

Maryland  
Transportation  
Authority



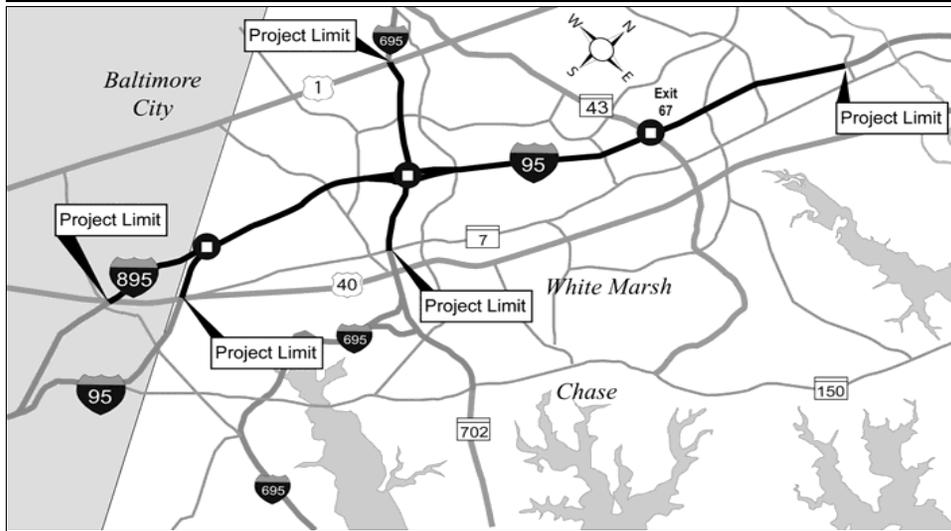
**MARYLAND TRANSPORTATION AUTHORITY**

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**MARYLAND TRANSPORTATION AUTHORITY  
CAPITAL PROGRAM SUMMARY  
(\$ MILLIONS)**

	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>SIX-YEAR TOTAL</u>
<b><u>Construction Program</u></b>							
Major Projects	169.9	155.2	157.9	125.2	112.2	37.7	758.3
System Preservation Minor Projects	94.0	162.2	195.5	186.4	201.5	189.5	1,029.1
<b><u>Development &amp; Evaluation Program</u></b>	<u>14.4</u>	<u>15.0</u>	<u>4.8</u>	<u>8.8</u>	<u>9.6</u>	<u>9.8</u>	<u>62.4</u>
<b>TOTAL</b>	278.3	332.4	358.2	320.5	323.3	237.0	1,849.8

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**PROJECT:** I-95 John F. Kennedy Memorial Highway - Express Toll Lanes (ETL)

**DESCRIPTION:** Constructed two Express Toll Lanes in each direction from I-895 North to north of MD 43 (8.0 miles) and improved the interchanges with I-895, I-695 and MD 43. (BRAC related.)

**PURPOSE & NEED SUMMARY STATEMENT:** This segment of I-95 is the most congested section of I-95 in Maryland north of Baltimore City. Currently, I-95, south of MD 43, operates at Level of Service (LOS) F (lowest level of efficiency) during morning and evening rush hours. By 2025, this section is also expected to operate at LOS E (irregular flow with speed variations) and LOS F (lowest level of efficiency, frequent slowing required) during weekend peak periods. I-95 is the backbone of the east coast's transportation network and is essential to the movement of people and freight.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |  |   |
|--|---|
| <input type="checkbox"/> Safety & Security             | <input type="checkbox"/> Environmental Stewardship      |
| <input type="checkbox"/> System Preservation           | <input type="checkbox"/> Community Vitality             |
| <input checked="" type="checkbox"/> Quality of Service | <input checked="" type="checkbox"/> Economic Prosperity |

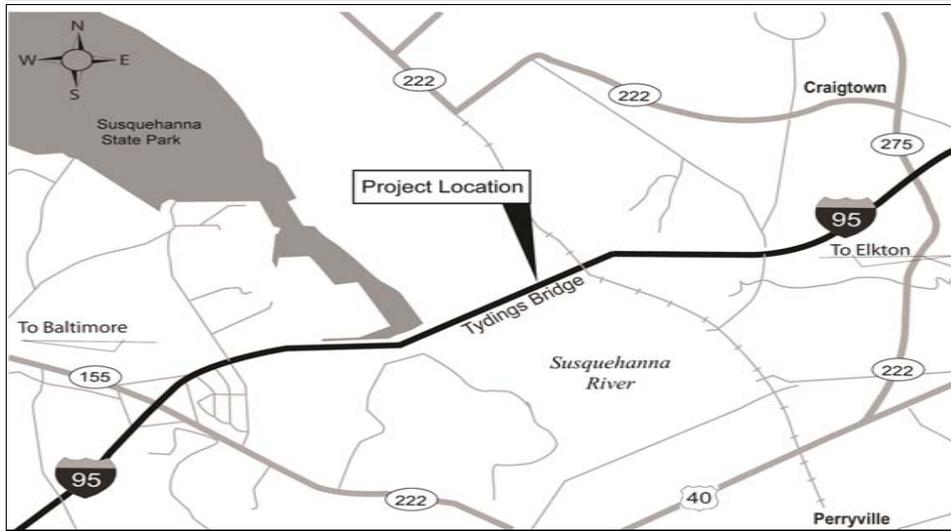
**ASSOCIATED IMPROVEMENTS:** None.

**EXPLANATION:** I-95, south of MD 43, experiences congestion during the morning and evening rush hours. By 2025, this section is also expected to experience congestion during weekend peak periods.

**STATUS:** The Express Toll Lanes are open to service. Improvements to the I-95/I-695 interchange are underway.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

POTENTIAL FUNDING SOURCE:		<input type="checkbox"/> SPECIAL		<input type="checkbox"/> FEDERAL		<input type="checkbox"/> GENERAL		<input checked="" type="checkbox"/> OTHER			
PHASE	TOTAL ESTIMATED COST (\$000)	TOTAL EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE	
					.....2018.....	.....2019.....	.....2020.....	.....2021.....			
Planning	6,032	6,032	0	0	0	0	0	0	0	0	
Engineering	119,732	119,113	619	0	0	0	0	0	619	0	
Right-of-way	47,507	47,507	0	0	0	0	0	0	0	0	
Construction	924,448	879,122	36,897	8,429	0	0	0	0	45,326	0	
<b>Total</b>	<b>1,097,719</b>	<b>1,051,774</b>	<b>37,516</b>	<b>8,429</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>45,945</b>	<b>0</b>	
Federal-Aid	0	0	0	0	0	0	0	0	0	0	



**PROJECT:** I-95 John F. Kennedy Memorial Highway - Clean and Zone Paint the Tydings Bridge

**DESCRIPTION:** Clean and paint rusted seams and crevices and paint the flat surfaces of the Tydings Bridge where the paint is showing wear. Also, perform necessary structural repairs.

**PURPOSE & NEED SUMMARY STATEMENT:** Paint throughout the bridge is showing wear. This project will address existing wear and prevent further wear.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |   |  |
|---|--|
| <input type="checkbox"/> Safety & Security              | <input type="checkbox"/> Environmental Stewardship |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Community Vitality        |
| <input type="checkbox"/> Quality of Service             | <input type="checkbox"/> Economic Prosperity       |

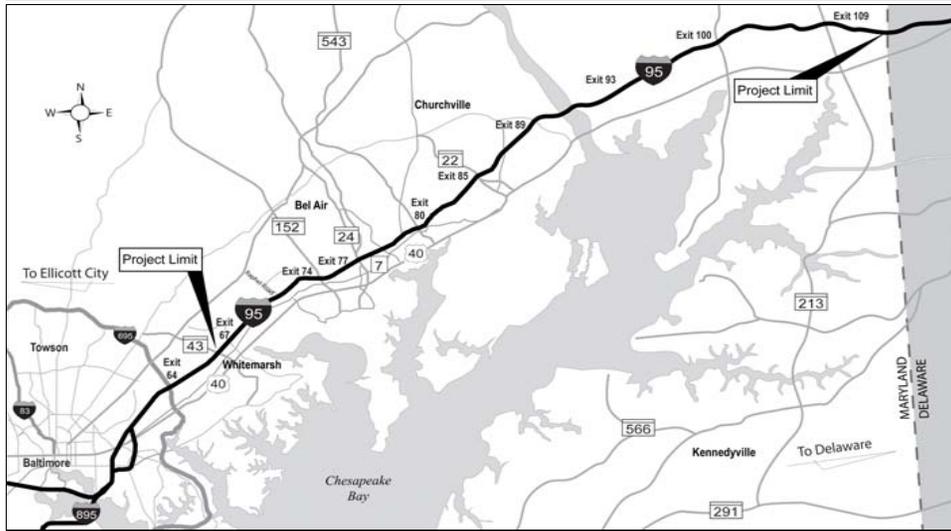
**ASSOCIATED IMPROVEMENTS:** None.

**EXPLANATION:** This project will bring uniformity to the paint system and extend the life of the existing system by ten years.

**STATUS:** Engineering is complete. Construction is underway.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

POTENTIAL FUNDING SOURCE:		<input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER									
PHASE	TOTAL				PROJECTED CASH REQUIREMENTS				SIX YEAR TOTAL	BALANCE TO COMPLETE	
	ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY			
Planning	0	0	0	0	0	0	0	0	0	0	
Engineering	101	101	0	0	0	0	0	0	0	0	
Right-of-way	0	0	0	0	0	0	0	0	0	0	
Construction	10,481	2,485	6,742	1,254	0	0	0	0	7,996	0	
Total	10,582	2,586	6,742	1,254	0	0	0	0	7,996	0	
Federal-Aid	0	0	0	0	0	0	0	0	0	0	



**PROJECT:** I-95 John F. Kennedy Memorial Highway - Resurfacing

**DESCRIPTION:** Resurface I-95 northbound and southbound from MD 43 to the Maryland/Delaware state line. Phase I is from MD 43 to MD 24. Phase II is from MD 24 to the Tydings Bridge. Phase III is from the Tydings Bridge to the Maryland/Delaware state line.

