

ANNUAL DISCLOSURE INFORMATION

Pertaining to
City of Portland, Oregon



First Lien Sewer System Revenue & Refunding Bonds:

\$86,165,000	2014 Series A	Dated August 14, 2014
\$329,805,000	2015 Series A	Dated August 27, 2015
\$156,650,000	2016 Series A	Dated September 7, 2016

Second Lien Sewer System Revenue & Refunding Bonds:

\$407,850,000	2010 Series A	Dated August 19, 2010
\$210,965,000	2013 Series A	Dated September 17, 2013
\$204,220,000	2014 Series B	Dated August 14, 2014
\$63,300,000	2015 Series B	Dated August 27, 2015
\$162,465,000	2016 Series B	Dated September 7, 2016
\$191,930,000	2018 Series A	Dated May 3, 2018
\$216,480,000	2019 Series A	Dated December 3, 2019

December 31, 2019



MATURITY SCHEDULES – FIRST LIEN BONDS:

\$86,165,000*

**FIRST LIEN SEWER SYSTEM REVENUE REFUNDING BONDS
2014 SERIES A**

Due October 1	Principal Amount	Interest Rate	CUSIP 736742
2020	\$8,745,000	5.00%	UZ8
2021	9,190,000	5.00%	VA2
2022	9,670,000	5.00%	VB0
2023	10,155,000	5.00%	VC8
2024	10,680,000	5.00%	VD6
	<u>\$48,440,000</u>		

\$329,805,000*

**FIRST LIEN SEWER SYSTEM REVENUE REFUNDING BONDS
2015 SERIES A**

Due June 1	Principal Amount	Interest Rate	CUSIP 736742
2020	\$55,075,000	5.00%	WK9
2021	47,000,000	5.00%	WL7
2022	*	*	*
2023	*	*	*
2024	8,185,000	5.00%	WM5
2025	8,600,000	5.00%	WN3
2026	9,030,000	5.00%	WP8
2027	9,475,000	3.00%	WQ6
2028	9,765,000	5.00%	WR4
2029	10,250,000	4.00%	WS2
2030	10,665,000	4.00%	WT0
2031	11,085,000	4.00%	WU7
	<u>\$179,130,000</u>		

* Original par amount

MATURITY SCHEDULES – FIRST LIEN BONDS (continued):

\$156,650,000*
FIRST LIEN SEWER SYSTEM REVENUE REFUNDING BONDS
2016 SERIES A

Due June 15	Principal Amount	Interest Rate	CUSIP 736742
2020	\$7,820,000	5.00%	XQ5
2021	8,215,000	5.00%	XR3
2022	8,620,000	5.00%	XS1
2023	9,050,000	5.00%	XT9
2024	9,500,000	5.00%	XU6
2025	9,980,000	5.00%	XV4
2026	10,480,000	5.00%	XW2
2027	11,005,000	5.00%	XX0
2028	11,550,000	2.00%	XY8
2029	11,780,000	2.00%	XZ5
2030	12,020,000	3.00%	YA9
2031	12,380,000	3.25%	YB7
2032	12,780,000	3.00%	YC5
2033	<u>13,165,000</u>	2.50%	YD3
	<u>\$148,345,000</u>		

* Original par amount

MATURITY SCHEDULES – SECOND LIEN BONDS:

\$210,965,000*
SECOND LIEN SEWER SYSTEM REVENUE BONDS,
2013 SERIES A

Due August 1	Principal Amount	Interest Rate	CUSIP 736742
2020	\$7,860,000	5.00%	TZ0
2021	8,260,000	5.00%	UA3
2022	8,685,000	5.00%	UB1
2023	13,250,000	5.00%	UC9
2024	6,190,000	5.00%	UD7
2025	6,510,000	5.00%	UE5
2026	6,840,000	5.00%	UF2
2027	7,160,000	4.00%	UG0
2028	7,450,000	4.00%	UH8
2029	7,795,000	5.00%	UJ4
2030	8,195,000	5.00%	UK1
2031	8,615,000	5.00%	UL9
2032	9,055,000	5.00%	UM7
2033	9,520,000	5.00%	UN5
2034	10,010,000	5.00%	UP0
2035	10,525,000	5.00%	UQ8
2036	11,060,000	5.00%	UR6
2037	11,630,000	5.00%	US4
2038	12,225,000	5.00%	UT2
	<u>\$170,835,000</u>		

* Original par amount

MATURITY SCHEDULES – SECOND LIEN BONDS (continued):

\$204,220,000*
SECOND LIEN SEWER SYSTEM REVENUE BONDS
2014 SERIES B

Due October 1	Principal Amount	Interest Rate	CUSIP 736742
2020	\$5,730,000	5.00%	VK0
2021	6,025,000	5.00%	VL8
2022	6,330,000	5.00%	VM6
2023	6,655,000	5.00%	VN4
2024	7,000,000	5.00%	VP9
2025	7,355,000	5.00%	VQ7
2026	7,735,000	5.00%	VR5
2027	8,050,000	3.00%	VS3
2028	8,295,000	3.00%	VT1
2029	8,590,000	4.00%	VU8
2030	8,940,000	4.00%	VV6
2031	9,305,000	4.00%	VW4
2032	9,685,000	4.00%	VX2
2033	10,080,000	4.00%	VY0
2034	10,490,000	4.00%	VZ7
2035	10,920,000	4.00%	WA1
2036	11,365,000	4.00%	WB9
2037	11,830,000	4.00%	WC7
2038	12,310,000	4.00%	WD5
2039	12,815,000	4.00%	WE3
	<u>\$179,505,000</u>		

* Original par amount

MATURITY SCHEDULES – SECOND LIEN BONDS (continued):

\$63,300,000*
SECOND LIEN SEWER SYSTEM REVENUE REFUNDING BONDS
2015 SERIES B

Due June 1	Principal Amount	Interest Rate	CUSIP 736742
2020	\$3,770,000	5.00%	WZ6
2021	3,450,000	5.00%	XA0
2022	1,000,000	5.00%	XB8
2023	1,000,000	5.00%	XC6
2024	4,230,000	5.00%	XD4
2025	4,445,000	5.00%	XE2
2026	4,665,000	5.00%	XF9
2027	4,895,000	5.00%	XG7
2028	5,145,000	5.00%	XH5
2029	5,400,000	3.00%	XJ1
2030	5,560,000	3.00%	XK8
2031	5,725,000	3.00%	XL6
	<u>\$49,285,000</u>		

* Original par amount

MATURITY SCHEDULES – SECOND LIEN BONDS (continued):

\$162,465,000*
SECOND LIEN SEWER SYSTEM REVENUE REFUNDING BONDS
2016 SERIES B

Due June 15	Principal Amount	Interest Rate	CUSIP 736742
2020	\$6,075,000	5.000%	YH4
2021	6,730,000	5.000%	YJ0
2022	59,960,000	5.000%	YK7
2023	62,980,000	5.000%	YL5
2024	1,605,000	5.000%	YM3
2025	1,690,000	4.000%	YN1
2026	1,760,000	4.000%	YP6
2027	1,825,000	4.000%	YQ4
2028	1,895,000	5.000%	YR2
2029	1,990,000	2.000%	YS0
2030	2,030,000	2.125%	YT8
2031	2,080,000	2.250%	YU5
2032	2,125,000	2.375%	YV3
2033	<u>2,175,000</u>	2.500%	YW1
	<u>\$154,920,000</u>		

* Original par amount

MATURITY SCHEDULES – SECOND LIEN BONDS (continued):

\$191,930,000*
SECOND LIEN SEWER SYSTEM REVENUE BONDS
2018 SERIES A

Due June 15	Principal Amount	Interest Rate	CUSIP 736742
2020	\$6,180,000	5.000%	YY7
2021	6,490,000	5.000%	YZ4
2022	6,815,000	5.000%	ZA8
2023	7,155,000	5.000%	ZB6
2024	7,515,000	5.000%	ZC4
2025	7,890,000	5.000%	ZD2
2026	8,285,000	5.000%	ZE0
2027	8,700,000	5.000%	ZF7
2028	9,135,000	5.000%	ZG5
2029	9,590,000	4.500%	ZH3
2030	10,020,000	4.500%	ZJ9
2031	10,470,000	4.500%	ZK6
2032	10,945,000	4.500%	ZL4
2033	11,435,000	4.500%	ZM2
2034	11,950,000	4.500%	ZN0
2035	12,490,000	4.500%	ZP5
2036	13,050,000	4.500%	ZQ3
2037	13,635,000	4.500%	ZR1
2038	14,250,000	4.500%	ZS9
	<u>\$186,000,000</u>		

* Original par amount

MATURITY SCHEDULES – SECOND LIEN BONDS (continued):

\$216,480,000*
SECOND LIEN SEWER SYSTEM REVENUE REFUNDING BONDS,
2019 SERIES A

Due March 1	Principal Amount	Interest Rate	CUSIP 736742
2021	\$11,045,000	5.00%	A23
2022	11,595,000	5.00%	A31
2023	12,185,000	5.00%	A49
2024	12,785,000	5.00%	A56
2025	13,425,000	5.00%	A64
2626	14,100,000	5.00%	A72
2027	14,800,000	5.00%	A80
2028	15,545,000	5.00%	ZT7
2029	16,315,000	5.00%	ZU4
2030	17,135,000	5.00%	ZV2
2031	17,990,000	5.00%	ZW0
2032	18,900,000	5.00%	ZX8
2033	19,835,000	5.00%	ZY6
2034	20,825,000	5.00%	ZZ3
	<u>\$216,480,000</u>		

* Original par amount

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SEWER SYSTEM FINANCIAL AND OPERATING INFORMATION

OVERVIEW

This section provides financial and operating information specifically related to the Sewer System.

FUND ACCOUNTING SYSTEM

The Bureau's financial reporting system is organized into five separate funds. These funds and their financial reporting purposes are described as follows. For financial reporting purposes, the first four funds referenced below (all except the Environmental Remediation Fund) are included within the Sewage Disposal Fund.

Sewer System Operating Fund

The Sewer System Operating Fund provides for the day-to-day operation, maintenance and management of Bureau programs. All payments for Sewer System personnel, materials and services are made within the Sewer System Operating Fund, with reimbursement from the Sewer System Construction Fund (described below) for capital improvements.

Sewer System Construction Fund

The Sewer System Construction Fund provides for the funding of Sewer System capital improvements, holding equity contributions and net bond proceeds until requested by the Sewer System Operating Fund for reimbursements of certain capital-related expenditures.

Sewer System Debt Redemption Fund

The Sewer System Debt Redemption Fund is a single fund that provides for payment of City debt incurred in conjunction with construction of Sewage System facilities.

Sewer System Rate Stabilization Fund

The Sewer System Rate Stabilization Fund allows for better financial management by enabling the City to level fluctuations in Sewer System revenues (primarily connection charges) from year to year.

Environmental Remediation Fund

The Environmental Remediation Fund has in the past supported the City's waste disposal site remediation activities and contributes funds to the Portland Harbor Superfund investigation. The Portland Harbor Superfund program expenditures are recorded in this fund, which is funded through rate revenues that appear as separate line items on customers' sewer bills.

HISTORICAL REVENUES AND EXPENDITURES

The City has maintained Gross Revenues sufficient to provide for all operating expenditures and debt service and has met legal debt service coverage requirements. In addition to meeting these requirements, the Gross Revenues have provided substantial cash to finance the CIP in combination with federal grants and the proceeds of revenue bond sales. The Bureau also collects System Development Charges ("SDCs") when property development occurs. The Bureau's SDCs are used to pay for debt service on borrowings previously issued to expand the Sewer System, per State law, and are included in the calculation of Sewer System Gross Revenues.

Historical results of the Bureau's financial operations are shown in Table 1, "Sewer System Historical Operating Results." Audited statements of revenues, expenditures, changes in retained earnings, and the audited balance sheet for the Sewer System Operating Fund are presented in the APPENDIX.

Table 1
CITY OF PORTLAND, OREGON
Sewer System
Historical Operating Results⁽¹⁾

Fiscal Year	2014-15	2015-16	2016-17	2017-18	2018-19
<i>(In thousands of dollars)</i>					
GROSS REVENUES					
Operating Revenues					
Service Charges & Fees	\$299,343	\$310,517	\$326,485	\$338,588	\$342,344
Portland Harbor Superfund Charges	2,033	2,771	3,475	4,535	4,594
Wholesale Contracts	3,519	3,545	3,490	3,611	4,073
Other Service Charges & Miscellaneous	3,658	4,768	5,712	5,585	5,846
Total Operating Revenues	308,553	321,601	339,162	352,319	356,857
System Development/Line & Branch Charges	18,949	22,584	29,809	34,692	27,842
Interest Earnings	1,909	2,424	3,166	3,881	7,940
Cash Transfers In -					
Rate Stabilization Fund	0	1,485	0	5,000	0
Other Funds	1,814	1,120	1,388	1,783	3,015
TOTAL GROSS REVENUES⁽²⁾	\$331,225	\$349,214	\$373,525	\$397,675	\$395,654
OPERATING EXPENSES⁽³⁾					
Personal Services	\$46,934	\$48,569	\$50,537	\$55,103	\$60,186
Materials and Services	22,714	22,119	20,512	21,512	33,451
Internal Services	30,440	32,515	33,360	34,050	36,859
Capitalized Overhead	(10,869)	(12,042)	(11,618)	(11,214)	(13,021)
Cash Transfers Out -					
General Fund Overhead	3,936	5,874	6,064	6,170	6,602
Rate Stabilization Fund	25,250	25,100	31,500	34,000	24,000
Other	2,068	3,905	3,607	4,836	5,087
TOTAL OPERATING EXPENSES	\$120,473	\$126,040	\$133,962	144,457	\$153,164
NET REVENUES	\$210,752	\$223,174	\$239,563	253,218	\$242,490
DEBT SERVICE FOR COVERAGE					
First Lien Bonds	\$95,625	\$97,500	\$95,401	\$96,179	\$87,968
Second Lien Bonds ⁽⁴⁾	66,614	73,965	71,890	72,710	92,143
TOTAL DEBT SERVICE	\$162,239	\$171,465	\$167,291	\$168,889	\$180,111
DEBT SERVICE COVERAGE⁽⁵⁾					
<u>With Rate Stabilization Transfers</u>					
First Lien Bonds	2.20x	2.29x	2.51x	2.63x	2.76x
First and Second Lien Bonds ⁽⁶⁾	1.30x	1.30x	1.46x	1.50x	1.35x
<u>Without Rate Stabilization Transfers</u>					
First Lien Bonds	2.47x	2.53x	2.84x	2.93x	3.03x
First and Second Lien Bonds	1.45x	1.44x	1.62x	1.67x	1.48x

(1) Totals may not sum due to rounding.

