

MD 175: Mapes Road and Reece Road Intersection Reconstruction

TIP ID	61-1402-39	Year of Operation	2017
Agency	SHA	Project Type	Other
Project Category	Environmental/Safety	Functional Class	Minor Arterial
Conformity Status	Not Exempt	Physical Data	1 Mile
CIP or CTP ID(s)	AA5806	Est. Total Cost	\$28,256,000

Description:

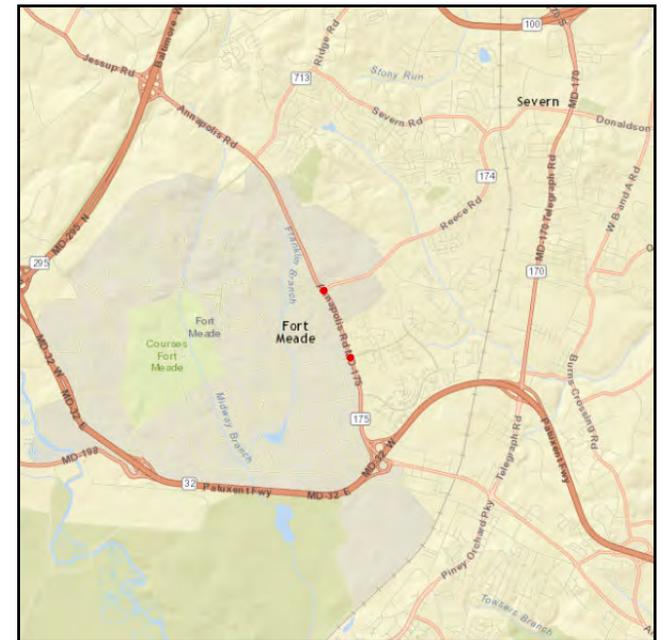
Construct intersection capacity improvements at Mapes Road/Charter Oaks Boulevard and Reece Road (MD 174) (BRAC intersection improvement) for the length of 1 mile.

Justification:

This project will improve safety and operations along MD 175 and ease growing congestion resulting from the BRAC expansion of Fort Meade.

Connection to Long-Range Transportation Planning Goals:

- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





2016 - 2019 Transportation Improvement Program

MD 175: Mapes Road and Reece Road Intersection Reconstruction

(Funding in Thousands)

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$2,950	\$647	\$3,275	\$719	\$3,079	\$677	\$0	\$0	\$11,347
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$4,249	\$1,036	\$2,211	\$557	\$461	\$116	\$0	\$0	\$8,630
Subtotal	\$7,199	\$1,683	\$5,486	\$1,276	\$3,540	\$793	\$0	\$0	\$19,977
Total	\$7,199	\$1,683	\$5,486	\$1,276	\$3,540	\$793	\$0	\$0	\$19,977

MD 175: MD 295 to MD 170

TIP ID	61-0605-41	Year of Operation	2020
Agency	SHA	Project Type	Traffic engineering
Project Category	Highway Capacity	Functional Class	Minor Arterial
Conformity Status	Not Exempt	Physical Data	4 lanes to 6-lane divided; 5.2 miles
CIP or CTP ID(s)	AA4361	Est. Total Cost	\$76,900,000

Description:

The purpose of this project is to improve access to Fort Meade. The section from MD 295 to MD 32 includes widening from 4 to 6 lanes, the section from MD 32 to MD 170 includes interchange and intersection improvements. The entire corridor will see bicycle and pedestrian accommodations.

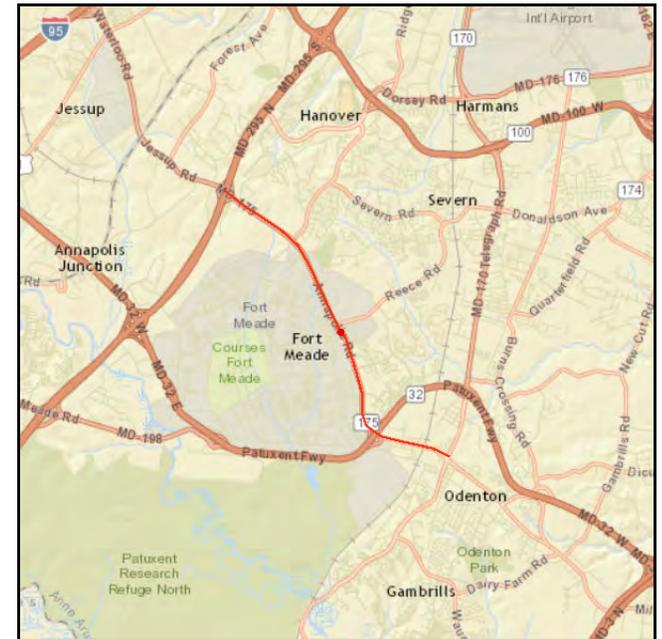
The project will be completed in phases. Segment 1 is the MD 175/MD 295 interchange, which is funded at \$1.5 million for project engineering and included in the fund flows for this TIP ID. Segment 2 is MD 175: Disney Road to Reece Road. This project is funded for design and construction. The TIP Reference #: 61-1601-41.

Justification:

This project would address current and future congestion along MD 175 and will improve access to Fort Meade.

Connection to Long-Range Transportation Planning Goals:

- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

MD 175: MD 295 to MD 170

(Funding in Thousands)

Section 1702 High Priority Project

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$1,060	\$140	\$1,200	\$0	\$1,132	\$0	\$0	\$0	\$3,532
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,060	\$140	\$1,200	\$0	\$1,132	\$0	\$0	\$0	\$3,532

Other

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$5,000	\$0	\$6,000	\$0	\$10,467	\$0	\$6,060	\$27,527
Subtotal	\$0	\$5,000	\$0	\$6,000	\$0	\$10,467	\$0	\$6,060	\$27,527
Total	\$1,060	\$5,140	\$1,200	\$6,000	\$1,132	\$10,467	\$0	\$6,060	\$31,059

MD 198: MD 295 to MD 32

TIP ID	61-1403-41	Year of Operation	2020
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	2.66 Miles
CIP or CTP ID(s)	AA5101	Est. Total Cost	\$200,000,000

Description:

Project to address capacity needs on MD 198 from MD 295 to MD 32. Bicycle and pedestrian access will be provided where appropriate. (BRAC related)

This project will be improved in phases. Phase I is the MD 198 / MD 295 partial interchange project, which is projected to be complete in 2020. This project will widen the roadway to add turning lanes; however, it does not add additional through-traffic lanes.

Justification:

MD 198 is a key link to Fort Meade from points south and west. The area in and around Fort Meade will experience substantial growth as a result of BRAC.

Connection to Long-Range Transportation Planning Goals:

- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





MD 198: MD 295 to MD 32

(Funding in Thousands)

Other

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$500	\$0	\$500	\$0	\$400	\$0	\$99	\$1,499
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$500	\$0	\$500	\$0	\$400	\$0	\$99	\$1,499
Total	\$0	\$500	\$0	\$500	\$0	\$400	\$0	\$99	\$1,499

US 50: MD 70 to MD 2

TIP ID	61-1404-41	Year of Operation	n/a
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Freeway & Expressways
Conformity Status	Exempt	Physical Data	1.7 miles
CIP or CTP ID(s)	AA2211	Est. Total Cost	\$23,000,000

Description:

Study to investigate options for alleviating congestion on US 50 from MD 70 to MD 2 (north), including the Severn River/Pearl Harbor Memorial Bridge. (1.7 miles)

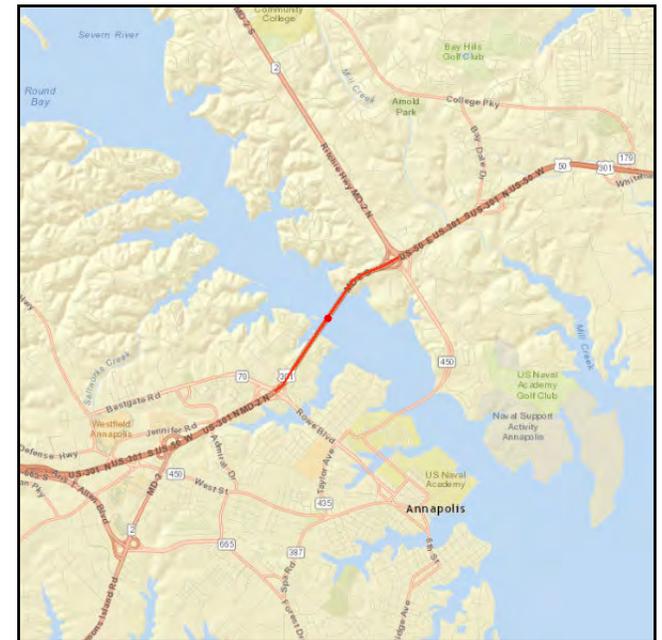
There are currently three through lanes in each direction of US 50. The preferred alternative adds an additional through lane on eastbound US 50.

Justification:

The approaches to the Severn River/Pearl Harbor Memorial Bridge experience severe congestion, particularly the eastbound direction during the evening peak period.

Connection to Long-Range Transportation Planning Goals:

- 4. Increase Mobility





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

US 50: MD 70 to MD 2

(Funding in Thousands)

Other

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$1,400	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$1,400	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400
Total	\$0	\$1,400	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400

MD 175: Disney Road to Reece Road

TIP ID	61-1601-41	Year of Operation	2020
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Minor Arterial
Conformity Status	Not Exempt	Physical Data	2 to 6 lanes
CIP or CTP ID(s)	AA4364	Est. Total Cost	\$41,514,000

Description:

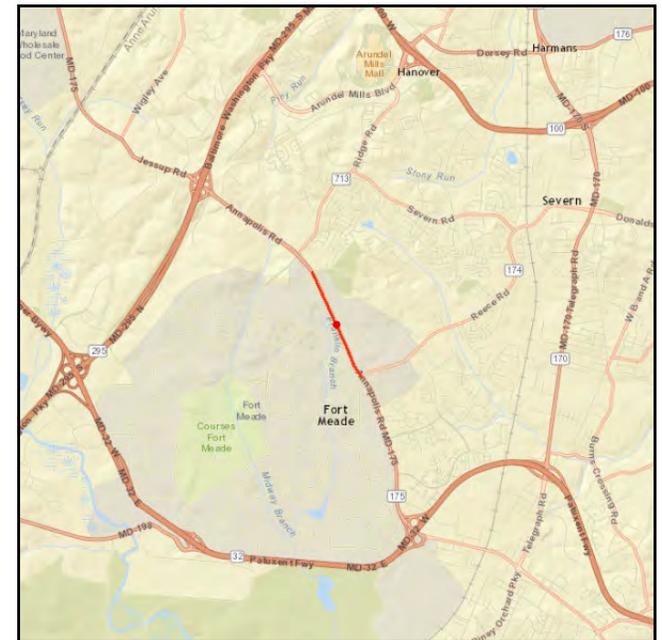
This project is a breakout of the MD 175: MD 295 to MD 170 corridor project, TIP ID #61-0605-41. It will widen MD 175 from Disney Road to Reece Road, from the existing two lane roadway to a six lane roadway. Bicycle and pedestrian facilities will be provided.

