

FISCAL BRIEF



STATE TRANSPORTATION BONDS AND DEBT SERVICE - SUMMARY

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FAST FACTS

- The State Transportation Commission has constitutional and statutory authority to issue debt by pledging revenue from motor fuel and vehicle registration taxes.
- Act 51 requires that constitutionally restricted revenue pledged to secure bonds or notes must be at least twice the amount of the related debt service. State Transportation Commission policy is more restrictive than statute; it requires a 4-to-1 revenue to debt service coverage ratio.
- In FY 2019-20 STF revenue was approximately 6.1 times STF debt service.
- Outstanding STF-related debt, including bonds issued in anticipation of federal aid, peaked in FY 2008-09 at \$2.3 billion declined to \$1.1 billion in FY 2018-19, and totaled \$1.7 billion FY 2019-20.
- The debt service increase in FY 2019-20 reflected the August 2020 sale of \$800.0 million in STF *Rebuilding Michigan* bonds

INTRODUCTION

The State Transportation Commission has the constitutional and statutory authority to sell bonds for transportation purposes by pledging constitutionally restricted revenue from motor fuel taxes and vehicle registration taxes. The Commission also has the authority to sell bonds by pledging federal grant revenue as a source of repayment.¹

The Commission's authority is put into effect when it authorizes the Michigan Department of Transportation (MDOT) to proceed with the sale of bonds. These bonds are *not* state general obligation or "full faith and credit" bonds of the State of Michigan; they are considered *revenue bonds*; i.e., they are sold using the pledge of a state restricted revenue source or a dedicated federal program revenue source. All bonds issued by MDOT have this character—they are all **revenue bonds**.

MDOT does not need legislative approval to issue bonds. 1951 PA 51 ("Act 51") does require that the Commission provide to the House and Senate Appropriations Committees the list of projects for which notes or bonds are to be issued at least 30 days before the notes or bonds are issued.

Bond proceeds are not appropriated. The only recognition of the MDOT bond program in the transportation budget is in the appropriation for debt service.

MDOT has sold bonds by pledging constitutionally-dedicated transportation revenue credited to the State Trunkline Fund (STF), as well as bonds using a pledge of future federal surface transportation program grant revenue. Bond proceeds from these sales have been used for capital road and bridge construction and reconstruction projects, primarily on the state trunkline highway system.

MDOT has also sold bonds by pledging constitutionally-dedicated transportation revenue credited to the Comprehensive Transportation Fund (CTF) for capital public transportation program needs.

The balance of this paper will focus on STF and federal grant anticipation bonds and debt service.

¹ As described in the House Fiscal Agency's February 2019 Fiscal Brief, *State Transportation Bonds and Debt Service*, http://www.house.mi.gov/hfa/PDF/Alpha/Fiscal_Brief_State_Transportation_Bonds_Feb19.pdf

Bonding and Debt Service History – FY 1999-2000 through FY 2019-20,

Outstanding STF debt totaled **\$633.2 million** at September 30, 2000. Between July 2001 and December 2011, MDOT sold several series of “new money” bonds pledging both state restricted STF revenue and anticipated federal grant revenue. Federal grant anticipation bonds are sometimes referred to as “GARVEE” bonds. In this publication “new money” bonds refers to bond sales that are used to directly finance capital road and bridge construction projects, as opposed to refunding bonds which are used to refinance previously issued bonds.

Outstanding combined STF/GARVEE debt peaked in FY 2008-09 at **\$2,258.3 million**. There were no “new money” bond issues after December 2011 until August 2020. As a result, debt service payments made during this period reduced outstanding STF/GARVEE debt each fiscal year through FY 2018-19. Outstanding STF/GARVEE bonds totaled **\$1,058.7 million** at the end of FY 2018-19 —significantly below the 2009 peak.

Debt service on STF-related debt, including GARVEE bonds, peaked in FY 2013-14 at **\$219.1 million** (\$166.3 million STF, \$52.8 million federal) and declined to **\$199.6 million** in FY 2019-20 (\$118.4 million STF, \$81.2 million federal).

As noted, debt service on GARVEE bonds issued in anticipation of federal grants totaled \$81.2 million FY 2019-20. Beyond FY 2019-20, estimated debt service for these bonds ranges from a low of \$55.2 million (FYs 2020-21 and 2021-22) to a high of \$130.2 million in FY 2026-27, the year all federal grant anticipation bonds are scheduled to be retired. MDOT does not anticipate selling new GARVEE bonds in the foreseeable future.