(2) As defined in the Master First Lien Bond Ordinance.

(3) As defined in the Master First Lien Bond Ordinance. Excludes depreciation.

(4) Interest calculated as defined in Master Second Lien Bond Declaration.

(5) The Debt Service Coverage shown may differ slightly than what has been published previously in the City's Comprehensive Annual Financial Reports (CAFR), as the result of corrections to previous calculations. None of the corrections had a significant impact on coverage calculations.

(6) Debt service coverage above the Bureau's planning standard in FY 2016-17 reflects a decision to transfer excess net operating income to the Sewer Construction Fund to cash-fund the Capital Improvement Program in lieu of issuing bonds sooner or adding to the growing balance within the Rate Stabilization Fund. See Table 2, "Sewer System Historical Rate Stabilization Ending Fund Balance."

Source: Bureau of Environmental Services

USE OF RATE STABILIZATION FUND

The Bureau uses transfers between the Sewer System Operating Fund and the Sewer System Rate Stabilization Fund to smooth rate increases while ensuring that coverage meets planning standards purposes. Balances in the Rate Stabilization Fund were collected between FY 2002-03 and FY 2007-08 in anticipation of funding needs related to the completion of the Eastside CSO project and were drawn down through FY 2012-13 as a result of new debt required to complete the CSO project in FY 2011-12. As shown in the table below, balances have increased significantly since that time as a result of the strong economy in Portland producing higher-than-expected revenues, lower-than-expected expenditure growth, and a planned strategy to establish higher cash balances to encourage long-term financial stability.

Table 2
CITY OF PORTLAND, OREGON
Sewer System
Historical Rate Stabilization
Ending Fund Balance⁽¹⁾

<u>Fiscal Year</u>	<u>Ending Balance</u>
2014-15	\$ 51,663,657
2015-16	75,666,584
2016-17	107,968,316
2017-18	138,446,143
2018-19	165,417,772

(1) Balances reflect transfers to and from the Sewer System Operating Fund as well as interest earnings on Rate Stabilization Fund balances.

Source: Bureau of Environmental Services

USER CHARGE BILLING AND COLLECTION

Ratemaking and Authorization

Section 11-302 of the City Charter authorizes the City Council to fix fees and charges for connection to and use of the Sewer System. Sewer user fees and connection charges are formally reviewed every year by the Bureau. Rates required to support proposed activities and meet all obligations to bondholders are submitted annually by the Director of the Bureau to the City Council for review and approval. No governmental approval, other than the City Council's, is required. The City Council approved an increase to the average single-family residential bill of approximately 2.95 percent for FY 2019-20 in May 2019. Over the last five fiscal years, average single-family residential bills have increased an average of 3.01 percent annually.

Billings and Collections

Sewer System billings and collection services for retail customers are provided by the City's Water Bureau. Retail customers include both residential and commercial. Customers are billed quarterly, bimonthly, and monthly. Billings include separate line items for sewer, stormwater, and water services.

In FY 2018-19, there were on average 5,614 Sewer System retail accounts of all types receiving water service from either the Rockwood Water People's Utility District or the Lorna Water District. Since they are not City water customers, meter data must come from the respective water districts. These accounts are known by the acronym "SODNR" or "sewer only – do not read." Table 3, "Sewer System Historical Number of Customer Accounts by Class" below displays the annual average customer counts by class in the recent five-year period.

For delinquent sewer bills of City water customers, the Water Bureau implements service shutoffs on behalf of the Bureau. There is no water shutoff option for collection of delinquent sewer bills for the SODNR accounts. SODNR revenues for FY 2019-20 are estimated at \$6.2 million and past due balances currently total approximately \$1.8 million for this group, or approximately 25 percent of total delinquencies. Property liens have been used to enforce payment of delinquent accounts for owner-occupied single-family properties in the past and are expected to continue to be used in the future.

Wholesale customers are billed at various times during a fiscal year ranging from bi-monthly to quarterly. As of June 30, 2019, no wholesale customer was delinquent with respect to billed charges.

Clean River Rewards Program

To reflect the contributions to stormwater management made by individuals who install stormwater facilities on site, the City Council directed the Bureau to develop a discount program for stormwater charges. That program, referred to as the Clean River Rewards Program, was implemented on October 30, 2006. It provides for up to a 35 percent discount on the stormwater portion of the bill for customers who manage all stormwater on-site.

Approximately 34,100 customers have registered for and are receiving discounts on their stormwater bills, approximately 19 percent of the total customer base. Funding is provided by adjusting stormwater rates for all classes of customers upward to offset the revenue reductions from the stormwater discount program.

Low Income Discounts

In May of 2018 the City Council approved changes to an existing low-income assistance program, which included a second tier discount, an expanded crisis voucher program, and new tenant eviction-prevention assistance. For FY 2019-20, the Tier 1 bill discount (those with incomes at 60 percent or less of median household income) is approximately 49 percent of a typical single-family bill, which lowers sewer bills for eligible residential households by approximately \$37.37 per month or \$448 per year. The Tier 2 bill discount (those with incomes at 30 percent or less of median household income) is approximately 79 percent of a typical single-family bill, which lowers sewer bills for eligible residential households by approximately \$59.80 per month or \$718 per year. Funding is provided by adjusting rates for residential classes of customers upward to offset the revenue reductions from the low-income discount program. Total sewer revenue redistribution from low-income discount rates is estimated at approximately \$5.1 million for FY 2019-20.

Table 3
CITY OF PORTLAND, OREGON
Sewer System
Historical Number of Customer Accounts by Class⁽¹⁾

Fiscal Year	2014-15	2015-16	2016-17	2017-18	2018-19
CUSTOMER CLASS					
<u>RESIDENTIAL</u>					
Single Family	150,098	150,591	150,817	151,488	151,776
SODNR ⁽²⁾	5,212	5,196	5,260	5,286	5,289
Stormwater Only	336	334	338	341	403
Multifamily					
Monthly	2,090	2,098	2,109	2,139	2,148
Quarterly	8,665	8,893	9,253	9,661	10,114
SODNR ⁽²⁾	317	321	326	325	325
Subtotal	166,718	167,433	168,103	169,240	170,055
<u>COMMERCIAL</u>					
Commercial/Industrial					
Monthly	3,479	3,503	3,529	3,621	3,671
Quarterly	9,821	9,850	9,862	10,064	10,116
Quarterly (sewer only)	124	125	124	124	126
Extra Strength (measured)	59	56	51	52	49
Clean Water to Storm	15	16	16	15	15
Stormwater Only					
Monthly	26	27	26	27	29
Quarterly	133	150	160	159	157
Subtotal	13,657	13,727	13,768	14,062	14,163
Total Accounts	180,375	181,160	181,871	183,302	184,218

(1) Table reports annual average customer accounts.

(2) As described in the text above, Sewer Only-Do Not Read accounts receive no City water service.

Source: Bureau of Environmental Services

Extra Strength Charges

The Bureau currently monitors and charges about 50 industrial customers for extra strength sanitary sewage discharges based upon samples taken and laboratory analysis of their sewage discharges (“Measured Extra Strength”). The majority of these facilities are large food/beverage processing plant and commercial linen/laundry services. The Bureau collected approximately \$5.6 million from these Measured Extra Strength customers in FY 2018-19.

The Bureau also imposes an extra strength charges on commercial food service establishments using a “Class Average” methodology that has characterized the wastewater strength of 11 food service classes. The program’s rate structure provides an economic incentive to customers to reduce grease discharges and implement other best management practices, which is important to the Bureau for both regulatory compliance and reduced maintenance costs. As of June 30, 2019, about 3,200 food service facilities are billed Class Average extra strength charges on 2,500 accounts. Revenues from Class Average extra strength customers were about \$5.4 million in FY 2018-19.

Wholesale Rates

The City currently provides contractual services to one major wholesale customer, the City of Lake Oswego, and several smaller wholesale customers, including county service districts and portions of two other cities. Each wholesale service contract provides for full cost recovery during the life of the contract. Charges to wholesale customers were \$4.1 million for FY 2018-19, which is approximately 1.1 percent of total Sewer System operating revenues. For a discussion of the potential replacement of the Tryon Creek Wastewater Treatment Plant, which currently provides wholesale service to the City of Lake Oswego, see “SEWAGE

TREATMENT PLANTS” in the Official Statement of the Second Lien Sewer System Revenue Bonds, 2019 Series A. The Official Statement can be found on the MSRB’s EMMA system for municipal securities disclosure at <http://emma.msrb.org>.

Table 4
CITY OF PORTLAND, OREGON
Sewer System
Historical Monthly Rates and Charges⁽¹⁾

Fiscal Year	2014-15	2015-16	2016-17	2017-18	2018-19
CUSTOMER CLASS					
<u>RESIDENTIAL</u>					
Sanitary Volume (\$/ccf)	9.23	9.56	9.89	10.28	10.53
Impervious Area Charge (\$/1000 sq. ft.)	10.82	11.22	11.61	12.16	12.60
Average Single-Family Monthly Bill(\$/account) ⁽²⁾	65.25	67.60	69.80	71.86	73.52
<u>COMMERCIAL</u>					
Sanitary Volume (\$/ccf)	9.097	9.428	9.767	10.141	10.454
Cooling (Clean) Water					
To Storm Sewer (\$/ccf)	0.924	0.961	1.001	1.042	1.096
Impervious Area Charge (\$/1000 sq. ft.)	11.29	11.69	12.13	12.72	13.26
Extra Strength					
Biochemical Oxygen Demand (\$/lb.)	0.622	0.650	0.674	0.723	0.788
Suspended Solids (\$/lb.)	0.770	0.804	0.832	0.988	1.096
<u>Capital Charges</u>					
Sanitary System Development Charge (\$/EDU)	4,779	5,867	5,712	6,046	6,446
Year-to-Year Percentage Increase of Typical Single-Family Monthly Bill ⁽²⁾	4.00%	3.60%	3.25%	2.95%	2.31%

(1) Abbreviations used in the table include the following: “ccf” (hundred cubic feet) and “EDU” (Equivalent Dwelling Units).

(2) Typical bills reflect average annual billed consumption, which is lower than winter average use.

Source: Bureau of Environmental Services

Major Retail Users

The following table presents the top retail users of the Sewer System, as measured by user charges. The charges represent a combination of users’ sanitary sewer and stormwater accounts.

Table 5
CITY OF PORTLAND, OREGON
Sewer System
Largest Bureau Customers (FY 2018-19)

CUSTOMER	Total Sewer System Charges	Percentage of Rate Revenues
Port of Portland	\$7,927,450.89	2.31%
OHSU	2,525,285.10	0.74
Precision Castparts	2,375,663.41	0.69
Portland Public Schools	2,210,526.34	0.64
Darigold Inc.	1,890,024.33	0.55
Housing Auth. of Portland	1,401,743.95	0.41
Bureau of Parks	1,370,130.66	0.40
Portland State University	1,303,226.51	0.38
Fred Meyer Inc.	1,289,312.51	0.38
Siltronic Corp.	1,288,730.06	0.38
Total	\$23,582,805.45	6.87%

Source: Bureau of Environmental Services

UTILITY LICENSE FEE

The Bureau pays a utility license fee directly to the City’s General Fund for the right to operate a utility within the City. The fee is levied pursuant to City Code Chapter 7.14. The Bureau, the Water Bureau, and City-owned golf courses pay this fee along with private utilities such as cable, telephone, gas, and electric. Currently, the utility license fee is not subject to regulation by State law and may be raised at the discretion of the City Council. The utility license fee is subordinate to the payment of debt service on the First Lien Bonds and Second Lien Bonds. The table below presents a five-year history of the Bureau’s utility license fee payments as well as the source of those payments.

Table 6
CITY OF PORTLAND, OREGON
Sewer System
Utility License Fee Payments

Fiscal Year	Sewer Operating Fund	Environmental Remediation Fund	Totals
2014-15	\$14,761,849	\$112,495	\$14,874,343
2015-16	15,571,211	138,095	15,709,306
2016-17	16,250,599	173,160	16,423,760
2017-18	16,884,548	226,035	17,110,583
2018-19	17,105,955	229,112	17,335,067

Source: City of Portland

OUTSTANDING SEWER SYSTEM DEBT

Revenue Bonds

The following table shows outstanding First Lien Bonds, Second Lien Bonds, and Subordinate Obligations as of December 31, 2019. On December 3, 2019, the City issued its Second Lien Sewer System Revenue Refunding Bonds, 2019 Series A, which refunded the Second Lien Sewer System Revenue Bonds, 2010 Series A, as reflected in Table 7 below.

Table 7
CITY OF PORTLAND, OREGON
Sewer System
Outstanding First Lien Bonds, Second Lien Bonds, and Subordinate Obligations

Issue	Dated	Final Maturity	Original Par Amount	Amount Outstanding
First Lien Bonds				
2014 Series A Bonds	08/14/2014	10/01/2024	\$86,165,000	\$48,440,000
2015 Series A Bonds	08/27/2015	06/01/2031	329,805,000	179,130,000
2016 Series A Bonds	09/07/2016	06/15/2033	156,650,000	148,345,000
Subtotal			\$572,620,000	\$375,915,000
Second Lien Bonds				
2013 Series A Bonds	09/17/2013	08/01/2038	210,965,000	170,835,000
2014 Series B Bonds	08/14/2014	10/01/2039	204,220,000	179,505,000
2015 Series B Bonds	08/27/2015	06/01/2031	63,300,000	49,285,000
2016 Series B Bonds	09/07/2016	06/15/2033	162,465,000	154,920,000
2018 Series A Bonds	05/03/2018	05/01/2038	189,110,000	186,000,000
2019 Series A Bonds	12/03/2019	03/01/2034	216,480,000	216,480,000
Subtotal			\$1,046,540,000	\$957,025,000
Subordinate Obligations				
SRF Loans	Various	Various	\$26,302,393	\$10,078,674
TOTAL			\$1,645,462,393	\$1,343,018,674

Source: City of Portland

The following table shows the Sewer System’s annual debt service requirements associated with outstanding First Lien Bonds and Second Lien Bonds.