Justification:

This project will address current and future congestion along MD 175 and will improve access to Fort Meade.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

MD 175: Disney Road to Reece Road

(Funding in Thousands)

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$1,744	\$3,388	\$10,025	\$2,891	\$9,481	\$2,735	\$30,264
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$1,744	\$3,388	\$10,025	\$2,891	\$9,481	\$2,735	\$30,264



2016 - 2019 Transportation Improvement Program

MD 175: Disney Road to Reece Road

(Funding in Thousands)

Transportation Investment Generating Economic Recovery

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000

Section 1702 High Priority Project

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$600	\$150	\$400	\$100	\$0	\$0	\$0	\$0	\$1,250
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$600	\$150	\$400	\$100	\$0	\$0	\$0	\$0	\$1,250
Total	\$600	\$150	\$12,144	\$3,488	\$10,025	\$2,891	\$9,481	\$2,735	\$41,514

MD 295: I-895 to North of Daisy Avenue - Noise Wall

TIP ID	63-1405-31	Year of Operation	2017
Agency	SHA	Project Type	Noise barriers
Project Category	Environmental/Safety	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	1.1 Miles
CIP or CTP ID(s)	BA9782	Est. Total Cost	\$14,879,000

Description:

This project will install noise walls along MD 295 to reduce highway noise for residents of the Riverview and Baltimore highlands communities in Baltimore County. The project will also include the construction of drainage systems to allow stormwater to continue downstream and landscaping (tree plantings and slope treatments).

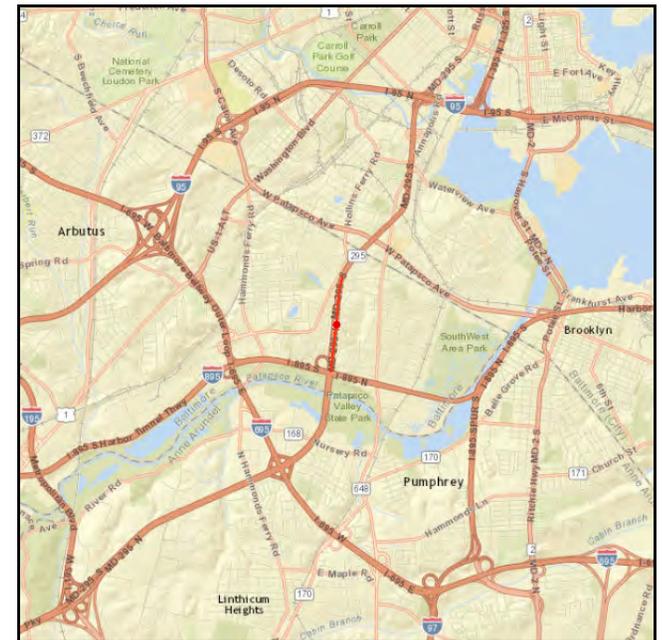
Breakout from Areawide Environmental Projects - 60-9506-38

Justification:

The MD 295 noise wall project will reduce noise impacts to Riverview and Highlands communities in Baltimore County.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





SHA

2016 - 2019 Transportation Improvement Program

Environmental/Safety
National Highway System

MD 295: I-895 to North of Daisy Avenue - Noise Wall

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$6,082	\$1,715	\$2,991	\$844	\$0	\$0	\$0	\$0	\$11,632
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$6,082	\$1,715	\$2,991	\$844	\$0	\$0	\$0	\$0	\$11,632
Total	\$6,082	\$1,715	\$2,991	\$844	\$0	\$0	\$0	\$0	\$11,632

I-695: Low-Cost Operational and Safety Improvements

TIP ID	63-1204-04	Year of Operation	n/a
Agency	SHA	Project Type	Traffic engineering
Project Category	Emission Reduction Strategy	Functional Class	Interstate
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	NA	Est. Total Cost	\$10,448,000

Description:

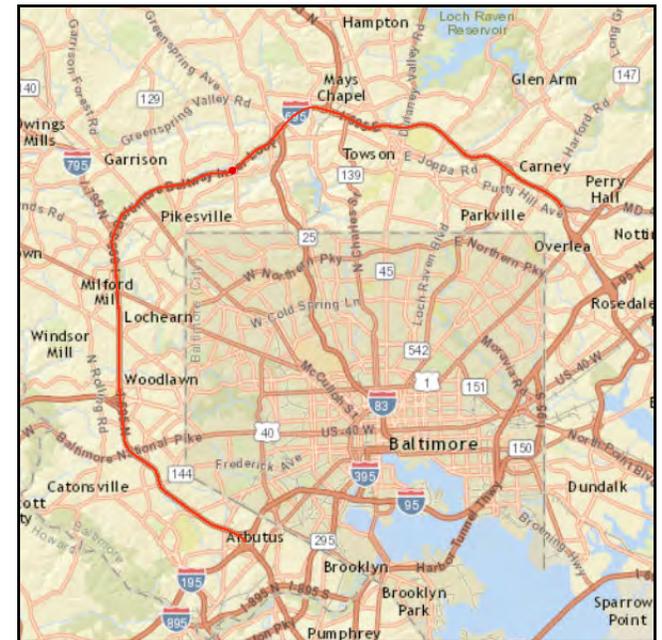
A traffic analysis using traffic simulation modeling software was conducted by SHA to identify ways to improve operational and overall safety conditions on I-695 from I-95 (Arbutus) to MD 43 (White Marsh). The next phase is to initiate Preliminary Engineering to advance design of the conceptual operational and safety improvements, while considering the planned widening of I-695. Current analysis indicates the project likely recommended next will be auxiliary lanes at Cromwell Bridge Road.

Justification:

These traffic management strategies will increase safety and improve traffic operations, with minor interim improvements. The improvements will ease congestion at choke points along I-695. Improvements to the Baltimore Beltway are a top transportation priority for Baltimore County.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





I-695: Low-Cost Operational and Safety Improvements

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$350	\$276	\$280	\$120	\$840	\$360	\$5,250	\$2,250	\$9,726
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$350	\$276	\$280	\$120	\$840	\$360	\$5,250	\$2,250	\$9,726
Total	\$350	\$276	\$280	\$120	\$840	\$360	\$5,250	\$2,250	\$9,726

I-695: I-95 to MD 122 (Southwest Beltway)

TIP ID	63-0602-41	Year of Operation	2018
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Exempt	Physical Data	6 to 8 Lanes
CIP or CTP ID(s)	AW7581	Est. Total Cost	\$0

Description:

The overall purpose of this project is to study the six-lane portions of I-695 for widening to an eight-lane freeway from I-95 to MD 122 (Security Boulevard). This umbrella project funded PE in 2014 for two projects that have since been broken out. Funding did not go beyond 30% PE:

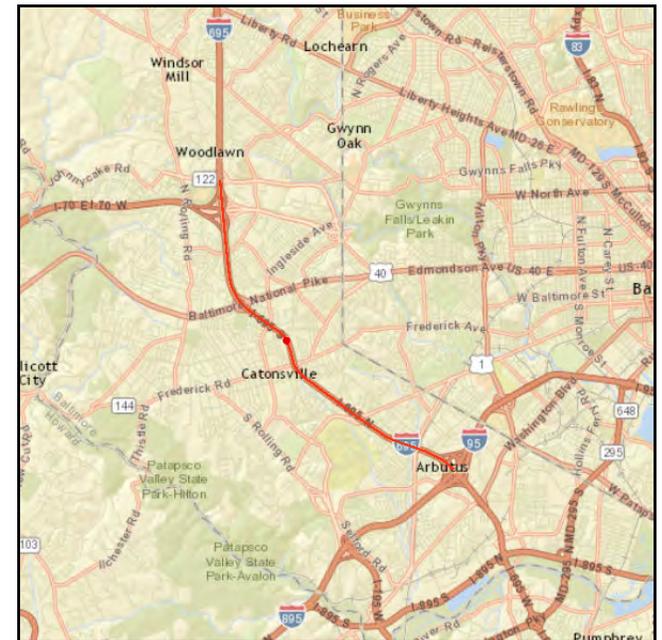
- a) I-695 Outer Loop widening from south of US 40 to MD 144: The project involves the multi-lane reconstruction of the I-695 Outer Loop from South of US 40 to MD 144. This project has separate cash flows and TIP ID #63-1601-41.
- b) Replacement of bridge on I-695 Inner Loop over Benson and Leeds/US1/Amtrak/Herbert Run and realignment of I-695 Inner Loop ramp from US 1 over Leeds Avenue, and US 1 from Knecht Avenue to Linden Avenue. This project has separate cash flows and TIP ID #63-1602-43.

Justification:

The purpose of this project is to improve mobility and safety on I-695 by widening the roadway to provide a fourth mainline lane on the outer and inner loops of the beltway. The project will also provide pavement width to accommodate for the ultimate section of the beltway.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

I-695: I-95 to MD 122 (Southwest Beltway)

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

MD 140: Garrison View Road to North of Owings Mills Boulevard (Phase 2)

TIP ID	63-0802-41	Year of Operation	2020
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	0.75 Mile, 2 to 3 lanes
CIP or CTP ID(s)	BA7291	Est. Total Cost	\$24,198,000

Description:

Capacity and safety improvements to MD 140 from Garrison View Road to north of Owings Mills Boulevard including; an additional through lane on southbound MD 140, addition of left and right turn lanes, and added width for bicycle compatibility. This results in two through lanes on northbound MD 140 and three through lanes on southbound MD 140. Pedestrian improvements will be provided where appropriate.

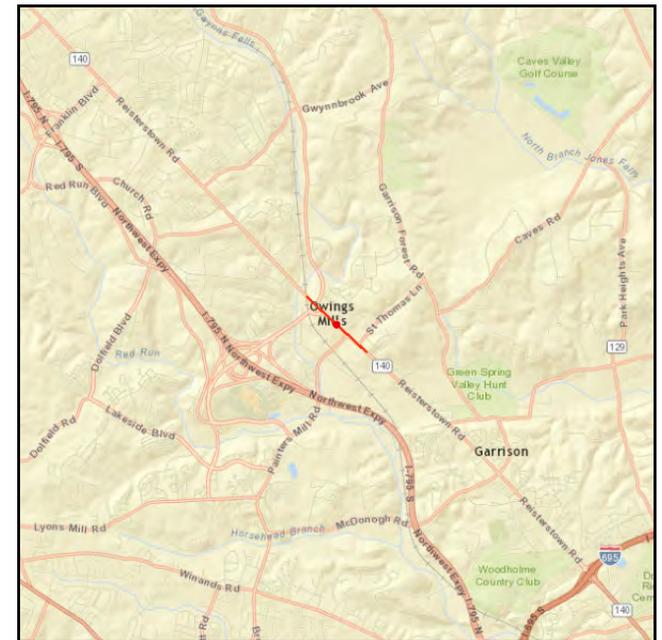
This is phase 2 of MD 140 corridor improvements. Phase I - MD 140: Garrison View Road to Painters Mill Road, including the intersection, has TIP ID #63-1203-41

Justification:

This project will provide additional capacity and access to planned development in Owings Mills, including the Owings Mills Town Center, the Owings Mills Metro Station and the MD 140 business corridor.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 4. Increase Mobility





MD 140: Garrison View Road to North of Owings Mills Boulevard (Phase 2)

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$500	\$0	\$470	\$0	\$228	\$0	\$0	\$1,198
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$500	\$0	\$470	\$0	\$228	\$0	\$0	\$1,198
Total	\$0	\$500	\$0	\$470	\$0	\$228	\$0	\$0	\$1,198

I-795: Dolfield Boulevard Interchange

TIP ID	63-0803-46	Year of Operation	2026
Agency	SHA	Project Type	New interchange
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Not Exempt	Physical Data	Full Interchange, 2 to 3 lanes
CIP or CTP ID(s)	BA4511	Est. Total Cost	\$41,000,000

Description:

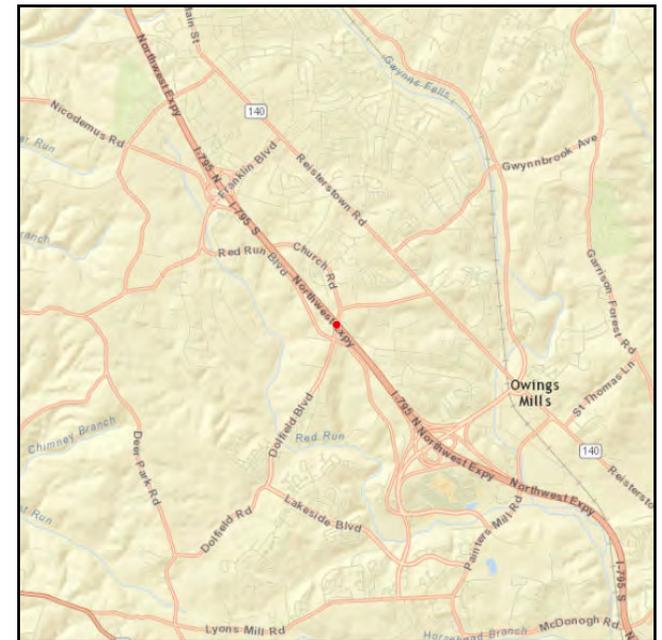
Preferred Alternative 4C Option 10 consists of widening the I-795 mainline from 2 to 3 through lanes, widening the Dolfield Boulevard/Pleasant Hill Road bridge over I-795, adding northbound and southbound on and off-ramps forming a full interchange at Dolfield Blvd, auxiliary lanes between the new Dolfield Blvd interchange ramps and the Owings Mills Blvd interchange ramps, and making local intersection improvements. Tollgate Road, between Hewitt Farms Road and Dolfield Blvd, would be relocated tying into the intersection of Dolfield Blvd and Church Road. Pleasant Hill Road would tie into relocated Tollgate Road forming a T-intersection. The intersection of Relocated Tollgate Road and Pleasant Hill Road would consist of right in/right out movements only onto Pleasant Hill Road. A new roadway through the swim club property is proposed to replace left turn movements from Pleasant Hill Rd.

Justification:

This project would provide improved access to the planned growth corridor along Red Run Boulevard in Owings Mills.

Connection to Long-Range Transportation Planning Goals:

- 4. Increase Mobility





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

I-795: Dolfield Boulevard Interchange

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$1,350	\$150	\$1,350	\$150	\$900	\$100	\$450	\$50	\$4,500
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,350	\$150	\$1,350	\$150	\$900	\$100	\$450	\$50	\$4,500
Total	\$1,350	\$150	\$1,350	\$150	\$900	\$100	\$450	\$50	\$4,500

MD 140: Garrison View Road to Painters Mill Road - Phase 1

TIP ID	63-1203-41	Year of Operation	2017
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	0.3 Miles, 2 to 3 lanes
CIP or CTP ID(s)	BA7292	Est. Total Cost	\$13,502,000

Description:

Improvements include widening northbound MD 140 to provide a third through lane (lane is 16'-wide bicycle-compatible) and 5' raised median, constructing 5' ADA-compliant sidewalks, resurfacing roadway, landscaping and utility relocations. Southbound improvements to be provided by developer. Culvert and utility work to be done in advance contract.

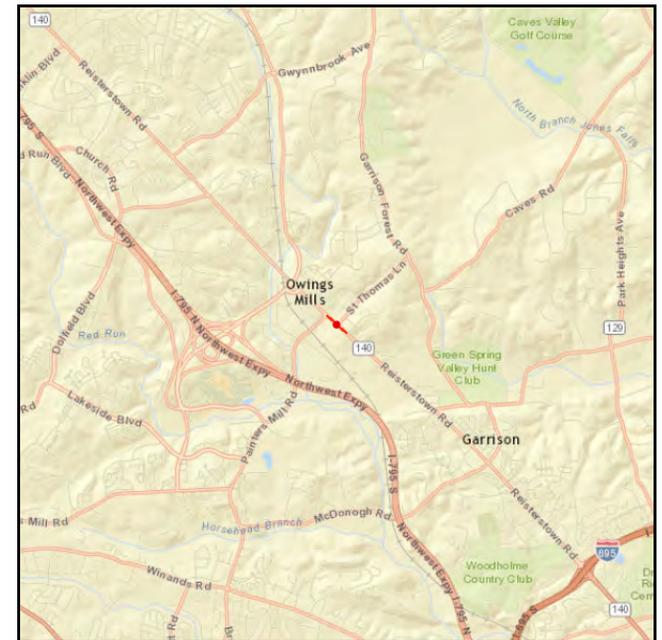
This is phase 1 of MD 140 construction. Phase 2 is the MD 140: Garrison View Road to north of Owings Mills Boulevard project (TIP ID #63-0802-41).

Justification:

The purpose of this project is to relieve current and anticipated traffic congestion based on background growth and proposed development, including Transit Oriented Development at the Owings Mills Metro Station. The project will address safety and operational concerns along MD 140. It will help reduce overall delays along the corridor and enhance vehicular and pedestrian safety. This is a top transportation priority project for Baltimore County.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 4. Increase Mobility





2016 - 2019 Transportation Improvement Program

MD 140: Garrison View Road to Painters Mill Road - Phase 1

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$1,003	\$0	\$0	\$0	\$0	\$0	\$0	\$1,003
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$265	\$66	\$0	\$0	\$0	\$0	\$0	\$0	\$331
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$980	\$0	\$1,015	\$0	\$0	\$0	\$0	\$1,995
Subtotal	\$265	\$2,049	\$0	\$1,015	\$0	\$0	\$0	\$0	\$3,329
Total	\$265	\$2,049	\$0	\$1,015	\$0	\$0	\$0	\$0	\$3,329

I-695: Bridge Over Milford Mill Road Reconstruction

TIP ID	63-1205-43	Year of Operation	2016
Agency	SHA	Project Type	Bridge widening
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Exempt	Physical Data	8 to 8 lanes
CIP or CTP ID(s)	BA4622	Est. Total Cost	\$27,608,000

Description:

Replace the existing I-695 Bridge over Milford Mill Road. It will be removed and replaced with a wider bridge to improve safety and allow for future widening of I-695. No additional traffic lanes are being provided at this time. Sidewalks along Millford Road under the bridge will be rebuilt to accommodate the new bridge structure.

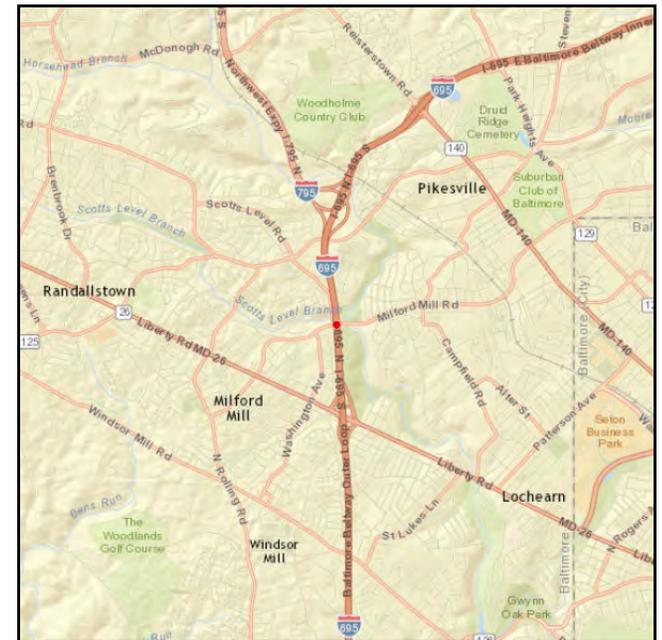
More project details can be found on the SHA web site at: <http://apps.roads.maryland.gov> (Search for project #BA462_22)

Justification:

The existing bridge is deteriorated and structurally deficient.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

I-695: Bridge Over Milford Mill Road Reconstruction

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$8,234	\$972	\$0	\$0	\$0	\$0	\$0	\$0	\$9,206
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$8,234	\$972	\$0	\$0	\$0	\$0	\$0	\$0	\$9,206
Total	\$8,234	\$972	\$0	\$0	\$0	\$0	\$0	\$0	\$9,206

I-695: MD 41 to MD 147 Auxiliary Lane and MD 147 Inner Loop Ramp Reconstruction

TIP ID	63-1206-41	Year of Operation	2018
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Not Exempt	Physical Data	6 to 8 lanes; 11.4 miles
CIP or CTP ID(s)	BA4581	Est. Total Cost	\$32,376,000

Description:

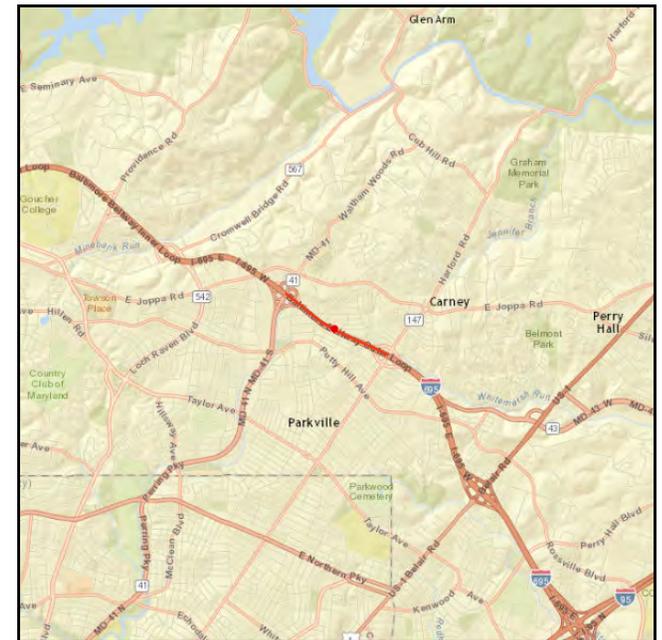
The purpose of this project is to provide a continuous auxiliary lane on both the Inner and Outer Loops of I-695 between MD 41 (Perring Parkway) and MD 147 (Harford Road). Other improvements include a wider median, wider shoulders and replacement of the existing Old Harford Road bridge over I-695, accommodating future widening along I-695. This project also includes the reconfiguration of an existing one-lane ramp off of the I-695 Inner Loop at MD 147 (Harford Road). The new ramp will increase from one to three lanes, including a double-left and an exclusive right-turn lane. A traffic signal and 350 feet of storage capacity will be provided. The existing one-lane ramp will be removed, reducing the need to weave on this section of I-695.

Justification:

These changes will increase capacity and improve safety on this segment of the I-695 Beltway.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





I-695: MD 41 to MD 147 Auxiliary Lane and MD 147 Inner Loop Ramp Reconstruction

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$9,271	\$0	\$10,178	\$0	\$0	\$0	\$0	\$19,449
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$9,271	\$0	\$10,178	\$0	\$0	\$0	\$0	\$19,449

Section 1702 High Priority Project

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$684	\$84	\$0	\$0	\$0	\$0	\$0	\$0	\$768
Subtotal	\$684	\$84	\$0	\$0	\$0	\$0	\$0	\$0	\$768
Total	\$684	\$9,355	\$0	\$10,178	\$0	\$0	\$0	\$0	\$20,217

I-695: US 40 to MD 144

TIP ID	63-1601-41	Year of Operation	2018
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Not Exempt	Physical Data	3 to 4 lanes
CIP or CTP ID(s)	BA7271	Est. Total Cost	\$117,430,000

Description:

This project will widen I-695 outer loop from US 40 to MD 144 from three to four through lanes. This project will also accommodate the final configuration of this section of the beltway.