**PURPOSE & NEED SUMMARY STATEMENT:** The I-95 roadway north of MD 43 is in need of resurfacing. Phase I is I-95 from MD 43 to MD 24, Phase II is from MD 24 to the Tydings Bridge and Phase III is from the Tydings Bridge to the Maryland/Delaware state line. Only Phases I and II are funded at this time.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- Safety & Security
- System Preservation
- Quality of Service
- Environmental Stewardship
- Community Vitality
- Economic Prosperity

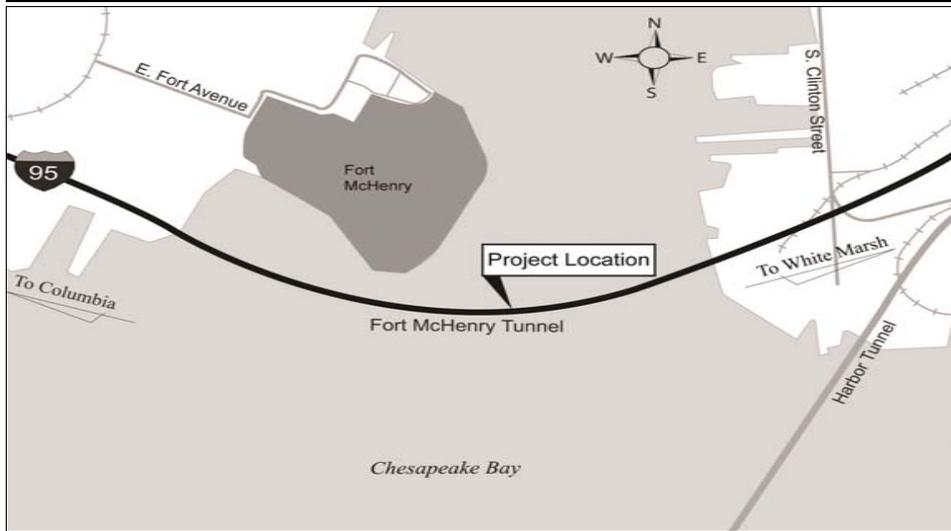
**ASSOCIATED IMPROVEMENTS:** None.

**EXPLANATION:** The I-95 roadway is in need of resurfacing from MD 43 to the Maryland/Delaware state line (northbound and southbound). Phase I is I-95 from MD 43 to MD 24, Phase II is from MD 24 to the Tydings Bridge and Phase III is from the Tydings Bridge to the Maryland/Delaware state line.

**STATUS:** Construction of Phase I is complete. Engineering is complete and construction is underway for Phase II.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

POTENTIAL FUNDING SOURCE:		<input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER								
PHASE	TOTAL				PROJECTED CASH REQUIREMENTS				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	FOR PLANNING PURPOSES ONLY					
					.....2018.....	.....2019.....	.....2020.....	.....2021.....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	305	305	0	0	0	0	0	0	0	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	30,907	16,805	12,936	1,166	0	0	0	0	14,102	0
<b>Total</b>	<b>31,212</b>	<b>17,110</b>	<b>12,936</b>	<b>1,166</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,102</b>	<b>0</b>
Federal-Aid	0	0	0	0	0	0	0	0	0	0



**PROJECT:** I-95 Fort McHenry Tunnel - Rehabilitate Concrete Tunnel Deck

**DESCRIPTION:** Rehabilitate the tunnel deck for all four bores.

**PURPOSE & NEED SUMMARY STATEMENT:** The bottom of the tunnel deck is showing signs of wear throughout the length of the tunnel. This improvement will significantly increase the useful life of the tunnel deck.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |   |  |
|---|--|
| <input type="checkbox"/> Safety & Security              | <input type="checkbox"/> Environmental Stewardship |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Community Vitality        |
| <input type="checkbox"/> Quality of Service             | <input type="checkbox"/> Economic Prosperity       |

**ASSOCIATED IMPROVEMENTS:**

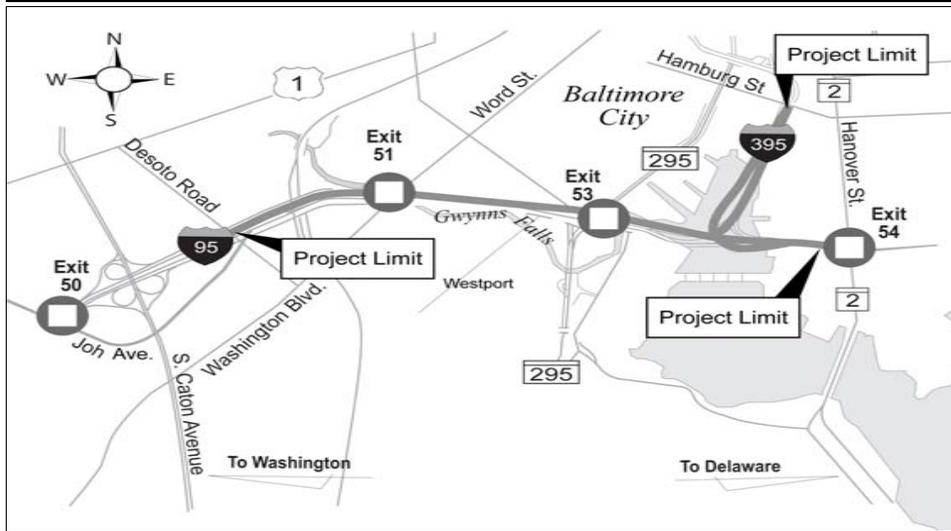
I-95/I-395 Fort McHenry Tunnel - Rehabilitate Decks, Repair Superstructure, Replace Joints, Zone Paint and Other Miscellaneous Repairs South of the Tunnel - Construction Program (Line 5)

**EXPLANATION:** The tunnel deck shows signs of wear. This improvement will extend the useful life of the tunnel deck.

**STATUS:** Engineering is complete. Construction is underway.

POTENTIAL FUNDING SOURCE:		<input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER								
PHASE	TOTAL				PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	.....2018.....	.....2019.....	.....2020.....	.....2021.....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	665	665	0	0	0	0	0	0	0	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	35,773	28,396	7,377	0	0	0	0	0	7,377	0
Total	36,438	29,061	7,377	0	0	0	0	0	7,377	0
Federal-Aid	0	0	0	0	0	0	0	0	0	0

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** Cost decreased by \$2.0 million because all quantities in bid items will not be used.



**PROJECT:** I-95/I-395 Fort McHenry Tunnel - Rehab Decks, Repair Superstructure, Replace Joints, Zone Paint and Other Misc. Repairs

**DESCRIPTION:** Rehabilitate decks, repair superstructure, replace joints, add drainage troughs and paint fifty-one bridges north and south of the Fort McHenry Tunnel.

**PURPOSE & NEED SUMMARY STATEMENT:** The decks exhibit varying degrees of deterioration. Superstructure and paint exhibit various degrees of wear. This improvement will correct current wear and extend the useful life of the decks and superstructure. The joints are near the end of their useful life and need to be replaced.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |   |  |
|---|--|
| <input type="checkbox"/> Safety & Security              | <input type="checkbox"/> Environmental Stewardship |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Community Vitality        |
| <input type="checkbox"/> Quality of Service             | <input type="checkbox"/> Economic Prosperity       |

**ASSOCIATED IMPROVEMENTS:**

I-95 Ft. McHenry Tunnel - Rehabilitate Concrete Tunnel Deck - Construction Program (Line 4)

**EXPLANATION:** Repairs are needed to correct current wear and to prevent further wear of the decks, superstructure and paint. The joints are nearing the end of their useful life and need to be replaced.

**STATUS:** Engineering is complete. Construction is underway.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

POTENTIAL FUNDING SOURCE:		<input type="checkbox"/> SPECIAL		<input type="checkbox"/> FEDERAL		<input type="checkbox"/> GENERAL		<input checked="" type="checkbox"/> OTHER			
PHASE	TOTAL ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE	
					.....2018.....	.....2019.....	.....2020.....	.....2021.....			
Planning	0	0	0	0	0	0	0	0	0	0	
Engineering	4,750	4,750	0	0	0	0	0	0	0	0	
Right-of-way	0	0	0	0	0	0	0	0	0	0	
Construction	80,775	53,027	24,787	2,961	0	0	0	0	27,748	0	
Total	85,525	57,777	24,787	2,961	0	0	0	0	27,748	0	
Federal-Aid	0	0	0	0	0	0	0	0	0	0	

2205, 2207, 2262



**PROJECT:** I-95 Fort McHenry Tunnel - Replace Weathering Steel High Mast Light Poles North and South of the Tunnel

**DESCRIPTION:** Replace all weathering steel high mast light poles with galvanized steel poles on I-95 in Baltimore City, north and south of the Fort McHenry Tunnel. Also, replace foundations and associated conduits/controls. Most of these weathering steel poles represent the original lighting structures when the facility was first built in 1985.

**PURPOSE & NEED SUMMARY STATEMENT:** The weathering steel high mast light poles were part of the original construction in 1985 and are nearing the end of their useful life. They will be replaced with galvanized steel poles that have a longer life expectancy.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- Safety & Security
- System Preservation
- Quality of Service
- Environmental Stewardship
- Community Vitality
- Economic Prosperity

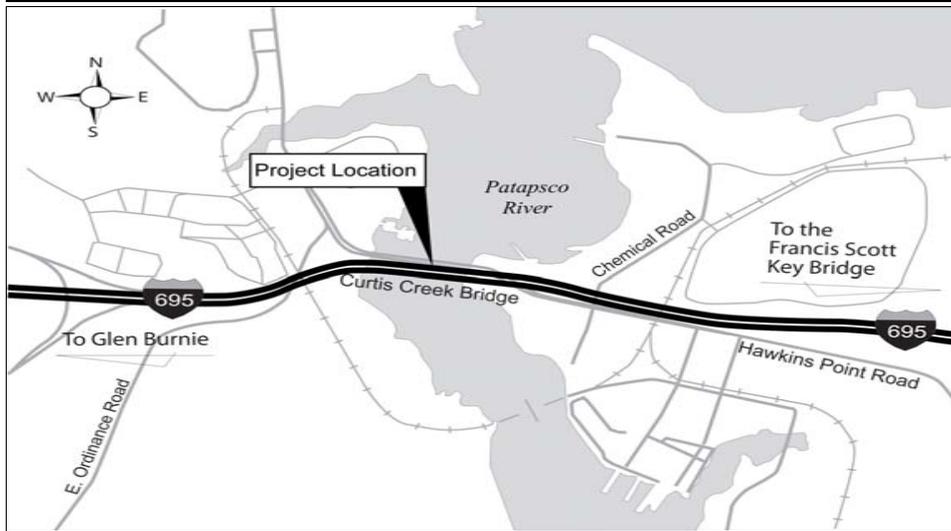
**ASSOCIATED IMPROVEMENTS:** None.

