

Office of the City Auditor



City and County of Honolulu
State of Hawai`i

City and County of Honolulu Sewer Fund

Financial Statements and Supplemental Schedules
June 30, 2018 and 2017

Table of Contents

Independent Auditor's Report	1
Management's Discussion and Analysis (MD&A)	4-9
Financial Statements	
Statement of Net Position	10-11
Statement of Revenues, Expenses and Changes in Net Position	12
Statement of Cash Flows	13-14
Notes to Financial Statements	15-45
Required Supplementary Information	
Schedule of City's Proportionate Share of the Net Pension Liability	46
Schedule of Pension Contributions	47
Notes to Schedule of City's Proportionate Share of the Net Pension Liability	48
Schedule of Changes in Net OPEB Liability and Related Ratios	49
Schedule of OPEB Contributions	50
Notes to Schedule of OPEB Contributions	51



A Hawaii Limited Liability Partnership

Independent Auditor's Report

To the Chair and Members of the City Council City and County of Honolulu

Report on the Financial Statements

We have audited the accompanying financial statements of the City and County of Honolulu, Sewer Fund (Sewer Fund) which comprise the statement of net position as of June 30, 2018, and the related statements of revenues, expenses, and changes in net position and cash flows for the year then ended and the related notes to the financial statements, which collectively comprise the Sewer Fund's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Sewer Fund as of June 30, 2018, and the changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 2, the financial statements referred to above include only the financial activities of the Sewer Fund, and are not intended to present fairly the financial position of the City and County of Honolulu as of June 30, 2018, and the changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

As discussed in Note 2, in 2018 the Sewer Fund adopted Governmental Accounting Standards Board Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions. As a result of adopting this standard the net position at July 1, 2017 has been restated. Our opinion is not modified with respect to this matter.

Other Matter

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 4 through 9 and the schedule of City's proportionate share of the net pension liability, schedule of pension contributions, notes to schedule of City's proportionate share of the net pension liability, schedule of changes in net other postemployment benefits (OPEB) liability and related ratios, schedule of OPEB contributions, and notes to schedule of OPEB contributions on pages 46 through 51, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Government Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the

United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

KMH LLP

Honolulu, Hawaii December 20, 2018

KMH LLP

Management's Discussion and Analysis June 30, 2018

The following summary discussion and analysis of the financial statements for the fiscal year ended June 30, 2018 are provided by the City and County of Honolulu's wastewater enterprise (Wastewater Enterprise). The summary is designed to provide an introduction to the Sewer Fund financial statements and the financial condition of the Wastewater Enterprise. We encourage readers to also review the financial statements as a whole.

Financial Highlights

- 114.0 million gallons per day of wastewater were collected and treated in fiscal year 2018, a decrease of 2.5% from fiscal year 2017. As of June 30, 2018, the Wastewater Enterprise had approximately 147,000 customer accounts and served approximately 780,000 residents.
- Total assets and deferred outflows of resources were \$4,876.1 million and exceeded total liabilities and deferred inflows of resources by \$1,924.9 million as of June 30, 2018. As of June 30, 2018, net position (difference between assets, deferred inflows/outflows of resources, and liabilities) increased by \$174.7 million, or 9.6%, from June 30, 2017 (including the impact of the beginning balance of the June 30, 2018 net position restatement). The increase in net position in 2018 was due to increased current, restricted and capital assets.
- As of June 30, 2018, total assets increased by \$429.2 million to \$4,776.7 million, representing a 9.9% increase from the prior fiscal year. The increase in fiscal year 2018 was due to additional capital assets and current assets.
- Total current and restricted assets increased by 21.5% or \$294.6 million to \$1,663.6 million at June 30, 2018. The increase in 2018 was primarily due to revenue bond proceeds.
- Total current liabilities increased by 0.1% or \$0.1 million to \$196.8 million primarily due to an increase in bonds payable. At June 30, 2018, total liabilities increased 12.7% or \$330.3 million to \$2,932.2 million due to an increase in bonds payables and net other postemployment benefits (OPEB) liability.
- Due to the implementation of Government Accounting Standards (GASB) No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pension, during fiscal year 2018, the July 1, 2017 beginning net position has been restated in the amount of \$77.7 million. It was not practical to determine the amounts of all deferred inflows and outflows of resources for fiscal year 2017, therefore the 2017 financial statements have not been restated for the management's discussion and analysis.
- The Sewer Fund early implemented GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*, as of June 30, 2018. This GASB statement requires that the provision be applied prospectively as of June 30, 2018. The capitalized interest reported for the fiscal year ended June 30, 2017 was approximately \$21.3 million.

Management's Discussion and Analysis June 30, 2018

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the Wastewater Enterprise's financial statements, which consist of the basic financial statements and notes to the financial statements.

Basic financial statements. The basic financial statements are designed to provide readers with a broad overview of the Wastewater Enterprise's finances, in a manner similar to a private-sector business.

The statements of net position presents information on the Wastewater Enterprise's assets, liabilities, and deferred inflows and outflows of resources with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Wastewater Enterprise is improving or deteriorating. Net position increases when revenues and subsidies exceed expenses. Increases to assets without a corresponding increase to liabilities, result in increased net position, which indicates an improved financial position.

The statements of revenues, expenses, and changes in net position present information showing how the Wastewater Enterprise's net position changed during the past two fiscal years. All changes in net position are reported as soon as the underlying event occurs, regardless of timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future fiscal periods (e.g., earned but unused vacation leave).

The statements of cash flows present changes in cash and cash equivalents, resulting from operating, financing, and investing activities. This statement presents cash receipts and cash disbursements information, without consideration of the earnings event, when an obligation arises, or depreciation of capital assets.

Notes to the financial statements. The notes provide additional information that is essential to a full understanding of the data provided in the basic financial statements.

Management's Discussion and Analysis June 30, 2018

Financial Analysis

The following are the highlights of the condensed statements of net position (in thousands of dollars) for the Wastewater Enterprise:

Statements of Net Position

	2018		 2017
Assets:			
Current assets	\$	1,225,345	\$ 1,121,172
Restricted assets		438,207	247,765
Capital assets, net		3,113,168	2,978,459
Other noncurrent assets		-	135
Deferred Outflows of Resources		99,369	 101,631
Total assets and deferred outflows	\$	4,876,089	\$ 4,449,162
Liabilities:			
Current liabilities	\$	196,760	\$ 196,658
Noncurrent liabilities		2,735,419	2,405,223
Deferred Inflows of Resources		18,970	19,343
Total liabilities and deferred inflows		2,951,149	 2,621,224
Net investment in capital assets		852,641	874,926
Restricted for debt service		260,091	165,226
Unrestricted		812,208	 787,786
Total net position		1,924,940	 1,827,938
Total liabilities, deferred inflows, and net position	\$	4,876,089	\$ 4,449,162

Net position

Net position (the difference between assets, liabilities, and deferred inflows/outflows of resources) may serve, over time, as a useful indicator of a government's financial position. In the case of the Wastewater Enterprise, assets and deferred outflows of resources exceeded liabilities by \$1,924.9 million at the end of fiscal year 2018. Additions of capital assets resulted in a 10.0% increase in net position from fiscal year 2017 (as restated) to 2018. The largest portion of the Wastewater Enterprise's net position represented its investment in capital assets (e.g., land, buildings, transmission and distribution system, etc.). The Wastewater Enterprise uses these capital assets to provide wastewater services on the Island of Oahu and consequently, capital assets are not available to liquidate liabilities or other spending.

Management's Discussion and Analysis June 30, 2018

The following are the highlights of the condensed statements of revenues, expenses and changes in net position (in thousands of dollars):

Statements of Revenues, Expenses and Changes in Net Position

	 2018	2017	
Operating revenues Operating expenses	\$ 455,438 (205,949)	\$ 458,773 (194,609)	
Operating income	249,489	264,164	
Nonoperating revenues (expenses)			
Interest income	14,436	7,718	
Interest expense	(74,614)	(52,061)	
Other	 3,578	 2,934	
Income before transfers and capital contributions	192,889	222,755	
Transfers out	(18,170)	(16,199)	
Capital contributions	8	 205	
Change in net position	 174,727	 206,761	
Net position			
Beginning of year, as previously reported	1,827,938	1,621,177	
Restatement due to change in accounting principle	(77,725)		
Beginning of year, as restated	1,750,213	 1,621,177	
End of year	\$ 1,924,940	\$ 1,827,938	

The changes in net position were primarily due to:

- Operating revenues, comprised mainly of sewer service charges, decreased 0.7% to \$455.4 million for the fiscal year 2018 compared to the prior fiscal. Sewer service charge rates remained the same in fiscal year 2018.
- Operating expenses increased \$11.3 million or 5.8% to \$205.9 million for fiscal year 2018 compared to the prior fiscal year. The primary increase in 2018 was in administrative and general, depreciation and utilities.

