

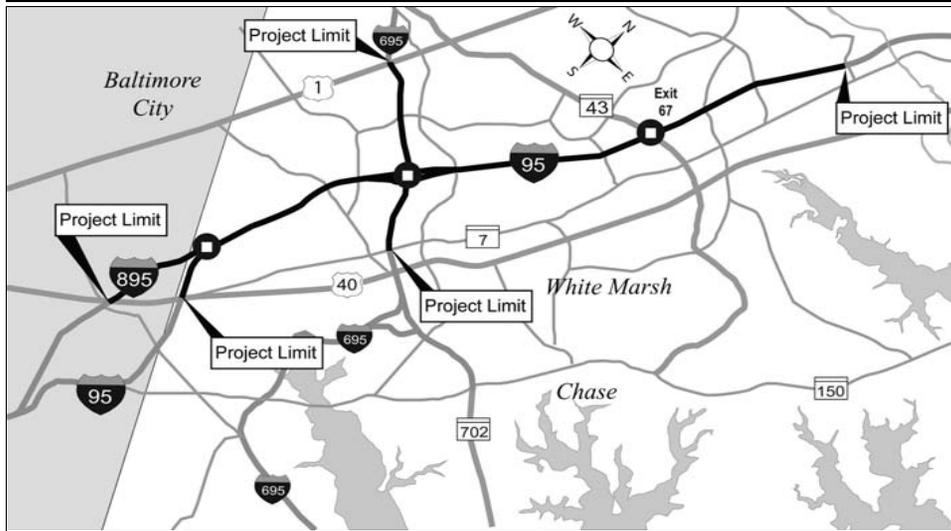
Maryland
Transportation
Authority



MARYLAND TRANSPORTATION AUTHORITY

**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> |
|--|----------------|----------------|----------------|----------------|----------------|----------------|---------------------------|
| <u>Construction Program</u> | | | | | | | |
| Major Projects | 164.6 | 192.8 | 161.4 | 155.8 | 136.9 | 59.2 | 870.7 |
| System Preservation Minor Projects | 101.6 | 156.1 | 185.5 | 193.7 | 163.0 | 161.9 | 961.8 |
| <u>Development & Evaluation Program</u> | <u>13.3</u> | <u>14.6</u> | <u>7.3</u> | <u>8.8</u> | <u>9.6</u> | <u>9.8</u> | <u>63.4</u> |
| TOTAL | 279.5 | 363.5 | 354.2 | 358.3 | 309.5 | 230.9 | 1,895.9 |



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: The Express Toll Lanes have helped to reduce peak period congestion on I-95 between White Marsh and the I-95/I-895 split that occurs during morning and afternoon rush hours, weekends, holidays, incidents and other peak periods. Prior to the opening of the Express Toll Lanes, this segment of I-95 was the most congested section of I-95 in Maryland north of Baltimore City. 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:

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

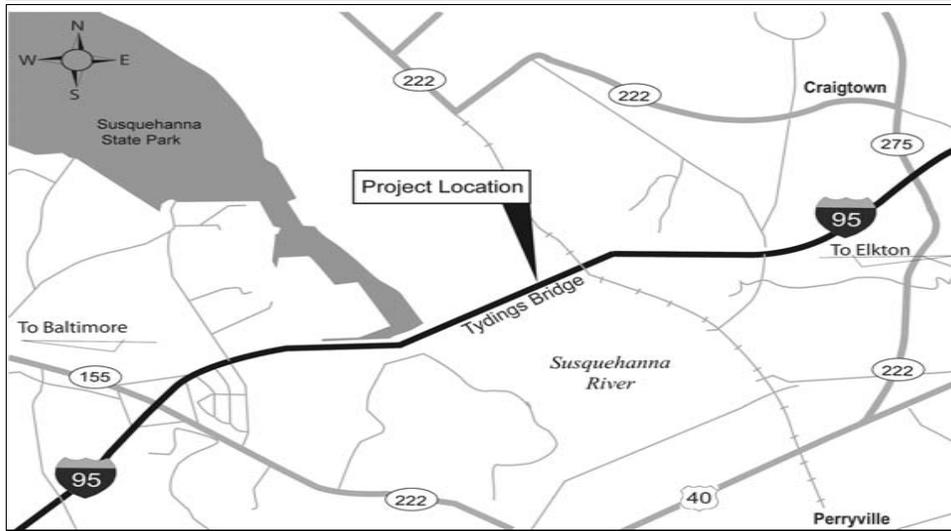
ASSOCIATED IMPROVEMENTS: None.

EXPLANATION: The reconstruction of three interchanges and the addition of the Express Toll Lanes have helped reduce peak period congestion on I-95 between White Marsh and the I-95/I-895 split.

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 | 118,861 | 871 | 0 | 0 | 0 | 0 | 0 | 871 | 0 | |
| Right-of-way | 47,507 | 47,094 | 267 | 146 | 0 | 0 | 0 | 0 | 413 | 0 | |
| Construction | 924,448 | 851,039 | 23,555 | 49,854 | 0 | 0 | 0 | 0 | 73,409 | 0 | |
| Total | 1,097,719 | 1,023,026 | 24,693 | 50,000 | 0 | 0 | 0 | 0 | 74,693 | 0 | |
| 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 |

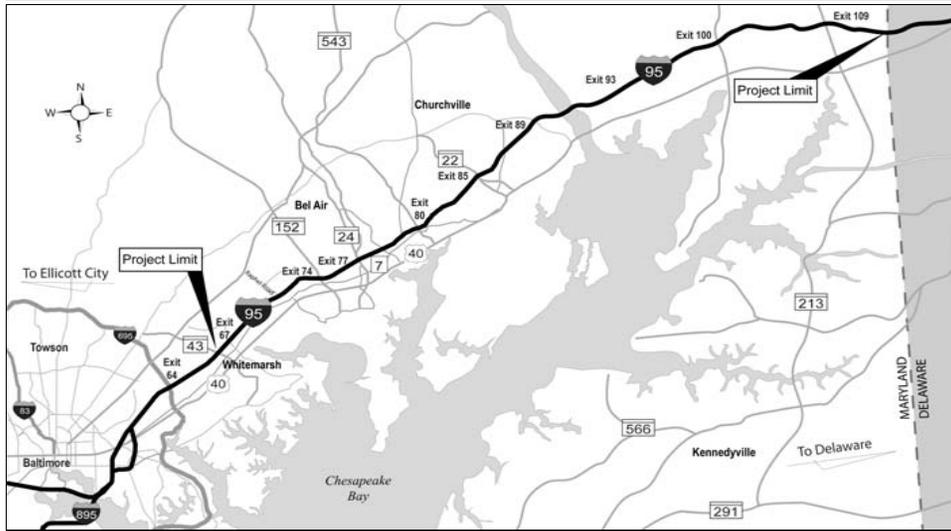
ASSOCIATED IMPROVEMENTS: None.

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 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 | 199 | 199 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 10,383 | 1,930 | 7,199 | 1,254 | 0 | 0 | 0 | 0 | 8,453 | 0 |
| Total | 10,582 | 2,129 | 7,199 | 1,254 | 0 | 0 | 0 | 0 | 8,453 | 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. Only Phases I and II are funded for construction at this time. Phase III is funded for engineering only.

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.

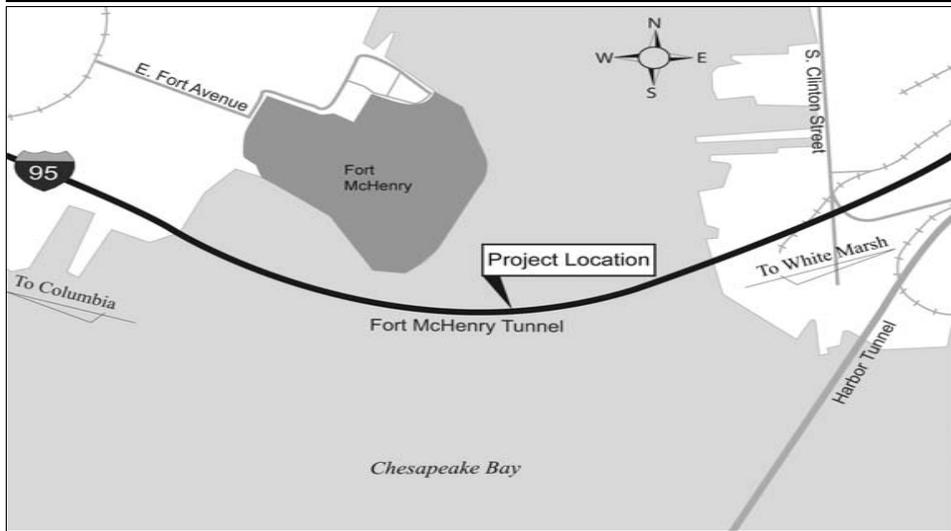
EXPLANATION: The I-95 roadway is in need of resurfacing from MD 43 to the Maryland/Delaware state line (northbound and southbound).