Debt service on STF revenue bonds totaled \$118.4 million in FY 2019-20. Current debt service schedules, including debt service on all STF-issued bonds through August 2020, range from a high of \$154.5 million in FY 2021-22, to a low of \$40.7 million in FY 2035-36. Between FY 2036-37 and FY 2045-46, when all currently issued STF debt is scheduled to be fully retired, STF debt service ranges from a high of \$66.7 million in FY 2036-37 to a low of \$42.2 million in FY 2041-42.

See Tables A-D and Figures 1-2 starting on page 4.

STF Refunding and Rebuilding Michigan Bonds

On January 30, 2020, the State Transportation Commission authorized the sale of up to \$200.0 million in STF bonds to refund STF bonds issued in 2009 and 2011. The Commission also authorized the sale of up to \$3.5 billion in new STF bonds; these “new money” STF bonds were described as “Rebuilding Michigan” bonds.

In April 2020 MDOT sold \$103.5 million of STF refunding bonds which were used to retire STF bonds issued in 2009. MDOT was unable to refinance the 2011 bonds at that time. The stated interest rate on the refunding bonds was 5.0% although the effective interest rate was approximately 1.3%.

In August 2020, MDOT completed the sale of \$800.0 million in new money “Rebuilding Michigan” bonds. Stated interest rates on these bonds were between 4.0% and 5.0%, although effective interest rates, depending on series maturity, were generally between 1.0% and 2.0%. The final bond maturity for these bonds would be November 2045.

Note that MDOT has not completed the sale of all bonds authorized by the Commission. MDOT anticipates issuing additional new money bonds under the January 2020 authorizations later in 2021. The Commission authorization is valid through December 31, 2023.

Additional Information on Transportation Bonding

The year-to-year variation in the debt service payments described above and shown in the tables and graphs at the end of this publication illustrate the fact that transportation bonds do not follow a steady amortization schedule—they are not like most home mortgages or car payments. Transportation bonds are often issued in series of different terms, different interest rates, and varying repayment schedules.

The structure of these bond sales depends in part on the needs of MDOT’s capital construction program and projected cash flow needs. The structure is also a function of the demands of bond markets.

Underwriters establish a nominal interest rate prior to sale. Purchasers may bid up the bond price if the stated interest rates are higher than what is otherwise available in the bond market. That’s why the actual proceeds from a bond sale may be higher than the nominal face value of the bond issue; buyers will have paid a premium for the bonds. For example, a December 2011 STF bond issue had a stated value of \$90.98 million, but the sale realized \$101.6 million of proceeds. The December 2011 bond sale was the last “new money” bond sale prior to the August 2020 issuance of \$800.0 million of STF “Rebuilding Michigan” bonds.

The weighted average interest rate on STF bonds outstanding at September 30, 2020, ranged from 4.49% to 5.24%. Note these interest rates represent the stated or coupon rate of the bond issues; the effective rate paid by MDOT is less than the stated interest rates.

MDOT refinances bonds if the bond issue is callable and if refunding would achieve a net present value savings of at least 3%. MDOT indicates that it routinely looks for opportunities to refinance previously issued bonds. However, not all bonds are callable.

There is no strict statutory limit on total outstanding transportation debt. However, Act 51 does establish limits on STF and CTF debt service, which effectively limits the total of outstanding debt.

Act 51 limits STF transportation-related debt service to 50% of the previous year’s constitutionally restricted transportation revenue credited to the STF.² To state this another way, constitutionally-restricted STF revenue pledged to secure bonds or notes must be at least twice the amount of the related STF debt service. State Transportation Commission policy is more restrictive than statute; it requires a 4-to-1 revenue-to-debt service coverage ratio.

Current STF debt service is below these statutory limits. For FY 2019-20, STF revenue available to cover debt service was approximately \$1.2 billion, 6.1 times the amount needed to cover STF debt service. Future STF revenue-to-debt service coverage will be a function of actual STF revenue and future STF debt service. Future debt service is a function of the amount of debt issued, bond interest rates, and the structure of payments over the term of the life of the debt issue.

MDOT’s bond program, particularly during the early 2000s, helped “frontload” MDOT’s road and bridge reconstruction program and helped achieve the stated trunkline pavement performance goal of 90% in “good” condition by 2007. While bonding helped MDOT achieve its pavement performance goal in 2007, subsequent increases in debt service reduced the amount of STF and federal aid revenue available for the ongoing state trunkline road and bridge capital construction program.

