

# Novato Sanitary District

## GASB 75 OPEB Valuation Report Measured as of June 30, 2020 for Disclosures for the Fiscal Year Ending June 30, 2020

September 15, 2020



**GovInvest**  
Insights to your financial future



562A Filbert Street, Suite 4  
San Francisco, California 94133  
t: (415) 801-5987 f: (415) 358-8500  
[www.precisionactuarial.com](http://www.precisionactuarial.com)



**GovInvest**  
Insights to your financial future

562A Filbert Street, Suite 4  
San Francisco, CA 94133  
[www.precisionactuarial.com](http://www.precisionactuarial.com)  
(415) 801-5987

September 15, 2020

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

**Re: Novato Sanitary District GASB 75 OPEB Valuation Measured as of June 30, 2020**

Dear Ms. Creamer:

At your request, we completed an actuarial valuation of the retiree health and welfare benefits measured as of June 30, 2020, for the Novato Sanitary District. This is a roll-forward of the valuation produced for the fiscal year ending June 30, 2019. Please use the information in this report for your financial statements for the fiscal year ending June 30, 2020. 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, MAAA, FCA



## Corporate Solutions for the Modern World

Healthcare • Pension • Valuations • Life & Disability • P&C • Financial Reporting  
Risk Management • Reinsurance • M&A • Expert Witness

DUNS: 079861610 CAGE: 7EC83 CA Supplier: 1798304

## Contents

---

### Executive Summary

Overview	1
Accounting Summary	3
Reconciliation of the Change in the Total OPEB Liability	4

### Accounting Information

Statement of Fiduciary Net Position	5
Statement of Changes to the Fiduciary Net Position	6
Changes in the Net OPEB Liability	7
Development of Deferred Outflows and Inflows of Resources	8
Expense and Deferred Outflows and Inflows	10
Reconciliation of Expense	11
Amortization of Unfunded Actuarial Accrued Liability	12
Actuarially Determined Contribution (ADC)	13
Interest on Total OPEB Liability and Total Projected Earnings	14
OPEB Cash-Flow Projections	15
OPEB Cash-Flow Projections Chart	16
Projection of Contributions	17
Projection of Contributions Charts	18
Projection of Fiduciary Net Position	19
Schedule of Implicit Subsidy Liability	20
Schedule of Deferred Outflows and Inflows of Resources	21
Schedule of Changes in the Total OPEB Liability and Related Ratios	22
Schedule of Investment Returns	23
Schedule of Contributions	24
Draft Notes to the Financial Statements	25

### Basis of Valuation

Substantive Plan	30
Participant Summary	31
Participant Summary Charts	32
Actuarial Assumptions	33

### Appendix

About GASB 75	36
Decrement Tables	41

# Executive Summary

## Overview

---

### 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, 2020.

**Valuation Date:** June 30, 2018

**Measurement Date:** June 30, 2020

**Report Date:** June 30, 2020

### Application to Financials

This report provides assets, liabilities, and expenses for use in the District's 2020 financial reports.

The District should use the liabilities, assets, and expense measured as of June 30, 2020, for its financial statements for the year ending June 30, 2020.

Update procedures were used to roll the total OPEB liability forward to the measurement date.

The report also provides the actuarially determined contributions for funding purposes for reporting for the fiscal years ending June 30 for 2019, 2020, and 2021.

### Changes Since the Prior Valuation

This valuation is a roll-forward of the valuation produced for the prior fiscal year. We updated:

- Discount rate from 5.61% to 5.47%
- Inflation rate from 2.50% to 1.75%
- Removal of ACA Excise Tax to reflect repeal.
- Benefit payments
- Contributions
- Assets

### Actuarial Certification

Our determinations reflect the provisions and methods prescribed by GASB 75. In preparing this report, we relied on assets, 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.

# Executive Summary

## Overview

---

### 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

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

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, MAAA, FCA**  
*Chief Actuary*

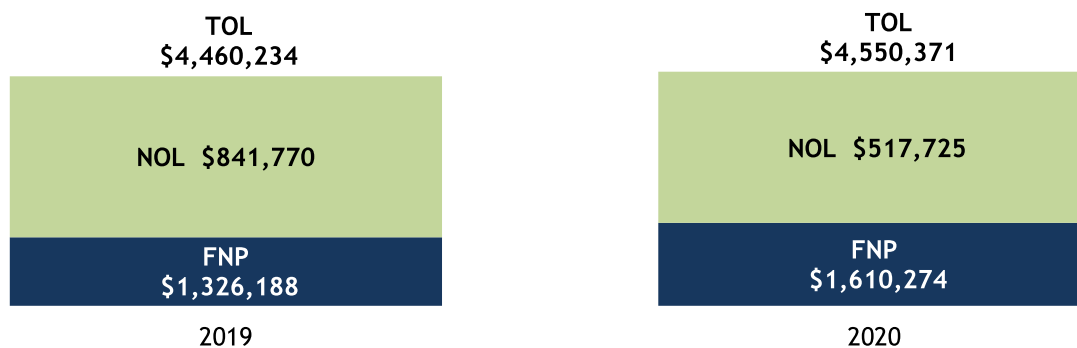
# Executive Summary

## Accounting Summary

A summary of the key valuation results follows.

	Valuation Date:	June 30, 2018	June 30, 2018
	Measurement Date:	June 30, 2019	June 30, 2020
	Report Date:	June 30, 2019	June 30, 2020
<b>Present Value of Future Benefits</b>			
Active Employees	\$	1,505,112	\$ 1,688,006
Retirees	+	3,656,613	3,502,982
<b>Total Present Value of Future Benefits</b>	=	<b>5,161,725</b>	<b>5,190,988</b>
<b>Total Present Value of Future Normal Costs</b>	-	<b>701,491</b>	<b>640,617</b>
<b>Total OPEB Liability (TOL)</b>	=	<b>\$ 4,460,234</b>	<b>\$ 4,550,371</b>
<b>OPEB Liability</b>			
Active Employees	\$	803,621	\$ 1,047,389
Retirees	+	3,656,613	3,502,982
<b>Total OPEB Liability (TOL)</b>	=	<b>4,460,234</b>	<b>4,550,371</b>
<b>Fiduciary Net Position (FNP)</b>	-	<b>1,326,188</b>	<b>1,610,274</b>
<b>Net OPEB Liability (NOL)</b>	=	<b>\$ 3,134,046</b>	<b>\$ 2,940,097</b>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability		29.73%	35.39%
Covered-Employee Payroll	\$	1,636,626	\$ 1,681,633
Net OPEB Liability as a Percentage of Covered-Employee Payroll		191.49%	174.84%
	Measurement Period:	2018-2019	2019-2020
	Reporting Period:	2018-2019	2019-2020
<b>Expense</b>	\$	<b>152,734</b>	<b>\$ 128,871</b>
<b>Actuarially Determined Contribution (ADC)*</b>		<b>441,931</b>	<b>126,101</b>