**EXPLANATION:** The weathering steel high mast light poles were part of the original construction in 1985 and are nearing the end of their useful life. They will be replaced with galvanized steel poles that have a longer life expectancy.

**STATUS:** Engineering is complete. Construction is underway.

POTENTIAL FUNDING SOURCE:										
<input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER										
PHASE	TOTAL		CURRENT YEAR	BUDGET YEAR	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015			2016	2017	.....2018.....	.....2019.....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	1,326	1,326	0	0	0	0	0	0	0	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	15,935	4,299	8,904	2,732	0	0	0	0	11,636	0
<b>Total</b>	<b>17,261</b>	<b>5,625</b>	<b>8,904</b>	<b>2,732</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,636</b>	<b>0</b>
Federal-Aid	0	0	0	0	0	0	0	0	0	0

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.



**PROJECT:** MD 695 Francis Scott Key Bridge - Clean and Paint Approach Spans on Bridges over Curtis Creek

**DESCRIPTION:** Clean and paint the structural steel at the approach spans of the inner loop and outer loop bridges on MD 695 over Curtis Creek.

**PURPOSE & NEED SUMMARY STATEMENT:** Paint throughout the spans is deteriorating. These bridges have not been repainted since they were originally built, over 30 years ago. This improvement will address existing deterioration and prevent further deterioration.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- Safety & Security
- System Preservation
- Quality of Service
- Environmental Stewardship
- Community Vitality
- Economic Prosperity

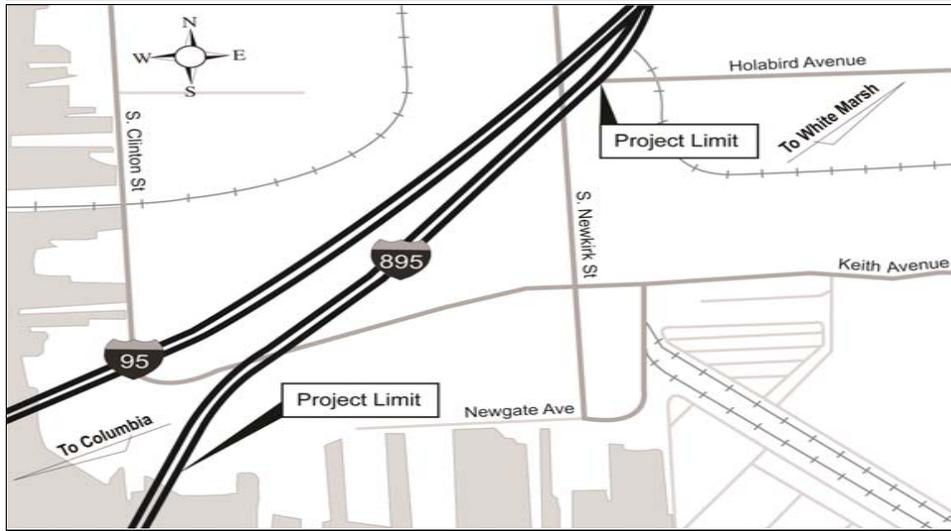
**ASSOCIATED IMPROVEMENTS:** None.

**EXPLANATION:** Paint throughout the spans is deteriorating. This improvement will address existing deterioration and prevent further deterioration.

**STATUS:** Engineering is complete. Construction is underway.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

POTENTIAL FUNDING SOURCE:										
<input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER										
PHASE	TOTAL				PROJECTED CASH REQUIREMENTS				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	FOR PLANNING PURPOSES ONLY					
					.....2018.....	.....2019.....	.....2020.....	.....2021.....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	100	100	0	0	0	0	0	0	0	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	5,330	1,658	2,900	772	0	0	0	0	3,672	0
<b>Total</b>	<b>5,430</b>	<b>1,758</b>	<b>2,900</b>	<b>772</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,672</b>	<b>0</b>
Federal-Aid	0	0	0	0	0	0	0	0	0	0



**PROJECT:** I-895 Baltimore Harbor Tunnel Thruway - Replace Canton Viaduct

**DESCRIPTION:** Replace the Canton Viaduct which is the elevated portion of the roadway from the north portal entrance to Holabird Avenue.

**PURPOSE & NEED SUMMARY STATEMENT:** The bridge deck on this structure has not been renovated since 1985. Testing has indicated that portions of the viaduct are nearing the end of their life cycle. The bridge deck, substructure and superstructure are experiencing various degrees of wear. The Canton Viaduct is the MDTA's only Structurally Deficient bridge.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |   |  |
|---|--|
| <input type="checkbox"/> Safety & Security              | <input type="checkbox"/> Environmental Stewardship |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Community Vitality        |
| <input type="checkbox"/> Quality of Service             | <input type="checkbox"/> Economic Prosperity       |

**ASSOCIATED IMPROVEMENTS:**

I-895 Baltimore Harbor Tunnel Thruway - Replace Deck and Superstructure of Bridge over Patapsco Flats - Construction Program (Line 10)

**EXPLANATION:** The bridge deck, substructure and superstructure are experiencing various degrees of wear. The Canton Viaduct is the MDTA's only Structurally Deficient bridge.

**STATUS:** Engineering and right-of-way are underway. Construction is scheduled to begin in FY 2017.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

POTENTIAL FUNDING SOURCE:		<input type="checkbox"/> SPECIAL		<input type="checkbox"/> FEDERAL		<input type="checkbox"/> GENERAL		<input checked="" type="checkbox"/> OTHER			
PHASE	TOTAL				PROJECTED CASH REQUIREMENTS				SIX YEAR TOTAL	BALANCE TO COMPLETE	
	ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY			
Planning	0	0	0	0	0	0	0	0	0	0	
Engineering	14,933	13,133	750	250	200	200	200	200	1,800	0	
Right-of-way	10,920	776	4,684	5,460	0	0	0	0	10,144	0	
Construction	263,934	427	0	36,556	62,747	54,239	84,123	25,842	263,507	0	
<b>Total</b>	<b>289,787</b>	<b>14,336</b>	<b>5,434</b>	<b>42,266</b>	<b>62,947</b>	<b>54,439</b>	<b>84,323</b>	<b>26,042</b>	<b>275,451</b>	<b>0</b>	
Federal-Aid	0	0	0	0	0	0	0	0	0	0	



**PROJECT:** I-895 Baltimore Harbor Tunnel Thruway - Replace Vent Fans

**DESCRIPTION:** Replace thirty-two ventilation fans located in the Canton and Fairfield Ventilation Buildings.

**PURPOSE & NEED SUMMARY STATEMENT:** The ventilation system is an integral part of the Baltimore Harbor Tunnel. The fans are nearing the end of their useful life and need to be replaced.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |   |  |
|---|--|
| <input type="checkbox"/> Safety & Security              | <input type="checkbox"/> Environmental Stewardship |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Community Vitality        |
| <input type="checkbox"/> Quality of Service             | <input type="checkbox"/> Economic Prosperity       |

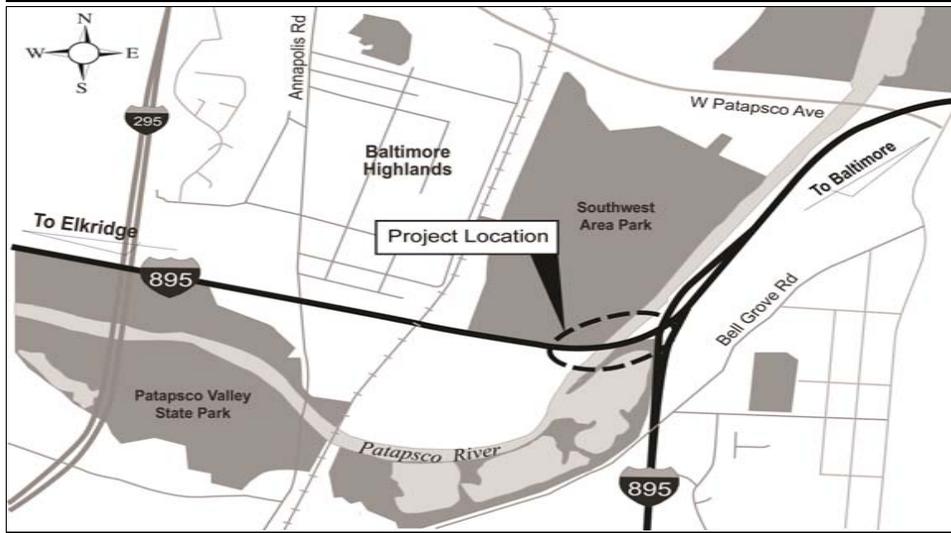
**ASSOCIATED IMPROVEMENTS:** None.

**EXPLANATION:** Replacing the vent fans will extend the life of the existing ventilation system.

**STATUS:** Design is underway. Construction is scheduled to start in FY 2016.

PHASE	POTENTIAL FUNDING SOURCE: <input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER									
	TOTAL ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
					....2018....	....2019....	....2020....	....2021....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	2,846	1,920	926	0	0	0	0	0	926	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	60,800	0	3,457	20,239	20,239	16,865	0	0	60,800	0
Total	63,646	1,920	4,383	20,239	20,239	16,865	0	0	61,726	0
Federal-Aid	0	0	0	0	0	0	0	0	0	0

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.



**PROJECT:** I-895 Baltimore Harbor Tunnel Thruway - Replace Deck and Superstructure of Bridge over Patapsco Flats

**DESCRIPTION:** Replace the deck and superstructure of the bridge over the Patapsco Flats.

**PURPOSE & NEED SUMMARY STATEMENT:** This project includes the replacement of the complete superstructure and deck. The concrete filled steel grid deck and steel superstructure are exhibiting signs of deterioration and warrant a complete superstructure replacement.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |   |  |
|---|--|
| <input type="checkbox"/> Safety & Security              | <input type="checkbox"/> Environmental Stewardship |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Community Vitality        |
| <input type="checkbox"/> Quality of Service             | <input type="checkbox"/> Economic Prosperity       |

**ASSOCIATED IMPROVEMENTS:**

I-895 Baltimore Harbor Tunnel Thruway - Replace Canton Viaduct - Construction Program (Line 8)

**EXPLANATION:** Replacing the deck and superstructure will provide a bridge that will not need to be rehabilitated for fifteen years.