State trunkline pavement condition fell below the 90% “good” condition measure in 2011.

² Act 51 makes a similar limitation with respect to CTF debt.

Table A
Revenue Dedicated Bonded Debt - Michigan Department of Transportation
Bonds Issued and Outstanding
(In Thousands)

	AMOUNTS ISSUED	OUTSTANDING 9/30/2020	OUTSTANDING 9/30/2019	MATURITIES	
				FIRST YEAR	LAST YEAR
<u>Comprehensive Transportation Fund Bonds:</u>					
Series 2005 (Refunding)	\$62,180	18,390	\$26,435	2009	2023
Series 2011 (Refunding)	18,470	4,585	6,710	2013	2022
Series 2013 (Refunding)	10,130	1,540	1,540	2014	2023
Series 2015 (Refunding)	29,380	25,025	26,190	2017	2031
Total Comprehensive Transportation Fund Bonds	\$120,160	\$49,520	\$60,875		
<u>State Trunkline Fund Bonds:</u>					
Series 2004 (Refunding)	103,450	23,845	34,870	2006	2022
Series 2005 (Refunding)	223,020	47,790	69,795	2010	2022
Series 2009 (Revenue and Refunding)	146,190	-	146,185	2018	2027
Series 2011	90,980	74,050	76,790	2014	2037
Series 2012 (Refunding)	49,305	14,470	21,185	2014	2022
Series 2014 (Refunding)	265,085	41,405	60,640	2016	2022
Series 2015 (Refunding)	54,055	54,055	54,055	2023	2023
Series 2020A (Refunding)	103,485	103,485	-	2021	2027
Series 2020B	800,000	800,000	-	2021	2046
Total State Trunkline Fund Bonds	\$1,835,570	\$1,159,100	\$463,520		
<u>Grant Anticipation Bonds:</u>					
Series 2016 (Refunding)	607,110	542,310	595,130	2018	2027
Total Grant Anticipation Bonds:	\$607,110	\$542,310	595,130		
TOTAL REVENUE DEDICATED BONDED DEBT – TRANSPORTATION RELATED	\$2,562,840	\$1,701,410	\$1,119,525		

Source: Michigan Department of Transportation. 9/30/2020 figures are preliminary/unaudited.

Tables B and C
STF/GARVEE Outstanding Debt and Debt Service

State Trunkline Fund (STF)/ Federal (GARVEE) Bonds			
Outstanding STF/GARVEE Debt at 9/30/2020			
Fiscal Year	STF	GARVEE	Total
1995	669,583,000		669,583,000
1996	648,798,000		648,798,000
1997	680,778,000		680,778,000
1998	671,432,000		671,432,000
1999	645,990,000		645,990,000
2000	633,219,000		633,219,000
2001	928,052,000	400,000,000	1,328,052,000
2002	911,967,000	600,000,000	1,511,967,000
2003	891,770,000	600,000,000	1,491,770,000
2004	1,055,645,000	600,000,000	1,655,645,000
2005	1,402,587,000	172,000,000	1,574,587,000
2006	1,622,979,000	84,000,000	1,706,979,000
2007	1,597,573,000	517,115,000	2,114,688,000
2008	1,547,445,000	485,115,000	2,032,560,000
2009	1,494,734,000	763,520,000	2,258,254,000
2010	1,405,961,000	756,495,000	2,162,456,000
2011	1,315,660,000	749,155,000	2,064,815,000
2012	1,304,700,000	741,455,000	2,046,155,000
2013	1,206,365,000	733,410,000	1,939,775,000
2014	1,084,680,000	724,960,000	1,809,640,000
2015	973,285,000	716,305,000	1,689,590,000
2016	846,470,000	616,625,000	1,463,095,000
2017	724,635,000	607,110,000	1,331,745,000
2018	597,430,000	601,285,000	1,198,715,000
2019	463,520,000	595,130,000	1,058,650,000
2020	1,159,100,000	542,310,000	1,701,410,000

