

Novato Sanitary District

GASB 75 OPEB Valuation Report as of June 30, 2019 for Disclosures for the Fiscal Year Ending June 30, 2019

November 27, 2019



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November 27, 2019

Laura Creamer
CPA
Novato Sanitary District
500 Davidson Street
Novato, California 94945

Re: Novato Sanitary District GASB 75 OPEB Valuation as of June 30, 2019

Dear Ms. Creamer:

At your request, we completed an actuarial valuation of the retiree health and welfare benefits as of June 30, 2019, for the Novato Sanitary District. Please use the information in this report for your financial statements for the fiscal year ending June 30, 2019. This valuation is based on input from the District and from CalPERS, as well as our understanding of GASB Statement No. 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions" (GASB 75).

We greatly appreciate your business. If you have any questions, please feel free to call us at (415) 801-5987.

Best Regards,

A handwritten signature in blue ink that reads "Roger T. Burton".

Roger T. Burton, FSA, FCA, MAAA



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Executive Summary

Purpose of the Report

Precision Actuarial prepared this report to meet employer financial accounting requirements under GASB Statement No. 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions" (GASB 75), issued in June 2015. This report includes information with respect to the obligation to provide future retiree health and welfare benefits for the fiscal year ending June 30, 2019.

Valuation Date: June 30, 2018
Measurement Date: June 30, 2019
Report Date: June 30, 2019

Application to Financials

The District should use the liabilities and assets measured as of June 30, 2019, for its June 30, 2019, liabilities and assets, and it should use the expense for the measurement period ending June 30, 2019, as its expense in its financial statements for the year ending June 30, 2019.

This report provides assets, liabilities, and expenses for use in the District's 2019 and 2020 financial reports. If significant changes, including to the discount rate, occur up to one year after the measurement date, a new valuation may be necessary.

The report also provides the actuarially determined contributions for funding purposes for reporting for the fiscal years ending June 30 for 2019 and 2020. The District makes its contributions in the same fiscal year in which it reports the contributions.

We recommend that the District have an actuary provide an updated report for the June 30, 2020, financial statements using updated benefit payments, assets, and discount rate. However, barring significant changes, this is optional. Please confer with your auditor for guidance.

Changes Since the Prior Valuation

This valuation is a full valuation. We updated:

- Census
- Benefit payments
- Contributions
- Assets
- Premium & Cost of Care
- Salary Merit Scale Assumptions
- Decrement Assumptions
- Discount Rate from 4.85% to 5.61%

Actuarial Certification

Our determinations reflect the provisions and methods prescribed by GASB 75. In preparing this report, we relied on employee census, plan design, premium rates, and administrative fees provided directly or indirectly by the plan sponsor, and demographic assumptions provided by CalPERS. CalPERS' actuaries set the premium rates using community rating. We did not attempt to verify that the community-rated premium rates represent the true cost of claims and administrative fees.

Actuarial Certification *(continued)*

We based the results in this report on this information, along with the actuarial assumptions and methods used herein. In our opinion, the assumptions used represent reasonable expectations of anticipated plan experience. We reviewed the census information for reasonableness, but we did not audit it.

Actuarial computations under GASB 75 fulfill employer accounting and financial reporting requirements. The calculations are consistent with our understanding of GASB 75. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results in our report. Accordingly, additional determinations may be necessary for other purposes, such as judging benefit security at termination.

No third-party recipient of Precision Actuarial's work product should rely solely on Precision Actuarial's work product. Any third-party recipient should engage qualified professionals for advice appropriate to their own needs.

There is no relationship between Precision Actuarial, its owners, subcontractors, or staff; GovInvest; or the Novato Sanitary District beyond the contractual services that we perform for the Novato Sanitary District.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, the report is complete and accurate and that we prepared it in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the applicable "Actuarial Standards of Practice" and "Actuarial Compliance Guidelines" as promulgated by the American Academy of Actuaries.

The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



Roger T. Burton, FSA, FCA, MAAA
Chief Actuary



Christian Boughner, ASA, MAAA
Consulting Actuary

Executive Summary

Reconciliation of Change in the Total OPEB Liability from Prior Report

A reconciliation of the changes to the Total OPEB Liability since the prior valuation report follow.

Total OPEB Liability as of Measurement Date June 30, 2018	\$ 5,358,899
Interest and Net Benefits Earned	362,277
Change in Census (Demographics)	201,040
Change in Premiums/Claims	(323,331)
Change in Salary Merit Scale	132,258
Change in Decrement Assumptions	(302,574)
Change in Trend Rate Assumptions	(111,592)
Change in Discount Rate from 4.85% to 5.61%	(597,952)
Other Assumption Changes	32,467
Benefit Payments	(217,800)
Implicit Subsidy Fulfilled	(73,458)
Total OPEB Liability as of Measurement Date June 30, 2019	<u>\$ 4,460,234</u>

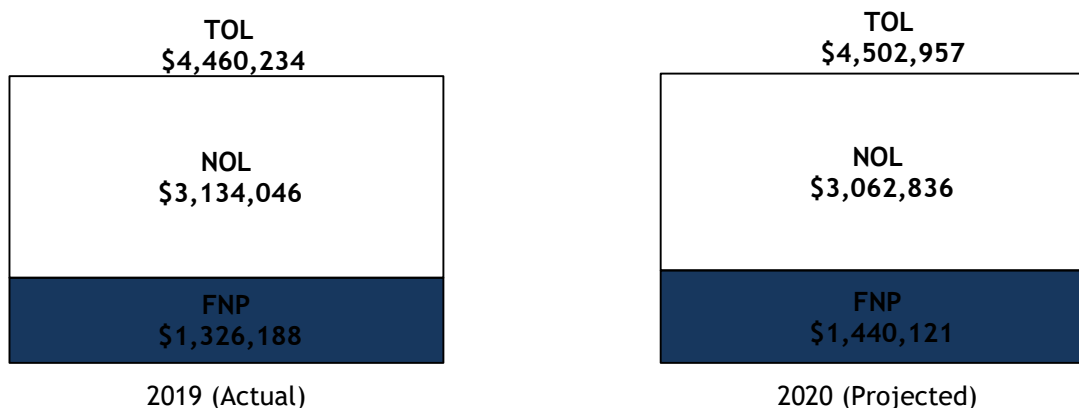
Executive Summary

Accounting Summary

A summary of the key valuation results follows.

	<u>Actual</u>	<u>Projected</u>
Valuation Date:	June 30, 2018	June 30, 2018
Measurement Date:	June 30, 2019	June 30, 2020
Report Date:	June 30, 2019	June 30, 2020
Present Value of Future Benefits		
Active Employees	\$ 1,505,112	\$ 1,589,549
Retirees	+ 3,656,613	+ 3,589,521
Total Present Value of Future Benefits	= 5,161,725	= 5,179,070
Total Present Value of Future Normal Costs	- 701,491	- 676,113
Total OPEB Liability (TOL)	= \$ 4,460,234	= \$ 4,502,957
OPEB Liability		
Active Employees	\$ 803,621	\$ 913,436
Retirees	+ 3,656,613	+ 3,589,521
Total OPEB Liability (TOL)	= 4,460,234	= 4,502,957
Fiduciary Net Position (FNP)	- 1,326,188	- 1,440,121
Net OPEB Liability (NOL)	= \$ 3,134,046	= \$ 3,062,836
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability		
	29.73%	31.98%
Covered-Employee Payroll	\$ 1,636,626	\$ 1,681,633
Net OPEB Liability as a Percentage of Covered-Employee Payroll	191.5%	182.1%
Measurement Period		
	2018-2019	2019-2020
Reporting Period		
	2018-2019	2019-2020
Expense		
Actuarially Determined Contribution (ADC), End of Year*	\$ 152,734	\$ 122,992
	441,931	297,401

Net Position Chart



*The Actuarially Determined Contribution includes the implicit subsidy. It is not the amount that the District contributes directly to the fund. See page 16 for the District's direct contribution.

Accounting Information

Statement of Fiduciary Net Position

Measurement Date: June 30, 2019

Report Date: June 30, 2019

Assets

Cash and Deposits	\$	-
Securities Lending Cash Collateral		-
Total Cash		-
Receivables:		
Contributions		-
Due from Broker for Investments Sold		-
Investment Income (Interest on Investments)		-
Other		-
Total Receivables		-
Investments:		
Domestic Fixed Income Securities		-
Domestic Equities		-
Investment Funds		1,326,188
International Equities		-
Real Estate		-
Total Investments		1,326,188
Total Assets	\$	1,326,188

Liabilities

Payables:

Investment Management Fees	\$	-
Due to Broker for Investments Purchased		-
Collateral Payable for Securities Lending		-
Other		-
Total Liabilities	\$	-

Net Position Restricted for Postemployment Benefits Other than Pensions \$ 1,326,188

Accounting Information

Statement of Changes to the Fiduciary Net Position

	<u>Actual</u>	<u>Projected</u>
Measurement Date:	June 30, 2019	June 30, 2020
Report Date:	June 30, 2019	June 30, 2020
Additions		
Investment Income:		
Net Appreciation in the Fair Value of Investments	\$ 75,128	\$ 75,478
Interest and Dividends	-	-
Less Investment Expense, Other than from Securities Lending	-	-
Net Income from Investing, Other than from Securities Lending	75,128	75,478
Securities Lending Income	-	-
Less Securities Lending Expense	-	-
Net Income from Securities Lending	-	-
Net Investment Income (a)	\$ 75,128	\$ 75,478
Contributions:		
Employer – District's Contribution	\$ 606,729	\$ 274,245
Employer – Implicit Subsidy	73,458	23,156
Employee	-	-
Total Contributions (b)	\$ 680,187	\$ 297,401
Total Additions (c) = (a) + (b)	\$ 755,315	\$ 372,879
Deductions		
Benefit Payments	\$ 217,800	\$ 232,980
Implicit Rate Subsidy Fulfilled	73,458	23,156
Administrative Expense	2,741	2,810
Total Deductions (d)	\$ 293,999	\$ 258,946
Net Increase in Net Position = (c) – (d)	\$ 461,316	\$ 113,933
Net Position Restricted for Postemployment Benefits Other than Pensions		
Beginning of Year	\$ 864,872	\$ 1,326,188
Net Increase in Net Position	461,316	113,933
End of Year	\$ 1,326,188	\$ 1,440,121

Asset projections for fiscal year-end 2020 and beyond use an estimated expected rate of return, contributions, and benefit payments. We recommend that the District update these values for its 2020 financial statements.

Accounting Information

Changes in the Net OPEB Liability

The funded status of the Plan as of the fiscal year-end, as well as other required disclosure information, follows.