Management's Discussion and Analysis June 30, 2018

- Interest expense increased by \$22.6 million or 43.3% to \$74.6 million for fiscal 2018 compared to the prior fiscal year. The increase in 2018 was due to an increase in interest expense on wastewater revenue bonds and the implementation of GASB 89.
- Contributed capital decreased to \$0.01 million in fiscal year 2018 down from \$0.21 million in fiscal year 2017. Contributed capital represents assets (primarily capital assets) transferred from other city governmental funds and other entities. Approximately \$18.2 million was transferred out during fiscal year 2018 for the Wastewater Enterprise's share of central administrative expenses incurred by the City.

Capital Asset and Debt Administration

Capital assets. The Wastewater Enterprise's investment in capital assets amounted to \$3.1 billion and \$3.0 billion, net of accumulated depreciation, as of June 30, 2018 and 2017, respectively, an increase of \$134.7 million or 4.5% in 2018. Capital assets include land, buildings, infrastructure, land improvements, equipment and machinery for the 9 treatment plants, 70 pumping stations, and over 2,100 miles of sewer line that makes up the Wastewater Enterprise. Capital assets are added, rehabilitated or replaced according to the infrastructure and facilities twenty-year capital plan.

Long-term debt. Wastewater revenue bonds and State revolving fund loans are the primary long-term financing instruments used to fund the acquisition of capital assets. The long term portion of revenue bonds outstanding as of June 30, 2018 and 2017 totaled \$2,287.7 million and \$2,012.4 million, respectively. The long term portion of state revolving fund notes payable outstanding at June 30, 2018 and 2017 totaled \$206.7 million and \$229.2 million, respectively.

Debt service coverage was 282% on Senior Revenue Bonds, 214% on all revenue bonds, and 185% on all debt at June 30, 2018. Debt service coverage exceeded the requirements of bond covenants and policies of the City Council in 2018.

Additional information on the Wastewater Enterprise's capital assets and long-term debt can be found in the notes to the financial statements.

Management's Discussion and Analysis June 30, 2018

Currently Known Facts, Decisions or Conditions

In support of requirements in the 2010 Consent Decree (See Note 11 to the financial statement) and other system requirements, the City anticipates issuing additional wastewater system revenue bonds to pay for costs of certain additions and improvements to the wastewater system and to refund eligible previously issued bonds for economic savings during FY 2018.

Requests for Information

Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the City and County of Honolulu, Department of Environmental Services, 1000 Uluohia Street, Suite 308, Kapolei, Hawaii 96707.

Statement of Net Position June 30, 2018 (Amounts in thousands)

Assets and Deferred Outflows of Resources

Current Assets:	
Cash and cash equivalents	\$ 157,181
Investments	983,106
Receivables:	
Accounts, net of allowance for uncollectible accounts of \$2,962	66,419
Interest	4,049
Employee advances	 733
Total receivables	71,201
Inventories of materials and supplies	 13,857
Total current assets	1,225,345
Restricted Assets - Investments	438,207
Capital Assets, Net	 3,113,168
Total assets	 4,776,720
Deferred Outflows of Resources:	
Deferred refunding costs, net	57,325
Deferred pension costs	33,265
Deferred other postemployment benefits costs	 8,779
Total deferred outflows of resources	 99,369
Total assets and deferred outflows of resources	\$ 4,876,089

Statement of Net Position (continued) June 30, 2018 (Amounts in thousands)

Liabilities, Deferred Inflows of Resources, and Net Position

Current Liabilities:	
Accounts payable	\$ 54,396
Due to other City funds	356
Interest payable	46,553
Bonds payable	70,545
Notes payable	22,670
Accrued payroll	1,738
Other current liabilities	 502
Total current liabilities	196,760
Revenue Bonds Payable, Net	2,287,667
Net Pension Liability	117,720
Net Other Postemployment Benefit Liability	115,525
Notes Payable	206,728
General Obligation Bonds Payable, Net	651
Other Liabilities	 7,128
Total liabilities	 2,932,179
Deferred Inflows of Resources:	
Deferred pension costs	18,538
Deferred other postemployment benefits costs	 432
Total deferred inflows of resources	 18,970
Net Position:	
Net investment in capital assets	852,641
Restricted for debt service	260,091
Unrestricted	 812,208
Total net position	1,924,940
Total liabilities, deferred inflows of resources, and net position	\$ 4,876,089

The accompanying notes are an integral part of the financial statements.

Statement of Revenues, Expenses and Changes in Net Position Year Ended June 30, 2018 (Amounts in thousands)

Operating Revenues:	
Sewer service charges	\$ 450,541
Other revenue	 4,897
Total operating revenues	 455,438
Operating Expenses:	
Administrative and general	48,338
Depreciation	68,546
Utilities	23,149
Fringe benefits	29,361
Contractual services	20,530
Materials and supplies	14,344
Fuel and lubricants	1,106
Maintenance	 575
Total operating expenses	205,949
Income from operations	 249,489
Nonoperating Revenues (Expenses):	
Interest income	14,436
Interest expense	(74,614)
Net decrease in fair value of investments	(620)
Other	4,198
Total nonoperating expenses	 (56,600)
Income before transfers and capital contributions	192,889
Transfers Out	(18,170)
Capital Contributions	8
Changes in net position	174,727
Net Position at Beginning of Year, as Previously Reported	1,827,938
Restatement Due to Change in Accounting Principle	(77,725)
Net Position at Beginning of Year, as Restated	 1,750,213
Net Position, End of Year	\$ 1,924,940

The accompanying notes are an integral part of the financial statements.

Statement of Cash Flows Year Ended June 30, 2018 (Amounts in thousands)

Cash Flows from Operating Activities:	
Cash received from customers	\$ 450,157
Cash payments to suppliers	(65,048)
Cash payments to employees	(61,548)
Other receipts	 785
Net cash provided by operating activities	 324,346
Cash Flows from Noncapital Financing Activities	
Transfers Out	 (18,170)
Cash Flows from Capital and Related Financing Activities:	
Acquisition and construction of capital assets	(216,524)
Proceeds from issuance of notes	222
Repayments on notes	(23,593)
Interest paid on notes	(2,040)
Proceeds from issuance of bonds, net	602,614
Repayments on bonds	(310,215)
Interest paid on bonds	(85,142)
Payment to escrow agent for crossover refunding	(106,409)
Interest subsidies for wastewater system revenue bonds	 5,013
Net cash used in capital and related financing activities	 (136,074)
Cash Flows from Investing Activities:	
Purchase of investments	(2,411,252)
Proceeds from maturity of investments	2,262,852
Interest on investments	12,246
Net cash used in investing activities	 (136,154)
Net increase in cash and cash equivalents	33,948
Cash and Cash Equivalents, Beginning of Year	 123,233
Cash and Cash Equivalents, End of Year	\$ 157,181

The accompanying notes are an integral part of the financial statements.

Statement of Cash Flows (continued) Year Ended June 30, 2018 (Amounts in thousands)

Reconciliation of Income from Operations to Net Cash

Provided	by O	perating	Activities:
1 10 viaca	$o_y \circ$	peramis	rictivities.

Income from operations	\$ 249,489
Adjustments to reconcile income from operations to net cash	
provided by operating activities:	
Depreciation	68,546
Write-off of capital assets	4,915
Other revenues	593
Change in assets, liabilities and deferred inflows/outflows of resources:	
Accounts receivable	(5,463)
Inventories of materials and supplies	1,175
Deferred outflows from pension	15,714
Deferred outflows from other postemployment benefits	(1,053)
Accounts payable	(1,570)
Other liabilities	(158)
Net pension liability	(9,957)
Net other postemployment benefits liability	2,136
Due to other City funds	352
Deferred inflows from pension	(805)
Deferred inflows from other post employment benefits	 432
Net cash provided by operating activities	\$ 324,346

Supplemental Disclosure of Noncash Capital and Related Financing Activities:

The Sewer Fund received \$0.01 million in contributions of capital assets from government agencies and developers, which are recorded as capital contributions at their cost or estimated cost for the year ended June 30, 2018.

Amortization of bond premiums, (discounts), and (deferred loss on refunding) amounted to \$17.29 million, (\$0.76) million, and (\$3.92) million for the year ended June 30, 2018, respectively.

Notes to Financial Statements June 30, 2018

1. Financial Reporting Entity

The City and County of Honolulu, Sewer Fund (Sewer Fund) was established as an enterprise fund effective July 1, 1999 in conjunction with the November 1998 City Resolution 98-193, CD1, authorizing the issuance of the Wastewater System Revenue Bonds for the City and County of Honolulu's (City) wastewater system. The fund accounts for the operations of the City's wastewater system.

2. Summary of Significant Accounting Policies

a. Financial Statement Presentation

The Sewer Fund is one of the various enterprise funds of the City. The accompanying financial statements present only the activities of the Sewer Fund and do not include other organizations, activities and functions of the City. The City's Director of Budget and Fiscal Services maintains the central accounts for all City funds and publishes financial statements for the City annually, which includes the Sewer Fund's financial activities.

