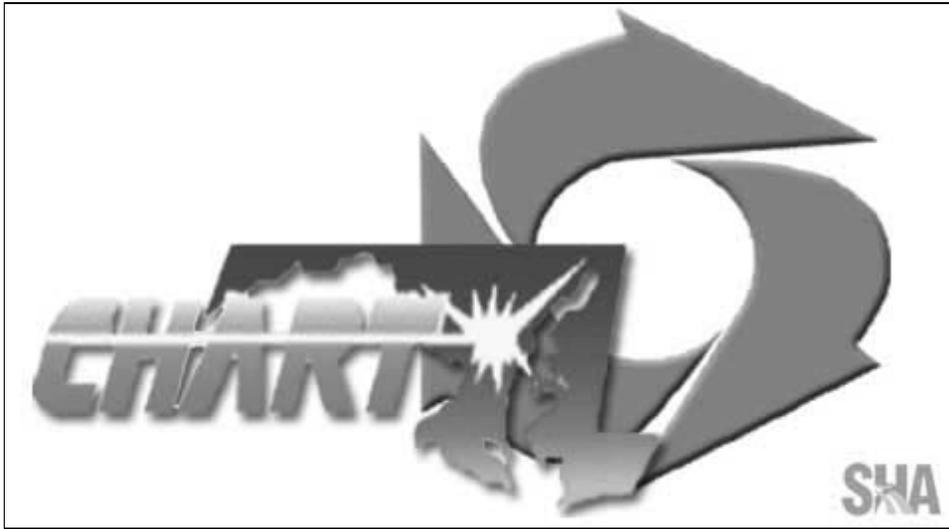


SHA



SHA STATEWIDE



PROJECT: Coordinated Highway Action Response Team (CHART)

DESCRIPTION: Install advanced traffic management system (ATMS) and advanced traffic information system (ATIS) technologies on Interstate highways and arterials statewide. Technologies include cameras, traffic detectors, weather sensors, dynamic message signs, highway advisory radios, web sites and telecommunication networks. CHART is comprised of five major components: 1) Traffic and Roadway Monitoring; 2) Incident Management; 3) "511" - Traveler's Information; 4) System Integration and Communication; 5) Traffic Management.

PURPOSE & NEED SUMMARY STATEMENT: Heavy volumes of traffic, stop-and-go commuter peaks, and lack of comprehensive information regarding current, real-time conditions on available alternatives contribute to and compound the effects of unexpected incidents. With the growth in traffic outpacing any realistic hope of expanding capacity through building new highways, or expanding existing ones, it is imperative to operate the existing system more efficiently through the application of Intelligent Transportation System technologies and interagency teamwork.

SMART GROWTH STATUS: Project Not Location Specific Not Subject to PFA Law
 Project Inside PFA Grandfathered
 Project Outside PFA Exception Will Be Required
 PFA Status Yet To Be Determined Exception Granted

ASSOCIATED IMPROVEMENTS:

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

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

EXPLANATION: Projects in the CHART program will aid in the reduction of travel time, reduce congestion and provide critical traffic information for the traveling public, which improves movement of both passengers and freight. Messages on dynamic message boards provide information to aid in the safety and security of travelers.

STATUS: Engineering and Construction underway. This represents a summary of the Statewide CHART program. Individual corridor work is shown in the State Highway Administration's Safety, Congestion Relief, Highway and Bridge Preservation Program.

SIGNIFICANT CHANGE FROM FY 2016 - 21 CTP: Added funding in FY22. Cost change due to the removal of cumulative expenditures from previous years.

POTENTIAL FUNDING SOURCE:		<input checked="" type="checkbox"/> SPECIAL <input checked="" type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input type="checkbox"/> OTHER								
PHASE	PROJECT CASH FLOW									
	TOTAL ESTIMATED COST (\$000)	EXPEND THRU 2016	CURRENT YEAR 2017	BUDGET YEAR 2018	FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
					.....2019.....	.....2020.....	.....2021.....	.....2022.....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	67,971	8,871	10,300	9,530	9,880	9,730	9,830	9,830	59,100	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	55,829	9,329	3,900	4,570	13,720	13,670	5,870	4,770	46,500	0
Total	123,800	18,200	14,200	14,100	23,600	23,400	15,700	14,600	105,600	0
Federal-Aid	49,799	7,426	4,359	5,584	8,260	8,681	7,897	7,592	42,373	0

CLASSIFICATION:

STATE - N/A

FEDERAL - N/A

STATE SYSTEM: N/A

Annual Average Daily Traffic (vehicles per day)

CURRENT (2016) - N/A

PROJECTED (2035) - N/A



PROJECT: Sidewalk Program

DESCRIPTION: This program will provide matching funds for the construction of sidewalks adjacent to State highways. Fifty percent of project costs will be required from local and municipal project sponsors, except in urban revitalization areas where projects are eligible for 100 percent state funding, and in priority funding areas where projects are eligible for 75 percent state funding.

PURPOSE & NEED SUMMARY STATEMENT: Program will support community revitalization efforts and efforts to encourage pedestrian usage along State highways consistent with the intent of the "Access 2000" legislation.

