

# BONDED DEBT

15

City Debt Obligations  
Overview of Bond Types  
Bond Payment Schedules



Balance, flexibility, and positive choices have ensured fiscal stability as we pay close attention to how we balance revenue and debt. Prudent planning and the management of our bond payment schedules over time will serve Chandler well for generations to come.



## **Bonded Debt Obligations**

The City of Chandler has experienced significant growth over the last thirty years. The 1985 mid-decade census population was 63,855; the 1990 decade census was 89,862; the 2000 census population was 176,581; the 2010 census population was 236,326; and the most recent estimate by the Planning Division is 253,098.

This growth created demand for infrastructure and capital projects. Citizens needed more amenities such as parks, streets, water, and wastewater facilities. Financing these capital costs was accomplished through various financing sources, referred to as “bonded debt.” This includes instruments such as general obligation bonds, revenue bonds, excise tax revenue obligations, and certificate of participation notes.

### **Bond Ratings**

When new bonds are issued, the three major bond rating agencies typically assign a bond rating that is a reflection of the City’s ability to repay the debt. Each agency has a slightly different rating scale but, in general, top ratings are referred to as “AAA” (triple A) with lower ratings such as “A” (single A) or “B.” In some cases, distinctions are made with upper and lower case letters and “+” or “-” to further elaborate on the rating. After the initial review, the rating agencies periodically review the City’s financial position and either reaffirm the prior rating, raise the rating, or lower the rating. The City’s most recent bond ratings are as shown below:

<b>Type of Debt</b>	<b>Fitch Ratings</b>	<b>Moody’s Investments</b>	<b>Standard and Poor’s</b>
General Obligation	AAA*	Aaa*	AAA*
Excise Tax Revenue Obligations	AAA*	Aa1	AAA*
Water/Sewer Revenue Bonds	AA+	Aa1	AA
Highway User Fund Revenue Bonds	AA	Aa3	AA

\*Highest rating level from this agency.

These high bond ratings are a positive reflection of Chandler’s strong financial management and its ability to repay outstanding debt. The higher bond ratings also represent a lower investment risk for potential bond buyers and lower debt costs for the City and its citizens.

### **Debt Management**

Chandler’s primary debt management objectives are to minimize the cost of borrowing to taxpayers while assuring that total indebtedness does not exceed available resources and conforms to Arizona legal requirements. The necessity to incur debt in order to finance the capital program carries with it the obligation to manage the debt program effectively. As a result, the level of outstanding debt and the City’s capacity to incur and repay additional debt require careful examination.

The City’s last bond election was in May 2007 and resulted in voters approving over \$450 million in new bond authorization spread across ten program areas: Water/Sewer, Reclaimed (Reuse) Water, Parks and Recreation, Museum, Center for the Arts, Library, Public Buildings, Streets, Fire, and Police. Bond sales in January 2009 and January 2011 have reduced the available voter authorized amounts to \$245,345,000 as shown in the table on the next page.

The City most recently sold bonds requiring voter authorization during Fiscal Year (FY) 2010-11. Also, during FY 2011-12, there was a reallocation of voter authorization among Parks and Recreation, Museum, Public Building, Center for the Arts, and Streets bonds. During FY 2016-17, the City conducted a refunding of both Excise Tax Obligation and General Obligation Bonds and defeased \$8.1 million of callable 2007 General Obligation Refunding bonds. The City anticipates an Excise Tax Revenue Obligation sale along with a General Obligation Bond sale in FY 2017-18.

### Voter Authorization Summary

<b>Voter Authorized Bonds</b>	<b>2015-16 Ending Authorization</b>	<b>2016-17 Bond Sales</b>	<b>2016-17 Ending Authorization</b>	<b>2017-18 Anticipated Bond Sales</b>	<b>Remaining Authorization</b>
Parks and Recreation	\$ 58,250,000	\$ -	\$ 58,250,000	\$ 2,675,000	\$ 55,575,000
Center for the Arts	500,000	-	500,000	-	500,000
Museum	12,730,000	-	12,730,000	6,600,000	6,130,000
Library	5,245,000	-	5,245,000	-	5,245,000
Public Building	9,960,000	-	9,960,000	-	9,960,000
Streets General Obligation	125,926,000	-	125,926,000	30,000,000	95,926,000
Storm Water Revenue/GOB	4,204,000	-	4,204,000	40,000	4,164,000
Public Safety/Fire	10,371,000	-	10,371,000	10,371,000	-
Public Safety/Police	12,730,000	-	12,730,000	11,040,000	1,690,000
Airport	494,000	-	494,000	-	494,000
Recycling & Solid Waste	4,935,000	-	4,935,000	-	4,935,000
<b>TOTAL</b>	<b>\$ 245,345,000</b>	<b>\$ -</b>	<b>\$ 245,345,000</b>	<b>\$ 60,726,000</b>	<b>\$ 184,619,000</b>
<b>Non-Voter Authorized Bonds*</b>					
Water	N/A	\$ -	N/A	\$ 35,500,000	N/A
Wastewater	N/A	-	N/A	30,000,000	N/A
<b>TOTAL</b>	<b>N/A</b>	<b>\$ -</b>	<b>N/A</b>	<b>\$ 65,500,000</b>	<b>N/A</b>

\* Non-voter approved debt as allowed by the City Debt Management Policy located in the Budget Policies, Process, and Decisions section. The Debt Service is paid by dedicated water and wastewater user fees.

