

APPENDIX B – SHA Financial Constraint Summary Table and Explanation

FISCAL CONSTRAINT - ANTICIPATED REVENUES AND COSTS
VERSUS PROGRAMMED FUNDING FOR PROJECTS 2018-2022

Dollars in Millions

State Highway Administration (SHA)	2018*	2019	2020	2021	2022	2018-2022 TOTAL
SHA REVENUE AVAILABLE						
BALANCE CARRIED FORWARD	\$ 721.7	\$ 891.6	\$ 743.4	\$ 638.0	\$ 632.4	
FEDERAL REVENUE						
Federal Fund Balance as of 10/1/2017	\$ 213.0	\$ -	\$ -	\$ -	\$ -	
Federal Core Apportioned Programs w/o HPP	\$ 635.6	\$ 650.0	\$ 665.5	\$ 678.8	\$ 692.4	\$ 3,322.3
Federal High Priority Project Funding	\$ -	\$ -	\$ -	\$ -	\$ -	
Special Federal Appropriations and Allocations	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Federal Revenue Available	\$ 848.6	\$ 650.0	\$ 665.5	\$ 678.8	\$ 692.4	\$ 3,535.3
STATE REVENUE						
Allocation from MDOT for SHA Capital Projects	\$ 880.7	\$ 842.9	\$ 998.7	\$ 858.4	\$ 787.1	\$ 4,367.8
Total State Revenue Available	\$ 880.7	\$ 842.9	\$ 998.7	\$ 858.4	\$ 787.1	\$ 4,367.8
TOTAL FEDERAL AND STATE REVENUE AVAILABLE	\$ 1,461.0	\$ 1,384.5	\$ 1,407.6	\$ 1,175.2	\$ 1,111.9	\$ 7,903.1
SHA REVENUE USES (ARRA Included)						
MAJOR PROJECTS (includes D&E)						
Primary	\$ 266.9	\$ 250.3	\$ 190.2	\$ 137.6	\$ 57.7	\$ 902.7
Secondary	\$ 55.2	\$ 68.2	\$ 80.8	\$ 69.3	\$ 48.4	\$ 321.9
Interstate	\$ 97.3	\$ 134.7	\$ 134.5	\$ 179.5	\$ 108.4	\$ 654.4
Change Orders	\$ -	\$ 10.0	\$ 10.0	\$ -	\$ -	\$ 20.0
Reimbursables	\$ 56.7	\$ 55.5	\$ 43.5	\$ 15.0	\$ 15.0	\$ 185.7
Total Major Projects	\$ 476.1	\$ 518.7	\$ 459.0	\$ 401.4	\$ 229.5	\$ 2,084.7
SAFETY, CONGESTION RELIEF and COMMUNITY ENHANCEMENT						
Environmental Preservation	\$ 12.6	\$ 6.0	\$ 7.7	\$ 7.7	\$ 7.8	\$ 41.8
Crash Prevention	\$ 18.9	\$ 10.8	\$ 15.8	\$ 12.1	\$ 13.1	\$ 70.7
Median Guardrail & End Treatment	\$ 0.1	\$ -	\$ -	\$ -	\$ -	\$ 0.1
ADA Retrofit	\$ 6.1	\$ 7.3	\$ 8.2	\$ 6.7	\$ 7.3	\$ 35.6
RailRoad Safety & Spot	\$ 2.0	\$ 3.4	\$ 3.0	\$ 2.9	\$ 2.8	\$ 14.1
Drainage	\$ 29.8	\$ 20.7	\$ 18.0	\$ 12.3	\$ 12.3	\$ 93.1
Emergency	\$ 0.4	\$ 4.7	\$ 1.5	\$ 1.6	\$ 1.5	\$ 9.7
Safety & Spot Improvements	\$ 34.6	\$ 42.2	\$ 44.2	\$ 42.9	\$ 43.7	\$ 207.6
Resurfacing & Rehabilitation	\$ 274.6	\$ 251.4	\$ 238.1	\$ 238.5	\$ 242.8	\$ 1,245.4
Sidewalks	\$ 3.4	\$ 3.0	\$ 6.0	\$ 4.9	\$ 6.9	\$ 24.2
Bridge Replace & Rehab.	\$ 191.9	\$ 241.5	\$ 193.8	\$ 180.0	\$ 234.8	\$ 1,042.0
Park-n-Ride	\$ 1.4	\$ 3.1	\$ 3.5	\$ 3.5	\$ 3.5	\$ 15.0
Urban Reconstruction	\$ 38.8	\$ 22.9	\$ 19.5	\$ 12.8	\$ 6.1	\$ 100.1
Traffic Management	\$ 47.1	\$ 52.4	\$ 53.3	\$ 56.1	\$ 52.3	\$ 261.2
CHART (ITS Program)	\$ 14.7	\$ 16.3	\$ 26.5	\$ 24.7	\$ 18.9	\$ 101.1
Intersection Capacity	\$ 22.2	\$ 15.4	\$ 12.0	\$ 13.0	\$ 17.7	\$ 80.3
Bicycle Retrofit	\$ 2.6	\$ 3.8	\$ 3.7	\$ 2.0	\$ 2.2	\$ 14.3
TMDL Compliance	\$ 77.5	\$ 96.0	\$ 112.0	\$ 57.8	\$ 46.6	\$ 389.9
Retrofit Sound Barriers	\$ 8.1	\$ 2.2	\$ 2.3	\$ 0.8	\$ 0.5	\$ 13.9
Total S, CR and CE	\$ 786.8	\$ 803.1	\$ 769.1	\$ 680.3	\$ 720.8	\$ 3,760.1

