000,000	\$ -
73	Emergency Lighting for the Anchorages-Towers	\$ -	\$ -	\$ 515,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
74	Bridge Management and Monitoring System	\$ -	\$ -	\$ 500,000	\$ -	\$ 2,000,000	\$ -	\$ 1,000,000	\$ -	\$ -
75	DMB Tower Elevator Communications and Controls	\$ -	\$ -	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
78	Fitness Center Renovations (DMB)	\$ -	\$ -	\$ 100,000	\$ -	\$ 350,000	\$ -	\$ -	\$ -	\$ -
80	Administration Building Second Floor Renovations	\$ -	\$ -	\$ 35,000	\$ -	\$ 300,000	\$ -	\$ -	\$ -	\$ -
82	Route 9 Bridge Repairs	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ -	\$ 3,200,000	\$ -	\$ -
83	Norfolk RR Backwall Replacement	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ 2,500,000	\$ -	\$ -
84	1st Structure Safety Walk & Curb Drainage Retrofit	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ -	\$ 2,000,000	\$ -	\$ -
	Grand Total	\$ -	\$ -	\$ 4,950,000	\$ -	\$ 3,050,000	\$ -	\$ 18,700,000	\$ -	\$ 10,000,000

67 **Cable Preservation (Both Structures) - Asset Preservation**

As a result of the cable investigation it was determined that preventive measures are necessary to maintain the service life and capacity of the Delaware Memorial Bridge structures. The project installed a dehumidification system to preserve the main suspension cables in 2018 and maintains an active maintenance and monitoring program as part of the contract. This project has an estimated DRBA cost of \$1,000,000 in the out years. This effort has an anticipated annual maintenance and monitoring cost of \$54,000.

68 **Fall Prevention Fencing - Safety**

The project aims to install anti-climb mesh fencing along both spans of the Delaware Memorial Bridges. This project has an estimated DRBA cost of \$22,000,000 in the out years. This effort has no anticipated annual operating cost impact.

73 **Emergency Lighting for the Anchorages-Towers - Safety**

There is a need for emergency pathway lighting in the towers and anchorages of the Delaware Memorial Bridge. The project programs the assessment, design, and installation of emergency lighting systems for these areas. This project has an estimated DRBA cost of \$515,000 in the out years. This effort has no anticipated annual operating cost impact.

74 **Bridge Management and Monitoring System - Asset Preservation**

The 1st and 2nd Structures are aging and require significant monitoring and maintenance to ensure they continue to serve as an essential asset to the traveling public. The implementation of a bridge monitoring system is recommended to track the condition of critical structural elements and facilitate prioritization and documentation of corrective measures. This project has an estimated DRBA cost of \$3,500,000 in the out years. This effort has an anticipated annual operating cost of \$50,000.

75 **DMB Tower Elevator Communications and Controls - Efficiency and Sustainability**

There is a desire to monitor access and ensure proper usage of the recently rehabilitated Tower Elevators. The project programs the design and installation of communications to the towers and installation of card readers for the Tower Elevators. This project has an estimated DRBA cost of \$800,000 in the out years. This effort has no anticipated annual operating cost impact.

Delaware Memorial Bridge - Out Year Projects

78 **Fitness Center Renovations (DMB) - Efficiency and Sustainability**

The fitness center holds obsolete equipment and unused space. The purpose of this project is to renovate the area to effectively use the room and upgrade the equipment. This project has an estimated DRBA cost of \$450,000 in the out years. This effort has no anticipated annual operating cost impact.

80 **Administration Building Second Floor Renovations - Efficiency and Sustainability**

Extensive renovations have been performed throughout the east wing of the Delaware Memorial Bridge Administrative Building with exception of the upper foyer. The project programs renovations to the flooring, stairwells, and other features throughout this space. This project has an estimated DRBA cost of \$335,000 in the out years. This effort has no anticipated annual operating cost impact.

82 **Route 9 Bridge Repairs - Asset Preservation**

The Route 9 bridge deck is showing signs of deterioration near the joints. The project programs the removal and replacement of existing bridge joints along with the repair of the associated portions of the bridge deck. This project has an estimated DRBA cost of \$3,350,000 in the out years. This effort has no anticipated annual operating cost impact.

83 **Norfolk RR Backwall Replacement - Asset Preservation**

The backwall of west abutment of the bridge over the Norfolk Southern Railroad has developed a large longitudinal crack that extends through the length of the backwall. The project aims to replace this backwall and the expansion joint above with a jointless backwall that will be designed to perform better and eliminate leakages from the joint. This project has an estimated DRBA cost of \$2,600,000 in the out years. This effort has no anticipated annual operating cost impact.

84 **1st Structure Safety Walk & Curb Drainage Retrofit - Safety**

The 1st structure currently has an open grate safety walk which allows water, road salts, and sand to corrode the structural steel beneath the road level. The project programs the design and construction necessary to convert from an open grate safety walk to a solid surface. This project has an estimated DRBA cost of \$2,150,000 in the out years. This effort has no anticipated annual operating cost impact.