Table 8
CITY OF PORTLAND, OREGON
SEWER SYSTEM REVENUE BONDS
Annual Debt Service Requirements⁽¹⁾

Fiscal Year	Outstanding	Outstanding	
Ending	First	Second	
June 30	Lien Bond	Lien Bond	Total
	Debt Service	Debt Service	Debt Service
2020	\$87,967,575	\$91,261,060	\$179,228,635
2021	77,141,200	85,117,906	162,259,106
2022	27,782,075	135,385,281	163,167,356
2023	27,789,575	135,364,281	163,153,856
2024	35,961,450	78,030,281	113,991,731
2025	35,976,325	70,496,156	106,472,481
2026	25,030,325	70,499,181	95,529,506
2027	25,024,825	70,485,281	95,510,106
2028	25,025,325	70,499,206	95,524,531
2029	25,021,075	70,485,831	95,506,906
2030	25,030,475	70,486,631	95,517,106
2031	25,023,275	70,488,694	95,511,969
2032	13,492,525	64,604,344	78,096,869
2033	13,494,125	64,589,800	78,083,925
2034	-	62,359,425	62,359,425
2035	-	40,495,775	40,495,775
2036	-	40,497,150	40,497,150
2037	-	40,489,575	40,489,575
2038	-	40,494,850	40,494,850
2039	-	25,599,425	25,599,425
2040	-	13,071,300	13,071,300
Total	\$469,760,150	\$1,410,801,435	\$1,880,561,585

(1) Totals may not sum due to rounding.
Source: City of Portland

RESERVE ACCOUNTS, RESERVE EQUIVALENTS AND RESERVE CREDIT FACILITIES

First Lien Bond Reserve Account

The Master First Lien Bond Declaration allows the City to create subaccounts in the First Lien Bond Reserve Account and to determine the Reserve Requirement for each subaccount. The First Lien Bond Reserve Account currently has one subaccount, the Prior Bonds Reserve Subaccount, that secures the First Lien Sewer System Revenue Refunding Bonds, 2014 Series A, the First Lien Sewer System Revenue Refunding Bonds, 2015 Series A, and the First Lien Sewer System Revenue Refunding Bonds, 2016 Series A (collectively, the “Prior Bonds”).

The Prior Bonds Reserve Account, as defined under the Master First Lien Bond Declaration, is a pooled reserve account that secures all currently outstanding First Lien Bonds. The Prior Bonds Reserve Subaccount is fully funded with Reserve Equivalents and contains no cash and investments, as shown in the table below. The Prior Bonds Required Reserve is currently approximately \$41.0 million. The current balance in the First Lien Bond Reserve Account, which is the aggregate face amount of First Lien Bond Reserve Equivalents, is approximately \$61.1 million.

Table 9
CITY OF PORTLAND, OREGON
First Lien Bond Reserve Account

Series ⁽¹⁾	Date of Issue	Maturity Date	Surety Provider	Required Reserve	Surety Face Value ⁽²⁾	Moody’s/S&P Ratings ⁽³⁾
2014 Series A	08/14/2014	10/01/2024	AGM ⁽⁴⁾	n/a	\$11,641,700	A2/AA
2015 Series A	08/27/2015	06/01/2031	AGM ⁽⁴⁾	n/a	\$31,148,923	A2/AA
2016 Series A ⁽⁵⁾	09/07/2016	06/15/2033	AGM ⁽⁴⁾	n/a	\$18,280,050	A2/AA

- (1) The Prior Bonds are jointly secured by the Prior Bonds Reserve Subaccount, which currently is calculated at 125 percent of average annual debt service for outstanding Prior Bonds.
- (2) While the aggregate face amount of Prior Bonds Reserve Equivalents exceeds the Prior Bonds Required Reserve, the Prior Bonds Reserve Equivalents may only be drawn up to an amount equal to the Prior Bonds Required Reserve in the event of a payment default.
- (3) Ratings for surety providers are from Moody’s Investor Services and S&P Global Ratings, respectively.
- (4) Assured Guaranty Municipal Corporation (“AGM”).
- (5) The City refunded a portion of its 2008 Series A Bonds with proceeds of its 2016 Series A Bonds and defeased the remaining maturity of the 2008 Series A Bonds in September 2017. The Reserve Equivalent provided by AGM for the 2008 Series A Bonds extends to the 2016 Series A Bonds.

Source: City of Portland

The Master First Lien Bond Declaration provides that Reserve Equivalents are valued at the amount available to be drawn on them unless a Reserve Credit Event has occurred and is continuing. The City currently expects that it could draw the full face amount under all First Lien Bond Reserve Equivalents shown in Table 9 above and no reserve Credit Event has occurred and is continuing.

Second Lien Bond Reserve Account

The Second Lien Bond Reserve Account consists of subaccounts that secure different Series of Second Lien Bonds. All of the subaccounts are fully funded. The subaccounts in the Second Lien Sewer System Refunding Bonds, 2015 Series B, and the Second Lien Sewer System Revenue Refunding Bonds, 2016 Series B currently contain the Reserve Credit Facilities shown in the following table. The subaccounts in the Second Lien Bond Reserve Account for the Second Lien Sewer System Revenue Bonds, 2010 Series A, the Second Lien Sewer System Revenue Bonds, 2013 Series A, and the Second Lien Sewer System Revenue Bonds, 2014 Series A contain cash or investments.

Table 10
CITY OF PORTLAND, OREGON
Funding of Second Lien Bond Reserve Subaccounts for
Second Lien Bonds Secured by the Second Lien Reserve Account⁽¹⁾

Series of Bonds Secured	Date of Issue	Maturity Date	Surety Provider/ Cash	Reserve Requirement	Surety Face Value/Cash
2013 Series A	09/17/2013	08/01/2038	Cash	\$17,132,053	17,905,146
2014 Series B	08/14/2014	10/01/2039	Cash	13,073,050	13,073,050
2015 Series B	08/27/2015	06/01/2031	AGM ⁽²⁾	5,903,050	5,904,050
2016 Series B	09/07/2016	06/15/2033	AGM ⁽²⁾	3,000,000	3,000,000

(1) Note that the City’s Second Lien Sewer System Revenue Bonds, 2018 Series A and Second Lien Sewer System Revenue Refunding Bonds, 2019 Series A Bonds are not secured by any subaccount in the Second Lien Bond Reserve Account.

(2) Assured Guaranty Municipal Corporation (“AGM”).

Source: City of Portland

The Master Second Lien Bond Declaration provides that each subaccount in the Second Lien Bond Reserve Account is deemed to contain the amount available to be paid under all Reserve Equivalents that are credited to that subaccount. The City currently believes that the amount available to be paid under each Reserve Equivalent shown in Table 10 is equal to its full face amount.

CITY FINANCIAL AND OPERATING INFORMATION

BASIS OF ACCOUNTING

The governmental fund types are reported using the current financial resources measurement focus and the modified accrual basis of accounting. The economic resources measurement focus and the accrual basis of accounting is used for all proprietary fund and fiduciary fund financial statements. The City's accounting practices conform to Generally Accepted Accounting Principles (GAAP) as interpreted by the Governmental Accounting Standards Board (the "GASB").

FISCAL YEAR

July 1 to June 30.

AUDITS

The Oregon Municipal Audit Law (ORS 297.405 - 297.555) requires an audit and examination be made of the accounts and financial affairs of every municipal corporation at least once each year. The audit shall be made by accountants whose names are included on the roster prepared by the State Board of Accountancy. Moss Adams LLP has performed auditing services for FY 2002-03 through FY 2018-19.

A complete copy of the City's FY 2018-19 audit is available on the EMMA system for municipal securities disclosure established by the MSRB and accessible at <http://emma.msrb.org>.

Excerpts of the City's audited financial statements for the Sewage Disposal Fund on a GAAP basis are found in the Appendix.

FINANCIAL REPORTING AND BUDGETING

Financial Reporting

The City has been awarded the Government Finance Officers Association ("GFOA") Certificate of Achievement for Excellence in Financial Reporting every year since 1982. According to the GFOA, the Certificate of Achievement is the "highest form of recognition in the area of governmental financial reporting." To be awarded the certificate, a governmental unit must publish an easily readable and efficiently organized comprehensive financial report whose content conforms to program requirements and satisfies both generally accepted accounting principles and applicable legal requirements.

Budget Process

The City prepares annual budgets for all its bureaus and funds in accordance with provisions of Oregon Local Budget Law. The law provides standard procedures for the preparation, presentation, administration, and public notice for public sector budgets. At the outset of the process, the Mayor or the full City Council reviews overall goals, establishes priorities, and provides direction to bureaus. The City Council conducts an extensive public information process to obtain direct public input on City service priorities, and most bureaus include key stakeholders in developing their budget requests.

In addition to this public outreach process, in January 2014, the City Council approved a five-year contract with the Citizens' Utility Board of Oregon (the "CUB"), an independent consumer advocacy nonprofit organization, to provide input regarding the City's water and sewer bureaus on behalf of residential customers. The City Council renewed the partnership agreement with the CUB in 2019. The CUB provides recommendations to the City Council on capital spending, rates, and customer service issues. On June 10, 2015, the City Council approved creation of the Portland Utility Board, a new citizen oversight panel that replaced the Portland Utility Review Board and budget advisory committees for the Portland Water Bureau and Bureau of Environmental Services. The Portland Utility Board, which is staffed by a dedicated financial analyst, advises the City Council regarding operations of the two utility bureaus, including development of bureau budgets and financial plans, capital spending, and rate setting.

A five-year General Fund financial forecast, which serves as the basis for determining resources available for budgeting, is also provided to the City Council along with budget requests. Major City bureaus generally prepare and submit five-year financial plans and capital improvement plans. The City Budget Office, which was created by the City Council in December 2012, coordinates the budget development process.

Bureau budget requests are reviewed by the Mayor and Council members, as well as a panel of community advisors. The Mayor develops a Proposed Budget that addresses City Council priorities, public input, and balancing requirements. Following presentation of the Proposed Budget, a community hearing is scheduled wherein public testimony is taken. A budget summary and notice of hearing are published prior to the hearings. The City Council, sitting as the Budget Committee, considers the testimony from the community and can alter the budget proposal before voting to approve the budget.

The City Council transmits the Approved Budget to the Multnomah County Tax Supervising and Conservation Commission (the "TSCC"), an oversight board appointed by the governor, for public hearing and review for compliance with budget law. Upon certification by the TSCC, the City Council holds a final public hearing prior to adoption. Final adoption of the City's budget is required to be through a vote of the City Council no later than June 30. All committee meetings and budget hearings are open to the public.

INSURANCE

The City is exposed to various risks of loss related to theft, damage and destruction of assets, tort claims (general and fleet liability), injuries to employees, acts of terrorism, and natural disasters. The City is self-insured for workers' compensation, fleet and general liability claims and certain employees' medical coverage in internal service funds.

The City estimates liability for incurred losses for reported and unreported claims for workers' compensation, general and fleet liability and employee medical coverage (included in accrued self-insurance claims in the combined statement of net position). Workers' compensation, general and fleet liability estimates are primarily based on individual case estimates for reported claims and through historical data for unreported claims as determined by the City's Risk Management Division and independent actuarial studies. Liabilities are based on an estimated ultimate cost of settling claims, including effects of inflation and other societal and economic factors. The estimated liability is then discounted by the City's expected rate of return and anticipated timing of cash outlays to determine present value of the liability. For FY 2018-19, the expected rate of return used was 2.1 percent. For FY 2019-20, and subsequent years, the expected rate of return used was 2.3 percent and 2.35 percent respectively. The Bureau of Human Resources and the employee benefits consultant determines relevant employees' medical coverage estimates.

The City provides insurance coverage deemed as adequate, appropriate, and actuarially sound. It meets all the City's anticipated settlements, obligations and outstanding liabilities. An excess liability coverage insurance policy covers individual claims in excess of \$1 million to policy limits, police law enforcement claims in excess of \$2.5 million for claims occurring after November 12, 2013, to policy limits and an excess workers' compensation coverage insurance policy covers claims in excess of \$850,000 for occurrences after July 1, 2012. The City purchases commercial insurance for claims in excess of coverage provided by the self-insurance fund. The City's limits of coverage on the excess liability policy is \$10 million per claim above the self-insurance retention for covered torts. The City does not have any claims reserved above the current self-insurance retention and excess layer. In the City's last three excess renewals, there have been no material changes in retention, coverage or conditions. Furthermore, current levels of accrued claims and case reserve estimates are viewed as reasonable provisions for expected future losses.

Per Oregon Revised Statute ("ORS") 30.272 limitations on liability of public bodies for personal injury to any single claimant for causes of action arising on or after July 1, 2019, and before July 1, 2020, limitations are \$749,000 for single claimant and \$1.498 million for multiple claimants.

Per ORS 30.273 limitations on liability of public bodies for property damage arising on or after July 1, 2019 and before July 1, 2020, limitations are \$122,900 for single claimant and \$614,300 for multiple claimants.

Liabilities are reported in the applicable fund when it is probable that a loss has occurred and the amount of loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported. The result of the process to estimate the claims liability is not an exact amount as it depends on many complex factors, such as inflation, changes in legal doctrines, and damage awards. Accordingly, claims are reevaluated for effects of inflation, recent claim settlement trends (including frequency and amount of pay-outs), and other economic and social factors.

The estimate of claims liability also includes amounts for incremental claim adjustment expenses related to specific claims and other claim adjustment expenses regardless of whether any are allocated to specific claims. Estimated recoveries, from salvage or subrogation for example, are another component of the claims liability estimate. Changes in the balances of claims liabilities during the past two years are as follows:

	FY 2018-19	FY 2017-18
Balance, beginning of fiscal year	\$31,721,400	\$28,068,818
Incurred claims and adjustments	66,624,554	64,839,071
Claim cash payments	(65,925,043)	(61,186,489)
Unpaid claims, end of fiscal year	<u>\$32,420,911</u>	<u>\$31,721,400</u>

CYBERSECURITY

The City, like other large public and private entities, relies on a large and complex technology environment to conduct its operations, and consequently faces the threat of cybersecurity incidents. Cybersecurity incidents could result from unintentional events, or from deliberate attacks by unauthorized entities or individuals attempting to gain access to the City’s information technology systems to misappropriate assets or information or to cause operational disruption and damage.

To reduce and mitigate the risk of business operations impact and/or damage from cybersecurity incidents, the City has invested in multiple forms of cybersecurity and operational safeguards, including adopting the National Institute of Standards and Technology Cybersecurity Framework to support, maintain, and prioritize securing critical infrastructure and data systems, manage risk, and improve cybersecurity event detection and remediation. Under the leadership of the City’s Chief Information Security Officer, the City’s Bureau of Technology Services has established a cybersecurity team which is responsible for identifying, evaluating, responding, and reporting on information security risks in a manner that meets compliance and regulatory requirements, and which aligns with and supports the cybersecurity risk posture of the City. Additionally, all information security related standards, policies and administrative rules are reviewed annually.

