

90 Debt Service Funds-At a Glance

Mission To accumulate funds to repay principal (money borrowed) and interest due on general obligation bonds and notes issued by the government to finance capital projects (land, buildings, equipment, etc.) with lives greater than one year. Three funds are used to account for this debt:

25104 Schools Debt Service Fund
 20115 GSD Debt Service Fund
 28315 USD Debt Service Fund

Budget Summary

	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>
Expenditures and Transfers:			
Debt Service Funds	\$ 292,226,700	\$ 336,872,700	\$ 353,968,500
Total Expenditures and Transfers	<u>\$ 292,226,700</u>	<u>\$ 336,872,700</u>	<u>\$ 353,968,500</u>
Revenues and Transfers:			
Program Revenue			
Charges, Commissions, and Fees	\$ 0	\$ 0	\$ 0
Other Governments and Agencies	\$ 7,324,300	\$ 12,818,200	\$ 4,596,000
Other Program Revenue	\$ 4,940,400	\$ 4,843,400	\$ 4,843,400
Total Program Revenue	\$ 12,264,700	\$ 17,661,600	\$ 9,439,400
Non-program Revenue	217,733,400	268,936,200	326,631,300
Transfers From Other Funds and Units	62,228,600	\$ 50,274,900	\$ 17,897,800
Total Revenues	<u>\$ 292,226,700</u>	<u>\$ 336,872,700</u>	<u>\$ 353,968,500</u>
Expenditures Per Capita	\$ 422.76	\$ 486.40	\$ 509.94

Positions Total Budgeted Positions

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These funds are administered by the Department of Finance, and have no separate organization chart.

Debt Service Expenditures by District & Fund

<u>Source Description</u>	<u>FY 2019 Budget</u>	<u>FY 2019 Actual</u>	<u>FY 2020 Budget</u>	<u>FY 2021 Budget</u>
GSD - General Services District				
20115 GSD Debt Service	\$ 169,296,200	\$ 164,306,912	\$ 207,650,400	\$ 213,492,000
25104 MNPS Debt Service	<u>103,273,200</u>	<u>103,273,200</u>	<u>110,554,700</u>	<u>119,492,000</u>
Total GSD	\$ 272,569,400	\$ 267,580,112	\$ 318,205,100	\$ 332,984,000
USD - Urban Services District				
28315 USD Debt Service	<u>\$ 19,657,300</u>	<u>\$ 20,143,999</u>	<u>\$ 18,667,600</u>	<u>\$ 20,984,500</u>
Total USD	19,657,300	\$ 20,143,999	\$ 18,667,600	\$ 20,984,500
Total General Obligation Debt Service – GSD+USD	<u>\$292,226,700</u>	<u>\$287,724,111</u>	<u>\$336,872,700</u>	<u>\$353,968,500</u>

90 Debt Service Funds-At a Glance

Budget Highlights FY 2021

The recommended budget services outstanding debt issues. Currently, Metro has approximately \$1,281,275,523 in un-issued general obligation bonds authorized for capital spending plans in Fiscal Years 2010 through 2020.

Overview

Debt Financing: Periodically, Metro borrows money to provide long-term financing for capital improvement projects that are included in the Capital Spending Plan by issuing (or selling) bonds and notes, which are written promises to repay the debt at certain times and with certain interest to bondholders/investors. The specific improvements to be financed are listed in the legislation that authorizes the debt. The proceeds from the sale of the debt are used to pay off commercial paper that provides short-term financing for those improvements.

Debt service is the process of repaying those bonds and notes, and their interest, over time to bondholders/investors. A portion of the principal is repaid each year between issuance and maturity. This approximately matches the maturity dates of bonds to the lives of the projects they fund, and keeps Metro from having to make a big payment at one time to make a capital improvement.

Metro does not issue long-term debt to finance operating expenditures or deficits.

Types of debt: Debt generally falls into the following categories:

- General obligation (GO) debt is payable from taxes, and is backed by the full faith, credit, and taxing power of the government. There is no legal limit to Metro's use of general obligation debt, although issuance requires passage of a Council resolution. Only general obligation debt is repaid from the three debt service funds (25104, 20115, and 28315).
- Revenue debt is often used to finance projects that will generate revenue. Part of the revenue generated by a project is used to service the debt on the project. It is accounted for through the enterprise or internal service fund that develops the capital project and receives its revenues.
 - Limited obligation revenue debt normally operates as revenue debt but is backed by certain non-property-tax revenues (defined in the bond covenants) in the event that there are not sufficient revenues to service the debts.

Interest earned by our bondholders/investors is generally held to be exempt from federal and Tennessee taxation.

Structure: Metro's outstanding debt takes three forms:

- Bonds - Long-term debt that usually matures over a period of 20-30 years.
- Notes - Shorter-term debt that is issued for three years, renewable for an additional two terms of three years each. The usual total maturity is 3 to 5 years.
- Commercial paper – Short-term GO obligations with flexible maturities ranging from 1 to 270 days, issued as cash when needed in blocks of \$100,000 plus \$1,000 increments. Interest rates are usually lower than bond interest rates.

Notes and commercial paper often provide temporary financing and are retired by issuing longer-term bonds.

Many bonds have "call" provisions that allow Metro to redeem the debt before its scheduled maturity. This is most often done when the debt being called is refunded by issuing new debt for the same period of time but at lower interest rates. The lower interest costs save Metro money over the remaining life of the bond issue.

Legal Limitations: There is no legal debt margin limitation on GSD debt. Section 7.08 of the Charter limits the USD total net bonded indebtedness payable from USD ad valorem taxes, after deduction of sinking funds for the payment of principal, to 15% of the USD assessed valuation of taxable property. At June 30, 2019, the taxable property was valued at \$24.5 billion, so the 15% limit was \$3.67 billion. With only \$169 million of applicable debt (0.69% of valuation), the margin was \$3.51 billion.