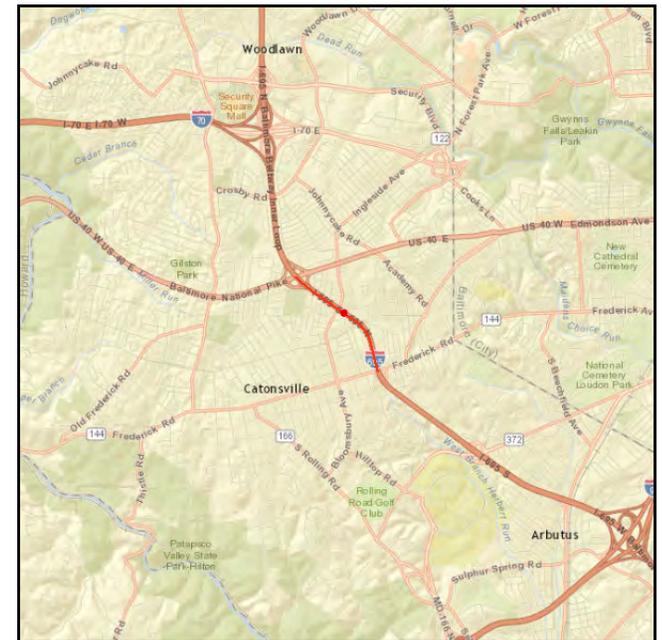
This project is a breakout of the I-695, from I-95 to MD 122, corridor project, which has TIP ID #63-0602-41.

Justification:

This project will provide additional capacity and improve safety and operations on this segment of I-695.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 4. Increase Mobility





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

I-695: US 40 to MD 144

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$13,814	\$3,897	\$19,667	\$10,865	\$20,337	\$16,371	\$13,145	\$5,834	\$103,930
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$13,814	\$3,897	\$19,667	\$10,865	\$20,337	\$16,371	\$13,145	\$5,834	\$103,930
Total	\$13,814	\$3,897	\$19,667	\$10,865	\$20,337	\$16,371	\$13,145	\$5,834	\$103,930

I-695 Bridge Replacements at Benson Ave and US 1

TIP ID	63-1602-43	Year of Operation	2017
Agency	SHA	Project Type	Bridge widening
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	BA3661	Est. Total Cost	\$50,936,000

Description:

Replacement of Bridge 0311305 on I-695 Inner Loop over Benson Ave; Bridge 0311405 on I-695 Inner Loop over Leeds Avenue, US 1, AMTRAK and Herbert Run. The project also includes the realignment of access to the I-695 on-ramp from Leeds Ave. to US 1. Both bridges will be widened to accommodate the future widening of I-695 (one additional through lane) to improve safety. No additional traffic lanes are being provided at this time.

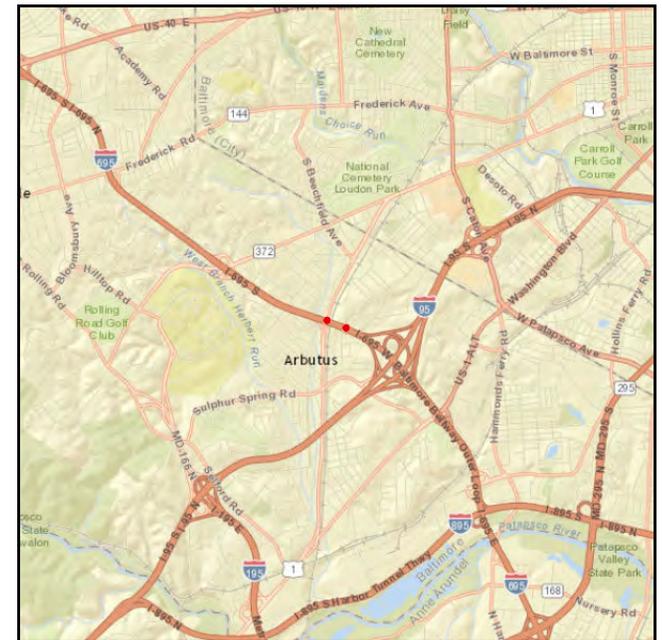
This project is a breakout of the larger corridor project, I-695 from I-95 to MD 122, which has TIP ID #63-0602-41 and separate funding flows.

Justification:

The bridges on I-695 Inner Loop over Benson and Leeds/US 1/ AMTRAK/ Herbert Run are nearing the end of their useful life and are structurally deficient. An existing ramp is being realigned as part of this project to provide a more direct connection from US 1 to the Inner Loop of I-695.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

I-695 Bridge Replacements at Benson Ave and US 1

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$15,949	\$65	\$12,736	\$1,273	\$5,539	\$615	\$0	\$0	\$36,177
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$15,949	\$65	\$12,736	\$1,273	\$5,539	\$615	\$0	\$0	\$36,177



SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

I-695 Bridge Replacements at Benson Ave and US 1

(Funding in Thousands)

Other

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$2,158	\$0	\$364	\$0	\$0	\$0	\$0	\$2,522
Subtotal	\$0	\$2,158	\$0	\$364	\$0	\$0	\$0	\$0	\$2,522
Total	\$15,949	\$2,223	\$12,736	\$1,637	\$5,539	\$615	\$0	\$0	\$38,699

MD 25: Bridge Replacement over Georges Run

TIP ID	63-1603-13	Year of Operation	2016
Agency	SHA	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Major Collector
Conformity Status	Exempt	Physical Data	Bridge Replacement, 2 to 2 Lanes
CIP or CTP ID(s)	BA8101	Est. Total Cost	\$3,216,000

Description:
 Replace bridge #0301900 along MD 25, Falls Road, over Georges Run.

Justification:
 The bridge is nearing the end of its structural life and needs to be replaced.

Connection to Long-Range Transportation Planning Goals:
 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





MD 25: Bridge Replacement over Georges Run

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$1,482	\$418	\$0	\$0	\$0	\$0	\$0	\$0	\$1,900
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,482	\$418	\$0	\$0	\$0	\$0	\$0	\$0	\$1,900

Other

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$190	\$0	\$57	\$0	\$0	\$0	\$0	\$247
Subtotal	\$0	\$190	\$0	\$57	\$0	\$0	\$0	\$0	\$247
Total	\$1,482	\$608	\$0	\$57	\$0	\$0	\$0	\$0	\$2,147

MD 30 Business: North Woods Trail to CSX Railroad (Hampstead Community Safety & Enhancement)

TIP ID	64-1401-19	Year of Operation	2019
Agency	SHA	Project Type	Other
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	1.58 miles, 2 to 2 lanes
CIP or CTP ID(s)	CL3411	Est. Total Cost	\$23,584,000

Description:

The purpose of this project is to provide Community Safety and Enhancement improvements on MD 30 Business (Main Street in Hampstead) from North Woods Trail to CSX Railroad by reconstructing the existing roadway with ADA compliant sidewalks on both sides of the street, bicycle facilities, curb and gutter, crosswalks, and driveway entrances. The project will also upgrade the drainage system, provide stormwater management facilities, provide landscaping, modify traffic signals and relocate utilities as necessary.

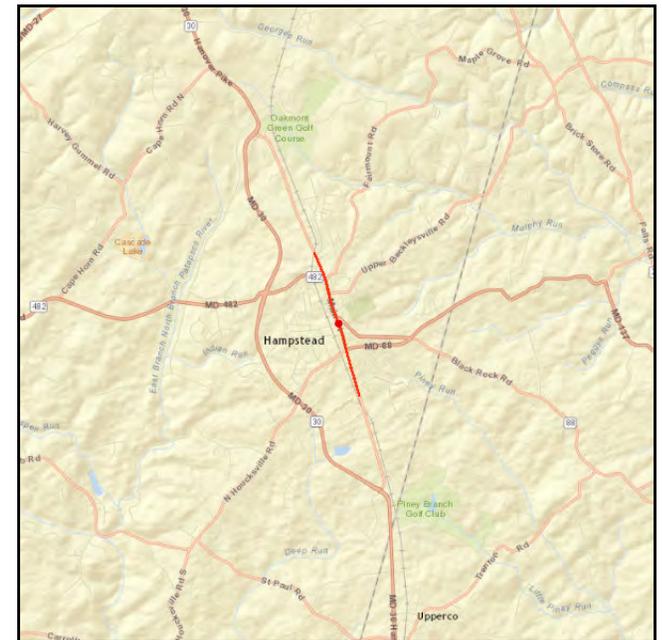
Justification:

This project will provide significant improvements to the roadway, sidewalk and drainage infrastructure in the town of Hampstead. It will also address operational issues at intersections.

* Preliminary engineering and right-of-way phases were funded under the Areawide Urban Reconstruction Program.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 3.B Improve Accessibility -- Improve ADA-related conditions for pedestrians / transit riders.





MD 30 Business: North Woods Trail to CSX Railroad (Hampstead Community Safety & Enhancement)

(Funding in Thousands)

Other

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$1,245	\$0	\$8,283	\$0	\$6,843	\$0	\$3,140	\$19,511
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$149	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$149
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$307	\$77	\$0	\$0	\$0	\$0	\$0	\$0	\$384
Subtotal	\$456	\$1,322	\$0	\$8,283	\$0	\$6,843	\$0	\$3,140	\$20,044
Total	\$456	\$1,322	\$0	\$8,283	\$0	\$6,843	\$0	\$3,140	\$20,044

MD 22: Beards Hill Road Intersection Reconstruction

TIP ID	65-1205-41	Year of Operation	2016
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Freeway & Expressways
Conformity Status	Not Exempt	Physical Data	Intersection, 4 to 6 Lanes
CIP or CTP ID(s)	HA3484	Est. Total Cost	\$15,987,000

Description:

The project will include adding an additional lane on MD 22- eastbound and westbound (outside widening) as well as an additional left-turn lane from MD 22 eastbound to Beards Hill Road. This results in a capacity increase from two to three through lanes both eastbound and westbound.

The existing left-turn lanes on Beards Hill Road will be widened to double left-turn lanes on each approach to MD 22.

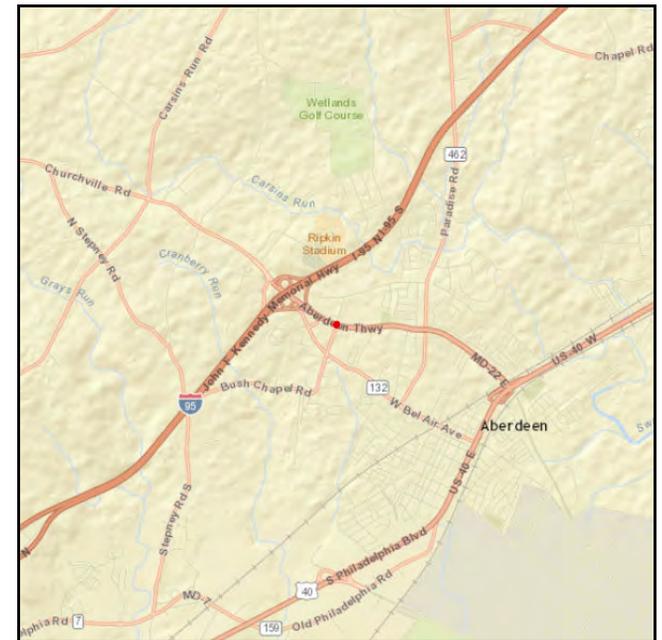
Funds allocated for the PE phase are reflected in the BRAC near Aberdeen Proving Grounds project.

Justification:

Improved access to Aberdeen Proving Ground is a vital component needed to accommodate the increase of employment as a result of BRAC. The intersection improvements will improve safety, capacity and operations in the near-term.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





MD 22: Beards Hill Road Intersection Reconstruction

(Funding in Thousands)

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$3,204	\$704	\$3,966	\$873	\$0	\$0	\$0	\$0	\$8,747
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$453	\$113	\$0	\$0	\$0	\$0	\$0	\$0	\$566
Subtotal	\$3,657	\$817	\$3,966	\$873	\$0	\$0	\$0	\$0	\$9,313
Total	\$3,657	\$817	\$3,966	\$873	\$0	\$0	\$0	\$0	\$9,313

US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 2

TIP ID	65-1402-41	Year of Operation	2019
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	Intersection, 4 to 6 Lanes
CIP or CTP ID(s)	HA3487	Est. Total Cost	\$20,500,000

Description:

The project includes widening US 40 from two through lanes to three through lanes in each direction, plus added turn lanes. West bound US 40 widening will extend approximately 2,500 feet west of MD 7. East bound US 40 widening will extend approximately 3,000 feet east to tie into previous widening at the MD 715 interchange. MD 159 will be modified to tie into US 40 east bound widening. The bridge over Cranberry Run will also be widened.