**STATUS:** Design is underway. Construction is scheduled to begin in FY 2017.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

POTENTIAL FUNDING SOURCE:		<input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER								
PHASE	TOTAL				PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	.....2018.....	.....2019.....	.....2020.....	.....2021.....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	1,920	1,600	320	0	0	0	0	0	320	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	64,680	0	0	17,000	20,606	20,606	6,468	0	64,680	0
Total	66,600	1,600	320	17,000	20,606	20,606	6,468	0	65,000	0
Federal-Aid	0	0	0	0	0	0	0	0	0	0



**PROJECT:** I-895 Harbor Tunnel Thruway - Rehabilitate Tunnel Standpipe and Sump Pump Systems

**DESCRIPTION:** The project is the rehabilitation of mechanical, electrical, and plumbing systems required to provide a code compliant standpipe system for fire protection in the tunnel. The existing sump pumps and supporting drain pipe network will be upgraded.

**PURPOSE & NEED SUMMARY STATEMENT:** The mechanical, electrical, and plumbing systems are reaching the end of their useful life and are in need of rehabilitation.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- Safety & Security
- System Preservation
- Quality of Service
- Environmental Stewardship
- Community Vitality
- Economic Prosperity

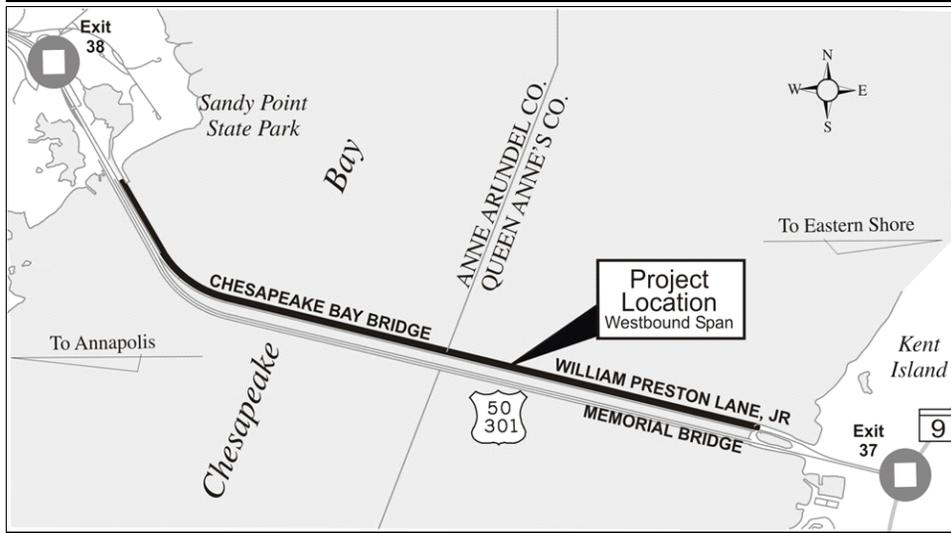
**ASSOCIATED IMPROVEMENTS:** None.

**EXPLANATION:** A standpipe is a vertical pipe to which fire hoses can be connected. The project addresses aging mechanical, electrical, and plumbing systems required to provide a code compliant system of standpipes.

**STATUS:** Engineering is complete. Construction is scheduled to begin in FY 2016.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** Added to the Construction Program.

POTENTIAL FUNDING SOURCE:										
				<input type="checkbox"/> SPECIAL	<input type="checkbox"/> FEDERAL	<input type="checkbox"/> GENERAL	<input checked="" type="checkbox"/> OTHER			
PHASE	TOTAL		CURRENT YEAR	BUDGET YEAR	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015			2016	2017	....2018....	....2019....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	320	320	0	0	0	0	0	0	0	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	11,651	0	1,923	7,805	1,923	0	0	0	11,651	0
Total	11,971	320	1,923	7,805	1,923	0	0	0	11,651	0
Federal-Aid	0	0	0	0	0	0	0	0	0	0



**PROJECT:** US 50/301 Bay Bridge - Clean and Paint Structural Steel Westbound Bridge

**DESCRIPTION:** Partial painting of all structural steel surfaces on the westbound bridge of approximately three million square feet including girder spans, deck trusses, overhead truss members and suspension spans. Phase I is painting the west girder spans. Phase II is cleaning and painting the suspension towers, spot painting the remainder of the suspension span and zone painting the deck truss spans. Phase III is cleaning and painting the deck truss spans and steel rail posts and rehabilitating the steel barrier. Phase IV is cleaning and painting the east girder and through truss spans.

**PURPOSE & NEED SUMMARY STATEMENT:** The bridge has not been fully painted since it opened in 1973. Limited spot painting has been done as needed. The paint is showing signs of wear. This improvement will protect the steel components of the bridge and extend the useful life.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |   |  |
|---|--|
| <input type="checkbox"/> Safety & Security              | <input type="checkbox"/> Environmental Stewardship |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Community Vitality        |
| <input type="checkbox"/> Quality of Service             | <input type="checkbox"/> Economic Prosperity       |

**EXPLANATION:** The paint is showing signs of wear. This improvement will address existing wear and extend the useful life of the steel components of the bridge.

**ASSOCIATED IMPROVEMENTS:**

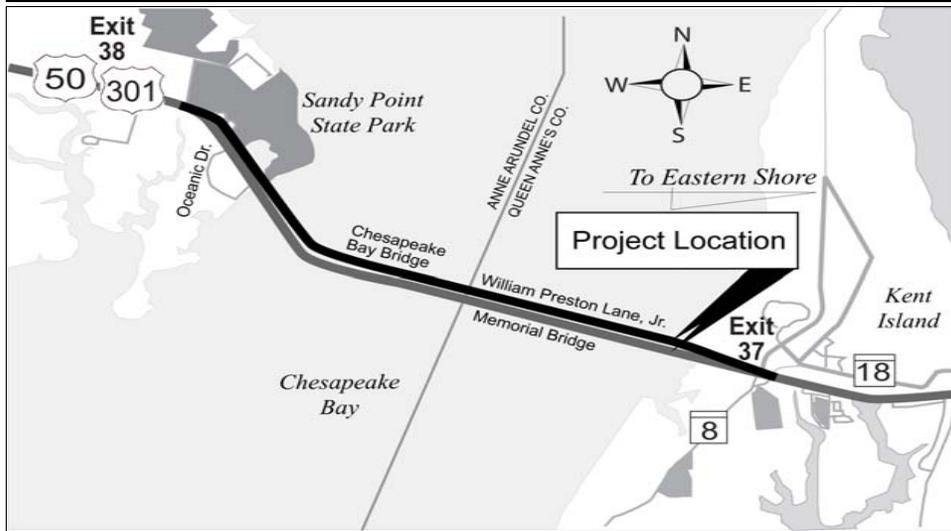
- US 50/301 Bay Bridge - Cable Rewrapping & Dehumidification - Construction Program (Line 13)
- US 50/301 Bay Bridge - Rehab Suspension Spans Westbound Bridge - Constr. Prog. (Line 14)
- US 50/301 Bay Bridge - Structural Repairs and Misc. Modifications - Constr. Program (Line 15)
- US 50/301 Bay Bridge - Rehab EB Bridge Deck - Development and Evaluation Program (Line 23)

**STATUS:** Engineering is complete. Construction is complete for Phases I, II, and III. Phase IV construction is scheduled to begin in FY 2017.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

POTENTIAL FUNDING SOURCE:		<input type="checkbox"/> SPECIAL		<input type="checkbox"/> FEDERAL		<input type="checkbox"/> GENERAL		<input checked="" type="checkbox"/> OTHER			
PHASE	TOTAL ESTIMATED COST (\$000)	THRU YEAR 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE	
					.....2018.....	.....2019.....	.....2020.....	.....2021.....			
Planning	0	0	0	0	0	0	0	0	0	0	
Engineering	951	951	0	0	0	0	0	0	0	0	
Right-of-way	0	0	0	0	0	0	0	0	0	0	
Construction	98,122	76,107	0	2,600	10,400	9,015	0	0	22,015	0	
<b>Total</b>	<b>99,073</b>	<b>77,058</b>	<b>0</b>	<b>2,600</b>	<b>10,400</b>	<b>9,015</b>	<b>0</b>	<b>0</b>	<b>22,015</b>	<b>0</b>	
Federal-Aid	0	0	0	0	0	0	0	0	0	0	

0632, 2224, 2259, 2260



**PROJECT:** US 50/301 Bay Bridge - Cable Rewrapping and Dehumidification

**DESCRIPTION:** Rewrap and dehumidify the main cables and anchorages on both spans.

**PURPOSE & NEED SUMMARY STATEMENT:** The existing suspension cable wrapping is reaching the end of its useful life. This improvement will prevent cable corrosion.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |   |  |
|---|--|
| <input type="checkbox"/> Safety & Security              | <input type="checkbox"/> Environmental Stewardship |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Community Vitality        |
| <input type="checkbox"/> Quality of Service             | <input type="checkbox"/> Economic Prosperity       |

**EXPLANATION:** Cable wrapping is nearing the end of its useful life and needs to be replaced.

**ASSOCIATED IMPROVEMENTS:**

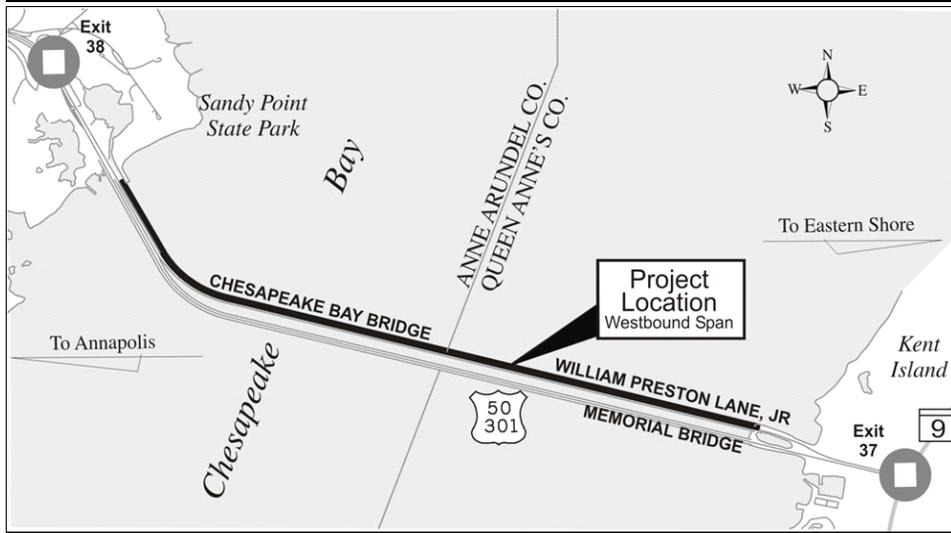
- US 50/301 Bay Bridge - Clean and Paint Structural Steel WB Bridge - Constr. Program (Line 12)
- US 50/301 Bay Bridge - Rehab Suspension Spans Westbound Bridge - Constr. Prog. (Line14)
- US 50/301 Bay Bridge - Structural Repairs and Misc. Modifications - Constr. Program (Line 15)
- US 50/301 Bay Bridge - Rehab EB Bridge Deck - Development and Evaluation Program (Line 23)