Bond Ratings: Metro holds excellent investment-grade ratings from two independent rating agencies (Moody's Aa2 and Standard & Poor's AA). These ratings are based on both the city's financial health and available reserves for paying off debt. Each agency has its own rating system; ratings of the two agencies cannot necessarily be compared to each other. For explanations of the ratings, visit each agency's web site.

Debt Policies: The following guidelines are used in managing debt service funds:

- USD general obligation debt is subject to the legal limitation noted above.
- Debt is not issued above the capacity provided by current revenue sources (including property taxes at the current rate) plus anticipated normal growth; debt is not issued in anticipation of a not-yet-approved property tax increase.
- When planning future debt capacity, normal revenue growth is projected conservatively.
- The financing of an improvement will not exceed its useful life. In a multi-purpose bond package, the package maturities will reflect the mix of project lives funded by the package; the average life of the bonds cannot exceed the average life of the projects.
- General obligation issues are sold by competitive bid in a public offering; a bid sale is awarded to the bidder with the lowest true interest cost
- Bond issues may be considered for refunding when lower interest rates on the new bonds will result in a 3.5% or better aggregate present value savings over the old bonds. The term of the refunding bonds will not exceed the terms of the bonds being refunded. Refunding Bonds may be sold either by negotiated sale or by competitive bid public offering.

90 Debt Service Funds-At a Glance

Revenue Sources: Revenues for all three funds are detailed in the budget ordinance. The GSD and USD Debt Service Funds (funds 20115 & 28315) are funded primarily by a dedicated portion of the property tax levies. The GSD Debt Service Fund also receives \$3.2 million from the GSD General Fund (fund 10101) for stadium debt, and the Schools Debt Service Fund (fund 25104) receives substantial schools-related sales taxes.

Capital Expenditures and the Budget: The discussion of Capital Improvements in Section A of this book describes how these funds relate to the operating budget.

Recent Bond Issues: The Recent Bond Issues table summarizes recent bond issues. Note that only the general obligation issues are serviced through the GSD, USD, and Schools Debt Service funds; the revenue issues are serviced through non-tax sources. Future debt service requirements are listed on the next page.

Comparative Debt Statistics: The Comparable Debt Statistics table uses standard indicators to measure debt burden levels and trends.

Comparative Debt Statistics

Fiscal Year	Net Debt to Assessed Valuation		Net Debt Per Capita	Debt Service to Total Expenditures
	GSD+USD	USD only		
2010	10.15%	1.17%	3,110.89	8.8%
2011	10.14%	1.14%	1,571.19	4.5%
2012	10.92%	1.31%	3,226.91	5.6%
2013	13.25%	1.41%	3,897.73	6.7%
2014	12.00%	1.32%	3,682.52	9.1%
2015	11.36%	1.25%	3,451.97	9.6%
2016	12.79%	1.23%	3,910.24	9.4%
2017	14.05%	1.15%	4,380.03	9.4%
2018	9.09%	0.70%	4,103.65	10.0%
2019	10.61%	0.69%	4,933.86	10.5%

Source: Comprehensive Annual Financial Reports for each year

90 Debt Service Funds-At a Glance

Recent Bond Issues						
Issue	Date Issued	Amount & interest rate	Maturity	Ratings *	Fund *	Comments *
General Obligation Refunding Bonds, Series 2006A	05/11/06	\$60,805,000 3.60%	2006 to 2026	M: Aa2/VMIG1 S: AA/A-1 F: AA+/F1+	G	Current Refund of outstanding general obligation public improvement bonds, Series 1996 held in interest rate hedging agreement. Finance the retirement of a portion of the G O Anticipation Notes (Commercial Paper), and general government projects.
Water and Sewer Revenue Refunding Bonds, Series 2008A	02/22/08	\$122,530,000 3.25%-5.25%	2011 to 2022	M: Aa3 S: AA F: AA-	--	Non-GO. Current refund of W&S Revenue Refunding Bonds, Series 1998A (\$127,775,000) maturing in 2011-2019, and W&S Revenue Bonds, Series 1998B (\$785,000) maturing 2011-2012.
General Obligation Improvement and Refunding Bonds, Series 2010A	06/10/10	\$296,750,000 2.75 - 5.00%	2010 to 2026	M: Aa2 S: AA	G U S	Finance the retirement of a portion of the G.O Anticipation Notes (Commercial Paper), and advance refund portions of out-standing bonds.
General Obligation Improvement Bonds Federally Taxable (BAB's), Series 2010B	06/10/10	\$252,005,000 5.71%	2010 to 2034	M: Aa2 S: AA	G U S	Finance the retirement of a portion of the General Obligation Anticipation Notes (Commercial Paper), and general government projects.
General Obligation Refunding Bonds, Series 2010D	09/21/10	\$291,360,000 1.50 – 5.00%	2010 to 2024	M: Aa2 S: AA	G U S	Advance refund portions of out-standing bonds.
Water and Sewer Revenue Refunding Bonds, Series 2010A	12/9/10	\$104,050,000 3.00 – 5.00%	2010 to 2027	M: Aa3 S: AA	--	Non-GO. Advance refund portions of outstanding W&S Revenue Refunding Bonds.
Water and Sewer Revenue Bonds Federally Taxable, Series 2010B (BAB-Direct Payment)	12/9/10	\$135,000,000 6.39 – 6.57%	2010 to 2037	M: Aa3 S: AA	--	Finance the retirement of currently outstanding W&S Commercial Paper Bond Anticipation Notes and finance additional capital projects.
Water and Sewer Revenue Bonds Federally Taxable Series 2010C (Recovery Zone Economic Dev. Bonds)	12/9/10	\$75,000,000 6.69%	2010 to 2041	M: Aa3 S: AA	--	Finance Water system capital projects.
Water and Sewer Revenue Refunding Bonds Federally Taxable Series 2010D	12/9/10	\$7,610,000	2010 to 2018	M: Aa3 S: AA	--	Non-GO. Advance refund portions of outstanding W&S Revenue Refunding Bonds.
General Obligation Refunding Bonds, Series 2011	09/29/11	\$89,480,000 2.00 – 5.00%	2011 to 2023	M: Aa2 S: AA	G U S	Advance refund portions of out-standing bonds.
General Obligation Refunding Bonds, Series 2012	02/02/12	\$227,110,000 2.00 - 5.00%	2012 to 2025	M: Aa2 S: AA	G U S	Advance refund portions of out-standing bonds.
Water and Sewer Revenue Refunding Bonds, Series 2012	02/02/12	\$129,625,000 1.00 – 5.00%	2012 to 2023	M: Aa3 S: AA	--	Non-GO. Advance refund portions of outstanding W&S Revenue Refunding Bonds.

