#### **GENERAL OBLIGATION DEBT**

#### Introduction

The General Obligation Debt Service Fund provides for the payment of principal and interest on the City's outstanding general obligation bonds, certificates of obligation and equipment acquisition notes as well as interest on outstanding general obligation commercial paper. Debt financing is used to pay for large capital projects. By using debt, the project costs are allocated over the life of the asset. Capital projects may include improvements to and/or construction of the City's street system; parks and recreational facilities; libraries; police and fire protection facilities; flood protection and storm drainage system. The Financial Management Performance Criteria (FMPC) addresses debt management and other requirements adopted by the City Council. The FMPC provides additional guidance on the issuance of debt including restricting the length of maturities and outlines the amount and purpose for which bonded debt may be issued.

The primary source of revenue for the debt service fund is the ad valorem property tax. The proposed ad valorem tax rate of 78.04 cents per \$100 assessed value is split into two rates. Approximately 28 percent (22.24 cents) of the tax revenue is used to pay principal and interest on the City's outstanding general obligation debt as well as interest on outstanding general obligation commercial paper. The remaining 72 percent (55.80 cents) is used to pay for operating and maintenance costs incurred in the General Fund.

Due to the level principal structure of most bond sales, the principal and interest payments of the existing general obligation debt decline annually. This repayment schedule creates more growth in the capacity to issue new debt within the existing debt service tax rate than a level debt service schedule.

#### **Credit Rating**

The City of Dallas' long-term general obligation debt holds AA- (negative outlook)/A1 (negative outlook)/AA (negative outlook) ratings from S&P Global Ratings, Moody's Investors Service and Fitch Ratings, respectively, as of June 27, 2017.

Credit Rating Service	General Obligation Debt	Commercial Paper Notes
Moody's Investors Service	A1 (negative outlook)	P-1
Standard & Poor's	AA- (negative outlook)	A-1+
Fitch Ratings Service	AA (negative outlook)	N/A

#### Legal Debt Margin

The Dallas City Charter (Chapter XXI, Section 3) limits the maximum bonded indebtedness, payable from taxation, to 10 percent of assessed property value. However, the City's Financial Management Performance Criteria (FMPC) limits the net general obligation debt to 4 percent of the true market valuation of the taxable property of Dallas. Existing debt plus new debt to be issued will constitute 1.5 percent of the assessed value of \$118.31 billion and 1.2 percent of the market value of taxable property of \$154.09 billion. Thus, the City will continue to comply with both requirements as of 9/30/2018.

Assessed Value	\$118,314,677,595
10% Legal Debt Margin	\$11,831,467,760
Projected General Obligation (GO) Debt 9/30/18	\$1,793,087,437
GO Debt as a percent of Assessed Property Value	1.5%
Market Value of Taxable Property	\$154,093,483,070
4% FMPC Limit	\$6,163,739,323
Projected GO Debt 9/30/18	\$1,793,087,437
GO Debt as a percent of Market Value	1.2%

#### FY 2017-18 Debt Service Budget

The FY 2017-18 budget includes principal and interest payments of \$229.46 million on outstanding general obligation debt. Principal and interest expense for existing debt in FY 2017-18 are \$139.51 million and \$89.95 million, respectively. In FY 2010-11, a commercial paper program was implemented to interim finance voter-approved capital improvement projects. The fees associated with the commercial paper program are included in the General Fund budget. The interest on outstanding commercial paper is paid by the Debt Service Fund. The City anticipates issuing General Obligation bonds during FY 2017-18 (\$300 million) and FY 2018-19 (\$107 million) to close out the 2006 and 2012 bond programs. Projects will continue to be awarded using commercial paper and will be refunded later.

#### **Selected Financial Management Performance Criteria - Debt Management**

These key criteria, established to ensure sound management of the City's financial resources, are listed below to detail the effects of the issuance of new debt.