**FISCAL CONSTRAINT - ANTICIPATED REVENUES AND COSTS
VERSUS PROGRAMMED FUNDING FOR PROJECTS 2018-2022**

Dollars in Millions

State Highway Administration (SHA)	2018*	2019	2020	2021	2022	2018-2022 TOTAL
OTHER SYSTEM PRESERVATION						
Statewide Planning and Research (SPR)	\$ 29.6	\$ 28.3	\$ 25.2	\$ 26.2	\$ 26.2	\$ 135.5
Facilities, Equipment & Environmental Compliance	\$ 52.1	\$ 46.8	\$ 69.2	\$ 45.8	\$ 46.4	\$ 260.3
Truck Weight Facilities and Equipment	\$ 2.4	\$ 8.1	\$ 12.1	\$ 10.2	\$ 2.8	\$ 35.6
Transportation Alternatives Program	\$ 9.1	\$ 10.2	\$ 20.2	\$ 12.2	\$ 18.8	\$ 70.5
Highway User Revenues	\$ -	\$ -	\$ 256.0	\$ 260.4	\$ 266.1	\$ 782.5
State Aid in Lieu to Locals	\$ 6.1	\$ 6.0	\$ 6.0	\$ 5.9	\$ 5.9	\$ 29.9
Major IT Projects	\$ 5.5	\$ 7.2	\$ 6.1	\$ 6.3	\$ 6.3	\$ 31.4
Total Other System Preservation	\$ 104.8	\$ 106.6	\$ 394.8	\$ 367.0	\$ 372.5	\$ 1,345.7
Subtotal of SHA Uses						
	\$ 1,367.7	\$ 1,428.4	\$ 1,622.9	\$ 1,448.7	\$ 1,322.8	\$ 7,190.5
DEBT SERVICE						
GARVEE Debt Service	\$ 87.5	\$ 87.5	\$ 52.6			\$ 227.6
Total Debt Service	\$ 87.5	\$ 87.5	\$ 52.6			\$ 227.6
OTHER						
ADHS Local Access	\$ 0.8	\$ 0.8	\$ 0.8	\$ 0.8	\$ 0.8	\$ 4.0
Local Bridge Program	\$ 13.4	\$ 13.7	\$ 14.1	\$ 14.1	\$ 14.1	\$ 69.4
Baltimore City Federal Aid	\$ 32.9	\$ 33.6	\$ 34.4	\$ 34.4	\$ 34.4	\$ 169.7
Rec Trails	\$ 1.1	\$ -	\$ -	\$ -	\$ -	\$ 1.1
CMAQ to MDOT/Modals	\$ 44.8	\$ 44.8	\$ 44.8	\$ 44.8	\$ 44.8	\$ 224.0
Other Transfers to MDOT/Modals	\$ 11.2	\$ 32.3	\$ -	\$ -	\$ -	\$ 43.5
Total Other	\$ 104.2	\$ 125.2	\$ 94.1	\$ 94.1	\$ 94.1	\$ 511.7
TOTAL REVENUE USES	\$ 1,559.4	\$ 1,641.1	\$ 1,769.6	\$ 1,542.8	\$ 1,416.9	\$ 7,929.8
SHA - AMOUNT OVER/UNDER AVAILABLE RESOURCES	\$ 891.6	\$ 743.4	\$ 638.0	\$ 632.4	\$ 695.0	