90 Debt Service Funds-At a Glance

Recent Bond Issues						
Issue	Date Issued	Amount & interest rate	Maturity	Ratings *	Fund *	Comments *
General Obligation Improvement Bonds Federally Taxable, Series 2012	08/15/12	\$6,440,000 3.367%	2027	M: Aa2 S: AA	G	Finance the costs of certain public projects of the Metropolitan Government for qualified energy conservation improvements.
District Energy System Revenue and Tax Refunding Bonds, Series 2012A	08/15/12	\$47,450,000 2.00 – 5.00%	2013 To 2033	M: Aa2 S: AA	U	Advance refund of outstanding Energy Production Facility Revenue Bonds.
General Obligation Refunding Bonds, Series 2012B	08/15/12	\$140,345,000 .320 – 2.76%	2013 To 2024	M: Aa2 S: AA	G U S	Advance refund of portions of outstanding bonds.
General Obligation Refunding Bonds, Series 2013	02/21/13	\$245,485,000 2.00 – 5.00%	2015 To 2027	M: Aa2 S: AA	G U S	Advance refund of portions of outstanding bonds.
Water and Sewer Revenue Bonds, Series 2013	04/25/13	\$237,930,000 3.00 – 5.00%	2022 To 2033	M: Aa3 S: AA	--	Retire outstanding Water and Sewer commercial paper and to fund a debt reserve fund.
General Obligation Improvement Bonds, Series 2013A	05/09/13	\$374,665,000 3.00 – 5.00%	2020 To 2033	M: Aa2 S: AA	G U S	Retire outstanding General Obligation Commercial paper, and to finance capital projects.
General Obligation Extendable Commercial Paper Notes 2014 Program	07/01/14	Up to \$325,000,000 Market rates	Up to 90 days issue with option to extend up to 270 days after issue	M: P-1 S: A-1+	G U S	Provide interim financing of various capital projects and to refinance existing general obligation commercial paper notes.
General Obligation Refunding Bonds, Series 2015A	02/19/15	\$59,730,000 5%	2021 To 2026	M: Aa2 S: AA	G U S	Advance refund of portions of outstanding bonds.
General Obligation Refunding Bonds, Series 2015B (Taxable)	02/19/15	\$103,980,000 .300 – 3.493%	2015 To 2029	M: Aa2 S: AA	G U S	Advance refund of portions of outstanding bonds
Water and Sewer Extendable Commercial Paper Notes, 2015 Program	04/15/15	Up to \$100,000,000 Market Rate	Up to 90 days issue with option to extend up to 270 days after issue	M: P-1 S: A-1+	--	Provide interim financing of various capital projects and refinance existing projects as relate to Water and Sewer prior to the issuing of bonds.
General Obligation Improvement Bonds, Series 2015C	07/21/15	\$347,235,000 4.00 – 5.00%	2017 To 2034	M: Aa2 S: AA	G U S	Retire outstanding General Obligation Commercial Paper Notes.
General Obligation Refunding Bonds, Series 2016	06/01/16	\$343,975,000 2.00 – 5.00%	2017 To 2033	M: Aa2 S: AA	G U S	Advance refund of portions of outstanding bonds.
General Obligation Improvement Bonds, Series 2017	02/02/17	\$455,540,000 4.00 – 5.00%	2018 To 2036	M: Aa2 S: AA	G U S	Retire outstanding General Obligation Commercial Paper Notes.
General Obligation Commercial Paper Series B-1	07/06/17	Up to \$200,000,000 Market rates	Up to 270 days after issue	M: P-1 S: A-1+	G U S	Provide interim financing of various capital projects and to refinance existing general obligation commercial paper notes.
General Obligation Commercial Paper Series B-2	07/06/17	Up to \$175,000,000 Market rates	Up to 270 days after issue	M: P-1 S: A-1+	G U S	Provide interim financing of various capital projects and to refinance existing general obligation commercial paper notes.
Water and Sewer Revenue Bonds, Series 2017A (Green Bonds)	11/02/17	\$89,420,000 5.00%	2021 To 2046	M: Aa3 S: AA	--	Retire outstanding Water and Sewer commercial paper and to fund a debt reserve fund

90 Debt Service Funds-At a Glance

Recent Bond Issues						
Issue	Date Issued	Amount & interest rate	Maturity	Ratings *	Fund *	Comments *
Water and Sewer Revenue Bonds, Series 2017B	11/02/17	\$155,210,000 5.00%	2030 To 2046	M: Aa3 S: AA	--	Retire outstanding Water and Sewer commercial paper and to fund a debt reserve fund
Water and Sewer Revenue Commercial Paper Notes, Series 2018A	7/09/18	Up to \$183,000,000 Market Rate	Up to 270 days after Issue	M: P-1 S: A-1+	--	Provide interim financing of various capital projects and refinance existing projects as relate to Water and Sewer prior to the issuing of bonds.
General Obligation Improvement Bonds, Series 2018	10/25/18	\$715,955,000 4.00 – 5.00%	2019 To 2038	M: Aa2 S: AA	G U S	Retire outstanding General Obligation Commercial Paper Notes, and to finance capital projects.
<p>* Ratings: M = Moody's, S = Standard & Poor's, F = Fitch, I = Insured (see text). Maturity dates are <u>underlined</u>. Fund: This code shows the debt service fund(s) used to repay this issue. G = GSD, U = USD, S = Schools. Comments: Non-GO = Not a general obligation debt, but included in this table for completeness</p>						