Criteria	09/30/16 Actual	09/30/17 Estimate	09/30/18 Proposed
Total direct plus overlapping debt not to exceed 8% of the market value of taxable property	4.7 % In compliance	3.8 % In compliance	4.0 % In compliance
Weighted average general obligation bond maturities (exclusive of pension obligation bonds) not to exceed 10 years	6.3 years In compliance	7.0 years In compliance	6.6 years In compliance
Certificate of obligation debt not to exceed 15% of total authorized and issued general obligation debt	1.4 % In compliance	0.8 % In compliance	0.5 % In compliance
Per capita general obligation debt not to exceed 10% of latest authoritative computation of per capita annual income	5.1 % In compliance	4.4 % In compliance	5.1 % In compliance

### Statement of General Obligation Bonded Indebtedness

#### As of 09/30/2017

Issue Name	Issue Date	Original Issue Amount	True Interest Cost	Outstanding Principal
Taxable General Obligation Pension Bonds (Current Interest Bonds), Series 2005A	02/16/2005	186.575.000	5.0%	117,845,000
Taxable General Obligation Pension Bonds (Capital Appreciation Bonds), Series 2005B	02/16/2005	137,772,609	5.4%	63,645,997
General Obligation Refunding and Improvement Bonds, Series 2007A	12/20/2007	363,240,000	4.1%	30,675,000
General Obligation Bonds, Series 2008	11/25/2008	209,815,000	4.7%	11,045,000
General Obligation Refunding and Improvement Bonds, Series 2010A	03/30/2010	196,615,000	2.8%	134,805,000
General Obligation Bonds (Build America Bonds), Taxable Series 2010B	03/30/2010	85,380,000	4.7%	85,380,000
General Obligation Refunding Bonds, Series 2010C	11/18/2010	142,035,000	2.6%	75,820,000
General Obligation Refunding Bonds, Taxable Series 2010	11/18/2010	77,670,000	4.6%	76,135,000
General Obligation Refunding Bonds, Series 2012	10/31/2012	214,495,000	2.1%	170,755,000
General Obligation Refunding and Improvement Bonds, Series 2013A	08/06/2013	194,470,000	3.5%	153,520,000
General Obligation Refunding Bonds, Taxable Series 2013B	08/06/2013	42,615,000	2.2%	25,810,000
General Obligation Refunding and Improvement Bonds, Series 2014	12/22/2014	529,365,000	2.7%	489,815,000
General Obligation Refunding and Improvement Bonds, Series 2015	12/10/2015	195,075,000	3.0%	184,235,000
Total General Obligation Bonds	5	2,705,897,609	_	\$1,619,485,997
Combination Tax and Revenue Certificates of Obligation, Series 2008A	11/25/2008	5,400,000	3.8%	600,000
Combination Tax and Revenue Certificates of Obligation, Series 2010	03/30/2010	21,575,000	1.2%	430,000
Combination Tax and Revenue Certificates of Obligation, Series 2012	06/26/2012	21,930,000	1.6%	12,080,000
Total Certificates of Obligation		54,405,000	-	\$13,110,000
Total General Obligation Debt (excluding Commercial Paper)		\$2,760,302,609	-	\$1,632,595,997
General Obligation Commercial Paper Notes Projected Outstanding as of 9/30/17		9,650,000		9,650,000
Total General Obligation Debt (including Commercial Paper)		\$2,769,952,609	-	\$1,642,245,997

Note: Outstanding commercial paper above does not include additional commitments made against the City's commercial paper program to award projects prior to issuing commercial paper.

### General Obligation Debt Service Requirements As of 09/30/2017

Fiscal		<b>Outstanding Debt</b>	
Year	Principal	Interest	Total
2018	139,508,560	89,950,236	229,458,796
2019	137,475,322	85,238,245	222,713,567
2020	127,271,699	80,434,194	207,705,893
2021	149,150,000	54,657,787	203,807,787
2022	149,625,000	47,205,517	196,830,517
2023	150,545,000	39,817,156	190,362,156
2024	144,830,000	32,613,813	177,443,813
2025	106,071,834	60,812,184	166,884,018
2026	96,960,114	57,527,530	154,487,644
2027	85,642,694	54,801,447	140,444,141
2028	64,004,062	52,925,636	116,929,698
2029	53,258,642	51,864,969	105,123,611
2030	53,560,730	51,105,369	104,666,099
2031	45,055,840	50,602,192	95,658,032
2032	45,053,960	50,512,854	95,566,814
2033	34,822,046	50,792,228	85,614,274
2034	34,824,198	51,320,916	86,145,114
2035	14,936,297	45,590,144	60,526,441
	\$1,632,595,997	\$1,007,772,417	\$2,640,368,414