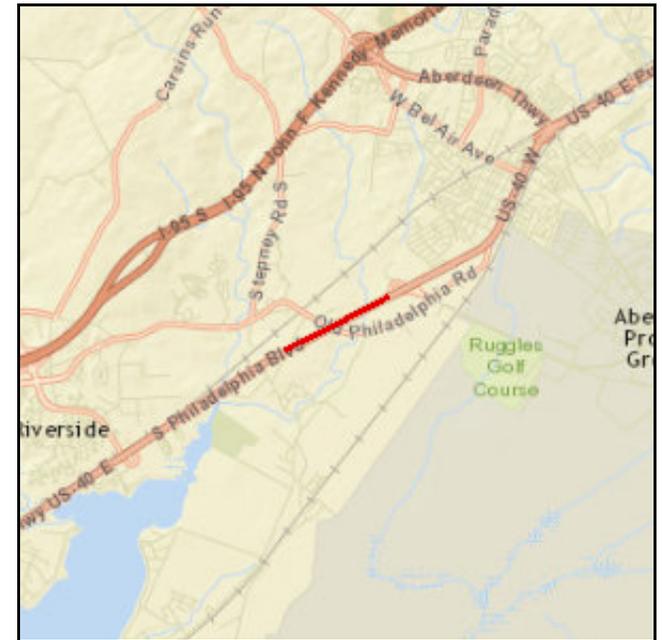
Funds allocated for the PE phase are reflected in the Areawide Project for BRAC near Aberdeen Proving Ground.

Justification:

Improved access to Aberdeen Proving Ground is a vital component needed to accommodate the increase of employment as a result of BRAC. The intersection improvements will improve safety, capacity and operations in the near-term.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 2

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$1,916	\$523	\$4,013	\$1,134	\$4,488	\$1,267	\$3,744	\$1,057	\$18,142
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,916	\$523	\$4,013	\$1,134	\$4,488	\$1,267	\$3,744	\$1,057	\$18,142

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$281	\$91	\$183	\$50	\$183	\$50	\$122	\$33	\$993
Subtotal	\$281	\$91	\$183	\$50	\$183	\$50	\$122	\$33	\$993
Total	\$2,197	\$614	\$4,196	\$1,184	\$4,671	\$1,317	\$3,866	\$1,090	\$19,135

MD 22: Paradise Road Intersection Reconstruction

TIP ID	65-1403-41	Year of Operation	2017
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Freeway & Expressways
Conformity Status	Not Exempt	Physical Data	4 to 6 lanes
CIP or CTP ID(s)	HA3483	Est. Total Cost	\$21,196,000

Description:

The project will provide an additional lane in each direction on MD 22 between MD 462 and Beards Hill Road intersections, which results in three through lanes in each direction. MD 462 will be widened to provide exclusive left and right-turn lanes in both northbound and southbound directions. Sound Barriers will be installed along MD 22 east of MD 462.

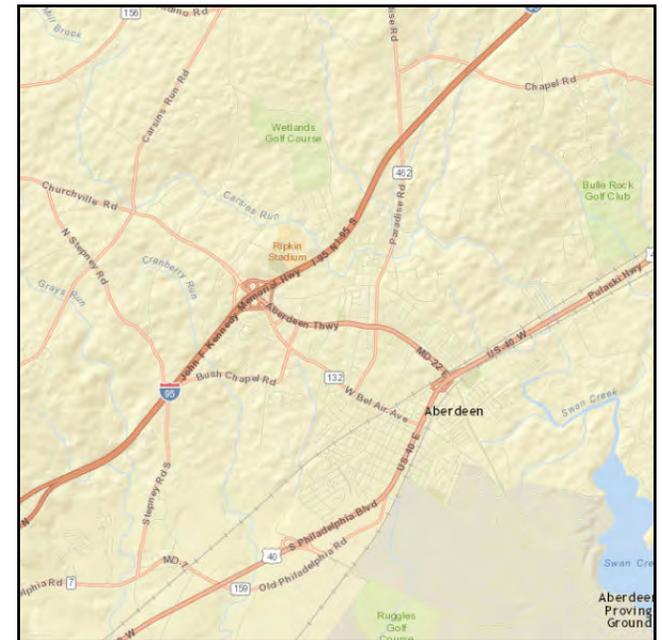
Funds allocated for the PE phase are reflected in the BRAC near Aberdeen Proving Grounds project. Bicycle-compatible shoulders are being provided along MD 22 in accordance with SHA bike policy.

Justification:

Improved access to Aberdeen Proving Ground is a vital component needed to accommodate the increase of employment as a result of BRAC. The intersection improvements will improve safety, capacity and operations in the near-term.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 4. Increase Mobility





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

MD 22: Paradise Road Intersection Reconstruction

(Funding in Thousands)

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$3,218	\$1,264	\$4,062	\$1,595	\$518	\$203	\$0	\$0	\$10,860
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$367	\$103	\$367	\$103	\$367	\$103	\$122	\$35	\$1,567
Subtotal	\$3,585	\$1,367	\$4,429	\$1,698	\$885	\$306	\$122	\$35	\$12,427
Total	\$3,585	\$1,367	\$4,429	\$1,698	\$885	\$306	\$122	\$35	\$12,427

MD 22: Old Post Road Intersection Reconstruction

TIP ID	65-1202-12	Year of Operation	2016
Agency	SHA	Project Type	Road reconstruction
Project Category	Highway Preservation	Functional Class	Other Freeway & Expressways
Conformity Status	Exempt	Physical Data	Intersection
CIP or CTP ID(s)	HA3485	Est. Total Cost	\$8,875,000

Description:

This project will include a number of improvements on MD 22 at Old Post Road, including the following: add an additional through lane on eastbound MD 22, add a through lane and an auxiliary lane on westbound MD 22, create a second left-turn lane from eastbound MD 22 to northbound Old Post Road, add right turn lanes from MD 22 to Old Post Road (both directions), and include a wide outside lane to accommodate bicyclists and pedestrians on Old Post Road. Other work activities at this intersection include construction of new curb/gutter and sidewalks, grinding, resurfacing, signing, lighting, pavement marking, signal modification and landscaping.

Justification:

The purpose of the project is to improve the operation and safety of MD 22 at Old Post Road, as well as provide additional local capacity in the area of the intersection. These intersection improvements will improve access to Aberdeen Proving Ground. Improving access is a vital component to accommodate the increased employment from BRAC.

Funds allocated for the PE phase are reflected in the BRAC near Aberdeen Proving Grounds project.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and





SHA

2016 - 2019 Transportation Improvement Program

Highway Preservation
National Highway System

MD 22: Old Post Road Intersection Reconstruction

(Funding in Thousands)

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$2,852	\$678	\$0	\$0	\$0	\$0	\$0	\$0	\$3,530
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$102	\$26	\$0	\$0	\$0	\$0	\$0	\$0	\$128
Subtotal	\$2,954	\$704	\$0	\$0	\$0	\$0	\$0	\$0	\$3,658
Total	\$2,954	\$704	\$0	\$0	\$0	\$0	\$0	\$0	\$3,658

US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 1

TIP ID	65-1401-12	Year of Operation	2014
Agency	SHA	Project Type	Road reconstruction
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	Intersection
CIP or CTP ID(s)	HA3482	Est. Total Cost	\$4,091,000

Description:

Construct intersection improvements on US 40 at MD 7/MD 159 in Aberdeen. Phase 1 improves the MD 7 eastbound approach at US 40 to provide two exclusive left turn lanes, a channelized right turn lane and one through lane.

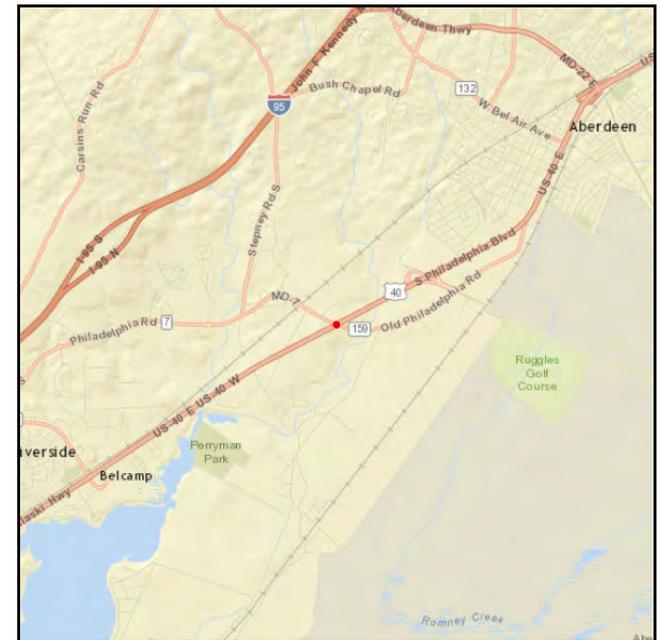
Funds allocated for the PE phase are reflected in the BRAC near Aberdeen Proving Grounds project.

Justification:

Improve access to the Aberdeen Industrial Park complexes and the Perryman Peninsula, as well as the Aberdeen Proving Grounds.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





SHA

2016 - 2019 Transportation Improvement Program

Highway Preservation
National Highway System

US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 1

(Funding in Thousands)

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$262	\$85	\$57	\$18	\$0	\$0	\$0	\$0	\$422
Subtotal	\$262	\$85	\$57	\$18	\$0	\$0	\$0	\$0	\$422
Total	\$262	\$85	\$57	\$18	\$0	\$0	\$0	\$0	\$422

MD 24: South of Stirrup Run Culvert to Deer Creek Bridge, Section G

TIP ID	65-1601-12	Year of Operation	
Agency	SHA	Project Type	Road reconstruction
Project Category	Highway Preservation	Functional Class	Major Collector
Conformity Status	Exempt	Physical Data	1.8 Miles
CIP or CTP ID(s)	HA3342	Est. Total Cost	\$9,100,000

Description:

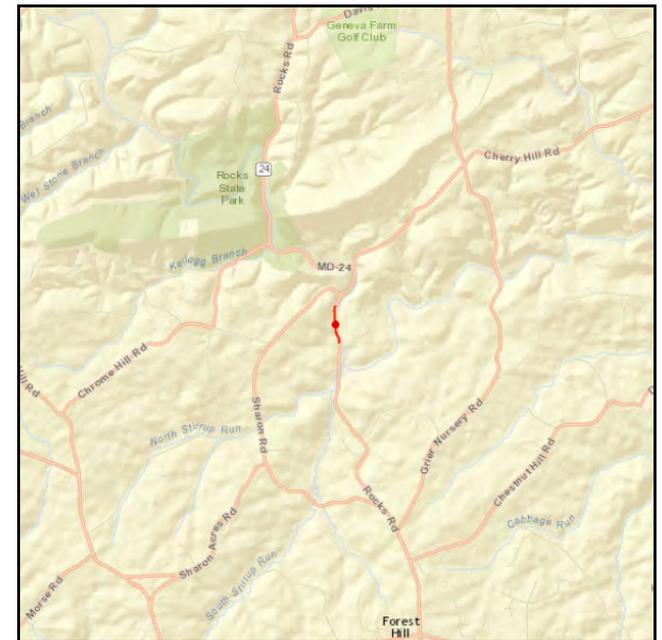
MD 24 will be resurfaced and reconstructed including slope repair and guardrail replacement. This is the southern section (Section G) of MD 24, Rocks Road, from 900 feet south of Sharon Road to 1,700 feet north of Ferncliff Lane.