### Debt Coverage

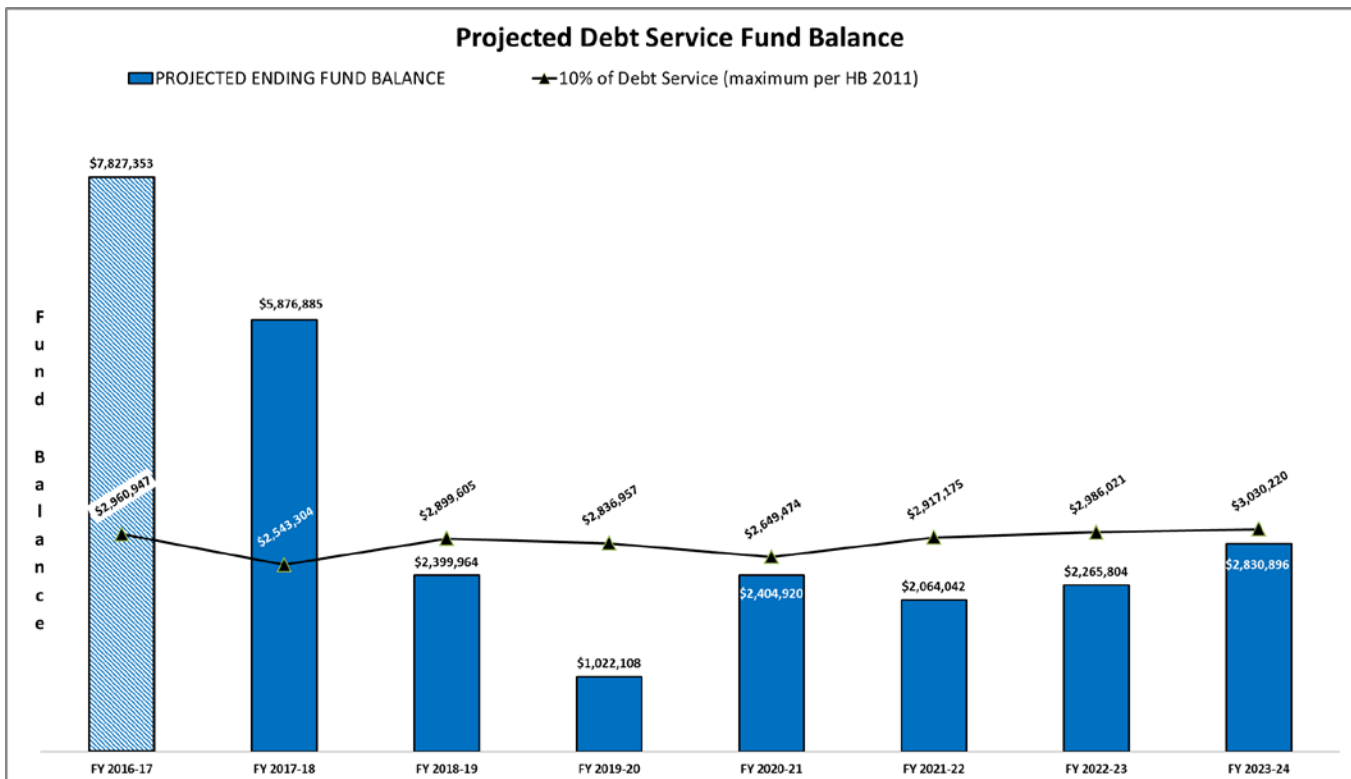
Certain debt issues include debt covenants whereby the City is required to maintain sufficient operating revenue to meet debt service requirements. In other cases, the City has debt coverage goals or objectives noted in the City's Debt Policy (located in the Budget Policies, Processes and Decisions section) which establish good operating practice for adequate debt coverage. Projected debt coverage at the end of Fiscal Year 2017-18 is as shown:

<b>Type of Debt</b>	<b>Coverage Basis</b>	<b>Coverage Required (Mandated or Goal)</b>	<b>Projected end of 2017-18</b>	<b>Coverage Met?</b>
Water/Wastewater Utility Revenue Bonds	Available Operating Revenue/Debt Service	<b>Mandated by debt covenants: 1.2x</b> Goal: 1.5x - 2.0x	18.05x	Yes
Water/Wastewater General Obligation Bonds	Available Operating Revenue/Debt Service	1.2x (Goal)	4.25x	Yes
Water/Wastewater Excise Tax Revenue Obligations	Excise Tax Revenue/Debt Service	<b>Mandated by debt covenants: 3x</b> Goal: 5.0	11.17x	Yes
	Available Operating Revenue/Debt Service	1.2x (Goal)	2.68	Yes

### Debt Service Funds

**General Obligation Debt Service Fund:** The General Obligation Debt Service Fund is used to collect secondary property taxes and pay principal and interest on general obligation bonds. Fund balance is projected based upon best estimates of future assessed values, existing debt service schedules, and projected General Obligation Bond sales.

Current fund balance projections assume modest growth in assessed values and show that debt service expenses will exceed secondary property tax revenues for the next five years, causing a drawdown in the fund balance. As the result of House Bill (HB) 2011 passed by the 2017 legislature, the debt service fund balance cannot exceed 10% of annual debt service payments. As a result, the City has revised its debt plan to reach this goal by the end of FY 2018-19. The fund balance projection is updated each year based upon new assessed value projections and any changes to general obligation debt projections as a result of new capital funding requirements. The most recent projection is shown below.