### **General Obligation Debt**

### **Statement of Revenues and Expenditures**

	FY 2015-16 Actual	FY 2016-17 Budget	FY 2016-17 Estimate	FY 2017-18 Adopted	FY 2018-19 Planned
Beginning Cash Balance	\$ 13,799,213	\$ 10,776,840	\$ 11,079,395	\$ 13,769,804	\$ 24,596,164
Revenues					
Ad Valorem Taxes	230,780,133	242,487,406	243,021,373	260,036,328	278,577,564
DebtService Fund InterestEarnings	232,619	101,408	102,526	102,526	102,526
Self Supporting Departmental Transfers	3,171,026	3,113,951	3,113,951	-	-
POB Transfer	15,101,132	15,211,514	16,120,995	16,609,518	17,111,067
Premium/Discount on Sale of Bonds	2,880,000	-	-	-	-
"Build America Bonds" Federal Subsidy	1,400,986	1,372,426	1,400,986	1,400,986	1,358,322
Total	\$ 253,565,896	\$262,286,705	\$ 263,759,832	\$ 278,149,358	\$ 297,149,479
Total Available Resources	\$ 267,365,109	\$ 273,063,545	\$ 274,839,227	\$ 291,919,162	\$ 321,745,643
Expenses					
Principal and Interest on Existing Debt	218,198,151	238,369,481	237,991,408	229,458,796	222,713,568
Principal-Commercial Paper	25,000,000	10,000,000	10,000,000	10,000,000	10,000,000
TIF Increment Payment	10,710,577	13,495,664	13,078,015	16,614,202	19,521,687
New Debt\$300M issuance planned FY18	-	-	-	11,250,000	31,243,500
New Debt\$105M issuance planned FY19	-				3,937,500
Total	\$253,908,728	\$261,865,145	\$261,069,423	\$267,322,998	\$287,416,255
Change in Encumbrances and other Balance					
Sheet Accounts	(2,376,986)	-	-	-	-
Ending Cash Balance	\$ 11,079,395	\$ 11,198,400	\$ 13,769,804	\$ 24,596,164	\$ 34,329,388

#### Master Lease Purchase Program

The Master Lease Purchase Program (MLPP) is a lease revenue finance program used by the City to finance capital equipment and technology items. The City has used this program since FY 2011-12. The financing vehicle for the MLPP is a tax-exempt revenue commercial paper program established pursuant to Public Property Finance Act, Texas Local Gov't. Code Ann. §271.001 et seq.

Under the program, the City borrows money to pay for equipment or other eligible equipment type projects by issuing tax-exempt revenue, known as "Schedule A," to the Master Equipment Lease/Purchase Agreement. The financing agent and the City enter a lease pursuant to which the lessor acquires the equipment or other project and leases it to the City, who is required to make lease payments to the lessor to repay the principal and interest on the Lease. When the lease is fully paid, possession of the equipment or other financed project is returned to the City. The City may pay off the lease at any time without penalty.

The City entered a Master Equipment Lease/Purchase Agreement with Banc of America Public Capital Corp. December 1, 2011, which expired in FY 2015-16. A second, five-year agreement was entered May 24, 2016. As of June 2017, the City has entered 21 Schedule A agreements totaling \$106.1 million.

#### What is Financed?

The MLPP may be used to finance the City's acquisition of heavy equipment, computer hardware/software, and other personal property with a minimum useful life of three years. Lease drawdowns are used to pay invoices or provide up-front funding for systems subject to multi-year implementation schedules. The City has drawn down lease funding in three term types depending on the useful life of the purchased equipment. Technology items such as computer hardware and software is leased over a three-year term; vehicles and heavy equipment are leased over a five-year term; and fire apparatus are leased over a ten-year term.

#### **Lease Payments**

The interest rate for each lease is set at the time the funds are drawn, and is fixed for the term of the lease. The interest rate is determined through a calculation based on the "Swap Index" published by the Intercontinental Exchange, Inc. As of June 2017, the average interest rates for each lease term are: 3-year – 1.5039%; 5-year – 1.5782%; and 10-year – 2.1236%. Level lease payments are made biannually. The estimated total payments for FY 2017-18 is \$28.1 million, of which \$1.6 million is interest. The table that follows displays detail for completed draws of \$19.3 million for FY 2017-18 and \$13.1 million for FY 2018-19.