SMART GROWTH STATUS: Project Not Location Specific Not Subject to PFA Law
 Project Inside PFA Grandfathered
 Project Outside PFA Exception Will Be Required
 PFA Status Yet To Be Determined Exception Granted

ASSOCIATED IMPROVEMENTS:

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

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

EXPLANATION: This program supports community revitalization and other efforts to encourage pedestrian usage along State Highways. Provides/promotes safer access to transit service for both surface bus and fixed rail systems.

STATUS: Engineering, Right-of-way and Construction underway. Working with local jurisdictions to identify projects. This sheet represents a summary of the Program. Individual projects are shown in SHA's Safety, Congestion Relief, Highway and Bridge Preservation Program.

SIGNIFICANT CHANGE FROM FY 2016 - 21 CTP: Added funding in FY22. Cost change due to the removal of cumulative expenditures from previous years.

PHASE	POTENTIAL FUNDING SOURCE:				<input checked="" type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input type="checkbox"/> OTHER					SIX YEAR TOTAL	BALANCE TO COMPLETE
	TOTAL ESTIMATED COST (\$000)	EXPEND THRU 2016	CURRENT YEAR 2017	BUDGET YEAR 2018	PROJECT CASH FLOW FOR PLANNING PURPOSES ONLY						
					.....2019.....	.....2020.....	.....2021.....	.....2022.....		
Planning	1,380	146	134	200	200	200	250	250	1,234	0	
Engineering	10,909	1,993	1,166	1,550	1,550	1,550	1,550	1,550	8,916	0	
Right-of-way	0	0	0	0	0	0	0	0	0	0	
Construction	23,211	3,961	2,600	3,150	3,250	3,850	3,000	3,400	19,250	0	
Total	35,500	6,100	3,900	4,900	5,000	5,600	4,800	5,200	29,400	0	
Federal-Aid	0	0	0	0	0	0	0	0	0	0	

CLASSIFICATION:

STATE - N/A

FEDERAL - N/A

STATE SYSTEM: N/A

Annual Average Daily Traffic (vehicles per day)

CURRENT (2016) - N/A

PROJECTED (2035) - N/A



PROJECT: Sound Barrier Program

DESCRIPTION: Funding to implement retrofit sound barrier projects that meet eligibility criteria.

PURPOSE & NEED SUMMARY STATEMENT: Mitigating highway noise is an essential element of the Department's programs for environmental stewardship and community conservation.

SMART GROWTH STATUS: Project Not Location Specific Not Subject to PFA Law
 Project Inside PFA Grandfathered
 Project Outside PFA Exception Will Be Required
 PFA Status Yet To Be Determined Exception Granted

ASSOCIATED IMPROVEMENTS:

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

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

EXPLANATION: This program provides mitigation of highway noise to those communities that qualify for noise abatement. Improves quality of life for eligible communities adjacent to access controlled facilities.

STATUS: Engineering, Right-of-Way and Construction underway. This consolidates the total dollars available for sound barriers that meet eligibility criteria. Individual projects are shown in SHA's Safety, Congestion Relief, Highway and Bridge Preservation Program.

SIGNIFICANT CHANGE FROM FY 2016 - 21 CTP: Cost change due to the removal of cumulative expenditures from previous years.

POTENTIAL FUNDING SOURCE:		<input checked="" type="checkbox"/> SPECIAL <input checked="" type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input type="checkbox"/> OTHER								
PHASE	PROJECT CASH FLOW									
	TOTAL ESTIMATED COST (\$000)	EXPEND THRU 2016	CURRENT YEAR 2017	BUDGET YEAR 2018	FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
					.....2019.....	.....2020.....	.....2021.....	.....2022.....		
Planning	0	0	0	0	0	0	0	0	0	0
Engineering	1,984	984	600	400	0	0	0	0	1,000	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	38,316	12,016	11,500	7,500	2,100	2,000	2,000	1,200	26,300	0
Total	40,300	13,000	12,100	7,900	2,100	2,000	2,000	1,200	27,300	0
Federal-Aid	15,500	6,800	6,200	2,500	0	0	0	0	8,700	0

CLASSIFICATION:

STATE - N/A

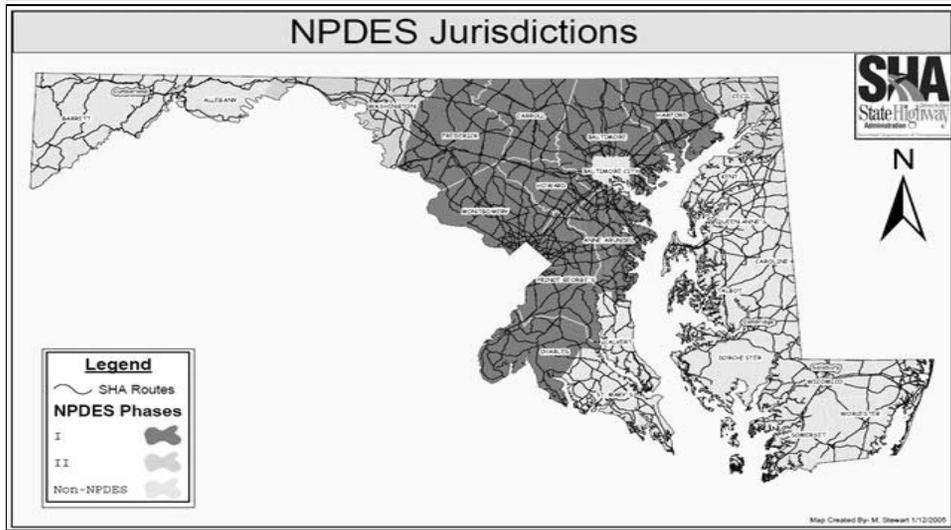
FEDERAL - N/A

STATE SYSTEM: N/A

Annual Average Daily Traffic (vehicles per day)