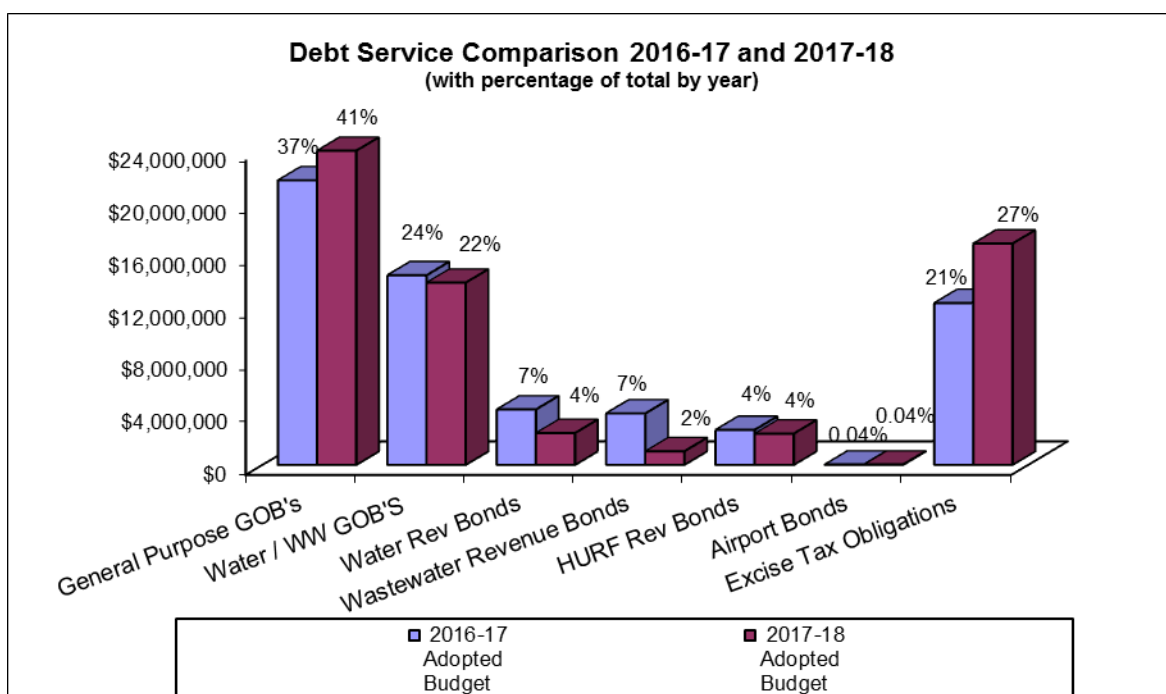
**Highway User Revenue Fund (HURF) Debt Service Fund:** The HURF Debt Service Fund is managed on a year-to-year basis whereby a transfer is made from the HURF Operating Fund to the HURF Debt Service Fund on an annual basis for the exact amount of principal and interest due for the year. The fund balance returns to zero at the end of each fiscal year.

**Enterprise Fund Debt Service:** Water, Wastewater, and Airport debt service is paid from their respective Enterprise operating funds and directly supported by each Enterprise's user fees. Some older debt issues also have debt service costs paid by water, wastewater, and reclaimed water system development funds. Separate Debt Service Funds are not maintained to pay Debt Service in Enterprise Funds, but managed within each of their Enterprise operating funds.

<b>FUNCTION:</b>	Debt Service	<b>COST CENTER:</b>	7500
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Description	2015-16 Actual Expenditures	2016-17 Adopted Budget	2016-17 Adjusted Budget	2016-17 Estimated Expenditures	2017-18 Adopted Budget	% Change Adopted to Adopted
General Obligation Bonds (GOBs)	\$ 21,706,981	\$ 21,740,608	\$ 21,740,608	\$ 29,609,467	\$ 25,432,488	16.98%
Water GOBs	8,929,353	8,935,903	8,935,903	8,837,673	8,467,678	-5.24%
Wastewater GOBs	5,565,997	5,552,897	5,552,897	5,527,025	5,451,172	-1.83%
Water Revenue Bonds	8,975,180	4,230,660	4,230,660	2,057,160	2,431,660	-42.52%
Wastewater Revenue Bonds	7,214,970	3,931,890	3,931,890	94,140	1,042,140	-73.50%
HURF Revenue Bonds	3,745,650	2,671,438	2,671,438	2,671,438	2,383,988	-10.76%
Airport GOB's	27,313	26,563	26,563	26,563	26,813	0.94%
Excise Tax Revenue Obligations	9,998,019	12,364,102	12,364,102	12,202,704	16,907,270	36.74%
<b>Total Cost Center - 7500</b>	<b>\$ 66,163,463</b>	<b>\$ 59,454,061</b>	<b>\$ 59,454,061</b>	<b>\$ 61,026,170</b>	<b>\$ 62,143,209</b>	<b>4.52%</b>
<b>General Debt Service Fund</b>	<b>\$ 21,706,981</b>	<b>\$ 21,740,608</b>	<b>\$ 21,740,608</b>	<b>\$ 29,609,467</b>	<b>\$ 25,432,488</b>	
Highway User Revenue Debt Svc	3,745,650	2,671,438	2,671,438	2,671,438	2,383,988	
Water System Dev Fees (SDF)	226,121	161,682	161,682	-	-	
Water Operating	20,197,834	16,381,109	16,381,109	14,255,008	15,427,697	
Reclaimed Water SDF	766,665	611,826	611,826	-	-	
Wastewater SDF	1,524,968	1,216,977	1,216,977	-	-	
Wastewater Operating	17,967,932	16,643,858	16,643,858	14,463,694	18,872,223	
Airport Operating	27,313	26,563	26,563	26,563	26,813	
<b>Grand Total</b>	<b>\$ 66,163,463</b>	<b>\$ 59,454,061</b>	<b>\$ 59,454,061</b>	<b>\$ 61,026,170</b>	<b>\$ 62,143,209</b>	