		FY 2017-18					
Lease Schedule	Date of Issue	Principal	Interest	Total	Principal	Interest	Total
Schedule A No. 1	11/07/2012	\$0	\$0	\$0	\$0	\$0	\$0
General Fleet Citywide Technology		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Schedule A No. 2	05/10/2013	\$453,720	\$51,325	\$505,046	\$463,078	\$41,967	\$505,046
Fire Apparatus		\$453,720	\$51,325	\$505,046	\$463,078	\$41,967	\$505,046
Schedule A No. 3	05/10/2013	\$494,255	\$3,188		\$0	\$0	\$0
Ambulance Replacement		\$250,764	\$1,617	\$252,382	\$0	\$0	\$0
General Fleet & Equipment Sanitation Fleet & Equipment		\$58,959 \$184,531	\$380 \$1,190	\$59,340 \$185,722	\$0 \$0	\$0 \$0	\$0 \$0
Schedule A No. 4	04/23/2014	\$945,490	\$19,111	\$964,601	\$478,454	\$3,847	\$482,301
General Fleet & Equipment		\$750,804	\$15,176	\$765,980	\$379,935	\$3,055	\$382,990
Sanitation Fleet & Equipment		\$194,686	\$3,935	\$198,621	\$98,519	\$792	\$99,311
Schedule A No. 5	04/23/2014	\$0	\$0 -	\$ <i>0</i>	\$0	\$0 <b>•</b>	\$ <i>0</i>
Citywide Technology		\$0	\$0	\$0	\$0	\$0	\$0
Schedule A No. 6 (Taxable) Citywide Technology	04/23/2014	\$0 \$0	\$0 <sup>\$</sup> \$0	<i>\$0</i> \$0	<i>\$0</i> \$0	\$0 <b>"</b> \$0	<i>\$0</i> \$0
Schedule A No. 7	12/12/2014	\$1,863,211	\$56.837	\$1,920,048	\$1.895.490	\$24,558	\$1,920,048
General Fleet & Equipment	12/12/2014	\$1,003,277	\$30,837 \$31,850	\$1,920,048 \$1,075,943	\$1,062,181	\$2 <i>4,558</i> \$13.762	\$1,920,048 \$1,075,943
Sanitation Fleet & Equipment		\$819,117	\$31,850 \$24,987	\$1,075,945 \$844,104	\$833,308	\$10,796	\$844,104
Schedule A No. 8	12/12/2014	\$0	\$0	\$0	\$0	\$0 <b>*</b>	\$ <i>0</i>
Citywide Technology	12/12/2014	\$0	\$0 \$0	\$0	\$0	\$0 \$0	\$0
Schedule A No. 9	02/19/2015	\$1,110,027	\$201,846	\$1,311,873	\$1,135,906	\$175,967	\$1,311,873
Fire Apparatus	02/19/2013	\$1,110,027	\$201,846 \$201,846	\$1,311,873 \$1,311,873	\$1,135,906	\$175,967	\$1,311,873 \$1,311,873
Schedule A No. 10	02/09/2015	\$1,141,205	\$44,268	\$1,185,473	\$1,160,676	\$24,797	\$1,185,473
Ambulance Replacement	02/03/2013	\$1,141,205	\$44,268	\$1,185,473	\$1,160,676	\$24,797	\$1,185,473
Schedule A No. 11	08/18/2015	\$2,600,787	\$29,227 -	\$2,630,014	\$0	\$0 <b>"</b>	\$0
Citywide Technology	00/10/2010	\$2,600,787	\$29,227	\$2,630,014	\$0	\$0	\$0
Schedule A No. 12	12/16/2015	\$1,071,081	\$53,786	\$1,124,866	\$1.090.339	\$34,528	\$1,124,866
General Fleet & Equipment		\$286,650	\$14,395	\$301,045	\$291,804	\$9,240	\$301,045
Sanitation Fleet & Equipment		\$784,431	\$39,391	\$823,822	\$798,535	\$25,287	\$823,822
Schedule A No. 13	12/16/2015	\$2,062,971	\$24,191	\$2,087,162	\$0	\$0 <b>*</b>	\$O
Citywide Technology		\$1,717,111	\$20,136	\$1,737,246	\$0	\$0	\$0
DPD Technology		\$345,861	\$4,056	\$349,916	\$0	\$0	\$0
Schedule A No. 14	05/24/2016	\$966,586	\$14,060		\$487,498	\$2,825	\$490,323
Citywide Technology DPD Technology		\$916,609 \$49,978	\$13,333 \$727	\$929,942 \$50,705	\$462,292 \$25,206	\$2,679 \$146	\$464,971 \$25,352
Schedule A No. 15	05/24/2016	\$994.889	\$43,189 -	¢1 020 070	¢1 007 095	\$30,094	\$1,038,078
General Fleet & Equipment	05/24/2016	\$994,889 \$575,575	\$43,789 \$24,986	\$ <i>1,038,078</i> \$600,561	\$ <i>1,007,985</i> \$583,151	\$30,094 \$17,410	\$600,561
Sanitation Fleet & Equipment		\$419,314	\$18,203	\$437,517	\$424,834	\$12,684	\$437,517
Schedule A No. 16	05/24/2016	\$459,525	\$70,557	\$530,081	\$467,551	\$62,531	\$530,081
Fire Apparatus	00/24/2010	\$459,525	\$70,557	\$530,081	\$467,551	\$62,531	\$530,081
Schedule A No. 17	03/30/2017	\$866,132	\$33,323	\$899,455	\$880,791	\$18,664	\$899,455
Citywide Technology		\$235,097	\$9,045	\$244,142	\$239,076	\$5,066	\$244,142
DPD Technology		\$631,035.42	\$24,277.96	\$655,313.38	\$641,715.07	\$13,598.31	\$655,313.38
Schedule A No. 18	03/30/2017	\$98,709	\$24,206		\$101,078	\$21,838	\$122,915
Fire Apparatus		\$98,709	\$24,206	\$122,915	\$101,078	\$21,838	\$122,915
Schedule A No. 19	03/30/2017	\$2,511,989	\$211,588	\$2,723,577	\$2,560,253	\$163,324	\$2,723,577
General Fleet & Equipment		\$1,295,554	\$109,126	\$1,404,680	\$1,320,446	\$84,234	\$1,404,680
Sanitation Fleet & Equipment		\$1,216,435	\$102,462	\$1,318,897	\$1,239,807	\$79,090	\$1,318,897
Schedule A No. 20	05/19/2017	\$281,284	\$10,267	\$291,551	\$285,803	\$5,748	\$291,551
Citywide Technology		\$281,284	\$10,267	\$291,551	\$285,803	\$5,748	\$291,551
Schedule A No. 21	05/19/2017	\$479,551	\$37,414	\$516,965	\$488,104	\$28,861	\$516,965
Ambulance Replacement		\$479,551	\$37,414	\$516,965	\$488,104	\$28,861	\$516,965
Total Completed Draws	5	\$18,401,412	\$928,383	\$19,329,795	\$12,503,004	\$639,547	\$13,142,552
			414				