State Trunkline Fund (STF)/ Federal (GARVEE) Bonds			
STF/GARVEE Debt Service			
Fiscal Year	STF	GARVEE	Total
1995	41,208,728		41,208,728
1996	58,185,515		58,185,515
1997	59,737,132		59,737,132
1998	59,577,357		59,577,357
1999	57,750,999		57,750,999
2000	47,209,099		47,209,099
2001	47,200,259		47,200,259
2002	59,361,635	7,331,174	66,692,809
2003	74,774,663	8,188,877	82,963,540
2004	67,811,662	7,373,848	75,185,510
2005	74,523,958	42,101,793	116,625,751
2006	94,608,773	92,970,510	187,579,283
2007	104,799,642	53,666,746	158,466,388
2008	135,022,745	53,109,380	188,132,125
2009	135,674,762	22,783,230	158,457,992
2010	160,113,550	58,122,345	218,235,895
2011	160,148,680	53,355,406	213,504,086
2012	161,867,880	53,366,043	215,233,923
2013	162,095,381	53,062,744	215,158,124
2014	166,329,159	52,780,917	219,110,076
2015	160,662,334	52,703,947	213,366,281
2016	162,764,388	41,798,991	204,563,379
2017	162,279,130	50,743,360	213,022,490
2018	161,290,300	44,787,600	206,077,900
2019	160,734,300	35,863,400	196,597,700
2020	118,410,700	81,155,000	199,565,700