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (c) = (a) – (b)
Balance as of Report Date June 30, 2018	\$ 5,358,899	\$ 864,872	\$ 4,494,027
Changes for the year:			
Service Cost	117,613		117,613
Interest	244,664		244,664
Differences Between Expected and Actual Experience	201,040		201,040
Changes of Assumptions	(1,170,724)		(1,170,724)
Net Investment Income		75,128	(75,128)
Contributions			
Employer – District's Contribution		606,729	(606,729)
Employer – Implicit Subsidy		73,458	(73,458)
Employee		-	-
Benefit Payments, Including Refunds of Employee Contributions	(217,800)	(217,800)	-
Implicit Rate Subsidy Fulfilled	(73,458)	(73,458)	-
Administrative Expense		(2,741)	2,741
Other Changes		-	-
Net Changes	(898,665)	461,316	(1,359,981)
Balance as of Report Date June 30, 2019	\$ 4,460,234	\$ 1,326,188	\$ 3,134,046

Accounting Information

Development of Deferred Outflows and Inflows of Resources

All Balances at Report Date June 30, 2019

Deferred Outflows and Inflows of Resources Arising from Differences Between Expected and Actual Experience

Measurement Date – June 30:	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in		
			Expense Through June 30, 2019 (c)	Deferred Outflows of Resources (d) = (a) - (c)	Deferred Inflows of Resources (e) = (b) - (c)
2017	\$ -	\$ -	\$ -	\$ -	\$ -
2018	1,787	-	628	1,159	-
2019	201,040	-	36,821	164,219	-
Total			\$	165,378	\$ -

Deferred Outflows and Inflows of Resources Arising from Changes in Assumptions

Measurement Date – June 30:	Increase in Total Liability (a)	Decrease in Total Liability (b)	Amounts Recognized in		
			Expense Through June 30, 2019 (c)	Deferred Outflows of Resources (d) = (a) - (c)	Deferred Inflows of Resources (e) = (b) - (c)
2017	\$ -	\$ -	\$ -	\$ -	\$ -
2018	277,097	-	97,228	179,869	-
2019	-	(1,170,724)	(212,859)	-	(957,865)
Total			\$	179,869	\$ (957,865)

Deferred Outflows and Inflows of Resources Arising from Differences Between Projected and Actual Earnings on Investments

Measurement Date – June 30:	Earnings Less than Projected (a)	Earnings Greater than Projected (b)	Amounts Recognized in			Net (f) = (d) + (e)
			Expense Through June 30, 2019 (c)	Deferred Outflows of Resources (d) = (a) - (c)	Deferred Inflows of Resources (e) = (b) - (c)	
2017	\$ -	\$ (53,843)	\$ (32,307)	\$ -	\$ (21,536)	\$ (21,536)
2018	44,030	-	17,612	26,418	-	26,418
2019	10,104	-	2,021	8,083	-	8,083
Total			\$	34,501	\$ (21,536)	\$ 12,965

Accounting Information

Development of Projected Deferred Outflows and Inflows of Resources

All Balances at Report Date June 30, 2020

Deferred Outflows and Inflows of Resources Arising from Differences Between Expected and Actual Experience

Measurement Date – June 30:	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in		
			Expense Through June 30, 2020 (c)	Deferred Outflows of Resources (d) = (a) - (c)	Deferred Inflows of Resources (e) = (b) - (c)
2018	\$ -	\$ -	\$ -	\$ -	\$ -
2018	1,787	-	942	845	-
2019	201,040	-	36,821	164,219	-
2020	-	-	-	-	-
Total			\$ -	\$ 165,064	\$ -

Deferred Outflows and Inflows of Resources Arising from Changes in Assumptions

Measurement Date – June 30:	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in		
			Expense Through June 30, 2020 (c)	Deferred Outflows of Resources (d) = (a) - (c)	Deferred Inflows of Resources (e) = (b) - (c)
2017	\$ -	\$ -	\$ -	\$ -	\$ -
2018	277,097	-	145,842	131,255	-
2019	-	(1,170,724)	(425,718)	-	(745,006)
2020	-	-	-	-	-
Total			\$ -	\$ 131,255	\$ (745,006)

Deferred Outflows and Inflows of Resources Arising from Differences Between Projected and Actual Earnings on Investments

Measurement Date – June 30:	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in			Net (f) = (d) + (e)
			Expense Through June 30, 2020 (c)	Deferred Outflows of Resources (d) = (a) - (c)	Deferred Inflows of Resources (e) = (b) - (c)	
2017	\$ -	\$ (53,843)	\$ (43,076)	\$ -	\$ (10,767)	\$ (10,767)
2018	44,030	-	26,418	17,612	-	17,612
2019	10,104	-	4,042	6,062	-	6,062
2020	-	-	-	-	-	-
Total			\$ -	\$ 23,674	\$ (10,767)	\$ 12,907

Accounting Information

Schedule of Deferred Outflows and Inflows of Resources

Schedule of Deferred Outflows and Inflows of Resources

	Measurement Period	Original Amount	Recognition Period	Remaining Period	Increase/(Decrease) in Expense: Report Years Ending June 30:						Remaining	
					2019	2020	2021	2022	2023	2024		
Differences Between Expected and Actual Experience	2016-2017	\$ -	n/a	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
	2017-2018	1,787	5.7	4.7	314	314	314	314	217	-	-	-
	2018-2019	201,040	5.5	5.5	36,821	36,821	36,821	36,821	36,821	16,935	-	-
Changes of Assumptions	2016-2017	-	n/a	n/a	-	-	-	-	-	-	-	-
	2017-2018	277,097	5.7	4.7	48,614	48,614	48,614	48,614	34,027	-	-	-
	2018-2019	(1,170,724)	5.5	5.5	(212,859)	(212,859)	(212,859)	(212,859)	(212,859)	(106,429)	-	-
Differences Between Projected and Actual Earnings	2016-2017	(53,843)	5.0	3.0	(10,769)	(10,769)	(10,767)	-	-	-	-	-
	2017-2018	44,030	5.0	4.0	8,806	8,806	8,806	8,806	-	-	-	-
	2018-2019	10,104	5.0	5.0	2,021	2,021	2,021	2,021	2,020	-	-	-
Summary of Deferred Outflows and Inflows of Resources – Reporting Period 2018-2019												
Differences Between Expected and Actual Experience					\$ 37,135	\$ 37,135	\$ 37,135	\$ 37,135	\$ 37,038	\$ 16,935	\$ -	-
Changes of Assumptions					(164,245)	(164,245)	(164,245)	(164,245)	(178,832)	(106,429)	-	-
Differences Between Projected and Actual Earnings					58	58	60	10,827	2,020	-	-	-
Total					(127,052)	(127,052)	(127,050)	(116,283)	(139,774)	(89,494)	-	-

Accounting Information

Schedule of Projected Deferred Outflows and Inflows of Resources

Schedule of Deferred Outflows and Inflows of Resources

	Measurement Period	Original Amount	Recognition Period	Remaining Period	Increase/(Decrease) in Expense: Report Years Ending June 30:						Remaining
					2020	2021	2022	2023	2024	2025	
Differences Between Expected	2016-2017	-	n/a	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2017-2018	1,787	5.7	3.5	314	314	314	217	-	-	-
	2018-2019	201,040	5.5	4.5	36,821	36,821	36,821	36,821	16,935	-	-
	2019-2020	-	5.5	5.5	-	-	-	-	-	-	-
Changes of Assumptions	2016-2017	-	n/a	n/a	-	-	-	-	-	-	-
	2017-2018	277,097	5.7	2.3	48,614	48,614	48,614	34,027	-	-	-
	2018-2019	(1,170,724)	5.5	4.5	(212,859)	(212,859)	(212,859)	(212,859)	(106,429)	-	-
	2019-2020	-	5.5	5.5	-	-	-	-	-	-	-
Differences Between Projected	2016-2017	(53,843)	5.0	2.0	(10,769)	(10,767)	-	-	-	-	-
	2017-2018	44,030	5.0	3.0	8,806	8,806	8,806	-	-	-	-
	2018-2019	10,104	5.0	4.0	2,021	2,021	2,021	2,020	-	-	-
	2019-2020	-	5.0	5.0	-	-	-	-	-	-	-
Summary of Deferred Outflows and Inflows of Resources – Reporting Period 2019-2020											
Differences Between Expected and Actual Experience					\$ 37,135	\$ 37,135	\$ 37,135	\$ 37,038	\$ 16,935	\$ -	\$ -
Changes of Assumptions					(164,245)	(164,245)	(164,245)	(178,832)	(106,429)	-	-
Differences Between Projected and Actual Earnings					10,827	10,827	10,827	2,020	-	-	-
Total					(116,283)	(116,283)	(116,283)	(139,774)	(89,494)	-	-

Accounting Information

Calculation of Expense under GASB 75

		<i>Actual</i>
	Measurement Period:	2018-2019
	Reporting Period:	<u>2018-2019</u>
Expense		
Service Cost	\$	117,613
Interest on Total OPEB Liability		244,664
Recognized Differences Between Expected and Actual Experience		37,135
Recognized Changes of Assumptions		(164,245)
Employee Contributions		-
Projected Earnings on OPEB Plan Investments		(85,232)
Recognized Differences Between Projected and Actual Earnings		58
Administrative expenses		2,741
Total Expense	\$	<u>152,734</u>

	June 30, 2019	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	\$ 165,378	\$ -
Changes of Assumptions	179,869	(957,865)
Net Difference Between Projected and Actual Earnings on Plan Investments	12,965	-
District Contributions Subsequent to the Measurement Date	-	-
Total	<u>\$ 358,212</u>	<u>\$ (957,865)</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Report Year Ending June 30		Amount
2020	\$	(127,052)
2021		(127,050)
2022		(116,283)
2023		(139,774)
2024		(89,494)
Remaining		-

Accounting Information

Calculation of Projected Expense under GASB 75

	<i>Actual</i>	<i>Projected</i>
Measurement Period:	2018-2019	2019-2020
Reporting Period:	2018-2019	2019-2020
Expense		
Service Cost	\$ 117,613	\$ 62,979
Interest on Total OPEB Liability	244,664	248,964
Recognized Changes of Assumptions	37,135	37,135
Recognized Differences Between Expected and Actual Experience	(164,245)	(164,245)
Employee Contributions	-	-
Projected Earnings on OPEB Plan Investments	(85,232)	(75,478)
Recognized Differences Between Projected and Administrative expenses	58	10,827
	2,741	2,810
Total Expense	\$ 152,734	\$ 122,992

Deferred Outflows and Inflows of Resources

	<u>June 30, 2020</u>	
	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences Between Expected and Actual Experience	\$ 165,064	\$ -
Changes of Assumptions	131,255	(745,006)
Net Difference Between Projected and Actual Earnings on Plan Investments	12,907	-
District Contributions Subsequent to the Measurement Date	-	-
Total	\$ 309,226	\$ (745,006)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

