

FISCAL BRIEF



STATE TRANSPORTATION BONDS AND DEBT SERVICE - SUMMARY

William E. Hamilton

March 14, 2024

FAST FACTS

- Michigan's 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; it requires a 4-to-1 revenue to debt service coverage ratio; for FY 2023, STF revenue was approximately 5.4 times STF debt service.
- Outstanding STF-related debt, including bonds issued in anticipation of federal aid, was \$2.3 billion at September 30, 2009, declined to \$1.1 billion at September 30, 2019, and totaled \$3.3 billion at September 30, 2023.
- The increase in STF debt beginning in FY 2022-23 reflects bonds issued under the Rebuilding Michigan bond program.

INTRODUCTION

Michigan's 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 See House Fiscal Agency for additional information on transportation bond sales prior to 2000.

BONDING AND DEBT SERVICE

Recent History (1999 through 2020)

Outstanding STF debt totaled **\$633.2 million** on 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.

As a result of bond sales, outstanding combined STF/GARVEE debt increased to **\$2,258.3 million** at the close of FY 2008-09. There were no "new money" bond issues after December 2011 and until August 2020. Outstanding STF/GARVEE debt declined each fiscal year from FY 2009-10 through FY 2018-19. Outstanding STF/GARVEE bonds totaled **\$1,058.7 million** at the end of FY 2018-19 —significantly below the 2009 total.

Debt service on STF-related debt, including GARVEE bonds, totaled **\$219.1 million** in FY 2013-14 (\$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).

STF Refunding and Rebuilding Michigan Bonds (2020 – 2023)

Authorization – On January 30, 2020, Michigan's 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. The Commission's bond resolution included a list of Rebuilding Michigan projects – and estimated project costs – that could be financed with bond proceeds.

The original authorization was effective through December 31, 2023. On November 9, 2023, the State Transportation Commission approved a resolution to extend the authorization period to December 31, 2024. The resolution also modified the bond project list to update project cost estimates.

Bond Sales – Bond sales under the December 31, 2023 State Transportation Commission authorization are described in detail below:

April 2020 – MDOT sold \$103.5 million (face value) of STF refunding bonds which were used to retire STF bonds issued in 2009. Because of the premium paid by bond buyers, proceeds from the sale totaled \$113.9 million. The stated interest rate on the refunding bonds was 5.0% although the effective interest rate was approximately 1.3%.

August 2020 – MDOT completed the sale of \$800.0 million (face value) new money Rebuilding Michigan bonds. Because of bond premium, proceeds from the sale totaled \$1,017.3 million. 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 is November 2045.

August 2021 – MDOT sold an additional \$800.0 million (face value) new money Rebuilding Michigan bonds. Because of bond premium, proceeds from the sale totaled \$1,008.6 million. The stated interest rate was between 4% and 5% although the effective interest rates, depending on series maturity, ranged from less than 1% to 1.72%. The final bond maturity for these bonds is November 2047.

At the same time, MDOT sold \$54.1 million in STF refunding bonds to retire and refinance 2011 STF bonds. Because of bond premium, proceeds from the sale totaled \$70.1 million. The refunding bonds had a stated interest rate between 4% and 5%, with an actual effective rate of between .05% and 1.37%, depending on the series.

August 2023 – MDOT sold \$1,193.6 million (face value) new money Rebuilding Michigan bonds. Because of bond premium, proceeds from the sale totaled \$1,303.1 million. Stated interest rates on these bonds were generally 5.0%, although effective interest rates, depending on series maturity, were generally between 3.1% and 4.3%. The final bond maturity for these bonds is November 2049.

Following the issue of the August 2023 bonds, MDOT had issued a total of **\$2,793.6 million** in new money Rebuilding Michigan bonds under the authority of the State Transportation Commission's authorization resolutions, leaving MDOT with authority to issue an additional \$706.4 million in bonds, through December 31, 2024. ²

As of September 30, 2023, outstanding STF/GARVEE bonds totaled **\$3,288.9 million (\$2,846.2 million STF, \$442.7 million GARVEE)**.