### 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 13 for the District's direct contribution.

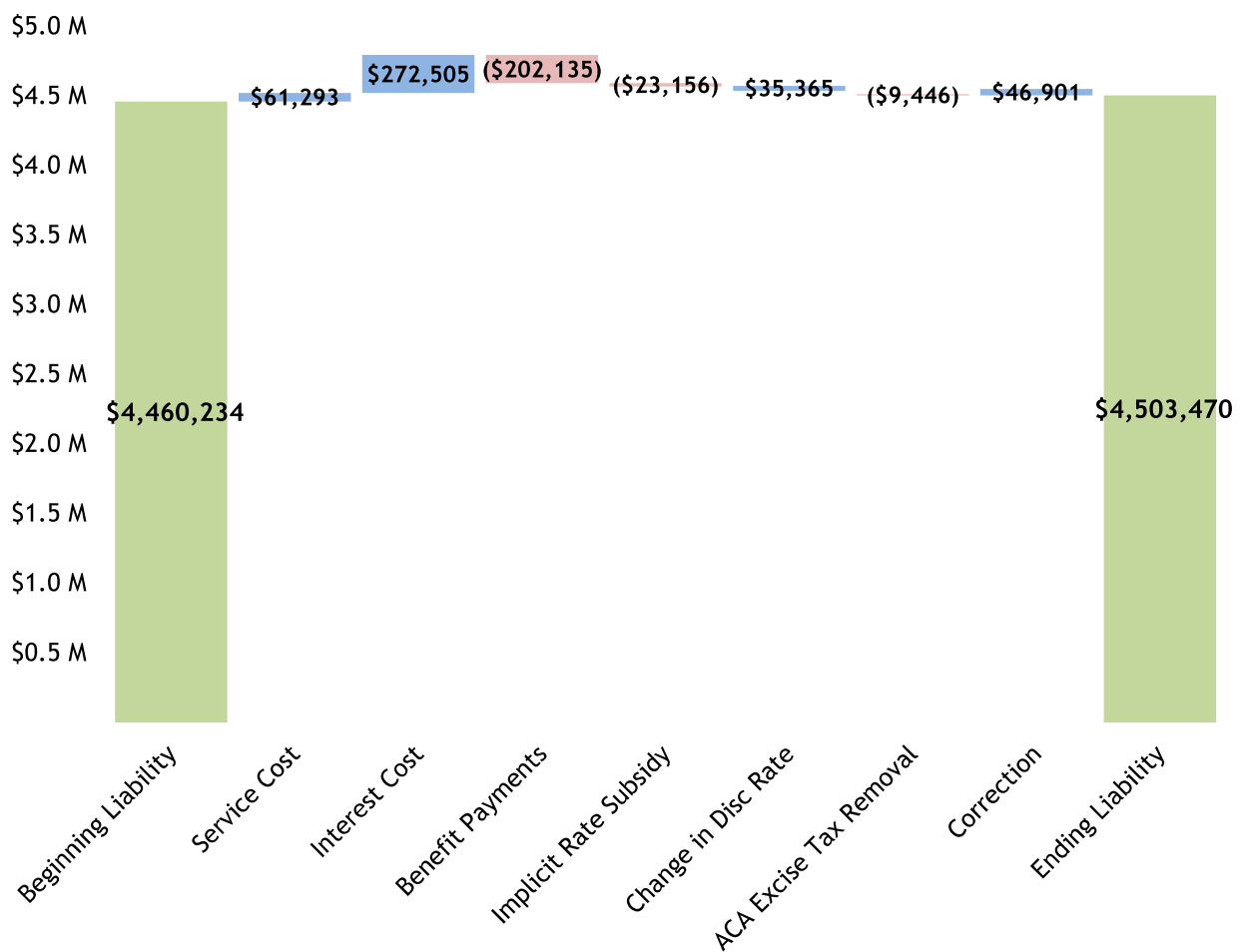
# Executive Summary

## Reconciliation of the Change in the Total OPEB Liability

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

<b>Total OPEB Liability as of Measurement Date June 30, 2019 /</b>	
<b>Report Date June 30, 2019</b>	<b>\$ 4,460,234</b>
Service Cost	61,293
Interest Cost	272,505
Benefit Payments	(202,135)
Implicit Subsidy Credit	(23,156)
Change in Experience (Actual versus Expected)	(31,710)
Change in Discount Rate from 5.61% to 5.47%	35,365
Repeal of ACA Excise Tax	(9,446)
Correction to Beginning Balance	46,901
<b>Total OPEB Liability as of Measurement Date June 30, 2020 /</b>	
<b>Report Date June 30, 2020</b>	<b>\$ 4,550,371</b>

### Reconciliation of the Change in the Total OPEB Liability



# Accounting Information

## Statement of Fiduciary Net Position

	Measurement Date:	June 30, 2020
	Report Date:	June 30, 2020
<b>Assets</b>		
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		1,610,274
International Equities		-
Real Estate		-
Total Investments		1,610,274
Total Assets	\$	1,610,274
<b>Liabilities</b>		
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	\$	1,610,274

# Accounting Information

## Statement of Changes to the Fiduciary Net Position

	Measurement Date:	June 30, 2019	June 30, 2020
	Report Date:	June 30, 2019	June 30, 2020
<b>Additions</b>			
Investment Income:			
Net Appreciation in the Fair Value of Investments	\$	75,128	\$ 90,034
Interest and Dividends		-	-
Less Investment Expense, Other than from Securities Lending	-	-	-
Net Income from Investing, Other than from Securities Lending		75,128	90,034
Securities Lending Income		-	-
Less Securities Lending Expense	-	-	-
Net Income from Securities Lending		-	-
Other Income/(Expense)		-	-
Net Investment Income (a)		<u>75,128</u>	<u>90,034</u>
Contributions:			
Employer – District's Contribution		606,729	403,796
Employer – Implicit Subsidy		73,458	23,156
Total Contributions (b)		<u>680,187</u>	<u>426,952</u>
<b>Total Additions (c) = (a) + (b)</b>		<b>755,315</b>	<b>516,986</b>
<b>Deductions</b>			
Benefit Payments		217,800	202,135
Implicit Subsidy Credit		73,458	23,156
Administrative Expense		2,741	7,609
Total Deductions (d)		<u>293,999</u>	<u>232,900</u>
<b>Net Increase in Net Position = (c) – (d)</b>		<b>461,316</b>	<b>284,086</b>
<b>Net Position Restricted for Postemployment Benefits Other than Pensions</b>			
Beginning of Year		864,872	1,326,188
Net Increase in Net Position		461,316	284,086
End of Year	\$	<u>1,326,188</u>	<u>\$ 1,610,274</u>

# 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.

	<i>Increase / (Decrease)</i>		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(c) = (a) – (b)
<b>Balance as of Measurement Date June 30, 2019 / Report Date June 30, 2019</b>	<b><u>\$ 4,460,234</u></b>	<b><u>\$ 1,326,188</u></b>	<b><u>\$ 3,134,046</u></b>
<b>Changes for the year:</b>			
Service Cost	61,293		61,293
Interest	272,505		272,505
Changes of Benefit Terms	-		-
Differences Between Expected and Actual Experience	(31,710)		(31,710)
Changes of Assumptions	13,340		13,340
Net Investment Income		90,034	(90,034)
Contributions			
Employer – District's Contribution		403,796	(403,796)
Employer – Implicit Subsidy		23,156	(23,156)
Benefit Payments	(202,135)	(202,135)	-
Implicit Subsidy Credit	(23,156)	(23,156)	-
Administrative Expense		(7,609)	7,609
Other Changes	-	-	-
<b>Net Changes</b>	<b><u>90,137</u></b>	<b><u>284,086</u></b>	<b><u>(193,949)</u></b>
<b>Balance as of Measurement Date June 30, 2020 / Report Date June 30, 2020</b>	<b><u>\$ 4,550,371</u></b>	<b><u>\$ 1,610,274</u></b>	<b><u>\$ 2,940,097</u></b>

## Accounting Information

### Development of Deferred Outflows and Inflows of Resources

Balances as of Measurement Date June 30, 2020 / 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 Measurement Date June 30, 2020 (c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2017	\$ -	\$ -	\$ -	-	\$ -
2018	1,787	-	942	845	-
2019	201,040	-	73,642	127,398	-
2020	-	(31,710)	(6,218)	-	(25,492)
Total				\$ 128,243	\$ (25,492)

#### 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 Measurement Date June 30, 2020 (c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2017	\$ -	\$ -	\$ -	-	\$ -
2018	277,097	-	145,842	131,255	-
2019	-	(1,170,724)	(425,718)	-	(745,006)
2020	13,340	-	2,616	10,724	-
Total				\$ 141,979	\$ (745,006)