Note: These categories generally reflect the MAP-21 and FAST Act federal authorization programs. The current FAST Act authorization modifies the names of programs at FHWA from which some projects will be funded, but it does not change the total amount of federal funds received between FFY2018 and FFY2020 for a given program. FFYs 21-22 are estimates based on prior FAST Act apportionments.

*FY 2018 is for informational purposes only; STIP covers FY 2019-2022

AC Beginning Balance totals noted above are transferred over from the Balance Carried Forward line on page 101 (See Fiscal Constraint Table).

MARYLAND STATE HIGHWAY ADMINISTRATION ADVANCE CONSTRUCTION (AC) FORECAST (Dollars in Millions)					
SFY	2018	2019	2020	2021	2022
AC Beginning Balance	721.7	891.6	743.4	638.0	632.4
New AC - Planned	1,209.5	945.9	1,074.3	1,022.9	1,007.2
New AC - Managed	572.7	519.8	547.0	589.9	514.3
AC Sub-Total	2,503.9	2,357.3	2,364.8	2,250.8	2,153.9
Less: AC Conversions - Planned	(1,039.6)	(1,094.1)	(1,179.7)	(1,028.5)	(944.6)
Less: AC Conversions - Managed	(572.7)	(519.8)	(547.0)	(589.9)	(514.3)
Ending AC Balance	891.6	743.4	638.0	632.4	695.0

Note: regarding AC Conversions, the State of Maryland converts based on two thirds (2/3) of the total program in the current fiscal year and one third (1/3) of the total program in the following fiscal year.

*FY 2018 is for informational purposes only; STIP covers FY 2019-2022.

MDOT SHA Capital Programming Summary from FY2018 to FY2021 CTP.

STATE HIGHWAY ADMINISTRATION
CAPITAL PROGRAM SUMMARY
(**\$ MILLIONS**)

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>SIX-YEAR TOTAL</u>
<u>Construction Program</u>							
Major Projects	452.8	404.1	398.7	316.6	161.0	90.6	1,823.8
Safety, Congestion Relief and Community Enhancements	886.8	854.6	849.9	828.2	941.0	1,004.1	5,364.6
Other System Preservation	58.9	58.2	40.2	41.2	41.2	41.2	280.9
Programs 3 & 8	84.8	79.3	77.9	78.1	78.1	77.8	476.0
<u>Development & Evaluation Program</u>	<u>29.8</u>	<u>51.1</u>	<u>53.5</u>	<u>21.2</u>	<u>10.8</u>	<u>8.1</u>	<u>174.5</u>
TOTAL	1,513.1	1,447.3	1,420.2	1,285.3	1,232.1	1,221.8	8,119.8
Special Funds	894.7	756.7	750.1	675.4	711.5	774.2	4,562.7
Federal Funds	618.3	690.6	670.0	610.0	520.5	447.7	3,557.1

Explanation of Fiscal Constraint Worksheet – SHA

SHA Revenue Available

- **Balance Carried Forward** - This line is the balance carried forward from the preceding year (from line 1 on page 101 of the fiscal constraint worksheet).
- **Federal Fund Balance as of 3/15/2019** – This is the sum of federal formula funds anticipated to be carried forward in federal FMIS as of 3/15/2019.
- **Federal Core Apportioned Programs w/o HPP** – The federal apportionment amounts are taken directly from USDOT’s FAST Act summary of apportionment tables dated January 8, 2016.
- **Federal High Priority Project Funding** - After the expiration of SAFETEA-LU, no HPP were included in subsequent funding bills and, therefore, no allocations have been assumed in this fiscal constraint analysis.
- **Special Federal Appropriations and Allocations** – This line is for Congressional earmarks and federal discretionary allocations received in addition to apportioned federal funds.
- **Allocation from MDOT for SHA Capital Projects** – This line represents the approved allocation from MDOT for the non-federal share of SHA capital program project expenditures. This amount corresponds to “Special Funds” on the SHA divider page in CTP.