STATUS: Construction of Phase I is complete. Engineering is complete and construction is underway for Phase II. Design for Phase III 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 | 378 | 358 | 20 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Construction | 31,186 | 13,015 | 17,005 | 1,166 | 0 | 0 | 0 | 0 | 18,171 | 0 | |
| Total | 31,564 | 13,373 | 17,025 | 1,166 | 0 | 0 | 0 | 0 | 18,191 | 0 | |
| Federal-Aid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

2261, 2312, 2393, 2394



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 |

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

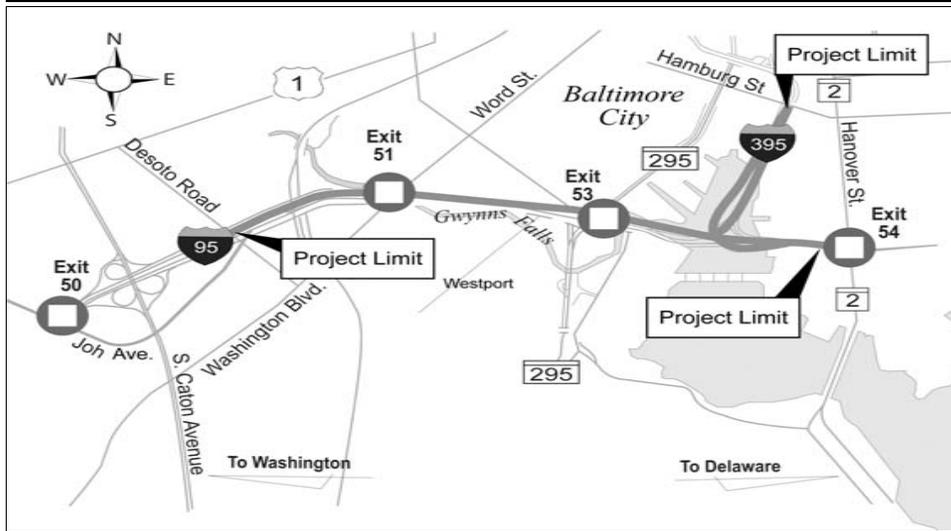
ASSOCIATED IMPROVEMENTS:

- I-95/I-395 Fort McHenry Tunnel - Rehabilitate Decks, Repair Superstructure, Replace Joints, Zone Paint and Other Misc. Repairs - Construction Program (Line 5)
- I-95 Fort McHenry Tunnel - Replace Tunnel Lighting Systems - Construction Program (Line 7)

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 | 778 | 778 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 35,660 | 26,823 | 7,000 | 1,837 | 0 | 0 | 0 | 0 | 8,837 | 0 |
| Total | 36,438 | 27,601 | 7,000 | 1,837 | 0 | 0 | 0 | 0 | 8,837 | 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 Fort McHenry Tunnel - Rehabilitate Concrete Tunnel Deck - Construction Program (Line 4)
- I-95 Fort McHenry Tunnel - Replace Tunnel Lighting Systems - Construction Program (Line 7)

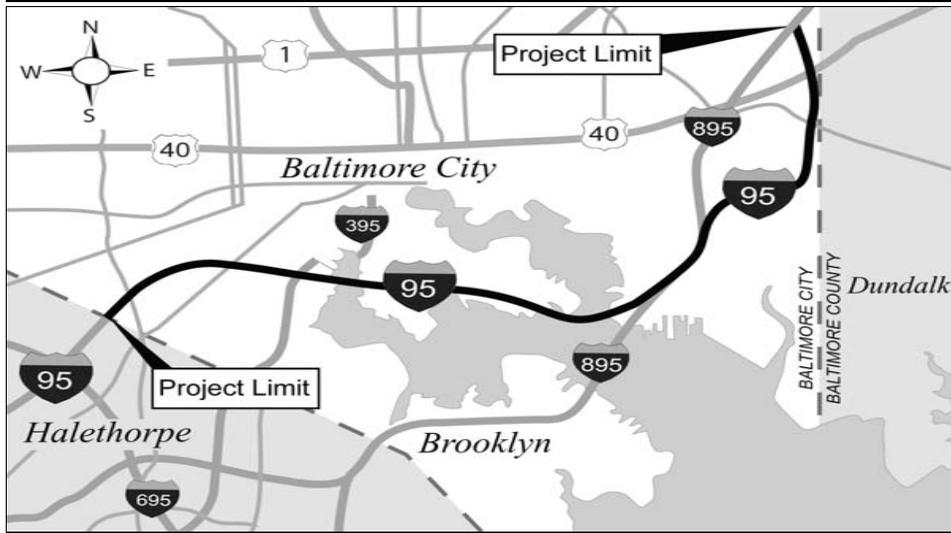
EXPLANATION: Repairs are needed to correct current wear and to prevent further wear of the decks, superstructure and paint. The joints are nearing the end of their useful life and need to be replaced.

STATUS: Engineering and construction are underway.

| 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 | 8,038 | 7,867 | 171 | 0 | 0 | 0 | 0 | 0 | 171 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 85,917 | 63,568 | 19,388 | 2,961 | 0 | 0 | 0 | 0 | 22,349 | 0 |
| Total | 93,955 | 71,435 | 19,559 | 2,961 | 0 | 0 | 0 | 0 | 22,520 | 0 |
| Federal-Aid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

2205, 2207, 2262, 2354

SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP: Cost increased by \$8.4 million for scope change to include additional superstructure and pier modifications.



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

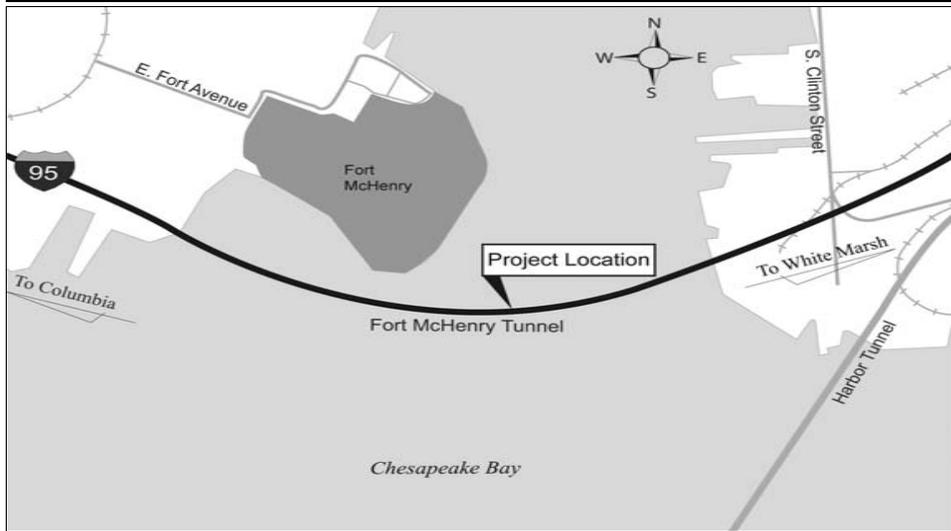
ASSOCIATED IMPROVEMENTS: None.

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.

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 | 1,086 | 1,086 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Construction | 16,175 | 3,618 | 9,825 | 2,732 | 0 | 0 | 0 | 0 | 12,557 | 0 | |
| Total | 17,261 | 4,704 | 9,825 | 2,732 | 0 | 0 | 0 | 0 | 12,557 | 0 | |
| Federal-Aid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |



PROJECT: I-95 Fort McHenry Tunnel - Replace Tunnel Lighting Systems

DESCRIPTION: Replace or rehabilitate the Fort McHenry Tunnel lighting system.

PURPOSE & NEED SUMMARY STATEMENT: The lights throughout this tunnel are an integral part of the tunnel system. The lighting system, which is approaching the end of its life cycle, needs to be replaced.

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

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

EXPLANATION: Old and/or inadequate lighting will be replaced throughout the Fort McHenry Tunnel, which will enhance safety for both workers and drivers.