#### **CONVENTION CENTER**

#### Introduction

The Convention Center Debt Service Fund provides for the payment of principal and interest on the Convention Center's outstanding revenue bonded indebtedness. In February 2009, the Convention Center Complex issued \$324.94 million in refunding and improvement revenue bonds. This issue included the refunding of all the Convention Center's \$261.36 million outstanding debt and \$63.58 million of new money. Of the new money issuance, \$60.80 million is being used for planned improvements to the Dallas Convention Center.

The 7% Hotel Occupancy Tax, non-operating revenue of the Convention Center Complex, and interest earned on cash balances in the bond reserve fund transferred to debt service funds are pledged for repayment of the debt. Operating revenues from the Convention Center Complex are transferred to the debt service fund to meet annual principal and interest payments. Additionally, the City has covenanted to provide for the payment of operating and maintenance expenses of the Convention Center Complex, should a shortfall in Convention Center revenues occur.

#### **Credit Rating**

The Convention Center Complex currently holds A1/A ratings from Moody's Investors Service and Standard & Poor's, respectively.

#### FY 2017-18 Debt Service Budget

The FY 2017-18 budget includes payments on existing debt of \$8.25 million in principal payments and \$15.23 million in interest payments.

#### Statement of Revenue Bonded Indebtedness, as of 09/30/17

Series Number	Issue Name	Date of Issue	Original Issue Amount	Term Years	Coupon Rate(s)	True Interest Cost	Outstanding Principal
623	Civic Center Convention Complex, Revenue Refunding Bonds	02/01/2009	\$324,940,000	30	3.0%- 5.25%	5.2%	\$ 296,390,000
Total Convention Center Outstanding Debt							\$ 296,390,000

### **Convention Center Debt Service Requirements**

#### As of 09/30/2017

Fiscal	C	outstanding Deb	t
Year	Principal	Interest	Total
2018	8,250,000	15,232,163	23,482,163
2019	8,665,000	14,819,663	23,484,663
2020	9,095,000	14,386,413	23,481,413
2021	9,550,000	13,931,663	23,481,663
2022	10,030,000	13,454,163	23,484,163
2023	10,530,000	12,952,663	23,482,663
2024	11,055,000	12,426,163	23,481,163
2025	11,610,000	11,873,413	23,483,413
2026	12,190,000	11,292,913	23,482,913
2027	12,800,000	10,683,413	23,483,413
2028	13,440,000	10,043,413	23,483,413
2029	14,110,000	9,371,413	23,481,413
2030	14,815,000	8,665,913	23,480,913
2031	15,595,000	7,888,125	23,483,125
2032	16,415,000	7,069,388	23,484,388
2033	17,275,000	6,207,600	23,482,600
2034	18,180,000	5,300,663	23,480,663
2035	19,135,000	4,346,213	23,481,213
2036	20,140,000	3,341,625	23,481,625
2037	21,200,000	2,284,275	23,484,275
2038	22,310,000	1,171,275	23,481,275
	\$296,390,000	\$196,742,533	\$493,132,533