As a recipient and provider of personal and confidential information, the City has been the subject of cybersecurity incidents that have resulted in, or could have resulted in, adverse consequences to the City’s confidential information and technologies and that required a response action to mitigate potential consequences. For example, during 2018, the City was subject to several phishing attacks against the City’s Microsoft-hosted email system which briefly disrupted some email services and exposed several employee e-mail accounts to unauthorized entities or individuals. The scope of impact was limited to a small number of accounts and the attacks were quickly contained and mitigated. The City has no evidence that any City or individual’s confidential information was exfiltrated, but there is a possibility of exfiltration. The City has thoroughly investigated these incidents and where appropriate, has offered the potentially impacted individuals a year of free credit monitoring. Since the occurrence of those attacks, the City has implemented additional information security controls to reduce the likelihood of success of future phishing attacks.

The City’s cybersecurity and operational safeguards are periodically internally tested and assessed by external auditors, however the City cannot assure that these measures will prevent all potential cybersecurity attacks, and accompanying disruptions and costs. To offset some of the potential financial costs and risks associated with a breach, the City’s Risk Management Division obtained a cyber-liability insurance policy. The policy offers liability coverage, as well as coverage for certain business expenses related to cybersecurity incidents, such as business interruption expenses and costs to recover, restore or replace lost data. The policy does not cover “social engineering losses,” such as losses resulting from bad actors manipulating people into performing actions such as wiring finances to banks. These claims are covered separately under the City’s Crime Policy.

LABOR RELATIONS

The City employs approximately 6,637 full-time equivalent personnel. Of these, 4,554 are represented by collective bargaining units.

The City is currently negotiating successor agreements with the Portland Fire Fighters Association (“PFFA”) and the Bureau of Emergency Communications (“BOEC”). Each of the current agreements expired on June 30, 2019. Neither union is permitted to strike, but each has the option of taking contract negotiations to binding arbitration. The PFFA declared a bargaining impasse on November 1, 2019, and filed a declaration of impasse with the State Employment Relations Board as negotiations had occurred for at least 150 days, been mediated for at least 15 days, and no agreement had been reached. The City is scheduling dates for arbitration, which currently are expected to occur beginning in April 2020. Additionally, negotiations between the City and BOEC have occurred for at least 150 days and the union has now requested to move to mediation. The first session occurred on December 17, 2019, and a second session has been scheduled for March 2020.

Table 11
CITY OF PORTLAND, OREGON
Bargaining Units and Contract Status

Collective Bargaining Unit	Number of Employees⁽¹⁾	Contracts & MOUs Expire
District Council of Trade Unions (DCTU) ⁽²⁾	1,173	June 30, 2020
Portland Police Association	830	June 30, 2020
Professional and Technical Employees Local 17	836	June 30, 2021
Portland Fire Fighters Association	653	June 30, 2019 ⁽³⁾
Laborers' International Union of North America Local 483 - Portland City Laborers	630	June 30, 2021
Laborers' International Union of North America Local 483 - Parks and Recreation	204	June 30, 2021
Bureau of Emergency Communications - PPA	108	June 30, 2019 ⁽³⁾
Laborers' International Union of North America Local 483 - Seasonal Maintenance Workers	91	June 30, 2022
Portland Police Commanding Officers Association (PPCOA)	29	June 30, 2022

(1) Number of employees refers to number of filled full-time equivalent positions.

(2) DCTU includes DCTU IBEW Local 48; DCTU- Auto Mechanics, District Lodge 24; DCTU-Operating Engineers Local 701; DCTU-Painters and Allied Trades, District Council 5; and DCTU Plumbers Local 290.

(3) Currently in negotiation.

Source: *City of Portland*

PENSION PLANS: OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

Overview

The Oregon Public Employees Retirement System (“PERS” or “the Statewide PERS System”) provides statewide defined benefit retirement plans for units of state government, political subdivisions, community colleges, and school districts. Most public employers in Oregon, including the City, participate in PERS. PERS is administered under ORS Chapter 238, Chapter 238A, and Internal Revenue Code Section 401(a) by the Public Employees Retirement Board (the “PERS Board”). The PERS Board is responsible for setting policies and for providing administrative direction to PERS. Benefits provided through PERS are paid from the Oregon Public Employees’ Retirement Fund (“OPERF”). PERS is a cost-sharing, multiple-employer public employee retirement system.

City employees (other than certain fire and police personnel), after six months of employment, participate in one of three retirement pension benefit programs provided through PERS as described below. The three PERS pension programs include two closed defined benefit programs and one program that has features of both defined benefit and defined contribution plans. In a defined benefit plan, the investment risk for the plan assets is borne by the employer. In a defined contribution plan, the investment risk for the plan assets is borne by the employee. A combination of participating employer contributions (determined by the PERS Board based upon the results of actuarial valuations), investment earnings and employee-paid contributions (currently, for the City, six percent of salaries and nine percent for police and fire employees) fund these pension programs. See “—Employer Contribution Rates and Amounts” and “—PENSION PLANS: FIRE AND POLICE DISABILITY AND RETIREMENT FUND” below.

Benefit Programs

Employees hired before January 1, 1996, are known as “Tier 1” participants. The retirement benefits applicable to Tier 1 participants are based on a defined benefit model. Tier 1 has a normal retirement age of 58 and, effective January 1, 2018, an assumed earnings rate guarantee of 7.20 percent. PERS maintains a “Tier One Rate Guarantee Reserve” which is credited with investment earnings in excess of the assumed earnings rate guarantee and used to offset the effects of investment earnings below the assumed earnings rate guarantee. As of June 30, 2019, the balance of this reserve was \$448.8 million. As of June 30, 2019, there were 18,971 active plan members, 128,177 retired plan members or their beneficiaries currently receiving benefits, and 7,655 inactive plan members entitled to but not yet receiving benefits, and 3,410 inactive plan members eligible for the refund value of their account only, for a total of 158,213 Tier One members in the Statewide PERS System.

Employees hired on or after January 1, 1996, and before August 29, 2003, are known as “Tier 2” participants. The Tier 2 program

also provides a defined benefit but with lower expected costs to employers than under the Tier 1 benefit. There is no assumed earnings rate guarantee and Tier 2 has a higher normal retirement age of 60. As of June 30, 2019, there were 32,441 active plan members, 15,567 retired plan members or their beneficiaries currently receiving benefits, and 5,778 inactive plan members entitled to but not yet receiving benefits, and 9,788 inactive plan members eligible for the refund value of their account only, for a total of 63,574 Tier 2 members in the Statewide PERS System.

Employees hired on or after August 29, 2003, are participants in a successor retirement program to the Tier 1 and Tier 2 retirement programs (the “T1/T2 Pension Programs”) known as the Oregon Public Service Retirement Plan (“OPSRP”). OPSRP consists of a defined benefit plan and also offers the Individual Account Program (“IAP”), which offers a defined contribution benefit. As of June 30, 2019, there were 124,915 active plan members, 5,642 retired plan members or their beneficiaries currently receiving benefits, 5,868 inactive plan members entitled to but not yet receiving benefits, and 16,287 inactive plan members not eligible for refund or retirement, for a total of 152,712 OPSRP Pension Program members.

Effective January 1, 2004, all active Tier 1 and Tier 2 employees also became members of the IAP. Tier 1 and Tier 2 employees retain their existing T1/T2 Pension Program account, but member contributions are now deposited into the member’s IAP account, not into the member’s PERS account.

Apportionment of City Assets and Liabilities

The City is pooled with the State of Oregon and other Oregon local government and community college public employers for its T1/T2 Pension Programs (the “State and Local Government Rate Pool” or “SLGRP”), and the SLGRP’s assets and liabilities are pooled. These assets and liabilities are not tracked or calculated on an employer basis or allocated to individual employers. The City’s portion of the SLGRP’s assets and liabilities is based on the City’s proportionate share of SLGRP’s pooled covered payroll. OPSRP’s assets and liabilities are pooled on a program-wide basis. These assets and liabilities are not tracked or calculated on an employer basis or allocated to individual employers. The City’s share of OPSRP’s assets and liabilities is based on the City’s proportionate share of OPSRP’s pooled covered payroll. The City’s proportionate liability of the T1/T2 Pension Programs and OPSRP may increase if other pool participants fail to pay their full employer contributions.

Employer Asset Valuation and Liabilities

Oregon statutes require an actuarial valuation of the Statewide PERS System by a competent actuary at least once every two years. The current PERS actuary is Milliman, Inc. (“Milliman”). Under current practice, actuarial valuations are performed annually, but only valuations as of the end of each odd-numbered year are used to determine annual required employer contribution rates that employers will be required to pay to fund the obligations of T1/T2 Pension Programs, OPSRP and the PERS-sponsored Retirement Health Insurance Account Plan (“RHIA”). For a description of RHIA, see “OTHER POST-EMPLOYMENT RETIREMENT BENEFITS” below. Valuations are released approximately one year after the valuation date.

An employer’s unfunded actuarial liability (“UAL”) is the excess of the actuarially determined present value of the employer’s benefit obligations to employees over the existing actuarially determined assets available to pay those benefits. The following table shows certain methods and assumptions adopted by the PERS Board, which are the basis for the actuarial valuations.

Table 12
OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM
Actuarial Assumptions and Methods

ASSUMPTION/METHOD	2016 & 2017 VALUATIONS⁽¹⁾	2018 & 2019 VALUATIONS⁽²⁾
Actuarial Cost Method:	Entry Age Normal	Unchanged
UAL Method: T1/T2 Programs	Level Percentage of Payroll over 20 years (fixed)	Unchanged
OPSRP	Level Percentage of Payroll over 16 years (fixed)	Unchanged
Asset Valuation Method:	Market Value ⁽³⁾	Unchanged
Investment Rate of Return:	7.20%	Unchanged%
Payroll Growth Rate:	3.50%	Unchanged
Inflation Level:	2.50%	Unchanged
Contribution Rate Stabilization Method:	Contribution rate may increase or decrease by 3% of payroll or by 20% of the previous rate; whichever is greater, when an employer's funded status is between 70% and 130%. At a funded status of 60% or less, or 140% or more, the limitation doubles to 6% of payroll or 40% of the previous rate, whichever is greater. At a funded status between 60% and 70% or 130% and 140%, the limitation increases in increments between 3%-6% of payroll or 20%-40% of the previous rate, whichever is greater.	Unchanged

- (1) Assumptions and methods adopted by the PERS Board on July 28, 2017, that apply to actuarial valuations as of December 31, 2016, and December 31, 2017.
- (2) Assumptions and methods adopted by the PERS Board on October 4, 2019 that apply to actuarial valuations as of December 31, 2018 and as of December 31, 2019 when released in the fall of 2020. See information regarding the one-time amortization of the unfunded actuarial liability as of December 31, 2019 as described in "PENION PLANS: OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM – Recent Developments Related to PERS."
- (3) Market value of assets reduced by value of assets in statutory reserves (contingency, capital preservation and rate guarantee reserves).

Source: Oregon Public Employees Retirement System

The PERS Board adopted the final actuarial assumptions and methods for the 2018 and 2019 actuarial valuations on October 4, 2019. Such adopted actuarial assumptions and methods remain largely unchanged from the actuarial assumptions and methods used for the 2016 and 2017 actuarial valuations, with the exception of the amortization of the 2019 UAL as described in Milliman released its 2016 valuation for the Statewide PERS System as of December 31, 2016 (the "2016 System Valuation") on December 6, 2017, its 2017 valuation for the Statewide PERS System as of December 31, 2017 (the "2017 System Valuation") on September 28, 2018, and its 2018 valuation for the Statewide PERS System as of December 31, 2018 (the "2018 System Valuation") on December 12, 2019. These reports include system-wide actuarial valuations for the T1/T2 Pension Programs and OPSRP.

Milliman released the City's individual 2016 valuation as of December 31, 2016, (the "2016 City Valuation") on December 7, 2017, and its 2017 valuation as of December 31, 2017, (the "2017 City Valuation") on October 17, 2018, and the City's individual 2018 valuation as of December 31, 2018 (the "2018 City Valuation") on December 12, 2019. These valuation reports provide the City's portion of (a) the SLGRP based on the City's proportionate share of the total SLGRP covered payroll as of the valuation date, (b) OPSRP based on the City's proportionate share of total OPSRP covered payroll as of the valuation date, and (c) the RHIA based on the City's proportionate share of the total RHIA covered payroll as of the valuation date.

The tables below provide historical summary valuation information for the Statewide PERS System and for the City.

Table 13
OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM
Summary of Statewide PERS System Funding Levels
(\$ in Millions) ⁽¹⁾

STATEWIDE PERS SYSTEM				
Calendar	Actuarial	Unfunded		
Year	Value of	Actuarial	Actuarial	Funded
Year	Assets (2)	Liability	Liability	Ratio (%)
2009	\$43,238.8	\$56,810.6	\$13,571.8	76.1
2010	46,004.4	59,329.5	13,325.1	77.5
2011	43,238.8	61,198.4	17,959.6	76.1
2012 ⁽³⁾	49,265.9	60,405.2	11,139.3	81.6
2013 ⁽³⁾	54,090.1	62,593.6	8,503.5	86.4
2014 ⁽⁴⁾	55,518.2	73,458.9	17,940.7	75.6
2015	54,365.8	76,196.6	21,830.8	71.3
2016	55,670.2	80,970.3	25,300.1	68.8
2017	61,764.9	84,056.1	22,291.2	73.5
2018	59,593.0	86,574.7	26,981.7	68.8

- (1) Composed of Tier 1/Tier 2 and OPSRP pensions but excluding retiree healthcare subsidies of RHIA.
- (2) Does not take into account offsets for deposits made by individual employers from bond proceeds or cash on hand in side accounts
- (3) Reflects the legislative changes enacted by the Oregon Legislative Assembly in 2013 (the “2013 PERS Bills”) to reduce future benefit payments, resulting in a reduction of the PERS unfunded actuarial liability by approximately \$5 billion.
- (4) In April 2015, the Oregon Supreme Court announced a decision on lawsuits challenging the provisions of the 2013 PERS Bills. The decision upheld the elimination of a benefit increase for out-of-state retirees but declared other benefit reductions unconstitutional as applied to benefits earned prior to the June 1, 2013 effective date of the 2013 PERS Bills.