The Fiscal Year 2017-18 budget provides \$54,448,251 for principal and interest and \$7,694,958 for anticipated new debt service costs on existing debt as shown in the chart above for each bond type and funding source. The following graph provides summarized data of the debt service comparison of adopted budgets of two fiscal years and the category percentage of total debt.



### General Obligation Bond Capacity Available

General Obligation Bonds are used to finance a variety of public projects and require voter approval. These bonds are backed by the full faith and credit of the City and are secured by the ad valorem taxing power of the City. Limitations for bonding capacity are set by State statute.

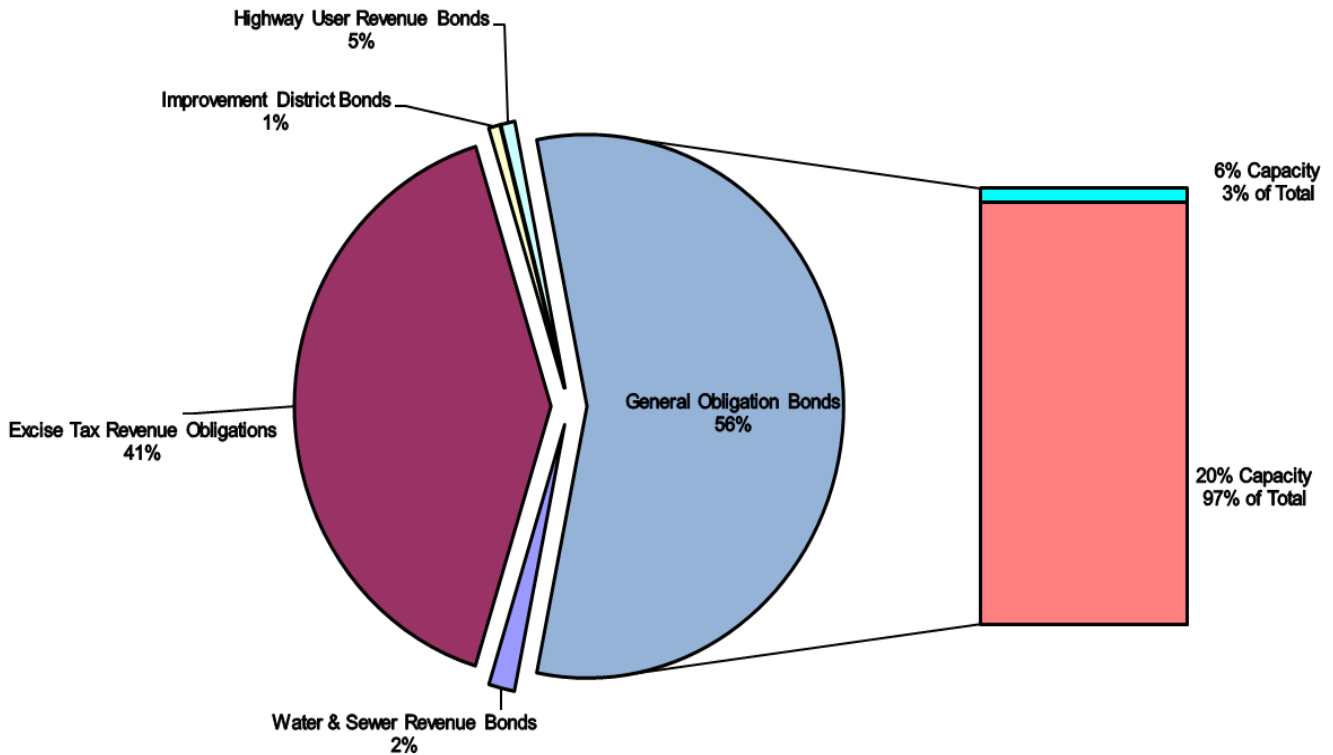
Under the Arizona Constitution Article IX, section 8 (amended by Proposition 104 in 2006), cities may issue General Obligation Bonds for streets and transportation facilities, public safety, law enforcement, fire and emergency services facilities, water, wastewater, artificial light, acquisition and development of land for open space preserves, parks, playgrounds, and recreation facilities up to an amount not exceeding 20% of secondary assessed value. Cities may also issue General Obligation Bonds for all other general purposes (e.g., airport, center for the arts, library, and museum) not included in the 20% debt margin category up to an amount not exceeding 6% of the secondary assessed value.