## Accounting Information

### Development of Deferred Outflows and Inflows of Resources

Balances as of Measurement Date June 30, 2020 / Report Date June 30, 2020

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

Measurement Date – June 30:	Investment Earnings Less Than Projected (a)	Investment Earnings Greater Than Projected (b)	Amounts Recognized in Expense Through Measurement Date June 30, 2020 (c)	Deferred Outflows of Resources (d) = (a) – (c)	Deferred Inflows of Resources (e) = (b) – (c)	Net (f) = (d) + (e)
2017	-	(53,843)	(43,076)	-	(10,767)	
2018	44,030	-	26,418	17,612	-	
2019	10,104	-	4,042	6,062	-	
2020	-	(10,191)	(2,039)	-	(8,152)	
Total				\$ 23,674	\$ (18,919)	\$ 4,755

# Accounting Information

## Expense and Deferred Outflows and Inflows

	Measurement Period:	2018-2019	2019-2020
	Reporting Period:	2018-2019	2019-2020
<b>Expense</b>			
Service Cost	\$	117,613	\$ 61,293
Interest on Total OPEB Liability		244,664	272,505
Changes of Benefit Terms		-	-
Recognized Differences Between Expected and Actual Experience		37,135	30,917
Recognized Changes of Assumptions		(164,245)	(161,629)
Projected Earnings on OPEB Plan Investments		(85,232)	(79,843)
Recognized Differences Between Projected and Actual Earnings		58	(1,981)
Administrative Expense		2,741	7,609
Other Miscellaneous (Income)/Expense		-	-
<b>Total Expense</b>	\$	152,734	\$ 128,871

### Deferred Outflows and Inflows of Resources

	Report Year Ending June 30, 2020	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	\$ 128,243	\$ (25,492)
Changes of Assumptions	141,979	(745,006)
Net Difference Between Projected and Actual Earnings on Plan Investments	4,755	-
Contributions Subsequent to the Measurement Date	-	-
<b>Total</b>	<b>\$ 274,977</b>	<b>\$ (770,498)</b>

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
2021	\$ (132,691)
2022	(121,924)
2023	(145,415)
2024	(95,131)
2025	(360)
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 Measurement Date June 30, 2019 / Report Date June 30, 2019	\$ (4,460,234)	\$ 1,326,188	\$ (3,134,046)	\$ (957,865)	\$ 345,247	\$ 12,965	\$ (599,653)	\$ (3,733,699)	
Service Cost	(61,293)		(61,293)						\$ 61,293
Interest on Total OPEB Liability	(272,505)		(272,505)						272,505
Effect of Changes of Benefit Terms	-		-						-
Effect of Liability Gains or Losses	31,710		31,710	(31,710)	-		(31,710)		
Effect of Assumption Changes or Inputs	(13,340)		(13,340)	-	13,340		13,340		
Expected Investment Income (Net of Investment Expenses)		79,843	79,843						(79,843)
Investment Gains or Losses on Expected Return Contributions		10,191	10,191			(10,191)	(10,191)		
Employer – District's Contribution		403,796	403,796					403,796	
Employer – Implicit Subsidy		23,156	23,156					23,156	
Benefit Payments	202,135	(202,135)	-						
Implicit Subsidy Credit	23,156	(23,156)	-						
Administrative Expenses		(7,609)	(7,609)						7,609
Other Income/(Expense)		-	-						-
Recognition of Liability Gains or Losses				6,218	(37,135)		(30,917)		30,917
Recognition of Assumption Changes or Inputs				212,859	(51,230)		161,629		(161,629)
Recognition of Investment Gains or Losses						1,981	1,981		(1,981)
Annual Expense								(128,871)	\$ 128,871
Balance as of Measurement Date June 30, 2020 / Report Date June 30, 2020	\$ (4,550,371)	\$ 1,610,274	\$ (2,940,097)	\$ (770,498)	\$ 270,222	\$ 4,755	\$ (495,521)	\$ (3,435,618)	

# Accounting Information

## Amortization of Unfunded Actuarial Accrued Liability

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.

	Measurement Period:	2018-2019	2019-2020	2020-2021
	Reporting Period:	2018-2019	2019-2020	2020-2021
Actuarial Accrued Liability (AAL) – Beginning of Fiscal Year		\$ 5,358,899	\$ 4,460,234	\$ 4,550,371
Actuarial Value of Plan Assets, Beginning of Fiscal Year	–	<u>864,872</u>	<u>1,326,188</u>	<u>1,610,274</u>
Unfunded Actuarial Accrued Liability (UAAL), Beginning of Fiscal Year	=	<u>\$ 4,494,027</u>	<u>\$ 3,134,046</u>	<u>\$ 2,940,097</u>
Interest Rate Used to Determine Amortization Payment		5.61%	5.61%	5.47%
Assumed Rate of Payroll Growth		2.750%	2.750%	2.750%
Amortization Period		18 years	17 years	16 years
Amount Recognized, Beginning of Year		\$ 312,115	\$ 227,573	\$ 221,922

# Accounting Information

## Actuarially Determined Contribution (ADC)

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

	Measurement Period:	2018-2019	2019-2020	2020-2021
	Reporting Period:	2018-2019	2019-2020	2020-2021
Service Cost		\$ 117,613	\$ 61,293	\$ 67,131
Amortization of the Unfunded Actuarial Accrued Liability		312,115	227,573	221,922
Interest to the End of the Year		24,108	16,206	15,811
<b>ADC</b>		<b>\$ 453,836</b>	<b>\$ 305,072</b>	<b>\$ 304,864</b>
ADC as a Percentage of Payroll		27.73%	18.14%	17.64%
Discount Rate for ADC Calculation		5.61%	5.61%	5.47%

### ADC Components

District's Contribution to the Trust Fund	\$ 150,673	\$ (99,190)	\$ 34,270
Credit for Retiree Benefit Payments	217,800	202,135	241,795
Credit for Implicit Subsidy	73,458	23,156	28,799
<b>Total Adjusted ADC*</b>	<b>\$ 441,931</b>	<b>\$ 126,101</b>	<b>\$ 304,864</b>

### 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 paid directly by the District (not through the Trust Fund), the implicit subsidy, and the contribution to the Trust Fund. The contribution to the Trust Fund is the ADC, in total, less the benefit payments and the implicit subsidy.

The District is amortizing the UAAL on a closed basis. Remaining years of amortization as of the report date of June 30, 2020:

16

The discount rate assumed for ADC calculations is the expected long-term rate of return:

5.47%

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

Projections for fiscal year-end 2021 use an estimated expected rate of return, contributions, and benefit payments. We recommend that the District update these values for its 2021 financial statements.

\*The ADC is adjusted to use the actual benefit payments (instead of the expected benefit payments) in the measurement periods 2018-2019 and 2019-2020. Contributions to the Trust Fund were calculated in the prior report based on expected benefit payments.

## Accounting Information

### Interest on Total OPEB Liability and Total Projected Earnings

	Amount for Period	Portion of Period	Interest Rate	Interest on the Total OPEB Liability
Interest on Total OPEB Liability	(a)	(b)	(c)	(d) = (a) × (b) × (c)
Beginning Total OPEB Liability	\$ 4,460,234	100%	5.61%	\$ 250,219
Service Cost	61,293	100%	5.61%	3,439
Benefit Payments	(202,135)	50%	5.61%	(5,670)
Implicit Subsidy	(23,156)	50%	5.61%	(650)
<b>Total Interest on Total OPEB Liability</b>				<b>\$ 247,338</b>

	Amount for Period	Portion of Period	Projected Rate of Return	Projected Earnings
Projected Earnings on Plan Investments	(a)	(b)	(c)	(d) = (a) × (b) × (c)
Beginning Plan Fiduciary Net Position excluding Receivables	\$ 1,326,188	100%	5.61%	\$ 74,399
Employer Contributions	201,661	50%	5.61%	5,657
Benefit Payments from Trust	-	50%	5.61%	-
Administrative Expense	(7,609)	50%	5.61%	(213)
Other Miscellaneous Income/(Expense)	-	100%	5.61%	-
<b>Total Projected Earnings</b>				<b>79,843</b>
(Investment Expense)				-
<b>Net Projected Earnings</b>				<b>\$ 79,843</b>