The accompanying financial statements of the Sewer Fund have been prepared in conformity with accounting principles generally accepted in the United States of America prescribed by the Governmental Accounting Standards Board (GASB).

b. Basis of Accounting

The accompanying financial statements are presented using the economic resources measurement focus and the accrual basis of accounting, whereby revenues and expenses are recognized in the period earned or incurred.

c. Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant items subject to such estimates and assumptions included revenue recognized related to unbilled accounts, allowance for uncollectible accounts, net pension liability and net other postemployment benefits (OPEB). Actual results could differ from those estimates.

Notes to Financial Statements June 30, 2018

2. Summary of Significant Accounting Policies (continued)

d. Cash and Cash Equivalents

Cash includes amounts in demand and time deposits primarily with various financial institutions in the State of Hawaii (State). Cash on deposit with financial institutions is collateralized in accordance with State statutes. Investments with original maturity of three months or less when purchased are considered cash equivalents.

e. Investments

Investments consist of U.S. treasury and government securities and nonparticipating guaranteed investment contracts. All nonparticipating investment contracts are recorded at amortized cost. Participating investment contracts with maturities of one year or more are stated at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Participating investment contracts with maturities of less than one year are recorded at amortized cost.

f. Inventories of Materials and Supplies

Inventories of materials and supplies are stated at weighted average cost. The costs of inventories are recorded as expenditures when consumed rather than when purchased.

g. Receivables

Sewer service charge revenues are accrued by the City based on estimated billings for services provided through the end of the fiscal year. Receivables included estimated unbilled sewer charges amounting to approximately \$35.3 million at June 30, 2018. The allowance for doubtful accounts is based on the aging of accounts receivable. Approximately 90% of balances over 120 days are regarded as uncollectible.

h. Restricted Assets

Revenue bond indentures allow the City to invest in U.S. Government Securities. At June 30, 2018, restricted assets consist of unspent debt proceeds of \$270.4 million, revenue bond collateral reserves of approximately \$62.4 million, and investments held in escrow accounts for crossover refunding bonds of \$105.4 million, totaling \$438.2 million.

Notes to Financial Statements June 30, 2018

2. Summary of Significant Accounting Policies (continued)

i. Capital Assets

Capital assets include property, plant and equipment, including infrastructure (sewer system, network of pipes and sewer mains). Assets with an initial individual cost of \$5,000 or more for equipment and \$100,000 for buildings, structures and infrastructure, and an estimated useful life of more than one year are capitalized. Such assets are recorded at cost or estimated cost.

Depreciation is calculated on a straight-line basis over the following estimated useful lives:

	Y ears
Buildings and land improvements	10 – 50
Transmission and distribution system	13 - 60
Equipment and machinery	5 - 20

Sales and retirements of depreciable property are recorded by removing the related cost and accumulated depreciation from the accounts. Gains or losses on sales and retirements of property are reflected in results of operations.

Normal maintenance and repairs that do not add to the value of the assets or materially extend asset lives are not capitalized. Betterments are capitalized and depreciated over the remaining useful lives of the related assets, as applicable.

j. Original Issue Discounts or Premiums

Original issue discounts or premiums on bonds are amortized ratably over the terms of the respective issues and are offset against the bonds payable in the statement of net position.

k. Accrued Vacation

Employees are credited with vacation at the rate of one and three-quarters working days per month. Accumulation of such vacation credits is limited to 90 days at calendar year-end and is convertible to pay upon termination of employment. Such accumulated vacation has been accrued and reflected in the statement of net position.

Notes to Financial Statements June 30, 2018

2. Summary of Significant Accounting Policies (continued)

l. Deferred Outflows and Inflows of Resources

Deferred outflows of resources represent consumptions of net position that apply to future periods and will not be recognized as an outflow of resources (expenditures) until then. The amount consists of:

- Deferred charges on refunding bonds resulting from the difference between the carrying value of debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt on a basis that approximates the effective-interest method.
- 2) According to GASB Statement No. 68 (GASB 68), Accounting and Reporting for Pensions (an amendment of GASB Statement No. 27) and GASB Statement No. 75 (GASB 75), Accounting and Financial Reporting for Postemployment Benefits Other Than Pension, differences between projected and actual experience and changes in assumptions are recognized in pension/OPEB expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions/OPEB through the pension/OPEB plan (active and inactive employees) determined as of the beginning of the measurement period. The average of expected remaining service lives for the purposes of recognizing the applicable deferred outflows and inflows of resources established in the 2017 fiscal year for pension and OPEB is 5.6644 years and 5.8776 years, respectively.

Additionally, differences between projected and actual earnings on pension/OPEB plan investments are recognized in pension/OPEB expense using a systematic and rational method over a closed five year period.

Contributions to the pension/OPEB plan from the employer subsequent to the measurement date of the net pension/OPEB liability and before the end of the reporting period are reported as deferred outflows of resources.

Notes to Financial Statements June 30, 2018

2. Summary of Significant Accounting Policies (continued)

m. Pension

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Employees' Retirement System of the State of Hawaii (ERS) and additions to/deductions from ERS's fiduciary net position have been determined on the same basis as they are reported by ERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

n. Other Postemployment Benefits

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the Hawaii Employer-Union Health Benefits Trust Fund (EUTF) and additions to/deductions from the EUTF's fiduciary net position have been determined on the same basis as they are reported by the EUTF. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at their fair value.

o. Net Position

Net position is comprised of the accumulated income from operating and nonoperating revenues, expenses, transfers and capital contributions. Net position is classified in the following three components: net investment in capital assets; restricted for debt service; and unrestricted net position. Net investment in capital assets consists of capital assets, net of accumulated depreciation, and is reduced by outstanding debt that is attributable to the acquisition, construction or improvement of those assets. Debt related to unspent proceeds or other restricted cash and investments at fiscal year-end are not included in the calculation of the amount of net investment in capital assets. Restricted for debt service consists of net position for which constraints are placed thereon by external parties, such as lenders, grantors, contributors, laws, regulations and enabling legislation, including self-imposed legal mandates. Unrestricted net position consists of all other net position not included in the above categories. When an expense is incurred for purposes for which both restricted and unrestricted net position is available, restricted resources are applied first, then unrestricted resources as they are needed.

Notes to Financial Statements June 30, 2018

2. Summary of Significant Accounting Policies (continued)

p. Operating Revenues and Expenses

The City distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services in connection with the Sewer Fund's principal wastewater operations. The principal operating revenues are from charges for wastewater system usage, while operating expenses include cost of services, administrative expenses and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

q. Capital Contributions

Capital contributions represent assets transferred from or constructed utilizing contributions from governmental agencies and developers and recorded at cost on the date placed in service.

r. Transfers

Transfers include authorized transfers of resources from the fund legally required to receive them to the fund through which such resources are to be expended. Transfers also include reimbursement of funds to the City's General Fund for expenditures paid by the General Fund on behalf of the Sewer Fund.

s. Risk Management

The City is exposed to various risks for losses related to torts; theft of, damage to, or destruction of assets; errors or omissions; natural disasters; and injuries to employees. A liability for a claim for a risk of loss is established if the information indicates that it is probable that a liability has been incurred at the date of the financial statements and the amount of the loss is reasonably estimable.

Notes to Financial Statements June 30, 2018

2. Summary of Significant Accounting Policies (continued)

t. New Accounting Pronouncements

In June 2015, GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. GASB 75 amends the accounting guidance related to employers' accounting for OPEB administered through trusts that meet specified criteria. GASB 75 establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expenditures related to OPEB. Note disclosures and required supplementary information are addressed by the statement.

As permitted in GASB 75, since management has determined that the restatement of fiscal year 2017 is not practical, the cumulative effect of adopting GASB 75 related to prior fiscal years has been recorded as a prior period adjustment to beginning net position for the fiscal year ended June 30, 2018. The adoption of GASB 75 resulted in the restatement of the Sewer Fund's fiscal year 2018 beginning net position to reflect the reporting of a net OPEB liability and deferred outflows of resources related to OPEB in accordance with the provisions of GASB 75. As of July 1, 2017, the Sewer Fund recorded a net OPEB liability and deferred outflows of resources related to OPEB of approximately \$113.4 million and \$7.7 million, respectively, compared to the previous net OPEB liability of \$27.9 million. The impact of the restatement to beginning net position is as follows (in thousands of dollars):

		2017				
	(As Previously Reported)		Restatement		2017	
			A	djustment	(As Restated)	
Net position, beginning of year	\$	1,827,938	\$	(77,725)	\$	1,750,213

In March 2017, GASB issued Statement No. 85 (GASB 85), *Omnibus 2017*. GASB 85 addresses practice issues that have been identified during implementation and applications of certain GASB Statements. GASB 85 addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and applications, and postemployement benefits (pensions and other postemployment benefits). GASB 85 was effective for the Sewer Fund's financial statement for the year ending June 30, 2018. Management implemented the provisions of GASB 85 as of June 30, 2018. GASB 85 did not have a significant impact on the Sewer Fund's financial statements.