90 Debt Service Funds-At a Glance

Bonds and Notes Payable at June 30, 2019						
GENERAL OBLIGATION BONDS PAYABLE General Services District (GSD)	Interest Rate	Date of Issue	Date of Final Maturity	Amount of Issue	June 30, 2019	
					Principal	Interests
GSD G.O. Improvement and Refunding Bonds, Series 2010A	2.75 - 5.00	Jun.10, 2010	July 1, 2026	159,008,728	57,879,613	8,192,055
GSD G.O. Improvement Bonds Federally Taxable (BAB's), Series 2010B	5.71	Jun.10, 2010	July 1, 2034	138,046,756	138,046,756	93,991,987
GSD G.O. Refunding Bonds, Series 2010D	1.50 - 5.00	Sept. 21, 2010	July 1, 2024	144,150,016	71,436,782	8,534,553
GSD G.O. Refunding Bonds, Series 2011	2.00 - 5.00	Sept. 16, 2011	July 1, 2023	49,712,377	32,536,908	3,864,627
GSD G.O. Refunding Bonds, Series 2012	2.00 - 5.00	Jan. 20, 2012	July 1, 2025	154,956,701	136,087,747	19,866,091
GSD G.O. Improvement Bonds (QECCB Federally Taxable), Series 2012	3.367	Aug. 15, 2012	Aug. 1 2027	6,440,000	6,440,000	1,843,096
GSD G.O. Refunding Bonds (Taxable), Series 2012B	.320 - 2.767	Aug. 15, 2012	July 1, 2024	67,480,283	37,861,948	3,966,049
GSD G.O. Refunding Bonds, Series 2013	3.00 - 5.00	Feb. 21, 2012	July 1, 2027	138,755,487	117,935,239	37,897,414
GSD G.O. Improvement Bonds, Series 2013A	3.00 - 5.00	May 9, 2013	Jan. 1, 2033	253,070,885	38,396,473	5,069,422
GSD G.O. Refunding Bonds, Series 2015A	5.00	Feb. 19, 2015	July 1, 2026	33,884,829	33,884,829	7,961,063
GSD G.O. Refunding Bonds, Series 2015B (Taxable)	.30 - 3.493	Feb. 19, 2015	July 1, 2029	72,314,470	58,568,601	7,230,113
GSD G.O. Improvement Bonds, Series 2015C	4.00 - 5.50	Jul. 21, 2015	July 1, 2034	240,454,031	222,965,395	96,160,232
GSD G.O. Refunding Bonds, Series 2016	2.00 - 5.00	Jun.1, 2016	Jan. 1, 2033	231,949,343	227,148,223	98,769,517
GSD G.O. Improvement Bonds, Series 2017	4.00 - 5.00	Feb. 2, 2017	July 1, 2036	280,675,679	275,549,402	115,810,945
GSD G.O. Improvement Bonds, Series 2018	4.00 - 5.00	Oct. 25, 2018	July 1, 2038	487,502,922	487,502,922	245,388,799
Total General Obligation Bonds Payable For General Purposes				2,458,402,507	1,942,240,838	754,545,963
For School Purposes:						
GSD G. O Improvement and Refunding Bonds, Series 2010A	2.75 - 5.00	Jun.10, 2010	July 1, 2026	114,567,598	39,625,133	5,528,737
GSD G. O Improvement Bonds Federally Taxable (BAB's), Series 2010B	5.71	Jun.10, 2010	July 1, 2034	70,516,649	70,516,649	48,012,716
GSD G. O Refunding Bonds, Series 2010D	1.50 - 5.00	Sept. 21, 2010	July 1, 2024	120,126,326	59,531,302	7,112,206
GSD G.O. Refunding Bonds, Series 2011	2.00 - 5.00	Sept. 16, 2011	July 1, 2023	32,574,740	19,631,701	2,402,557
GSD G.O. Refunding Bonds, Series 2012	2.00 - 5.00	Jan. 20, 2012	July 1, 2025	53,280,200	46,792,318	6,830,743
GSD G.O. Refunding Bonds (Taxable), Series 2012B	.320 - 2.767	Aug. 15, 2012	July 1, 2024	62,161,564	34,877,710	3,653,449
GSD G.O. Refunding Bonds, Series 2013	3.00 - 5.00	Feb. 21, 2012	July 1, 2027	82,814,365	70,388,078	22,618,567
GSD G.O. Improvement Bonds, Series 2013A	3.00 - 5.00	May 9, 2013	Jan. 1, 2033	84,932,213	12,886,103	1,701,331
GSD G.O. Refunding Bonds, Series 2015A	5.00	Feb. 19, 2015	July 1, 2026	22,804,914	22,804,914	5,357,895
GSD G.O. Refunding Bonds, Series 2015B (Taxable)	.30 - 3.493	Feb. 19, 2015	July 1, 2029	30,240,838	24,492,519	3,023,526
GSD G.O. Improvement Bonds, Series 2015C	4.00 - 5.50	Jul. 21, 2015	July 1, 2034	97,563,777	90,467,795	39,016,836
GSD G.O. Refunding Bonds, Series 2016	2.00 - 5.00	Jun.1, 2016	Jan. 1, 2033	78,790,586	77,129,229	33,455,945
GSD G.O. Improvement Bonds, Series 2017	4.00 - 5.00	Feb. 2, 2017	July 1, 2036	171,785,733	168,648,232	70,881,340
GSD G.O. Improvement Bonds, Series 2018	4.00 - 5.00	Oct. 25, 2018	July 1, 2038	212,601,170	212,601,170	107,014,633
Total General Obligation Bonds Payable for School Purposes				1,234,760,673	950,392,853	356,610,481
Total General Obligation Bonds Payable - General Services District				3,693,163,180	2,892,633,691	1,111,156,444