Source: Oregon Public Employees Retirement System

Table 14
OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM
Summary of City Funding Levels
(\$ in Millions)⁽¹⁾

Calendar Year	Actuarial Value of Assets	Actuarial Liability	Unfunded Actuarial Liability	Funded Ratio (%)
2009	\$1,424.0	\$1,606.0	\$182.0	88.7
2010	1,499.8	1,672.5	172.7	89.7
2011	1,459.0	1,724.2	265.3	84.6
2012 ⁽²⁾	1,624.8	1,744.3	119.5	93.2
2013 ⁽²⁾	1,762.8	1,804.7	41.9	97.7
2014 ⁽³⁾	1,844.1	2,210.1	366.0	83.4
2015	1,820.6	2,335.5	514.9	78.0
2016	1,891.4	2,540.2	648.8	74.4
2017	2,171.1	2,776.3	605.2	78.2
2018	2,202.1	3,048.8	846.8	72.2

(1) Composed of Tier 1/Tier 2 and OPSRP pensions but excluding retiree healthcare subsidies of RHIA. City information is calculated separately for the SLGRP and OPSRP using the City's payroll as a percentage of combined payroll of the respective rate pools. SLGRP values include pre-SLGRP and transition liabilities/surpluses created when the City joined the prior local government rate pool and the SLGRP.

(2) Reflects the legislative changes enacted by the Oregon Legislative Assembly in 2013 (the "2013 PERS Bills") to reduce future benefit payments, resulting in a reduction of the PERS unfunded actuarial liability by approximately \$5 billion.

(3) In April 2015, the Oregon Supreme Court announced a decision on lawsuits challenging the provisions of the 2013 PERS Bills. The decision upheld the elimination of a benefit increase for out-of-state retirees but declared other benefit reductions unconstitutional as applied to benefits earned prior to the June 1, 2013 effective date of the 2013 PERS Bills

Source: Oregon Public Employees Retirement System

The following table presents a history of the City’s member payroll, unfunded actuarial liability and ratio of unfunded actuarial liability to payroll.

Table 15
OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM
City Payroll for PERS Members and Unfunded Actuarial Liability

Calendar Year	Payroll	Unfunded Actuarial Liability	Unfunded Liability to Payroll Ratio
2009	\$303,851,551	\$182,019,126	60%
2010	307,538,429	172,726,579	56%
2011	303,508,135	265,267,189	87%
2012	311,688,601	119,477,128	38%
2013	313,291,592	41,882,231	13%
2014	335,113,826	365,964,877	109%
2015	350,158,915	514,861,639	147%
2016	362,850,562	648,861,639	179%
2017	384,409,335	605,231,941	157%
2018	434,168,788	846,761,641	195%

Source: Oregon Public Employees Retirement System

The funded status of the pension programs may change depending on the market performance of the securities that the OPERF is invested in, future changes in compensation and benefits of covered employees, demographic characteristics of members and methodologies and assumptions used by the actuary in estimating the assets and liabilities of PERS. Additionally, the market value of the investments held in the OPERF is determined using various sources.

State Investment Policy

The Oregon State Treasury is the investment officer for the state of Oregon. Investment standards are established in ORS 293.726 and require funds to be managed as a prudent investor would do. The Oregon Investment Council (“OIC”) establishes policies for the investment and reinvestment of moneys in PERS investment funds. Policies are established based on the primary investment asset class of each investment manager. The OIC has approved the following asset classes for the OPERF: Short-Term Investing, Fixed Income, Real Estate, Public and Private Equities, and Alternative Investments. In addition, OPERF invests in the Opportunity Portfolio, which may be populated with investment approaches across a wide range of investment opportunities with no limitation as to asset classes or strategies. The target investment portfolio mix at market value was revised at the OIC meeting of April 24, 2019, to 32.5 percent global equity, 17.5 percent private equity, 20 percent fixed income, 12.5 percent real estate, 7.5 percent alternatives – illiquid, 7.5 percent alternatives – diversifying strategies and 2.5 percent risk parity.

The following table presents a 10-year history of investment returns for the OPERF.

Table 16
OREGON PUBLIC EMPLOYEES RETIREMENT FUND
Oregon PERS Investment Returns⁽¹⁾

Fiscal Year	Net
Ending June 30	Returns (%)
2010	17.0
2011	22.3
2012	1.6
2013	12.7
2014	16.6
2015	4.3
2016	1.2
2017	11.9
2018 ⁽²⁾	9.4
2019	6.5

(1) Total fund performance, excluding variable account.

(2) The Oregon Investment Council has reported that for the calendar year ending December 31, 2018, net returns were 0.5 percent. See “—Recent Developments Related to PERS” herein.

Source: Oregon Public Employees Retirement Fund System Comprehensive Annual Financial Report for FYs 2009-10 through 2018-19

The following table presents annualized investment returns over the most recent 1-year, 3-year and 5-year periods. Calculations were prepared using a time-weighted rate of return based on market rates in accordance with the Global Investment Performance Standards performance presentation standards.

Table 17
OREGON PUBLIC EMPLOYEES RETIREMENT FUND
Annualized Investment Results⁽¹⁾

Periods Ending June 30, 2019	Annualized		
	1-Year	3-Year	5-Year
Total Portfolio, Excluding Variable	6.5%	9.3%	6.7%

(1) Total fund performance, regular account. Excludes variable account.

Source: Oregon Public Employees Retirement Fund System Comprehensive Annual Financial Report for FY 2018-19

Employer Contribution Rates and Amounts

At the end of each odd-numbered year, actuarial valuations determine the employer contribution rates that are officially set by the PERS Board. Pursuant to ORS 238.225 all employers participating in PERS are required to make their contribution to PERS based on the employer contribution rates set by the PERS Board.

PERS funding policy provides for monthly employer contributions at actuarially determined rates. These contributions, expressed as a percentage of covered payroll, are intended to accumulate sufficient assets to pay benefits when due. Employer contribution rates are based upon the current and projected cost of benefits and the anticipated level of funding available from the OPERF, including known and anticipated investment performance of the OPERF.

The City’s employer contribution rates were derived using a rate stabilization methodology (the “Rate Collar”) designed to cap rate increases and reduce large fluctuations in employer contribution rates. Such rate increases are shifted to future biennia. See Table 12 for a summary of the Rate Collar in effect. Because of the Rate Collar, the PERS Board-approved employer contribution rates for some employers, including the City, are currently less than the actuarially required contribution (“ARC”).

T1/T2 Pension Programs employees and OPSRP employees are required by state statute to contribute six percent of their annual salary to the respective programs. Employers are allowed to pay the employees’ contribution in addition to the required employers’ contribution. The City has elected to make the employee contribution. An employer also may elect via written employment policy or agreement to make additional employer contributions to its employees’ IAP accounts in an amount that can range from not less than one percent of salary to no more than six percent of salary and must be a whole percentage. Employers may make this policy or agreement for specific groups of their employees. The City has elected to make an optional contribution to the IAP accounts of public safety employees hired after January 1, 2007, of an additional three percent of their annual salary.

The table below shows the City’s employer contribution rates for the 2017-19 biennium that ended on June 30, 2019. The table also shows the City’s current employer contribution rates for the 2019-21 biennium that began on July 1, 2019, as reported in the 2017 City Valuation and the City’s advisory-only, employer contribution rates for the 2021-23 biennium as reported in the 2018 City Valuation. The City’s actual employer contribution rates for the 2021-23 biennium will be based on the City’s actuarial valuation as of December 31, 2019. The rates reported in the table do not include the six percent and nine percent employee contribution rates for contributions to the IAP paid by the City.

Table 18
OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM
Employer Contribution Rates for the City
Percentage of Covered Payroll⁽¹⁾⁽²⁾

Payrolls Paid	Past Rates 2017-2019	Current Rates 2019-21	Advisory-Only 2021-2023⁽³⁾
T1/T2	17.62%	21.86%	24.25%
OPSRP General Services	10.69	15.53	19.98
OPSRP Police and Fire	15.46	20.16	24.35

(1) Includes contribution rates to fund RHIA. See “OTHER POST-EMPLOYEE RETIREMENT BENEFITS – PERS Program.” For FY 2018-19, one percent of the City’s covered payroll for the three pension benefit programs was approximately: \$1,306,567 for T1/T2 Pension Programs; \$2,471,260 for OPSRP general services; and \$642,432 for OPSRP police and fire.

(2) Includes adjustments for side accounts and pre-SLGRP liabilities.

(3) Advisory-only, employer contribution rates for the 2021-2023 biennium are based on the 2018 City Valuation. The City’s actual employer contribution rates for the 2021-23 biennium will be based on the City’s actuarial valuation report as of December 31, 2019.

Source: City of Portland, Oregon Public Employees Retirement System

The City’s contribution rates may increase or decrease due to a variety of factors, including the investment performance of the OPERF, the use of pension-related reserves, further changes to system valuation methodology and assumptions and decisions by the PERS Board, and changes in benefits resulting from legislative modifications. The City cannot predict whether any legislation or related actions will attempt to further modify the PERS System or whether such attempts would withstand legal challenge.

The City’s financial plan has been updated to incorporate higher growth assumptions for PERS employer rates. For each of the next two biennia (FYs 2019-20 and 2020-21 and FYs 2021-22 and 2022-23), the financial plan assumes increases in rates for both T1/T2 and OPSRP of approximately five percentage points.

City Funding Policy

In August 2014, the City Council approved a policy regarding funding of its PERS pension liability. The policy requires the City to make contributions at no less than the rate established by the PERS Board and required by ORS 238.225. The City has always funded its full employer contribution as required by ORS 238.225. See “—Employer Contribution Rates and Amounts” above.

Pension Obligation Bonds

In addition to their PERS contribution, City bureaus in existence as of November 10, 1999, (the issue date of the bonds) are required to make a contribution to pay debt service on outstanding Limited Tax Pension Obligation Revenue Bonds (the “Pension Obligation Bonds”), which were issued to fund the City’s share of the unfunded actuarial liabilities of PERS as of December 31, 1997. The Pension Obligation Bonds were issued in three series: one series of fixed rate bonds in an amount of \$150,848,346 and two series of auction rate securities in an aggregate amount of \$150,000,000. Pension Obligation Bonds issued as auction rate securities were fully repaid on June 1, 2019. The final maturity of the fixed rate Pension Obligation Bonds is June 1, 2029. Proceeds of the Pension Obligation Bonds were deposited with PERS. Table 19 below shows the debt service paid by the City on its Pension Obligation Bonds.

Total City Pension Contribution

The following table shows the amount of City contributions paid to PERS for the three pension programs including amounts paid by the City for the employee contribution. Contributions include the payments from the Fire and Police Disability and Retirement Fund for pensions of police and firefighters participating in the T1/T2 Pension Programs and OPSRP. Fire and Police Disability and Retirement Fund contributions are funded from a dedicated Citywide property tax levy (the “FPDR levy”). See “—PENSION PLANS: FIRE AND POLICE DISABILITY AND RETIREMENT FUND” below. In FY 2018-19, approximately 68 percent of the total cash contribution was for the employer share and 32 percent was for the employee share. The City made its required contribution for its pension obligation in all years. See “—Employer Contribution Rates and Amounts” above.

Table 19
CITY OF PORTLAND, OREGON
City Contribution Related to PERS

Fiscal Year Ending June 30	City's Required Cash Contribution to PERS ⁽¹⁾	Debt Service on Pension Obligation Bonds	Total Cash Contribution for Pension Costs
2010	\$32,598,608	\$15,223,638	\$47,822,246
2011	33,622,080	16,416,215	50,038,295
2012	45,229,731	17,740,796	62,970,527
2013	45,278,556	19,433,725	64,712,281
2014	45,868,558	21,129,361	66,997,919
2015	46,969,145	23,074,692	70,043,837
2016	55,530,023	25,350,317	80,880,340
2017	58,637,409	27,853,142	86,490,551
2018	76,185,383	30,540,190	106,725,574
2019	86,437,805	33,027,629	119,465,434

(1) Includes City's statutorily required employer contribution for T1/T2 and OPSRP pension program and its pension contribution on behalf of employees. Includes contributions from the FPDR levy and other non-General Fund bureaus such as the Water Bureau and the Bureau of Environmental Services.

Source: Oregon Public Employees Retirement System and City of Portland; Oregon

Recent Developments Related to PERS

In 2019, the Legislature adopted and the Governor signed Senate Bill 1049 ("SB 1049"), which makes certain modifications to the amortization of the UAL and benefits provided to employees retiring after December 31, 2019. Such modifications include: a one-time re-amortization of the UAL associated with Tier 1 and Tier 2 benefits that is measured as of December 31, 2019 and extending that amortization to 22 years; redirecting a portion of the 6 percent contributions currently made to the IAP to an "Employee Pension Stability Account" ("EPSA") within the PERS fund when an employee's salary exceeds \$2,500 per month (indexed annually); removing all current hourly limitations on retirees who work for a PERS employer after retirement, while mandating that such employer shall continue to make pension contributions at the previous employer rate; and capping the annual salary used in the calculation of certain retirement packages for all tiers to \$195,000 (indexed annually). According to the Legislative Fiscal Office, the re-amortization of the T1/T2 UAL from 20 years to 22 years is expected, under current actuarial assumptions, to extend the retirement of the UAL by approximately six years to 2041.

On August 9, 2019, a petition was filed with the Oregon Supreme Court challenging the constitutionality of certain portions of SB 1049. The City cannot predict whether the petitioners will be successful in whole or in part nor what the impact of a successful challenge may be. Further, the City cannot predict whether SB 1049 will be subject to additional legal challenges that could affect some or all of its provisions.

PENSION PLANS: FIRE AND POLICE DISABILITY AND RETIREMENT PLAN

Overview

The following discussion pertains to the City's Fire and Police Disability, Retirement and Death Benefit Plan (the "FPDR Plan"). The FPDR Plan was established in 1942 to provide disability, retirement and death benefits for sworn members of the City's Bureaus of Fire and Police and their survivors. The FPDR Plan is governed by a Board of Trustees (the "FPDR Board"), composed of the Mayor or Mayor's designee, two active members of the Fire and Police Bureaus and two citizens appointed by the Mayor and confirmed by the City Council. The Fire and Police member trustees are elected by the active members of the Fire Bureau and Police Bureau, respectively. The citizen trustees must have relevant experience in pension or disability matters. The FPDR Plan is administered by the Bureau of Fire and Police Disability and Retirement, led by the Fund Administrator.