**STATUS:** Engineering is complete. Construction is underway.

PHASE	TOTAL		CURRENT YEAR				PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015	YEAR 2016	BUDGET YEAR 2017	.....2018.....	.....2019.....	.....2020.....	.....2021.....				
Planning	0	0	0	0	0	0	0	0	0	0	0	
Engineering	3,230	3,230	0	0	0	0	0	0	0	0	0	
Right-of-way	0	0	0	0	0	0	0	0	0	0	0	
Construction	57,213	56,463	750	0	0	0	0	0	0	750	0	
<b>Total</b>	<b>60,443</b>	<b>59,693</b>	<b>750</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>750</b>	<b>0</b>	
Federal-Aid	0	0	0	0	0	0	0	0	0	0	0	

2046, 2228

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** Cost increased by \$6.2 million for unanticipated construction management inspection (CMI) expenses.



**PROJECT:** US 50/301 Bay Bridge - Rehabilitate Suspension Spans Westbound Bridge

**DESCRIPTION:** Rehabilitate the suspension spans on the westbound Bay Bridge, including work on the suspension cables, the bridge superstructure, substructure and bearings.

**PURPOSE & NEED SUMMARY STATEMENT:** The main suspension cable investigation at the westbound Chesapeake Bay Bridge found areas with varying degrees of wear. The installation of supplemental cables will maintain long-term serviceability of the suspension system. Additionally, signs of wear were found during the routine inspections of structural components of the suspended spans that will be repaired to extend the useful life of the components.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |   |  |
|---|--|
| <input type="checkbox"/> Safety & Security              | <input type="checkbox"/> Environmental Stewardship |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Community Vitality        |
| <input type="checkbox"/> Quality of Service             | <input type="checkbox"/> Economic Prosperity       |

**EXPLANATION:** The installation of supplemental cables will maintain long-term serviceability of the suspension system. Repairs to areas showing signs of wear will extend the useful life of the components.

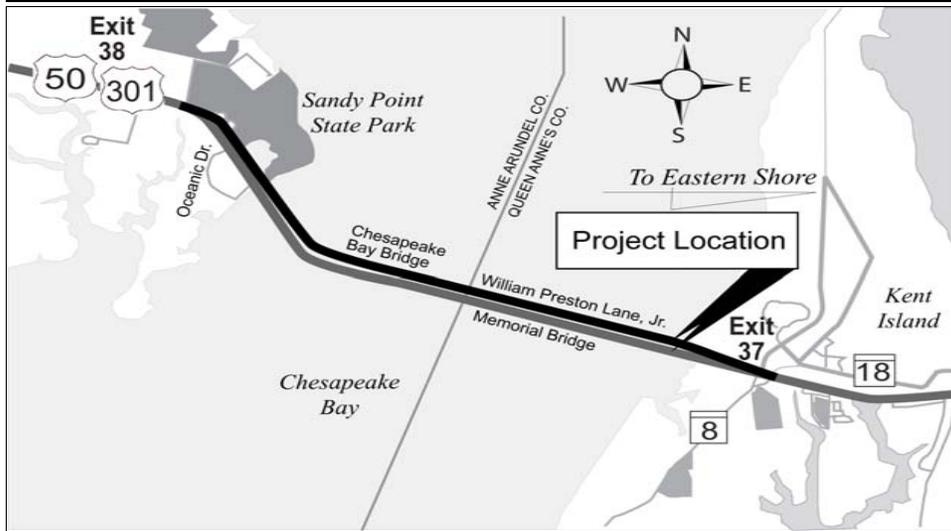
**ASSOCIATED IMPROVEMENTS:**

- US 50/301 Bay Bridge - Clean and Paint Structural Steel WB Bridge - Constr. Program (Line 12)
- US 50/301 Bay Bridge - Cable Rewrapping & Dehumidification - Construction Program (Line 13)
- US 50/301 Bay Bridge - Structural Repairs and Misc. Modifications - Constr. Program (Line 15)
- US 50/301 Bay Bridge - Rehab EB Bridge Deck - Development and Evaluation Program (Line 23)

**STATUS:** Engineering is underway. Construction is scheduled to begin in FY 2016.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

PHASE	TOTAL ESTIMATED EXPEND		CURRENT YEAR	BUDGET YEAR	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
	COST (\$000)	THRU 2015			2016	2017	.....2018.....	.....2019.....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	3,200	1,375	1,120	600	105	0	0	0	1,825	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	44,000	0	7,000	23,500	13,000	500	0	0	44,000	0
<b>Total</b>	<b>47,200</b>	<b>1,375</b>	<b>8,120</b>	<b>24,100</b>	<b>13,105</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>45,825</b>	<b>0</b>
Federal-Aid	0	0	0	0	0	0	0	0	0	0



**PROJECT:** US 50/301 Bay Bridge - Structural Repairs and Misc. Modifications

**DESCRIPTION:** This project includes structural concrete and steel repairs to eastbound and westbound Bay Bridges. Bid specific work addresses priority repairs with an emphasis on minimizing lane closures with the use of rigging and barge-mounted man lifts.

**PURPOSE & NEED SUMMARY STATEMENT:** The routine inspections of the eastbound and westbound Bay Bridges found areas of the structural steel, concrete, and deck joints with signs of wear. Repairs to these components will extend the useful life of the components.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- Safety & Security
- System Preservation
- Quality of Service
- Environmental Stewardship
- Community Vitality
- Economic Prosperity

**EXPLANATION:** This project will repair areas of wear and extend the useful life of the components.

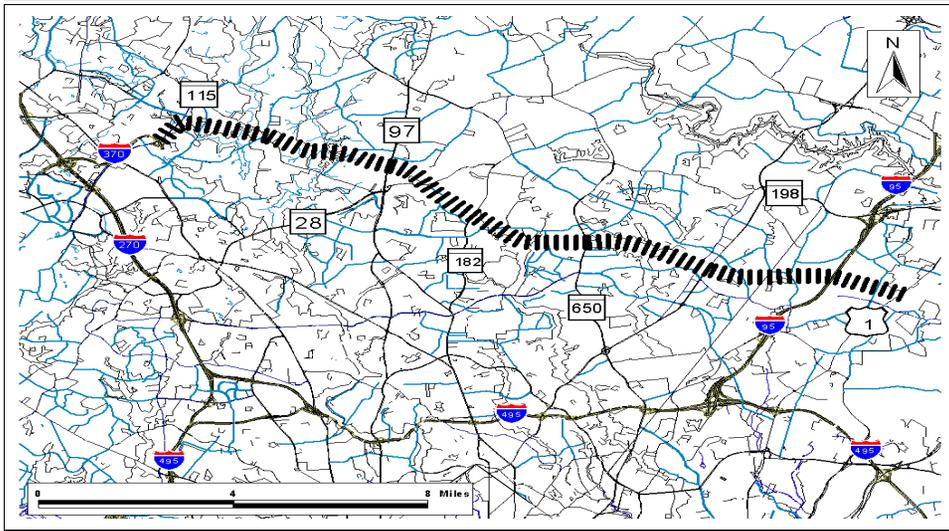
**ASSOCIATED IMPROVEMENTS:**

- US 50/301 Bay Bridge - Clean and Paint Structural Steel WB Bridge - Constr. Program (Line 12)
- US 50/301 Bay Bridge - Cable Rewrapping & Dehumidification - Construction Program (Line 13)
- US 50/301 Bay Bridge - Rehab Suspension Spans Westbound Bridge - Constr. Prog. (Line 14)
- US 50/301 Bay Bridge - Rehab EB Bridge Deck - Development and Evaluation Program (Line 23)

**STATUS:** Engineering and construction are underway.

POTENTIAL FUNDING SOURCE:										
<input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER										
PHASE	TOTAL				PROJECTED CASH REQUIREMENTS				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	FOR PLANNING PURPOSES ONLY					
					.....2018.....	.....2019.....	.....2020.....	.....2021.....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	1,200	568	316	316	0	0	0	0	632	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	16,510	2,622	8,070	3,818	2,000	0	0	0	13,888	0
<b>Total</b>	<b>17,710</b>	<b>3,190</b>	<b>8,386</b>	<b>4,134</b>	<b>2,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,520</b>	<b>0</b>
Federal-Aid	0	0	0	0	0	0	0	0	0	0

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.



**PROJECT:** MD 200, InterCounty Connector

**DESCRIPTION:** Constructed a new east-west, multi-modal highway in Montgomery and Prince George's counties between I-270 and I-95/US 1.

**PURPOSE & NEED SUMMARY STATEMENT:** This transportation project was needed to increase community mobility and safety; to support development and local land use plans; to improve access between economic growth centers; to advance homeland security measures; and to help restore the natural, human and cultural environments from past development impacts in the project area.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Safety & Security  | <input checked="" type="checkbox"/> Environmental Stewardship |
| <input type="checkbox"/> System Preservation           | <input checked="" type="checkbox"/> Community Vitality        |
| <input checked="" type="checkbox"/> Quality of Service | <input checked="" type="checkbox"/> Economic Prosperity       |

**EXPLANATION:** The project increases community mobility and safety; supports development and local land use plans; improves access between economic growth centers; advances homeland security measures; and helps restore the natural, human and cultural environments from past development impacts in the project area.