Justification:

The purpose of these projects is to improve the road safety by remediating the slope supporting MD 24, repairing the pavement, improving roadway drainage and addressing roadside safety concerns.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





MD 24: South of Stirrup Run Culvert to Deer Creek Bridge, Section G

(Funding in Thousands)

Other

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$65	\$0	\$114	\$0	\$0	\$0	\$0	\$179
Subtotal	\$0	\$65	\$0	\$114	\$0	\$0	\$0	\$0	\$179
Total	\$0	\$65	\$0	\$114	\$0	\$0	\$0	\$0	\$179

I-95: Welcome Center Truck Parking Lot Expansion

TIP ID	66-1203-04	Year of Operation	2014
Agency	SHA	Project Type	Traffic engineering
Project Category	Emission Reduction Strategy	Functional Class	NA
Conformity Status	Exempt	Physical Data	41 spaces
CIP or CTP ID(s)	HO2931	Est. Total Cost	\$5,362,000

Description:

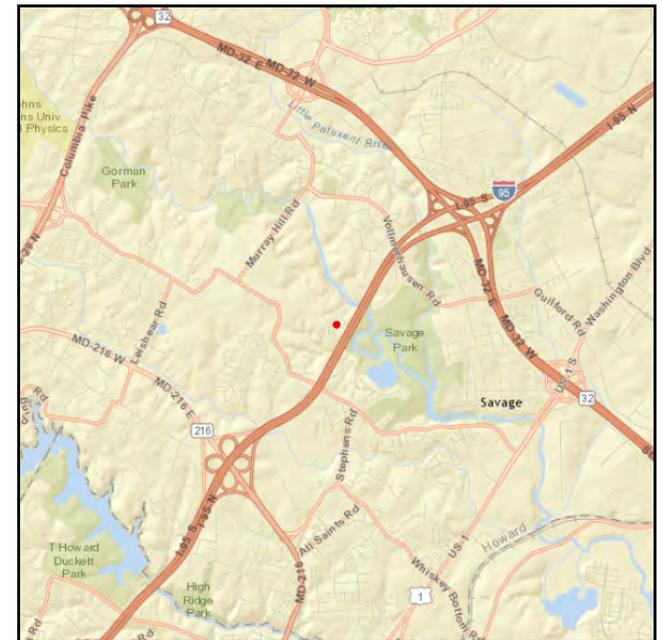
This project will construct 41 new truck parking spaces at the southbound welcome center on I-95 in Howard County to address a severe shortage of commercial vehicle parking along this portion of the I-95 corridor.

Justification:

This is a safety and improvements project to help reduce the number of trucks parking on exit and entrance ramps for the I-95 South Welcome Center.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





I-95: Welcome Center Truck Parking Lot Expansion

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$94	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$96
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$94	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$96
Total	\$94	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$96

US 29: Seneca Drive to MD 175- Phase 1B

TIP ID	66-1101-41	Year of Operation	2017
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Freeway & Expressways
Conformity Status	Not Exempt	Physical Data	5 to 6 lanes; 2.8 miles
CIP or CTP ID(s)	HO3171	Est. Total Cost	\$35,202,000

Description:

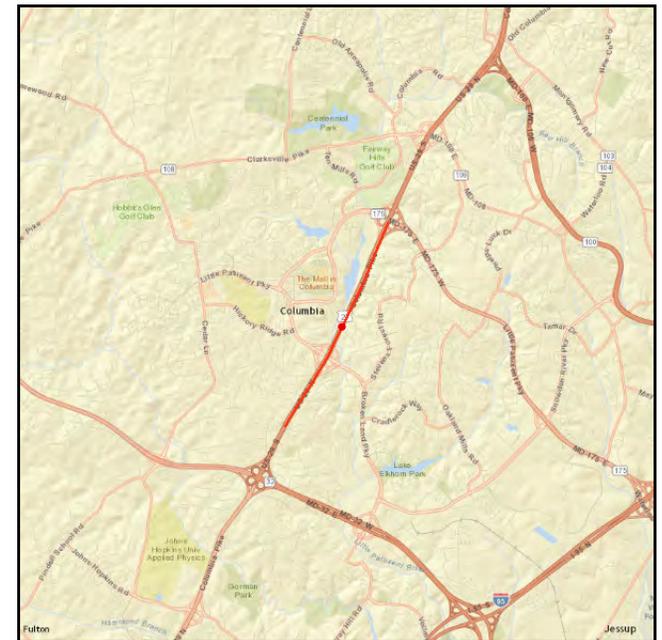
The US 29 Northbound widening project extends from Seneca Drive to south of MD 175, a distance of 2.8 miles. This section of Northbound US 29 is currently only two lanes wide, and the project scope includes widening into the median to add a third lane. The improvement will extend the acceleration and deceleration lanes at the Seneca Drive interchange, and remove the existing access points at Gales Lane and Old Columbia Road.

Justification:

The project will improve safety and reduce congestion by upgrading northbound US 29 to match the southbound section, which is currently 3 lanes.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 4. Increase Mobility





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

US 29: Seneca Drive to MD 175- Phase 1B

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$10,803	\$0	\$7,027	\$0	\$0	\$0	\$0	\$17,830
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$257	\$371	\$0	\$0	\$0	\$0	\$0	\$0	\$628
Subtotal	\$257	\$11,174	\$0	\$7,027	\$0	\$0	\$0	\$0	\$18,458
Total	\$257	\$11,174	\$0	\$7,027	\$0	\$0	\$0	\$0	\$18,458

MD 32: MD 108 to I-70

TIP ID	66-1405-41	Year of Operation	2024
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	2 to 4 lanes; 9.1 miles
CIP or CTP ID(s)	HO7561	Est. Total Cost	\$232,800,000

Description:

Project to upgrade existing MD 32 from MD 108 to I-70 to address safety concerns, a total corridor length of 9.06 miles. Shoulders will accommodate bicycles.

Current engineering and right-of-way cash flows fund a new interchange at Rosemary Lane, which has a proposed advertisement date of summer 2018.

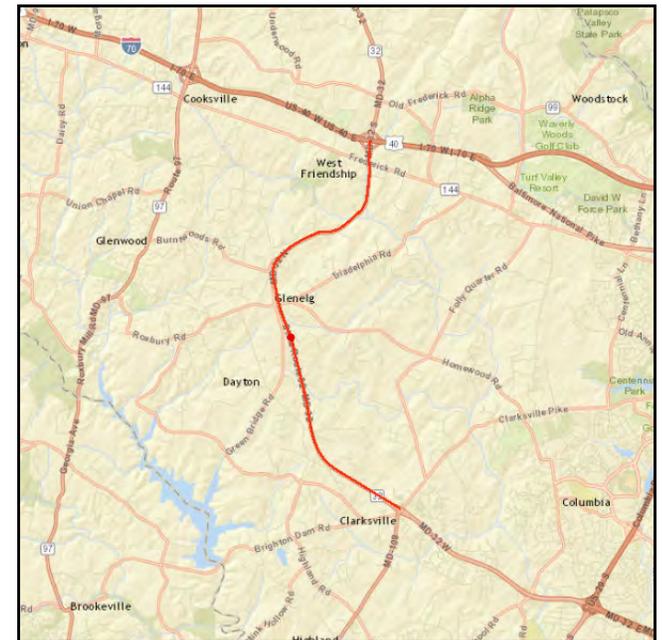
New interchanges have also been proposed at MD 144 and I-70; however, these projects are not funded.

Justification:

This project would address safety problems which have been experienced as a result of increasing traffic volumes on the existing 2 lane roadway.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 4. Increase Mobility





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

MD 32: MD 108 to I-70

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$800	\$200	\$2,400	\$600	\$1,003	\$251	\$0	\$0	\$5,254
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$800	\$200	\$2,400	\$600	\$1,003	\$251	\$0	\$0	\$5,254



SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

MD 32: MD 108 to I-70

(Funding in Thousands)

Other

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$10	\$0	\$2,600	\$0	\$2,600	\$0	\$3,771	\$8,981
Subtotal	\$0	\$10	\$0	\$2,600	\$0	\$2,600	\$0	\$3,771	\$8,981
Total	\$800	\$210	\$2,400	\$3,200	\$1,003	\$2,851	\$0	\$3,771	\$14,235

US 29: Middle Patuxent River to Seneca Drive - Phase 2

TIP ID	66-1406-41	Year of Operation	2025
Agency	SHA	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Freeway & Expressways
Conformity Status	Not Exempt	Physical Data	5 to 6 lanes; 1.7 miles
CIP or CTP ID(s)	HONEW1	Est. Total Cost	\$59,400,000

Description:

Widen the northbound section of US 29 from the Middle Patuxent River to Seneca Drive (Phase 2) from 2 to 3 lanes (1.7 miles).

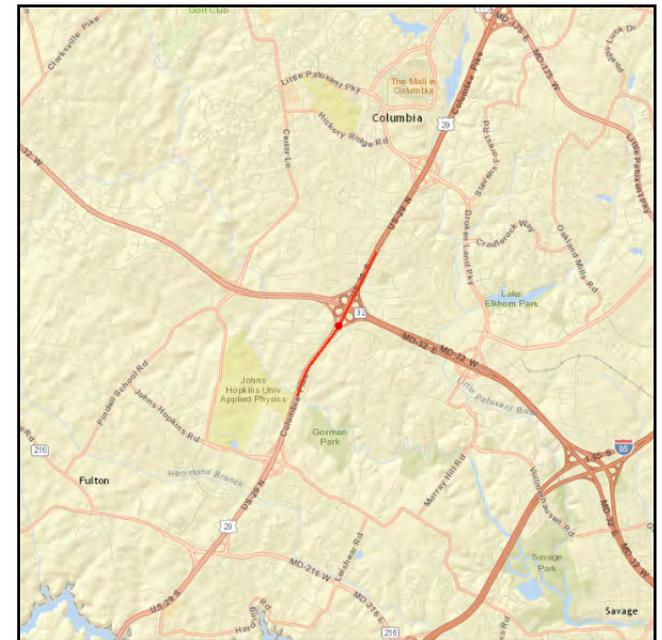
Related projects include: US 29: Seneca Drive to MD 175, Phase 1A, Old Columbia Road Access Only; TIP ID # 66-1601-42, as well as, US 29: Seneca Lane to MD 175, Phase 1B, which is assigned TIP ID # 66-1101-41.

Justification:

This project will improve safety and reduce congestion by upgrading northbound US 29 to match the southbound section, which is currently 3 lanes in each direction.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 4. Increase Mobility





SHA

2016 - 2019 Transportation Improvement Program

Highway Capacity
National Highway System

US 29: Middle Patuxent River to Seneca Drive - Phase 2

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$700	\$0	\$700	\$0	\$992	\$0	\$0	\$2,392
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$700	\$0	\$700	\$0	\$992	\$0	\$0	\$2,392
Total	\$0	\$700	\$0	\$700	\$0	\$992	\$0	\$0	\$2,392

US 29: Seneca Drive to MD 175 - Phase 1A, Old Columbia Road Access Only

TIP ID	66-1601-42	Year of Operation	2015
Agency	SHA	Project Type	New or extended roadways
Project Category	Highway Capacity	Functional Class	Other Freeway & Expressways
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	HO3172	Est. Total Cost	\$8,227,000

Description:

Construct access improvements by relocating direct access to Gales Lane and Old Columbia Drive from US 29 to the local road system (Phase 1A).