# Accounting Information

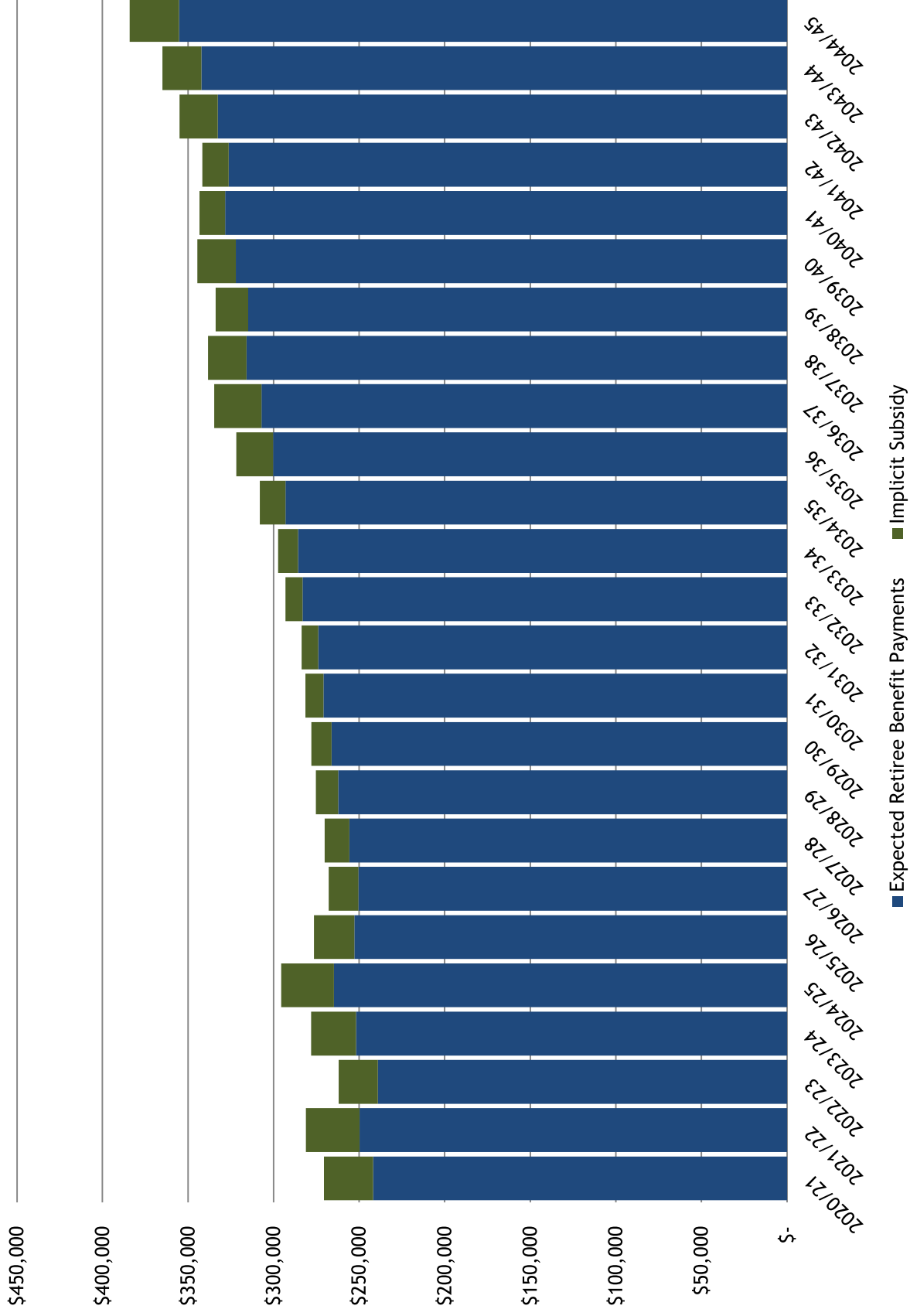
## OPEB Cash-Flow Projections

OPEB cash-flow projections for current participants for the next twenty-five years follow.

Measurement	Expected Retiree		Total Expected
Period Ending	Benefit Payments	Implicit Subsidy	Credited Benefit
June 30:			Payments
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
2045	355,155	28,885	384,040