90 Debt Service Funds-At a Glance

Bonds and Notes Payable at June 30, 2019

GENERAL OBLIGATION BONDS PAYABLE
URBAN Services District (USD)

USD G.O. Improvement and Refunding Bonds, Series 2010A	2.75 - 5.00	Jun.10, 2010	July 1, 2026	22,899,473	5,960,582	752,599
USD G.O. Improvement Bonds Federally Taxable (BAB's), Series 2010B	5.71	Jun.10, 2010	July 1, 2034	43,441,595	43,441,595	29,578,106
USD G.O. Refunding Bonds, Series 2010D	1.50 - 5.00	Sept. 21, 2010	July 1, 2024	25,925,413	12,847,920	1,534,941
USD G.O. Refunding Bonds, Series 2011	2.00 - 5.00	Sept. 16, 2011	July 1, 2023	6,688,796	5,672,304	675,287
USD G.O. Refunding Bonds, Series 2012	2.00 - 5.00	Jan. 20, 2012	July 1, 2025	18,873,099	16,574,935	2,419,609
USD G.O. Refunding Bonds (Taxable), Series 2012B	.320 - 2.767	Aug. 15, 2012	July 1, 2024	7,471,610	4,192,182	439,132
USD G.O. Refunding Bonds, Series 2013	3.00 - 5.00	Feb. 21, 2012	July 1, 2027	23,915,148	20,326,683	6,531,794
USD G.O. Improvement Bonds, Series 2013A	3.00 - 5.00	May 9, 2013	Jan. 1, 2033	30,135,613	4,572,241	603,665
USD G.O. Refunding Bonds, Series 2015A	5.00	Feb. 19, 2015	July 1, 2026	3,040,257	3,040,257	714,292
USD G.O. Refunding Bonds, Series 2015B (Taxable)	.30 - 3.493	Feb. 19, 2015	July 1, 2029	1,424,692	1,153,880	142,443
USD G.O. Improvement Bonds, Series 2015C	4.00 - 5.50	Jul. 21, 2015	July 1, 2034	8,531,298	7,910,802	3,411,760
USD G.O. Refunding Bonds, Series 2016	2.00 - 5.00	Jun.1, 2016	Jan. 1, 2033	27,571,610	27,001,908	11,744,601
USD G.O. Improvement Bonds, Series 2017	4.00 - 5.00	Feb. 2, 2017	July 1, 2036	2,538,666	2,492,305	1,047,491
USD G.O. Improvement Bonds, Series 2018	4.00 - 5.00	Oct. 25, 2018	July 1, 2038	14,291,393	14,291,393	7,193,698
Total General Obligation Bonds Payable (governmental activities)				236,748,663	169,478,987	66,789,418

USD G.O. Improvement & Refunding Bonds, Series 2010A(1)	2.21 - 5.71	Jun.10, 2010	July 1, 2034	274,201	39,672	909
USD G.O. Refunding Bonds, Series 2010D (DES)	1.50 - 5.00	Sept. 21, 2010	July 1, 2024	1,158,245	573,996	68,575
USD G.O. Refunding Bonds, Series 2011 (DES)	2.00 - 5.00	Sept. 16, 2011	July 1, 2023	504,087	504,087	98,154
District Energy System Revenue Refunding Bonds, Series 2012A	2.000 - 5.000	Aug. 15, 2012	Oct. 1, 2033	47,450,000	37,855,000	13,946,025
USD G.O. Refunding Bonds (Taxable), Series 2012B	.320 - 2.767	Aug. 15, 2012	July 1, 2024	3,231,543	1,813,160	189,929
USD G.O. Improvement Bonds, Series 2013A	3.00 - 5.00	May 9, 2013	Jan. 1, 2033	6,526,289	990,183	130,732
USD G.O. Improvement Bonds, Series 2015C	4.00 - 5.50	Jul. 21, 2015	July 1, 2034	685,894	636,008	274,297
USD G.O. Refunding Bonds, Series 2016	2.00 - 5.00	Jun.1, 2016	Jan. 1, 2033	5,663,461	5,560,640	2,450,437
USD G.O. Improvement Bonds, Series 2017	4.00 - 5.00	Feb. 2, 2017	July 1, 2036	539,922	530,061	222,780
USD G.O. Improvement Bonds, Series 2018	4.00 - 5.00	Oct. 25, 2018	July 1, 2038	1,559,515	1,559,515	784,995
Total General Obligation Bonds Payable (business-type activities)				67,593,157	50,062,322	18,166,833
Total General Obligation Bonds Payable - Urban Services District				304,341,820	219,541,309	84,956,251

REVENUE BONDS PAYABLE

Dept of Water and Sewerage Rev. Refunding Bonds of 2008A	3.250 - 5.250	Feb. 15, 2008	Jan. 1, 2022	122,530,000	14,275,000	749,438
Dept of Water and Sewerage Rev. Refunding Bonds, Series 2010A	3.00 - 5.00	Dec. 9, 2010	Jul. 1, 2027	104,050,000	70,590,000	15,022,325
Dept of Water and Sewerage Rev. Bonds Federally Taxable, Series 2010B(B.	6.393 - 6.568	Dec. 9, 2010	Jul. 1, 2037	135,000,000	135,000,000	121,854,630
Dept of Water and Sewerage Rev. Bonds Federally Taxable, Seies 2010C	6.693	Dec. 9, 2010	Jul. 1, 2041	75,000,000	75,000,000	104,734,407
Dept of Water and Seweage Rev. Refunding Bonds, Series 2012	2.00 - 5.00	Jan. 2, 2012	Jul. 1, 2025	129,625,000	76,715,000	7,822,625
Dept of Water and Sewerage Revenue Bonds, Series 2013	1.89 - 5.00	Apr. 25, 2013	Jul. 1, 2033	237,930,000	237,930,000	175,835,225
Dept of Water and Sewerage Revenue Bonds, Series 2017A (Green Bonds)	5.00	Nov. 2, 2017	Jul. 1, 2046	89,420,000	89,420,000	78,228,327
Dept of Water and Sewerage Revenue Bonds, Series 2017B	5.00	Nov. 2, 2017	Jul. 1, 2046	155,210,000	155,210,000	137,644,000
Total Revenue Bonds Payable - Department of Water and Sewerage				1,048,765,000	854,140,000	641,890,977
Total Revenue Bonds Payable - Urban Services District				1,048,765,000	854,140,000	641,890,977
Total Bonds Payable - Urban Services District				1,353,106,820	1,073,681,309	726,847,228