ADDITIONAL INFORMATION ON TRANSPORTATION BONDING

Debt service payments on STF-backed revenue bonds varies from year-to-year – as shown in the tables and graphs at the end of this publication. This variance illustrates 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.

The weighted average interest rate on STF bonds outstanding as of September 30, 2023, ranges 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.

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, the August 2021 STF new-money bond issue had a stated value of \$800.0 million, but the sale realized \$1,008.6 million of proceeds.

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.

² See MDOT webpage for additional detail on MDOT bond issues: [Bonding \(michigan.gov\)](https://www.michigan.gov/bonding)

Act 51 limits STF transportation-related debt service to 50% of the previous year's constitutionally restricted transportation revenue credited to the STF.³ 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. As part of the disclosures made in the August 2023 bond sale statement, MDOT estimated that for FY 2022-23, STF revenue available to cover debt service was approximately \$1,091.6 million, or 5.4 times the amount needed to cover 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. Future STF revenue-to-debt service coverage will be a function of actual STF revenue and future STF debt service.

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.

MDOT does not anticipate selling new GARVEE bonds in the foreseeable future.

MDOT has \$706.4 million remaining under the \$3.5 billion Rebuilding Michigan authorization, before the authorization expires on December 31, 2024.

Any future bond sale will depend on MDOT's capital construction program, related cash needs, and bond market conditions.

See Tables A, B, C, and D and Figures 1 and 2 on the following pages.

³ 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)

	MATURITIES			
	AMOUNTS ISSUED	OUTSTANDING 9/30/2023	FIRST YEAR	LAST YEAR
<u>Comprehensive Transportation Fund Bonds:</u>				
Series 2015 (Refunding)	29,380	22,515	2017	2031
Total Comprehensive Transportation Fund Bonds	\$29,380	\$22,515		
<u>State Trunkline Fund Bonds:</u>				
Series 2020A (Refunding)	103,485	25,870	2021	2027
Series 2020B Rebuilding Michigan	800,000	790,000	2021	2046
Series 2021A Rebuilding Michigan	800,000	785,000	2023	2047
Series 2021B (Refunding)	54,150	51,665	2023	2037
Series 2023A Rebuilding Michigan	1,193,645	1,193,645	2025	2050
Total State Trunkline Fund Bonds	\$2,951,280	\$2,846,180		
<u>Grant Anticipation Bonds:</u>				
Series 2016 (Refunding)	607,110	442,675	2018	2027
Total Grant Anticipation Bonds	\$607,110	\$442,675		
TOTAL TRANSPORTATION-RELATED BONDED DEBT (REVENUE-DEDICATED)	\$3,587,770	\$3,311,370		

Source: Michigan Department of Transportation.

Reconciled to State of Michigan September 30, 2023 Annual Comprehensive Financial Statements, Note 13.

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/XXXX			
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
2021	1,842,610,000	513,525,000	2,356,135,000
2022	1,734,590,000	483,235,000	2,217,825,000
2023	2,846,180,000	442,675,000	3,288,855,000

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
2021	143,118,400	55,180,900	198,299,300
2022	183,268,800	50,232,300	233,501,100
2023	221,558,900	0	221,558,900
2024	257,613,400	0	257,613,400

