

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	86,400	12,550	13,550	11,980	12,880	11,780	11,830	11,830	73,850	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	36,000	7,350	5,750	8,520	7,420	2,920	1,870	2,170	28,650	0
Total	122,400	19,900	19,300	20,500	20,300	14,700	13,700	14,000	102,500	0
Federal-Aid	39,357	8,000	5,346	5,740	6,638	4,880	4,357	4,396	31,357	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.

POTENTIAL FUNDING SOURCE:		<input checked="" type="checkbox"/> SPECIAL <input type="checkbox"/> FEDERAL <input type="checkbox"/> GENERAL <input type="checkbox"/> OTHER										
PHASE	PROJECT CASH FLOW										SIX YEAR TOTAL	BALANCE TO COMPLETE
	TOTAL ESTIMATED COST (\$000)	EXPEND THRU 2016	CURRENT YEAR 2017	BUDGET YEAR 2018	FOR PLANNING PURPOSES ONLY				YEAR 2019			
					.....2019....	.....2020....	.....2021....	.....2022....		
Planning	1,500	150	250	200	200	200	250	250	1,350	0		
Engineering	10,750	1,550	1,450	1,550	1,550	1,550	1,550	1,550	9,200	0		
Right-of-way	0	0	0	0	0	0	0	0	0	0		
Construction	22,250	3,400	3,300	3,450	3,350	3,150	2,700	2,900	18,850	0		
Total	34,500	5,100	5,000	5,200	5,100	4,900	4,500	4,700	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 and the deferral of funding in FY 19 through FY 22.

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	5,250	1,500	1,750	2,000	0	0	0	0	3,750	0
Right-of-way	0	0	0	0	0	0	0	0	0	0
Construction	32,350	15,700	10,550	6,100	0	0	0	0	16,650	0
Total	37,600	17,200	12,300	8,100	0	0	0	0	20,400	0
Federal-Aid	15,900	7,200	6,200	2,500	0	0	0	0	8,700	0

CLASSIFICATION:

STATE - N/A

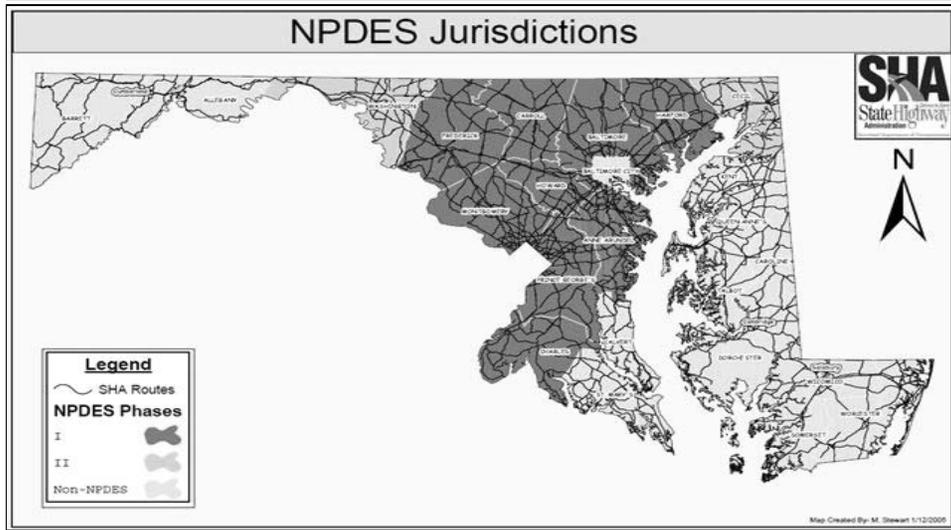
FEDERAL - N/A

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	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
Planning	20,450	5,300	2,550	2,200	2,200	2,200	3,000	3,000	15,150	0
Engineering	271,900	70,700	38,100	33,100	19,000	19,000	46,000	46,000	201,200	0
Right-of-way	3,850	2,500	200	350	300	300	100	100	1,350	0
Construction	475,200	95,700	36,750	97,850	88,100	87,000	39,000	30,800	379,500	0
Total	771,400	174,200	77,600	133,500	109,600	108,500	88,100	79,900	597,200	0
Federal-Aid	50,994	50,994	0	0	0	0	0	0	0	0