<u>Report Year Ending June 30:</u>	<u>Amount</u>
2021	\$ (116,283)
2022	(116,283)
2023	(139,774)
2024	(89,494)
2025	-
Remaining	-

Accounting Information

Reconciliation of Expense

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability	Deferred (Inflows)	Deferred Outflows	Net Investment (Inflows)/ Outflows	Net Deferrals	Net OPEB Liability plus Net Deferrals	Annual Expense
Balance as of Report Date June 30, 2018	\$ (5,358,899)	\$ 864,872	\$ (4,494,027)	\$ -	\$ -	\$ (62,649)	\$ (62,649)	\$ (4,556,676)	
Service Cost	(117,613)		(117,613)						\$ 117,613
Interest on Total OPEB Liability	(244,664)		(244,664)						244,664
Differences Between Expected and Actual Experience	(201,040)		(201,040)	201,040			(201,040)		
Effect of Assumption Changes or Inputs	1,170,724		1,170,724	(1,170,724)			1,170,724		
Expected Investment Income (Net of Investment Expenses)		85,232	85,232						(85,232)
Investment Gains or Losses on Expected Return		(10,104)	(10,104)			10,104	10,104		
Contributions									
Employer – District's Contribution		606,729	606,729					606,729	
Employer – Implicit Subsidy		73,458	73,458					73,458	
Employee		-	-						
Benefit Payments, Including Refunds of Employee Contributions	217,800	(217,800)	-						
Implicit Rate Subsidy Fulfilled	73,458	(73,458)	-						
Administrative Expenses		(2,741)	(2,741)						2,741
Recognition of Liability Gains or Losses			-	(37,135)			37,135		37,135
Recognition of Assumption Changes or Inputs			-	164,245			(164,245)		(164,245)
Recognition of Investment Gains or Losses			-	(58)			58		58
Annual Expense								(152,734)	\$ 152,734
Balance as of Report Date June 30, 2019	\$ (4,460,234)	\$ 1,326,188	\$ (3,134,046)	\$ (842,632)	\$ -	\$ (52,545)	\$ (895,177)	\$ (4,029,223)	

Accounting Information

Amortization of Unfunded Actuarial Accrued Liability As of Fiscal Years Ended June 30, 2020 and June 30, 2021

A summary of the information used to establish the amortization amount for the current year, with respect to the Unfunded Actuarial Accrued Liability (UAAL), follows. We recalculate the amortization of the UAAL each fiscal year.

	2018-2019	2019-2020	2020-2021
Measurement Period:	2018-2019	2019-2020	2020-2021
Reporting Period:	2018-2019	2019-2020	2020-2021
Actuarial Accrued Liability (AAL) – Entry Age Normal, Beginning of Fiscal Year	\$ 5,358,899	\$ 4,502,957	\$ 4,558,764
Actuarial Value of Plan Assets, Beginning of Fiscal Year	– 864,872	1,326,188	1,440,121
Unfunded Actuarial Accrued Liability (UAAL), Beginning of Fiscal Year	<u>= \$ 4,494,027</u>	<u>\$ 3,176,769</u>	<u>\$ 3,118,643</u>
Payment	4.85%	5.61%	5.61%
Assumed Rate of Payroll Growth	2.750%	2.750%	2.750%
Amortization Period	18 years	17 years	16 years
Amount Recognized, Beginning of Year*	\$ 294,890	\$ 218,624	\$ 237,573
Amount Recognized, End of Year*	\$ 309,192	\$ 230,889	\$ 250,901

Accounting Information

Actuarially Determined Contribution (ADC) for the Fiscal Year Ended June 30, 2019 and June 30, 2020

The calculation of the Actuarially Determined Contribution (ADC) follows. The ADC is based on the District's funding policy.

	Measurement Period:	2018-2019	2019-2020	2020-2021
	Reporting Period:	2018-2019	2019-2020	2020-2021
Service Cost – Entry Age Normal	\$	117,613	\$ 62,979	\$ 64,711
Amortization of the Unfunded Actuarial Accrued Liability (UAAL)		294,890	218,624	237,573
Actuarially Determined Contribution (ADC), Beginning of Year	\$	412,503	\$ 281,603	\$ 302,284
Actuarially Determined Contribution (ADC), End of Year	\$	432,509	\$ 297,401	\$ 319,242
ADC as a Percentage of Covered-Employee Payroll		26.43%	17.69%	18.48%
Discount Rate		4.85%	5.61%	5.61%
ADC Components				
Benefit Payments	\$	217,800	\$ 232,980	\$ 241,795
District's Contribution to Assets (Trust)		150,673	41,265	48,648
District's Total Contribution		368,473	274,245	290,443
Implied Contribution – Implicit Subsidy		73,458	23,156	28,799
Total ADC*	\$	441,931	\$ 297,401	\$ 319,242

District's Funding Policy

The District's funding policy is to contribute the full amount of the ADC each year.

The ADC is the sum of the service cost and the amortization of the unfunded liability. For payment of the ADC, however, it comprises three parts: the benefit payments made by the District, the implicit subsidy, and the contribution to the assets. The contribution to the assets is the difference between the ADC and the sum of the other two components.

The District is amortizing the UAAL on a closed basis. Remaining years of amortization as of June, 30, 2019:

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The discount rate assumed for ADC calculations is the expected long-term rate of return, which for the 2020-2021 period, is:

5.61%

The UAAL is amortized using a level percent of pay method.

Projections for fiscal year-end 2020 use an estimated expected rate of return, contributions, and benefit payments. We recommend that the District update these values for its 2020 financial statements.

*Adjusted for actual benefit payments and implicit subsidy for the first year.

Accounting Information

Projection of ADC and Net OPEB Liability

	Measurement Date:	June 30, 2019	June 30, 2020	June 30, 2021
	Report Date:	June 30, 2019	June 30, 2020	June 30, 2021
Estimated Liabilities				
OPEB Liability, Beginning of Year	\$	5,358,899	\$ 4,460,234	\$ 4,516,041
Service Cost		117,613	62,979	64,711
Interest on Liabilities		244,664	248,964	258,569
Differences Between Expected and Actual Experience		201,040	-	-
Changes of Assumptions		(1,170,724)	-	-
Benefit Payments		(217,800)	(232,980)	(241,795)
Implicit Rate Subsidy Fulfilled		(73,458)	(23,156)	(28,799)
OPEB Liability, End of Year (a)	\$	4,460,234	\$ 4,516,041	\$ 4,568,727
Estimated Assets				
Assets, Beginning of Year	\$	864,872	\$ 1,326,188	\$ 1,440,121
Expected Earnings		75,128	75,478	75,292
Contributions				
Employer – District's Contribution		606,729	274,245	48,648
Employer – Implicit Subsidy		73,458	23,156	28,799
Employee		-	-	-
Total Contributions		680,187	297,401	77,447
Projected Benefit Payments				
Benefit Payments, Including Refunds of Employee Contributions		(217,800)	(232,980)	(241,795)
Implicit Rate Subsidy Fulfilled		(73,458)	(23,156)	(28,799)
Total Benefit Payments		(291,258)	(256,136)	(270,594)
Administrative Expenses		(2,741)	(2,810)	(2,880)
Assets, End of Year (b)	\$	1,326,188	\$ 1,440,121	\$ 1,319,386
Net OPEB liability, End of Year = (a) - (b)	\$	3,134,046	\$ 3,075,920	\$ 3,249,341
Expense		152,734	122,992	n/a
ADC		441,931	297,401	319,242

Projections for fiscal year-end 2020 and beyond use an estimated expected rate of return, contributions, and benefit payments. We recommend that the District update these values for its 2020 financial statements.