## Accounting Information

### OPEB Cash-Flow Projections for Current Participants



## Accounting Information

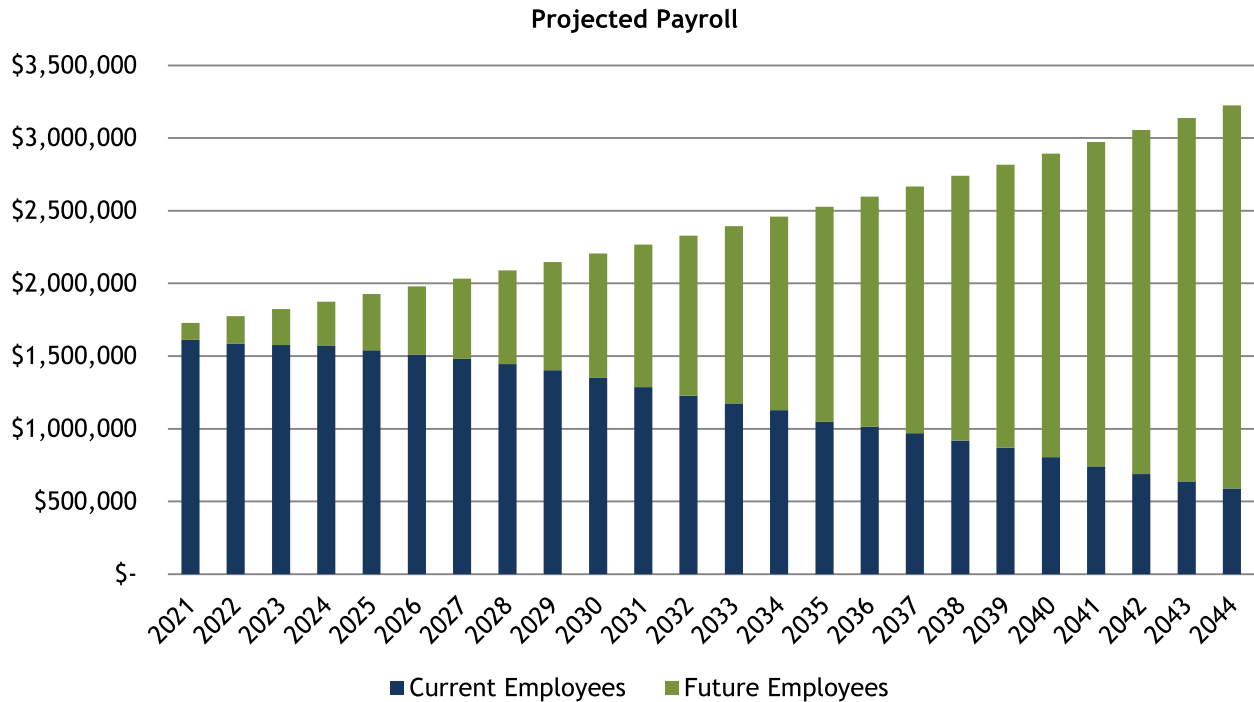
### Projection of Contributions

Measurement Period Ending	Payroll for Current		Payroll for Future		Total Employee	Portion of Employer		Employer	Contributions Related	
	Employees	(a)	Employees	(b)		Payroll Current Plan Members	Contribution for (d) = (f) – (e)		to Payroll of Future Plan Members	to Payroll of all Plan Members (f) = (c) x 17.64% for 16 Years, 4.10% Thereafter
June 30:						(c)			(e) = (b) x 4.10%	
2021	\$	1,612,197	\$	115,681	\$	1,727,878	\$	300,124	\$	304,864
2022		1,587,168		188,227		1,775,395		305,535		313,248
2023		1,575,387		248,831		1,824,218		311,666		321,862
2024		1,570,013		304,371		1,874,384		318,241		330,713
2025		1,539,146		386,784		1,925,930		323,959		339,808
2026		1,511,491		467,402		1,978,893		330,000		349,153
2027		1,480,793		552,520		2,033,313		336,113		358,754
2028		1,444,687		644,542		2,089,229		342,209		368,620
2029		1,402,614		744,069		2,146,683		348,267		378,757
2030		1,349,725		855,992		2,205,717		354,097		389,173
2031		1,285,784		980,590		2,266,374		359,694		399,875
2032		1,227,112		1,101,587		2,328,699		365,732		410,872
2033		1,175,461		1,217,277		2,392,738		372,291		422,171
2034		1,128,486		1,330,052		2,458,538		379,279		433,780
2035		1,050,826		1,475,322		2,526,148		385,255		445,709
2036		1,013,776		1,581,841		2,595,617		393,147		457,966
2037		968,594		1,698,402		2,666,996		39,690		109,285
2038		917,849		1,822,489		2,740,338		37,610		112,290
2039		870,394		1,945,303		2,815,697		35,666		115,378
2040		803,729		2,089,400		2,893,129		32,934		118,551
2041		740,856		2,231,834		2,972,690		30,357		121,811
2042		688,072		2,366,367		3,054,439		28,195		125,161
2043		637,453		2,500,983		3,138,436		26,121		128,603
2044		589,357		2,635,386		3,224,743		24,150		132,140
2045		538,826		2,774,597		3,313,423		22,080		135,774

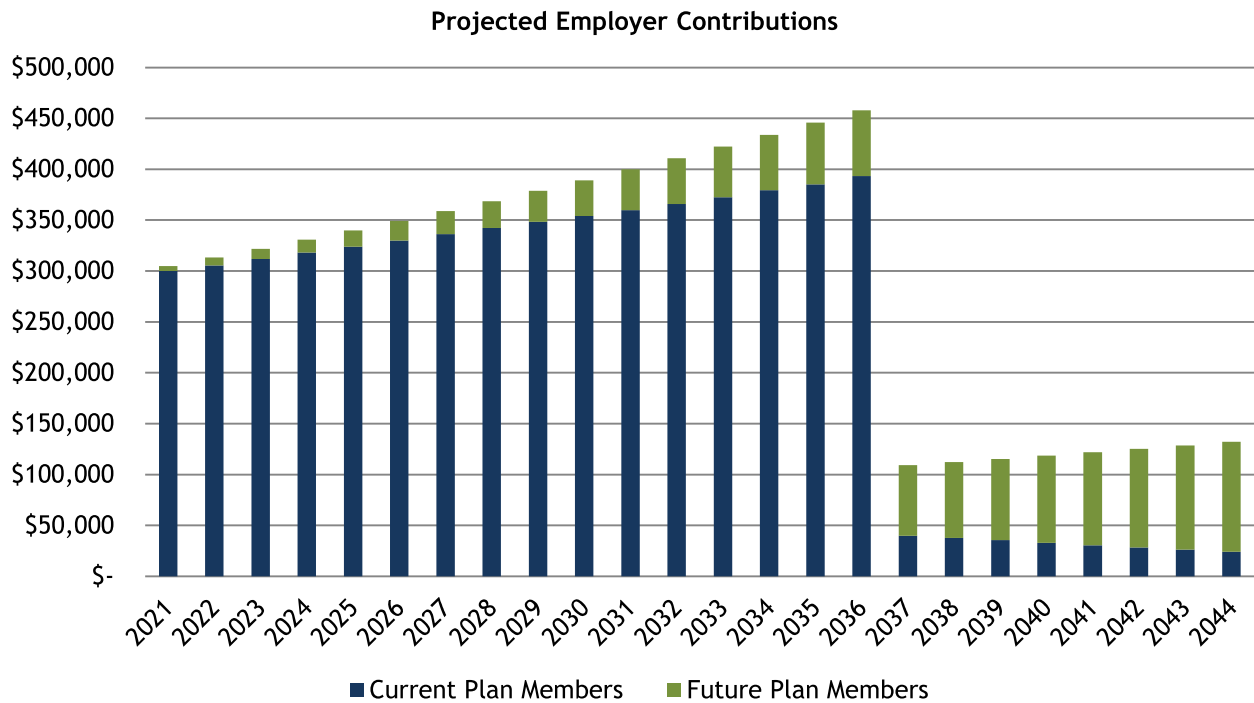
# Accounting Information

## 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

Current 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) = $\Sigma [(a) : (e)]$
2021	\$ 1,610,274	\$ 300,124	\$ (270,594)	\$ (7,742)	\$ 88,678	\$ 1,720,740
2022	1,720,740	305,535	(281,087)	(7,877)	94,578	1,831,889
2023	1,831,889	311,666	(261,896)	(8,015)	101,346	1,974,990
2024	1,974,990	318,241	(278,106)	(8,155)	108,907	2,115,877
2025	2,115,877	323,959	(295,540)	(8,298)	116,289	2,252,287
2026	2,252,287	330,000	(276,353)	(8,443)	124,436	2,421,927
2027	2,421,927	336,113	(267,785)	(8,591)	134,113	2,615,777
2028	2,615,777	342,209	(270,130)	(8,741)	144,815	2,823,930
2029	2,823,930	348,267	(275,266)	(8,894)	156,222	3,044,259
2030	3,044,259	354,097	(277,863)	(9,050)	168,358	3,279,801
2031	3,279,801	359,694	(281,345)	(9,208)	181,296	3,530,238
2032	3,530,238	365,732	(283,553)	(9,369)	195,095	3,798,143
2033	3,798,143	372,291	(293,089)	(9,533)	209,664	4,077,476
2034	4,077,476	379,279	(297,351)	(9,700)	225,013	4,374,717
2035	4,374,717	385,255	(308,087)	(9,870)	241,138	4,683,153
2036	4,683,153	393,147	(321,747)	(10,043)	257,847	5,002,357
2037	5,002,357	39,690	(334,721)	(10,219)	265,280	4,962,387
2038	4,962,387	37,610	(338,344)	(10,398)	262,933	4,914,188
2039	4,914,188	35,666	(333,834)	(10,580)	260,362	4,865,802
2040	4,865,802	32,934	(344,593)	(10,765)	257,341	4,800,719
2041	4,800,719	30,357	(343,331)	(10,953)	253,740	4,730,532
2042	4,730,532	28,195	(341,581)	(11,145)	249,884	4,655,885
2043	4,655,885	26,121	(354,898)	(11,340)	245,375	4,561,143
2044	4,561,143	24,150	(364,918)	(11,538)	239,859	4,448,696
2045	4,448,696	22,080	(384,040)	(11,740)	233,123	4,308,119

## Accounting Information

### Schedule of Implicit Subsidy Liability

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 the retiree's 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

	Measurement Date (June 30):		2017		2018		2019		2020	
	Report Date (June 30):		2017		2018		2019		2020	
Benefit Payments	\$		4,465,686	\$	4,816,783	\$	4,215,971	\$	4,355,125	
Implicit Subsidy			550,965		542,116		244,263		195,246	
Total OPEB Liability	\$		5,016,651	\$	5,358,899	\$	4,460,234	\$	4,550,371	
Discount Rate			5.25%		4.85%		5.61%		5.47%	