CLASSIFICATION:

STATE - N/A

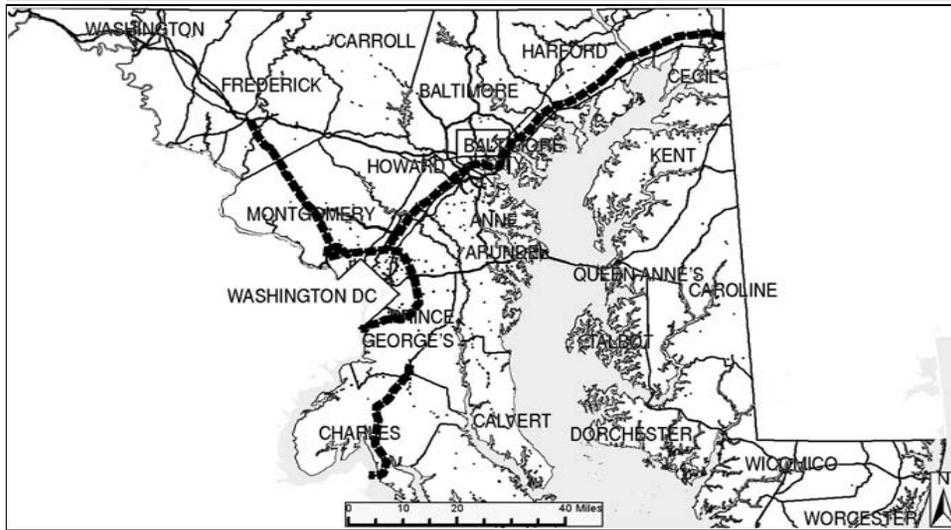
FEDERAL - N/A

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 traffic management strategies to improve operations on the Capital Beltway, I-95/495, I-270 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										SIX YEAR TOTAL	BALANCE TO COMPLETE	
	TOTAL ESTIMATED COST (\$000)	EXPEND THRU 2016	CURRENT YEAR 2017	BUDGET YEAR 2018	FOR PLANNING PURPOSES ONLY				YEAR 2019	YEAR 2020			YEAR 2021	YEAR 2022
Planning	3,055	1,538	1,381	136	0	0	0	0	0	0	0	1,517	0
Engineering	0	0	0	0	0	0	0	0	0	0	0	0	0
Right-of-way	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3,055	1,538	1,381	136	0	0	0	0	0	0	0	1,517	0
Federal-Aid	2,844	1,383	1,325	136	0	0	0	0	0	0	0	1,461	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