Notes to Financial Statements June 30, 2018

2. Summary of Significant Accounting Policies (continued)

t. New Accounting Pronouncements (continued)

In May 2017, GASB issued Statement No. 86 (GASB 86), Certain Debt Extinguishments. GASB 86 improves consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary asset acquired with only existing resources, resources other than the proceeds of refunding debt, are placed in an irremovable trust for the sole purpose of extinguishing debt. This statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to the financial statements for debt that is defeased in substance. GASB 86 was effective for the Sewer Fund's financial statement for the year ending June 30, 2018. Management implemented the provisions of GASB 86 as of June 30, 2018. GASB 86 did not have a significant impact on the Sewer Fund's financial statements.

In March 2018, GASB issued Statement No. 88 (GASB 88), Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements. GASB 88 improves consistency in the information that is disclosed in the note to financial statements related to debt, including direct borrowings and direct placements, and to provide financial statement users with additional essential informations about debt. GASB 88 is effective for the Sewer Fund's financial statements for the year ending June 30, 2019, with early adoption permitted. Management is currently evaluating the impact the adoption of GASB 88 will have on the Sewer Fund's financial statements.

In June 2018, GASB issued Statement No. 89 (GASB 89), Accounting for Interest Cost Incurred before the End of a Construction Period. GASB 89 enhances the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and to simplify accounting for certain interest cost. This statement requires financial statements that are prepared using the economic resource measurement focus to expense interest costs incurred in the period in which cost is incurred and such interest cost should not be capitalized as part of the historical cost of a capital asset. GASB 89 is effective for the Sewer Fund's financial statements for the year ending June 30, 2021, with early adoption permitted, and should be applied prospectively. Management implemented the provisions of GASB 89 as of June 30, 2018. The adoption of GASB 89 resulted in no capitalized interest for the year ended June 30, 2018 compared to \$21.3 million of capitalized interest the fiscal year ended June 30, 2017.

Notes to Financial Statements June 30, 2018

3. Cash and Cash Equivalents and Investments

The cash and cash equivalents and investment balances reported in the accompanying statement of net position are included in the City's cash and cash equivalents and investment pool that is substantially used by all of the City's funds. Investments include \$12.7 million with FSA Capital Management LLC at June 30, 2018. The remaining balance at June 30, 2018 is invested in the City's pooled investment fund. Information pertaining to credit risk, interest rate risk and fair value measurements is available for only the total cash and cash equivalents and investment pool, which is disclosed in the City's Comprehensive Annual Financial Report (CAFR) available at City's website: http://www.honolulu.gov/budget/budget-cafr.html.

State statutes authorize the City to invest in obligations of the U.S. Treasury and U.S. Agencies, obligations of other states, cities and counties, mutual funds, and bank repurchase agreements. Investments in repurchase agreements are primarily U.S. government or federal agency securities. The City does not have a policy relative to interest rate risk.

4. Credit Risk

Financial instruments, which potentially expose the City to concentrations of credit risk, consist primarily of cash, investments in debt securities, and accounts receivable from customers. Cash and cash equivalents are maintained in various financial institutions in the State. Credit risk related to investments in debt securities has been mitigated by limiting such investments to debt obligations of the U.S. government.

The customer base is concentrated among commercial, industrial, residential and governmental customers located within Honolulu, Hawaii. Although the City is directly affected by Honolulu's economy, management does not believe significant credit risk exists at June 30, 2018, except as provided in the allowance for uncollectible accounts. The City manages its credit exposure through procedures designed to identify and monitor credit risk.

5. Due From and Due To Other City Funds

Due to other City funds consists primarily of bond principal and interest and pension expenses for the Sewer Fund temporarily advanced by the General Fund.

Notes to Financial Statements June 30, 2018

6. Capital Assets

The capital assets activity for the year ended June 30, 2018 were as follows (in thousands of dollars):

		Balance at			Retirements/		Balance at	
	July 1, 2017		Additions		Trans fers		June 30, 2018	
Depreciable assets								
Buildings and improvements	\$	1,140,510	\$	216,622	\$	-	\$	1,357,132
Transmission and distribution system		1,797,655		302,727		(117)		2,100,265
Equipment and machinery		82,375		37,271		(301)		119,345
Land improvements		7,508		90				7,598
Total depreciable assets		3,028,048		556,710		(418)		3,584,340
Less: Accumulated depreciation								
Buildings and improvements		(289,242)		(24,489)		-		(313,731)
Transmission and distribution system		(408, 123)		(36,753)		48		(444,828)
Equipment and machinery		(47,335)		(7,092)		301		(54,126)
Land improvements		(2,193)		(212) -		_		(2,405)
Total accumulated depreciation		(746,893)		(68,546)		349		(815,090)
		2,281,155		488,164		(69)		2,769,250
Land		46,025		8		-		46,033
Construction in progress		651,279		199,454		(552,848)		297,885
	\$	2,978,459	\$	687,626	\$	(552,917)	\$	3,113,168

Depreciation expense was approximately \$68.5 million for the year ended June 30, 2018.

Notes to Financial Statements June 30, 2018

7. Long-Term Obligations

The City issues general obligation bonds for the construction of major capital facilities. The Sewer Fund's general obligation bonds are collateralized by or expected to be paid from sewer user charges. These instruments are a direct obligation of the City for which its full faith and credit is pledged. The general obligation bonds for the Sewer Fund were issued during fiscal years 1993 through 2013 in the original amount totaling \$181.7 million, and maturing serially through fiscal year 2028. The general obligation bonds bear interest at rates ranging from 1.3% to 5.0% at June 30, 2018. No new general obligation bonds have been issued to finance construction of sewer capital facilities since fiscal year 1998. Subsequently, sewer capital facilities were funded by wastewater system revenue bonds.

At June 30, 2018, wastewater system revenue bonds outstanding in the City's business-type activities were issued during fiscal years 1999 through 2018, in the original amount totaling \$3.3 billion, less discounts of \$35.4 million and adjusted for premiums of \$245.1 million, which are being amortized over the related term of the bonds. The bonds bear interest at 0.6% to 6.3% at June 30, 2018 and mature at various dates through fiscal year 2048. The wastewater system revenues collateralize the revenue bonds

On December 20, 2017, the City issued wastewater system revenue bonds of \$252.5 million. The bonds were comprised of \$155.2 million of Senior Series A for refunding of bonds and \$97.3 million of Senior Series B for crossover refunding. Proceeds from bonds utilized for crossover refunding are held in an escrow account to be used to pay debt service cost and purchase government obligations and therefore included as restricted assets – investments on the statement of net position. The refunded bonds are not considered legally defeased until the crossover date and therefore are included as revenue bonds payable on the statement of net position.

Senior series 2017A were issued for \$155.2 million. The proceeds of the bonds, along with release of \$1.7 million common reserve funds, were used to refund a portion of revenue bond series 2011A and 2012A. The bonds mature annually on July 1, 2018 through July 1, 2034 and bear interest at 2.4% to 3.1%. The refunding was undertaken to reduce total debt service payments by \$28.2 million and resulted in an economic gain of \$13.6 million.

Notes to Financial Statements June 30, 2018

7. Long-Term Obligations (continued)

Senior series 2017B were issued for \$97.3 million. The proceeds of the bonds, along with release of \$9.1 million of common reserve funds, were used as a crossover refunding for a portion of revenue bond series 2009B and 2010B. The bonds mature annually on July 1, 2020 through July 1, 2034 and bear interest at 2.5% to 3.0%. The refunding was undertaken to reduce total debt service payments by \$21.3 million and resulted in an economic gain of \$7.1 million. The crossover dates are July 1, 2019 for the 2009B revenue bond series and July 1, 2020 for the 2010B revenue bond series.

On February 13, 2018, the City issued tax-exempt wastewater system revenue bonds of \$282.9 million and taxable wastewater system revenue bonds of \$41.9 million. The bonds were comprised of Senior series A & B and Junior Series A & B with total aggregate of \$324.8 million.

Senior series 2018A was issued for \$239.3 million. The proceeds of the bonds will be used to pay for certain additions and improvements to the wastewater system. The bonds mature annually on July 1, 2035 through July 1, 2047 and bear interest rates at 3.3% to 5.0%. For certain bonds maturing on or after July 1, 2035 through July 1, 2047, the City may exercise its option of redemption on or after January 1, 2028 in whole or in part, at any time, in order of maturity selected by the City, and by lot within maturity, at the principal amount thereof, plus interest accrued to the date fixed for redemption thereof, without premium.