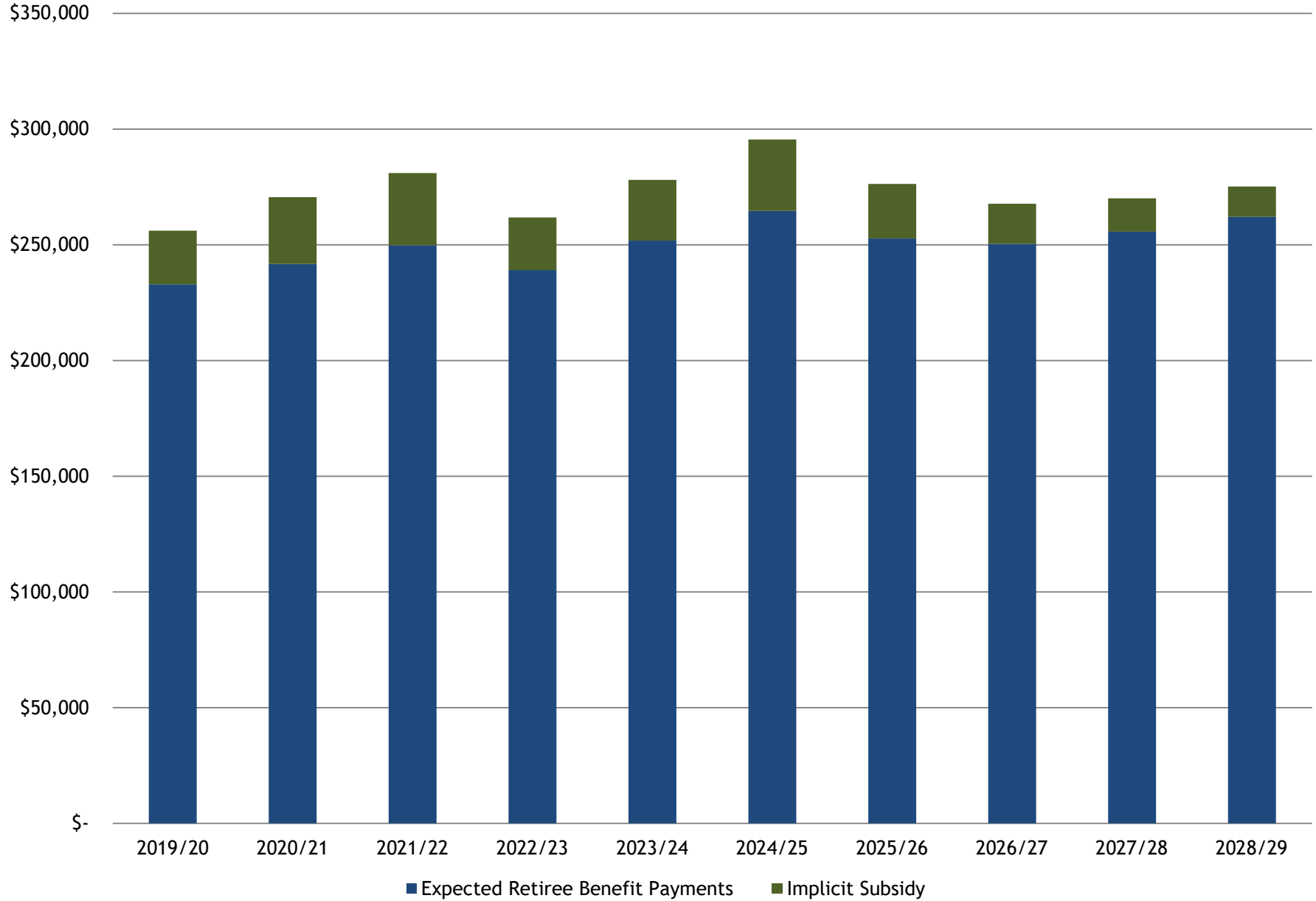
Accounting Information

OPEB Cash-Flow Projections

<u>Measurement Period Ending June 30:</u>	<u>Expected Retiree Benefit Payments</u>	<u>Implicit Subsidy</u>	<u>Total Expected Credited Benefit Payments</u>
2020	\$ 232,980	\$ 23,156	\$ 256,136
2021	241,795	28,799	270,594
2022	249,771	31,316	281,087
2023	239,110	22,786	261,896
2024	251,844	26,262	278,106
2025	264,760	30,780	295,540
2026	252,774	23,579	276,353
2027	250,471	17,314	267,785
2028	255,696	14,434	270,130
2029	262,169	13,097	275,266
2030	266,084	11,779	277,863
2031	270,858	10,487	281,345
2032	273,858	9,695	283,553
2033	282,985	10,104	293,089
2034	285,750	11,601	297,351
2035	293,029	15,058	308,087
2036	300,222	21,525	321,747
2037	307,050	27,671	334,721
2038	315,767	22,577	338,344
2039	314,787	19,047	333,834
2040	322,094	22,499	344,593
2041	328,334	14,997	343,331
2042	326,176	15,405	341,581
2043	332,624	22,274	354,898
2044	342,151	22,767	364,918

Accounting Information

Ten-Year Projection of Expected Benefit Payments for Existing Participants



Accounting Information

Projection of Contributions

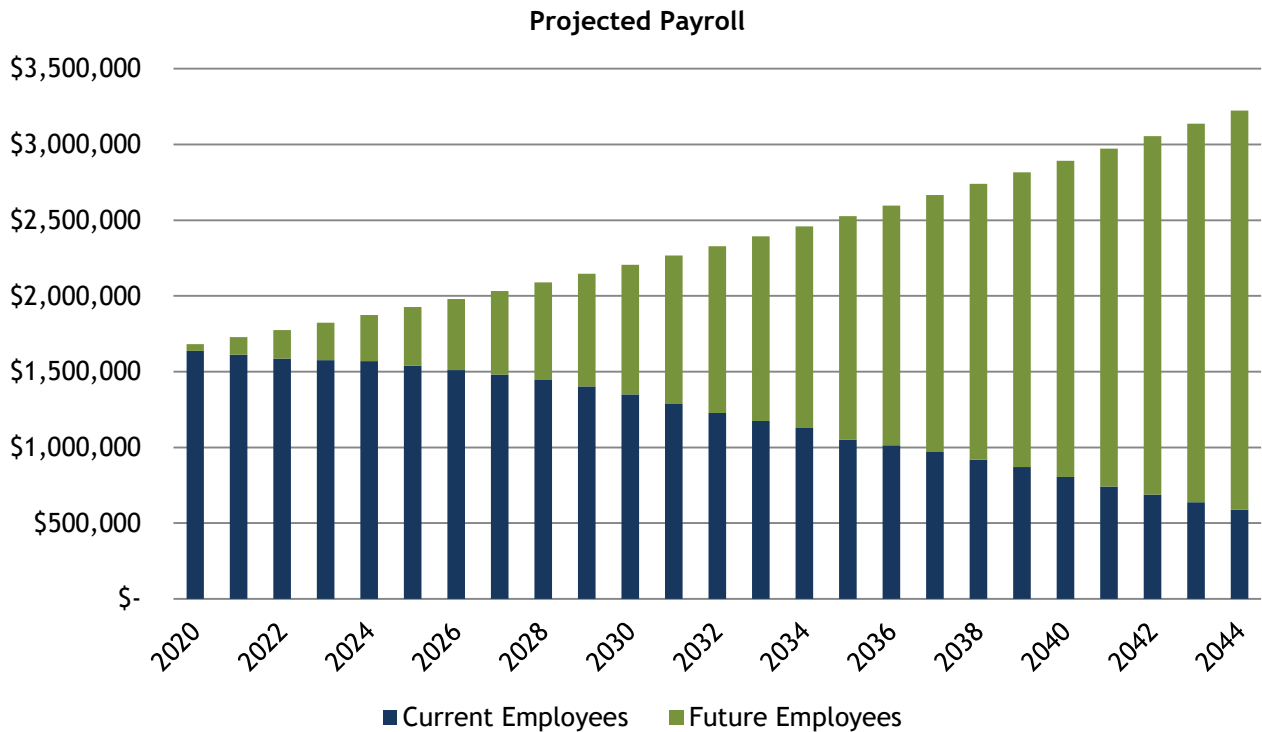
Measurement Period Ending June 30:	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll (c)	Employer Contributions Related to Payroll of all Plan Members (d) = (c) x 18.48% for 17 Years, 3.96% Thereafter*	Employer Contributions Related to Payroll of Future Plan Members (e) = (b) x 3.96%	Portion of Employer Contribution for Current Plan Members (f) = (d) - (e)
2020	\$ 1,636,626	\$ 45,007	\$ 1,681,633	\$ 297,401	\$ 1,780	\$ 295,621
2021	1,612,197	115,681	1,727,878	319,242	4,575	314,667
2022	1,587,168	188,227	1,775,395	328,021	7,445	320,576
2023	1,575,387	248,831	1,824,218	337,042	9,842	327,200
2024	1,570,013	304,371	1,874,384	346,311	12,039	334,272
2025	1,539,146	386,784	1,925,930	355,834	15,298	340,536
2026	1,511,491	467,402	1,978,893	365,620	18,487	347,133
2027	1,480,793	552,520	2,033,313	375,674	21,853	353,821
2028	1,444,687	644,542	2,089,229	386,005	25,493	360,512
2029	1,402,614	744,069	2,146,683	396,620	29,430	367,190
2030	1,349,725	855,992	2,205,717	407,527	33,856	373,671
2031	1,285,784	980,590	2,266,374	418,734	38,784	379,950
2032	1,227,112	1,101,587	2,328,699	430,250	43,570	386,680
2033	1,175,461	1,217,277	2,392,738	442,081	48,146	393,935
2034	1,128,486	1,330,052	2,458,538	454,239	52,606	401,633
2035	1,050,826	1,475,322	2,526,148	466,730	58,352	408,378
2036	1,013,776	1,581,841	2,595,617	479,565	62,565	417,000
2037	968,594	1,698,402	2,666,996	492,753	67,175	425,578
2038	917,849	1,822,489	2,740,338	108,386	72,083	36,303
2039	870,394	1,945,303	2,815,697	111,367	76,941	34,426
2040	803,729	2,089,400	2,893,129	114,429	82,640	31,789
2041	740,856	2,231,834	2,972,690	117,576	88,274	29,302
2042	688,072	2,366,367	3,054,439	120,810	93,595	27,215
2043	637,453	2,500,983	3,138,436	124,132	98,919	25,213
2044	589,357	2,635,386	3,224,743	127,546	104,235	23,311

*The first year shown is calculated in the prior year's report and has different percentages of payroll.