Figure 1
State Trunkline Fund (STF) / Federal (GARVEE) Bonds
Outstanding Debt

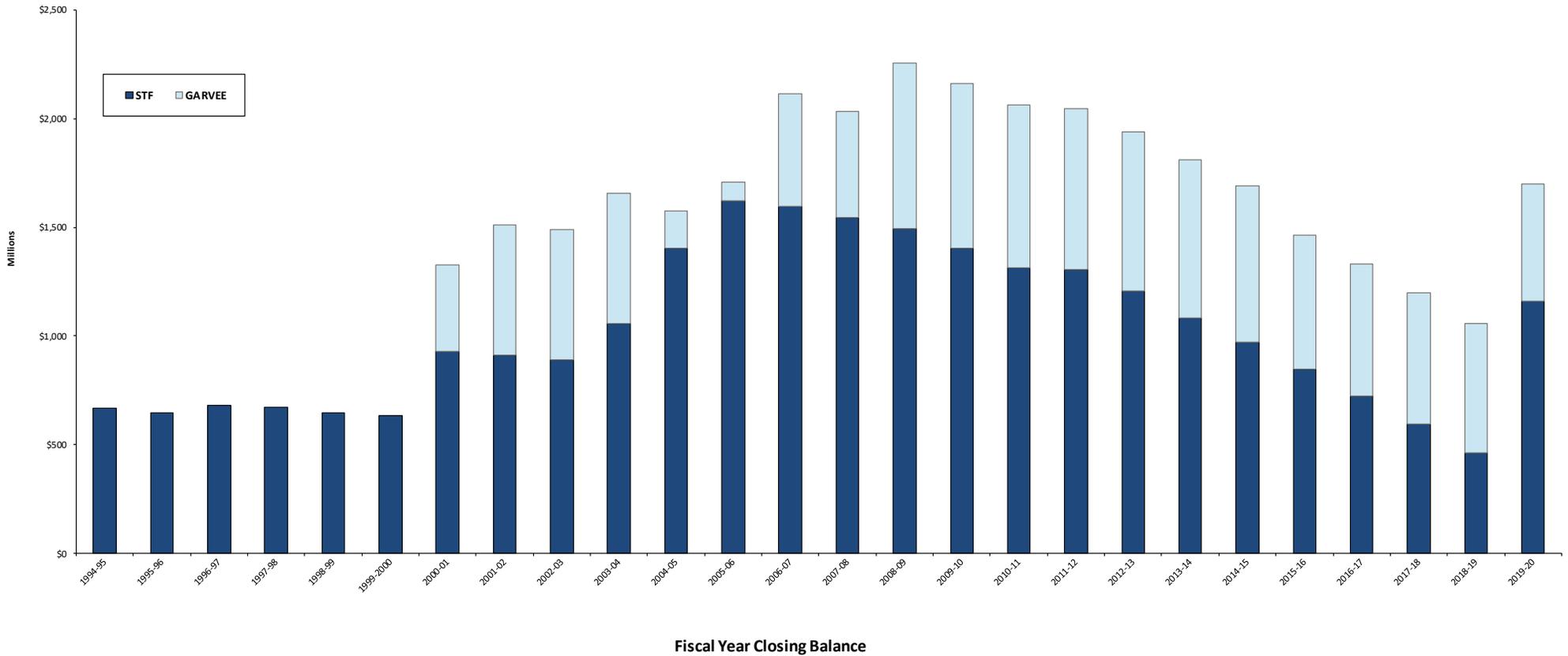


Figure 2
State Trunkline Fund/ Federal (GARVEE) Bonds
Debt Service

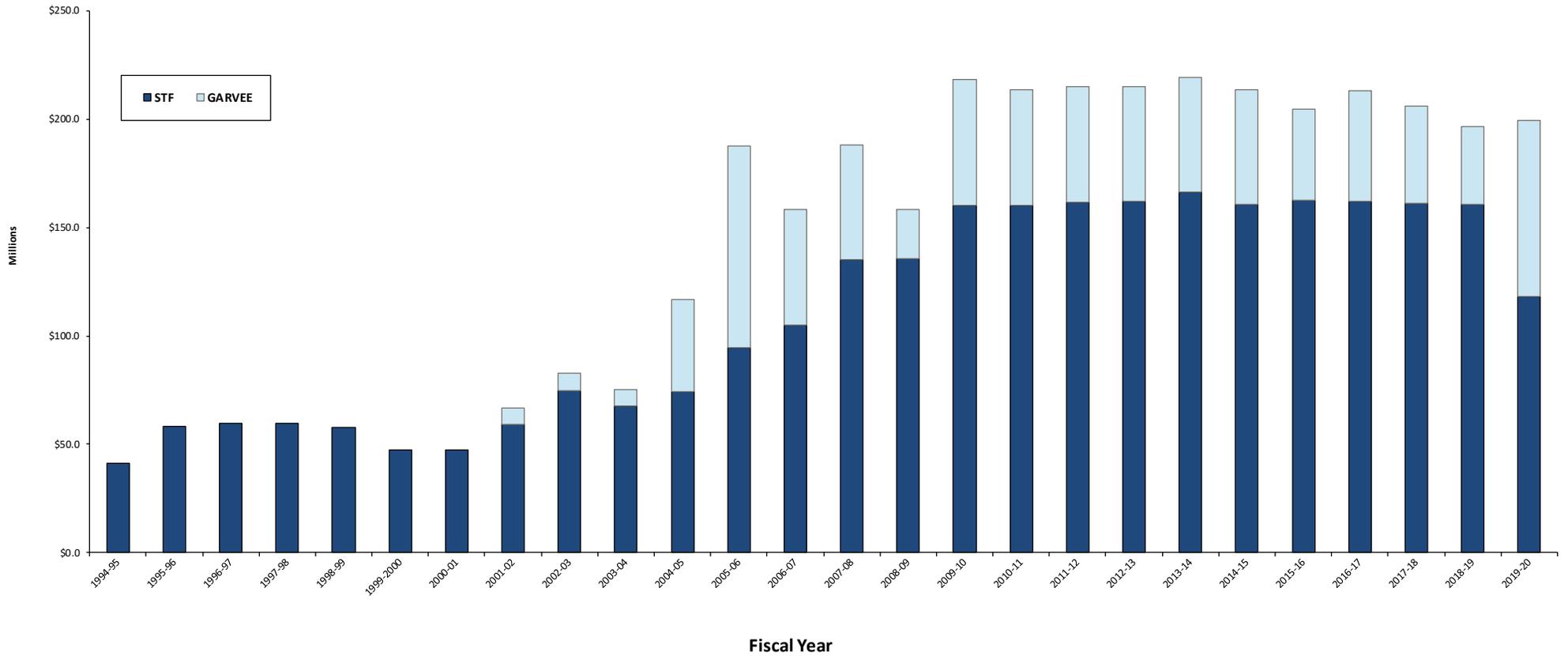


Table D
Michigan Department of Transportation
State Trunkline and Federal Grant Anticipation Bond Debt Service

	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	Average FY 2028-29 through FY 2044-45
Federal	\$55,200,000	\$55,200,000	\$63,700,000	\$114,800,000	\$116,300,000	\$128,400,000	\$130,200,000	0	0
STF	143,100,000	154,500,000	109,800,000	54,400,000	54,400,000	44,000,000	44,000,000	96,400,000	62,100,000
Total	\$198,300,000	\$209,700,000	\$173,500,000	\$169,200,000	\$170,700,000	\$172,400,000	\$174,200,000	\$96,400,000	\$62,100,000

Source: MDOT debt service schedules January 2021.