### Statement of Debt Service Revenues and Expenditures

#### **Convention Center**

	-	F	Y 2015-16 Actual		FY 2016-17 Budget		FY 2016-17 Estimate		FY 2017-18 Adopted		FY 2018-19 Planned
Beginning Cash Balance		\$	3,901,062	\$	3,934,401	\$	3,933,970	\$	3,983,035	\$	4,023,535
Revenues											
Transfers			21,583,800		22,524,413		22,524,413		23,482,163		23,484,663
Interest/Transfers/Other			55,521		49,065		49,065		40,500		40,500
	Total	\$	21,639,321	\$	22,573,478	\$	22,573,478	\$	23,522,663	\$	23,525,163
Total Available Resources		\$	25,540,383	\$	26,507,879	\$	26,507,448	\$	27,505,698	\$	27,548,698
Expenses											
Principal Payments			5,740,000		6,945,000		6,945,000		8,250,000		8,665,000
Interest Payments			15,866,413		15,579,413		15,579,413		15,232,163		14,819,663
	Total	\$	21,606,413	\$	22,524,413	\$	22,524,413	\$	23,482,163	\$	23,484,663
Ending Cash Balance		\$	3,933,970	\$	3,983,466	\$	3,983,035	\$	4,023,535	\$	4,064,035



#### WATER UTILITIES

#### Introduction

The debt service component of the Operating Budget for Dallas Water Utilities (DWU) provides for payment of principal and interest on DWU's indebtedness. The budget for these payments is prescribed by the following standards:

- The Dallas City Charter provides in Chapter XI, Section 14 that all water and wastewater costs (including debt requirements) shall be paid for from customer service revenues.
- Revenue bond ordinances provide that customer service revenues solely secure water and wastewater bonds.
- Financial criteria for DWU provide for financing of capital improvements (effectively defined as capital projects with useful lives of 20 years or longer) either from debt or directly from revenues, to maintain system equity levels.

In addition to revenue bonds, debt sources include tax-exempt commercial paper notes (CP), which are utilized for interim financing of capital construction projects. On at least a biannual basis, commercial paper is refinanced and retired with revenue bonds. This process lowers overall interest costs and provides greater financing flexibility. Debt sources also include certain contractual obligations whereby DWU reimburses other agencies for debt incurred to construct joint-use facilities. Under these contractual agreements DWU makes payments in proportion to its allocated share of the joint use facilities.

#### **Credit Ratings**

The City of Dallas Waterworks and Sewer System Revenue Bonds are judged to be of high quality by all standards. These credit ratings reflect the sound management of DWU financial resources and allow issuance of bonds with relatively low interest costs. The City of Dallas Waterworks and Sewer System Commercial Paper Notes hold similarly high credit ratings. Current ratings, as of June 2017, of the City's debt instruments are shown in the table below.

Credit Rating Service	Revenue Bonds	Commercial Paper Notes
Moody's Investors Service	Aa1	P-1
Standard & Poor's	AAA	A-1+
Fitch Ratings Service	AA+	N/A

#### **Revenue Bond and Commercial Paper Note Coverage**

The following are established standards for DWU net revenue in relation to future debt service payments.

- Revenue bond ordinances require net revenues equal to at least 1.25 times bond principal and interest requirements of the future year when those requirements are highest.
- DWU financial criteria state that net revenues should be 1.5 times maximum annual bond requirements at the end of each fiscal year.
- Commercial Paper coverage requirements state that net revenues should be 1.10 times the maximum annual principal and interest payments required on all debt outstanding in the future year when those requirements are highest.

The latest available audited financial statements coverage at September 30, 2016 is summarized in the table below.