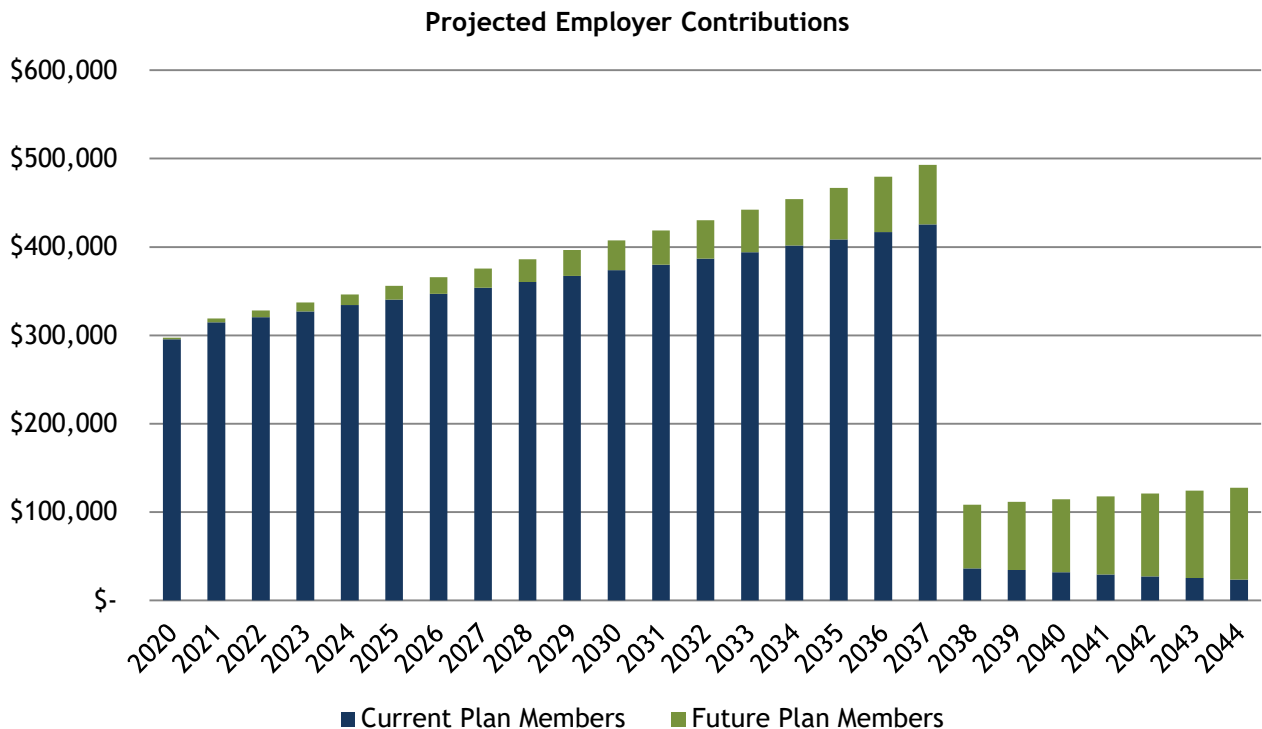
Accounting Information

Projection of Contributions Charts

Projected Payroll for Current and Future Employees



Projected Employer Contributions for Current and Future Plan Members



Accounting Information

Projection of Fiduciary Net Position

Existing Participants Only

Measurement Period Ending June 30:	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (Including Implicit Subsidy) (c)	Projected Administrative Expense (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) – (c) – (d) + (e)
2020	\$ 1,326,188	\$ 297,401	\$ 256,136	\$ 2,810	\$ 75,478	\$ 1,440,121
2021	1,440,121	319,242	270,594	2,880	82,075	1,567,964
2022	1,567,964	328,021	281,087	2,952	89,196	1,701,142
2023	1,701,142	337,042	261,896	3,026	97,457	1,870,719
2024	1,870,719	346,311	278,106	3,102	106,773	2,042,595
2025	2,042,595	355,834	295,540	3,180	116,192	2,215,901
2026	2,215,901	365,620	276,353	3,260	126,725	2,428,633
2027	2,428,633	375,674	267,785	3,342	139,179	2,672,359
2028	2,672,359	386,005	270,130	3,426	153,074	2,937,882
2029	2,937,882	396,620	275,266	3,512	168,121	3,223,845
2030	3,223,845	407,527	277,863	3,600	184,394	3,534,303
2031	3,534,303	418,734	281,345	3,690	202,025	3,870,027
2032	3,870,027	430,250	283,553	3,782	221,117	4,234,059
2033	4,234,059	442,081	293,089	3,877	241,601	4,620,775
2034	4,620,775	454,239	297,351	3,974	263,515	5,037,204
2035	5,037,204	466,730	308,087	4,073	286,923	5,478,697
2036	5,478,697	479,565	321,747	4,175	311,665	5,944,005
2037	5,944,005	492,753	334,721	4,279	337,771	6,435,529
2038	6,435,529	108,386	338,344	4,386	354,460	6,555,645
2039	6,555,645	111,367	333,834	4,496	361,405	6,690,087
2040	6,690,087	114,429	344,593	4,608	368,729	6,824,044
2041	6,824,044	117,576	343,331	4,723	376,364	6,969,930
2042	6,969,930	120,810	341,581	4,841	384,685	7,129,003
2043	7,129,003	124,132	354,898	4,962	393,325	7,286,600
2044	7,286,600	127,546	364,918	5,086	401,977	7,446,119

Accounting Information

Implicit Subsidy

Actuarial standard of practice (ASOP) number 6, "Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Program Periodic Costs or Actuarially Determined Contributions", requires the inclusion of the implicit subsidy in OPEB valuations.

The implicit subsidy arises when an employer allows a retiree and their dependents to continue on the plans for active employees, and pay the active-employee premiums. Retirees are not paying the true cost of their benefits because they have higher costs than active employees, and therefore are partially subsidized by the active employees. Once a retiree reaches Medicare eligibility, the rates are set for Medicare retirees separately, and are set to be sufficient to cover the true costs of the Medicare retirees. Thus, there is no implicit subsidy for Medicare retirees.

	Measurement Date:	June 30, 2019	June 30, 2020
	Report Date:	June 30, 2019	June 30, 2020
Discount Rate		5.61%	5.61%
Retiree Benefit Payments	\$	4,215,971	\$ 4,264,831
Implicit Subsidy		244,263	238,126
Total OPEB Liability	\$	4,460,234	\$ 4,502,957

Accounting Information

Schedule of Changes in the Total OPEB Liability and Related Ratios

GASB 75 requires a disclosure of the changes in Net OPEB Liability for the last ten fiscal years, or for as many years as are available.

Measurement Date:	June 30, 2017	June 30, 2018	June 30, 2019
Report Date:	<u>June 30, 2017</u>	<u>June 30, 2018</u>	<u>June 30, 2019</u>
<u>Total OPEB Liability</u>			
Service Cost	\$ 104,860	\$ 108,006	\$ 117,613
Interest	251,406	256,099	244,664
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience	-	1,787	201,040
Changes of Assumptions	-	277,097	(1,170,724)
Benefit Payments, Including Refunds of Employee Contributions	(187,852)	(226,479)	(217,800)
Implicit Rate Subsidy Fulfilled	<u>(68,761)</u>	<u>(74,262)</u>	<u>(73,458)</u>
Net Change in Total OPEB liability	99,653	342,248	(898,665)
Total OPEB Liability – Beginning of Year	4,916,998	5,016,651	5,358,899
Total OPEB Liability – Ending Year (a)	<u>\$ 5,016,651</u>	<u>\$ 5,358,899</u>	<u>\$ 4,460,234</u>
<u>Plan Fiduciary Net Position</u>			
Net Investment Income	\$ 6,933	\$ 2,230	\$ 75,128
Contributions			
Employer – District's Contribution	887,852	382,482	606,729
Employer – Implicit Subsidy	68,761	74,262	73,458
Benefit Payments, Including Refunds of Employee Contributions	(187,852)	(226,479)	(217,800)
Implicit Rate Subsidy Fulfilled	(68,761)	(74,262)	(73,458)
Administrative Expense	(294)	-	(2,741)
Other	-	-	-
Net Change in Plan Fiduciary Net Position	706,639	158,233	461,316
Plan Fiduciary Net Position – Beginning of Year	<u>-</u>	<u>706,639</u>	<u>864,872</u>
Plan Fiduciary Net Position – End of Year (b)	<u>\$ 706,639</u>	<u>\$ 864,872</u>	<u>\$ 1,326,188</u>
<u>Net OPEB Liability</u>			
District's Net OPEB liability – End of Year = (a) – (b)	\$ 4,310,012	\$ 4,494,027	\$ 3,134,046
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability			
	14.09%	16.14%	29.73%
Covered-Employee Payroll	\$ 1,991,580	\$ 2,046,348	\$ 1,636,626
Percentage of Covered-Employee Payroll	216.41%	219.61%	191.49%

Notes to schedule: The District adopted GASB 75 for the fiscal Year Ending June 30, 2017.

Accounting Information

Schedule of Investment Returns

GASB 75 requires a schedule of investment returns for the last ten fiscal years, or for as many years as are available if less than ten years are available.

	Measurement Date:	June 30, 2017	June 30, 2018	June 30, 2019
	Report Date:	<u>June 30, 2017</u>	<u>June 30, 2018</u>	<u>June 30, 2019</u>
Annual Money-Weighted Rate of Return, Net of Investment Expense		1.98%	0.28%	7.10%

The annual money-weighted rate of return, net of investment expenses, is the net investment income for the year divided by the average net position for the year (less investment expenses).

Accounting Information

Schedule of Contributions

GASB 75 requires a schedule of contributions for the last ten fiscal years, or for as many years as are available if less than ten years are available.

	Measurement Period: Reporting Period: Report Date:	2016-2017 2016-2017 June 30, 2017	2017-2018 2017-2018 June 30, 2018	2018-2019 2018-2019 June 30, 2019		
Actuarially Determined Contribution (ADC)	\$	411,241	\$	401,663	\$	441,931
Less: Contributions Made in Relation to the ADC	-	956,613		456,744		680,187
Contribution Deficiency (Excess)		(545,372)		(55,081)		(238,256)
Covered-Employee Payroll	\$	1,991,580	\$	2,046,348	\$	1,636,626
Contributions as a Percentage of Covered-Employee		48.03%		22.32%		41.56%

Notes to Schedule:

Assumptions and Methods

Actuarial Cost Method	Entry age normal, level percent of pay
Amortization Method	Closed period, level percent of pay
Amortization Period	20 years
Inflation	2.50%
Assumed Payroll Growth	2.75%
Healthcare Trend Rates	7.00%, trending down to 3.84%
Rate of Return on Assets	5.61%
Mortality Rate	CalPERS Rates. See appendix.
Retirement Rates	CalPERS Rates. See appendix.

Accounting Information

Draft Notes to the Financial Statements

A draft of the required notes to the District's financial statements, based on the requirements of GASB 75 and our understanding of the District's retiree health plan, follows.

Notes to the Financial Statements for the Year Ended June 30, 2019

Summary of Significant Accounting Policies

Other Postemployment Benefits Other Than Pensions (OPEB).

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 District Retiree Benefits Plan (the Plan) and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, the Plan recognizes benefit payments when due and payable in accordance with the benefit terms.

Note X – Other Post-employment Benefits (OPEB)

Plan Description.

The District administers a single-employer defined-benefit post-employment healthcare plan. Participants are eligible for benefits on retirement. Benefits vary by hire date and employment status; benefits continue to surviving spouses.

Benefits Provided.

Employees hired before July 1, 2008 are eligible for the following benefits:

Retire at 55 with 10 years of service – District pays for retire only premium up to Kaiser Bay Area

Retire at 60 with 15 years of service – District pays 100% pf premium for retiree and spouse or dependent for the duration of their lifetimes.

Retire at 55 with 25 years of service – District pays 100% of premium for retiree and spouse or dependent for the duration of their lifetimes.

Employees covered by benefit terms.

At June 30, 2018 (the census date), the benefit terms covered the following employees:

Category	Count
Active employees:	18
Inactive employees, spouses, or beneficiaries currently receiving benefit payments:	38
Inactive employees entitled to but not yet receiving benefit payment:	0
Total	56

Contributions.

The District makes contributions based on an actuarially determined rate.

Accounting Information

Draft Notes to the Financial Statements

Net OPEB Liability

The District's net OPEB liability was measured as of June 30, 2019, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of June 30, 2019.

Actuarial Assumptions .

The total OPEB liability in the June 30, 2019 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation: 2.50%

Salary increases: 2.750%. Additional merit-based increases based on CalPERS merit salary increase tables.

Investment rate of return: 5.61%

Healthcare cost trend rates: 7.00% in the first year, trending down to 3.84% over 58 years.

Mortality rates were based on CalPERS tables.

Discount Rate.

The discount rate used to measure the total OPEB liability is 5.61%. This is the expected long-term rate of return on District assets using the Moderately Conservative Index Plus investment strategy managed by PARS Public Agency Retirement Services. The projection of cash flows used to determine the discount rate assumed that the contribution will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan's fiduciary net position is projected to cover all future OPEB payments. Therefore, the discount rate was set equal to the long-term expected rate of return.