Senior series 2018B were issued for \$34.3 million. The proceeds of the bonds were used to refund a portion of revenue bond series 2015C. The bonds mature annually on July 1, 2018 through July 1, 2025 and bear interest rate at 5.0%. The refunding was undertaken to reduce total debt service payments by \$1.0 million and resulted in an economic gain of approximately \$0.9 million.

Junior series 2018A were issued for \$41.9 million. The proceeds of the bonds, along with release of \$3.3 million in common reserve funds, were used to refund a portion of revenue bond series 2009A and 2010A. The bonds mature annually on July 1, 2018 through July 1, 2026 and bear interest rates at 2.2% to 3.2%. The refunding was undertaken to reduce total debt service payments by \$5.8 million and resulted in an economic gain of approximately \$1.8 million.

Junior series 2018B were issued for \$9.3 million. The proceeds of the bonds were used to refund a portion of revenue bonds series 2015B. The bonds mature annually on July 1, 2018 through July 1, 2025 and bear interest rate at 4.0%. The refunding was undertaken to reduce total debt service payments by \$0.3 million and resulted in an economic gain of approximately \$0.3 million.

Notes to Financial Statements June 30, 2018

7. Long-Term Obligations (continued)

The Sewer Fund defeased certain general obligation and revenue bonds by placing the proceeds of new bonds in irrevocable trusts to provide for all future debt service payments on the old bonds. Accordingly, the assets of the irrevocable trusts and the liability for the defeased bonds are not included in the Sewer Fund's financial statements. At June 30, 2018, approximately \$444.0 million of the Sewer Fund's bonds outstanding were considered defeased.

The notes payable to the State are for the construction of necessary treatment works. During fiscal year 2018, the City issued notes payable amounting to \$0.2 million. Total notes amounted to \$229.4 million at June 30, 2018, bearing interest ranging from 0.0% to 2.4%, and require annual principal and interest payments through fiscal year 2035.

Total interest costs incurred in 2018 was approximately \$74.6 million.

Long-term obligations activity for the fiscal year ended June 30, 2018 were as follows (in thousands of dollars):

	Balance at July 1, 2017 (Restated)	Additions	Reductions	Balance at June 30, 2018	Amount Due Within One Year
General obligation bonds Revenue bonds	\$ 736 1,930,205	\$ - 577,265	\$ (60) (288,415)	\$ 676 2,219,055	\$ 55 70,490
Notes payable	252,769	222	(23,593)	229,398	22,670
	2,183,710	577,487	(312,068)	2,449,129	93,215
Add: Unamortized net premium	142,038	26,769	(29,675)	139,132	
Total long-term debt	2,325,748	604,256	(341,743)	2,588,261	93,215
Compensated absences	7,813	2,879	(3,062)	7,630	502
Total long-term obligations	\$ 2,333,561	\$ 607,135	\$ (344,805)	\$ 2,595,891	\$ 93,717

Compensated absences is included on the accompanying statement of net position as other liabilities.

Notes to Financial Statements June 30, 2018

7. Long-Term Obligations (continued)

Scheduled maturities of long-term debt at June 30, 2018 are as follows (in thousands of dollars):

	Gei	neral								
	Obli	gation		Revenue		Notes		Total		Total
	Во	nds	Bonds		Payable		Principal		Interest	
Year ending June 30,				_				_		
2019	\$	55	\$	70,490	\$	22,670	\$	93,215	\$	90,337
2020		58		72,460		21,209		93,727		89,371
2021		61		76,240		20,888		97,189		87,577
2022		63		80,000		20,782		100,845		85,157
2023		64		89,380		20,093		109,537		81,818
2024–2028		375		512,245		88,702		601,322		348,813
2029–2033		-		505,730		33,720		539,450		235,451
2034–2038		-		396,230		1,334		397,564		135,100
2039–2043		-		273,770		-		273,770		55,576
2044–2048				142,510				142,510		12,604
		676		2,219,055		229,398		2,449,129	\$	1,221,804
Less: Current portion		(55)		(70,490)		(22,670)		(93,215)		
	\$	621	\$	2,148,565	\$	206,728	\$	2,355,914		

Notes to Financial Statements June 30, 2018

8. Net Position

At June 30, 2018, net position consisted of the following (in thousands of dollars):

~ ~	•			
Net	investment	m	canital	accete.
INCL	mivesument	ш	Capitai	assets.

Net property, plant and equipment	\$ 3,113,168
Deferred outflows of resources - deferred refunding costs, net	57,325
Less:	
Wastewater general obligation bonds payable, net of	
unamortized premiums and discounts	(706)
Wastewater system revenue bonds payable, net of	
unamortized premiums and discounts	(2,358,157)
Notes payable	(229,398)
Amount of debt related to unspent debt proceeds	270,409
	852,641
Restricted for debt service	260,091
Unrestricted	 812,208
Total	\$ 1,924,940

At June 30, 2018, restricted for debt service includes approximately \$62.4 million in collateral reserves related to its revenue bonds and approximately \$105.4 million in investment in escrow account for crossover refunding bonds. The remaining amount relates to self-imposed restrictions for debt service.

9. Employee Benefit Plans

a. Defined Benefit Pension Plans

Plan Description

Substantially all eligible employees of the City are members of the ERS, a cost-sharing multiple-employer defined benefit pension plan. The ERS provides retirement benefits as well as death and disability benefits and is governed by a Board of Trustees. All contributions, benefits and eligibility requirements are established by HRS Chapter 88, and can be amended by legislative action. The ERS is composed of three classes, the contributory, the noncontributory and the hybrid retirement classes. Prior to July 1, 1984, the plan consisted of only a contributory class. In 1984, legislation was enacted to create a new noncontributory class for members of the ERS who are also covered under social security. Persons employed in positions not covered by social security were precluded from the noncontributory class. The noncontributory class provides for reduced benefits and covers most eligible employees hired starting July 1, 1984. Employees hired before that date were allowed to continue under the

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

a. Defined Benefit Pension Plans (continued)

Plan Description (continued)

contributory class or to elect the new noncontributory class and receive a refund of employee contributions. In 2004, legislation was enacted to create a hybrid retirement class, which took effect July 1, 2006. Employees in the contributory and noncontributory class were given the option to join the hybrid class or to remain in their existing class effective July 1, 2006. Starting July 1, 2006, all new employees covered by social security are required to join the hybrid class.

All benefits vest after five or ten years of credited service. Vesting is determined by the employee's class and date of hire. The monthly retirement allowance benefit formula is calculated based on the employee's age, years of credited service, average final compensation (AFC) and multiplier.

For employees who became members prior to January 1, 1971 the AFC is the average salary earned during the five highest paid years of service, including the vacation payment or the average salary earned during the three highest paid years of service excluding any lump sum vacation payment. For employees who became members on January 1, 1971 through June 30, 2012, the AFC is based on the three highest paid years of service excluding the vacation payment. For employees who became members after June 30, 2012, the AFC is the highest five years excluding any lump sum vacation payment.

The ERS issues a Comprehensive Annual Financial Report that may be obtained by writing to the Employees' Retirement System of the State of Hawaii, 201 Merchant Street, Suite 1400, Honolulu, Hawaii 96813 or found on the ERS website at http://ers.hawaii.gov/resources/financials.

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

a. Defined Benefit Pension Plans (continued)

Contributions

General employees covered under the contributory class and hired prior to July 1, 2012, are required to contribute 7.80% of their salary and will receive pensions based on a 2.00% multiplier. General employees hired after June 30, 2012, are required to contribute 9.80% of their salary with pensions based on a 1.75% multiplier. General employees covered under the hybrid class prior to July 1, 2012 are required to contribute 6.00% of their salary and will receive pensions based on a 2.00% multiplier. General employees hired after June 30, 2012, are required to contribute 8.00% of their salary with pensions based on a 1.75% multiplier. Employees covered under the noncontributory class will receive pensions based on a 1.25% multiplier.

Contributions are established by HRS Chapter 88 and may be amended through legislation. The employer rate is set by statute based on the recommendations of the ERS actuary resulting from an experience study conducted every five years. Since July 1, 2005, the employer contribution rate is a fixed percentage of compensation, including the normal cost plus amounts required to pay for the unfunded actuarial accrued liabilities. The Sewer Fund's contribution requirements as of June 30, 2018 was approximately \$7.5 million.

The City is required to contribute the remaining amounts necessary to pay contributory class benefits and all amounts necessary to pay noncontributory class benefits. The funding method used to calculate the total employer contribution requirement is the Entry Age Normal Actuarial Cost Method.

On May 18, 2017, the Governor signed into law Act 17, SLH 2017, which increased future employer contributions to a phased-in contribution rate increase over four years beginning July 1, 2017. The rate for all employees is 18.00% on July 1, 2017; 19.00% on July 1, 2018; 22.00% on July 1, 2019; and 24.00% on July 1, 2020.