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

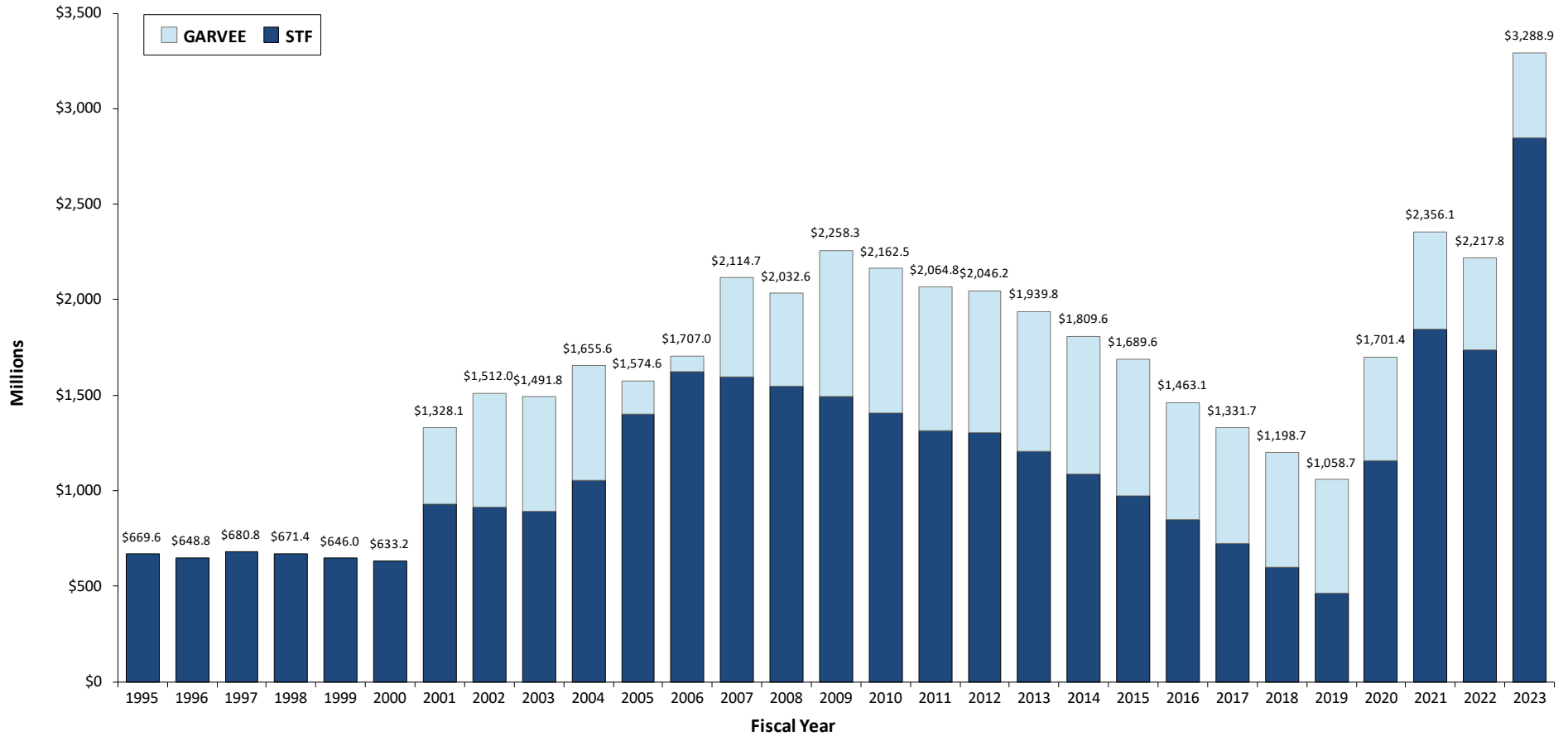


Figure 2
State Trunkline Fund/ Federal (GARVEE) Bonds
Debt Service

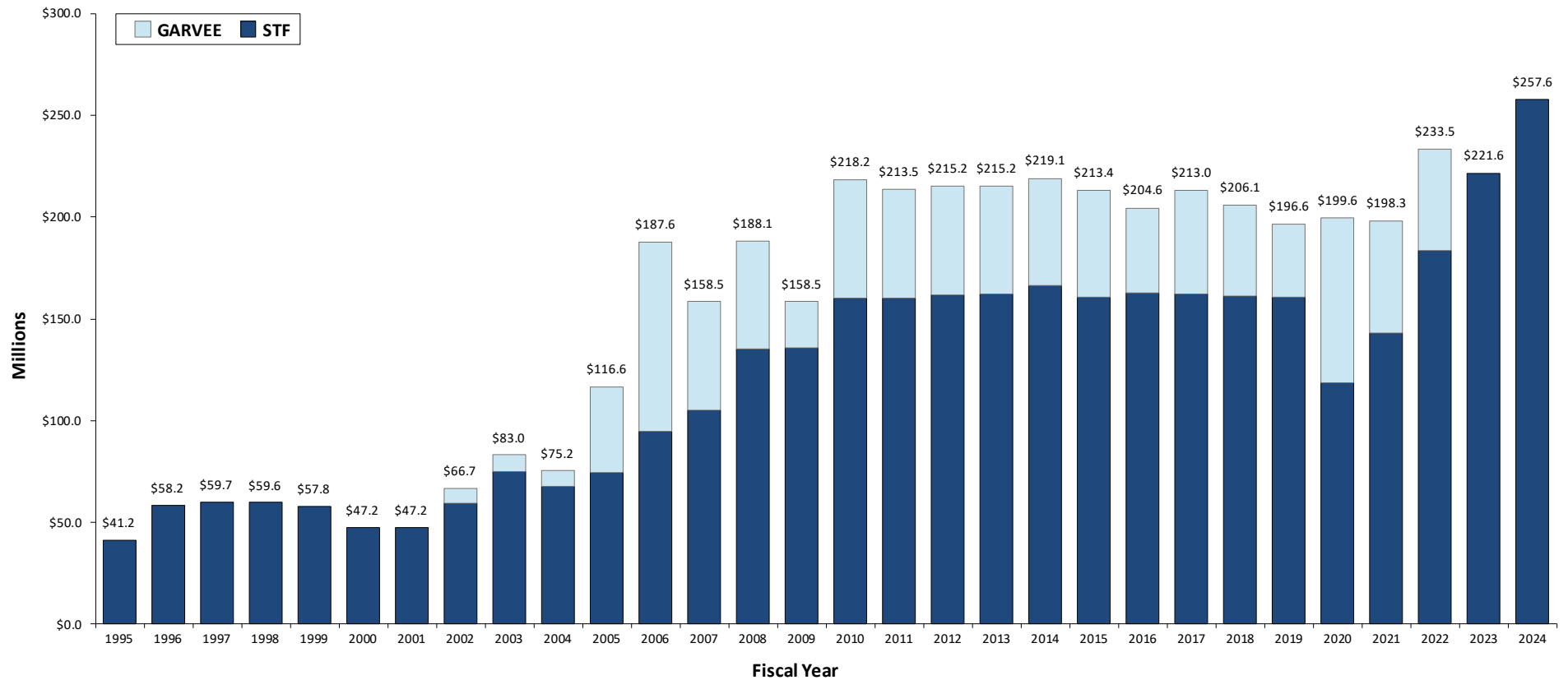


Table D Michigan Department of Transportation State Trunkline and Federal Grant Anticipation Bond Debt Service							
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	Average FY 2027-28 through FY 2046-47	Average FY 2047-48 through FY 2049-50
STF	\$221,558,900	\$257,316,400	\$286,263,700	\$286,262,000	\$286,260,100	\$200,800,000	\$93,660,000
Total	\$221,558,900	\$257,316,400	\$286,263,700	\$286,262,000	\$286,260,100	\$200,800,000	\$93,660,000
<i>Because of the way the bonds were structured, beginning in FY 2022-23 and through FY 2026-27, debt service on outstanding federal/GARVEE bonds is made from the STF, not federal funds. GARVEE bonds will be fully retired in FY 2027.</i>							

Source: MDOT debt service schedules January 2024.