CURRENT (2016) - N/A

PROJECTED (2035) - N/A



PROJECT: Total Maximum Daily Load (TMDL)

DESCRIPTION: Plan, design, and construct storm water controls and alternative water quality improvement strategies in Maryland Phase I and Phase II Counties in order to meet the US Environmental Protection Agency's (EPA) Chesapeake Bay Total Maximum Daily Load (TMDL) requirements by the year 2025. These strategies support the goal of protecting and restoring the Chesapeake Bay watershed. The implementation will follow the State of Maryland commitment in its Watershed Implementation Phase I Plan (WIP I).

PURPOSE & NEED SUMMARY STATEMENT: SHA is required to adhere to the Chesapeake Bay TMDL and local TMDLs as a result of its National Pollution Elimination Discharge System (NPDES) Phase I and Phase II Municipal Separate and Storm Sewer System Permit (MS4) permits. This programmatic effort is needed for compliance and supports the ultimate goal of improved water quality in Maryland streams, creeks, rivers, and the Chesapeake Bay.

SMART GROWTH STATUS: Project Not Location Specific Not Subject to PFA Law
 Project Inside PFA Grandfathered
 Project Outside PFA Exception Will Be Required
 PFA Status Yet To Be Determined Exception Granted

ASSOCIATED IMPROVEMENTS:

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

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

EXPLANATION: Implement strategies through the year 2025 that will primarily reduce nitrogen, phosphorus and sediment loads in waters that drain to the Chesapeake Bay from SHA-owned roads and coverage areas. Implementation Strategies to include: Structural and Non-Structural Best Management Practices; Environmentally Sensitive Designs; Stream and Wetland Restoration; and Afforestation.

STATUS: Engineering, Right-of-Way, and Construction underway.

SIGNIFICANT CHANGE FROM FY 2016 - 21 CTP: Added funding in FY22.

POTENTIAL FUNDING SOURCE:		<input checked="" type="checkbox"/> SPECIAL <input checked="" type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input type="checkbox"/> OTHER									
PHASE	TOTAL		PROJECT CASH FLOW							SIX YEAR TOTAL	BALANCE TO COMPLETE
	ESTIMATED COST (\$000)	EXPEND THRU 2016	CURRENT YEAR 2017	BUDGET YEAR 2018	FOR PLANNING PURPOSES ONLY						
					....2019....	....2020....	....2021....	....2022....		
Planning	20,591	7,391	2,600	2,200	2,200	2,200	2,000	2,000	13,200	0	
Engineering	167,449	25,249	38,100	33,100	19,000	19,000	17,000	16,000	142,200	0	
Right-of-way	2,989	1,589	200	0	300	300	300	300	1,400	0	
Construction	434,771	20,071	44,100	78,600	90,000	82,000	63,800	56,200	414,700	0	
Total	625,800	54,300	85,000	113,900	111,500	103,500	83,100	74,500	571,500	0	
Federal-Aid	8,028	8,028	0	0	0	0	0	0	0	0	

CLASSIFICATION:

STATE - N/A

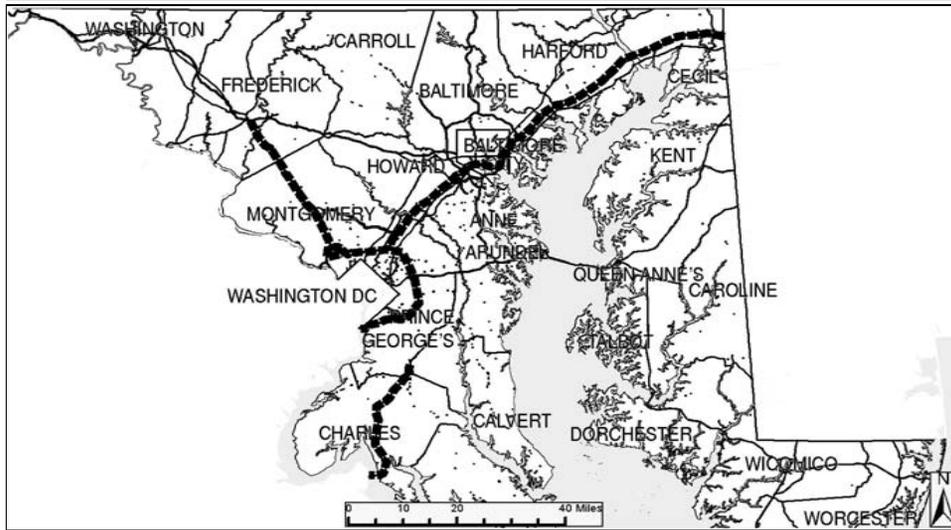
FEDERAL - N/A

STATE SYSTEM: N/A

Annual Average Daily Traffic (vehicles per day)

CURRENT (2016) - N/A

PROJECTED (2035) - N/A



PROJECT: Operational Improvement Studies

DESCRIPTION: Develop strategies to improve operations on the Capital Beltway, I-95 and US 301.