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 August 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	2,638	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	1,386	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 August 1, 2016
<u>Fiscal Year 2016 Completions (cont'd)</u>				
<u>Safety/Spot Improvement</u>				
14		At various locations Statewide; drainage improvement	3,210	Completed
15		At various locations Statewide; drainage improvement	3,269	Completed
16		At various locations in District 3; surface treatment	62	Completed
17		Various locations statewide; drainage improvement	3,321	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 August 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	604	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	3,088	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 August 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)	1,062	Completed
41	I 97	John Hanson Highway; Grass swales at various locations in District 5; drainage improvement (Transportation Infrastructure Investment Act of 2013)	3,941	Completed
<u>Fiscal Years 2017 and 2018</u>				
<u>Resurface/Rehabilitate</u>				
42		At various locations in District 4; surface treatment	623	FY 2017
43		At various locations in District 7; guard rail	2,211	FY 2017
44		At various locations in District 7; slurry seal	4,440	FY 2017
45		At various locations in District 5 - ultra thin bonded wearing course; surface treatment	4,005	FY 2017
46		At various locations in Allegany, Garrett and Washington counties; guard rail	2,396	FY 2017
47		At various locations in District 1 - ultra thin bonded wearing course; surface treatment	4,132	FY 2017
48		At various locations in District 4 - ultra thin bonded wearing course; surface treatment	4,137	FY 2017
49		At various locations in District 4; surface treatment	1,488	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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Resurface/Rehabilitate (cont'd)</u>				
50		At various locations in District 4; joint sealing	1,843	FY 2017
51		At various locations in District 6 - thermo thinline striping; pavement marking	1,245	FY 2017
52		At various locations in District 3 - thermo thinline striping; pavement marking	1,226	FY 2017
53		At various locations in Caroline and Talbot Counties; resurface	1,892	FY 2017
54		At various locations in District 5; guard rail	930	FY 2017
55		At various locations in District 6; resurface	478	FY 2017
56		At various locations in Montgomery and Prince George's Counties; sidewalks	2,149	FY 2017
57		At various locations in District 7 - thermo thinline striping; pavement marking	962	FY 2017
58		At various locations in District 5; sidewalks	2,250	FY 2017
59		At various locations in District 2; mill and resurface	3,877	FY 2017
60		At various locations in District 2 - thermo thinline striping; pavement marking	960	FY 2017
61		At various locations in Carroll and Frederick Counties; mill and resurface	18,187	FY 2017
62		At various locations in District 7; patching	2,313	FY 2017
63		At various locations in Kent and Queen Anne's Counties; resurface	1,894	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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Resurface/Rehabilitate (cont'd)</u>				
64		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
65		At various locations in District 1; pavement marking	1,003	FY 2017
66		At various routes in Carroll, Frederick and Howard counties; guard rail	2,003	FY 2017
67		At various locations in District 5; pavement marking	1,907	FY 2017
68		At various locations in District 4; pavement marking	1,157	FY 2017
69		At various locations in District 2; sidewalks	1,392	Under construction
70		At various locations in Caroline, Cecil, Kent, Queen Anne's and Talbot counties; slurry seal	2,310	FY 2017
71		At various locations in District 5; patching	3,377	FY 2017
72		At various locations in Caroline, Cecil, Kent, Queen Anne's and Talbot counties; guard rail	599	FY 2017
73		At various locations in Calvert, Charles and St. Mary's counties; joint sealing	913	FY 2017
74		At various locations in Dorchester, Somerset, Wicomico and Worcester Counties; patching	2,669	FY 2017
75		At various locations in Dorchester, Somerset, Wicomico and Worcester Counties; guard rail	1,566	Under construction
76		At various locations in District 6; slurry seal	2,974	FY 2017
77		At various locations in District 2; joint sealing	465	FY 2018