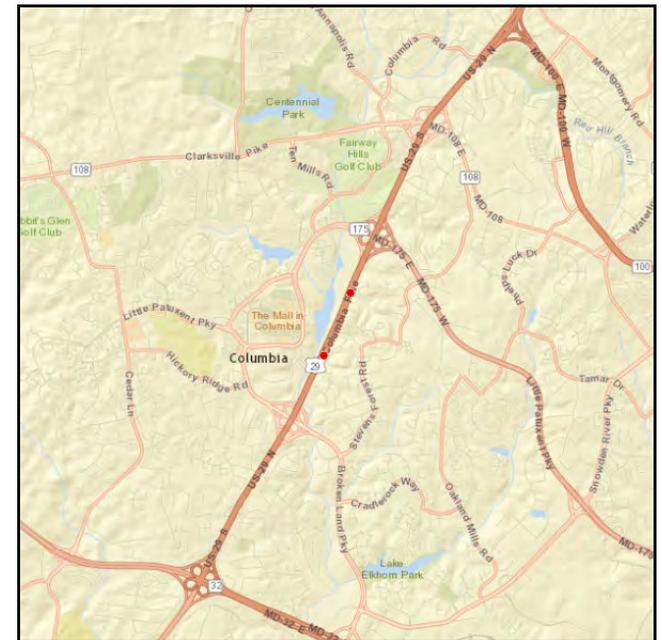
Related projects include: US 29: Seneca Lane to MD 175, Phase 1B, which is assigned TIP ID # 66-1101-41, as well as, US 29: Middle Patuxent River to Seneca Drive, Phase 2, which is assigned TIP ID # 66-1406-41.

Justification:

This project will improve safety and reduce congestion by upgrading northbound US 29 to match the southbound section, which is currently three lanes in each direction.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





US 29: Seneca Drive to MD 175 - Phase 1A, Old Columbia Road Access Only

(Funding in Thousands)

Section 1702 High Priority Project

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$1,657	\$33	\$0	\$0	\$0	\$0	\$0	\$0	\$1,690
Subtotal	\$1,657	\$33	\$0	\$0	\$0	\$0	\$0	\$0	\$1,690



US 29: Seneca Drive to MD 175 - Phase 1A, Old Columbia Road Access Only

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$191	\$18	\$0	\$0	\$0	\$0	\$0	\$0	\$209
Subtotal	\$191	\$18	\$0	\$0	\$0	\$0	\$0	\$0	\$209
Total	\$1,848	\$51	\$0	\$0	\$0	\$0	\$0	\$0	\$1,899

Areawide Transportation Alternatives Projects

TIP ID	60-9903-29	Year of Operation	Ongoing
Agency	SHA	Project Type	Other
Project Category	Enhancement Program	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	N/A	Est. Total Cost	\$19,012,000

Description:

This is an ongoing program to expand travel choices and enhance the transportation experience by improving the cultural, historic, and environmental aspects of our transportation infrastructure. These projects may include but are not limited to pedestrian/bicycle facilities; rehabilitation of historic transportation facilities, including railroad facilities and canals; conversion and use of abandoned railway corridors; archeological activities related to transportation impacts; and mitigation of water pollution due to highway runoff. This program also includes Safe Routes to School and National Recreational Trails projects.

Justification:

Transportation enhancements are projects which add community and environmental value to the transportation system.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 4.F Increase Mobility -- Support a regional, long-distance bikeway network.
- 5.E Conserve and Enhance the Environment -- Preserve and protect natural and cultural resources.





Areawide Transportation Alternatives Projects

(Funding in Thousands)

Transportation Alternatives (Transportation Enhancement, Safe Routes to School, Recreational Trails)

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$2,728	\$682	\$2,728	\$682	\$2,728	\$682	\$2,728	\$682	\$13,640
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$644	\$161	\$644	\$161	\$644	\$161	\$644	\$161	\$3,220
PP	\$215	\$54	\$215	\$54	\$215	\$54	\$215	\$54	\$1,076
ROW	\$215	\$54	\$215	\$54	\$215	\$54	\$215	\$54	\$1,076
Subtotal	\$3,802	\$951	\$3,802	\$951	\$3,802	\$951	\$3,802	\$951	\$19,012
Total	\$3,802	\$951	\$3,802	\$951	\$3,802	\$951	\$3,802	\$951	\$19,012

Areawide Environmental Projects

TIP ID	60-9506-38	Year of Operation	Ongoing
Agency	SHA	Project Type	Environmental other
Project Category	Environmental/Safety	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-20	Est. Total Cost	\$107,612,000

Description:

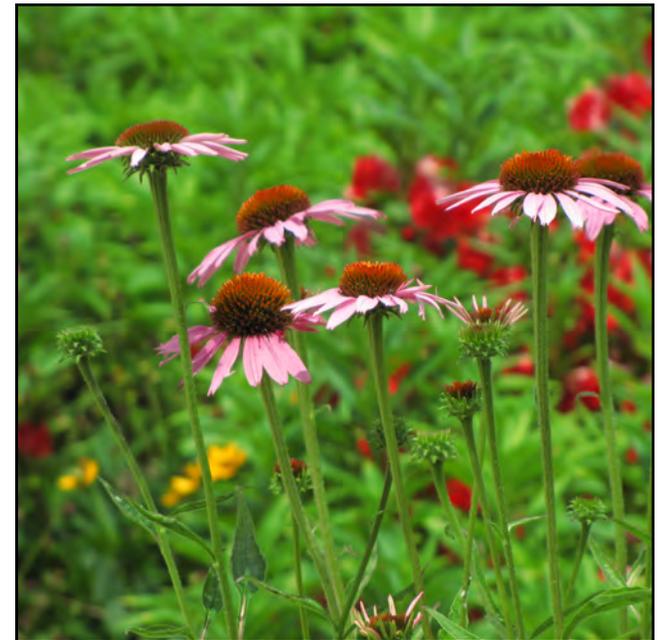
This is an ongoing program to provide environmental and aesthetic improvements on State highways. These are non-capacity improvements, which may include but are not limited to, projects dealing with noise abatement, wetlands, reforestation, landscape planting, scenic beautification, and pedestrian or bicycle facilities.

Justification:

Will restore important wetlands, enhance the surrounding environment and community, and reduce noise impacts.

Connection to Long-Range Transportation Planning Goals:

- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 5.E Conserve and Enhance the Environment -- Preserve and protect natural and cultural resources.





Areawide Environmental Projects

(Funding in Thousands)

Highway Safety Improvement Program

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$300	\$75	\$300	\$75	\$300	\$75	\$300	\$75	\$1,500
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$300	\$75	\$300	\$75	\$300	\$75	\$300	\$75	\$1,500



Areawide Environmental Projects

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$4,113	\$1,028	\$4,113	\$1,028	\$4,113	\$1,028	\$4,113	\$1,028	\$20,564
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$216	\$54	\$216	\$54	\$216	\$54	\$216	\$54	\$1,080
PP	\$71	\$18	\$71	\$18	\$71	\$18	\$71	\$18	\$356
ROW	\$72	\$18	\$72	\$18	\$72	\$18	\$72	\$18	\$360
Subtotal	\$4,472	\$1,118	\$4,472	\$1,118	\$4,472	\$1,118	\$4,472	\$1,118	\$22,360

National Highway System

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$4,114	\$1,028	\$4,114	\$1,028	\$4,114	\$1,028	\$4,114	\$1,028	\$20,568
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$400	\$100	\$400	\$100	\$400	\$100	\$400	\$100	\$2,000
PP	\$70	\$18	\$70	\$18	\$70	\$18	\$70	\$18	\$352
ROW	\$72	\$18	\$72	\$18	\$72	\$18	\$72	\$18	\$360
Subtotal	\$4,656	\$1,164	\$4,656	\$1,164	\$4,656	\$1,164	\$4,656	\$1,164	\$23,280



Areawide Environmental Projects

(Funding in Thousands)

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$9,270	\$2,318	\$9,270	\$2,318	\$9,270	\$2,318	\$9,270	\$2,318	\$46,352
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$1,694	\$424	\$1,694	\$424	\$1,694	\$424	\$1,694	\$424	\$8,472
PP	\$565	\$141	\$565	\$141	\$565	\$141	\$565	\$141	\$2,824
ROW	\$565	\$141	\$565	\$141	\$565	\$141	\$565	\$141	\$2,824
Subtotal	\$12,094	\$3,024	\$12,094	\$3,024	\$12,094	\$3,024	\$12,094	\$3,024	\$60,472
Total	\$21,522	\$5,381	\$21,522	\$5,381	\$21,522	\$5,381	\$21,522	\$5,381	\$107,612

Areawide Congestion Management

TIP ID	60-9504-04	Year of Operation	Ongoing
Agency	SHA	Project Type	Traffic engineering
Project Category	Emission Reduction Strategy	Functional Class	Varies
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-21	Est. Total Cost	\$39,059,000

Description:

This is an ongoing program to provide traffic control, management, and monitoring on State highways. These improvements may include but are not limited to the employment of variable message signs, video for traffic management (CCTV), traffic management detectors, signal systemization and remote timing, permanent congestion monitoring systems employed by the CHART program, deployment of local jurisdiction intelligent transportation system (ITS) projects, and the development of park-and-ride facilities.

This project also includes a program that replaces older drayage trucks serving the Port of Baltimore with newer trucks that meet or exceed 2007 EPA emissions certified engine standards.

Justification:

These projects together provide an important air quality component of reducing emissions from motor vehicles in the Baltimore region. Most of these projects will improve safety and traffic flow operations on the existing highway system without major new construction. They will save motorists time by allowing them to avoid traffic congestion. Some of the projects will reduce congestion through the use of ITS technology innovations in communication, advanced traffic management, traveler information, etc.

*Supports regional M&O initiatives.

Connection to Long-Range Transportation Planning Goals:

4.A Increase Mobility -- Provide techniques or alternatives as part of a Congestion Management Process (CMP).

5.C Conserve and Enhance the Environment -- Provide incentives for zero-emission vehicles.





Areawide Congestion Management

(Funding in Thousands)

Congestion Mitigation and Air Quality

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$1,200	\$300	\$1,200	\$300	\$1,200	\$300	\$1,200	\$300	\$6,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$446	\$112	\$446	\$112	\$446	\$112	\$446	\$112	\$2,232
PP	\$149	\$37	\$149	\$37	\$149	\$37	\$149	\$37	\$744
ROW	\$149	\$37	\$149	\$37	\$149	\$37	\$149	\$37	\$744
Subtotal	\$1,944	\$486	\$1,944	\$486	\$1,944	\$486	\$1,944	\$486	\$9,720

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$1,680	\$420	\$1,680	\$420	\$1,680	\$420	\$1,680	\$420	\$8,400
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$149	\$37	\$149	\$37	\$149	\$37	\$149	\$37	\$744
PP	\$110	\$27	\$110	\$27	\$110	\$27	\$110	\$110	\$631
ROW	\$27	\$7	\$27	\$7	\$27	\$7	\$27	\$7	\$136
Subtotal	\$1,966	\$491	\$1,966	\$491	\$1,966	\$491	\$1,966	\$574	\$9,911



Areawide Congestion Management

(Funding in Thousands)

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$2,550	\$638	\$2,550	\$638	\$2,550	\$638	\$2,550	\$638	\$12,752
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$1,182	\$295	\$1,182	\$295	\$1,182	\$295	\$1,182	\$295	\$5,908
PP	\$77	\$19	\$77	\$19	\$77	\$19	\$77	\$19	\$384
ROW	\$77	\$19	\$77	\$19	\$77	\$19	\$77	\$19	\$384
Subtotal	\$3,886	\$971	\$3,886	\$971	\$3,886	\$971	\$3,886	\$971	\$19,428
Total	\$7,796	\$1,948	\$7,796	\$1,948	\$7,796	\$1,948	\$7,796	\$2,031	\$39,059

Areawide Bridge Replacement And Rehabilitation

TIP ID	60-9310-13	Year of Operation	Ongoing
Agency	SHA	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-20	Est. Total Cost	\$225,623,000

Description:

This is an ongoing program to provide major upgrade and maintenance of structures on State highways. These are non-capacity improvements, which may include but are not limited to, structural replacements, deck rehabilitation, superstructure replacements, parapet reconstruction, cleaning and painting, and general maintenance on various state-owned bridges.