JUSTIFICATION: A comprehensive set of relatively low cost strategies is needed to address recurring and non-recurring congestion that occurs along these corridors.

SMART GROWTH STATUS: Project Not Location Specific Not Subject to PFA Law

Project Inside PFA Grandfathered
 Project Outside PFA Exception Will Be Required
 PFA Status Yet To Be Determined Exception Granted

ASSOCIATED IMPROVEMENTS:

STATUS: Planning underway.

SIGNIFICANT CHANGE FROM FY 2016 - 21 CTP: None.

POTENTIAL FUNDING SOURCE:		<input checked="" type="checkbox"/> SPECIAL		<input checked="" type="checkbox"/> FEDERAL		<input type="checkbox"/> GENERAL		<input type="checkbox"/> OTHER		
PHASE	PROJECT CASH FLOW									
	TOTAL ESTIMATED COST (\$000)	EXPEND THRU 2016	CURRENT YEAR 2017	BUDGET YEAR 2018	FOR PLANNING PURPOSES ONLY				SIX YEAR TOTAL	BALANCE TO COMPLETE
					.....2019.....	.....2020.....	.....2021.....	.....2022.....		
Planning	3,055	1,352	814	889	0	0	0	0	0	1,703
Engineering	0	0	0	0	0	0	0	0	0	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0
Total	3,055	1,352	814	889	0	0	0	0	0	1,703
Federal-Aid	2,844	1,202	753	889	0	0	0	0	0	1,642

CLASSIFICATION:

STATE - N/A

FEDERAL - N/A

STATE SYSTEM: N/A

Annual Average Daily Traffic (vehicles per day)

CURRENT (2016) - N/A

PROJECTED (2035) - N/A

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Year 2016 Completions</u>				
<u>Resurface/Rehabilitate</u>				
1		At various locations in District 5; sidewalks	3,023	Completed
2		At various locations in District 5; guardrail	933	Completed
3		Various locations in Carroll, Frederick and Howard Counties; joint sealing	1,400	Completed
4		Various locations in Districts 3 and 5; pavement marking	2,306	Completed
5		Various locations in Districts 1 and 2; pavement marking	2,055	Completed
6		Various locations in District 6; guardrails	1,826	Completed
7		Various locations in Montgomery and Prince George's Counties; resurface	2,055	Completed
8		At various locations in District 5; widen and resurface	4,176	Completed
9		At various locations in Calvert, Charles and St. Mary's Counties; joint sealing	493	Completed
10		Traffic barrier upgrades at various locations in District 7; guardrail	1,556	Completed
11		Install/upgrade Traffic barrier at various locations in District 6	725	Completed
12		Various Locations in District 5; slurry seal	1,932	Completed
<u>Bridge Replacement/Rehabilitation</u>				
13		Bridges 1400600 and 2001800 in Kent and Talbot Counties; clean/paint bridges	1,503	Completed

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Year 2016 Completions (cont'd)</u>				
<u>Safety/Spot Improvement</u>				
14		At various locations Statewide; drainage improvement	3,245	Completed
15		At various locations Statewide; drainage improvement	3,273	Completed
16		At various locations in District 3; surface treatment	221	Completed
17		Various locations statewide; drainage improvement	3,333	Completed
18		Various locations in District 2; rumble strips	232	Completed
19		At various locations in District 3; sidewalks	3,744	Completed
20		Various locations statewide; drainage	1,457	Completed
21		Various locations in Allegany and Garrett Counties; geometric improvements	2,271	Completed
22		Repairs on Stormwater Facilities in various locations; drainage improvement	622	Completed
23		Sign Reflectivity Management Statewide; signing	8,000	Completed
24		Stormwater Management facilities at various locations Statewide; drainage improvement	2,584	Completed
<u>Environmental Preservation</u>				
25		Landscape Sustainability IV at various locations in District 1; landscape	112	Completed
26		Integrated roadside veg management I 695 to Mountain Road; landscape	597	Completed

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Year 2016 Completions (cont'd)</u>				
<u>Environmental Preservation (cont'd)</u>				
27		Landscape sustainability IV for various locations in District 3 and 5; landscape	633	Completed
28		Various locations in District 4 and 7; landscape	490	Completed
29		Various locations in District 1 and 2; landscape	151	Completed
30		Landscape sustainability improvements in various locations in District 3 and 5; landscape	594	Completed
31		Various interchanges on US 50 and US 13; landscaping	944	Completed
32		Various interchanges on I 83, I 695 and I 95; landscaping	1,650	Completed
33		Vegetation management - Various interchanges on US 50, MD 100 and District 5 Wetlands; landscaping	1,484	Completed
34		Various interchanges on I 70, I 95 ,US 29 and MD 100 ; landscaping	1,976	Completed
35		Landscape sustainability improvements at various locations in District 3 and District 5; landscaping	234	Completed
36	I 68	Integrated roadside vegetation management - Allegany/Washington County line to Allegany/Garrett County line; landscaping	1,099	Completed
37	I 95	Vegetation Management - MD 202 to I-95, I-495 to HO/PG County line; landscaping	3,022	Completed
38	US 301	Blue Star Memorial Highway; US 50 split to Delaware State Line; landscape	230	Completed