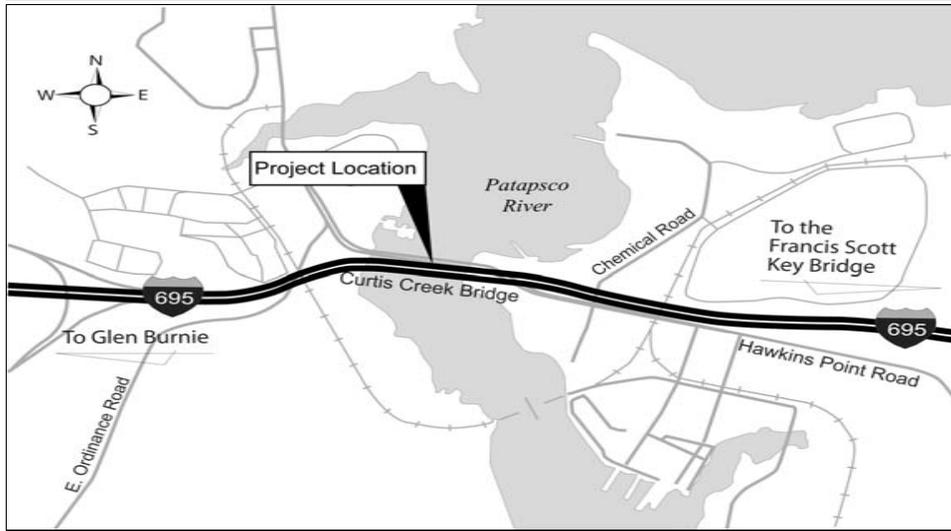
ASSOCIATED IMPROVEMENTS:

- I-95 Fort McHenry Tunnel - Rehabilitate Concrete Tunnel Deck - Construction Program (Line 4)
- I-95/I-395 Fort McHenry Tunnel - Rehabilitate Decks, Repair Superstructure, Replace Joints, Zone Paint and Other Misc. Repairs - Construction Program (Line 5)

STATUS: Engineering is underway. 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 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 | 1,634 | 603 | 1,031 | 0 | 0 | 0 | 0 | 0 | 1,031 | 0 | |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Construction | 38,441 | 0 | 30 | 20,000 | 18,411 | 0 | 0 | 0 | 38,441 | 0 | |
| Total | 40,075 | 603 | 1,061 | 20,000 | 18,411 | 0 | 0 | 0 | 39,472 | 0 | |
| Federal-Aid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |



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

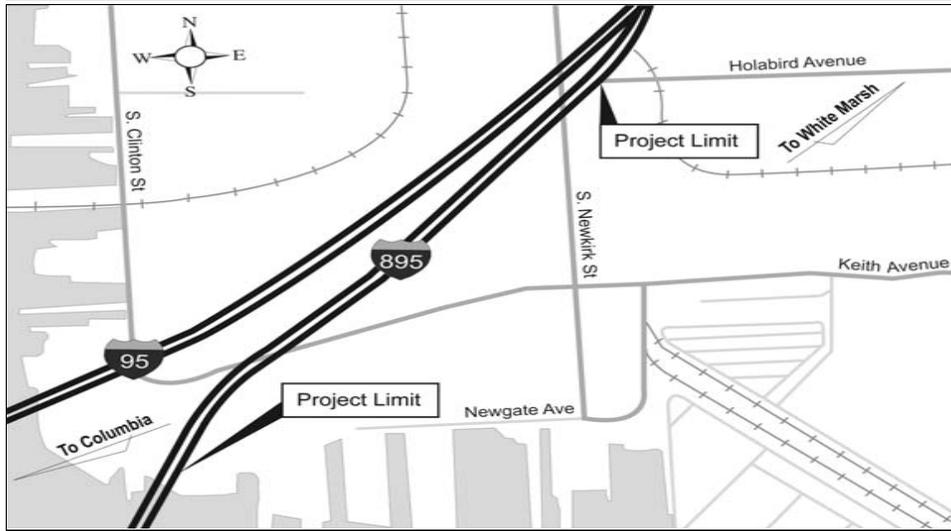
ASSOCIATED IMPROVEMENTS: None.

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 | 256 | 256 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 5,174 | 2,037 | 2,365 | 772 | 0 | 0 | 0 | 0 | 3,137 | 0 |
| Total | 5,430 | 2,293 | 2,365 | 772 | 0 | 0 | 0 | 0 | 3,137 | 0 |
| 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:

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

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

ASSOCIATED IMPROVEMENTS:

- I-895 Baltimore Harbor Tunnel Thruway - Replace Deck and Superstructure of Bridge over Patapsco Flats - Construction Program (Line 11)
- I-895 Baltimore Harbor Tunnel Thruway - Rehabilitate Various Bridges - Construction Program (Line 13)

STATUS: Engineering and right-of-way are underway. Construction is scheduled to begin in FY 2018.

SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP: Cost decreased by \$16.7 million due to change from 4 Stage Construction to 2 Stage Construction.

| 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 | 20,107 | 13,277 | 1,800 | 1,125 | 1,325 | 860 | 860 | 860 | 6,830 | 0 |
| Right-of-way | 10,920 | 432 | 5,028 | 5,460 | 0 | 0 | 0 | 0 | 10,488 | 0 |
| Construction | 242,070 | 1,070 | 0 | 0 | 24,100 | 74,710 | 101,220 | 40,970 | 241,000 | 0 |
| Total | 273,097 | 14,779 | 6,828 | 6,585 | 25,425 | 75,570 | 102,080 | 41,830 | 258,318 | 0 |
| 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:

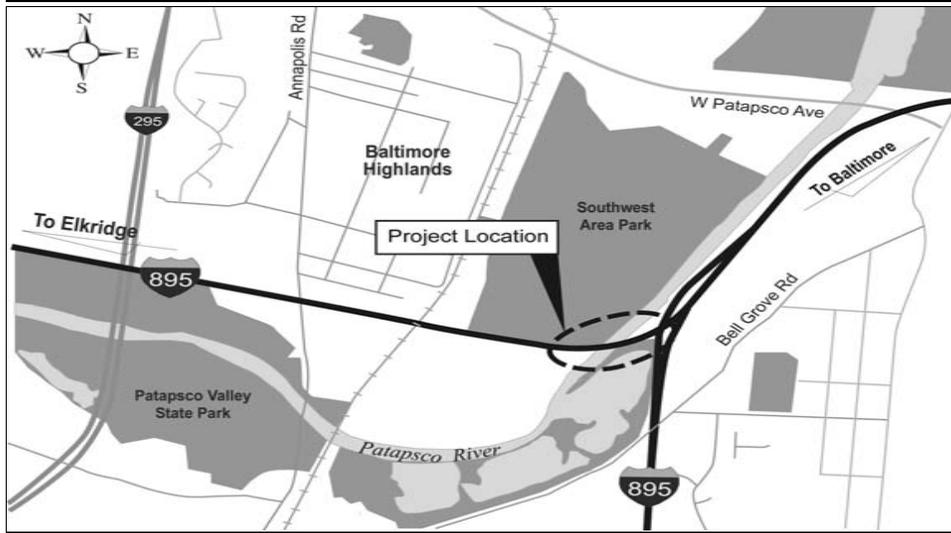
I-895 Harbor Tunnel Thruway - Rehabilitate Tunnel Standpipe and Sump Pump Systems - Construction Program (Line 12)

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

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

| 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 | 2,846 | 2,346 | 500 | 0 | 0 | 0 | 0 | 0 | 500 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 60,800 | 0 | 1,401 | 18,684 | 18,684 | 18,684 | 3,347 | 0 | 60,800 | 0 |
| Total | 63,646 | 2,346 | 1,901 | 18,684 | 18,684 | 18,684 | 3,347 | 0 | 61,300 | 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 |

EXPLANATION: Replacing the deck and superstructure will extend the life of the bridge by fifteen years.

ASSOCIATED IMPROVEMENTS:

I-895 Baltimore Harbor Tunnel Thruway - Replace Canton Viaduct - Construction Program (Line 9)
 I-895 Baltimore Harbor Tunnel Thruway - Rehabilitate Various Bridges - Construction Program (Line 13)

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

| 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 | 2,165 | 2,002 | 163 | 0 | 0 | 0 | 0 | 0 | 163 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 66,515 | 35 | 0 | 17,000 | 21,506 | 21,506 | 6,468 | 0 | 66,480 | 0 |
| Total | 68,680 | 2,037 | 163 | 17,000 | 21,506 | 21,506 | 6,468 | 0 | 66,643 | 0 |
| Federal-Aid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP: Cost increased by \$2.3 million for revised scope to include environmental requirements, additional miscellaneous repairs, MOT prephasing, and approach/crossover roadway work.