90 Debt Service Funds-At a Glance

Future Debt Service Requirements for Debt Outstanding at 06/30/2019

General Obligation Debt (Debt Service Funds)

Fiscal Year	GSD Debt Service			GSD School Debt Service		
	Principal	Interest	Total	Principal	Interest	Total
2020	110,709,715	86,929,018	197,638,733	58,559,145	42,179,134	100,738,279
2021	115,829,973	81,979,533	197,809,506	60,961,514	39,569,646	100,531,160
2022	118,246,243	76,474,326	194,720,569	62,941,554	36,681,160	99,622,714
2023	128,396,796	70,695,657	199,092,453	62,377,178	33,750,836	96,128,014
2024	130,011,866	64,900,551	194,912,417	71,437,847	30,789,958	102,227,805
2025	132,620,879	58,965,035	191,585,914	70,053,160	27,695,663	97,748,823
2026	124,080,229	52,951,079	177,031,308	62,403,924	24,650,822	87,054,746
2027	115,540,309	47,148,063	162,688,372	56,768,195	21,763,445	78,531,640
2028	118,371,581	41,476,381	159,847,962	53,122,176	19,057,548	72,179,724
2029	93,055,569	36,565,776	129,621,345	41,670,332	16,836,945	58,507,277
2030	96,709,773	32,605,192	129,314,965	43,336,682	15,014,945	58,351,627
2031	98,194,030	27,935,301	126,129,331	44,065,299	12,925,766	56,991,065
2032	102,708,964	23,097,797	125,806,761	46,064,741	10,761,827	56,826,568
2033	107,439,866	18,033,193	125,473,059	48,158,161	8,498,089	56,656,250
2034	84,775,552	12,929,190	97,704,742	41,061,715	6,215,004	47,276,719
2035	88,282,739	9,062,866	97,345,605	42,751,191	4,341,805	47,092,996
2036	52,343,754	6,043,795	58,387,549	26,430,587	2,857,790	29,288,377
2037	54,479,165	3,907,335	58,386,500	27,508,732	1,779,005	29,287,737
2038	34,518,875	2,127,376	36,646,251	15,053,761	927,754	15,981,515
2039	35,924,960	718,499	36,643,459	15,666,959	313,339	15,980,298
Total	1,942,240,838	754,545,963	2,696,786,801	950,392,853	356,610,481	1,307,003,334

90 Debt Service Funds-At a Glance

Future Annual Debt Service Requirements for Debt Outstanding at 6/30/2019

General Obligation Debt (Debt Service Funds)

Fiscal Year	Water Service (USD)			USD Debt Service		
	Principal	Interest	Total	Principal	Interest	Total
2020	39,120,000	44,225,115	83,345,115	12,641,140	10,239,917	22,881,057
2021	25,080,000	42,304,977	67,384,977	13,243,513	9,674,040	22,917,553
2022	29,955,000	40,984,827	70,939,827	13,467,203	9,025,619	22,492,822
2023	36,775,000	39,449,077	76,224,077	14,251,026	8,369,551	22,620,577
2024	27,475,000	37,987,378	65,462,378	15,970,287	7,708,470	23,678,757
2025	21,445,000	36,819,676	58,264,676	15,875,961	7,000,764	22,876,725
2026	22,490,000	35,756,878	58,246,878	14,490,847	6,279,906	20,770,753
2027	23,605,000	34,622,378	58,227,378	15,556,496	5,552,015	21,108,511
2028	24,780,000	33,375,526	58,155,526	15,206,243	4,796,893	20,003,136
2029	25,850,000	32,061,447	57,911,447	12,114,099	4,128,150	16,242,249
2030	26,995,000	30,657,731	57,652,731	12,553,545	3,594,772	16,148,317
2031	28,270,000	29,114,622	57,384,622	13,020,671	2,969,885	15,990,556
2032	29,605,000	27,488,762	57,093,762	13,566,295	2,319,307	15,885,602
2033	31,015,000	25,779,580	56,794,580	14,146,973	1,624,932	15,771,905
2034	32,490,000	23,989,844	56,479,844	10,797,733	890,756	11,688,489
2035	34,045,000	22,111,927	56,156,927	7,776,070	401,567	8,177,637
2036	35,670,000	20,145,338	55,815,338	1,260,659	169,315	1,429,974
2037	37,380,000	18,085,809	55,465,809	1,312,103	117,860	1,429,963
2038	39,165,000	15,925,580	55,090,580	1,122,364	69,170	1,191,534
2039	41,005,000	13,654,921	54,659,921	1,168,081	23,362	1,191,443
2040	42,875,000	11,274,966	54,149,966			
2041	44,810,000	8,795,273	53,605,273			
2042	46,765,000	6,285,776	53,050,776			
2043	29,685,000	4,380,044	34,065,044			
2044	31,035,000	3,028,900	34,063,900			
2045	14,810,000	1,967,500	16,777,500			
2046	15,575,000	1,207,875	16,782,875			
2047	16,370,000	409,250	16,779,250			
	854,140,000	641,890,977	1,496,030,977	219,541,309	84,956,251	304,497,560

90 Debt Service Funds-At a Glance

Highlights from the Metropolitan Government of Nashville and Davidson County's Debt Management Policy

The purpose of the Policy is to provide written guidance about the amount and type of debt issued, the issuance process, and the management of the debt portfolio for the Metropolitan Government.