Accounting Information

Draft Notes to the Financial Statements

Changes in the Net OPEB Liability

	Increases (Decreases)		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(c)
Balance as of Report Date June 30, 2018	\$ 5,358,899	\$ 864,872	\$ 4,494,027
Changes for the year:			
Service Cost	117,613		117,613
Interest	244,664		244,664
Differences Between Expected and Actual Experience	201,040		201,040
Changes of Assumptions	(1,170,724)		(1,170,724)
Contributions			
Employer – District’s Contribution		606,729	(606,729)
Employer – Implicit Subsidy		73,458	(73,458)
Employee		-	-
Net Investment Income		75,128	(75,128)
Benefit Payments, Including Refunds of Employee Contributions	(217,800)	(217,800)	-
Implicit Rate Subsidy Fulfilled	(73,458)	(73,458)	-
Administrative Expenses		(2,741)	2,741
Net Changes	(898,665)	461,316	(1,359,981)
Balance as of Report Date June 30, 2019	\$ 4,460,234	\$ 1,326,188	\$ 3,134,046

Sensitivity of the net OPEB liability to changes in the discount rate. The net OPEB liability of the District, as well as what the District's net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (4.61%) or one percentage point higher (6.61%) follows:

	<u>1% Decrease</u>	<u>Discount Rate</u>	<u>1% Increase</u>
	4.61%	5.61%	6.61%
Net OPEB Liability (Asset)	\$ 3,765,614	\$ 3,134,046	\$ 2,625,055

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates. The net OPEB liability of the District, as well as what the District's net OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (6.00%) or one percentage point higher (8.00%) than current healthcare cost trend rates follows:

	<u>1% Decrease</u>	<u>Trend Rate</u>	<u>1% Increase</u>
	6.00% Decreasing to 2.84%	7.00% Decreasing to 3.84%	8.00% Decreasing to 4.84%
Net OPEB Liability (Asset)	\$ 2,607,833	\$ 3,134,046	\$ 3,788,794

Accounting Information

Draft Notes to the Financial Statements

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

For the year ended June 30, 2019, the District recognized an OPEB expense of \$152,734. At June 30, 2019, the District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences Between Actual and Expected Experience	\$ 165,378	\$ -
Changes of Assumptions	179,869	(957,865)
Net Difference Between Projected and Actual Earnings on OPEB Plan Investments	12,965	-
District Contributions Subsequent to the Measurement Date	-	-
Total	\$ 358,212	\$ (957,865)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

<u>Report Year Ending June 30:</u>	<u>Amount</u>
2020	\$ (127,052)
2021	(127,050)
2022	(116,283)
2023	(139,774)
2024	(89,494)
Remaining	-

A summary of the substantive plan used as the basis of the valuation follows.

All Retirees – Description of Benefits	
Duration of Coverage	Retiree’s lifetime.
Minimum Age	50
Type of Coverage	Medical only.
Medical Plan Choices	Same as actives.
PEMHCA	Eligible for PEMHCA minimum at \$133 per month in 2018 and \$136 per month in 2019 with annual increase.
Service Requirement	5 years (CalPERS eligibility).

Employees hired before July 1, 2008	
Retire at 55 with 10 years service	District pays for retiree only up to Kaiser Bay Area premium (\$774.06 for 2018-19).
Retire at 60 with 15 years service or Retire at 55 with 25 years service	District pays 100% premiums for retiree and spouse or eligible dependent for duration of their lifetimes.

Employees hired after July 1, 2008	
The District contributes 1.5% of the employee’s base monthly salary toward a Medical After Retirement Account (MARA) while employed. District contributions to the MARA are not included in OPEB accounting, but are accrued each year as an operating expense as they are contributed.	

Basis of Valuation

Participant Summary

Census Date:

June 30, 2018

Age and service determined as of the census date.

Active Participants											
Age	Years of Service										Total
	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
< 25											0
25-29	1		1								2
30-34			1								1
35-39		2	1	1							4
40-44	1			1							2
45-49		2									2
50-54	2			3							5
55-59											0
60-64		1			1						2
65-69											0
70+											0
Total	4	5	3	5	1	0	0	0	0	0	18

Average Employee Age: 44.2

Average Years of Service: 6.2

Inactive Participants					
Age	Retiree	Disabled Retiree	Spouse	Surviving Spouse	Total
< 50					0
50-54					0
55-59	3		2		5
60-64	4		3		7
65-69	6		3		9
70-74	5		4		9
75-79	3	1	1		5
80-84	1		1	1	3
85-89					0
90+					0
Total	22	1	14	1	38

Average Inactive Age: 66.9

Basis of Valuation

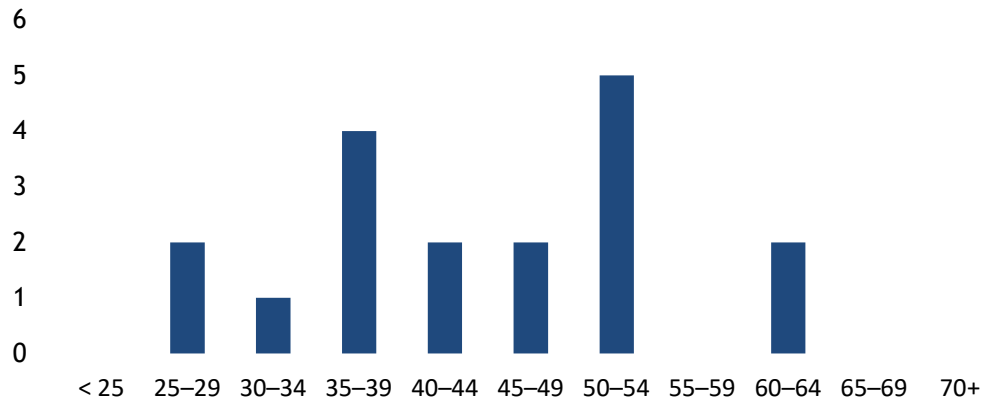
Participant Summary Charts

Census Date: June 30, 2018

Age and service determined as of the census date.

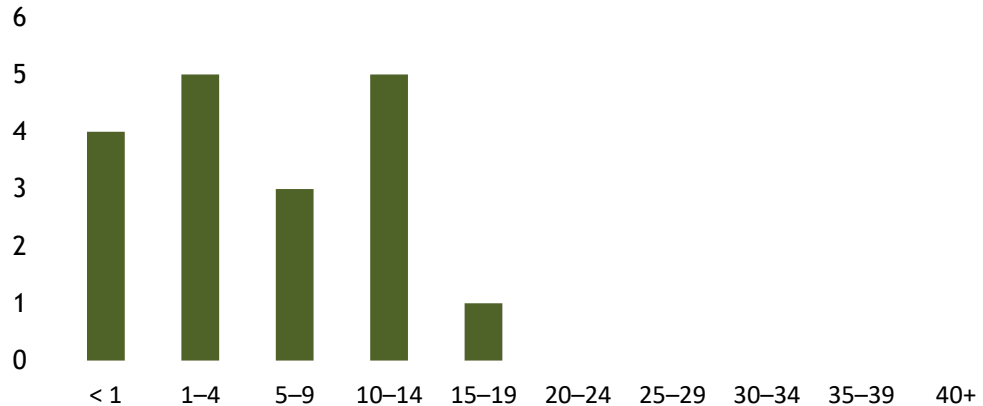
Count of Actives by Age Bracket

Average Employee Age: 44.2



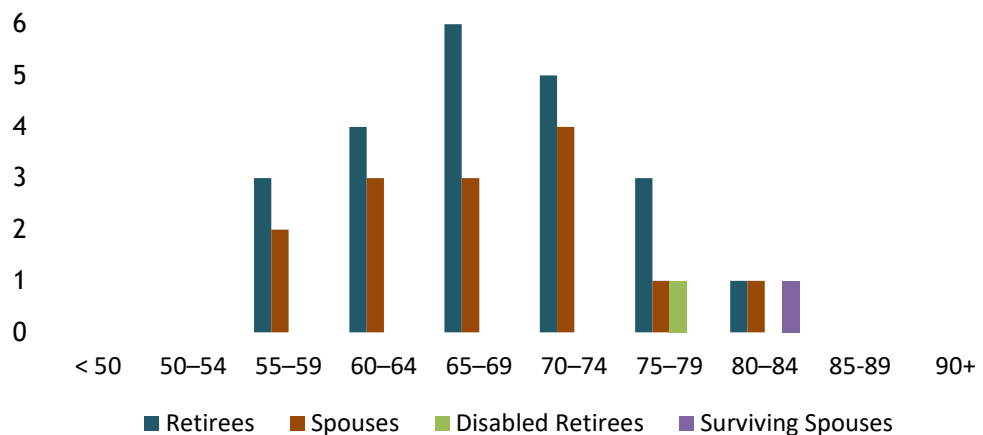
Count of Actives by Years of Service

Average Years of Service: 6.2



Count of Inactives by Age Bracket

Average Inactive Age: 66.9



Basis of Valuation

Actuarial Assumptions

A summary of the actuarial assumptions used for this valuation follows. We considered the reasonableness of each assumption independently based on its own merits, consistent with each other assumption, and the combined impact of all assumptions.

Assumption	Rates
Actuarial Cost Method	Entry Age Normal Level Percentage of Salary
Measurement Date	June 30, 2019
Valuation Date	June 30, 2018
Report Date	June 30, 2019
Discount Rate	The discount rate selected is 5.61%. The discount rate is the long-term rate of return for the plan's assets, as our projections show that the assets will be sufficient to cover the projected benefit payments should the District continue to contribute to the plan with an amount of at least the ADC each year. Should the assets not be sufficient to cover the projected benefit payments at any time in the future, we would employ a discount rate reflecting the 20-year tax-exempt municipal bond yield or index rate to the period after which we project assets to run out. We would then use a single, blended discount rate equivalent to the long-term rate of return and the 20-year tax-exempt municipal bond yield. If there are no assets, we would use only the 20-year tax-exempt municipal bond yield for the valuation.
Mortality	Same as CalPERS. See appendix.
Termination Rates	Same as CalPERS. See appendix. Also known as "turnover".
Disability	Same as CalPERS. See appendix.
Retirement	Same as CalPERS. See appendix.
Average Per Capita Cost for Implicit Subsidy Calculation	Developed based on premiums for the District's enrollment by plan, family demographics from CalPERS plans, and risk scores (both HMO and PPO) for the CalPERS population.

Basis of Valuation

Actuarial Assumptions

Assumption	Rates
------------	-------

Annual Per Capita Claims Cost Developed based on premiums for the City's enrollment by plan, family demographics from the broader CalPERS population in the same plans, and risk scores (both HMO and PPO) for the overall CalPERS population.

Age	Males	Females
50	\$ 9,502	\$ 9,765
55	10,972	10,482
60-64	13,521	11,720

Aging or Morbidity Factors Based on actual CalPERS HMO and PPO population data.

Inflation Rate 2.50%

Salary Increases 2.75% (same as CalPERS). The salary increase is used to determine the growth in the aggregate payroll.