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Year 2016 Completions (cont'd)</u>				
<u>Sidewalks</u>				
39		Various locations in District 3; sidewalks	3,661	Completed
<u>TMDL Compliance</u>				
40		Tree Planting at various locations in District 7; landscape (Transportation Infrastructure Investment Act of 2013)	932	Completed
41	I 97	John Hanson Highway; Grass swales at various locations in District 5; drainage improvement (Transportation Infrastructure Investment Act of 2013)	4,261	Completed
<u>Fiscal Years 2017 and 2018</u>				
<u>Resurface/Rehabilitate</u>				
42		At various locations in Anne Arundel, Calvert, Charles and St. Mary's Counties; guard rail	2,020	FY 2017
43		At various locations in District 4; surface treatment	623	FY 2017
44		At various locations in District 7; guard rail	2,341	FY 2017
45		At various locations in District 7; slurry seal	4,440	FY 2017
46		At various locations in District 5 - ultra thin bonded wearing course; surface treatment	4,005	FY 2017
47		At various locations in Allegany, Garrett and Washington Counties; guard rail	2,396	FY 2017
48		At various locations in District 1 - ultra thin bonded wearing course; surface treatment	4,251	FY 2017
49		At various locations in District 4 - ultra thin bonded wearing course; surface treatment	4,137	FY 2017

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Resurface/Rehabilitate (cont'd)</u>				
50		At various locations in District 4; surface treatment	1,548	FY 2017
51		At various locations in District 4; joint sealing	1,572	FY 2017
52		At various locations in District 6 - thermo thinline striping; pavement marking	1,245	FY 2017
53		At various locations in District 3 - thermo thinline striping; pavement marking	1,226	FY 2017
54		At various locations in Caroline and Talbot Counties; resurface	1,892	FY 2017
55		At various locations in District 5; guard rail	930	FY 2017
56		At various locations in District 6; resurface	478	FY 2017
57		At various locations in Montgomery and Prince George's Counties; sidewalks	2,149	FY 2017
58		At various locations in District 7 - thermo thinline striping; pavement marking	962	FY 2017
59		At various locations in District 5; sidewalks	2,250	FY 2017
60		At various locations in District 2; mill and resurface	3,877	FY 2017
61		At various locations in District 2 - thermo thinline striping; pavement marking	960	FY 2017
62		At various locations in Carroll and Frederick Counties; mill and resurface	18,187	FY 2017
63		At various locations in District 7; patching	2,313	FY 2017

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Resurface/Rehabilitate (cont'd)</u>				
64		At various locations in Kent and Queen Anne's Counties; resurface	1,894	FY 2017
65		At various locations on I-70, I-95, I-195, I-795, I-83, I-695, MD 695 and MD 295; safety and resurface	8,555	FY 2017
66		At various locations in District 1; pavement marking	1,003	FY 2017
67		At various routes in Carroll, Frederick and Howard Counties; guard rail	2,003	FY 2017
68		At various locations in District 5; pavement marking	1,907	FY 2017
69		At various locations in District 4; pavement marking	1,157	FY 2017
70		At various locations in District 2; sidewalks	1,392	Under construction
71		At various locations in Caroline, Cecil, Kent, Queen Anne's and Talbot Counties; slurry seal	2,310	FY 2017
72		At various locations in District 5; patching	3,377	FY 2017
73		At various locations in Caroline, Cecil, Kent, Queen Anne's and Talbot Counties; guard rail	599	FY 2017
74		At various locations in Calvert, Charles and St. Mary's Counties; joint sealing	913	FY 2017
75		At various locations in Dorchester, Somerset, Wicomico and Worcester Counties; patching	2,669	FY 2017
76		At various locations in Dorchester, Somerset, Wicomico and Worcester Counties; guard rail	1,566	Under construction
77		At various locations in District 6; slurry seal	2,974	FY 2017

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Resurface/Rehabilitate (cont'd)</u>				
78		At various locations in District 2; joint sealing	465	FY 2018
79		At various locations in District 4; guardrail	2,302	Under construction
80		At various locations in District 4; Joint Sealing	1,435	Under construction
81		At various locations in District 6; resurface	445	Under construction
82		At various locations in District 7; guardrails	1,940	Under construction
83		Various locations in Districts 4 and 7; pavement marking	2,025	Under construction
84		Various locations in District 2; slurry seal	1,186	Under construction
85		Various locations in Carroll, Frederick and Howard Counties; joint sealing	442	FY 2017
86		Various locations in Carroll, Frederick and Howard Counties; patching	1,712	Under construction
87		Various locations in District 3 and 5; thermoplastic thinline striping	1,207	Under construction
88		Various locations in District 2; guardrail	383	FY 2017
89		Various locations in District 1 and 2; thermoplastic thinline striping	1,363	Under construction
90		Various locations in District 7; guardrail	1,413	Under construction
91		Various locations in Cecil, Kent, Queen Anne's and Caroline Counties; sidewalks	737	Under construction