# Accounting Information

## Schedule of Deferred Outflows and Inflows of Resources

### Schedule of Deferred Outflows and Inflows of Resources

Measurement Period	Base Amount	Amount Previously Recognized	Recognition Period	Remaining Period	Increase/(Decrease) in Expense: Measurement / Report Years Ending June 30:					
					2020	2021	2022	2023	2024	2025
Differences Between Expected and Actual Experience										
2016-2017	\$ -	\$ -	5.7	2.7	\$ 314	\$ 314	\$ 314	\$ 217	\$ -	\$ -
2017-2018	1,787	628	5.7	3.7	314	314	314	217	-	-
2018-2019	201,040	36,821	5.5	4.5	36,821	36,821	36,821	36,821	16,935	-
2019-2020	(31,710)	-	5.1	5.1	(6,218)	(6,218)	(6,218)	(6,218)	(6,218)	(620)
Changes of Assumptions										
2016-2017	-	-	5.7	2.7	-	-	-	-	-	-
2017-2018	277,097	-	5.7	3.7	48,614	48,614	48,614	34,027	-	-
2018-2019	(1,170,724)	97,228	5.5	4.5	(212,859)	(212,859)	(212,859)	(212,859)	(106,429)	-
2019-2020	13,340	(212,859)	5.1	5.1	2,616	2,616	2,616	2,616	2,616	260
Differences Between Projected and Actual Earnings										
2016-2017	(53,843)	(32,307)	5.0	2.0	(10,769)	(10,767)	-	-	-	-
2017-2018	44,030	17,612	5.0	3.0	8,806	8,806	8,806	-	-	-
2018-2019	10,104	2,021	5.0	4.0	2,021	2,021	2,021	2,020	(2,035)	-
2019-2020	(10,191)	-	5.0	5.0	(2,039)	(2,039)	(2,039)	(2,039)	(2,035)	-

### Summary of Deferred Outflows and Inflows of Resources

Measurement Period: July 1, 2019 - June 30, 2020  
Fiscal Reporting Period: July 1, 2019 - June 30, 2020

	Measurement/Report Years Ending June 30:					
	2020	2021	2022	2023	2024	2025
Differences Between Expected and Actual Experience	\$ 30,917	\$ 30,917	\$ 30,917	\$ 30,820	\$ 10,717	\$ (620)
Changes of Assumptions	(161,629)	(161,629)	(161,629)	(176,216)	(103,813)	260
Differences Between Projected and Actual Earnings	(1,981)	(1,979)	8,788	(19)	(2,035)	-
Total	\$ (132,693)	\$ (132,691)	\$ (121,924)	\$ (145,415)	\$ (95,131)	\$ (360)

## 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	2018	2019	2020
Report Date (June 30):	2017	2018	2019	2020
<b>Total OPEB Liability</b>				
Service Cost	\$ 104,860	\$ 108,006	\$ 117,613	\$ 61,293
Interest	251,406	256,099	244,664	272,505
Changes of Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience	-	1,787	201,040	(31,710)
Changes of Assumptions	-	277,097	(1,170,724)	13,340
Benefit Payments	(187,852)	(226,479)	(217,800)	(202,135)
Implicit Subsidy Credit	(68,761)	(74,262)	(73,458)	(23,156)
Net Change in Total OPEB Liability	99,653	342,248	(898,665)	90,137
Total OPEB Liability – Beginning	<b>4,916,998</b>	<b>5,016,651</b>	<b>5,358,899</b>	<b>4,460,234</b>
<b>Total OPEB Liability – Ending (a)</b>	<b>\$ 5,016,651</b>	<b>\$ 5,358,899</b>	<b>\$ 4,460,234</b>	<b>\$ 4,550,371</b>
<b>Plan Fiduciary Net Position</b>				
Net Investment Income	\$ 6,933	\$ 2,230	\$ 75,128	\$ 90,034
Employer – District's Contribution	887,852	382,482	606,729	403,796
Employer – Implicit Subsidy	68,761	74,262	73,458	23,156
Benefit Payments	(187,852)	(226,479)	(217,800)	(202,135)
Implicit Subsidy Credit	(68,761)	(74,262)	(73,458)	(23,156)
Administrative Expense	(294)	-	(2,741)	(7,609)
Other Miscellaneous Income/(Expense)	-	-	-	-
Net Change in Plan Fiduciary Net Position	706,639	158,233	461,316	284,086
Plan Fiduciary Net Position – Beginning	-	<b>706,639</b>	<b>864,872</b>	<b>1,326,188</b>
<b>Plan Fiduciary Net Position – Ending (b)</b>	<b>\$ 706,639</b>	<b>\$ 864,872</b>	<b>\$ 1,326,188</b>	<b>\$ 1,610,274</b>
<b>Net OPEB Liability</b>				
District's Net OPEB Liability – Ending = (a) – (b)	\$ 4,310,012	\$ 4,494,027	\$ 3,134,046	\$ 2,940,097
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	14.1%	16.1%	29.7%	35.4%
Covered-Employee Payroll	\$ 1,991,580	\$ 2,046,348	\$ 1,636,626	\$ 1,681,633
District's Net OPEB Liability as a Percentage of Covered-Employee Payroll	216.4%	219.6%	191.5%	174.8%

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

	Measurement Date (June 30):		2017		2018		2019		2020	
	Report Date (June 30):		2017		2018		2019		2020	
Annual Money-Weighted Rate of Return, Net of Investment Expense			1.98%		0.28%		7.10%		6.33%	

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:	2016-2017	2017-2018	2018-2019	2019-2020
Reporting Period:	2016-2017	2017-2018	2018-2019	2019-2020
Report Date (June 30):	2017	2018	2019	2020
Actuarially Determined Contribution (ADC)	\$ 411,241	\$ 401,663	\$ 441,931	\$ 126,101
Less: Contributions Made in Relation to the ADC	956,613	456,744	680,187	426,952
Contribution Deficiency (Excess)	(545,372)	(55,081)	(238,256)	(300,851)
Covered-Employee Payroll	\$ 1,991,580	\$ 2,046,348	\$ 1,636,626	\$ 1,681,633
Contributions as a Percentage of Covered-Employee Payroll	48.03%	22.32%	41.56%	25.39%

#### 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:	1.75%
Assumed Payroll Growth:	2.750%
Healthcare Trend Rates:	6.00%, trending down to 3.90%
Rate of Return on Assets:	5.47%
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, 2020

#### 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:

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

# Accounting Information

## Draft Notes to the Financial Statements

---

### *Contributions*

The District makes contributions based on an actuarially determined rate.

Contribution rate: 17.64% for 16 years,  
4.10% thereafter.

Reporting period contributions: \$426,952 (Includes implicit subsidy credit.)

### *Financial Report*

The District issues a stand-alone financial report that is available to the public. The report is available at:

<https://www.novatosan.com/newsletters-press-documents/documents>

### **Net OPEB Liability**

The District's total OPEB liability was valued as of June 30, 2018 and was used to calculate the net OPEB liability measured as of June 30, 2020.

### *Actuarial Assumptions*

The total OPEB liability in the June 30, 2020 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Measurement Date:	June 30, 2019	June 30, 2020
Discount Rate	5.61%	5.47%
Investment Rate of Return	5.61%	5.47%
Inflation	2.50%	1.75%
Healthcare Cost Trend Rates	n/a	5.50% Trending down to 3.90% over 54 years. Applies to calendar years.
Salary Increases	2.750%	2.750% Additional merit-based increases based on CalPERS merit salary increase tables.
Mortality Rates	Based on CalPERS tables.	

### *Discount Rate*

The discount rate used to measure the total OPEB liability is 5.47%. This is the expected long-term rate of return on District assets using the Moderately Conservative Index Plus investment strategy managed Public Agency Retirement Services (PARS). The projection of cash flows used to determine the discount rate assumed that the District 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

---

### *Long-Term Expected Real Rate of Return*

The long-term expected rate of return is determined using the long-term rates of return developed by PARS.