The FPDR Plan's authority for vesting and benefit provisions is provided by Chapter 5 of the City Charter. Most amendments require majority approval of the voters in the City. Ten revisions have been passed by the voters since the creation of the plan. The most recent voter revision, comprised of eleven different plan amendments, was passed November 6, 2012. City Council may provide by ordinance any additional benefits that the City is required by law to extend to the members and may also change benefits by ordinance to maintain the FPDR Plan's tax-qualified status. The most recent amendments by the City Council occurred in 2016.

Benefit Programs

The FPDR Plan consists of three tiers, two of which are now closed to new employees. The retirement plans for FPDR One, the original plan, and FPDR Two, in which most active fire and police personnel participate, are single-employer, defined-benefit plans administered by the FPDR Board. In addition to retirement benefits for FPDR One and FPDR Two members, the FPDR Plan provides service-connected, nonservice-connected, and occupational disability benefits for FPDR One, FPDR Two and FPDR Three members. FPDR Plan members do not participate in Social Security and do not receive Social Security benefits for their years of service.

FPDR One. Sworn members of the Police and Fire Bureaus subject to the FPDR Plan as constituted prior to July 1, 1990, are included in the FPDR One tier. All FPDR One members are now retired or receiving long-term disability benefits. Under FPDR One, retirement benefits are provided upon termination of employment on or after attaining age 50 (with 25 or more years of service) or 55 (with 20 years or more of service). Retirement benefits are paid to members at two percent of current top-step pay for a police officer or firefighter for each year of service (up to 60 percent); therefore, FPDR One members receive postretirement benefit increases equal to increases in current top-step police officer or firefighter pay.

FPDR Two. Sworn members of the Police and Fire Bureaus subject to the FPDR Plan as constituted after June 30, 1990, and first sworn before January 1, 2007, are included in the FPDR Two tier. Under FPDR Two, retirement benefits are provided upon termination of employment on or after attaining age 55, or on or after attaining age 50 if the member has 25 or more years of service. Members become 100 percent vested after five years of service. Benefits are paid using a formula tied to years of service and the highest one-year base pay the member received during the final three years of employment. The FPDR Board has the authority to grant postretirement benefit increases to FPDR Two members, so long as the increases do not exceed increases awarded to sworn retirees of PERS. Members enrolled in the FPDR Plan and still working prior to July 1, 1990, were required to make an election as to whether they wished to fall under the provisions of the FPDR Plan as constituted prior to July 1, 1990 (now called FPDR One) or become subject to the new FPDR Two provisions after June 30, 1990.

FPDR Three. Sworn members of the Police and Fire Bureaus hired on or after January 1, 2007, are included in the FPDR Three tier; those sworn on or after January 1, 2013, become FPDR Three members after six months of service. These participants are part of OPSRP for retirement benefits and are under the FPDR Plan for disability and pre-retirement death benefits, offset by any benefits received on account of disability or death under OPSRP. Retirement benefits for these participants are pre-funded, and the FPDR levy pays the employee and employer portions of the OPSRP contribution. For information regarding OPSRP and the employee and employer contribution rates for OPSRP, see "PENSION PLANS: OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM," above.

Funding

The FPDR levy is a special property tax levy which cannot exceed two and eight-tenth mills on each dollar of valuation of property (\$2.80 per \$1,000 of Real Market Value) that is not exempt from such levy. The FPDR levy has been sufficient in all years to meet required annual benefit payments. In the event that collections from this special property tax levy are less than the amount required for payment of benefits in any particular year, the FPDR Fund could receive advances from the FPDR Reserve Fund first and then from other City funds to make up the difference. While the FPDR Fund has not experienced any funding shortfalls to date, future funding is dependent on the availability of property tax revenues and, in the absence of sufficient property tax revenues, other legally available City funds.

Although the City Charter provides the FPDR Plan with dedicated property tax levy authority, the Oregon state constitution caps each property's general government taxes at \$10 per \$1,000 of Real Market Value. After reaching this point, all levies, including the FPDR levy, are subject to compression under the State Constitution ("Measure 5 compression") to fit within the \$10 limit. For this reason, it is unlikely that FPDR could collect the full \$2.80 per \$1,000 of Real Market Value on each property. In FY 2019-20, the tax loss due to Measure 5 compression was \$7.77 million, or 4.6 percent of the FPDR levy.

Retirement Plan Asset Valuation and Liabilities

The table below shows key assumptions for the most recent valuation of the FPDR Plan. Mortality and other assumptions are regularly reviewed and updated as needed. The discount rate is equal to the June 30 value of the Bond Buyer General Obligation 20-Bond Municipal Bond Index each year, in accordance with the requirement of Governmental Accounting Standards Board Statement No. 67 (“GASB 67”) that plans use a risk-free discount rate for the portion of the plan’s liability that is not prefunded.

Table 20
CITY OF PORTLAND, OREGON
FPDR Plan -- Actuarial Assumptions and Methods
For the June 30, 2018, Valuation

Actuarial Cost Method	Entry Age Normal
Actuarial Value of Assets	Market Value
Funding Policy	Pay-As-You-Go
Discount Rate	3.87%
Payroll Growth Rate	3.75%

Source: Milliman Inc., City of Portland Fire & Police Disability & Retirement (FPDR) Fund, Pension Actuarial Valuation Report as of June 30, 2018, dated January 15, 2019

As distinguished from the pension plan for FPDR Three members, assets generally are not accumulated in the current year to pay for benefit payments in future years for the FPDR Plan. The table below shows funding levels for the FPDR Plan over the past ten fiscal years. In accordance with the Charter’s provisions, there are no requirements to fund the FPDR Plan using actuarial techniques. The FPDR Plan is funded on a pay-as-you-go basis. Each year’s benefits and expenses are paid for with employer contributions derived from dedicated property tax revenue received during that year. Because of the FPDR Plan’s pay-as-you-go funding basis, the unfunded actuarial accrued pension liability and net pension liability (the new terminology per GASB 67 implemented by the City effective June 30, 2014), do not reflect the value of dedicated future revenues from the property tax levy. See “—Levy Adequacy” below. As reflected in the City’s CAFR for its fiscal year ended June 30, 2019, and required by GASB 68, the net pension liability for the FPDR Plan is a primary factor in the City’s unrestricted net position deficit for governmental activities for FY 2018-19, and contributed to the City’s total net position decrease from FY 2012-13 to FY 2013-14, when GASB 68 was implemented. See table entitled “Net Position by Component Last Ten Fiscal Years (accrual basis of accounting)” on page 390 of the City’s CAFR for its fiscal year ended June 30, 2019.

Table 21
CITY OF PORTLAND, OREGON
FPDR Plan --Summary of Funding Levels ⁽¹⁾

Fiscal Year	Actuarial Value of Assets	Actuarial Liability	Unfunded Actuarial Liability ⁽¹⁾	Funded Ratio ⁽²⁾
2009 (3)	\$11,571,074	\$2,279,923,000	\$2,268,351,926	0.51%
2010	16,542,896	2,549,479,088	2,532,936,192	0.65%
2011 (3)	25,648,253	2,610,360,794	2,584,712,541	0.98%
2012 (3)	20,287,803	2,674,072,175	2,653,784,372	0.76%

Fiscal Year ⁽³⁾	Plan Net Position, Ending	Total Pension Liability	Net Pension Liability ⁽²⁾	Net Position as Percent of Total Liability ⁽²⁾
2013	\$17,155,015	\$2,517,096,534	\$2,499,941,519	0.68%
2014	20,532,924	2,473,970,866	2,453,437,942	0.83%
2015	21,876,942	2,896,894,767	2,875,017,825	0.76%
2016	17,425,353	3,391,461,315	3,374,035,962	0.51%
2017	14,150,087	3,367,105,729	3,352,955,642	0.42%
2018	17,790,774	3,295,142,974	3,277,352,200	0.54%
2019	20,001,298	3,568,635,904	3,548,634,606	0.56%

(1) Table reflects transition to new accounting classifications as required by the Governmental Accounting Standards Board beginning with FY 2012-13.

(2) Does not include value of future dedicated FPDR property tax collections.

(3) Amounts are calculated by rolling forward prior actuarial valuations. See Table 22 below for a summary of the June 30, 2016, and June 30, 2018, valuations.

Source: *City of Portland audited financial statements*

Overall the net pension liability decreased from \$3.67 billion on June 30, 2016, to \$3.31 billion on June 30, 2018, as shown in Table 22 below. Note that these valuations differ from results shown in Table 21 above because they are based on actual results prepared by Milliman and are not roll-forward amounts of prior valuations.

Table 22
CITY OF PORTLAND, OREGON
FPDR Plan--Summary of Most Recent Actuarial Valuations

Fiscal Year Ending June 30	Plan Assets	Total Pension Liability	Net Pension Liability
2016	\$17,425,353	\$3,689,965,110	\$3,672,539,757
2018	17,790,776	3,323,733,057	3,305,942,281

Source: Milliman Inc., City of Portland Fire & Police Disability & Retirement (FPDR) Fund, Pension Actuarial Valuation Report as of June 30, 2018, dated January 15, 2019

The primary reason for the reduction in the plan’s pension liability is the increase in the discount rate (the June 30 value of the Bond Buyer General Obligation 20-Bond Municipal Bond Index each year). The rate rose from 2.85 percent on June 30, 2016 to 3.87 percent on June 30, 2018, dropping the pension liability by \$554 million. In addition, projected longevity declined for some participant types as a result of changes in mortality assumptions, which decreased the pension liability by a relatively small \$35 million. Mortality assumptions are routinely updated to reflect the experience of the larger and more statistically valid Oregon PERS sworn population. Partially offsetting these reductions were increases caused by divergence between recent experience and long-term assumptions, particularly with respect to active participant salary growth.

FPDR Fund and Levy Adequacy

A critical measure of the FPDR Fund’s financial health is whether the dedicated property tax will ever be insufficient to fully cover benefit expenditures both for the pay-as-you-go FPDR Plan and contributions to the pre-funded OPSRP plan. The table below compares the certified tax levy for FPDR Plan contributions (for FPDR One and FPDR Two participants) and OPSRP contributions (for FPDR Three participants) with the amount authorized based on the \$2.80/\$1,000 Charter limitation. Between FY 2010-11 and FY 2019-20, Real Market Value of property subject to taxation has grown by a compounded annual rate of approximately 6.5 percent.

Table 23
CITY OF PORTLAND, OREGON
FPDR Fund--Certified Levies Compared with Maximum Levies Authorized

FYE	Tax Levy	Certified	Maximum Levy	Amount Available
June 30	per \$1,000 RMV	Tax Levy⁽¹⁾	Authorized (\$2.80/1,000 RMV)	to be Certified from Authorized Levy
2011	\$1.37	\$118,526,184	\$241,849,105	\$123,322,921
2012	1.41	114,264,711	227,257,618	112,992,907
2013	1.55	123,564,952	223,709,460	100,144,508
2014	1.62	136,383,540	235,325,707	98,942,167
2015	1.48	136,883,230	259,331,341	122,448,111
2016	1.30	133,795,013	287,358,793	153,563,780
2017	1.15	138,900,728	338,199,473	199,298,745
2018	1.13	155,553,793	384,951,394	229,397,601
2019	1.09	163,748,624	419,138,031	255,389,407
2020	1.10	168,768,476	427,766,153	258,997,677

(1) Before Measure 5 Compression, delinquencies and discounts.
Source: City of Portland

The table below shows historical taxes imposed (after Measure 5 compression) and historical expenditures for retirement benefits and death and disability benefits. As fire and police retirement benefits transition from a pay-as-you-go system to a pre-funded system through OPSRP, the FPDR levy will be funding pensions for two generations of FPDR members simultaneously: FPDR One and FPDR Two members who are funded on a pay-as-you-go basis during their retirement years and FPDR Three members whose retirement benefits are pre-funded through OPSRP during their working careers. Costs for disability benefits will continue to be paid on a pay-as-you go basis. As described below, higher costs are expected over approximately the next 20 years, with the potential for higher tax levy rates.

Table 24
CITY OF PORTLAND, OREGON
FPDR Fund--Imposed Levies and Expenditures for
Pension Benefits and Death/Disability Benefits

Fiscal Year Ending June 30	Imposed Tax Levy⁽¹⁾	FPDR One & Two Pension Benefits	FPDR Three OPSRP Contributions	Disability & Funeral Benefits	Total FPDR Benefit Contributions
2010	\$111,376,678	\$89,038,110	\$2,210,250	\$9,075,988	\$100,324,348
2011	114,217,070	90,464,611	2,865,737	7,938,636	101,268,984
2012	108,666,428	94,708,986	4,735,637	7,064,187	106,508,810
2013	115,752,880	99,417,595	5,265,815	6,725,710	111,409,120
2014	123,304,615	103,506,696	5,998,321	7,410,977	116,915,994
2015	126,777,805	103,355,638	6,952,685	6,219,646	116,527,969
2016	126,376,817	107,074,899	8,699,501	6,420,506	122,194,906
2017	132,477,613	113,826,622	9,672,695	6,525,351	130,024,668
2018	148,214,877	119,616,359	13,318,516	6,050,635	138,985,510
2019	156,454,895	124,145,879	15,515,328	6,587,313	146,248,520

(1) Amount after Measure 5 Compression but not adjusted for delinquencies and discounts.

Source: *City of Portland*

The FPDR Board assesses the FPDR Plan’s long-term financial condition in part by projecting the future availability of revenues from the dedicated property tax (the “Levy Adequacy Analysis”), which are the source of employer contributions under the Charter. The most recent Levy Adequacy Analysis, completed by an independent actuary in connection with the actuarial valuation of the fund, was as of June 30, 2018. The Levy Adequacy Analysis found that, under a wide range of simulated economic scenarios over the next 20 years, the future FPDR levy would remain under \$2.80 per \$1,000 of Real Market Value, but the levy exceeded the \$2.80 threshold in at least one year in approximately one percent of modeled scenarios. This represents a decline from about three percent of modeled scenarios in the prior analysis as of June 30, 2016. Continued growth in real market values in the City’s tax base has further increased the likelihood that the FPDR levy will be sufficient to fund benefits and expenses for the entire life of the FPDR Plan. Plan costs peak in FY 2036-37 in nominal terms; the peak on an inflation-adjusted basis is in FY 2031-32.

The table below shows projected levy rates and taxes levied at the 50th and 5th percentiles of scenarios for FY 2018-19 through FY 2037-38 as included in the 2018 Levy Adequacy Analysis. Note that the actual levy rate per \$1,000 of Real Market Value was \$1.09 for FY 2018-19 and \$1.10 for FY 2019-20.