Introduction

The Metropolitan Government of Nashville and Davidson County (the "Metropolitan Government"): (1) identifies policy goals and demonstrates a commitment to long-term financial planning; including a multi-year capital plan; (2) improves the quality of decisions; and (3) provides justification for the structure of debt issuance.

Goals & Objectives

Debt policies and procedures are tools that ensure that financial resources are adequate to meet the Metropolitan Government's long-term financing objectives. In addition, the Policy helps to ensure that financings undertaken by the Metropolitan Government satisfy certain clear objective standards which allow the Metropolitan Government to protect its financial resources in order to meet its short-term financing and long-term capital needs. The adoption of clear and comprehensive financial policies enhances the internal financial management of the Metropolitan Government.

Purpose and Use of Issuance Process

Debt is to be issued pursuant to the authority of and in full compliance with provisions, restrictions and limitations of the Charter and the Constitution and laws of the State of Tennessee (including without limitation Title 9, Chapter 21, Tennessee Code Annotated, and Title 7, Chapter 34, Tennessee Code Annotated (together, the "State Debt Statutes"), pursuant to resolutions adopted by the Metropolitan Government.

Debt Capacity Assessment

During development and consideration of a capital-spending plan, impact of the resulting debt and debt service will be evaluated to determine appropriate level of debt to the overall financial position of the Metropolitan Government. To accomplish this evaluation, a calculation of the various metrics, will be performed on existing debt as compared to projected debt resulting from capital-spending plan. An analysis of historical financial trends and current and projected economic factors will be considered in evaluation of the appropriate level of debt to be approved in a capital-spending plan.

Federal Tax Status

1. **Tax-Exempt Debt** – The Metropolitan Government will use its best efforts to maximize the amount of debt sold under this policy using tax-exempt interest financing.
2. **Taxable Debt** – The Metropolitan Government will sell taxable debt when necessary to finance

projects not eligible to be financed with tax-exempt debt.

Legal Limitation on the Use of Debt

1. No Debt obligation, except as shall be repaid with the fiscal year of issuance, shall be sold to fund the current operation of any Metropolitan Government service or program.
2. The proceeds of any debt obligation shall be expended only for the purpose for which it was authorized.
3. Debt may only be issued pursuant to an authorized resolution of the Metropolitan Council.

Types of Debt

A. Bonds

Security- Pursuant to State Debt Statutes, the Metropolitan Government may issue general obligation bonds, which are direct general obligations of the Metropolitan Government payable as to both principal and interest from any funds or monies of the Metropolitan Government from whatever source derived. The full faith and credit of the Metropolitan Government is pledged to the payment of principal of and interest on all general obligations bonds. General obligation bonds may be additionally secured by a pledge of the revenues of one or more revenue-producing systems or facilities. Pursuant to State Debt Statutes, the Metropolitan Government may issue revenue bonds, which are limited obligations of the Metropolitan Government, payable solely from the revenues of one or more revenue-producing systems or facilities.

B. Short Term Debt

Pending the issuance of bonds to provide long-term financing, the Metropolitan Government may issue short term debt. Such debt shall be authorized by resolution of the Metropolitan Government.

These notes may be structured as:

- Bond Anticipation Notes
- Tax and Revenue Anticipation Notes
- Capital Outlay Notes

Debt Management Structure

The Metropolitan Government shall establish all terms and conditions relating to the issuance of bonds and will invest all bond proceeds pursuant to the terms of the Metropolitan Government's Investment Policy.

- A. Term.** The term of any debt (including refunding debt) used to purchase or otherwise obtain or construct any equipment, goods, or structures shall have a reasonably anticipated

90 Debt Service Funds-At a Glance

lifetime of use equal to or less than the average useful life of the project.

- B. Debt Service Structure.** Debt issuance shall be planned to achieve substantially level debt service over a twenty-year period (commencing immediately following the third year after issuance) unless otherwise specified in the authorizing resolution of the Metropolitan Council.
- C. Call Provisions.** When issuing new debt, the structure may include a call provision that occurs no later than ten years from the date of delivery of the bonds. Call features should be structured to provide the maximum flexibility relative to cost.
- D. Original Issuance Discount/Premium.** Bonds sold with original issuance discount/premium are permitted with the approval of the Metropolitan Council.

Balloon Debt

A. Introduction

The Metropolitan Government may, from time to time, consider the issuance of bonds that would now constitute "balloon indebtedness," as defined by Tennessee Code Annotated Section 9-21-134. Generally speaking, balloon indebtedness reduces the Metropolitan Government's future capacity to issue debt and its financial flexibility to meet future needs. The Metropolitan Government's preference is for the issuance of indebtedness that does not constitute balloon indebtedness, all in a manner consistent with this Debt Management Policy, and in the best interest of the Metropolitan Government and its taxpayers or ratepayers (as applicable).

B. Policy

It is the policy of the Metropolitan Government that the Metropolitan Government will strive to issue all-future debt to provide funding for capital projects ("improvement bonds") with a principal amortization structure that does not constitute balloon indebtedness.

It is further the policy of the Metropolitan Government to maintain at all times a plan for managing any outstanding balloon indebtedness to mitigate its effects on the Metropolitan Government's future debt capacity and financial flexibility, taking into consideration the financial resources of the Metropolitan Government.

C. Issuance of Balloon Indebtedness

Unless the Metropolitan Council concludes, through the procedures outlined in (2) below, that a balloon indebtedness structure is in the public interest, all future improvement bonds will be structured so that principal amortizes in a manner that results in level or declining debt service, commencing no later than the fourth year following issuance.

D. Debt Affordability

The Metropolitan Government will manage any outstanding balloon indebtedness in a manner that mitigates its effects on the Metropolitan Government's future revenues by considering the following options, within its financial resources:

- Restructuring debt with accelerated amortization
- Early repayment of debt
- Delaying of capital projects, or funding capital projects with revenues, until capacity is available to issue debt structured with level or declining payments
- Such other actions available within its financial capacity to manage debt.