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

a. Defined Benefit Pension Plans (continued)

<u>Pension Liabilities, Pension Expense, and Deferred Outflows and Deferred Inflows of</u> Resources Related to Pensions

At June 30, 2018, the Sewer Fund reported a liability of \$117.7 million for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Sewer Fund's proportion of the net pension liability was based on a projection of the Sewer Fund's long-term share of contributions to the pension plan relative to the projected contributions of all participating members of ERS, actuarially determined. At June 30, 2017, the City's proportion was 17.82%, which was a decrease of 0.35% from its proportion measured as of June 30, 2016. The Sewer Fund's proportionate share of the City's proportionate share as of June 30, 2017 was 5.10%, which was a decrease of 0.16% from prior year.

For the fiscal year ended June 30, 2018, the Sewer Fund recognized pension expense of \$14.7 million. At June 30, 2018, the Sewer Fund reported deferred outflows and inflows of resources related to pensions from the following sources (in thousands of dollars):

	Deferred Outflows of Resources]	Deferred Inflows of Resources	
Differences between expected and actual experience	\$	4,862	\$	(895)	
Net difference between projected and actual					
earnings on pension plan investments		-		(388)	
Change of assumptions		19,376		-	
Changes in proportion and differences between City					
contributions and proportionate share of contributions		1,526		(17,255)	
Sewer Fund's contributions subsequent to the					
measurement date		7,501			
	\$	33,265	\$	(18,538)	

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

a. Defined Benefit Pension Plans (continued)

<u>Pension Liabilities, Pension Expense, and Deferred Outflows and Deferred Inflows of</u> Resources Related to Pensions (continued)

The \$7.5 million reported as deferred outflows of resources related to pension at June 30, 2018, resulting from Sewer Fund contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019. Other amounts reported as deferred outflows and inflows of resources related to pension will be recognized in pension expense as follows (in thousands of dollars):

Year Ended June 30:	
2019	\$ 742
2020	3,102
2021	3,060
2022	670
2023	 (348)

7,226

2 50%

Actuarial Assumptions

Inflation

The total pension liability in the June 30, 2017 actuarial valuation was determined using the following actuarial assumptions adopted by the Board of Trustees of the Employees' Retirement System of the State of Hawaii, on December 12, 2016, based on the most recent experience study dated July 5, 2016:

Illiation	2.3070
Projected Salary Increases, Including Inflation	3.50% to 6.50%
Payroll Growth Rate	3.50%

Investment Rate of Return, Compounded Annually,

Including Inflation 7.00%

There were no changes to ad hoc postemployment benefits including cost-of-living adjustments.

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

a. Defined Benefit Pension Plans (continued)

Actuarial Assumptions (continued)

There were no other changes in assumptions between the measurement date, June 30, 2017, and the reporting date, June 30, 2018, that are expected to have a significant effect on the proportionate share of the net pension liability.

The post-retirement mortality rates are based on the 2016 Public Retirees of Hawaii mortality table with adjustments based on generational projections of the BB projection table for 2016 and full generational projection in future years. Pre-retirement mortality rates are based on multiples of RP-2014 mortality table based on the occupation of the member.

The long-term expected rate of return on pension plan investments was determined using a "top down approach" of the Bespoke Client-Constrained Simulation-based Optimization Model (a statistical technique known as "re-sampling with replacement" that directly keys in on specific plan-level risk factors as stipulated by the ERS Board) in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

		Long-term
		Expected
Strategic Allocation	Target	Geometric Rate
(risk-based classes)	Allocation	of Return
	_	
Broad growth	63.0%	8.05%
Principal protection	7.0%	2.45%
Real return	10.0%	5.80%
Crisis risk offset	20.0%	5.35%
	100.0%	
	100.0%	

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

a. Defined Benefit Pension Plans (continued)

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Sewer Fund's proportionate share of the net pension liability to changes in the discount rate

The following presents the Sewer Fund's proportionate share of the net pension liability calculated using the single discount rate of 7.00%, as well as what the Sewer Fund's proportionate share of the net pension liability would be if it were calculated using a single discount rate that is 1-percentage point lower or 1-percentage-point higher than the current rates (in thousands of dollars):

	1 percent	Current	1 percent
	Decrease	Discount	Increase
	(6.00%)	Rate (7.00%)	(8.00%)
Sewer Fund's proportionate share of the net pension liability	\$ 154,548	\$ 117,720	\$ 87,353

Pension Plan fiduciary net position

The pension plan's fiduciary net position is determined on the same basis used by the pension plan. The ERS financial statements are prepared using the accrual basis of accounting under which expenses are recorded when the liability is incurred, and revenues are recorded in the accounting period in which they are earned and become measureable. Employer and member contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Investment purchases and sales are recorded as of their trade date. Administrative expenses are financed exclusively with investment income. There were no significant changes after the June 30, 2017 measurement date.

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

a. Defined Benefit Pension Plans (continued)

Payables to the Pension Plan

The Sewer Fund had no outstanding payable to the Pension Plan as of June 30, 2018.

b. Post-Employment Healthcare and Life Insurance Benefits

Plan Description

Pursuant to Act 88, Sessions Law of Hawaii (SLH) 2001, the employers provide certain health care (medical, prescription, vision and dental) and life insurance benefits to all qualified employees. The Hawaii Employer-Union Health Benefits Trust Fund (EUTF), established on July 1, 2003, is an agent, multiple-employer defined benefit plan.

The EUTF issues a stand-alone financial report that is publicly available at https://eutf.hawaii.gov. Questions concerning any of the information contained therein or requests for any additional financial information related to that report should be addressed to EUTF, P.O. Box 2121, Honolulu, Hawaii 96805-2121.

City Policy

The actuarial valuation of the EUTF does not provide OPEB information by department or agency. Accordingly, the City's policy on the accounting and reporting for OPEB is to allocate a portion of the City's net OPEB liability, deferred inflows and outflows, and OPEB expense, to proprietary funds that are reported separately in stand-alone financial statements or in the City's CAFR. The basis for the allocation is the proportionate share of contributions made by each proprietary fund for retiree health benefits.

Benefits Provided

For employees hired before July 1, 1996, the employers pay 100.0% of the base monthly contribution for employees retiring with ten or more years of credited service, and 50.0% of the base monthly contribution for employees retiring with fewer than ten years of credited service. The employers' contributions are based on the plan (single, two-party or family) selected by the retiree.

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

b. Post-Employment Healthcare and Life Insurance Benefits (continued)

Benefits Provided (continued)

For employees hired after June 30, 1996 and retiring with 25 years or more of service, the employers pay the entire base monthly contribution. For employees retiring with at least 15 years but fewer than 25 years of service, the employers pay 75.0% of the base monthly contribution. For those retiring with at least ten years but fewer than 15 years of service, the employers pay 50.0% of the base monthly contribution. For those retiring with fewer than ten years of service, the employers make no contributions. If the retiree was hired before July 1, 2001, the employers' contributions are based on the plan (single, two-party or family) selected by the retiree. If the retiree was hired on or after July 1, 2001, the employers are responsible for the single plan base monthly contribution while the retiree must pay the difference if family coverage is elected.

Employees Covered by Benefit Terms

At July 1, 2017, the following number of City employees were covered by the benefit terms:

Inactive plan members or beneficiaries currently receiving benefits	7,185
Inactive plan members entitled to but not yet receiving benefits	885
Active plan members	8,612
Total	16,682

Contributions

Act 268, SLH 2013 required EUTF to establish and administer separate trust accounts for each public employer for the purpose of receiving irrevocable employer contributions to prefund OPEB) for retirees and their beneficiaries. It established the Hawaii EUTF Trust Fund Task Force to examine further steps to address the unfunded liability and requires all public employers to make their annual required contributions (now known as actuarially determined contributions) effective with fiscal year 2014.

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

b. Post-Employment Healthcare and Life Insurance Benefits (continued)

Contributions (continued)

The employers' OPEB contributions (comprised of pay-as-you-go retiree costs and prefunding amounts paid to EUTF) are established by Hawaii State statutes. The retiree is responsible to pay the difference if the single plan base monthly contribution is less than the cost of the monthly premium for those employees hired on or after July 1, 2001. For fiscal year 2018, the employers' prefunding contribution shall be equal to 80.0% of the valuation amount determined by an actuary retained by the EUTF board. Commencing with fiscal year 2019, the annual contribution shall be equal to the actuarially determined amount. In any fiscal year, should an employer's contribution be less than the actuarially determined amount, the difference shall be transferred to the OPEB trust account from the employer's portion of the transient accommodations tax revenues and all other of its revenues held by the State.

OPEB contributions for the fiscal year ended June 30, 2018 amounted to approximately \$8.8 million.

OPEB Liability, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At June 30, 2018, the Sewer Fund reported a liability of \$115.5 million for its proportionate share of net OPEB liability. The net OPEB liability was measured as of July 1, 2017, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date. The City's proportion of the net OPEB liability was based on a projection of the City's long-term share of contributions to the EUTF relative to project contributions of all participants, actuarially determined. The City's proportion of the net OPEB liability was based on an allocation of the City's net OPEB liability based on the proportionate share of qualified payroll. At June 30, 2017, the Sewer Fund's share of the City's net OPEB liability was 6.2%.