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:

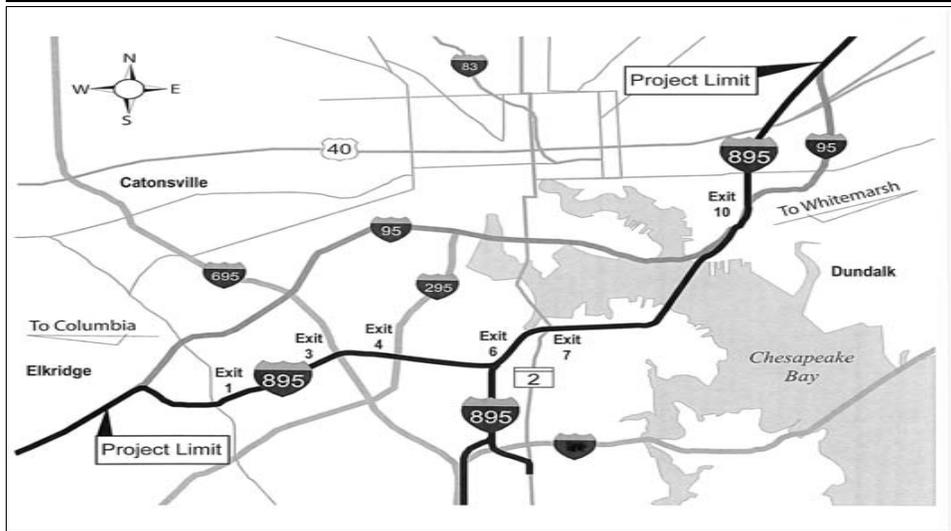
I-895 Baltimore Harbor Tunnel Thruway - Replace Vent Fans - Construction Program (Line 10)

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 2020.

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 | 278 | 42 | 0 | 0 | 0 | 0 | 0 | 42 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 12,738 | 0 | 0 | 0 | 0 | 0 | 8,407 | 4,331 | 12,738 | 0 |
| Total | 13,058 | 278 | 42 | 0 | 0 | 0 | 8,407 | 4,331 | 12,780 | 0 |
| Federal-Aid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



PROJECT: I-895 Baltimore Harbor Tunnel Thruway - Rehabilitate Various Bridges

DESCRIPTION: Rehabilitate substructure and superstructure of various bridges on I-895 north and south of the Baltimore Harbor Tunnel including the Glen Burnie spur.

PURPOSE & NEED SUMMARY STATEMENT: The substructures and superstructures of the bridges are experiencing various degrees of wear. The improvements will considerably increase the useful life of these structures.

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 project will extend the life cycles and usefulness of the structures associated with this tunnel system.

ASSOCIATED IMPROVEMENTS:

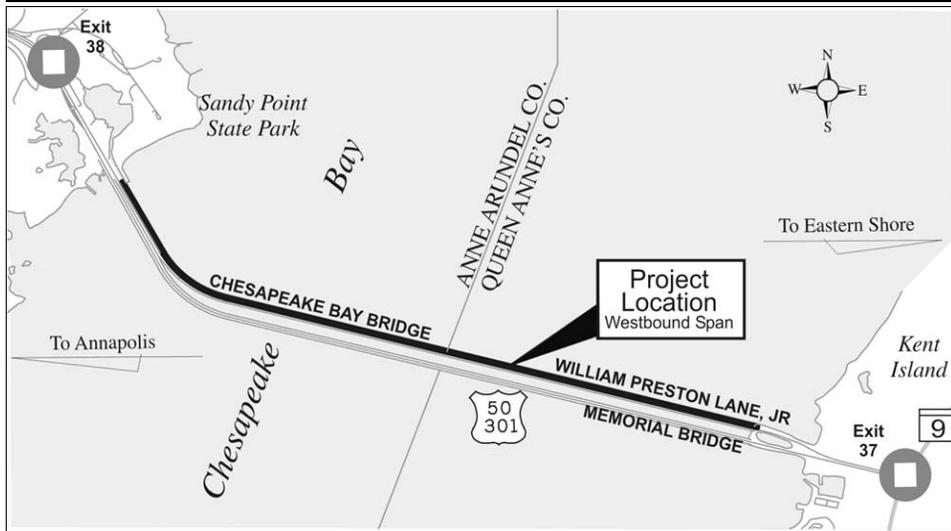
- I-895 Baltimore Harbor Tunnel Thruway - Replace Canton Viaduct - Construction Program (Line 9)
- I-895 Baltimore Harbor Tunnel Thruway - Replace Deck and Superstructure of Bridge over Patapsco Flats - Construction Program (Line 11)

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

| POTENTIAL FUNDING SOURCE: | | <input checked="" type="checkbox"/> SPECIAL | | <input type="checkbox"/> FEDERAL | | <input type="checkbox"/> GENERAL | | <input 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 | 0 |
| Engineering | 3,355 | 1,844 | 1,511 | 0 | 0 | 0 | 0 | 0 | 0 | 1,511 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 40,544 | 0 | 0 | 12,200 | 19,630 | 8,714 | 0 | 0 | 0 | 40,544 | 0 |
| Total | 43,899 | 1,844 | 1,511 | 12,200 | 19,630 | 8,714 | 0 | 0 | 0 | 42,055 | 0 |
| Federal-Aid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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

2370, 2371, 2372



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:

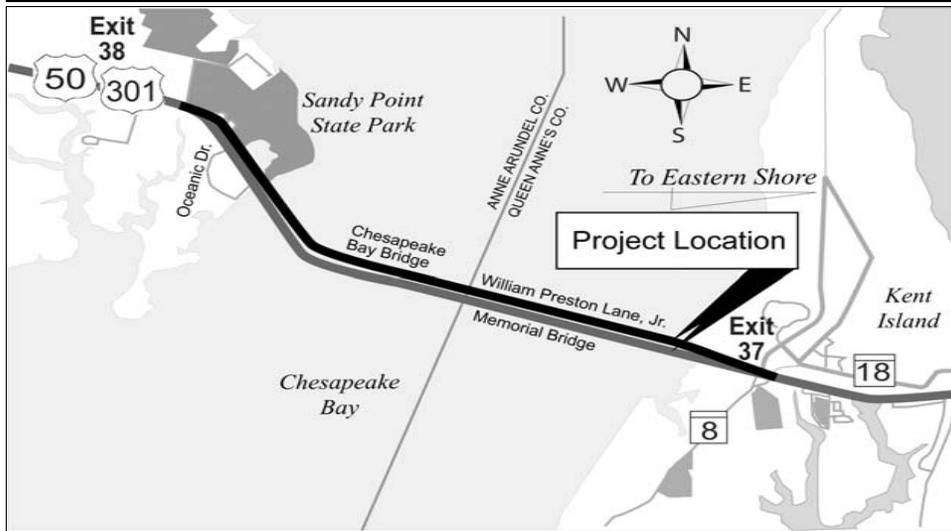
- US 50/301 Bay Bridge - Cable Rewrapping & Dehumidification - Construction Program (Line 15)
- US 50/301 Bay Bridge - Rehab Suspension Spans Westbound Bridge - Constr. Prog. (Line16)
- US 50/301 Bay Bridge - Structural Repairs and Misc. Modifications - Constr. Program (Line 17)

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: Cost increased by \$5.8 million for scope change due to recent inspection findings for Phase IV.

| 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 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 | 815 | 752 | 63 | 0 | 0 | 0 | 0 | 0 | 63 | 0 | |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Construction | 103,637 | 76,381 | 226 | 2,500 | 13,602 | 10,928 | 0 | 0 | 27,256 | 0 | |
| Total | 104,452 | 77,133 | 289 | 2,500 | 13,602 | 10,928 | 0 | 0 | 27,319 | 0 | |
| 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:

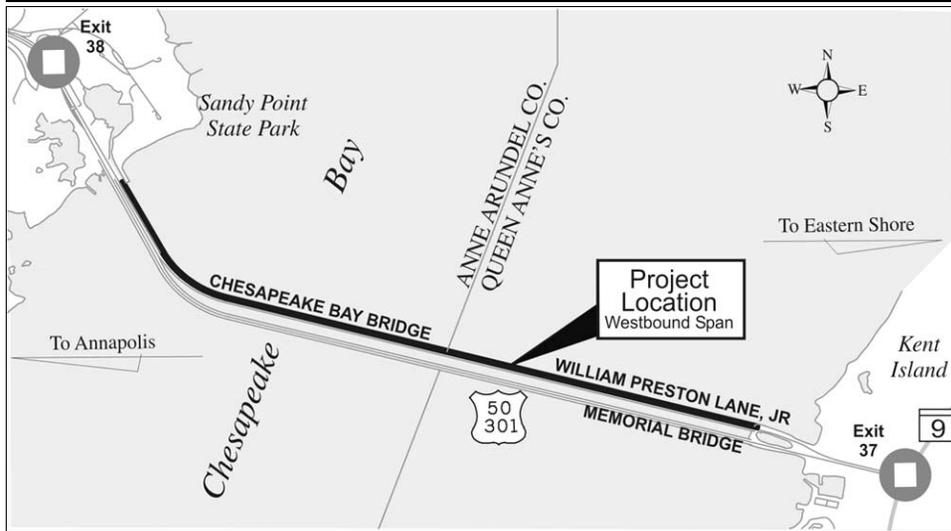
- US 50/301 Bay Bridge - Clean and Paint Structural Steel WB Bridge - Constr. Program (Line 14)
- US 50/301 Bay Bridge - Rehab Suspension Spans Westbound Bridge - Constr. Prog. (Line16)
- US 50/301 Bay Bridge - Structural Repairs and Misc. Modifications - Constr. Program (Line 17)
- US 50/301 Bay Bridge - Rehab EB Bridge Deck - Development and Evaluation Program (Line 26)

STATUS: Engineering and construction are underway.

| PHASE | TOTAL | | CURRENT YEAR | | | | PROJECTED CASH REQUIREMENTS FOR PLANNING PURPOSES ONLY | | | | SIX YEAR TOTAL | BALANCE TO COMPLETE |
|--------------|------------------------|------------------|--------------|----------|---------------|---------------|--|---------------|---------------|---------------|----------------|---------------------|
| | ESTIMATED COST (\$000) | EXPEND THRU 2015 | 2016 | 2017 |2018.... |2019.... |2020.... |2021.... |2022.... |2023.... |2024.... |2025.... |
| Planning | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Engineering | 3,230 | 2,188 | 1,042 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,042 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 57,213 | 53,760 | 3,453 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,453 |
| Total | 60,443 | 55,948 | 4,495 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,495 |
| Federal-Aid | 0 | 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 of 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.

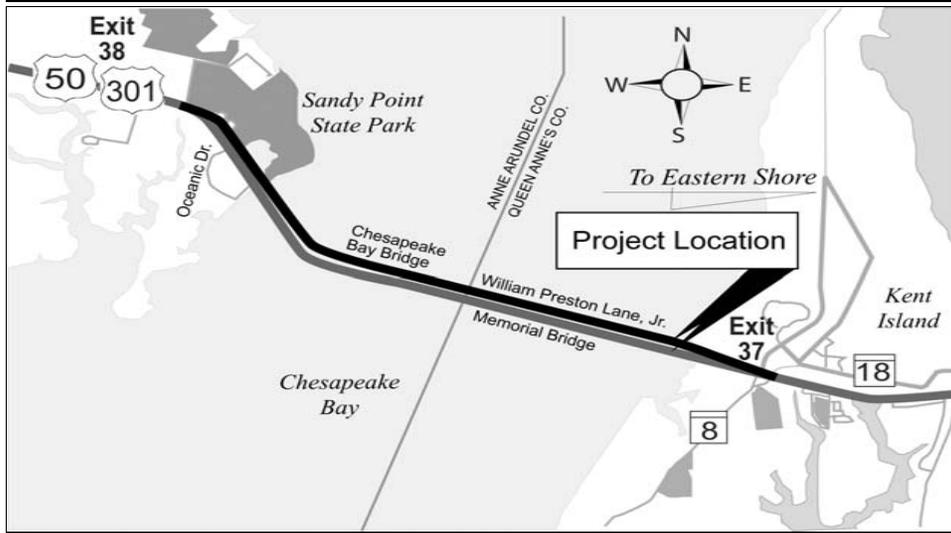
ASSOCIATED IMPROVEMENTS:

- US 50/301 Bay Bridge - Clean and Paint Structural Steel WB Bridge - Constr. Program (Line 14)
- US 50/301 Bay Bridge - Cable Rewrapping & Dehumidification - Construction Program (Line 15)
- US 50/301 Bay Bridge - Structural Repairs and Misc. Modifications - Constr. Program (Line 17)

STATUS: Engineering is underway. Construction 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 | | 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..... | | |2020..... |
| Planning | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Engineering | 3,200 | 724 | 1,771 | 600 | 105 | 0 | 0 | 0 | 2,476 | 0 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 44,000 | 57 | 6,943 | 23,500 | 13,000 | 500 | 0 | 0 | 43,943 | 0 | 0 |
| Total | 47,200 | 781 | 8,714 | 24,100 | 13,105 | 500 | 0 | 0 | 46,419 | 0 | 0 |
| Federal-Aid | 0 | 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:

- | | |
|---|--|
| <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: This project will repair areas of wear and extend the useful life of the components.

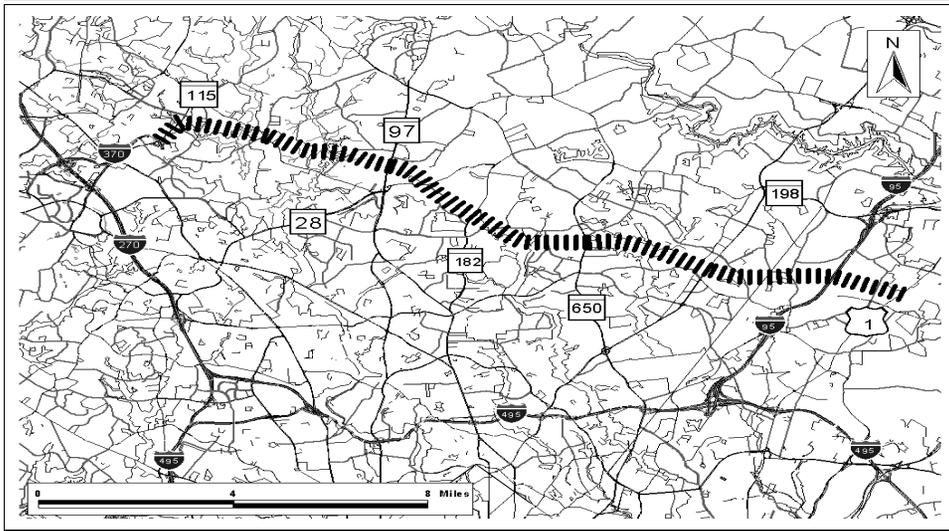
ASSOCIATED IMPROVEMENTS:

- US 50/301 Bay Bridge - Clean and Paint Structural Steel WB Bridge - Constr. Program (Line 14)
- US 50/301 Bay Bridge - Cable Rewrapping & Dehumidification - Construction Program (Line 15)
- US 50/301 Bay Bridge - Rehab Suspension Spans Westbound Bridge - Constr. Prog. (Line16)
- US 50/301 Bay Bridge - Rehab EB Bridge Deck - Development and Evaluation Program (Line 26)

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 | 326 | 558 | 316 | 0 | 0 | 0 | 0 | 874 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 16,510 | 3,412 | 7,280 | 3,818 | 2,000 | 0 | 0 | 0 | 13,098 | 0 |
| Total | 17,710 | 3,738 | 7,838 | 4,134 | 2,000 | 0 | 0 | 0 | 13,972 | 0 |
| 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:

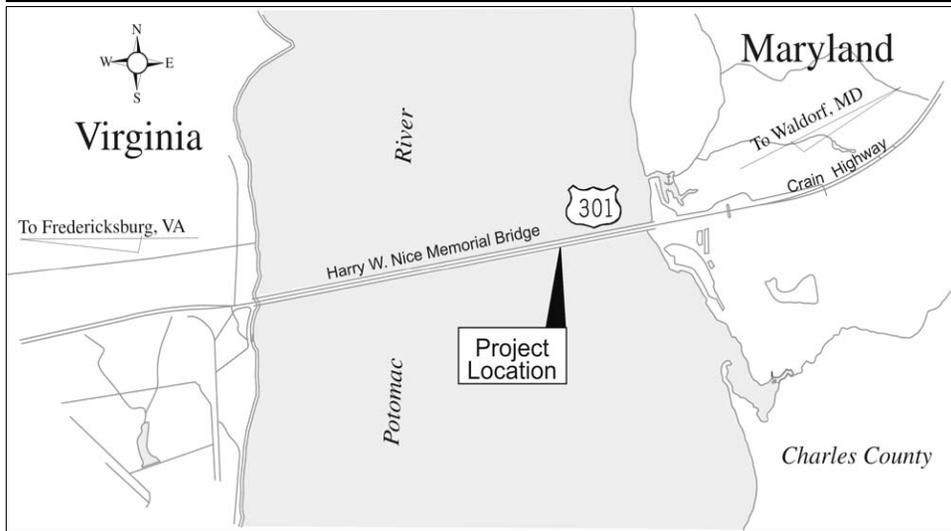
- US 29 Interchanges (Lines 10, 11 Montgomery County - SHA)
- MD 28/MD 198, MD 97 to I-95 (Line 12, Montgomery County - SHA)
- I-95/Contee Road Interchange (Line 1, Prince George's County - SHA)
- MD 201 Extended/US 1, I-95/I-495 to N. of Muirkirk Road (Line 21, Prince George's County - SHA)

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 | | 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 | 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 | 244,259 | 1,741 | 0 | 0 | 0 | 0 | 0 | 1,741 | 0 |
| Construction | 2,036,518 | 1,997,902 | 30,781 | 5,496 | 900 | 600 | 480 | 359 | 38,616 | 0 |
| Total | 2,386,588 | 2,346,231 | 32,522 | 5,496 | 900 | 600 | 480 | 359 | 40,357 | 0 |
| 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.
1982



PROJECT: US 301 Harry W. Nice Memorial 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 25)

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 | 731 | 69 | 0 | 0 | 0 | 0 | 0 | 69 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 12,386 | 11,249 | 1,137 | 0 | 0 | 0 | 0 | 0 | 1,137 | 0 |
| Total | 13,186 | 11,980 | 1,206 | 0 | 0 | 0 | 0 | 0 | 1,206 | 0 |
| Federal-Aid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



PROJECT: Point Breeze - Renovate Building 2330

DESCRIPTION: Renovate Point Breeze Building 2330 to provide office space for the Authority Operations Center (AOC) and Tele-Communication Office (TCO) moving from the 5th floor of the Fort McHenry Tunnel East Vent Building.

PURPOSE & NEED SUMMARY STATEMENT: Renovations to the Point Breeze Building 2330 will provide essential operational space in a secured environment required for the Authority Operations Center (AOC) and Tele-Communication Office (TCO) - Dispatch Center supporting MDTA Police functions. Integrating the space to provide continuity between AOC and TCO - Dispatch Center will improve communication and efficiency.

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 Authority Operations Center (AOC) is the primary traffic and systems monitoring center for various MDTA facilities. The Tele-Communication Office (TCO) - Dispatch Center supporting MDTA Police functions works closely with AOC. Providing an integrated work space will allow maximum efficiency.

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

| <u>POTENTIAL FUNDING SOURCE:</u> | | | | | | | | | | |
|--|------------------------|------------------|--------------|--------------|-----------------------------|----------|----------------------------|----------|----------------|---------------------|
| <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 | | | | SIX YEAR TOTAL | BALANCE TO COMPLETE |
| | ESTIMATED COST (\$000) | EXPEND THRU 2015 | | | 2016 | 2017 | FOR PLANNING PURPOSES ONLY | 2018 | | |
| Planning | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Engineering | 764 | 23 | 741 | 0 | 0 | 0 | 0 | 0 | 741 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 10,495 | 0 | 0 | 8,500 | 1,995 | 0 | 0 | 0 | 10,495 | 0 |
| Total | 11,259 | 23 | 741 | 8,500 | 1,995 | 0 | 0 | 0 | 11,236 | 0 |
| Federal-Aid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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



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.

| 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 | 616 | 616 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 11,129 | 9,687 | 1,442 | 0 | 0 | 0 | 0 | 0 | 1,442 | 0 |
| Total | 11,745 | 10,303 | 1,442 | 0 | 0 | 0 | 0 | 0 | 1,442 | 0 |
| Federal-Aid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

SIGNIFICANT CHANGE FROM FY 2015 - 20 CTP: Cost decreased by \$1.5 million as warranty and preventive maintenance costs were transferred to the operating budget.



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.

| <u>POTENTIAL FUNDING SOURCE:</u> <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 | 566 | 566 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 13,851 | 3,657 | 5,095 | 5,099 | 0 | 0 | 0 | 0 | 10,194 | 0 |
| Total | 14,417 | 4,223 | 5,095 | 5,099 | 0 | 0 | 0 | 0 | 10,194 | 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 hardware and Operating System software and increase the capacity for handling video tolling and citations.

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 update the Electronic Toll Collection hardware 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 decreased by \$4.4 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 | 8,500 | 2,213 | 850 | 850 | 850 | 850 | 850 | 580 | 4,830 | 1,457 |
| Right-of-way | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction | 70,000 | 930 | 0 | 0 | 15,290 | 15,290 | 15,290 | 12,100 | 57,970 | 11,100 |
| Total | 78,500 | 3,143 | 850 | 850 | 16,140 | 16,140 | 16,140 | 12,680 | 62,800 | 12,557 |
| 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

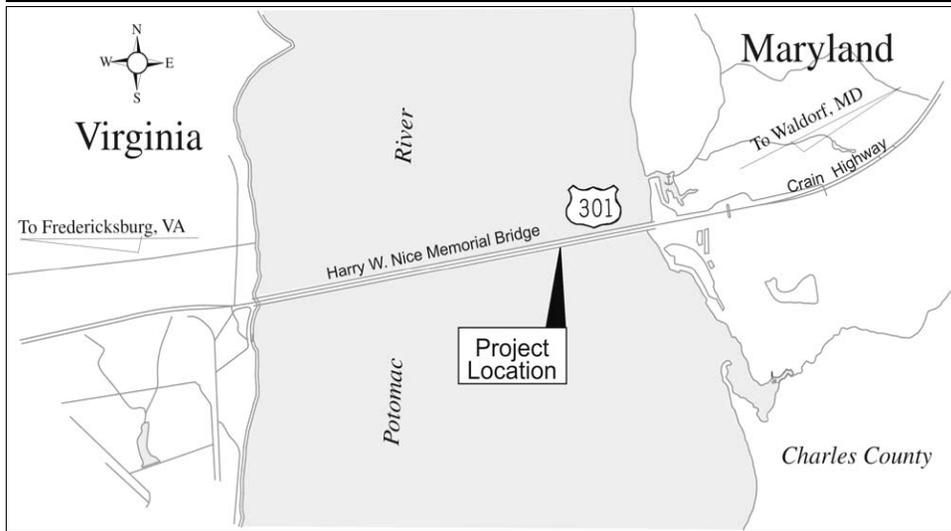
ASSOCIATED IMPROVEMENTS: None.

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 | 354 | 246 | 0 | 0 | 0 | 0 | 0 | 246 | 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 | 354 | 246 | 6,929 | 10,018 | 3,131 | 0 | 0 | 20,324 | 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.