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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Resurface/Rehabilitate (cont'd)</u>				
78		At various locations in District 4; guardrail	2,302	Under construction
79		At various locations in District 4; Joint Sealing	1,435	Under construction
80		At various locations in District 6; resurface	445	Under construction
81		At various locations in District 7; guardrails	1,940	Under construction
82		Various locations in Districts 4 and 7; pavement marking	2,025	Under construction
83		Various locations in District 2; slurry seal	1,186	Under construction
84		Various locations in Carroll, Frederick and Howard Counties; joint sealing	442	FY 2017
85		Various locations in Carroll, Frederick and Howard Counties; patching	1,712	Under construction
86		Various locations in District 3 and 5; thermoplastic thinline striping	1,207	Under construction
87		Various locations in District 2; guardrail	383	FY 2017
88		Various locations in District 1 and 2; thermoplastic thinline striping	1,363	Under construction
89		Various locations in District 7; guardrail	1,413	Under construction
90		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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Bridge Replacement/Rehabilitation</u>				
91		Preservation and minor rehab of fixed bridges, culverts and retaining walls-statewide; bridge rehabilitation	12,604	FY 2017
92		Preservation and minor rehab of fixed bridges, culverts and retaining walls-statewide; bridge rehabilitation	12,604	FY 2017
93		Preservation and minor rehab of fixed bridges, culverts and retaining walls-statewide; bridge rehabilitation	12,604	FY 2017
94		At various locations in District 6; bridge rehabilitation	3,119	FY 2017
95		Preservation and minor rehab of fixed bridges, culverts and retaining walls-statewide; bridge rehabilitation	12,604	FY 2017
96		Preservation and minor rehab of moveable and fixed bridges, culverts and walls; bridge rehabilitation	12,570	FY 2017
97		Invert paving and restoration to various structures; miscellaneous	4,192	FY 2017
98		Preservation/minor rehab fixed bridges, culverts, retaining walls in District 6; bridge rehabilitation	1,997	FY 2017
99		Preservation and minor rehab of fixed bridges, culverts and walls - Contract 1; bridge rehabilitation	11,258	FY 2017
100		Preservation and minor rehab of fixed bridges, culverts and walls - Contract 2; bridge rehabilitation	11,322	Under construction
101		Preservation and minor rehab of fixed bridges, culverts and walls - Contract 4; bridge rehabilitation	13,049	Under construction
102		At various locations on lower Georges Creek Road, National Freeway, Friendsville Road; clean/paint bridges	1,670	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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Bridge Replacement/Rehabilitation (cont'd)</u>				
103		Preservation and minor rehab of moveable and fixed bridges, culverts and walls; bridge rehabilitation	9,033	FY 2017
104		Install troughs and rehabilitation of joints to 27 bridges in WA and BA Counties; joint sealing	3,144	Under construction
105		Invert paving and restoration to various structures; miscellaneous	1,639	Under construction
<u>Safety/Spot Improvement</u>				
106		At various locations in District 4; RPM	801	FY 2017
107		Tree trimming/removal at various locations in Prince George's and Montgomery counties; safety	523	FY 2017
108		At various locations in District 5; rumble strips	469	FY 2017
109		At various locations in District 1; RPM	458	FY 2017
110		Baltimore and Harford Counties - safety and operations improvements; safety	5,553	FY 2017
111		At various locations statewide - on call contract; drainage improvement	5,491	FY 2017
112		At various locations in District 1; rumble strips	319	FY 2017
113		Baltimore and Harford counties - tree trimming and removal; bicycle-pedestrian route	515	FY 2017
114		At various locations in Carroll, Frederick and Howard counties; RPM	801	FY 2017
115		At various locations in District 5; RPM	561	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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Safety/Spot Improvement (cont'd)</u>				
116		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
117		At various locations statewide; drainage improvement	2,895	Under construction
118		At various locations in Prince George's and Montgomery counties; geometric improvements	3,292	FY 2017
119		At various locations in District 2; RPM	603	FY 2017
120		At various locations in Baltimore and Harford counties; rumble strips	1,130	FY 2017
121		At various locations in District 4; sidewalks	2,972	FY 2017
122		At various locations in District 6; drainage improvement	8,786	FY 2018
123		ADA at various locations in District 1; sidewalks	4,541	FY 2017
124		At various locations statewide - Stormwater/drainage asset remediation; drainage improvement	3,131	Under construction
125		At various locations in District 6; sidewalks	3,392	FY 2017