The City's available bonding capacity for Fiscal Year (FY) 2017-18 is based on the 2017 Net Full Cash Property Valuation of \$3,307,214,933 as shown below:

	20%	6%
2017 Net Full Cash Property Valuation	\$ 3,307,214,933	\$ 3,307,214,933
Legal Bond Limit	661,442,987	198,432,896
Outstanding Bonded Debt Previously Issued	(261,754,100)	(8,500,900)
Anticipated Bond Sales in FY 2017-18	(54,126,000)	(6,600,000)
<b>Bonding Capacity Available</b>	<b>\$ 345,562,887</b>	<b>\$ 183,331,996</b>

### Summary of Outstanding Bonds By Type

Type of Issue	Principal Bond Amount	% Total
<b>General Obligation Bonds (Combined)</b>		
6% Capacity	\$ 8,500,900	
20% Capacity	261,754,100	
<b>Total General Obligation Bonds</b>	<b>\$ 270,255,000</b>	<b>56.27%</b>
<b>Water &amp; Sewer Revenue Bonds</b>	<b>7,845,000</b>	<b>1.63%</b>
<b>Highway User Revenue Bonds</b>	<b>4,270,000</b>	<b>4.95%</b>
<b>Excise Tax Revenue Obligations</b>	<b>194,415,000</b>	<b>40.48%</b>
<b>Improvement District Bonds</b>	<b>3,460,000</b>	<b>0.72%</b>
<b>Total</b>	<b>\$ 480,245,000</b>	<b>100.00%</b>



**Schedule of Total Outstanding Debt**

	Original Issue	Outstanding 7/1/2017	2017-18		
			Principal	Interest	Payment
<b>Revenue Bonds</b>					
<b>Highway User Revenue:</b>					
Refunding Series 2010	10,450,000	1,095,000	535,000	36,988	571,988
Refunding Series 2014	8,660,000	3,175,000	1,685,000	127,000	1,812,000
	<b>\$ 19,110,000</b>	<b>\$ 4,270,000</b>	<b>\$ 2,220,000</b>	<b>\$ 163,988</b>	<b>\$ 2,383,988</b>
<b>Water:</b>					
Refunding Series 2014	\$ 11,079,850	\$ 5,491,500	\$ 2,212,000	\$ 219,660	\$ 2,431,660
	<b>\$ 11,079,850</b>	<b>\$ 5,491,500</b>	<b>\$ 2,212,000</b>	<b>\$ 219,660</b>	<b>\$ 2,431,660</b>
<b>Sewer:</b>					
Refunding Series 2014	\$ 4,320,150	\$ 2,353,500	\$ 948,000	\$ 94,140	\$ 1,042,140
	<b>\$ 4,320,150</b>	<b>\$ 2,353,500</b>	<b>\$ 948,000</b>	<b>\$ 94,140</b>	<b>\$ 1,042,140</b>
<b>Total HURF &amp; Enterprise Revenue Bonds</b>	<b>\$ 34,510,000</b>	<b>\$ 12,115,000</b>	<b>\$ 5,380,000</b>	<b>\$ 477,788</b>	<b>\$ 5,857,788</b>
<b>General Obligation Bonds</b>					
<b>General &amp; Enterprise Funds:</b>					
Series 2009	\$ 252,000,000	\$ 11,880,000	\$ 11,880,000	\$ 371,250	\$ 12,251,250
Series 2011A	9,925,000	8,300,000	2,500,000	319,500	2,819,500
Refunding Series 2011B	10,360,000	835,000	835,000	33,400	868,400
Refunding Series 2014	214,540,000	210,190,000	7,790,000	8,280,200	16,070,200
Refunding Series 2016	39,050,000	39,050,000	-	1,653,800	1,653,800
<b>Total General Obligation Bonds</b>	<b>\$ 525,875,000</b>	<b>\$ 270,255,000</b>	<b>\$ 23,005,000</b>	<b>\$ 10,658,150</b>	<b>\$ 33,663,150</b>
<b>Excise Tax Revenue Obligations:*</b>					
Series 2009	\$ 34,040,000	\$ 2,795,000	\$ 1,375,000	\$ 101,488	\$ 1,476,488
Series 2011	15,000,000	4,200,000	785,000	135,050	920,050
Series 2013	104,500,000	101,750,000	1,600,000	4,512,500	6,112,500
Series 2015	66,660,000	66,160,000	2,405,000	2,426,275	4,831,275
Refunding Series 2016	19,510,000	19,510,000	-	939,000	939,000
<b>Total Excise Tax Revenue Obligations</b>	<b>\$ 239,710,000</b>	<b>\$ 194,415,000</b>	<b>\$ 6,165,000</b>	<b>\$ 8,114,313</b>	<b>\$ 14,279,313</b>
<b>Improvement District Bonds:</b>					
Series 2008 - Spectrum ID	\$ 7,370,000	\$ 3,460,000	\$ 520,000	\$ 128,000	\$ 648,000
<b>Total Improvement District Bonds</b>	<b>\$ 7,370,000</b>	<b>\$ 3,460,000</b>	<b>\$ 520,000</b>	<b>\$ 128,000</b>	<b>\$ 648,000</b>
<b>Total Bonded Debt &amp; Obligations</b>	<b>\$ 807,465,000</b>	<b>\$ 480,245,000</b>	<b>\$ 35,070,000</b>	<b>\$ 19,378,251</b>	<b>\$ 54,448,251</b>

\* Non-voter approved debt as allowed by the City Debt Management Policy located in the Budget Policies, Process, and Decisions section. The Debt Service is paid by dedicated water and wastewater user fees.