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
		<u>Fiscal Years 2017 and 2018 (cont'd)</u>		
		<u>Resurface/Rehabilitate (cont'd)</u>		
92	I 68	National Freeway; From 0.63 miles west of AL/GA County line to 0.37 east of AL/GA County line; climbing lane Funding provided by the Governor's Investment in Highways and Bridges Initiative	893	FY 2017
		<u>Bridge Replacement/Rehabilitation</u>		
93		Provide maintenance of traffic and access equipment for bridge inspection - contract 2; bridge inspection	4,648	FY 2017
94		Providing maintenance of traffic and access equipment for bridge inspection; bridge inspection	5,939	FY 2017
95		Preservation and minor rehab of fixed bridges, culverts and retaining walls-statewide; bridge rehabilitation	11,980	FY 2017
96		Preservation and minor rehab of fixed bridges, culverts and retaining walls-statewide; bridge rehabilitation	11,908	FY 2017
97		Preservation and minor rehab of fixed bridges, culverts and retaining walls-statewide; bridge rehabilitation	12,030	FY 2017
98		At various locations in District 6; bridge rehabilitation	2,860	FY 2017
99		Preservation and minor rehab of fixed bridges, culverts and retaining walls-statewide; bridge rehabilitation	12,072	FY 2017
100		Preservation and minor rehab of moveable and fixed bridges, culverts and walls; bridge rehabilitation	12,570	FY 2017
101		Invert paving and restoration to various structures; miscellaneous	4,192	FY 2017
102		Preservation/minor rehab fixed bridges, culverts, retaining walls in District 6; bridge rehabilitation	1,997	FY 2017

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Bridge Replacement/Rehabilitation (cont'd)</u>				
103		Preservation and minor rehab of fixed bridges, culverts and walls - Contract 1; bridge rehabilitation	11,258	FY 2017
104		Preservation and minor rehab of fixed bridges, culverts and walls - Contract 2; bridge rehabilitation	11,322	Under construction
105		Preservation and minor rehab of fixed bridges, culverts and walls - Contract 4; bridge rehabilitation	13,049	Under construction
106		At various locations on lower Georges Creek Road, National Freeway, Friendsville Road; clean/paint bridges	1,670	Completed
107		Preservation and minor rehab of moveable and fixed bridges, culverts and walls; bridge rehabilitation	9,033	FY 2017
108		Install troughs and rehabilitation of joints to 27 bridges in WA and BA Counties; joint sealing	3,144	Under construction
109		Invert paving and restoration to various structures; miscellaneous	1,722	Under construction
<u>Safety/Spot Improvement</u>				
110		At various locations in Prince George's and Montgomery Counties; drainage improvement	3,047	FY 2017
111		At various locations in District 3; bicycle-pedestrian improvements (Total cost \$13.7 million, includes all phases)	2,792	FY 2017
112		At various locations in District 4; RPM	753	FY 2017
113		Tree trimming/removal at various locations in Prince George's and Montgomery Counties; safety	523	FY 2017
114		At various locations in District 5; rumble strips	416	FY 2017

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Safety/Spot Improvement (cont'd)</u>				
115		At various locations in District 1; RPM	429	FY 2017
116		Baltimore and Harford Counties - safety and operations improvements; safety	5,553	FY 2017
117		At various locations statewide - on call contract; drainage improvement	5,491	FY 2017
118		At various locations in District 1; rumble strips	319	FY 2017
119		Baltimore and Harford Counties - tree trimming and removal; bicycle-pedestrian route	959	FY 2017
120		At various locations in Carroll, Frederick and Howard Counties; RPM	801	FY 2017
121		At various locations in District 5; RPM	561	FY 2017
122		At various locations in Anne Arundel, Calvert, Charles and St. Mary's Counties; drainage improvements Funding provided by the Governor's Investment in Highways and Bridges Initiative	2,860	FY 2017
123		At various locations statewide; drainage improvement	3,312	Under construction
124		At various locations in Prince George's and Montgomery Counties; geometric improvements	3,292	FY 2017
125		At various locations in District 2; RPM	603	FY 2017
126		At various locations in Baltimore and Harford Counties; rumble strips	1,130	FY 2017
127		At various locations in District 4; sidewalks	2,995	FY 2017

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Safety/Spot Improvement (cont'd)</u>				
128		At various locations in District 6; drainage improvement	8,786	FY 2018
129		ADA at various locations in District 1; sidewalks	4,541	FY 2017
130		At various locations statewide - Stormwater/drainage asset remediation; drainage improvement	3,582	Under construction
131		At various locations in District 6; sidewalks	3,392	FY 2017
132		At various locations in District 3; sidewalks	3,494	FY 2017
133		Clearing and grubbing at various locations for utilities relocation in District 5; miscellaneous	273	FY 2017
134		Various locations in District 7; ADA compliance	2,515	FY 2017
135		At various locations in District 1 and 2; pavement marking	899	Under construction
136		Various locations in District 3, 4, 5, 6 and 7; pavement marking	1,713	Under construction
137		At various locations in District 1; rumble strips	505	Under construction
138		ADA Compliance Program in District 1	4,135	FY 2017
139		Various locations in Baltimore and Harford Counties; safety	6,921	Under construction
140		Various locations in District 4; pavement markings	517	Under construction
141	US 13	Ocean Highway; Jones Road to North of Eden Road; geometric improvements Funding provided by the Governor's Investment in Highways and Bridges Initiative	2,103	FY 2017