Table 25
CITY OF PORTLAND, OREGON
FPDR Fund--Projected Levy Rate, Taxes and Requirements⁽¹⁾

Fiscal Year Ending June 30	Levy Rate at 50th Percentile	Taxes Levied at 50th Percentile	Levy Rate at 5th Percentile	Taxes Levied at 5th Percentile
2019	\$1.08	\$161,900,000	\$1.08	\$161,900,000
2020	1.09	171,900,000	1.09	172,000,000
2021	1.10	180,100,000	1.23	181,700,000
2022	1.16	198,600,000	1.37	203,000,000
2023	1.17	208,900,000	1.43	214,600,000
2024	1.19	222,900,000	1.54	235,700,000
2025	1.20	235,900,000	1.60	250,600,000
2026	1.22	251,700,000	1.70	272,200,000
2027	1.24	266,400,000	1.77	289,700,000
2028	1.25	281,700,000	1.85	311,300,000
2029	1.26	296,800,000	1.89	329,900,000
2030	1.32	324,700,000	2.03	363,800,000
2031	1.32	339,900,000	2.06	383,200,000
2032	1.32	354,900,000	2.11	404,400,000
2033	1.31	369,600,000	2.14	423,000,000
2034	1.29	380,700,000	2.18	442,600,000
2035	1.27	391,900,000	2.17	457,600,000
2036	1.18	381,100,000	2.10	455,000,000
2037	1.15	388,400,000	2.07	466,700,000
2038	1.02	358,900,000	1.89	440,800,000

(1) Results are expressed as a probability distribution. Amounts shown in table are median values within percentile categories. Actual rates for FY 2017-18 and FY 2018-19 are found in the table titled “FPDR Fund—Certified Levies Compared with Maximum Levies Authorized.”

Source: Milliman, Inc., *FPDR Levy Adequacy Analysis as of June 30, 2018, dated January 22, 2019*

The current analysis extends through FY 2037-38 and encompasses all facts, decisions and conditions pertaining to the FPDR Plan known at the time the analysis was completed. Future actuarial measurements may differ significantly from the measurements presented herein due to factors such as changes in economic or demographic assumptions (including changes in Real Market Value); changes related to PERS, performance of investments, and changes in FPDR Plan benefit provisions or applicable law.

OTHER POST-EMPLOYMENT RETIREMENT BENEFITS (“OPEB”)

The City’s OPEB liability includes two separate plans. The City provides a contribution to the State of Oregon PERS cost-sharing multiple-employer defined benefit plan and an implicit rate subsidy for retiree Health Insurance Continuation premiums.

PERS Program

Retirees who receive pension benefits through the T1/T2 Pension Programs and are enrolled in certain PERS-administered health insurance programs may also receive a subsidy towards the payment of health insurance premiums. Under ORS 238.420, retirees may receive a subsidy for Medicare supplemental health insurance of up to \$60 per month towards the cost of their health insurance premiums under the RHIA program. RHIA’s assets and liabilities are pooled on a system-wide basis. These assets and liabilities are not tracked or calculated on an employer basis. The City’s allocated share of the RHIA program’s assets and liabilities is based on the City’s proportionate share of the program’s pooled covered payroll. According to the 2018 City Valuation, the City’s allocated share of the RHIA program’s UAL was (\$6,363,951) as of December 31, 2018.

The City’s current employer contribution rates to fund RHIA benefits during the 2019-21 biennium for T1/T2 employees is 0.06 percent and for OPSRP general services and police and fire employees is 0.00 percent. According to the 2018 City Valuation, the advisory-only rates to fund RHIA benefits during the 2021-23 biennium for T1/T2 employees is 0.05 percent and for OPSRP general services and policy and fire employees is 0.00 percent. These employer contribution rates to fund RHIA are included in the rates described in Table 18 above. Actual employer contribution rates to fund RHIA for the 2021-23 biennium will be based on the City’s actuarial valuation report as of December 31, 2019.

Health Insurance Continuation Option

Distinct from the PERS program, Oregon municipalities, including the City, are required to allow retirees and their dependents to continue to receive health insurance by paying the premiums themselves at a rate that is blended with the rate for current employees until retirees and spouses are eligible for federal Medicare coverage and until children reach the age of 18 (the “Health Insurance Continuation Option” or “HIC”). GASB 75 refers to this as an implicit subsidy and therefore requires the corresponding liability to be determined and reported.

The OPEB liability associated with the Health Insurance Continuation Option is an actuarially-determined amount calculated in accordance with the parameters of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The City’s annual OPEB cost is calculated based on the actuarially-determined service cost, which represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded liability over a period of 30 years. The City’s estimated unfunded actuarial accrued liability for OPEB as of July 1, 2018 was \$100,197,951. The valuation was prepared using the Entry Age Normal actuarial cost method and amortized over an open period of 30 years using the level percentage of projected pay. Other assumptions include of a discount rate of 3.90 percent, 2.2 percent inflation rate, annual healthcare cost trend rates of 4.5 to 7.5 percent, and retirees’ share of benefit-related costs of 26 percent of estimated program costs.

For FY 2018-19, the changes to the total OPEB liability is calculated as follows:

Balance at 6/30/18	\$100,197,951
Changes for the year:	
Service cost	3,675,148
Interest	3,640,097
Changes of assumptions	(2,777,647)
Benefit payments	(5,567,867)
Net Changes	(1,030,269)
Balance at 6/30/19	<u>\$99,167,682</u>

Actuarial valuations for the Health Insurance Continuation Option are undertaken every two years. A new valuation study will be undertaken for reporting the OPEB liability as of July 1, 2019.

The City expects to use a pay-as-you-go approach to fund its actuarial accrued liability and OPEB obligation, but will monitor its OPEB liability and assess whether a different approach is needed in future years.

Implementation of Governmental Accounting Standards Board Statement No. 75

Beginning in its CAFR for FY 2017-18, the City implemented Governmental Accounting Standards Board Statement No. 75, which changed employer reporting of OPEB for state and local governments. Under this new standard, for FY 2018-19, the City has reported in its CAFR the following balances:

	Deferred	Net OPEB	
	Outflow/(Inflow) of	Liability/(Asset)	OPEB Expense
	Resources	Liability/(Asset)	OPEB Expense
RHIA	\$779,521	(\$4,177,752)	(\$410,434)
HIC	(\$1,650,289)	\$99,167,682	\$5,979,579
Total	(\$870,768)	\$94,989,930	\$5,569,145

See the City’s CAFR for the fiscal year ended June 30, 2019, which is posted on the EMMA website.

LITIGATION

Members of the public and advocacy groups from time to time assert that they intend to file a legal action against the City challenging certain programs, laws or actions that the City, its officers or bureaus have taken. Because the City cannot be certain as to whether such actions will actually be filed, the legal assertions that may be made in a potential action or the remedy sought in terms of the amount of damages or performance requested of the City, the City includes as threatened litigation only situations in which the City is engaged in active settlement negotiations with a person or group in order to pre-empt filing of a lawsuit.

The City discloses only pending or threatened litigation that the City has determined may have a materially adverse impact on the financial position of the Bureau or the Water System. The current level of materiality involves litigation where the damages or performance sought has a reasonable probability of imposing liability of \$5 million or more against the Bureau or the Water System. Except as noted in the following paragraphs, there is no litigation pending or threatened against the City which would materially and adversely affect the financial condition of the Bureau or the Water System.

Portland Harbor Superfund Site. In 2000, Portland Harbor, a 10-mile industrial stretch of the Lower Willamette River outside of the City's urban center, was listed by the EPA as a Superfund site. The EPA notified the City that it may have liability for releases of contaminants in the Willamette River. The City may also have liabilities to Natural Resource Trustees of the Willamette River (including tribes, and federal and state resource agencies) for damages to natural resources in Portland Harbor.

In 2017, the EPA issued its Record of Decision for the cleanup plan for the Portland Harbor Superfund Site. For purposes of comparing relative cleanup costs of different remedies, the EPA prepared rough (-30% to +50%) cost estimates of remedy costs. Using this method, the EPA estimated capital costs to implement the selected remedy of approximately \$1.05 billion in 2017 dollars, estimated by the EPA to be \$1.7 billion in actual future dollars. Since the issuance of the Record of Decision, the EPA has required an additional phase of environmental sampling before remedy implementation. The additional work and EPA's interpretation of remedy requirements may change the expected costs of the remedy. The costs associated with the remedy have not been allocated among the numerous potentially liable parties.

The Natural Resource Trustees have not made a final determination of the total damages to natural resources and those costs have not been allocated among the numerous potentially liable parties.

The City is participating in voluntary, negotiated settlement processes to determine how cleanup costs can be allocated among all responsible parties. These processes cannot be concluded until the parties reach agreement or the liabilities are litigated. The City will defend against a significant allocation of liability to the City for cleanup and natural resource damages. Under Superfund law, responsible parties that fail to enter into agreements to remediate and restore Superfund sites become subject to legal action by the EPA for cleanup and restoration, including imposition of fines. Once initiated, the remedial design and implementation phase is expected to be conducted and funded over many years. The City expects to have an extended period to identify funding strategies and to fund its share of the remedy.

On July 12, 2019 a complaint was filed in Multnomah County Circuit Court challenging the City's use of ratepayer funds on expenditures related to partial settlement of City liabilities on the Portland Harbor Superfund site. Under the agreement authorizing this expenditure, the City is obligated to pay to the EPA the total sum of \$12,000,000 from both City General Fund and ratepayer sources. The complaint challenged only the City's authority to utilize ratepayer funds for this purpose. Based on the Circuit Court's prior rulings on this issue, the City is confident that the Charter of the City of Portland duly authorizes the City to expend ratepayer funds for this purpose.



APPENDIX
EXCERPTS FROM AUDITED FINANCIAL STATEMENTS

INTRODUCTION TO EXCERPTS OF FINANCIAL STATEMENTS

The financial statements of the City have been audited by independent certified public accountants for the fiscal years 2015, 2016, 2017, 2018 and 2019. Copies of these financial statements containing the reports of the independent certified public accountants are available on the on the MSRB's EMMA system for municipal securities disclosure at <http://emma.msrb.org>, and the City's website at <http://www.portlandoregon.gov/bfs/26053>.

The following pages in this Appendix A are excerpted from the City's Comprehensive Annual Financial Reports of the City for Fiscal Years ending June 30, 2015 through June 30, 2019. Any Notes that follow the tabular data have been prepared by the City and have not been reviewed by the independent auditor.

A CONSENT OF THE INDEPENDENT AUDITOR WAS NOT REQUESTED. THE AUDITOR WAS NOT REQUESTED TO PERFORM AND HAS NOT PERFORMED ANY SERVICE IN CONNECTION WITH THIS DISCLOSURE DOCUMENT AND IS THEREFORE NOT ASSOCIATED WITH THIS DISCLOSURE DOCUMENT.

CITY OF PORTLAND, OREGON

**SEWAGE DISPOSAL FUND
STATEMENT OF NET POSITION
As of June 30**

	2015	2016	2017	2018	2019
ASSETS					
Current assets (unrestricted):					
Cash and investments	\$ 93,893,296	\$ 142,221,490	\$ 171,056,466	\$ 220,282,473	\$ 298,584,740
Receivables					
Accounts, net	53,959,205	53,109,979	53,996,977	56,478,394	56,321,677
Assessments	1,256,515	2,378,736	2,600,727	2,873,871	1,709,393
Advances	-	-	-	-	22,776
Accrued interest, advances	672,838	860,668	911,912	1,653,693	2,573,364
Notes and loans net	83,232	83,232	83,232	-	4,940
Due from component unit	-	61,484	-	-	-
Inventories	1,623,555	1,757,819	1,898,619	2,009,361	2,373,142
Prepaid expenses	-	-	-	1,369,497	8,063,307
Internal balances	-	-	-	-	1,457,886
Total current assets (unrestricted)	<u>151,488,641</u>	<u>200,473,408</u>	<u>230,547,933</u>	<u>284,667,289</u>	<u>371,111,225</u>
Current assets (restricted)					
Cash and investments	8,535,806	9,215,896	-	15,630,714	19,338,309
Total current assets (restricted)	<u>8,535,806</u>	<u>9,215,896</u>	<u>-</u>	<u>15,630,714</u>	<u>19,338,309</u>
Total current assets	<u>160,024,447</u>	<u>209,689,304</u>	<u>230,547,933</u>	<u>300,298,003</u>	<u>390,449,534</u>
Noncurrent assets (unrestricted):					
Capital assets, not being depreciated or amortized:					
Land	73,316,928	75,118,666	80,239,715	77,318,085	78,905,215
Construction in progress	157,060,654	141,220,550	178,010,942	221,278,779	288,903,099
Intangible assets/land use rights	10,960,297	11,769,066	12,109,796	12,170,970	14,312,701
Capital assets, being depreciated or amortized:					
Buildings	33,010,333	33,438,440	33,441,319	30,599,043	30,765,991
Improvements to land	1,753,470	2,249,269	2,249,269	1,485,801	1,631,035
Equipment	27,076,695	28,576,721	28,975,530	31,181,128	33,303,230
Intangible assets/software	8,571,730	8,571,730	8,489,429	8,489,429	8,478,231
Infrastructure	3,313,993,288	3,420,719,069	3,485,117,325	3,549,098,347	3,616,799,754
Accumulated depreciation and amortization	<u>(469,842,639)</u>	<u>(514,586,210)</u>	<u>(560,635,720)</u>	<u>(604,879,652)</u>	<u>(649,665,208)</u>
Capital assets net of accumulated depreciation and amortization	3,155,900,756	3,207,077,301	3,267,997,605	3,326,741,930	3,423,434,048
Receivables:					
Assessments	4,105,469	3,934,456	3,301,471	4,481,699	2,592,611
Pension asset	10,340,385	-	-	-	-
Internal balances	-	-	-	1,457,886	-
Net OPEB asset	-	-	-	121,681	344,431
Total noncurrent assets (unrestricted)	<u>3,170,346,610</u>	<u>3,211,011,757</u>	<u>3,271,299,076</u>	<u>3,332,803,196</u>	<u>3,426,371,090</u>
Noncurrent assets (restricted):					
Cash and investments	172,691,444	93,531,971	59,279,660	202,047,120	55,935,109
Total non-current assets	<u>3,343,038,054</u>	<u>3,304,543,728</u>	<u>3,330,578,736</u>	<u>3,534,850,316</u>	<u>3,482,306,199</u>
Total assets	<u>3,503,062,501</u>	<u>3,514,233,032</u>	<u>3,561,126,669</u>	<u>3,835,148,319</u>	<u>3,872,755,733</u>
DEFERRED OUTFLOWS OF RESOURCES					
Deferred outflows - pensions	3,394,556	6,105,726	35,003,532	21,274,974	24,637,047
Deferred outflows - OPEB	-	-	-	613,206	635,140
Deferred charge for debt refundings	-	-	-	-	21,506
Total deferred outflows of resources	<u>3,394,556</u>	<u>6,105,726</u>	<u>35,003,532</u>	<u>21,888,180</u>	<u>25,293,693</u>