126		At various locations in District 3; sidewalks	3,494	FY 2017
127		Clearing and grubbing at various locations for utilities relocation in District 5; miscellaneous	273	FY 2017
128		Various locations in District 7; ADA compliance	2,515	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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Safety/Spot Improvement (cont'd)</u>				
129		At various locations in District 1 and 2; pavement marking	899	Under construction
130		Various locations in District 3, 4, 5, 6 and 7; pavement marking	1,712	Under construction
131		At various locations in District 1; rumble strips	505	Under construction
132		ADA Compliance Program in District 1	4,135	FY 2017
133		Various locations in Baltimore and Harford Counties; safety	6,921	Under construction
134		Various locations in District 4; pavement markings	517	Under construction
135	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
136	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>				
137		Noise barrier preservation and remediation - statewide; noise abatement	2,240	FY 2017
138		Noise barrier fire door remediation in district 3; noise abatement	1,354	FY 2017
139		Various locations; noise abatements	1,435	Under construction
140	I 495	Capital Beltway; noisewalls 15110 and 15113; drainage improvements	160	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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Traffic Management</u>				
141		At various locations - statewide; signalization	6,864	FY 2017
142		At various locations in Districts 3, 4, and 5; signalization	7,771	FY 2017
143		Sign structure replacement - statewide; signing	7,389	FY 2017
144		Modify/install/recon of signing - statewide; signing	8,896	FY 2017
145		At various locations in District 6 and 7; lighting	2,773	FY 2017
146		At various locations statewide - UPS/APS/CFS; signalization	5,965	FY 2017
147		At various locations in District 3 and 6; signalization	7,433	FY 2017
148		At various locations - sign retro reflectivity; signing Funding provided by the Governor's Investment in Highways and Bridges Initiative	5,300	FY 2018
149		At various locations in Districts 1 and 2; signalization	3,793	FY 2017
150		At various locations in Districts 6 and 7; lighting	3,378	Under construction
151		At various locations statewide; signing	6,251	Under construction
152		Light Emitting Diode (LED) Upgrades - Statewide	4,030	FY 2017
153		Modify/Install/Reconstruct Signals; signalization	5,741	FY 2017
154		Tourism and service signing; signing	3,157	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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Traffic Management (cont'd)</u>				
155		With APS/CPS in Districts 3, 4 and 7; signalization	6,970	FY 2017
156		APS in Districts 6 and 7; signalization	5,037	FY 2017
157		At various locations in District 3; lighting	4,930	FY 2017
158		At various locations in District 3; signalization	6,942	FY 2017
159		At various locations in District 4; lighting	4,268	FY 2017
160		At various locations in District 5; lighting	4,377	FY 2017
161		At various locations in District 6; signing	3,693	FY 2017
162		Various locations in District 3; signing	3,377	FY 2017
163		Various locations in District 6 and 7; lighting	4,875	FY 2017
164		Various locations in District 4; signalization	5,696	Under construction
165		Various locations in District 1 and 2; lighting	4,861	FY 2017
166		Various Locations in District 5; signalization	5,664	FY 2017
167		Various locations in District 4; signing	3,048	Under construction
168		Automatic Traffic Recorders Statewide; miscellaneous	2,222	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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Traffic Management (cont'd)</u>				
169		Modify/reconstruct with in Districts 3, 4, 5; signalization	11,503	Under construction
170		Traffic signs and APS in District 3; signalization	7,153	FY 2017
171		Sign Structure replacement in District 7	4,777	FY 2017
172		Sign Structure replacement in District 4	4,905	FY 2017
173		Sign Structure replacement in District 3	5,003	FY 2017
174		Various locations in District 3, 4 and 5; signalization	5,671	Under construction
175		Various locations in Districts 6 and 7; signalization	3,168	Under construction
176		At various locations in District 5; signing	2,295	Under construction
177		Various locations in District 5; signalization	5,935	Under construction
178		Modify/Install/Reconstruct traffic signals - District 3; signalization	6,194	Under construction
179		Various locations in District 1 and 2; signalization	1,064	Under construction
180		Various locations in District 4; lighting	1,783	Under construction
181		Various locations in District 1 and 2; signing	1,163	Under construction
182		Various locations in District 3; signalization	2,146	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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>Traffic Management (cont'd)</u>				