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Safety/Spot Improvement (cont'd)</u>				
142	US 40	Baltimore National Pike; Bethany Lane to Tyson Road and Johnnycake Road to Coleridge Road; guard rail	753	Under construction
<u>Noise Barriers</u>				
143		Noise barrier preservation and remediation - statewide; noise abatement	2,240	FY 2017
144		Noise barrier fire door remediation in district 3; noise abatement	1,151	FY 2017
145		Various locations; noise abatements	1,423	Under construction
146	I 495	Capital Beltway; noise walls 15110 and 15113; drainage improvements	160	Under construction
<u>Traffic Management</u>				
147		At various locations in District 3; signalization	5,720	FY 2017
148		At various locations in Districts 6 and 7; signing	4,863	FY 2017
149		At various locations in Districts 3, 4 and 5; signing	5,720	FY 2017
150		At various locations in District 1 and 2; lighting	4,406	FY 2017
151		At various locations in Districts 1 and 2; signing	3,432	FY 2017
152		At various locations in District 4; signalization	6,178	FY 2017
153		At various locations - statewide; signalization	7,362	FY 2017

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Traffic Management (cont'd)</u>				
154		At various locations in Districts 3, 4, and 5; signalization	7,771	FY 2017
155		Sign structure replacement - statewide; signing	7,389	FY 2017
156		Modify/install/recon of signing - statewide; signing	8,896	FY 2017
157		At various locations in District 6 and 7; lighting	2,773	FY 2017
158		At various locations statewide - UPS/APS/CFS; signalization	5,604	FY 2017
159		At various locations in District 3 and 6; signalization	7,433	FY 2017
160		At various locations - sign retro reflectivity; signing Funding provided by the Governor's Investment in Highways and Bridges Initiative	5,300	FY 2018
161		At various locations in Districts 1 and 2; signalization	3,793	FY 2017
162		At various locations in Districts 6 and 7; lighting	3,379	Under construction
163		At various locations statewide; signing	6,251	Under construction
164		Light Emitting Diode (LED) Upgrades - Statewide	4,030	FY 2017
165		Modify/Install/Reconstruct Signals; signalization	5,741	FY 2017
166		Tourism and service signing; signing	3,157	FY 2017
167		With APS/CPS in Districts 3, 4 and 7; signalization	6,970	FY 2017

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Traffic Management (cont'd)</u>				
168		APS in Districts 6 and 7; signalization	5,037	FY 2017
169		At various locations in District 3; lighting	4,930	FY 2017
170		At various locations in District 3; signalization	6,942	FY 2017
171		At various locations in District 4; lighting	4,268	FY 2017
172		At various locations in District 5; lighting	4,377	FY 2017
173		At various locations in District 6; signing	3,693	FY 2017
174		Various locations in District 3; signing	3,377	FY 2017
175		Various locations in District 6 and 7; lighting	4,875	FY 2017
176		Various locations in District 4; signalization	5,696	Under construction
177		Various locations in District 1 and 2; lighting	4,861	FY 2017
178		Various Locations in District 5; signalization	5,664	FY 2017
179		Various locations in District 4; signing	3,048	Under construction
180		Automatic Traffic Recorders Statewide; miscellaneous	2,235	FY 2017
181		Modify/reconstruct with in Districts 3, 4, 5; signalization	10,045	Under construction

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STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Traffic Management (cont'd)</u>				
182		Traffic signs and APS in District 3; signalization	7,153	FY 2017
183		Sign Structure replacement in District 7	4,777	FY 2017
184		Sign Structure replacement in District 4	4,905	FY 2017
185		Sign Structure replacement in District 3	5,003	FY 2017
186		Various locations in District 3, 4 and 5; signalization	5,671	Under construction
187		Various locations in Districts 6 and 7; signalization	3,168	Under construction
188		At various locations in District 5; signing	2,295	Under construction
189		Various locations in District 5; signalization	5,935	Under construction
190		Modify/Install/Reconstruct traffic signals - District 3; signalization	6,194	Under construction
191		Various locations in District 1 and 2; signalization	1,064	Under construction
192		Various locations in District 4; lighting	1,783	Under construction
193		Various locations in District 1 and 2; signing	1,163	Under construction
194		Various locations in District 3; signalization	2,146	Under construction
195		Various locations in District 3; signing	2,810	Under construction

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STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Traffic Management (cont'd)</u>				
196		Various locations in District 5; signalization	2,104	Under construction
197		Various locations in District 6 and 7; lighting	930	Under construction
198		Various locations in District 4; signing	2,999	Under construction
199		Various locations in District 5; lighting	1,674	Under construction
200		Various locations in District 3; lighting	1,734	Under construction
201		Various locations in District 6 and 7; signing	2,170	Under construction
202		Various locations in District 1 and 2; lighting	1,300	Under construction
203		Various locations in District 4; signalization	2,048	Under construction
204		Various locations in District 6 and 7; signalization	1,074	Under construction
205		Traffic detection at signalized intersections District 3, 6 and 7 (ARRA PROJECT)	1,875	Under construction
<u>C.H.A.R.T. Projects</u>				
206		Statewide CHART CCTV deployment - Phase 6; miscellaneous	3,300	FY 2017
207		CHART SOC improvements	6,064	FY 2018
208		CHART CCTV Deployment (Phase 5C) in Allegany, Frederick, Garrett and Washington Counties	2,830	FY 2017