**ASSOCIATED IMPROVEMENTS:**

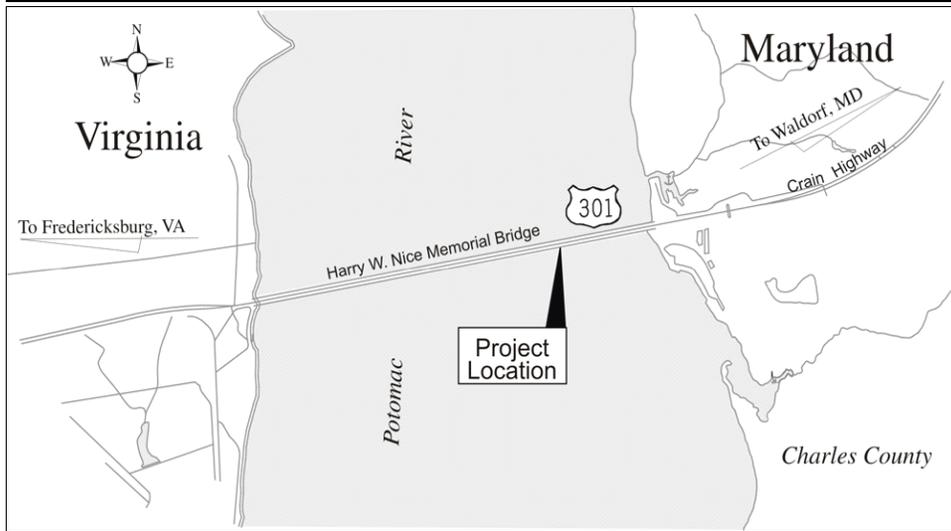
- US 29 Interchanges (Lines 16, 17 Montgomery County - SHA)
- MD 28/MD 198, MD 97 to I-95 (Line 19, Montgomery County - SHA)
- MD 201 Extended/US 1, I-95/I-495 to N. of Muirkirk Road (Line 28, Prince George's County - SHA)

**STATUS:** The highway is open to service. Final construction elements and environmental mitigation and stewardship projects are underway.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

POTENTIAL FUNDING SOURCE:		<input checked="" type="checkbox"/> SPECIAL		<input checked="" type="checkbox"/> FEDERAL		<input checked="" type="checkbox"/> GENERAL		<input checked="" type="checkbox"/> OTHER			
PHASE	TOTAL ESTIMATED COST (\$000)	TOTAL ESTIMATED EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE	
					.....2018.....	.....2019.....	.....2020.....	.....2021.....			
Planning	28,889	28,889	0	0	0	0	0	0	0	0	
Engineering	75,181	75,181	0	0	0	0	0	0	0	0	
Right-of-way	246,000	244,595	1,405	0	0	0	0	0	1,405	0	
Construction	2,036,518	1,999,714	28,969	5,496	900	600	480	359	36,804	0	
<b>Total</b>	<b>2,386,588</b>	<b>2,348,379</b>	<b>30,374</b>	<b>5,496</b>	<b>900</b>	<b>600</b>	<b>480</b>	<b>359</b>	<b>38,209</b>	<b>0</b>	
Federal-Aid	19,270	19,270	0	0	0	0	0	0	0	0	

The Federal-Aid share of \$19.27 million is also included in SHA's portion of the CTP.



**PROJECT:** US 301 Harry W. Nice Bridge - Clean and Paint Structural Steel and Miscellaneous Structural Repairs

**DESCRIPTION:** Spot paint as required throughout the full length of the bridge and zone paint at locations of roadway joints. Repair miscellaneous structural elements.

**PURPOSE & NEED SUMMARY STATEMENT:** Last zone paint completed was on the truss towers in 2002. Paint on many locations throughout the bridge has wear. This improvement will extend the useful life of the structural steel.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |   |  |
|---|--|
| <input type="checkbox"/> Safety & Security              | <input type="checkbox"/> Environmental Stewardship |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Community Vitality        |
| <input type="checkbox"/> Quality of Service             | <input type="checkbox"/> Economic Prosperity       |

**ASSOCIATED IMPROVEMENTS:**

US 301 Harry W. Nice Memorial Bridge - Replace Nice Bridge - Development and Evaluation Program (Line 22)

**EXPLANATION:** Paint throughout the bridge has wear. This improvement will address existing wear and prevent further wear.

**STATUS:** Engineering is complete. Construction is underway.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

POTENTIAL FUNDING SOURCE:										
<input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER										
PHASE	TOTAL				PROJECTED CASH REQUIREMENTS				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY		
					.....2018.....	.....2019.....	.....2020.....	.....2021.....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	800	800	0	0	0	0	0	0	0	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	12,386	11,809	577	0	0	0	0	0	577	0
Total	13,186	12,609	577	0	0	0	0	0	577	0
Federal-Aid	0	0	0	0	0	0	0	0	0	0



**PROJECT:** Authority-Wide - Install Security Systems and Video Surveillance at Major Bridges

**DESCRIPTION:** Install electronic security systems and video surveillance at five major bridges.

**PURPOSE & NEED SUMMARY STATEMENT:** This project will enhance the safety and security at five major bridges.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- Safety & Security
- System Preservation
- Quality of Service
- Environmental Stewardship
- Community Vitality
- Economic Prosperity

**ASSOCIATED IMPROVEMENTS:** None.

**EXPLANATION:** This project will enhance the safety and security at five major bridges.

**STATUS:** Engineering is complete. Construction is underway.

POTENTIAL FUNDING SOURCE: <input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER										
PHASE	TOTAL				PROJECTED CASH REQUIREMENTS				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	FOR PLANNING PURPOSES ONLY					
					.....2018.....	.....2019.....	.....2020.....	.....2021.....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	616	616	0	0	0	0	0	0	0	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	12,641	8,632	2,434	973	602	0	0	0	4,009	0
Total	13,257	9,248	2,434	973	602	0	0	0	4,009	0
Federal-Aid	0	0	0	0	0	0	0	0	0	0

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.



**PROJECT:** Upgrade Truck Weigh Facilities at the Kennedy Highway, Bay Bridge and Hatem Bridge Locations

**DESCRIPTION:** Upgrade the existing truck weigh facilities in accordance with increased truck traffic.

**PURPOSE & NEED SUMMARY STATEMENT:** The truck weigh facilities will be upgraded to accommodate increased truck traffic by replacing the existing scales and installing newer technologies including Commercial Vehicles Information Systems and Networks (CVISN) and CHART. This project will improve the efficiency and effectiveness of commercial vehicle safety programs.

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- Safety & Security
- System Preservation
- Quality of Service
- Environmental Stewardship
- Community Vitality
- Economic Prosperity

**ASSOCIATED IMPROVEMENTS:** None.

**EXPLANATION:** The truck weigh facilities will be upgraded to accommodate increased truck traffic by replacing the existing scales and installing newer technologies including Commercial Vehicles Information Systems and Networks (CVISN) and CHART. This project will improve the efficiency and effectiveness of commercial vehicle safety programs.

**STATUS:** Engineering is complete. Construction is underway.

POTENTIAL FUNDING SOURCE: <input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER										
PHASE	TOTAL		CURRENT YEAR	BUDGET YEAR	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015			2016	2017	....2018....	....2019....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	300	300	0	0	0	0	0	0	0	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	14,117	3,012	5,096	6,009	0	0	0	0	11,105	0
Total	14,417	3,312	5,096	6,009	0	0	0	0	11,105	0
Federal-Aid	0	0	0	0	0	0	0	0	0	0

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.



**PROJECT:** Authority-Wide - Replace Electronic Toll Collection and Operating System - 3rd Generation

**DESCRIPTION:** The project will develop the framework and consequential contracts for the 3rd generation toll system. The project's contracts will replace the Electronic Toll Collection Next Generation (ETCNG) contracts currently deployed. Project is a multiyear project with major phases including a design/build phase, integration, testing and transition and an operations phase that may be 5-10 years depending on final project plan development.

**PURPOSE & NEED SUMMARY STATEMENT:** This project will update the Electronic Toll Collection and Operating System software and increase the capacity for handling video tolling and citations.

**STATE GOALS :** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- |   |  |
|---|--|
| <input type="checkbox"/> Safety & Security              | <input type="checkbox"/> Environmental Stewardship |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Community Vitality        |
| <input checked="" type="checkbox"/> Quality of Service  | <input type="checkbox"/> Economic Prosperity       |

**ASSOCIATED IMPROVEMENTS:** None.

**EXPLANATION:** This project will update the Electronic Toll Collection and Operating System software and increase the capacity for handling video tolling and citations.

**STATUS:** Engineering is underway. Construction is scheduled to begin in FY 2018.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** Cost increased by \$3.8 million to reflect an updated assessment of scope and schedule.

POTENTIAL FUNDING SOURCE:										
<input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER										
PHASE	TOTAL		CURRENT YEAR	BUDGET YEAR	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015			2016	2017	....2018....	....2019....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	3,333	2,505	368	368	92	0	0	0	828	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	83,384	0	0	0	15,067	20,090	20,939	11,319	67,415	15,969
<b>Total</b>	<b>86,717</b>	<b>2,505</b>	<b>368</b>	<b>368</b>	<b>15,159</b>	<b>20,090</b>	<b>20,939</b>	<b>11,319</b>	<b>68,243</b>	<b>15,969</b>
Federal-Aid	0	0	0	0	0	0	0	0	0	0



**PROJECT:** Remove, Replace, and Upgrade Sign Structures - Northern Region

**DESCRIPTION:** Update and replace sign structures along the John F. Kennedy Memorial Highway and the Thomas J. Hatem Memorial Bridge.

**PURPOSE & NEED SUMMARY STATEMENT:** Existing sign structures date from the early 1980's and are approaching the end of their design life (30 years).