SHA Revenue Uses

- **Major Projects (includes D&E)** – This line is the total for major projects and matches the sum of “Construction Program” plus “Development and Evaluation Program” as shown in the Capital Program Summary page 103.
- **Safety, Congestion Relief and Community Enhancement** – The listings under this heading are annual allocations (budgets) for core system preservation initiatives, and the total matches that shown for “Safety, Congestion Relief and Community Enhancements” as shown in the Capital Program Summary page 103.
 - **Environmental Preservation** – This fund provides for design and construction of roadside landscape features, reforestation plantings, critical area mitigation, wetland and stream permitting and mitigation, and other environmental restoration/preservation efforts associated with Capital Program delivery.
 - **Crash Prevention** – This fund includes roundabouts, minor geometric improvements, capital remedial improvements, and general corridor improvements.
 - **Median Guardrail and End Treatment** – This fund includes traffic barrier improvements.
 - **ADA Retrofit** – This fund includes sidewalks, crosswalks, and ramp retrofit improvements to address compliance and avoid sanctions.
 - **Railroad Safety and Spot** – This fund includes safety improvements at railroad crossings.
 - **Drainage** – This fund includes improvements to areas of recurring flood damage or road closures.
 - **Emergency** – This fund includes work performed as a result of major storm damage, slope failures, or other unforeseen roadway or bridge emergencies.
 - **Safety and Spot Improvements** – This fund includes safety improvements at high accident locations, intersection capacity improvements, slide repairs, roundabouts, and ramp modifications.
 - **Resurfacing and Rehabilitation** – This fund includes resurfacing improvements, including concrete patching, joint sealing, and pavement markings.

- **Sidewalks** – This fund includes the construction of retrofit sidewalks along state highways and the reconstruction/replacement of existing sidewalks if part of a revitalization effort in an officially designated urban revitalization area.
- **Bridge Replace and Rehab** – This fund includes bridge replacements, deck replacement, major rehabilitations, deck overlays, parapet modifications, bridge repainting/spot painting, and all structure condition inspections.
- **Park-n-Ride** – This fund includes park and ride lot expansions, repairs, and lighting.
- **Urban Reconstruction** – This fund includes the rehabilitation of roads through urban areas including pavement and drainage reconstruction.
- **Traffic Management** – This fund includes new signals, signal system construction, signal reconstruction, raised pavement markers, lighting, and signage.
- **CHART (ITS Program)** – This fund includes installation of advanced traffic management systems (ATMS) and advanced traffic information system (ATIS) technologies on interstates and arterials statewide.
- **Intersection Capacity** – This fund includes geometric improvements to improve mobility at congested intersections.
- **Bicycle Retrofit** – This fund includes construction and reconstruction of roadway shoulders, road markings for bicycles, fixing potholes, and construction of off-road trails parallel to existing roadways.
- **TMDL Compliance** – This fund includes planning, designing, and construction of stormwater controls and alternative water quality improvement strategies in Maryland Phase I and Phase II counties to meet US Environmental Protection Agency’s Chesapeake Bay TMDL requirements by 2020.
- **Retrofit Sound Barriers** – This fund includes retrofits to sound barriers along existing highways, barrier rehabilitation, and noise berms.
- **Other System Preservation** - The total matches that shown for “Other System Preservation” and “Reimbursables” as shown on the SHA divider page in the CTP.
- **Subtotal of SHA Uses** – This line represents the total anticipated SHA expenditures (both federal and state dollars). The annual totals match that shown as “TOTAL” on the SHA divider page in the CTP.
- **GARVEE Debt Service** – This line is a reservation of federal funds for federal eligible expenses for the Intercounty Connector (ICC) project, which is partially funded with GARVEE bonds.
- **Other** – Funding reservations under this heading include the use of federal highway funds for initiatives external to the SHA. This includes the reservation of federal funds for expenditures on: ADHS local access improvements in accordance with Appalachian Regional Commission policies; local bridge rehabilitation and replacement projects; Baltimore City projects including high priority projects that have received federal funding; local (non-SHA and non-Baltimore City) high priority projects that have received federal funding; grants for recreational trail projects; grants for Safe Routes to Schools projects; and for the flexing of CMAQ funds for transit/non-SHA CMAQ eligible projects.

Note: SHA operations and maintenance expenditures are included with the other modes in the MDOT fiscal constraint worksheet on page 107.