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STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>C.H.A.R.T. Projects (cont'd)</u>				
209		CHART DMS Deployment - Phase 4; miscellaneous	4,339	FY 2017
210		CHART CCTV Deployment (Phase 5B) in Anne Arundel, Baltimore, Carroll and Howard Counties	2,295	FY 2017
211		CHART CCTV Deployment (Phase 5A) in Dorchester, Frederick, Montgomery, Prince George's, Queen Anne's, Talbot, Wicomico, Worcester Counties	1,562	Under construction
212		Road Weather Information Systems Upgrade	500	Under construction
213		CHART Closed Circuit Television deployment - Phase 4	740	Under construction
214		CHART - Areawide Dynamic Message Signs Deployment - Phase 3	3,200	Under construction
215		Back-up Power for CHART Cameras	241	Under construction
216		10 CCTV Cameras Project	700	Under construction
217	MD 295	Baltimore Washington Parkway; CHART ITS devices in Districts 3 and 5; miscellaneous	859	Under construction
<u>Environmental Preservation</u>				
218		Landscape sustainability improvements V for Districts 3 and 5; landscape	437	Under construction
219		Landscape Sustainability IV at various locations in District 2; landscape	125	Under construction
220		At various locations in District 4; landscape	1,274	FY 2018
221		At various locations in District 7; landscape	558	Under construction

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STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Environmental Preservation (cont'd)</u>				
222	US 50	Various locations in District 1 and 2; landscape	1,835	FY 2017
223		MD 404/MD 309; Integrated roadside vegetation management at various locations in District 2	573	Under construction
<u>Sidewalks</u>				
224		Various locations in District 2; sidewalks	2,506	Under construction
225		At various locations in District 5; sidewalks	2,983	FY 2017
226		At various locations in District 5; sidewalks	2,006	FY 2017
227		Various locations in District 3; sidewalks	2,613	Under construction
<u>TMDL Compliance</u>				
228		At various locations in District 7 - Group 2; drainage improvement	3,661	FY 2017
229		At various locations in District 5; landscape	1,380	FY 2017
230		At various locations in District 3 - Group 1; drainage improvement	4,908	FY 2017
231		Tree planting at various locations in District 3; landscape	427	FY 2017
232		Tree establishment at various locations in Howard and Carroll Counties; landscape	2,206	FY 2017
233		Tree establishment at various locations in Anne Arundel and Charles Counties; landscape	921	FY 2017

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STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>TMDL Compliance (cont'd)</u>				
234		Tree planting at various locations in Frederick and Howard Counties; landscape	3,432	FY 2018
235		At various locations in District 7 - Group 1 - impervious area removal; drainage improvement	2,910	FY 2017
236		Tree establishment at various locations in District 3; landscape	1,317	FY 2017
237		SWM at various locations in District 7 - Group 1; drainage improvement	6,875	FY 2017
238		Stream restoration and SWM at DNR Patapsco; wetlands replacement (reimbursed by DNR)	0	FY 2017
239		Tree planting at various locations in Anne Arundel and Charles Counties; landscape	1,175	FY 2017
240		Tree planting at various locations in District 6; landscape (Transportation Infrastructure Investment Act of 2013)	1,104	FY 2017
241		At various locations in District 4; drainage improvement (Transportation Infrastructure Investment Act of 2013)	3,795	FY 2017
<u>Enhancements (cont'd)</u>				
<u>Archaeological Planning & Research (cont'd)</u>				
242		Archeological and Historic Preservation Data Development; update and enhance searchable database of Maryland's architectural and archeological resources	90	FY 2017
243		Data Development and Analysis of Architectural Resources; update and enhance searchable database of Maryland's architectural and archeological resources	196	FY 2017
244		Synthesis of Maryland's archeological data; Synthesize 3500 archeological reports related to transportation projects; Archeological planning and research.	135	Underway

SAFETY, CONGESTION RELIEF, HIGHWAY AND BRIDGE PRESERVATION PROGRAM

STATE HIGHWAY ADMINISTRATION -- STATE WIDE LINE 6 (cont'd)

ITEM NO.	ROUTE NO.	DESCRIPTION AND IMPROVEMENT TYPE	TOTAL ESTIMATED COST (\$000's)	CONSTRUCTION START Status as of December 1, 2016
		<u>Fiscal Years 2017 and 2018 (cont'd)</u>		
		<u>Enhancements (cont'd)</u>		
245		Maryland Archeological Conservation Lab; creation of an archeological context database curated at the MAC Lab	55	Underway
		<u>Pedestrian and Bicycle Safety and Educational Activities (cont'd)</u>		
246		Walk Smart, Bike Smart, Drive Smart - Statewide Pedestrian and Bicycle Safety Campaign	3,000	FY 2017
		<u>Congressional Earmarks</u>		
247		Land acquisition for scenic easement in Cecil, Kent and Queen Anne's Counties (Earmark \$10 million; R/W) (Project underway)	0	