**STATE GOALS:** Maryland Transportation Plan (MTP) Goals/Selection Criteria:

- Safety & Security
- System Preservation
- Quality of Service
- Environmental Stewardship
- Community Vitality
- Economic Prosperity

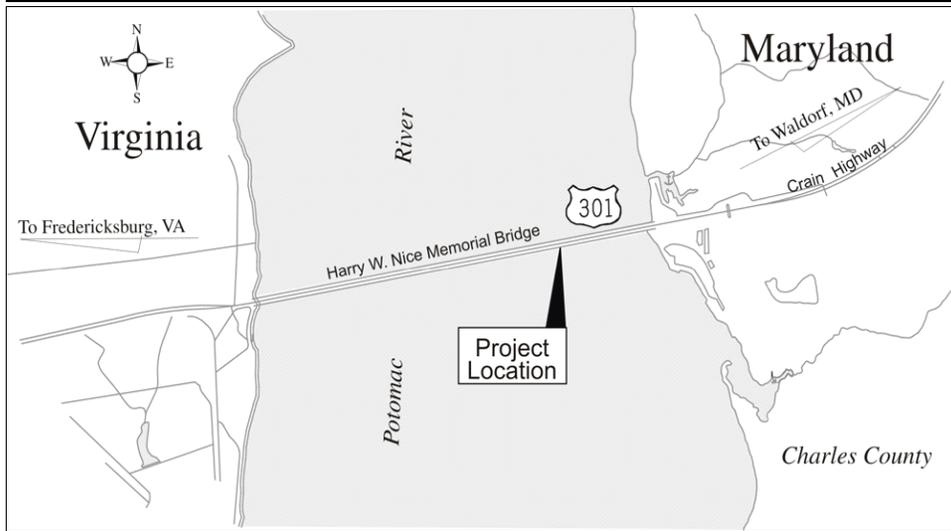
**ASSOCIATED IMPROVEMENTS:** None.

**EXPLANATION:** Aging sign structures along the John F. Kennedy Memorial Highway and the Thomas J. Hatem Memorial Bridge will be updated or replaced.

**STATUS:** Engineering is complete. Construction is scheduled to begin in FY 2017.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** Added to the Construction Program.

POTENTIAL FUNDING SOURCE: <input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER										
PHASE	TOTAL		CURRENT YEAR	BUDGET YEAR	PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015			2016	2017	....2018....	....2019....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	600	600	0	0	0	0	0	0	0	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	20,078	0	0	6,929	10,018	3,131	0	0	20,078	0
Total	20,678	600	0	6,929	10,018	3,131	0	0	20,078	0
Federal-Aid	0	0	0	0	0	0	0	0	0	0



**PROJECT:** US 301 Harry W. Nice Memorial Bridge - Replace Nice Bridge

**DESCRIPTION:** Preliminary engineering and right-of-way acquisition for the replacement of the current bridge with a new 4-lane bridge.

**JUSTIFICATION:** The existing bridge does not meet current standards, i.e., narrow lanes, lack of shoulders, and steep grades with lack of truck climbing lanes. The existing bridge during peak periods is reaching capacity. Traffic is projected to increase by 45 percent on weekdays and 33 percent on weekends by 2025.

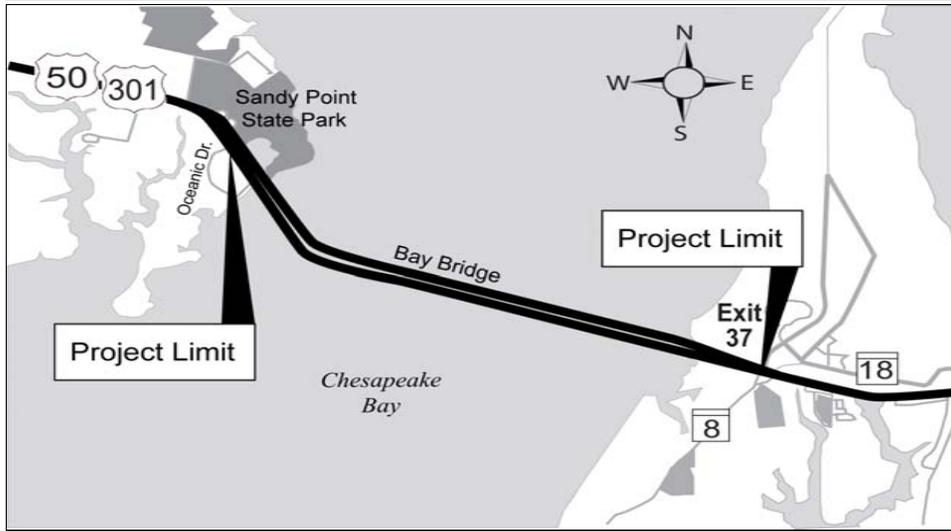
**ASSOCIATED IMPROVEMENTS:**

US 301 Harry W. Nice Memorial Bridge - Clean and Paint Structural Steel and Miscellaneous Structural Repairs - Construction Program (Line 17)

**STATUS:** Planning is complete. Engineering is underway. Right-of-way acquisition is scheduled to begin in FY 2016.

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

POTENTIAL FUNDING SOURCE:										
<input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER										
PHASE	TOTAL				PROJECTED CASH REQUIREMENTS				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY		
					.....2018.....	.....2019.....	.....2020.....	.....2021.....		
Planning	5,295	5,295	0	0	0	0	0	0	0	0
Engineering	44,605	3,405	9,000	8,000	3,000	6,000	7,600	7,600	41,200	0
Right-of-way	11,700	200	550	2,100	1,825	2,825	2,025	2,175	11,500	0
Construction	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>61,600</b>	<b>8,900</b>	<b>9,550</b>	<b>10,100</b>	<b>4,825</b>	<b>8,825</b>	<b>9,625</b>	<b>9,775</b>	<b>52,700</b>	<b>0</b>
Federal-Aid	0	0	0	0	0	0	0	0	0	0



**PROJECT:** US 50/301 Bay Bridge - Rehabilitate Eastbound Bridge Deck

**DESCRIPTION:** Preliminary engineering for the rehabilitation and/or replacement of the eastbound bridge deck.

**JUSTIFICATION:** The eastbound deck is exhibiting various degrees of deterioration as it was last replaced in 1985. Industry standards indicate that the deck is nearing the end of its life cycle.

**ASSOCIATED IMPROVEMENTS:**

- US 50/301 Bay Bridge - Clean and Paint Structural Steel WB Bridge - Constr. Program (Line 12)
- US 50/301 Bay Bridge - Cable Rewrapping & Dehumidification - Construction Program (Line 13)
- US 50/301 Bay Bridge - Rehab Suspension Spans Westbound Bridge - Constr. Prog. (Line 14)
- US 50/301 Bay Bridge - Structural Repairs and Misc. Modifications - Constr. Program (Line 15)

**STATUS:** Engineering is underway.

POTENTIAL FUNDING SOURCE:										
<input type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input checked="" type="checkbox"/> OTHER										
PHASE	TOTAL				PROJECTED CASH REQUIREMENTS				SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2015	CURRENT YEAR 2016	BUDGET YEAR 2017	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY	FOR PLANNING PURPOSES ONLY		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	10,700	972	4,828	4,900	0	0	0	0	9,728	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>10,700</b>	<b>972</b>	<b>4,828</b>	<b>4,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,728</b>	<b>0</b>
Federal-Aid	0	0	0	0	0	0	0	0	0	0

**SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP:** None.

**SYSTEM PRESERVATION MINOR PROJECTS PROGRAM**

**MARYLAND TRANSPORTATION AUTHORITY - LINE 24**

ITEM NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL PROJECT COST (\$000's)	CONSTRUCTION START
<b><u>Fiscal Year 2015 Completions</u></b>			
<b><u>BALTIMORE HARBOR TUNNEL</u></b>			
1	Canton & Fairfield Vent Building Envelope & Evase Repairs (Engineering only) (2306)	1,050	Complete
<b><u>F.S.KEY BRIDGE</u></b>			
2	Replace HVAC at FSK Campus and OEC Building Roof (Engineering only) (2319)	323	Complete
<b><u>FORT MCHENRY TUNNEL</u></b>			
3	Improve Landscaping (2352)	485	Complete
4	Replace Generator at Maintenance Building (2348)	414	Complete
5	Replace HVAC at Administration Building, Maintenance Building and Emergency Garages (2285)	2,668	Complete
<b><u>KENNEDY HIGHWAY</u></b>			
6	Rehab Slope and Construct Retaining Wall at I-695 WB and I-95 NB (2384)	3,400	Complete
7	Replace Underground Storage Tank with Aboveground Storage Tank-Maintenance 1 (2218)	899	Complete
8	Travel Time System (2373)	817	Complete
9	Zone Paint Various Bridges - Phase III (2281)	3,863	Complete
<b><u>MULTI-AREA</u></b>			
10	On-Call Facility/Building Repairs (2240)	2,349	Complete
11	On-Call Furnishing and Installation of Camera and Compressor-Decompressor (CODEC) Equipment (2014)	4,784	Complete
12	On-Call Miscellaneous Electrical Repairs (2236)	1,901	Complete
13	On-Call Structural Repairs and Miscellaneous Modifications (2254)	17,082	Complete
14	Replace Navigational Lighting Systems at Francis Scott Key, Nice Memorial and Bay Bridges (2074)	2,787	Complete
15	Replace Toll Booths at Bay Bridge and Fort McHenry Tunnel (2276)	5,580	Complete

**SYSTEM PRESERVATION MINOR PROJECTS PROGRAM**

**MARYLAND TRANSPORTATION AUTHORITY - LINE 24 (cont'd)**

ITEM NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL PROJECT COST (\$000's)	CONSTRUCTION START
<b><u>Fiscal Year 2015 Completions (cont'd)</u></b>			
<b><u>POINT BREEZE</u></b>			
16	Demolition of Point Breeze Power Plant Building (Engineering only) (2398)	400	Complete
17	Point Breeze - Second Floor Renovation (2295)	6,542	Complete
18	Rehabilitate MDTA 2340 Building (Engineering only) (2350)	332	Complete
19	Replace Roof and Repair Brick Masonry at 2310 Point Breeze Building (2242)	1,606	Complete
<b><u>W. P. LANE BRIDGE</u></b>			
20	Furnish and Install Uninterruptible Power Supply (UPS) (2268)	856	Complete
21	Renovate Conduit Hangers - WB Span (2267)	1,067	Complete
22	Repair Toll Plaza Concrete Paving (2318)	4,954	Complete
23	Replace Acoustic Monitoring on Eastbound Bay Bridge (2341)	1,688	Complete