The following pages present breakdowns of the principal and interest payments for all City bond issues outstanding as of June 30, 2017.

**Annual Bond Obligation for All  
Existing Bonds and Obligations**

<i><b>Maturity Date<sup>(1)</sup></b></i>	<i><b>Bonds Payable</b></i>	<i><b>Interest Payable</b></i>	<i><b>Fiscal Total</b></i>
July 1, 2018	\$ 35,070,000	\$ 19,378,251	\$ 54,448,251
July 1, 2019	35,165,000	18,292,325	53,457,325
July 1, 2020	36,630,000	17,045,975	53,675,975
July 1, 2021	32,715,000	15,758,125	48,473,125
July 1, 2022	33,795,000	14,452,925	48,247,925
July 1, 2023	34,865,000	13,033,475	47,898,475
July 1, 2024	35,815,000	11,309,275	47,124,275
July 1, 2025	35,430,000	9,518,525	44,948,525
July 1, 2026	35,130,000	8,068,625	43,198,625
July 1, 2027	33,735,000	6,508,125	40,243,125
July 1, 2028	36,710,000	4,856,375	41,566,375
July 1, 2029	16,240,000	3,467,575	19,707,575
July 1, 2030	16,375,000	2,865,375	19,240,375
July 1, 2031	17,015,000	2,259,125	19,274,125
July 1, 2032	17,160,000	1,628,675	18,788,675
July 1, 2033	17,310,000	993,875	18,303,875
July 1, 2034	5,465,000	339,575	5,804,575
July 1, 2035	5,620,000	175,625	5,795,625
<b>TOTAL</b>	<b>\$ 480,245,000</b>	<b>\$ 149,951,826</b>	<b>\$ 630,196,826</b>

	<i><b>Year</b></i>	<i><b>Principal</b></i>	<i><b>Interest</b></i>	<i><b>Fiscal Total</b></i>
This Year's Requirement	2018	\$ 35,070,000	\$ 19,378,251	\$ 54,448,251
Maximum Requirement	2018	\$ 35,070,000	\$ 19,378,251	\$ 54,448,251

<sup>(1)</sup> Actual payments are made one day prior to maturity date.

**Combined General Obligation Bonds  
6% Capacity Portion Outstanding**

<i><b>Maturity Date<sup>(1)</sup></b></i>	<i><b>Bonds Payable</b></i>	<i><b>Interest Payable</b></i>	<i><b>Fiscal Total</b></i>
July 1, 2018	\$ 1,959,900	\$ 333,117	\$ 2,293,017
July 1, 2019	1,968,400	266,514	2,234,914
July 1, 2020	2,557,750	189,802	2,747,552
July 1, 2021	237,950	89,759	327,709
July 1, 2022	242,850	80,821	323,671
July 1, 2023	249,900	71,107	321,007
July 1, 2024	256,850	58,612	315,462
July 1, 2025	174,100	45,769	219,869
July 1, 2026	176,200	38,805	215,005
July 1, 2027	420,000	29,995	449,995
July 1, 2028	257,000	8,995	265,995
<b>TOTAL</b>	<b>\$ 8,500,900</b>	<b>\$ 1,213,294</b>	<b>\$ 9,714,194</b>

	<i><b>Year</b></i>	<i><b>Principal</b></i>	<i><b>Interest</b></i>	<i><b>Fiscal Total</b></i>
This Year's Requirement	2018	\$ 1,959,900	\$ 333,117	\$ 2,293,017
Maximum Requirement	2020	\$ 2,557,750	\$ 189,802	\$ 2,747,552

<sup>(1)</sup> Actual payments are made one day prior to maturity date.

**Combined General Obligation Bonds  
20% Capacity Portion Outstanding**

<i>Maturity Date<sup>(1)</sup></i>	<i>Bonds Payable</i>	<i>Interest Payable</i>	<i>Fiscal Total</i>
July 1, 2018	\$ 21,045,100	\$ 10,325,033	\$ 31,370,133
July 1, 2019	20,771,600	9,782,637	30,554,237
July 1, 2020	23,417,250	9,152,149	32,569,399
July 1, 2021	23,557,050	8,439,941	31,996,991
July 1, 2022	24,042,150	7,555,030	31,597,180
July 1, 2023	24,740,100	6,593,344	31,333,444
July 1, 2024	25,428,150	5,356,339	30,784,489
July 1, 2025	24,610,900	4,084,931	28,695,831
July 1, 2026	25,003,800	3,174,245	28,178,045
July 1, 2027	23,695,000	2,075,255	25,770,255
July 1, 2028	25,443,000	890,505	26,333,505
<b>TOTAL</b>	<b>\$ 261,754,100</b>	<b>\$ 67,429,407</b>	<b>\$ 329,183,507</b>

	<i>Year</i>	<i>Principal</i>	<i>Interest</i>	<i>Fiscal Total</i>
This Year's Requirement	2018	\$ 21,045,100	\$ 10,325,033	\$ 31,370,133
Maximum Requirement	2020	\$ 23,417,250	\$ 9,152,149	\$ 32,569,399

<sup>(1)</sup> Actual payments are made one day prior to maturity date.