#### **Debt Service Coverage Requirements**

#### As of FY 2015-16 Year-End Close

#### (000 omitted)

Coverage Net Revenue (CNR) = \$313,805

Authority	Ratio	Requirement	Denominator \$	Actual
Bond Ordinance	CNR/Max Year	1.25	180,685	1.74
DWU Criteria	CNR/Max Year	1.50	180,685	1.74
DWU Criteria	CNR/Max CP	1.10	180,685	1.74
Rating Agencies	CNR/Average Annual Debt	N/A	110,902	2.83

Max Year = Maximum amount of debt service required in a single fiscal year for principal and interest payments on outstanding revenue bond indebtedness.

Max CP = Maximum amount of debt service required in a single fiscal year for principal and interest payments on all outstanding debt.

#### FY 2017-18 and FY 2018-19 Debt Service Budget

The FY 2017-18 budget provides principal and interest on existing debt of \$94.86 million and \$86.47 million, respectively. Commercial paper issues in FY 2017-18 are forecast at \$200 million with an estimated interest cost and fees of \$4.3 million, which is paid from the Water Utilities Operating Fund. The FY 2018-19 budget provides principal and interest on proposed debt of \$101.65 million and \$86.28 million.

#### Water Utilities Financial Criteria for Debt Management

Financial criteria have been established to ensure sound management of DWU's financial resources. Financial criteria that apply to DWU indebtedness are listed below. Compliance with each of the criteria is projected for FY 2017-18 unless otherwise noted (in italics).

- (1) Current revenues will be sufficient to support current expenditures including debt service and other obligations of the system.
- (2) Long-term debt will be used only for capital expansion, replacement and improvement of plant, not for current expenses.
- (3) Short-term debt, including tax-exempt commercial paper, will be used as authorized for interim financing of projects that will result in capital improvements.
- (4) Capital projects financed through the issuance of debt will be financed for a period not to exceed the expected useful lives of the projects.
- (5) An equity target will be maintained for each fiscal year-end of at least 20% of the total capital structure, excluding current liabilities.
- (6) Net revenues available for debt service should be at least 1.50 times the maximum annual principal and interest requirements of relevant outstanding revenue bonds at the end of the same fiscal year, and at least 1.25 times maximum-year requirements at all times, measured during a fiscal year using the previous year net revenues available for debt service.
- (7) Capital financing will be provided through revenue bonds, current revenues, contributed capital, and short-term debt.
- (8) Revenue bonds will be issued with serial maturities not to exceed thirty (30) years.
- (9) Debt refinancing will only be considered when the current refunding has an overall net present value savings is at least 3% of the principal

amount to be refunded, and the advance refund has an overall net present value savings at 4% of the principal amount to be refunded.

(10) Fully funded debt service reserves shall be maintained. A surety bond (or other type of credit facility such as a letter of credit) may be used in lieu of funding the reserve if the former is economically advantageous.

#### **Statement of Dallas Water Utilities Indebtedness**

Unit Number	Issue Name	lssue Date	Original Issue Amount	True Interest Cost	Outstanding Principal
Revenue	Bonds				
613	Waterworks & Sewer System Revenue Refunding, Series 2007	4/25/2007	678,480,000	4.3%	38,930,000
619	Waterworks & Sewer System Revenue Refunding, Series 2008	6/26/2008	158,655,000	4.6%	7,405,000
624	Waterworks & Sewer System Revenue Refunding, Series 2009A <sup>1</sup>	3/30/2009	15,100,000	2.4%	1,083,000
625	Waterworks & Sewer System Revenue Refunding, Series 2009B <sup>1</sup>	3/30/2009	8,280,000	2.5%	6,460,000
626	Waterworks & Sewer System Revenue Refunding, Series 2009C <sup>1</sup>	3/30/2009	94.723.000	2.1%	69.138.000
630	Waterworks & Sewer System Revenue Refunding, Series 2010	7/14/2010	295.850.000	4.2%	119.510.000
634	Waterworks & Sewer System Revenue Refunding, Series 2011	7/26/2011	239,425,000	2.8%	158,950,000
636	Waterworks & Sewer System Revenue Refunding, Series 2012 A	9/19/2012	259,420,000	2.7%	229,040,000
636	Waterworks & Sewer System Revenue Refunding, Taxable Series 2012 B	9/19/2012	106,720,000	2.7%	73,190,000
1530	Waterworks & Sewer System Revenue Refunding, Series 2013	9/17/2013	156,540,000	4.5%	148,525,000
9712	Waterworks & Sewer System Revenue Refunding, Series 2015A	3/25/2015	453,630,000	3.4%	447,695,000
9712	Waterworks & Sewer System Revenue Refunding, Taxable Series 2015B	3/25/2015	150,630,000	2.5%	150,630,000
1727	Waterworks & Sewer System Revenue Refunding, Series 2016A	7/7/2016	370,100,000	3.0%	370,100,000
1727	Waterworks & Sewer System Revenue Refunding, Taxable Series 2016B	7/7/2016	170,245,000	2.2%	167,715,000
n/a	Waterworks & Sewer System Revenue Refunding, Series 2017	6/28/2017	168,130,000	n/a	168,130,000
	Total Dallas Water Utilities Re	venue Bonds	\$3,325,928,000		\$2,156,501,000
<sup>1</sup> Texas V	/ater Development Board Bonds				
Commer	cial Paper Notes Projected Outstanding as of 9/30/17		40,000,000		40,000,000
Total Dallas Water Utilities Debt \$3,365,928,000					\$2,196,501,000