**SYSTEM PRESERVATION MINOR PROJECTS PROGRAM**

**MARYLAND TRANSPORTATION AUTHORITY - LINE 24 (cont'd)**

ITEM NO.	DESCRIPTION AND IMPROVEMENT TYPE	FY16 + FY17 PROJECT COST (\$000's)	CONSTRUCTION START
<b><u>Fiscal Year 2016 and 2017</u></b>			
<b><u>BALTIMORE HARBOR TUNNEL</u></b>			
24	I-895 Under-clearance at MD 295 and I-895 Spur Overpasses (Engineering only) (2403)	200	Underway
25	Rehab Structure of Various Bridges on I-895 from I-95 to I-695 (Engineering only) (2372)	700	Underway
26	Rehab Structure of Various Bridges on I-895 from North of Tunnel to I-95 (Engineering only) (2371)	700	Underway
27	Rehab Structure of Various Bridges on I-895 Spur and North of I-695 to Tunnel (Engineering only) (2370)	488	Underway
28	Rehabilitate Baltimore Harbor Tunnel Liner (Engineering only) (2376)	400	Underway
29	Rehabilitate K-Truss Approach Spans (2334)	1,794	Underway
30	Rehabilitate Tunnel Deck (Engineering only) (2389)	64	Underway
31	Repaint Harbor Tunnel Switchgear Enclosures (2330)	414	Underway
32	Repair Slopes and Drainage Along Baltimore Harbor Tunnel Thruway (Engineering only) (2380)	450	Underway
33	Replace HVAC at Administration Building (2308)	1,247	Underway
<b><u>F.S.KEY BRIDGE</u></b>			
34	Resurface Key Bridge Approach Roadways (Engineering only) (2277)	350	Summer, 2016
35	Overlay Bridge Decks over Dock Road and CSXT (4 Bridges) (2327)	5,500	Underway
36	Rehab Substructure and Superstructure of Various Bridges on FSK Facility (Engineering only) (2374)	475	Underway
37	Rehabilitate Bridges on I-695 over Curtis Creek (Engineering only) (2375)	650	Underway
38	Renovate Second Floor of FSK Administration Building 303 (Engineering only) (2406)	141	Underway
39	Replace Underground Storage Tanks with Vaulted Storage Tank (2202)	1,651	Underway
<b><u>FORT MCHENRY TUNNEL</u></b>			
40	FMT West Vent Building Settlement and Building Repairs (Engineering only) (2357)	250	Underway
41	Install Fresh Air Duct Lighting (2367)	2,812	Underway
42	Kane Street Property Acquisition (2401)	4	Underway
43	Modify I-95 and I-395 Superstructure and Piers (2354)	6,090	Underway
44	Rehab Substructure and Superstructure of Various Bridges on I-95 in Baltimore City (Eng. Only) (2397)	750	Underway
45	Rehabilitate Four Bridges on I-95 over Herring Run and CSX (2333)	3,064	Underway

**SYSTEM PRESERVATION MINOR PROJECTS PROGRAM**

**MARYLAND TRANSPORTATION AUTHORITY - LINE 24 (cont'd)**

ITEM NO.	DESCRIPTION AND IMPROVEMENT TYPE	FY16 + FY17 PROJECT COST (\$000's)	CONSTRUCTION START
<b><u>Fiscal Year 2016 and 2017 (cont'd)</u></b>			
<b><u>FORT MCHENRY TUNNEL (cont'd)</u></b>			
46	Renovate 5th Floor at East Vent Building (Engineering only) (2364)	200	Underway
47	Repair Vent Fans (Engineering only) (2251)	300	Underway
48	Replace or Rehabilitate Tunnel Lighting System (Engineering only) (2269)	337	Underway
49	Replace Underground Storage Tanks at FMT Administration (Engineering only) (2381)	150	Underway
50	Salt Barn Replacement, Debris Dewatering Pad and Civil Site Construction (Engineering only) (2299)	100	Underway
51	Zone Paint Various Bridges North of Tunnel (2256)	5	Underway
<b><u>HATEM BRIDGE</u></b>			
52	Rehabilitate Substructure and Superstructure of Thomas J. Hatem Memorial Bridge (2368)	3,234	Underway
53	Replace HVAC at Administration Building and Scale Houses (2303)	136	Underway
<b><u>KENNEDY HIGHWAY</u></b>			
54	Land Acquisition and Equipment to Support I-95 Improvements (2136)	385	Underway
55	Rehabilitate Corrugated Pipe Culverts (2359)	994	Underway
56	Rehabilitate Parking Lots and Access Roads at JFK Administration (2379)	2,494	Underway
57	Replace Light Poles North of ETL into Cecil County (2323)	6,614	Underway
58	Replace Navigational Lighting on the Tydings Bridge (2332)	323	Underway
59	Resurface I-95 NB from the Tydings Bridge to the Maryland/Delaware State Line (Engineering only) (2393)	73	Underway
60	Resurface I-95 SB from the Maryland/Delaware State Line to the Tydings Bridge (Engineering only) (2394)	73	Underway
61	Structural Rehab to Various Bridges on I-95 in Baltimore and Harford Counties (Engineering only) (2383)	375	Underway
62	Structural Rehab to Various Bridges on I-95 in Cecil County (Engineering only) (2382)	650	Underway
<b><u>MULTI-AREA</u></b>			
63	Furnish & Install Fiber Optic Cable from FSK to Point Breeze (2386)	200	Fall, 2015
64	Allocated Long Range Capital Needs Reserve (2325)	104,478	Ongoing

**SYSTEM PRESERVATION MINOR PROJECTS PROGRAM**

**MARYLAND TRANSPORTATION AUTHORITY - LINE 24 (cont'd)**

ITEM NO.	DESCRIPTION AND IMPROVEMENT TYPE	FY16 + FY17 PROJECT COST (\$000's)	CONSTRUCTION START
<b><u>Fiscal Year 2016 and 2017 (cont'd)</u></b>			
<b><u>MULTI-AREA (cont'd)</u></b>			
65	Equipment Budget (1702)	17,420	Ongoing
66	System Preservation Unallocated Reserve (1981)	2,000	Ongoing
67	Bay TMDL Stormwater Retrofits - Phase IV (Engineering only) (2404)	230	Underway
68	Deck Sealing and Miscellaneous Repairs to Bridges on I-95 (FMT) and I-695 (FSK) (2326)	3,544	Underway
69	Evaluate Condition of Deck, Superstructure & Substructures All Facilities (Engineering only) (2083)	250	Underway
70	Facility-Wide Culvert and Pipe Rehabilitation (Engineering only) (2390)	300	Underway
71	Furnish and Install License Plate Recognition Systems (2360)	2,513	Underway
72	Implement Video Citation Process (2294)	1,050	Underway
73	Install E-ZPass Back-Up Site (2225)	1,087	Underway
74	Install Ten Virtual Weigh Stations at JFK, TJH, FMT, BHT and FSK (2073)	5,792	Underway
75	Law Enforcement Computer-Aided Dispatch/Records Mgmt/Auto Field Report/Auto Veh Locator System Plan (2324)	2,697	Underway
76	Modifications to Toll Plaza Signing at All Facilities (2405)	765	Underway
77	On-Call Drainage and Stormwater Remediation (2366)	340	Underway
78	On-Call Electrical and ITS (2345)	2,316	Underway
79	On-Call Miscellaneous Paving Repairs (2335)	3,165	Underway
80	On-Call Shotcrete Repairs and Miscellaneous Modifications (2297)	1,864	Underway
81	On-Call Sign Structures (2298)	1,330	Underway
82	On-Call Structural & Concrete Repairs and Misc. Modifications (2385)	8,364	Underway
83	On-Call Structural Repairs and Misc. Modifications (2387)	8,569	Underway
84	On-Call Structural Repairs and Misc. Modifications (2388)	8,885	Underway
85	On-Call Structural Repairs and Miscellaneous Modifications (2291)	672	Underway
86	On-Call Structural Repairs and Miscellaneous Modifications (2296)	112	Underway
87	On-Call Total Maximum Daily Load (TMDL) Storm Water Retrofits on JFK and BHT (2290)	966	Underway
88	Replace Generators at JFK, WPL, BHT and FSK (2265)	1,054	Underway
89	Total Maximum Daily Load (TMDL) Storm Water Retrofits - Phase III (2346)	2,165	Underway
90	Total Maximum Daily Load (TMDL) Storm Water Retrofits (2300)	3,957	Underway
91	Upgrade Fire Alarm and Security Systems (2358)	3,580	Underway

**SYSTEM PRESERVATION MINOR PROJECTS PROGRAM**

**MARYLAND TRANSPORTATION AUTHORITY - LINE 24 (cont'd)**

ITEM NO.	DESCRIPTION AND IMPROVEMENT TYPE	FY16 + FY17 PROJECT COST (\$000's)	CONSTRUCTION START
<b><u>Fiscal Year 2016 and 2017 (cont'd)</u></b>			
<b><u>NICE BRIDGE</u></b>			
92	Rehabilitate Substructure and Superstructure of Nice Bridge (2395)	3,272	Underway
93	Replace Underground Storage Tanks with Aboveground Storage Tanks (2200)	185	Underway
<b><u>POINT BREEZE</u></b>			
94	On-Call Facility and Building Repairs for Point Breeze (Engineering only) (2400)	150	Underway
95	Rehabilitate Point Breeze Parking Lots (2365)	743	Underway
96	Renovate MDTA Headquarters (2356)	1,714	Underway
97	Renovate Point Breeze Building 2330 (Engineering only) (2407)	483	Underway
98	Replace Rooftop HVAC at Headquarters Building (2399)	678	Underway
<b><u>W. P. LANE BRIDGE</u></b>			
99	Modify WPL Crossover and Resurface EB and WB Approaches (Engineering only) (2344)	120	Underway
100	Modify WPL Lane Use System (2340)	893	Underway
101	Rehabilitate Bay Bridge Staging Dock (Engineering only) (2392)	200	Underway
102	Rehabilitate Metal Northrop/Grumman Building for Operations (2322)	173	Underway
103	Rehabilitate Toll Plaza Canopy and Plaza Lighting at BB Facility (Engineering only) (2378)	20	Underway
104	Renovate Buildings at Bay Bridge Facility (Engineering only) (2377)	200	Underway
105	Replace 5KV Feeder on Eastbound Bay Bridge (2329)	5,249	Underway
106	Replace Eastbound Bay Bridge Navigational Lighting (2347)	1,510	Underway
107	Replace EB Bay Bridge Trolley System (Engineering only) (2391)	42	Underway
108	Replace HVAC at Bay Bridge Campus Buildings (Engineering only) (2362)	149	Underway
109	Seal Deck of WB Bay Bridge (Engineering only) (2369)	100	Underway