**Combined General Obligation Bonds  
Enterprise Supported**

<b>Maturity Date<sup>(1)</sup></b>	<b>Bonds Payable</b>	<b>Interest Payable</b>	<b>Fiscal Total</b>
July 1, 2018	\$ 9,780,000	\$ 4,138,850	\$ 13,918,850
July 1, 2019	9,640,000	3,868,650	13,508,650
July 1, 2020	9,325,000	3,579,450	12,904,450
July 1, 2021	9,525,000	3,299,700	12,824,700
July 1, 2022	9,650,000	2,941,560	12,591,560
July 1, 2023	9,555,000	2,555,560	12,110,560
July 1, 2024	9,475,000	2,077,810	11,552,810
July 1, 2025	9,290,000	1,604,060	10,894,060
July 1, 2026	9,755,000	1,256,410	11,011,410
July 1, 2027	8,650,000	818,760	9,468,760
July 1, 2028	11,036,000	386,260	11,422,260
<b>TOTAL</b>	<b>\$ 105,681,000</b>	<b>\$ 26,527,070</b>	<b>\$ 132,208,070</b>

	<b>Year</b>	<b>Principal</b>	<b>Interest</b>	<b>Fiscal Total</b>
This Year's Requirement	2018	\$ 9,780,000	\$ 4,138,850	\$ 13,918,850
Maximum Requirement	2018	\$ 9,780,000	\$ 4,138,850	\$ 13,918,850

<sup>(1)</sup> Actual payments are made one day prior to maturity date.

**Combined General Obligation Bonds  
Ad Valorem Supported**

<i>Maturity Date</i> <sup>(1)</sup>	<i>Bonds Payable</i>	<i>Interest Payable</i>	<i>Fiscal Total</i>
July 1, 2018	\$ 13,199,000	\$ 6,518,488	\$ 19,717,488
July 1, 2019	13,100,000	6,180,500	19,280,500
July 1, 2020	16,650,000	5,762,500	22,412,500
July 1, 2021	14,270,000	5,230,000	19,500,000
July 1, 2022	14,635,000	4,694,290	19,329,290
July 1, 2023	15,435,000	4,108,890	19,543,890
July 1, 2024	16,210,000	3,337,140	19,547,140
July 1, 2025	15,495,000	2,526,640	18,021,640
July 1, 2026	15,425,000	1,956,640	17,381,640
July 1, 2027	15,465,000	1,286,490	16,751,490
July 1, 2028	14,664,000	513,240	15,177,240
<b>TOTAL</b>	<b>\$ 164,548,000</b>	<b>\$ 42,114,818</b>	<b>\$ 206,662,818</b>

	<i>Year</i>	<i>Principal</i>	<i>Interest</i>	<i>Fiscal Total</i>
This Year's Requirement	2018	\$ 13,199,000	\$ 6,518,488	\$ 19,717,488
Maximum Requirement	2020	\$ 16,650,000	\$ 5,762,500	\$ 22,412,500

<sup>(1)</sup> Actual payments are made one day prior to maturity date.

### Water and Sewer Revenue Bonds

Revenue bonds are payable from a specific source of revenue, do not affect the property tax rate, and are not subject to a legal limitation on the amount of bonds that may be issued. However, the electorate must authorize these bonds. Pledged revenue may be derived from utility operations, grants, and excise or other specified revenue sources. Proceeds from the sale of these bonds are used to improve and extend the existing municipal water and wastewater systems, including the construction or improvement of transmission lines, wells, storage, and pumping facilities. Funds are also used to acquire, improve, and install wastewater treatment and effluent reuse facilities.

The City has agreed to establish, maintain, and collect rates and other charges in an amount sufficient to produce revenues remaining after payment of net operating expenses in each fiscal year equal to a minimum of 120% of the aggregate annual debt service requirements on outstanding revenue bonds. Therefore, the utility net operating revenues need to exceed the maximum annual water and sewer revenue bond debt service cost by a 1.2 ratio. The annual debt service payment is paid from water and sewer user fees and system development fees.

### Combined Water and Sewer Revenue Bonds Outstanding

<i>Maturity Date</i> <sup>(1)</sup>	<i>Bonds Payable</i>	<i>Interest Payable</i>	<i>Fiscal Total</i>
July 1, 2018	\$ 3,160,000	\$ 313,800	\$ 3,473,800
July 1, 2019	2,345,000	187,400	2,532,400
July 1, 2020	2,340,000	93,600	2,433,600
<b>TOTAL</b>	<b>\$ 7,845,000</b>	<b>\$ 594,800</b>	<b>\$ 8,439,800</b>

	<i>Year</i>	<i>Principal</i>	<i>Interest</i>	<i>Fiscal Total</i>
This Year's Requirement	2018	\$ 3,160,000	\$ 313,800	\$ 3,473,800
Maximum Requirement	2018	\$ 3,160,000	\$ 313,800	\$ 3,473,800

<sup>(1)</sup> Actual payments are made one day prior to maturity date.

### Street and Highway User Revenue Fund (HURF) Bonds

This type of revenue bond is used solely for the purpose of improving, constructing, and reconstructing the major streets, arterial collectors, and local streets within the City. The bonds are secured by gas tax revenues collected by the State and distributed to Arizona cities and towns based on a formula of population and gas sales within the county of origin.

The amount of HURF bonds that may be issued by the City is limited by the amount of annual HURF revenues received from the State. Annual debt service must not exceed 50% of the annual HURF revenue received by the City.