#### As of 9/30/2017

### **Dallas Water Utilities Debt Service Requirements**

#### As of 9/30/2017

Fiscal	Outstanding Debt				
Year	Principal	Interest	Total		
2018	94,855,000	86,470,432	181,325,432		
2019	101,653,000	86,276,705	187,929,705		
2020	100,855,000	83,165,879	184,020,879		
2021	104,270,000	79,752,312	184,022,312		
2022	109,205,000	76,092,098	185,297,098		
2023	103,310,000	72,460,662	175,770,662		
2024	92,585,000	68,713,312	161,298,312		
2025	84,145,000	64,908,986	149,053,986		
2026	73,495,000	61,434,287	134,929,287		
2027	76,770,000	58,144,486	134,914,486		
2028	80,045,000	54,858,345	134,903,345		
2029	83,323,000	51,575,611	134,898,611		
2030	79,605,000	47,918,572	127,523,572		
2031	68,610,000	44,287,219	112,897,219		
2032	71,980,000	40,917,636	112,897,636		
2033	76,085,000	37,342,141	113,427,141		
2034	79,780,000	33,644,350	113,424,350		
2035	83,580,000	29,853,900	113,433,900		
2036	87,495,000	25,932,550	113,427,550		
2037	76,540,000	22,153,025	98,693,025		
2038	67,975,000	18,725,888	86,700,888		
2039	61,740,000	15,625,322	77,365,322		
2040	64,750,000	12,609,200	77,359,200		
2041	53,235,000	9,809,691	63,044,691		
2042	46,475,000	7,418,025	53,893,025		
2043	39,195,000	5,351,350	44,546,350		
2044	30,640,000	3,707,675	34,347,675		
2045	32,105,000	2,245,425 34,350,42			
2046	21,485,000	1,016,400	22,501,400		
2046	10,715,000	267,875	10,982,875		
	\$2,156,501,000	\$1,202,679,359	\$3,359,180,359		

#### **Dallas Water Utilities**

#### **Statement of Debt Service Revenues and Expenditures**

	-	FY 2015-16 Actual	FY 2016-17 Budget	FY 2016-17 Estimate	FY 2017-18 Adopted	FY 2018-19 Planned
Beginning Cash Balance		\$ 141,414,971	\$ 139,594,945	\$ 139,594,945	\$ 142,918,410	\$ 153,000,462
Revenues Operating Fund Transfers General Fund Transfers General Fund (Sanitation) Transfers Storm Water Utility Transfers		180,456,440 - 583,855	184,054,582 - _ 	183,828,908 - 	191,407,484 - - -	190,435,491 - - -
	Total	\$ 181,040,295	\$ 184,347,242	\$ 184,121,568	\$ 191,407,484	\$ 190,435,491
Total Available Resources		\$ 322,455,266	\$ 323,942,187	\$ 323,716,513	\$ 334,325,894	\$ 343,435,953
Expenses Principal Payments Interest Payments	Total	96,675,000 86,185,321 <b>\$ 182,860,321</b>	100,980,000 79,818,103 <b>\$ 180,798,103</b>	100,980,000 79,818,103 <b>\$ 180,798,103</b>	94,855,000 86,470,432 <b>\$ 181,325,432</b>	101,653,000 86,276,705 <b>\$ 187,929,705</b>
Ending Cash Balance		\$ 139,594,945	\$ 143,144,084	\$ 142,918,410	\$ 153,000,462	\$ 155,506,248

Note: Commercial paper costs, debt fees, and smaller debt expenses are paid directly from Water Utilities Operating Funds. These payments are made to bond holders and reservoir debt holders and do not include any additional fees or commercial paper interest.