There were no changes in assumptions between the measurement date, June 30, 2017, and the reporting date, June 30, 2018, that are expected to have a significant effect on the proportionate share of the net OPEB liability.

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

b. Post-Employment Healthcare and Life Insurance Benefits (continued)

OPEB Liability, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB (continued)

For the year ended June 30, 2018, the Sewer Fund recognized OPEB expense of approximately \$10.3 million. At June 30, 2018, the Sewer Fund reported deferred outflows of sources and inflows of resources related to OPEB from the following sources (in thousands of dollars):

	Ou	ferred tflows esources	In	ferred flows esources
Differences between expected and actual experience	\$	-	\$	-
Change of assumptions		-		-
Net difference between projected and actual				
earnings on investments		-		(432)
Sewer Fund's contributions subsequent to the				
measurement date		8,779		
	\$	8,779	\$	(432)

The \$8.8 million reported as deferred outflows of resources related to OPEB resulting from Sewer Fund's contribution subsequent to measurement date will be recognized as a reduction of the net OPEB liability in the fiscal year ended June 30, 2019. Other amounts reported as deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ended June 30:	
2019	\$ (108)
2020	(108)
2021	(108)
2022	(108)
2023	 -
	\$ (432)

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

b. Post-Employment Healthcare and Life Insurance Benefits (continued)

Actuarial Assumptions

The total OPEB liability reflected in the actuarial valuation report as of July 1, 2017 was determined using the following actuarial assumptions and methods, applied to all periods included in the measurement, unless otherwise specified:

Actuarial cost method Entry age normal

Discount rate 7.00% Inflation 2.50%

Salary increases 3.50% to 7.00%, including inflation

Investment rate of return 7.00%, net of investment expenses, including inflation

Demographic assumptions Based on the experience study covering the five year period

ended June 30, 2015, as conducted for the ERS

Mortality System-specific mortality tables utilizing scale BB to project

generational mortality improvement

Participation rates 98.00% healthcare participation assumptions for retirees that

receive 100% of Base Monthly Contributions (BMC). Healthcare participation rates of 25.00%, 65.00% and 90.00% for retirees that receive 0.00%, 50.00% or 75.00% of the BMC, respectively.

100% for life insurance and 98.00% for Medicare part B.

Healthcare trend rates:

PPO* Initial rates of 6.60%, 6.60%, and 9.00%; declining to a rate of

4.86% after 14 years

HMO* Initial rate of 9.00%; declining to a rate of 4.86% after 14 years

Part B & BMC Initial rates of 2.00% and 5.00%; declining to a rate of 4.70%

after 14 years

Dental 3.50% Vision 2.50% Life insurance 0.00%

^{*} Blended rates for medical and prescription drug.

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

b. Post-Employment Healthcare and Life Insurance Benefits (continued)

Actuarial Assumptions (continued)

The long-term expected rate of return on EUTF's investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

	Target	Long-term Expected
Asset Class	Allocation	Rate of Return
U.S. equity	19.00%	5.50%
International equity	19.00%	7.00%
U.S. microcap	7.00%	7.00%
Private equity	10.00%	9.25%
REITs	6.00%	5.85%
Core real estate	10.00%	3.80%
Global options	7.00%	5.50%
Core bonds	3.00%	0.55%
Long treasuries	7.00%	1.90%
Trend following	7.00%	1.75%
TIPS	5.00%	0.50%
	100.00%	

Discount Rate

A single discount rate of 7.00% was used to measure the total OPEB liability. The single discount rate was based on the expected rate of return on OPEB plan investments of 7.00%. Beginning with the fiscal year 2019 contribution, the funding policy of the City and its component units is to pay the recommended actuarially determined contributions, which are based on layered, closed amortization periods. As a result, the OPEB plan's fiduciary net position is expected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

b. Post-Employment Healthcare and Life Insurance Benefits (continued)

Changes in Net OPEB Liability

The following table represents a schedule of changes in the net OPEB liability (in thousands). The ending balances are as of the measurement date, July 1, 2017.

		al OPEB Liability	Fiduciary Position	Net OPEB Liability	
Beginning Balances	\$	131,427	\$ 18,039	\$	113,388
Changes for the Year:					
Service Cost		2,709	-		2,709
Interest on the total OPEB liability		9,130	-		9,130
Changes of benefit term	-		-		-
Difference between expected					
and actual experience		-	-		-
Changes of assumption		-	-		-
Employer contribution		-	7,726		(7,726)
Net investment income		-	1,910		(1,910)
Benefit payments		(4,710)	(4,710)		-
Adminsitrative expense		-	(5)		5
Other			 71		(71)
Net Changes		7,129	 4,992		2,137
Ending Balance	\$	138,556	\$ 23,031	\$	115,525

Notes to Financial Statements June 30, 2018

9. Employee Benefit Plans (continued)

b. Post-Employment Healthcare and Life Insurance Benefits (continued)

Sensitivity of the Sewer Fund's proportionate share of the net OPEB liability to changes in the discount rate

The following presents the Sewer Fund's proportionate share of the net OPEB liability, calculated using a single discount rate that is one percent lower (6.00%) or one percent higher (8.00%) than the current rate (amounts in thousands):

	1 Percent	Current	1 Percent		
	Decrease	Discount	Increase		
	(6.00%)	Rate (7.00%)	(8.00%)		
Sewer Fund's proportionate share of the net OPEB liability	\$ 137,446	\$ 115,525	\$ 97,833		

Sensitivity of the Sewer Fund's proportionate share of the net OPEB liability to changes in the healthcare cost trend rate

The following presents the Sewer Fund's proportionate share of the net OPEB liability, calculated using the assumed healthcare trend rates of 7.00%, as well as what the Sewer Fund's proportionate share of net OPEB liability would be if it were calculated using a healthcare cost trend rate that is one percent lower (6.00%) or one percent higher (8.00%) than the current rate (amounts in thousands):

	1 .	Percent	Н	ealthcare	1	Percent
	Decrease (6.00%)		Co	Cost Trend Rate (7.00%)		ncrease
			Rat			(8.00%)
Sewer Fund's proportionate share						
of the net OPEB liability	\$	97,003	\$	115,525	\$	138,825

Notes to Financial Statements June 30, 2018

10. Management Agreement

The Board of Water Supply (BWS) has an agreement with the City's Department of Environmental Services to provide certain services for the billing and collection of sewer service charges, which ended on June 30, 2017. BWS and City agreed to a month-to-month extension of agreement until a new agreement is made. The revenue related to these fees is included in other operating revenues of BWS and the corresponding expense in the Sewer Fund. Service fees including credit card fees incurred amounted to \$3.3 million for the year ended June 30, 2018, and is included on the statement of revenues, expenses and changes in net position as contractual services.

11. Commitments

a. Construction Contracts

The City has contractual commitments for the Sewer Fund of approximately \$639.7 million at June 30, 2018, primarily for construction contracts.

b. Accumulated Sick Leave Pay

Sick leave accumulates at the rate of one and three-quarters working days for each month, without limit. Sick leave is taken only in the event of illness and is not convertible to pay; accordingly, sick leave is not accrued. Employees who retire or leave government service in good standing with sixty or more unused sick leave days are entitled to an additional service credit in the retirement system. At June 30, 2018, accumulated sick leave, including vested and nonvested accumulated rights to receive sick leave benefits, amounted to approximately \$20.0 million.

c. Deferred Compensation Plan

All full-time employees of the Sewer Fund are eligible to participate in the City and County of Honolulu's Public Employees' Deferred Compensation Program (Plan) adopted pursuant to Internal Revenue Code Section 457. The Plan permits eligible employees to defer a portion of their salary until future years by contributing to a fund managed by a plan administrator. The deferred compensation amounts are not available to employees until termination, retirement, death or unforeseeable emergency.

A trust fund was established to protect plan assets from claims of general creditors and from diversion to any uses other than paying benefits to participants and beneficiaries. Deferred compensation plan assets are not reported in the accompanying financial statements.

Notes to Financial Statements June 30, 2018

11. Commitments (continued)

d. EPA Consent Decree

The City is complying with the terms of a consent decree entered on December 17, 2010 (2010 Consent Decree), by the United States District Court for the District of Hawaii to resolve the claims of the United States Environmental Protection Agency (EPA), the State of Hawaii Department of Health (DOH), and various non-governmental entities related to the City's compliance with the federal Clean Water Act and State law. The 2010 Consent Decree allows 10 years for completion of work on improvement to the collection system, 14 years for the upgrade of the Honouliuli Wastewater Treatment Plant (WWTP) to secondary treatment, and up to 25 years, with the possibility of a three-year extension, for the upgrade of the Sand Island WWTP to secondary treatment.