Asset Class		
Expected		
Asset Class	Weight	Return
Large Cap Core	15.50%	7.50%
Mid Cap Core	3.00%	7.80%
Small Cap Core	4.50%	8.70%
Real Estate	1.00%	6.70%
International	4.00%	7.80%
Emerging Markets	2.00%	7.80%
Short-Term Bonds	14.00%	3.30%
Intermediate-Term Bonds	49.25%	4.10%
High-Yield Bonds	1.75%	6.90%
Cash	5.00%	2.40%
Expected Return	100.00%	5.47%
Expected Standard Deviation		5.07%

# Accounting Information

## Draft Notes to the Financial Statements

Changes in the Net OPEB Liability	<i>Increase/(Decrease)</i>		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(c) = (a) - (b)
Balance as of Report Date June 30, 2019	\$ 4,460,234	\$ 1,326,188	\$ 3,134,046
Changes for the year:			
Service Cost	61,293		61,293
Interest	272,505		272,505
Changes of Benefit Terms	-		-
Differences Between Expected and Actual Experience	(31,710)		(31,710)
Changes of Assumptions	13,340		13,340
Contributions			
Employer – District's Contribution		403,796	(403,796)
Employer – Implicit Subsidy		23,156	(23,156)
Net Investment Income		90,034	(90,034)
Benefit Payments	(202,135)	(202,135)	-
Implicit Subsidy Credit	(23,156)	(23,156)	-
Administrative Expenses		(7,609)	7,609
Other Miscellaneous Income/(Expense)	-	-	-
Net Changes	90,137	284,086	(193,949)
Balance as of Report Date June 30, 2020	\$ 4,550,371	\$ 1,610,274	\$ 2,940,097

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 (4.47%) or one percentage point higher (6.47%) follows:

	1% Decrease	Discount Rate	1% Increase
	4.47%	5.47%	6.47%
Net OPEB Liability (Asset)	\$ 3,596,935	\$ 2,940,097	\$ 2,409,307

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 (5.00%) or one percentage point higher (7.00%) than current healthcare cost trend rates follows:

	1% Decrease	Trend Rate	1% Increase
	5.00%	6.00%	7.00%
	Decreasing to	Decreasing to	Decreasing to
	2.90%	3.90%	4.90%
Net OPEB Liability (Asset)	\$ 2,310,148	\$ 2,940,097	\$ 3,728,493

# Accounting Information

## Draft Notes to the Financial Statements

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

For the report year ended June 30, 2020, the District recognized an OPEB expense of \$128,871. The District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Actual and Expected Experience	\$ 128,243	\$ (25,492)
Changes of Assumptions	141,979	(745,006)
Net Difference Between Projected and Actual Earnings on OPEB Plan Investments	4,755	-
Contributions Subsequent to the Measurement Date	-	-
<b>Total</b>	<b>\$ 274,977</b>	<b>\$ (770,498)</b>

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
2021	\$ (132,691)
2022	(121,924)
2023	(145,415)
2024	(95,131)
2025	(360)
Remaining	-

# Basis of Valuation

## Substantive Plan

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

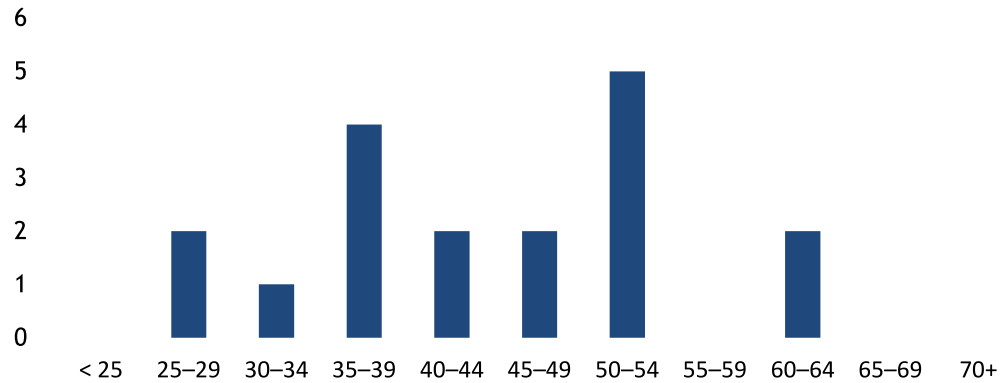
## Participant Summary Charts

Census Date: June 30, 2018

Age and service determined as of the census date.

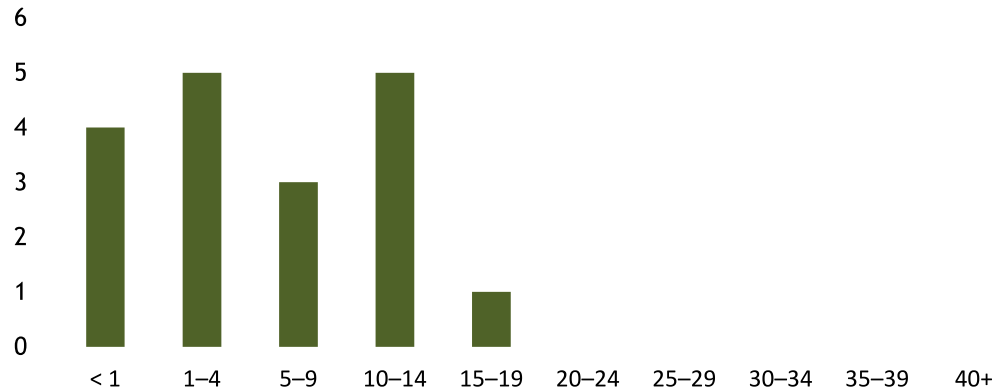
### Count of Actives by Age Bracket

Average Employee Age: 44.2



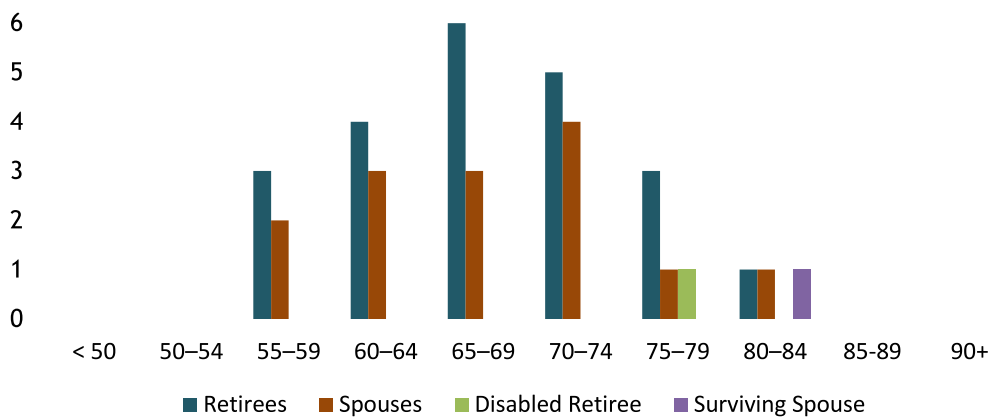
### Count of Actives by Years of Service

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												
Valuation Date	June 30, 2018												
Measurement Date	June 30, 2020												
Report Date	June 30, 2020												
Discount Rate	The discount rate selected is 5.47%. 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.												
Annual Per Capita Claims Cost	Developed using CalPERS experience to calculate age-related risk scores, but using the District's actual premiums for all other purposes. Assumed annual per capita claims costs follow: <table><tr><th>Age</th><th>Males</th><th>Females</th></tr><tr><td>50</td><td>\$ 9,502</td><td>\$ 9,765</td></tr><tr><td>55</td><td>10,972</td><td>10,482</td></tr><tr><td>60-64</td><td>13,521</td><td>11,720</td></tr></table>	Age	Males	Females	50	\$ 9,502	\$ 9,765	55	10,972	10,482	60-64	13,521	11,720
Age	Males	Females											
50	\$ 9,502	\$ 9,765											
55	10,972	10,482											
60-64	13,521	11,720											
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						
Aging or Morbidity Factors	Based on actual CalPERS HMO and PPO population data.						
Participant Contributions	Based on service at retirement and employee group.						
Salary Increases	2.750% The salary increase is used to determine the growth in the aggregate payroll.  Individual Salary Increases: 2018 CalPERS Merit Salary Increases.						
Inflation Rate	1.75%						
Marital Status	Current Retirees: Actual spouse coverage is used. Future retirees: 80% assumed to be married.						
Spouse Gender	Assumes spouse of opposite gender for current and future retirees.						
Spouse Age Difference	Actual spouse age is used for current retirees. Assumes males are three years older than females for future retirees.						
Participation	Current Retirees: Assume current elections continue until decrement. Future Retiree election assumptions summarized below: <table border="1"> <tr> <th>Condition</th><th>Participation</th></tr> <tr> <td>Eligible for Supplemental Benefits</td><td>100%</td></tr> <tr> <td>Eligible for PEMHCA Minimum Only</td><td>50%</td></tr> </table>	Condition	Participation	Eligible for Supplemental Benefits	100%	Eligible for PEMHCA Minimum Only	50%
Condition	Participation						
Eligible for Supplemental Benefits	100%						
Eligible for PEMHCA Minimum Only	50%						
PEMHCA Administrative Fee	0.23% of retiree premium.						
Annual PEMHCA Amount	\$1,662 for the period June 30, 2019 through June 30, 2020 and trended at 3% annually.						