Individual Salary Increases: 2018 CalPERS Merit Salary Increases.

Spouse Age Difference Actual spouse age is used for current retirees. Assumes males are three years older than females for future retirees.

Spouse Gender Assumes spouse of opposite gender for current and future retirees.

Marital Status Current Retirees: Spouse coverage provided by City.
Future Retirees: 80% assumed to be married.

Participation Current Retirees: Assume current elections continue until decrement.
Future Retiree election assumptions summarized below*:

Condition	Participation
Eligible for Supplemental Benefits	100%
Eligible for PEMHCA Minimum Only	50%

Participant Contributions Based on service at retirement and employee group.

Basis of Valuation

Actuarial Assumptions

Assumption	Rates		
Premiums	Premiums used to develop aged-claims.		
	Pre-Medicare Plan	Employee	Employee +1
	Blue Shield Access+ Bay Area	\$ 929.96	\$ 1,859.92
	Kaiser Permanente California Bay Area	774.06	1,548.11
	PERS Choice Bay Area	833.27	1,666.54
	Medicare Plan		
	Kaiser Permanente California Bay Area	\$ 320.04	\$ 640.08
	PERSCare Bay Area	353.19	706.38
	United HealthCare HMO Bay Area	315.07	630.13
Trend Rates	Medical Long-Term Trends from Society of Actuaries "Long Term Healthcare Cost Trends Model v2018_c" using baseline assumptions. Applied to both claims and premiums.		
		Pre-Medicare Trend	Medicare Trend
Year			
2018		7.00%	6.00%
2019		6.50%	5.50%
2020		6.00%	5.50%
2021		5.50%	5.30%
2022		5.20%	5.20%
2023		5.20%	5.20%
2024		5.20%	5.20%
2025		5.19%	5.19%
2026-2074	
2075+		3.84%	3.84%
PEMHCA Administration Fee	0.23% of retiree premium.		
PEMHCA Amount	\$1,614 for the period June 30, 2018 through June 30, 2019 and trended at 3% annually.		

This section includes a brief summary of GASB 75, as well as definitions of some of the key terminology used in this report.

About GASB 75

In General. In June 2015 the Governmental Accounting Standards Board released GASB 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions". GASB 75 replaced GASB 45 for fiscal years beginning after June 15, 2017, for employers that sponsor OPEB plans. The provisions in GASB 75 are similar to the provisions of GASB 68 for pensions.

Accounting. GASB 75 requires a liability known as the Net OPEB Liability (NOL). The employer recognizes the NOL on its balance sheet. The employer also recognizes an OPEB expense in the income statement. GASB 45 recorded the Unfunded Accrued Actuarial Liability (UAAL) in the notes to the financial statement, whereas GASB 75 records the NOL, which is very similar to the UAAL with just a few technical differences, on the balance sheet.

Financial Statement Impact (Employers). One of the biggest changes to the financial statements of governmental employers that provide OPEB is the reporting of the OPEB liability on the face of the statements rather than in the footnotes. Governments that do not provide OPEB through a trust are required to recognize the entire OPEB liability in the financial statements. For governments that provide OPEB through an OPEB plan that is administered through a trust, the government's OPEB liability is recognized net of the amount of the OPEB plan's fiduciary net position.

Changes to the Measurement of the Total OPEB Liability. Measurement of the OPEB liability includes discounting future benefit payments for current and former employees and their beneficiaries to their present value and allocating the present value over past and future periods of the employee service (total OPEB liability), less the amount of the OPEB plan's fiduciary net position. The calculation continues to include employee-related events, such as projected salary increases and projected years of service, if they affect the amount of OPEB payments employees will receive, as well as provisions for automatic cost-of-living adjustments (COLAs) and other automatic benefits. Additionally, ad hoc COLAs and other ad hoc benefit changes, which are made at the discretion of the government, are included in projections as well, if they routinely recur.

GASB 75 requires governments to discount projected OPEB payments to their present value. Under the new standard, governments discount the projected OPEB payments to be made in each year and the amount of plan assets (if a government administers the OPEB through a trust) available for providing those benefits to current active and inactive employees and their beneficiaries. Similar to the pension standards, the discount rate used is based on whether the plan assets are projected to be sufficient to make future payments. If the plan assets are sufficient, governments discount future payments using the long-term expected rate of return. If projected plan assets are insufficient to make all future payments to current and inactive employees and their beneficiaries, or if there are no plan assets held in trust, the discount rate is based on a high-quality 20-year tax-exempt general obligation municipal bond yield or index rate. "High-quality" is defined as being rated AA or higher (or an equivalent rating).

Cost Method. The Entry Age Normal Cost method must be used.

About GASB 75 (continued)

Factors that affect a government's OPEB liability, such as actual earnings on plan investments when the OPEB plan is administered as a trust, employee compensation changes, interest on the outstanding OPEB liability, contributions from employees and employers, and actual demographic and economic changes that are not in line with assumptions made in the actuarial calculations, are considered when determining the government's OPEB expense. A government's annual OPEB expense is calculated with consideration for factors affecting the OPEB liability within the reporting period. Several causes of changes in OPEB liability are immediately factored into the calculation of OPEB expense for the period, such as benefits earned each year, interest on the total OPEB liability, changes in benefit terms, and projected earnings on plan investments, if administered through a trust.

Governments are required to recognize deferred outflows of resources or deferred inflows of resources and then introduce into the expense calculation, systematically and rationally over the average remaining years of employment (active employees and inactive employees, including retirees), the effect on the total OPEB liability of differences between assumptions and actual experience.

Key Terminology

Actuarially Determined Contribution A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

Actuarial Present Value of Projected Benefit Payments Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

Agent Employer An employer whose employees are provided with OPEB through an agent multiple-employer defined-benefit OPEB plan.

Closed Period A specific number of years that is counted from one date, which declines to zero with the passage of time. For example, if the recognition period initially is five years on a closed basis, four years remain after the first year, three years after the second year, and so forth until no years remain.

Contributions Additions to an OPEB plan's fiduciary net position for amounts from employers, non-employer contributing entities, or employees.

Dates and Periods

- **Census Date** The date of the census. It is usually the same as the **Valuation Date**.
- **Measurement Date** The date on which assets are measured. The liabilities are rolled forward to this date from the **Valuation Date**, should it differ, using actuarial roll-forward techniques.
- **Measurement Period** The year ending on the **Measurement Date**.
- **Report Date** The date on which the amounts are reported in the financial statements. It is the same as the fiscal year-end. It may be up to one year ahead of the Measurement Date, with no roll-forward of liabilities or assets required.
- **Reporting Period** The year ending on the **Report Date**. It is the same as the fiscal year.
- **Valuation Date** The date on which the liabilities are valued.

Defined-Benefit OPEB OPEB for which the benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The OPEB may be stated as (a) a specified dollar amount (b) an amount that is calculated based on one or more factors such as age, years of service, and compensation, or (c) a type or level of coverage such as prescription drug coverage or a percentage of health insurance premiums. OPEB that does not have all of the terms of defined contribution OPEB is classified as defined-benefit OPEB.

Key Terminology (continued)

Discount Rate	<p>The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following:</p> <ul style="list-style-type: none">a. The actuarial present value of benefit payments projected to be made in future periods in which (1) the amount of the OPEB plan's fiduciary net position is projected to be greater than the benefit payments that are projected to be made in that period and (2) OPEB plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on OPEB plan investments.b. The actuarial present value of projected benefit payments not included in (a), calculated using a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale).
Net OPEB Liability	<p>The liability of employers and non-employer contributing entities to employees for benefits provided through a defined-benefit OPEB plan that is administered through a trust that meets the criteria in paragraph 4 of GASB 75.</p>
Normal Cost	<p>See Service Cost.</p>
Other Postemployment Benefits (OPEB)	<p>Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payment for sick leave.</p>
Projected Benefit Payments	<p>All benefits estimated to be payable through OPEB plan to current active and inactive employees as a result of their past service and their expected future service.</p>
Service Cost	<p>The portions of the actuarial present value of projected benefit payments that are attributed to valuation years. Also called Normal Cost.</p>
Substantive Plan	<p>The plan terms as understood by the employer and the plan members at the time of the valuation, including only changes to plan terms that have been made and communicated to employees.</p>

Appendix

Decrement Tables

The valuation used the following decrement tables from the CalPERS OPEB Assumption Model, revised December 20, 2017.

Mortality	<u>Source Table</u>
Miscellaneous Employees	Mort and Disb Rates_PA Misc
Disability Rates	
Miscellaneous Employees	Mort and Disb Rates_PA Misc
Terminated Refund Rates	
Miscellaneous Employees	Terminated Refund Rates_Misc
Terminated Vested Rates	
Miscellaneous Employees	Terminated Vested Rates_PA Misc
Salary Scale Rates	
Miscellaneous Employees	Salary Scale Rates_PA Misc
Service Retirement Rates	
Miscellaneous Employees	
• 2.0% at 60	Rx PA Misc 2% @ 60
• 2.0% at 62	Rx PA Misc 2% @ 62
• 2.5% at 55	Rx PA Misc 2.5% @ 55