CITY OF PORTLAND, OREGON
SEWAGE DISPOSAL FUND
STATEMENT OF NET POSITION (Continued)
As of June 30

	2015	2016	2017	2018	2019
LIABILITIES					
Current liabilities (payable from unrestricted assets):					
Accounts payable	\$6,413,223	\$7,021,104	\$20,614,195	\$6,650,221	\$9,332,629
Compensated absences	4,001,277	3,957,778	4,077,025	4,581,410	5,345,919
Self insurance claims	-	159,717	13,878	35,415	49,087
Unearned revenue	687,853	909,767	899,755	937,747	839,337
Bonds payable	103,320,081	114,206,606	126,189,967	134,345,878	137,002,011
Notes and loans payable	1,352,453	1,366,091	1,379,871	1,393,792	1,407,852
Accrued interest payable	17,726,523	14,968,233	14,823,372	14,941,362	14,119,444
Landfill postclosure	-	53,700	54,702	59,102	68,299
Pollution remediation	1,115,000	1,087,500	547,500	50,000	50,000
Other liabilities	27,000	68,693	79,160	652,634	634,123
Total current liabilities (unrestricted)	134,643,410	143,799,189	168,679,425	163,647,561	168,848,701
Current liabilities (payable from restricted assets):					
Accounts payable	8,535,806	9,215,896	-	15,630,714	19,338,309
Total current liabilities (restricted)	8,535,806	9,215,896	-	15,630,714	19,338,309
Total current liabilities	143,179,216	153,015,085	168,679,425	179,278,275	188,187,010
Noncurrent liabilities:					
Compensated absences	-	140,510	-	72,178	-
Bonds payable	1,725,047,498	1,612,290,669	1,508,137,654	1,587,358,056	1,450,356,046
Notes and loans payable	14,920,587	13,554,496	12,174,625	10,780,833	9,372,981
Accrued interest payable	10,469,206	11,675,666	12,979,705	14,389,197	15,912,653
Net pension liability - PERS	-	26,482,758	68,928,094	61,091,980	67,699,438
Other postemployment benefits	1,511,569	1,502,373	1,491,795	6,701,542	6,698,621
Landfill postclosure	-	9,388,784	6,017,740	2,402,216	2,600,865
Pollution remediation	225,000	370,000	275,000	250,000	250,000
Other liabilities	46,730	87,170	87,370	149,835	149,835
Total noncurrent liabilities	1,752,220,590	1,675,492,426	1,610,091,983	1,683,195,837	1,553,040,439
Total liabilities	1,895,399,806	1,828,507,511	1,778,771,408	1,862,474,112	1,741,227,449
DEFERRED INFLOWS OF RESOURCES					
Deferred inflows - pensions	20,670,228	7,275,341	1,773,290	1,905,480	4,236,057
Deferred charge for debt refunding	4,820,670	10,488,168	7,892,777	5,696,253	3,831,854
Deferred inflows - OPEB	-	-	-	317,784	422,529
Total deferred inflows of resources	25,490,898	17,763,509	9,666,067	7,919,517	8,490,440
NET POSITION					
Net investment in capital assets	1,503,588,286	1,571,170,823	1,691,727,931	1,806,923,132	1,892,317,879
Restricted for:					
Debt service	180,000	180,000	180,000	180,000	180,000
Unrestricted	81,798,067	102,716,915	115,784,795	179,539,738	255,833,658
Total net position	\$ 1,585,566,353	\$ 1,674,067,738	\$ 1,807,692,726	\$ 1,986,642,870	\$ 2,148,331,537

Source: City of Portland audited financial statements.

CITY OF PORTLAND, OREGON
SEWAGE DISPOSAL FUND
STATEMENT OF REVENUES, EXPENSES, and CHANGES IN FUND NET POSITION
Fiscal Years Ending June 30

	2015	2016	2017	2018	2019
Operating revenues:					
Service charges and fees	\$327,555,376	\$342,572,796	\$366,138,808	\$386,034,051	\$374,252,820
Service charges and fees provided internally	1,456,981	1,119,694	1,388,251.00	1,782,503	3,014,753
Licenses and permits	2,013,484	1,908,089	2,248,626	2,166,745	2,320,654
Rents and reimbursements	314,856	453,334	405,794	189,308	217,671
Miscellaneous	2,071,706	1,285,699	1,385,314	366,919	865,478
Total operating revenues	<u>333,412,403</u>	<u>347,339,612</u>	<u>371,566,793</u>	<u>390,539,526</u>	<u>380,671,376</u>
Operating expenses:					
Salaries and wages	34,632,181	69,831,726	58,821,599	61,812,417	66,606,436
Operating supplies	4,740,899	4,563,403	4,515,510	4,339,605	5,379,039
Professional services	2,779,041	3,331,013	3,141,297	3,886,296	3,532,984
Services and materials provided internally	24,504,600	26,292,701	27,766,111.00	28,923,825	30,354,431
Utilities	5,545,403	5,703,550	6,278,847	6,006,085	6,769,981
Claims	-	159,717	-	-	-
Miscellaneous	12,240,324	21,340,877	5,240,636	6,170,070	18,752,555
Utility license fees	14,761,849	15,571,211	16,250,599	16,884,548	17,105,955
Depreciation expense	43,075,864	45,561,285	47,376,734	47,889,962	48,917,284
Total operating expenses	<u>142,280,161</u>	<u>192,355,483</u>	<u>169,391,333</u>	<u>175,912,808</u>	<u>197,418,665</u>
Operating income (loss)	<u>191,132,242</u>	<u>154,984,129</u>	<u>202,175,460</u>	<u>214,626,718</u>	<u>183,252,711</u>
Nonoperating revenues (expenses):					
Gain (loss) on sale of capital assets	(814,164)	(273,852)	38,331	3,816,807	346,754
Investment earnings	2,104,384	3,167,609	1,527,317	1,197,068	15,071,257
Interest expense	(69,390,014)	(68,503,667)	(69,588,885)	(39,651,443)	(43,159,892)
Debt issuance costs	(1,018,056)	(2,177,049)	(1,285,282)	(629,891)	(59,013)
Miscellaneous	-	(21,276)	-	1,457,152	(849,292)
Total nonoperating revenues (expenses)	<u>(69,117,850)</u>	<u>(67,808,235)</u>	<u>(69,308,519)</u>	<u>(33,810,307)</u>	<u>(28,650,186)</u>
Income (loss) before contributions and transfers	<u>122,014,392</u>	<u>87,175,894</u>	<u>132,866,941</u>	<u>180,816,411</u>	<u>154,602,525</u>
Transfers in	147,509	159,024	162,769	203,847	2,747,283
Transfers out	(526,697)	(532,093)	(559,574)	(600,825)	(454,252)
Capital contributions	<u>3,000,654</u>	<u>1,698,560</u>	<u>1,154,852</u>	<u>3,419,865</u>	<u>4,793,111</u>
Change in net position	<u>124,635,858</u>	<u>88,501,385</u>	<u>133,624,988</u>	<u>183,839,298</u>	<u>161,688,667</u>
Total net position - beginning, previously reported	1,498,324,037	1,585,566,353	-	1,807,692,726	1,986,642,870
Restatement per GASB 68 implementation	(37,393,542)	-	-	-	-
Restatement per GASB 75 implementation	-	-	-	(4,889,154)	-
Total net position -- beginning, as restated	<u>1,460,930,495</u>	<u>1,585,566,353</u>	<u>1,674,067,738</u>	<u>1,802,803,572</u>	<u>1,986,642,870</u>
Total net position -- ending	<u>\$ 1,585,566,353</u>	<u>\$ 1,674,067,738</u>	<u>\$ 1,807,692,726</u>	<u>\$ 1,986,642,870</u>	<u>\$ 2,148,331,537</u>

Source: City of Portland audited financial statements.

CITY OF PORTLAND, OREGON
SEWAGE DISPOSAL FUND
STATEMENT OF CASH FLOWS
For Fiscal Years Ending June 30

	2015	2016	2017	2018	2019
CASH FLOWS FROM OPERATING ACTIVITY					
Receipts from customers and users	\$ 326,154,556	\$ 346,278,369	\$ 369,539,539	\$ 384,990,657	\$ 380,740,784
Receipts from interfund services provided	1,456,981	1,119,693	1,388,251	1,782,502	3,014,754
Payments to suppliers	(42,991,814)	(39,714,229)	(35,171,776)	(40,562,376)	(52,005,096)
Payments to employees	(47,644,401)	(49,026,826)	(50,807,961)	(55,307,726)	(60,480,992)
Payments for interfund services used	(24,504,600)	(26,292,703)	(27,766,111)	(28,923,825)	(30,354,431)
Other receipts (payments)	13,225	-	1,544	-	-
Net cash provided by operating activities	212,483,947	232,364,304	257,183,486	261,979,232	240,915,019
CASH FLOW FROM NONCAPITAL FINANCING ACTIVITIES					
Transfers in	147,510	158,958	162,769	203,847	2,747,283
Transfers out	(511,664)	(532,092)	(559,574)	(600,825)	(454,252)
Net cash provided (used) by noncapital financing activities	(364,154)	(373,134)	(396,805)	(396,978)	2,293,031
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES					
Proceeds from sale of bonds and notes	290,385,000	393,105,000	319,115,000	191,930,000	-
Premium on bonds and notes issued	32,206,753	48,885,563	56,113,433	21,636,279	-
Sale of capital assets	68,746	1,138,238	322,953	10,665,852	1,529,008
Acquisition of capital assets	(103,126,384)	(96,472,573)	(107,426,808)	(110,071,279)	(142,847,837)
Principal paid on bonds, notes and capital leases	(186,127,092)	(521,557,246)	(447,288,111)	(106,001,539)	(113,149,725)
Interest paid on bonds, notes and capital leases	(77,382,502)	(88,044,074)	(92,501,164)	(61,888,783)	(66,934,202)
Bond issuance costs	(1,018,056)	(2,177,049)	(1,285,282)	(629,891)	(59,013)
Net cash provided (used) by capital related financing activities	(44,993,535)	(265,122,141)	(272,949,979)	(54,359,361)	(321,461,769)
CASH FLOWS FROM INVESTING ACTIVITIES					
Interest on investments	1,662,097	2,979,782	1,530,067	401,288	14,151,570
Net increase (decrease) in cash and cash equivalents	168,788,355	(30,151,189)	(14,633,231)	207,624,181	(64,102,149)
CASH AND CASH EQUIVALENTS					
July 1 (beginning)	106,332,191	275,120,546	244,969,357	230,336,126	437,960,307
CASH AND CASH EQUIVALENTS					
June 30 (ending)	\$ 275,120,546	\$ 244,969,357	\$ 230,336,126	\$ 437,960,307	\$ 373,858,158
Reconciliation of Cash and Cash Equivalents to the Statements of Net Position:					
Unrestricted cash and cash equivalents	\$93,893,296	\$142,221,490	\$171,056,466	\$220,282,473	\$298,584,740
Restricted cash and cash equivalents	181,227,250	102,747,867	59,279,660	217,677,834	75,273,418
Total	\$275,120,546	\$244,969,357	\$230,336,126	\$437,960,307	\$373,858,158

CITY OF PORTLAND, OREGON
SEWAGE DISPOSAL FUND
STATEMENT OF CASH FLOWS (Continued)
For Fiscal Years Ending June 30

	2015	2016	2017	2018	2019
Reconciliation of operating income (loss) to net cash provided by operating activities					
Operating income (loss)	\$ 191,132,242	\$ 154,984,129	\$ 202,175,460	\$ 214,626,718	\$ 183,252,711
Adjustments to reconcile operating income (loss) to net cash provided (used) by operating activities:					
Depreciation and amortization of capital assets	43,075,864	45,561,285	47,376,734	47,889,962	48,917,284
Provision for uncollectible accounts	1,112,467	1,212,258	534,532	1,080,219	930,009
Nonoperating revenue	-	-	-	7,075	0
Change in assets and liabilities:					
Accounts and advances receivable	125,572	9,026,146	(1,064,533)	(4,999,457)	2,029,809
Inventories	(96,155)	(134,266)	(140,799)	(110,742)	(363,782)
Prepaid expense	-	-	-	(1,369,497)	(6,693,810)
Accounts payable	(1,969,535)	1,287,971	4,377,197	1,666,740	6,390,018
Self insurance claims	-	159,717	(145,839)	21,537	13,672
Compensated absences	66,786	97,011	(21,263)	576,563	692,331
Due from (to) component unit	-	(61,484)	61,484	-	-
Unearned revenue	(34,967)	221,915	(10,013)	37,994	(98,410)
Net pension liability - PERS	-	26,482,758	42,445,336	(7,836,114)	6,607,458
Accrued other postemployment benefits	48,151	(9,196)	(10,578)	5,209,747	(2,921)
Landfill postclosure	-	9,442,484	(3,370,042)	(3,611,124)	207,846
Pollution remediation	(741,200)	117,500	(635,000)	(522,500)	-
Other accrued liabilities	(117,408)	82,133	10,667	635,939	(18,511)
Deferred outflows - pensions	(3,394,556)	(2,711,170)	(28,897,806)	13,728,558	(3,362,073)
Deferred outflows - OPEB	-	-	-	(613,206)	(21,934)
Deferred inflows - pensions	20,670,228	(13,394,887)	(5,502,051)	132,190	2,330,577
Deferred inflows - OPEB	-	-	-	317,784	104,745
Restatement per GASB 68 implementation	(37,393,542)	-	-	-	-
Restatement per GASB 75 implementation	-	-	-	(4,889,154)	-
Net cash provided by operating activities	<u>\$ 212,483,947</u>	<u>\$ 232,364,304</u>	<u>\$ 257,183,486</u>	<u>\$ 261,979,232</u>	<u>\$ 240,915,019</u>

Noncash information

Prepaid PERS amortization	-	-	-	-	-
Capital contribution	3,000,654	1,698,560	1,154,852	3,419,865	4,793,111
Capital assets transferred to/from business-type activity	-	(21,276)	-	-	-
Increase in fair value of investments (classified as cash equivalents)	194,992	743,852	(1,638,417)	(3,143,237)	5,105,442

Source: City of Portland audited financial statements.