Upon entering the 2010 Consent Decree, the City was expected to incur, in 2010 dollars, approximately \$3.5 billion in capital costs through fiscal year 2020, which coincides with the term of the collection system portion of the 2010 Consent Decree. This amount will largely be spent on the collection system, and much of it will go toward work that was already required or planned. This amount also includes a portion of the costs of treatment plant upgrades at Sand Island and Honouliuli. Costs for the treatment plant upgrades include, in 2010 dollars, approximately \$550 million to replace primary treatment facilities at both plants and \$1.15 billion to upgrade the plants to secondary treatment plants.

In March 2012, after providing an opportunity for public comment, the court approved an order at the request of all parties to modify the 2010 Consent Decree to substitute construction of a Kaneohe-Kailua gravity tunnel and an associated influent pump station for the construction of a new force main between the City's Kaneohe pump station and its Kailua treatment plant and to eliminate requirements to proceed with and maintain storage projects in Kaneohe and Kailua. The court order was the culmination of a year of negotiations among the parties after the EPA and DOH determined that the tunnel proposal offered potential environmental benefits. The Kaneohe-Kailua tunnel and tunnel influent pump station were substantially complete and accepting flow in late May 2018 meeting the Consent Decree deadline.



Schedule of City's Proportionate Share of the Net Pension Liability Fiscal Years 2013-2017 (Amounts in Thousands)

Defined Benefit Plan

The following presents the Schedule of City's Proportionate Share of the Net Pension Liability for the City as a whole, of which the Sewer Fund is one of its various enterprise funds.

Fiscal Year Ended June 30,	Proportion of Net Pension Liability	Sh	pportionate nare of Net sion Liability	Cove	ered Payroll	Proportionate Share of the Net Pension Liability as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of Total Pension Liability
2017	17.82%	\$	2,307,225	\$	626,639	368.19%	54.80%
2016	18.17%	\$	2,428,894	\$	599,494	405.16%	51.28%
2015	17.41%	\$	1,520,529	\$	578,043	263.05%	62.42%
2014	16.31%	\$	1,307,396	\$	536,304	243.78%	63.92%
2013	16.76%	\$	1,496,794	\$	509,130	293.99%	57.96%

Prior Fiscal Years are not available. Table will be built prospectively.

Schedule of Pension Contributions Fiscal Years 2012-2018 (Amounts in Thousands)

Defined Benefit Plan

The following presents the Schedule of Contributions for the City as a whole, of which the Sewer Fund is one of its various enterprise funds.

Fiscal Year Ended June 30,	F	tatutorily Required ntribution	Statutorily Required		Contribution Excess (Deficiency)			ered Payroll	Contribution as a Percentage of Covered Payroll
2018	\$	152,657	\$	157,686	\$	5,029	\$	640,203	24.63%
2017	\$	140,342	\$	139,569	\$	(773)	\$	626,639	22.27%
2016	\$	135,217	\$	129,245	\$	(5,972)	\$	599,494	21.56%
2015	\$	121,465	\$	132,308	\$	10,843	\$	578,043	22.89%
2014	\$	102,885	\$	87,979	\$	(14,906)	\$	536,304	16.40%
2013	\$	93,503	\$	87,840	\$	(5,663)	\$	509,130	17.25%
2012	\$	89,275	\$	81,690	\$	(7,585)	\$	517,862	15.77%

Prior Fiscal Years are not available. Table will be built prospectively.

Notes to Schedule of City's Proportionate Share of the Net Pension Liability Fiscal Year Ended June 30, 2018

There were no changes in assumptions for the measure period June 30, 2017.

Contribution rates are a percentage of pensionable payroll and are set by statute based on the recommendation of the ERS actuary. Act 256/2007 established contribution rates beginning July 1, 2008 through June 30, 2012. Act 163/2011 established contribution rates beginning July 1, 2012 through July 1, 2015. Act 17/2017 established new contribution rates beginning July 1, 2017 until statutory changes are implemented. Contribution rates by year are as follows:

		General
Effective Starting	Police and Fire	Employees
1 1 1 2020	41.00/	24.00/
July 1, 2020	41.0%	24.0%
July 1, 2019	36.0%	22.0%
July 1, 2018	31.0%	19.0%
July 1, 2017	28.0%	18.0%
July 1, 2015	25.0%	17.0%
July 1, 2014	24.0%	16.5%
July 1, 2013	23.0%	16.0%
July 1, 2012	22.0%	15.5%
July 1, 2011	19.7%	15.0%

Act 152/2012 amended the definition of compensation for new employees hired after June 30, 2012 for the purpose of pension benefit calculations. Compensation is defined as normal periodic payments and does not include overtime, supplemental payments, bonuses, lump sum salary differentials and other types of differentials. For employees hired prior to July 1, 2012 compensation includes overtime, supplemental payments, bonuses and other types of differentials for the purpose of pension benefit calculations.

Act 153/2012 requires employers to pay additional contributions for those employees who retire on or after July 1, 2012 with significant "non-base pay" increases in the three or five years used to calculate their average final compensation and maximum retirement allowances. The amount is determined by comparing the maximum retirement allowance that would have been received without the significant non-base pay increase to the actual maximum allowance. These amounts are assessed, on a fiscal year basis, for all retirees meeting the criteria during the previous fiscal year.

Schedule of Changes in Net OPEB Liability and Related Ratios Fiscal Year Ended June 30, 2018 (Amount in Thousands)

Post-Employment Healthcare and Life Insurance Benefits

The following presents the Schedule of Changes in Net OPEB Liability and Related Ratios, for the City as a whole, of which the Sewer Fund is one of its various enterprise funds.

Total OPEB Liability	 2018
Service cost Interest on the total OPEB liability Changes of benefit terms Difference between expected and actual experience of total OPEB liability Changes of assumptions Benefit payments	\$ 43,835 147,732 - - - (76,221)
Net change in total OPEB liability	115,346
Total OPEB liability - beginning	 2,126,653
Total OPEB liability - ending	\$ 2,241,999
Plan fiduciary net position	
Employer contributions Net investment income Benefit payments OPEB plan administrative expense Other	\$ 125,018 30,907 (76,221) (72) 1,147
Net change in plan fiduciary position	80,779
Plan fiduciary net position - beginning	 291,892
Plan fiduciary net position - ending	\$ 372,671
Net OPEB liability - ending	\$ 1,869,328
Plan fiduciary net position as a percentage of total OPEB liability	16.6%
Covered-employee payroll	626,639
Net OPEB liability as a percentage of covered-employee payroll	298.3%
Data for prior fiscal years are not available. Table will be built prospectively. Notes to Schedule of Changes in Net OPEB Liability and Related Ratios: None	

See Independent Auditor's Report.

Schedule of OPEB Contributions June 30, 2018 (Amounts in Thousands)

Post-Employment Healthcare and Life Insurance Benefits

The following presents the Schedule of OPEB Contributions for the City as a whole, of which the Sewer Fund is one of its various enterprise funds.

Actuarially						Contribution		lovered	Contribution	as
Fiscal Year Determined					Excess		Employee		a Percentage	of
Ended June 30,	Contribution		Actual Contribution		(Deficiency)		Payroll		Covered Payroll	
2018	\$	166,876	\$	143,665	\$	(23,211)	\$	640,203	22.44%	

Information prior to the fiscal year ended June 30, 2018 is not available. As information becomes available in future years, up to 10 years will be displayed prospectively

Notes to Schedule of OPEB Contributions June 30, 2018

Valuation Date: The actuarially determined contribution for fiscal year ending

June 30, 2018 was developed in the July 1, 2015 valuation.

Methods and assumptions used to determine contributions

Actuarial Cost Method Entry age normal

Discount Rate 7.00% Inflation 2.50%

Amortization Method* Level percent, closed

Equivalent Single Amortization 20.7 as of fiscal year ending June 30, 2018

Period

Payroll Growth 3.50%

Salary Increases 4.00% to 19.00%, including inflation

Demographic Assumptions Based on the experience study covering the five year period

ended June 30, 2010, as conducted for the Employees'

Retirement Systems.

Mortality System-specific mortality tables

Participation rates 98.00% healthcare participation assumptions for retirees that

receive 100% of Base Monthly Contributions (BMC). Healthcare participation rates of 25.00%, 65.00% and 90.00% for retirees that receive 0.00%, 50.00% or 75.00% of the BMC, respectively.

100% for life insurance and 98.00% for Medicare part B.

Healthcare trend rates:

PPO**

Initial rate of 9.00, declining to a rate of 5.00% after 8 years

HMO**

Initial rate of 7.00%; declining to a rate of 5.00% after 8 years

Part B & BMC

Initial rate of 3.00% for the first two years, 5.00% afterwards

 Dental
 4.00%

 Vision
 3.00%

 Life insurance
 0.00%

^{*} Closed bases are established at each valuation for new unfunded liabilities.

^{**} Blended rates for medical and prescription drug