Refinancing Outstanding Debt

The Department of Finance and the Metropolitan Government's Financial Advisor shall have the responsibility to analyze outstanding bond issues for refunding opportunities. The Financial Advisor will regularly conduct an analysis of all refunding candidates to identify potential refunding candidates from the outstanding bond maturities. The Metropolitan Government will consider the following issues when analyzing possible refunding opportunities:

- Debt Service Savings
- Term of Refunding Bonds
- Bond Restructuring
- Escrow Structuring

Methods of Sale

Pursuant to State Debt Statutes, new money general obligation bonds must be sold at competitive sale. State Debt Statutes permit the Metropolitan Government to determine the method of sale for refunding bonds and revenue bonds. Following each sale of bonds, the Finance Department with the assistance of the Financial Advisor shall provide a report to the Metropolitan Council on the results of the sale.

- Competitive Sale
- Negotiated Sale
- Private Placement

Selection of Underwriting Team (Negotiated Transaction)

If there is an underwriter, the Metropolitan Government shall require the underwriter to clearly identify itself in writing, whether in a response to a request for proposals or in promotional materials provided to the Metropolitan Government or otherwise, as an underwriter and not as a financial advisor from the earliest stages of its relationship with the Metropolitan Government with respect to that issue. The underwriter must clarify its primary role as a purchaser of securities in an arm's-length commercial transaction and that it has financial and other interests that differ from those of the Metropolitan Government. The underwriter in a publicly offered, negotiated sale shall be required to provide

90 Debt Service Funds-At a Glance

pricing information both as to interest rates and to takedown per maturity to the Metropolitan Government or its designated official in advance of the pricing of the debt.

Credit Quality

The Metropolitan Government's debt management activities will be conducted to receive the highest credit ratings possible, consistent with Metropolitan Government's financing objectives.

Credit Enhancements

The Metropolitan Government will consider the use of credit enhancements on a case-by-case basis, evaluating the economic benefit versus the cost. Only when clearly demonstrable savings can be shown shall an enhancement- be utilized. The Metropolitan Government may consider each of the following enhancements as alternatives by evaluating the cost and benefit of such enhancements:

- Bond Insurance
- Letters of Credit
- Liquidity
- Use of Structured Products

Risk Assessment

The Finance Department will evaluate each transaction to assess the types and amounts of risk associated with that transaction, considering all available means to mitigate those risks. The Finance Department will evaluate all proposed transactions for consistency with the objectives and constraints defined in this Policy.

Transparency

The Metropolitan Government shall comply with the Tennessee Open Meetings Act, providing adequate public notice of meetings and specifying on the agenda when matters related to debt issuance will be considered. Additionally, all costs (including interest, issuance, continuing, and one-time) shall be disclosed to the citizens in a timely manner (see also Federal Regulatory Compliance and Continuing Disclosure)

Professional Services

The Metropolitan Government requires all professionals engaged to assist in the process of issuing debt to clearly disclose all compensation and consideration received related to services provided in the debt issuance process by the Metropolitan Government. This includes "soft" costs or compensations in lieu of direct payments.

Potential Conflicts of Interest

Professionals involved in a debt transaction hired or compensated by the Metropolitan Government shall be required to disclose to the Metropolitan Government

existing client and business relationships between and among the professionals to a transaction (including but not limited to financial advisor, swap advisor, bond counsel, swap counsel, trustee, paying agent, underwriter, counterparty, and remarketing agent), as well as conduit issuers, sponsoring organizations and program administrators and other issuers whom they may serve. This disclosure shall include that information reasonably sufficient to allow the Metropolitan Government to appreciate the significance of the relationships.

Debt Administration

A. Planning for Sale

Prior to submitting a bond resolution to the Metropolitan Council for approval, the Finance Department, with the assistance of the Financial Advisor, will present to the Metropolitan Council the purpose of the financing, the estimated amount of financing, the proposed structure of the financing, the proposed method of sale for the financing, members of the proposed financing team, and an estimate of all the costs associated with the financing.

In the case of a proposed refunding, proposed use of credit enhancement, or proposed use of variable rate debt, the Finance Department will present the rationale for using the proposed debt structure, an estimate of the expected savings associated with the transaction and a discussion of the potential risks associated with the proposed structure.

The Finance Department, bond counsel, financial advisor, along with other members of the financing team will prepare a Preliminary Official Statement describing the transaction and the security for the debt that is fully compliant with all legal requirements.

B. Post Sale

The Finance Department will present a post-sale report to the members of the Metropolitan Council describing the transaction and setting forth all the costs associated with the transaction.

The financial advisor will provide a closing memorandum with written instructions on transfer and flow of funds.

The Finance Department will establish guidelines and procedures for tracking the flow of all bond proceeds, as defined by the Internal Revenue Code, over the life of bonds reporting to the IRS all arbitrage earnings associated with the financing and any tax liability that may be owed.

The Finance Department, bond counsel, financial advisor, along with other members of the financing team will prepare an Official Statement describing the transaction and the security for the debt that is fully compliant with all legal requirements.

90 Debt Service Funds-At a Glance

Federal Regulatory Compliance and Continuing Disclosure

A. Federal Tax Compliance

The Metropolitan Government has adopted Federal Tax Compliance Policies and Procedures regarding the administration of all of its tax-exempt and tax-advantaged debt. The Finance Department will comply with these Federal Tax Compliance Policies and Procedures, as they may be amended from time to time.

B. Investment of Proceeds

Any proceeds or other funds available will be deposited with the Metropolitan Treasurer's Office. The proceeds must be invested pursuant to the Metropolitan Government's investment policy and applicable provisions of State law.

C. Disclosure

In complying with U.S. Securities and Exchange Commission Rule 15c2-12, the Metropolitan Government will timely provide to EMMA certain financial information and operating data each year and will provide notice of certain enumerated events with respect to the bonds, if material.

D. Generally Accepted Accounting Principles (GAAP)

The Metropolitan Government will prepare its financial reports in accordance with the standard accounting practices adopted by the Governmental Accounting Standards Board and with the accounting policies established by the Finance Department when applicable.