183		Various locations in District 3; signing	2,810	Under construction
184		Various locations in District 5; signalization	2,104	Under construction
185		Various locations in District 6 and 7; lighting	930	Under construction
186		Various locations in District 4; signing	2,999	Under construction
187		Various locations in District 5; lighting	1,674	Under construction
188		Various locations in District 3; lighting	1,734	Under construction
189		Various locations in District 6 and 7; signing	2,170	Under construction
190		Various locations in District 1 and 2; lighting	1,300	Under construction
191		Various locations in District 4; signalization	2,048	Under construction
192		Various locations in District 6 and 7; signalization	1,074	Under construction
193		Traffic detection at signalized intersections District 3, 6 and 7 (ARRA PROJECT)	1,875	Under construction
<u>C.H.A.R.T. Projects</u>				
194		CHART CCTV Deployment (Phase 5C) in Allegany, Frederick, Garrett and Washington Counties	4,521	FY 2017
195		CHART DMS Deployment - Phase 4; miscellaneous	4,339	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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>C.H.A.R.T. Projects (cont'd)</u>				
196		CHART CCTV Deployment (Phase 5B) in Anne Arundel, Baltimore, Carroll and Howard Counties	2,509	FY 2017
197		CHART CCTV Deployment (Phase 5A) in Dorchester, Frederick, Montgomery, Prince George's, Queen Anne's, Talbot, Wicomico, Worcester Counties	4,751	Under construction
198		Road Weather Information Systems Upgrade	500	Under construction
199		CHART Closed Circuit Television deployment - Phase 4	615	Under construction
200		CHART - Areawide Dynamic Message Signs Deployment - Phase 3	3,200	Under construction
201		Back-up Power for CHART Cameras	1,484	Under construction
202		10 CCTV Cameras Project	700	Under construction
203	MD 295	Baltimore Washington Parkway; CHART ITS devices in Districts 3 and 5; miscellaneous	859	Under construction
<u>Environmental Preservation</u>				
204		Landscape sustainability improvements V for Districts 3 and 5; landscape	439	Under construction
205		Landscape Sustainability IV at various locations in District 2; landscape	106	Under construction
206		At various locations in District 4; landscape	1,274	FY 2018
207		At various locations in District 7; landscape	558	Under construction
208		Various locations in District 1 and 2; landscape	1,835	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 August 1, 2016
		<u>Fiscal Years 2017 and 2018 (cont'd)</u>		
		<u>Environmental Preservation (cont'd)</u>		
209	US 50	MD 404/MD 309; Integrated roadside vegetation management at various locations in District 2	573	Under construction
		<u>Sidewalks</u>		
210		Various locations in District 2; sidewalks	2,506	Under construction
211		At various locations in District 5; sidewalks	2,983	FY 2017
212		At various locations in District 5; sidewalks	2,006	FY 2017
213		Various locations in District 3; sidewalks	2,613	Under construction
		<u>TMDL Compliance</u>		
214		At various locations in District 5; landscape	2,005	FY 2017
215		At various locations in District 3 - group 1; drainage improvement	4,908	FY 2017
216		Tree planting at various locations in District 3; landscape	427	FY 2017
217		Tree establishment at various locations in Howard and Carroll counties; landscape	2,206	FY 2017
218		Tree establishment at various locations in Anne Arundel and Charles counties; landscape	921	FY 2017
219		Tree planting at various locations in Frederick and Howard Counties; landscape	3,432	FY 2018
220		At various locations in District 7 - group 1 - impervious area removal; drainage improvement	2,910	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 August 1, 2016
<u>Fiscal Years 2017 and 2018 (cont'd)</u>				
<u>TMDL Compliance (cont'd)</u>				
221		Tree establishment at various locations in District 3; landscape	1,317	FY 2017
222		SWM at various locations in District 7 - Group 1; drainage improvement	6,544	FY 2017
223		Stream restoration and SWM at DNR Patapsco; wetlands replacement (reimbursed by DNR)	0	FY 2017
224		Tree planting at various locations in Anne Arundel and Charles Counties; landscape	1,175	FY 2017
225		Tree planting at various locations in District 6; landscape (Transportation Infrastructure Investment Act of 2013)	482	FY 2017
226		At various locations in District 4; drainage improvement (Transportation Infrastructure Investment Act of 2013)	3,737	FY 2017
<u>Enhancements (cont'd)</u>				
<u>Archaeological Planning & Research (cont'd)</u>				
227		Synthesis of Maryland's archeological data; Synthesize 3500 archeological reports related to transportation projects; Archeological planning and research.	135	Underway
228		Maryland Archeological Conservation Lab; creation of an archeological context database curated at the MAC Lab	55	Underway
<u>Congressional Earmarks</u>				
229		Land acquisition for scenic easement in Cecil, Kent and Queen Anne's Counties (Earmark \$10 million; R/W) (Project underway)	0	