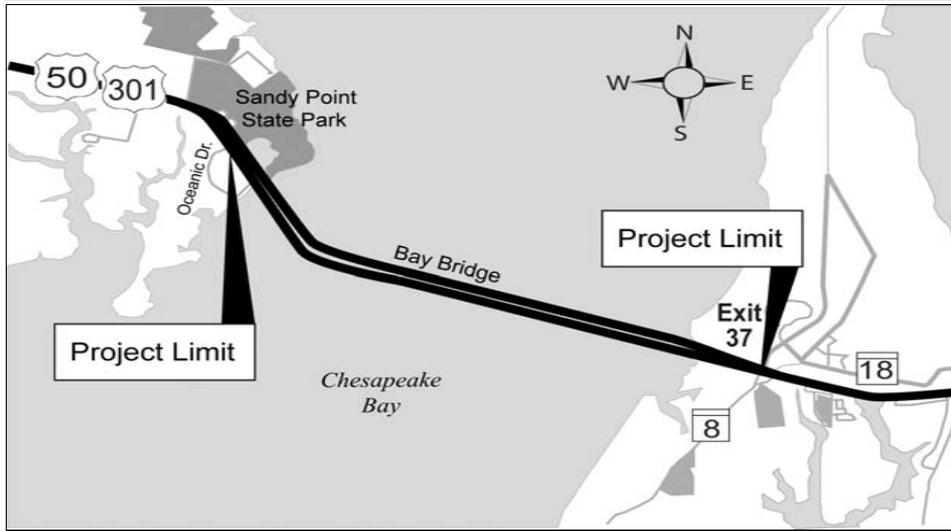
ASSOCIATED IMPROVEMENTS:

US 301 Harry W. Nice Memorial Bridge - Clean and Paint Structural Steel and Miscellaneous Structural Repairs - Construction Program (Line 19)

STATUS: Planning is complete. Engineering and right-of-way acquisition 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 | | | | 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 | 1,850 | 10,555 | 8,000 | 3,000 | 6,000 | 7,600 | 7,600 | 42,755 | 0 |
| Right-of-way | 11,700 | 31 | 719 | 2,100 | 1,825 | 2,825 | 2,025 | 2,175 | 11,669 | 0 |
| Construction | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 61,600 | 7,176 | 11,274 | 10,100 | 4,825 | 8,825 | 9,625 | 9,775 | 54,424 | 0 |
| 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 - Cable Rewrapping & Dehumidification - Construction Program (Line 15)
- US 50/301 Bay Bridge - Structural Repairs and Misc. Modifications - Constr. Program (Line 17)

STATUS: Engineering 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 | 10,700 | 1,695 | 2,000 | 4,500 | 2,505 | 0 | 0 | 0 | 9,005 | 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 |
| Total | 10,700 | 1,695 | 2,000 | 4,500 | 2,505 | 0 | 0 | 0 | 9,005 | 0 |
| Federal-Aid | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

SYSTEM PRESERVATION MINOR PROJECTS PROGRAM

MARYLAND TRANSPORTATION AUTHORITY - LINE 27

| ITEM NO. | DESCRIPTION AND IMPROVEMENT TYPE | TOTAL PROJECT COST (\$000's) | CONSTRUCTION START |
|--|--|------------------------------|--------------------|
| <u>Fiscal Year 2015 Completions</u> | | | |
| <u>FORT MCHENRY TUNNEL</u> | | | |
| 1 | Kane Street Property Acquisition (2401) | 8 | Complete |
| 2 | Zone Paint Various Bridges North of Tunnel (2256) | 6,688 | Complete |
| <u>MULTI-AREA</u> | | | |
| 3 | Install Radio Rebroadcast Systems in Fort McHenry and Harbor Tunnels (1963) | 845 | Complete |
| 4 | Miscellaneous Paving Repairs (Code 1 System Preservation) (2193) | 1,637 | Complete |
| 5 | On-Call Furnishing and Installation of Camera and Compressor-Decompressor (CODEC) Equipment (2014) | 4,445 | Complete |
| 6 | Replace Navigational Lighting Systems at Francis Scott Key, Nice Memorial and Bay Bridges (2074) | 2,791 | Complete |
| <u>POINT BREEZE</u> | | | |
| 7 | Point Breeze - Second Floor Renovation (2295) | 6,489 | Complete |
| 8 | Replace Roof and Repair Brick Masonry at 2310 Point Breeze Building (2242) | 1,730 | Complete |
| <u>W. P. LANE BRIDGE</u> | | | |
| 9 | Replace Eastbound Span Navigational Lighting (2347) | 92 | Complete |

SYSTEM PRESERVATION MINOR PROJECTS PROGRAM

MARYLAND TRANSPORTATION AUTHORITY - LINE 27 (cont'd)

| ITEM NO. | DESCRIPTION AND IMPROVEMENT TYPE | FY16 + FY17 PROJECT COST (\$000's) | CONSTRUCTION START |
|---|---|------------------------------------|--------------------|
| <u>Fiscal Year 2016 and 2017</u> | | | |
| <u>BALTIMORE HARBOR TUNNEL</u> | | | |
| 10 | Canton & Fairfield Vent Building Envelope & Evase Repairs (Engineering only) (2306) | 220 | Underway |
| 11 | Modify Under-Clearances at MD 295 and I-895 Spur Overpasses (Engineering only) (2403) | 246 | Underway |
| 12 | Rehabilitate K-Truss Approach Spans (2334) | 3,677 | Underway |
| 13 | Rehabilitate Tunnel Deck (Engineering only) (2389) | 289 | Underway |
| 14 | Rehabilitate Tunnel Liner (2376) | 51 | Underway |
| 15 | Repaint Switchgear Enclosures (2330) | 392 | Underway |
| 16 | Repair Slopes and Drainage (Engineering only) (2380) | 498 | Underway |
| 17 | Replace HVAC at Administration Building (2308) | 1,090 | Underway |
| 18 | Replacement of Concrete Median Barrier along I-895 (Engineering only) (2423) | 450 | Underway |
| <u>F.S.KEY BRIDGE</u> | | | |
| 19 | Resurface Approach Roadways (Engineering only) (2277) | 350 | Summer, 2016 |
| 20 | Maintenance & Repair of Curtis Creek Drawbridges (2420) | 475 | Underway |
| 21 | Overlay Bridge Decks over Dock Road and CSXT (4 Bridges) (2327) | 5,889 | Underway |
| 22 | Rehab Substructure and Superstructure of Various Bridges (Engineering only) (2374) | 617 | Underway |
| 23 | Rehabilitate Curtis Creek Bridges (Engineering only) (2375) | 764 | Underway |
| 24 | Renovate Second Floor of Administration Building 303 (Engineering only) (2406) | 350 | Underway |
| 25 | Replace HVAC at Campus and OEC Building Roof (Engineering only) (2319) | 84 | Underway |
| 26 | Replace Underground Storage Tanks with Vaulted Storage Tank (2202) | 1,596 | Underway |
| <u>FORT MCHENRY TUNNEL</u> | | | |
| 27 | I-95 Moravia Road to Tunnel - Phases 1 & 2 NB/Phase 2 SB (Engineering only) (2414) | 3,013 | Underway |
| 28 | Install Fresh Air Duct Lighting (2367) | 1,503 | Underway |
| 29 | Pavement Repairs along Moravia Road from I-895 to US 40 (Engineering only) (2419) | 250 | Underway |
| 30 | Rehab Substructure and Superstructure of Various Bridges (Engineering Only) (2397) | 750 | Underway |
| 31 | Rehabilitate Four Bridges on I-95 over Herring Run and CSX (2333) | 3,143 | Underway |

SYSTEM PRESERVATION MINOR PROJECTS PROGRAM

MARYLAND TRANSPORTATION AUTHORITY - LINE 27 (cont'd)

| ITEM NO. | DESCRIPTION AND IMPROVEMENT TYPE | FY16 + FY17 PROJECT COST (\$000's) | CONSTRUCTION START |
|--|--|------------------------------------|--------------------|
| <u>Fiscal Year 2016 and 2017 (cont'd)</u> | | | |
| <u>FORT MCHENRY TUNNEL (cont'd)</u> | | | |
| 32 | Renovate 1st and 5th Floors at East Vent Building (2364) | 7,507 | Underway |
| 33 | Repair Vent Fans (Engineering only) (2251) | 523 | Underway |
| 34 | Replace Generator at Maintenance Building (2348) | 15 | Underway |
| 35 | Replace Underground Storage Tanks at Administration Building (2381) | 953 | Underway |
| 36 | Salt Barn Replacement, Debris Dewatering Pad and Civil Site Construction (Engineering only) (2299) | 2,286 | Underway |
| 37 | West Vent Building Settlement and Building Repairs (2357) | 597 | Underway |
| <u>HATEM BRIDGE</u> | | | |
| 38 | Rehabilitate Substructure and Superstructure (2368) | 3,213 | Underway |
| 39 | Replace HVAC at Administration Building and Scale Houses (2303) | 50 | Underway |
| <u>KENNEDY HIGHWAY</u> | | | |
| 40 | Install Travel Time System (2373) | 343 | Underway |
| 41 | Rehab Slope and Construct Retaining Wall at I-695 WB and I-95 NB (2384) | 2,652 | Underway |
| 42 | Rehabilitate Corrugated Pipe Culverts (2359) | 848 | Underway |
| 43 | Rehabilitate Parking Lots and Access Roads at Administration Building (2379) | 2,468 | Underway |
| 44 | Replace Generator at Police Barracks (2410) | 75 | Underway |
| 45 | Replace Light Poles North of ETL into Cecil County (2323) | 7,715 | Underway |
| 46 | Replace Navigational Lighting on the Tydings Bridge (2332) | 79 | Underway |
| 47 | Replace Underground Storage Tank with Aboveground Storage Tank-Maintenance 1 (2218) | 6 | Underway |
| 48 | Structural Rehab to Various Bridges in Baltimore and Harford Counties (Engineering only) (2383) | 346 | Underway |
| 49 | Structural Rehab to Various Bridges in Cecil County (Engineering only) (2382) | 491 | Underway |
| 50 | Zone Paint Various Bridges - Phase III (2281) | 4 | Underway |