Appendix

Sample Mortality and Disability Rates

Attained Age	Public Agency Miscellaneous													
	Pre-Retirement Mortality				Post-Retirement Mortality						Disability			
	Male Assumptions		Female Assumptions		Male Assumptions			Female Assumptions			Male Assumptions		Female Assumptions	
	Non Industrial Death	Industrial Death	Non Industrial Death	Industrial Death	Healthy Recipients	Non Industrially Disabled	Industrially Disabled	Healthy Recipients	Non Industrially Disabled	Industrially Disabled	Non Industrial Disability	Industrial Disability	Non Industrial Disability	Industrial Disability
1	0.00000	0.00000	0.00000	0.00000	0.00023	0.00555	0.00128	0.00015	0.00346	0.00098	0.00000	0.00000	0.00000	0.00000
5	0.00000	0.00000	0.00000	0.00000	0.00023	0.00565	0.00129	0.00015	0.00350	0.00099	0.00000	0.00000	0.00000	0.00000
10	0.00000	0.00000	0.00000	0.00000	0.00024	0.00572	0.00130	0.00015	0.00354	0.00099	0.00000	0.00000	0.00000	0.00000
15	0.00023	0.00000	0.00017	0.00000	0.00024	0.00584	0.00132	0.00016	0.00361	0.00101	0.00017	0.00000	0.00010	0.00000
20	0.00031	0.00000	0.00020	0.00000	0.00025	0.00604	0.00135	0.00017	0.00372	0.00104	0.00017	0.00000	0.00010	0.00000
25	0.00040	0.00000	0.00023	0.00000	0.00029	0.00637	0.00141	0.00021	0.00392	0.00109	0.00017	0.00000	0.00010	0.00000
30	0.00049	0.00000	0.00025	0.00000	0.00039	0.00693	0.00153	0.00028	0.00428	0.00121	0.00019	0.00000	0.00024	0.00000
35	0.00057	0.00000	0.00035	0.00000	0.00060	0.00788	0.00178	0.00046	0.00492	0.00143	0.00049	0.00000	0.00081	0.00000
40	0.00075	0.00000	0.00050	0.00000	0.00110	0.00949	0.00225	0.00091	0.00605	0.00188	0.00122	0.00000	0.00155	0.00000
45	0.00106	0.00000	0.00071	0.00000	0.00227	0.01221	0.00318	0.00200	0.00804	0.00281	0.00191	0.00000	0.00218	0.00000
50	0.00155	0.00000	0.00100	0.00000	0.00501	0.01680	0.00501	0.00466	0.01158	0.00466	0.00213	0.00000	0.00229	0.00000
55	0.00228	0.00000	0.00138	0.00000	0.00599	0.01973	0.00599	0.00416	0.01149	0.00416	0.00221	0.00000	0.00179	0.00000
60	0.00308	0.00000	0.00182	0.00000	0.00710	0.02289	0.00754	0.00436	0.01235	0.00518	0.00222	0.00000	0.00135	0.00000
65	0.00400	0.00000	0.00257	0.00000	0.00829	0.02451	0.01122	0.00588	0.01607	0.00838	0.00210	0.00000	0.00118	0.00000
70	0.00524	0.00000	0.00367	0.00000	0.01305	0.02875	0.01635	0.00993	0.02211	0.01395	0.00180	0.00000	0.00114	0.00000
75	0.00713	0.00000	0.00526	0.00000	0.02205	0.03990	0.02834	0.01722	0.03037	0.02319	0.00142	0.00000	0.00118	0.00000
80	0.00990	0.00000	0.00814	0.00000	0.03899	0.06083	0.04899	0.02902	0.04725	0.03910	0.00142	0.00000	0.00118	0.00000
85	0.00000	0.00000	0.00000	0.00000	0.06969	0.09731	0.07679	0.05243	0.07762	0.06251	0.00000	0.00000	0.00000	0.00000
90	0.00000	0.00000	0.00000	0.00000	0.12974	0.14804	0.12974	0.09887	0.12890	0.09887	0.00000	0.00000	0.00000	0.00000
95	0.00000	0.00000	0.00000	0.00000	0.22444	0.22444	0.22444	0.18489	0.21746	0.18489	0.00000	0.00000	0.00000	0.00000
100	0.00000	0.00000	0.00000	0.00000	0.32536	0.32536	0.32536	0.30017	0.30017	0.30017	0.00000	0.00000	0.00000	0.00000
105	0.00000	0.00000	0.00000	0.00000	0.58527	0.58527	0.58527	0.56093	0.56093	0.56093	0.00000	0.00000	0.00000	0.00000
110	0.00000	0.00000	0.00000	0.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	0.00000	0.00000	0.00000	0.00000
115	0.00000	0.00000	0.00000	0.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	0.00000	0.00000	0.00000	0.00000
120	0.00000	0.00000	0.00000	0.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	0.00000	0.00000	0.00000	0.00000

Notes:

- 1) Pre-Retirement and Post-Retirement mortality rates include 20 years of projected on-going mortality improvement using Scale BB published by the Society of Actuaries.
- 2) Miscellaneous Plans usually have Industrial Death rates set to zero unless the agency has specifically contracted for Industrial Death benefits. If so, each Non-Industrial Death rate shown above will be split into two components: 99% will become the Non-Industrial Death rate and 1% will become the Industrial Death rate.
- 3) The Miscellaneous Non-Industrial Disability rates are used for Local Prosecutors
- 4) Normally, Industrial Disability rates are zero for miscellaneous plans unless the agency has specifically contracted for Industrial Disability benefits. If so, each miscellaneous non-industrial disability rate will be split into two components: 50% will become the Non-Industrial Disability rate and 50% will become the Industrial Disability rate.

Appendix

Sample Termination Rates

		Sample Terminated Refund Rates Public Agency Miscellaneous									
Entry Ages											
Service		15	20	25	30	35	40	45	50	55	59
0		0.18120	0.17420	0.16740	0.16060	0.15370	0.14680	0.14000	0.13320	0.12620	0.12080
5		0.02320	0.02120	0.01930	0.01740	0.01550	0.01360	0.01160	0.00970	0.00780	0.00620
10		0.01550	0.01380	0.01210	0.01040	0.00880	0.00710	0.00550	0.00380	0.00210	0.00080
15		0.00700	0.00600	0.00510	0.00420	0.00320	0.00230	0.00140	0.00040	0.00020	0.00020
20		0.00450	0.00370	0.00290	0.00210	0.00130	0.00050	0.00010	0.00010	0.00010	0.00010
25		0.00240	0.00170	0.00110	0.00050	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
30		0.00110	0.00050	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00000	0.00000
35		0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00000	0.00000	0.00000
40		0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00000	0.00000	0.00000	0.00000
45		0.00010	0.00010	0.00010	0.00010	0.00010	0.00000	0.00000	0.00000	0.00000	0.00000
		0.00010	0.00010	0.00010	0.00010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

		Sample Terminated Vested Rates Public Agency Miscellaneous									
Entry Ages											
Service		15	20	25	30	35	40	45	50	55	59
0		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5		0.07140	0.06560	0.05970	0.05370	0.04770	0.04180	0.00000	0.00000	0.00000	0.00000
10		0.05940	0.05300	0.04660	0.04030	0.03390	0.00000	0.00000	0.00000	0.00000	0.00000
15		0.05110	0.04430	0.03730	0.03050	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
20		0.04050	0.03330	0.02610	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
25		0.02880	0.02120	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
30		0.01500	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
35		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
40		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
45		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
50		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

When a member is eligible to retire, the termination with vested benefits probability is set to zero

Appendix

Sample Salary Scale Rates

Service	Entry Ages										Public Agency Miscellaneous			
	15	20	25	30	35	40	45	50	55	60	65	70	75	79
0	0.1220	0.1220	0.1220	0.1160	0.1090	0.1020	0.0950	0.0950	0.0950	0.0950	0.0950	0.0950	0.0950	0.0950
5	0.0640	0.0640	0.0640	0.0600	0.0550	0.0520	0.0480	0.0480	0.0480	0.0480	0.0480	0.0480	0.0480	0.0480
10	0.0460	0.0460	0.0460	0.0430	0.0410	0.0390	0.0370	0.0370	0.0370	0.0370	0.0370	0.0370	0.0370	0.0370
15	0.0420	0.0420	0.0420	0.0400	0.0380	0.0360	0.0340	0.0340	0.0340	0.0340	0.0340	0.0340	0.0340	0.0340
20	0.0390	0.0390	0.0390	0.0380	0.0360	0.0340	0.0330	0.0330	0.0330	0.0330	0.0330	0.0330	0.0330	0.0330
25	0.0370	0.0370	0.0370	0.0360	0.0340	0.0330	0.0310	0.0310	0.0310	0.0310	0.0310	0.0310	0.0310	0.0310
30	0.0350	0.0350	0.0350	0.0340	0.0330	0.0320	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300
35	0.0350	0.0350	0.0350	0.0340	0.0330	0.0320	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300
40	0.0350	0.0350	0.0350	0.0340	0.0330	0.0320	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300
45	0.0350	0.0350	0.0350	0.0340	0.0330	0.0320	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300
50	0.0350	0.0350	0.0350	0.0340	0.0330	0.0320	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300

Miscellaneous Salary Scale is used for local prosecutors

Appendix

Matrix of Sample Service Retirement Assumption Rates

Service	Attained Ages				Public Agency Miscellaneous 2% @ 60		
	50	55	60	65	70	75	79
0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0200	0.0190	0.0700	0.1400	0.1400	1.0000	1.0000
10	0.0200	0.0260	0.0740	0.1780	0.1780	1.0000	1.0000
15	0.0200	0.0330	0.0890	0.2150	0.2150	1.0000	1.0000
20	0.0200	0.0920	0.1130	0.2640	0.2640	1.0000	1.0000
25	0.0200	0.1360	0.1370	0.3210	0.3210	1.0000	1.0000
30	0.1500	0.1460	0.1610	0.3770	0.3770	1.0000	1.0000
35	0.1500	0.1500	0.2460	0.4120	0.4120	1.0000	1.0000
40	0.0000	0.1500	0.2960	0.4200	0.4200	1.0000	1.0000
45	0.0000	0.0000	0.2960	0.4200	0.4200	1.0000	1.0000
50	0.0000	0.0000	0.0000	0.4200	0.4200	1.0000	1.0000

Service	Attained Ages				Public Agency Miscellaneous 2% @ 62		
	50	55	60	65	70	75	79
0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0100	0.0310	0.1080	0.1200	1.0000	1.0000
10	0.0000	0.0190	0.0510	0.1410	0.1560	1.0000	1.0000
15	0.0000	0.0280	0.0710	0.1730	0.1930	1.0000	1.0000
20	0.0000	0.0360	0.0910	0.2060	0.2290	1.0000	1.0000
25	0.0000	0.0610	0.1110	0.2390	0.2650	1.0000	1.0000
30	0.0000	0.0960	0.1380	0.3000	0.3330	1.0000	1.0000
35	0.0000	0.1520	0.1830	0.3480	0.3870	1.0000	1.0000
40	0.0000	0.1800	0.2040	0.3600	0.4000	1.0000	1.0000
45	0.0000	0.0000	0.2040	0.3600	0.4000	1.0000	1.0000
50	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	1.0000

Service	Attained Ages				Public Agency Miscellaneous 2.5% @ 55		
	50	55	60	65	70	75	79
0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0080	0.0200	0.0440	0.1200	0.1200	1.0000	1.0000
10	0.0140	0.0380	0.0720	0.1560	0.1560	1.0000	1.0000
15	0.0200	0.0550	0.1010	0.1930	0.1930	1.0000	1.0000
20	0.0260	0.0730	0.1300	0.2290	0.2290	1.0000	1.0000
25	0.0330	0.1220	0.1580	0.2650	0.2650	1.0000	1.0000
30	0.0500	0.1920	0.1970	0.3330	0.3330	1.0000	1.0000
35	0.0600	0.3040	0.2610	0.3870	0.3870	1.0000	1.0000
40	0.0000	0.3600	0.2910	0.4000	0.4000	1.0000	1.0000
45	0.0000	0.0000	0.2910	0.4000	0.4000	1.0000	1.0000
50	0.0000	0.0000	0.0000	0.4000	0.4000	1.0000	1.0000