Justification:

Will preserve the existing structures, increase safety, and improve highway beautification.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





SHA

2016 - 2019 Transportation Improvement Program

Highway Preservation
National Highway System

Areawide Bridge Replacement And Rehabilitation

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$20,538	\$5,135	\$9,756	\$2,439	\$9,756	\$2,439	\$9,756	\$2,439	\$62,258
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$3,335	\$834	\$3,335	\$843	\$3,335	\$834	\$3,335	\$834	\$16,685
PP	\$569	\$142	\$569	\$142	\$569	\$142	\$569	\$142	\$2,844
ROW	\$569	\$142	\$569	\$142	\$569	\$142	\$569	\$142	\$2,844
Subtotal	\$25,011	\$6,253	\$14,229	\$3,566	\$14,229	\$3,557	\$14,229	\$3,557	\$84,631



SHA

2016 - 2019 Transportation Improvement Program

Highway Preservation
National Highway System

Areawide Bridge Replacement And Rehabilitation

(Funding in Thousands)

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$21,742	\$5,435	\$21,742	\$5,435	\$21,742	\$5,435	\$21,742	\$5,435	\$108,708
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$3,874	\$969	\$3,874	\$969	\$3,874	\$969	\$3,874	\$969	\$19,372
PP	\$1,291	\$323	\$1,291	\$323	\$1,291	\$323	\$1,291	\$323	\$6,456
ROW	\$1,291	\$323	\$1,291	\$323	\$1,291	\$323	\$1,291	\$323	\$6,456
Subtotal	\$28,198	\$7,050	\$28,198	\$7,050	\$28,198	\$7,050	\$28,198	\$7,050	\$140,992
Total	\$53,209	\$13,303	\$42,427	\$10,616	\$42,427	\$10,607	\$42,427	\$10,607	\$225,623

Areawide Resurfacing And Rehabilitation

TIP ID	60-9501-11	Year of Operation	Ongoing
Agency	SHA	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Varies
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-20	Est. Total Cost	\$325,564,000

Description:

This is an ongoing program to provide periodic resurfacing and upgrading of auxiliary features on State highways. These are non-capacity improvements, which may include but are not limited to, milling, patching, sealing, and resurfacing of existing deteriorated state roadways. Other improvements such as ADA or guardrail may be included incidental to other resurfacing and rehabilitation improvements.

Justification:

Will improve safety and the flow of traffic. This project listing represents a large funding request for many small resurfacing projects throughout the Baltimore region. Project selection is based upon need and is subject to change.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





2016 - 2019 Transportation Improvement Program

Highway Preservation
National Highway System

Areawide Resurfacing And Rehabilitation

(Funding in Thousands)

Highway Safety Improvement Program

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$500	\$125	\$500	\$125	\$500	\$125	\$500	\$125	\$2,500
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$500	\$125	\$500	\$125	\$500	\$125	\$500	\$125	\$2,500



SHA

2016 - 2019 Transportation Improvement Program

Highway Preservation
National Highway System

Areawide Resurfacing And Rehabilitation

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$20,112	\$5,028	\$26,640	\$6,660	\$20,112	\$5,028	\$20,112	\$5,028	\$108,720
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$3,486	\$872	\$3,486	\$872	\$3,486	\$872	\$3,486	\$872	\$17,432
PP	\$1,162	\$291	\$1,162	\$291	\$1,162	\$291	\$1,162	\$291	\$5,812
ROW	\$1,162	\$291	\$1,162	\$291	\$1,162	\$291	\$1,162	\$291	\$5,812
Subtotal	\$25,922	\$6,482	\$32,450	\$8,114	\$25,922	\$6,482	\$25,922	\$6,482	\$137,776

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$32,578	\$8,144	\$32,578	\$8,144	\$32,578	\$8,144	\$32,578	\$8,144	\$162,888
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$2,688	\$672	\$2,688	\$672	\$2,688	\$672	\$2,688	\$672	\$13,440
PP	\$896	\$224	\$896	\$224	\$896	\$224	\$896	\$224	\$4,480
ROW	\$896	\$224	\$896	\$224	\$896	\$224	\$896	\$224	\$4,480
Subtotal	\$37,058	\$9,264	\$37,058	\$9,264	\$37,058	\$9,264	\$37,058	\$9,264	\$185,288
Total	\$63,480	\$15,871	\$70,008	\$17,503	\$63,480	\$15,871	\$63,480	\$15,871	\$325,564

Areawide Safety And Spot Improvements

TIP ID	60-9508-19	Year of Operation	Ongoing
Agency	SHA	Project Type	Other
Project Category	Highway Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-20	Est. Total Cost	\$274,140,000

Description:

This is an ongoing program to provide localized improvements to address safety and/or operational issues on State highways. These are highway improvements which may include but are not limited to projects dealing with bypass lanes, acceleration and deceleration lanes, turn lanes, rail crossings, intersection realignment, geometric improvements, safety improvements including bridge, bicycle, and pedestrian safety improvements, pavement markers, ADA improvements, guardrails, and roundabouts. Other improvements such as slope repairs, drainage improvements, and joint sealing may be included incidental to other safety improvements.

Justification:

Will improve safety and the flow of traffic, thereby reducing fatalities, injuries, congestion, and queuing.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





SHA

2016 - 2019 Transportation Improvement Program

Highway Preservation
National Highway System

Areawide Safety And Spot Improvements

(Funding in Thousands)

Congestion Mitigation and Air Quality

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$1,720	\$430	\$1,720	\$430	\$1,720	\$430	\$1,720	\$430	\$8,600
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$182	\$46	\$182	\$46	\$182	\$46	\$182	\$46	\$912
PP	\$61	\$15	\$61	\$15	\$61	\$15	\$61	\$15	\$304
ROW	\$61	\$15	\$61	\$15	\$61	\$15	\$61	\$15	\$304
Subtotal	\$2,024	\$506	\$2,024	\$506	\$2,024	\$506	\$2,024	\$506	\$10,120



SHA

2016 - 2019 Transportation Improvement Program

Highway Preservation
National Highway System

Areawide Safety And Spot Improvements

(Funding in Thousands)

Highway Safety Improvement Program

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$6,825	\$1,706	\$6,825	\$1,706	\$6,825	\$1,706	\$6,825	\$1,706	\$34,124
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$960	\$240	\$960	\$240	\$960	\$240	\$960	\$240	\$4,800
PP	\$320	\$80	\$320	\$80	\$320	\$80	\$320	\$80	\$1,600
ROW	\$320	\$80	\$320	\$80	\$320	\$80	\$320	\$80	\$1,600
Subtotal	\$8,425	\$2,106	\$8,425	\$2,106	\$8,425	\$2,106	\$8,425	\$2,106	\$42,124

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$13,694	\$3,424	\$13,694	\$3,424	\$13,694	\$3,424	\$13,694	\$3,424	\$68,472
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$1,069	\$267	\$1,069	\$267	\$1,069	\$267	\$1,069	\$267	\$5,344
PP	\$356	\$89	\$356	\$89	\$356	\$89	\$356	\$89	\$1,780
ROW	\$356	\$89	\$356	\$89	\$356	\$89	\$356	\$89	\$1,780
Subtotal	\$15,475	\$3,869	\$15,475	\$3,869	\$15,475	\$3,869	\$15,475	\$3,869	\$77,376



SHA

2016 - 2019 Transportation Improvement Program

Highway Preservation
National Highway System

Areawide Safety And Spot Improvements

(Funding in Thousands)

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$23,008	\$5,752	\$23,008	\$5,752	\$23,008	\$5,752	\$23,008	\$5,752	\$115,040
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$3,277	\$819	\$3,277	\$819	\$3,277	\$819	\$3,277	\$819	\$16,384
PP	\$1,310	\$327	\$1,310	\$327	\$1,310	\$327	\$1,310	\$327	\$6,548
ROW	\$1,310	\$327	\$1,310	\$327	\$1,310	\$327	\$1,310	\$327	\$6,548
Subtotal	\$28,905	\$7,225	\$28,905	\$7,225	\$28,905	\$7,225	\$28,905	\$7,225	\$144,520
Total	\$54,829	\$13,706	\$54,829	\$13,706	\$54,829	\$13,706	\$54,829	\$13,706	\$274,140

Areawide Urban Reconstruction

TIP ID	60-9511-19	Year of Operation	Ongoing
Agency	SHA	Project Type	Other
Project Category	Highway Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-20	Est. Total Cost	\$33,932,000

Description:

This is an ongoing program to provide roadway rehabilitation and streetscape improvements on State highways in towns and urban areas. These are non-capacity highway improvements which may include but are not limited to projects dealing with drainage, curb and gutter, pavement milling and resurfacing, sidewalks, streetscape, signs, and markings and lighting improvements.

Justification:

Will improve safety and the flow of traffic, thereby reducing delay, queuing and congestion. This will also enhance the surrounding environment and community.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.





SHA

2016 - 2019 Transportation Improvement Program

Highway Preservation
National Highway System

Areawide Urban Reconstruction

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$24	\$6	\$24	\$6	\$24	\$6	\$24	\$6	\$120
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$6	\$2	\$6	\$2	\$6	\$2	\$6	\$2	\$32
PP	\$2	\$1	\$2	\$1	\$2	\$1	\$2	\$1	\$12
ROW	\$2	\$1	\$2	\$1	\$2	\$1	\$2	\$1	\$12
Subtotal	\$34	\$10	\$34	\$10	\$34	\$10	\$34	\$10	\$176



SHA

2016 - 2019 Transportation Improvement Program

Highway Preservation
National Highway System

Areawide Urban Reconstruction

(Funding in Thousands)

Surface Transportation Program (Surface Transportation, Bridge (Off-System))

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$5,433	\$1,358	\$5,433	\$1,358	\$5,433	\$1,358	\$5,433	\$1,358	\$27,164
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$790	\$198	\$790	\$198	\$790	\$198	\$790	\$198	\$3,952
PP	\$264	\$66	\$264	\$66	\$264	\$66	\$264	\$66	\$1,320
ROW	\$264	\$66	\$264	\$66	\$264	\$66	\$264	\$66	\$1,320
Subtotal	\$6,751	\$1,688	\$6,751	\$1,688	\$6,751	\$1,688	\$6,751	\$1,688	\$33,756
Total	\$6,785	\$1,698	\$6,785	\$1,698	\$6,785	\$1,698	\$6,785	\$1,698	\$33,932

Morgan State University Transportation Research Program

TIP ID	60-0702-99	Year of Operation	Ongoing
Agency	SHA	Project Type	Miscellaneous
Project Category	Miscellaneous	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)		Est. Total Cost	\$90,000

Description:

Transportation research, education and technology transfer activities involving university faculty, staff and students.

Justification:

The project will support research and solutions to real world transportation issues and meet the state and federal transportation objectives.

Connection to Long-Range Transportation Planning Goals:



Morgan State University Transportation Research Program

(Funding in Thousands)

Other

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$45	\$0	\$45	\$0	\$0	\$0	\$0	\$0	\$90
PE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$45	\$0	\$45	\$0	\$0	\$0	\$0	\$0	\$90
Total	\$45	\$0	\$45	\$0	\$0	\$0	\$0	\$0	\$90