#### HURF Bonds Outstanding

<i>Maturity Date</i> <sup>(1)</sup>	<i>Bonds Payable</i>	<i>Interest Payable</i>	<i>Fiscal Total</i>
July 1, 2018	\$ 2,220,000	\$ 163,988	\$ 2,383,988
July 1, 2019	2,050,000	79,200	2,129,200
<b>TOTAL</b>	<b>\$ 4,270,000</b>	<b>\$ 243,188</b>	<b>\$ 4,513,188</b>

	<i>Year</i>	<i>Principal</i>	<i>Interest</i>	<i>Fiscal Total</i>
This Year's Requirement	2018	\$ 2,220,000	\$ 163,988	\$ 2,383,988
Maximum Requirement	2018	\$ 2,220,000	\$ 163,988	\$ 2,383,988

<sup>(1)</sup> Actual payments are made one day prior to maturity date.

### Excise Tax Revenue Obligations

Excise Tax Revenue Obligations (ETRO) are payable from pledged revenue (but paid from dedicated Enterprise Funds user fees), do not affect the property tax rate, and are not subject to a statutory limitation on the amount of bonds that may be issued. The City may issue additional ETROs only if the total amount of excise taxes in the immediately preceding fiscal year is equal to at least three times the maximum annual debt service. Unlike other City debt instruments, ETROs do not require voter authorization. Pledged revenue may be derived from all unrestricted excise, transaction, franchise, privilege and business taxes, state shared sales and income taxes, and license and permit fees.

The City issued ETROs for the first time in Fiscal Year (FY) 2008-09 for a water reclamation facility expansion and to refund water and sewer revenue bonds in the amount of \$34,040,000. ETROs were issued again in FY 2010-11 for \$15,000,000, in FY 2013-14 for \$109,500,000, and in FY 2015-16 for \$66,660,000. This debt service is paid by dedicated water and wastewater user fees.

### Excise Tax Revenue Obligations Outstanding

<i>Maturity Date</i> <sup>(1)</sup>	<i>Bonds Payable</i>	<i>Interest Payable</i>	<i>Fiscal Total</i>
July 1, 2018	\$ 6,165,000	\$ 8,114,313	\$ 14,279,313
July 1, 2019	7,485,000	7,869,875	15,354,875
July 1, 2020	7,750,000	7,525,925	15,275,925
July 1, 2021	8,335,000	7,166,925	15,501,925
July 1, 2022	8,900,000	6,779,475	15,679,475
July 1, 2023	9,240,000	6,356,325	15,596,325
July 1, 2024	10,130,000	5,894,325	16,024,325
July 1, 2025	10,645,000	5,387,825	16,032,825
July 1, 2026	9,950,000	4,855,575	14,805,575
July 1, 2027	9,620,000	4,402,875	14,022,875
July 1, 2028	11,010,000	3,956,875	14,966,875
July 1, 2029	16,240,000	3,467,575	19,707,575
July 1, 2030	16,375,000	2,865,375	19,240,375
July 1, 2031	17,015,000	2,259,125	19,274,125
July 1, 2032	17,160,000	1,628,675	18,788,675
July 1, 2033	17,310,000	993,875	18,303,875
July 1, 2034	5,465,000	339,575	5,804,575
July 1, 2035	5,620,000	175,625	5,795,625
<b>TOTAL</b>	<b>\$ 194,415,000</b>	<b>\$ 80,040,138</b>	<b>\$ 274,455,138</b>

	<i>Year</i>	<i>Principal</i>	<i>Interest</i>	<i>Fiscal Total</i>
This Year's Requirement	2018	\$ 6,165,000	\$ 8,114,313	\$ 14,279,313
Maximum Requirement	2029	\$ 16,240,000	\$ 3,467,575	\$ 19,707,575

<sup>(1)</sup> Actual payments are made one day prior to maturity date.



### Improvement District Bonds

Improvement Districts are generally formed by property owners in a designated area within the City in which they must agree to be assessed for the repayment of the costs of constructing improvements that benefit the owner's property. Improvement District bonds are secured by a lien on the property and improvements of all parcels of each district. The State does not require legal appropriation of funds for improvement districts. Improvement District bonds are typically issued to finance local streets, water, or sewer improvements, or to acquire an existing water or sewer operation.

There is no statutory debt limit or legal limit to the amount of improvement district bonds that may be issued.

### Improvement District Bonds Outstanding

<i><b>Maturity Date<sup>(1)</sup></b></i>	<i><b>Bonds Payable</b></i>	<i><b>Interest Payable</b></i>	<i><b>Fiscal Total</b></i>
July 1, 2018	\$ 520,000	\$ 128,000	\$ 648,000
July 1, 2019	545,000	106,700	651,700
July 1, 2020	565,000	84,500	649,500
July 1, 2021	585,000	61,500	646,500
July 1, 2022	610,000	37,600	647,600
July 1, 2023	635,000	12,700	647,700
<b>TOTAL</b>	<b>\$ 3,460,000</b>	<b>\$ 431,000</b>	<b>\$ 3,891,000</b>

	<i><b>Year</b></i>	<i><b>Principal</b></i>	<i><b>Interest</b></i>	<i><b>Fiscal Total</b></i>
This Year's Requirement	2018	\$ 520,000	\$ 128,000	\$ 648,000
Maximum Requirement	2019	\$ 545,000	\$ 106,700	\$ 651,700

<sup>(1)</sup> Actual payments are made one day prior to maturity date.