SYSTEM PRESERVATION MINOR PROJECTS PROGRAM

MARYLAND TRANSPORTATION AUTHORITY - LINE 27 (cont'd)

| ITEM NO. | DESCRIPTION AND IMPROVEMENT TYPE | FY16 + FY17 PROJECT COST (\$000's) | CONSTRUCTION START |
|--|--|------------------------------------|--------------------|
| <u>Fiscal Year 2016 and 2017 (cont'd)</u> | | | |
| <u>MULTI-AREA</u> | | | |
| 51 | Allocated Long Range Capital Needs Reserve (2325) | 85,980 | Ongoing |
| 52 | Equipment Budget (1702) | 17,419 | Ongoing |
| 53 | Bay TMDL Stormwater Retrofits - Phase IV (Engineering only) (2404) | 781 | Underway |
| 54 | Deck Sealing and Miscellaneous Repairs to Bridges on FMT and FSK Approaches (2326) | 3,577 | Underway |
| 55 | Evaluate Condition of Deck, Superstructure & Substructures All Facilities (Engineering only) (2083) | 250 | Underway |
| 56 | Facility-Wide Culvert and Pipe Rehabilitation (Engineering only) (2390) | 305 | Underway |
| 57 | Furnish & Install Fiber Optic Cable from FSK to Point Breeze (2386) | 200 | Underway |
| 58 | Furnish and Install License Plate Recognition Systems (2360) | 1,914 | Underway |
| 59 | Implement Video Citation Process (2294) | 646 | Underway |
| 60 | Install E-ZPass Back-Up Site (2225) | 1,152 | Underway |
| 61 | Install Ten Virtual Weigh Stations at JFK, TJH, FMT, BHT and FSK (2073) | 6,884 | Underway |
| 62 | ITS and Electrical On-Call #3 (Engineering only) (2418) | 100 | Underway |
| 63 | Law Enforcement Computer-Aided Dispatch/Records Mgmt/Auto Field Report/Auto Veh Locator System Plan (2324) | 2,975 | Underway |
| 64 | Mainline Small Drainage System Preservation (Engineering only) (2421) | 500 | Underway |
| 65 | Modifications to Toll Plaza Signing at All Facilities (2405) | 820 | Underway |
| 66 | On-Call Drainage and Stormwater Remediation (2366) | 456 | Underway |
| 67 | On-Call Drainage and Stormwater Remediation (Engineering only) (2422) | 400 | Underway |
| 68 | On-Call Electrical and ITS (2345) | 2,464 | Underway |
| 69 | On-Call Facility/Building Repairs (2240) | 774 | Underway |
| 70 | On-Call Facility/Building Repairs (2411) | 523 | Underway |
| 71 | On-Call Miscellaneous Electrical Repairs (2236) | 70 | Underway |
| 72 | On-Call Miscellaneous Paving Repairs (2335) | 1,117 | Underway |
| 73 | On-Call Miscellaneous Paving Repairs (2417) | 2,840 | Underway |
| 74 | On-Call Shotcrete Repairs and Miscellaneous Modifications (2297) | 3,754 | Underway |
| 75 | On-Call Sign Structures (2298) | 1,529 | Underway |
| 76 | On-Call Structural & Concrete Repairs and Misc. Modifications (2385) | 8,599 | Underway |
| 77 | On-Call Structural Repairs and Misc. Modifications (2387) | 8,894 | Underway |

SYSTEM PRESERVATION MINOR PROJECTS PROGRAM

MARYLAND TRANSPORTATION AUTHORITY - LINE 27 (cont'd)

| ITEM NO. | DESCRIPTION AND IMPROVEMENT TYPE | FY16 + FY17 PROJECT COST (\$000's) | CONSTRUCTION START |
|--|---|------------------------------------|--------------------|
| <u>Fiscal Year 2016 and 2017 (cont'd)</u> | | | |
| <u>MULTI-AREA (cont'd)</u> | | | |
| 78 | On-Call Structural Repairs and Misc. Modifications (2388) | 9,079 | Underway |
| 79 | On-Call Structural Repairs and Miscellaneous Modifications (2254) | 1,988 | Underway |
| 80 | On-Call Structural Repairs and Miscellaneous Modifications (2291) | 725 | Underway |
| 81 | On-Call Structural Repairs and Miscellaneous Modifications (2296) | 965 | Underway |
| 82 | On-Call Structural Repairs and Miscellaneous Modifications (2415) | 2,270 | Underway |
| 83 | On-Call Structural Repairs and Miscellaneous Modifications (2416) | 1,926 | Underway |
| 84 | On-Call Total Maximum Daily Load (TMDL) Storm Water Retrofits on JFK and BHT (2290) | 855 | Underway |
| 85 | Replace Generators at JFK, WPL, BHT and FSK (2265) | 1,206 | Underway |
| 86 | Replace Toll Booths at Bay Bridge and Fort McHenry Tunnel (2276) | 419 | Underway |
| 87 | Replace Uninterruptible Power Supplies (Engineering only) (2413) | 333 | Underway |
| 88 | Total Maximum Daily Load (TMDL) Storm Water Retrofits - Phase III (2346) | 2,380 | Underway |
| 89 | Total Maximum Daily Load (TMDL) Storm Water Retrofits (2300) | 3,524 | Underway |
| 90 | Upgrade Fire Alarm and Security Systems (2358) | 2,545 | Underway |
| <u>NICE BRIDGE</u> | | | |
| 91 | Install Communications Tower (Engineering only) (2424) | 100 | Underway |
| 92 | Rehabilitate Substructure and Superstructure (2395) | 3,285 | Underway |
| 93 | Replace Underground Storage Tanks with Aboveground Storage Tanks (2200) | 386 | Underway |
| <u>POINT BREEZE</u> | | | |
| 94 | Demolition of Power Plant Building (Engineering only) (2398) | 292 | Underway |
| 95 | On-Call Facility and Building Repairs (2400) | 331 | Underway |
| 96 | Point Breeze Renovations Final Phase. (2356) | 1,248 | Underway |
| 97 | Rehabilitate Parking Lots (2365) | 682 | Underway |
| 98 | Replace Rooftop HVAC at Headquarters Building (2399) | 735 | Underway |

SYSTEM PRESERVATION MINOR PROJECTS PROGRAM

MARYLAND TRANSPORTATION AUTHORITY - LINE 27 (cont'd)

| ITEM NO. | DESCRIPTION AND IMPROVEMENT TYPE | FY16 + FY17 PROJECT COST (\$000's) | CONSTRUCTION START |
|--|---|------------------------------------|--------------------|
| <u>Fiscal Year 2016 and 2017 (cont'd)</u> | | | |
| <u>W. P. LANE BRIDGE</u> | | | |
| 99 | Furnish and Install Uninterruptible Power Supply (UPS) (2268) | 50 | Underway |
| 100 | Modify Lane Use System (2340) | 635 | Underway |
| 101 | Priority Structural Repairs and Misc. Modifications (Engineering only) (2412) | 720 | Underway |
| 102 | Rehabilitate Metal Northrop/Grumman Building for Operations (2322) | 406 | Underway |
| 103 | Renovate Conduit Hangers - Westbound Span (2267) | 385 | Underway |
| 104 | Repair Toll Plaza Concrete Paving (2318) | 640 | Underway |
| 105 | Replace 5KV Feeder on Eastbound Span (Engineering only) (2329) | 31 | Underway |
| 106 | Replace Acoustic Monitoring on Eastbound Span (2341) | 183 | Underway |
| 107 | Replace Eastbound Span Trolley System (Engineering only) (2391) | 109 | Underway |
| 108 | Replace HVAC at Campus Buildings (2362) | 1,776 | Underway |
| 109 | Replace Staging Dock (Engineering only) (2392) | 380 | Underway |
| 110 | Replace Traffic System Controllers, Signals and Communications and Replace Cameras and Remount (0651) | 38 | Underway |
| 111 | Seal Deck of Westbound Span (Engineering only) (2369) | 255 | Underway |