# Basis of Valuation

## Actuarial Assumptions

Assumption	Rates		
Premiums	Premiums used to develop aged claims		
	<b>Pre-Medicare Plan</b>	<b>Employee</b>	<b>Employee +1</b>
	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
	<b>Medicare Plan</b>		
	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

Calendar Year	Pre-Medicare	Medicare	PEMHCA Trend
	Trend	Trend	
2020	6.00%	5.50%	3.00%
2021	5.50%	5.30%	3.00%
2022	5.20%	5.20%	3.00%
2023	5.20%	5.20%	3.00%
2024	5.20%	5.20%	3.00%
2025	5.19%	5.19%	3.00%
2026	5.19%	5.19%	3.00%
2027	5.19%	5.19%	3.00%
2028-2074	...	...	...
2075+	3.90%	3.90%	3.00%

# Appendix

## About GASB 75

---

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.

# Appendix

## About GASB 75

---

### Key Terminology

<b>Actuarially Determined Contribution</b>	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.
<b>Actuarial Present Value of Projected Benefit Payments</b>	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
<b>Agent Employer</b>	An employer whose employees are provided with OPEB through an agent multiple-employer defined-benefit OPEB plan.
<b>Closed Period</b>	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.
<b>Contributions</b>	Additions to an OPEB plan's fiduciary net position for amounts from employers, non-employer contributing entities, or employees.
<b>Dates and Periods</b>	
• <b>Census Date</b>	The date of the census. It is usually the same as the <b>Valuation Date</b> .
• <b>Measurement Date</b>	The date on which assets are measured. The liabilities are rolled forward to this date from the <b>Valuation Date</b> , should it differ, using actuarial roll-forward techniques.
• <b>Measurement Period</b>	The year ending on the <b>Measurement Date</b> .
• <b>Report Date</b>	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.
• <b>Reporting Period</b>	The year ending on the <b>Report Date</b> . It is the same as the fiscal year.
• <b>Valuation Date</b>	The date on which the liabilities are valued.
<b>Deferred Inflows and Outflows of Resources</b>	The portion of the changes in the <b>Net OPEB Liability</b> that are not recognized in the current pension expense and are recognized in later periods. The changes deferred include differences between expected and actual experience, changes in assumptions, and differences between expected and actual earnings on OPEB plan investments.

# Appendix

## About GASB 75

---

### Key Terminology (continued)

<b>Defined-Benefit OPEB</b>	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.
<b>Discount Rate</b>	<p>The single rate of return that reflects the following:</p> <ul style="list-style-type: none"><li>a. The long-term expected rate of return on OPEB plan investments that are expected to be used to finance the payment of benefits, to the extent that (1) the OPEB plan's fiduciary net position is projected to be sufficient to make projected benefit payments, and (2) OPEB plan assets are expected to be invested using a strategy to achieve that return.</li><li>b. 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 scale), to the extent that the conditions in (a) are not met.</li></ul>
<b>Fiduciary Net Position</b>	The market value of assets as of the <b>Measurement Date</b> .
<b>Implicit Subsidy</b>	The implicit subsidy arises when an employer allows a retiree and the retiree's 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.
<b>Net OPEB Liability</b>	The <b>Total OPEB Liability</b> minus the <b>Fiduciary Net Position</b> .
<b>Normal Cost</b>	See <b>Service Cost</b> .
<b>Other Postemployment Benefits (OPEB)</b>	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.
<b>Projected Benefit Payments</b>	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.

# Appendix

## About GASB 75

---

### Key Terminology (continued)

<b>Service Cost</b>	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years. Also called <b>Normal Cost</b> .
<b>Substantive Plan</b>	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.
<b>Total OPEB Liability</b>	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.

# Appendix

## Decrement Tables

---

The valuation used the following decrement tables from the CalPERS OPEB Assumption Model, revised May 14, 2018:

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

Entry Ages		Sample Terminated Refund Rates									
Service	Public Agency Miscellaneous										
	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	
50	0.00010	0.00010	0.00010	0.00010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	

Entry Ages		Sample Terminated Vested Rates									
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	

# Appendix

## Matrix of Sample Service Retirement Assumption Rates

Service	Attained Ages				Public Agency Miscellaneous 2% @ 60		
	50	55	60	65	70	75	79
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5	0.02000	0.01900	0.07000	0.14000	0.14000	1.00000	1.00000
10	0.02000	0.02600	0.07400	0.17800	0.17800	1.00000	1.00000
15	0.02000	0.03300	0.08900	0.21500	0.21500	1.00000	1.00000
20	0.02000	0.09200	0.11300	0.26400	0.26400	1.00000	1.00000
25	0.02000	0.13600	0.13700	0.32100	0.32100	1.00000	1.00000
30	0.15000	0.14600	0.16100	0.37700	0.37700	1.00000	1.00000
35	0.15000	0.15000	0.24600	0.41200	0.41200	1.00000	1.00000
40	0.00000	0.15000	0.29600	0.42000	0.42000	1.00000	1.00000
45	0.00000	0.00000	0.29600	0.42000	0.42000	1.00000	1.00000
50	0.00000	0.00000	0.00000	0.42000	0.42000	1.00000	1.00000

Service	Attained Ages				Public Agency Miscellaneous 2% @ 62		
	50	55	60	65	70	75	79
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5	0.00000	0.01000	0.03100	0.10800	0.12000	1.00000	1.00000
10	0.00000	0.01900	0.05100	0.14100	0.15600	1.00000	1.00000
15	0.00000	0.02800	0.07100	0.17300	0.19300	1.00000	1.00000
20	0.00000	0.03600	0.09100	0.20600	0.22900	1.00000	1.00000
25	0.00000	0.06100	0.11100	0.23900	0.26500	1.00000	1.00000
30	0.00000	0.09600	0.13800	0.30000	0.33300	1.00000	1.00000
35	0.00000	0.15200	0.18300	0.34800	0.38700	1.00000	1.00000
40	0.00000	0.18000	0.20400	0.36000	0.40000	1.00000	1.00000
45	0.00000	0.00000	0.20400	0.36000	0.40000	1.00000	1.00000
50	0.00000	0.00000	0.00000	1.00000	1.00000	1.00000	1.00000

Service	Attained Ages				Public Agency Miscellaneous 2.5% @ 55		
	50	55	60	65	70	75	79
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5	0.00800	0.02000	0.04400	0.12000	0.12000	1.00000	1.00000
10	0.01400	0.03800	0.07200	0.15600	0.15600	1.00000	1.00000
15	0.02000	0.05500	0.10100	0.19300	0.19300	1.00000	1.00000
20	0.02600	0.07300	0.13000	0.22900	0.22900	1.00000	1.00000
25	0.03300	0.12200	0.15800	0.26500	0.26500	1.00000	1.00000
30	0.05000	0.19200	0.19700	0.33300	0.33300	1.00000	1.00000
35	0.06000	0.30400	0.26100	0.38700	0.38700	1.00000	1.00000
40	0.00000	0.36000	0.29100	0.40000	0.40000	1.00000	1.00000
45	0.00000	0.00000	0.29100	0.40000	0.40000	1.00000	1.00000
50	0.00000	0.00000	0.00000	0.40000	0.40000	1.00000	1.00000